

University of Lapland
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Media Education

COLLECTIVE INTELLIGENCE:
CONSENTING TO CONSCIENT CONSULTATION

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Summary:

Google, Facebook, Amazon, Wikipedia, Spotify, Netflix, Apple, Samsung, Microsoft, Disney, Uber, Tinder, etc.: ours is the generation that has got a World Wide Web to their fingertips; in addition, we often feel like the net has analogously become a kind of add-on to our minds, i.e., an extension to our intellectual capacity. Browsing on the internet, emailing, skypeing, googling, chatting, posting texts, photos or videos on social media, whilst interacting with contents that can be as informative as the news broadcast and as entertaining as playing videogames or streaming music, films, and series via applications (apps) downloaded on smart devices have thus been gradually becoming some of our generation's daily activities of choice. Along these lines, whilst meaning to conceptualise a method for studying an alternative to our present-day prescriptive educational practices, I elaborate a constructivist approach towards the transformative paradigm of a transmedia-interactive *produsage*. That is, in this MA Thesis I propose the *produsage* of a cyclic program in which educators could cooperatively consent on a conscient consultation of their *produced* contents in a knowledge democratisation exercise. These experts could thereby participate on the mediation, moderation, and mediatization of a (n)ethnographic e-volution on the road to a sociocultural empowerment and a civic emancipation movement, striving for critical reforms that would pursue the autonomous automatising of self-regulatory socio-cultures.

Comparatively, from this study's standpoint, the arguably participative factor of the existing Participatory Web resembles the speculative political empowerment triggered by the act of voting for a political candidate: because, in both cases, the options presented to the public regularly are pre-established by the few de facto empowered decision-makers, like e.g., the heads of political parties and coalitions on one hand, or content writers and producers on another. Alternatively, in this thesis I will look into concealed alternatives for (or, preferably, against) what has gradually developed into the modus operandi of media and technology businesses: the monetisation of information by the commodification of *producers*. More specifically, I hope to analyse if, inasmuch as ICTs have been democratising knowledge, they also have been contributing to the prospective quest for more maximalist, and collective, forms of participation during our (Western societies') history.

Notwithstanding, this thesis is a theoretical study, and therefore, here I will not present an empirical example of such educative interaction: which I deliberately call *eduration*. Appropriately, because the academia continuously gains new insights with the intersection and compilation of our human cognition, – viz., with our collective intelligence (CI) – I understand that constructivist edutainment and pedagogical participation practices can be interchangeably

employed towards a civic engagement – as presented in this thesis’ results. Accordingly, the discussion that I intend to incite with this research theoretically refers to the possible implementation of artefacts for mediatising our civic participation, towards the radical sense of democracy via a critical constructivist education. In short, here, I aim to explain how interactive media create collective intelligence, by analysing what decentralisation of power is engendered by *produsage* and why edutaining praxis ought to spur a civic participation. As a result, in this study I will hypothesise the emergence of a 21st century conscientisation praxis.

All in all, educators are enthusiasts, connoisseurs, collecting, curating, collaborating, criticising, converging, and creating contents that synthesise and might materialise meaningful methods and manners for systematically reasoning, negotiating, or promoting a collective, constructivist, and perchance transformative and participative (democratic) utopia. Ultimately, instructors are a medium of knowledge; and be that as it may, nobody knows all, but the sum of all known by each of us is all the knowledge of our multi-millenary humanity. Thence, we ought to find ways of collaboratively connecting the dots with our bits and pieces of information.

Until very recently, many considered the efforts for conceptualising networks, in which meaningful thematics could be broadly discussed (by people from different ethnicities all over the world), just as naïve as utopic. Indeed, it is still debatable whether interactive media, in the current state of Web 2.0, do provide such effectual possibilities to its users. On the other hand, it is with the purpose of adding to this debate that I endeavour to investigate quiescent means for collaboratively working on a critical upgrade to the denotation of democracy. As a matter of fact, technology, etymologically, is the study of crafts; and this MA Thesis endeavours to deal with the sociocultural factors and artefacts that we create to assist our kind’s evolving signification of civilisation. With this in mind, for concluding this thesis with a theorisation on yet untapped possibilities within *produsage*, I look into some of the latest media developments which could possibly contribute to meaningful improvements on our practices of participative citizenship. Then, in such hyperlinked hypothesis, educative matters of various thematic universes could be cooperatively taught by doyens, through networked lectures, with new hypertexts being added to the storylines of their lessons inasmuch as they were being produced and curated, as a critique to divergent interpretations on those phenomena previously presented via a unique interactive-video production. In that event, interactive media could create a Collective Intelligence, by means of an edutaining praxis which could spur a civic participation for democratising knowledge via *produsage* – in turn, (re-)creating and cyclically transforming our collective intelligence. Like this, such media type would theoretically serve as a *wikinomical* platform.

Key words:

Collective Intelligence, Civic Participation, *Produsage*, Interactive Media, *Eduration*, Conscientization, Digital Public Spheres, Media Literacy, Critical Pedagogy, Democratization of Knowledge, Edutainment Praxis, Sociocultural Mediatization, Political Engagement, Situational Interest

This MA Thesis does not contain personal data of any other than the data of the author/authors.

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1. INTRODUCTION: TECHNOLOGY AS AN ANTITHESIS OF INSTITUTIONAL POLITICS?

In addition to remaining as one of the main emergent forces of popular culture, recent research underscores that the media industry increasingly plays critical roles in global politics: in both economic and educational systems as well as in our personal quests for psychosocial wellbeing. Media refer to communication channels, and on top of being the plural of medium or mean in Latin, this thesis' foremost keyword is likewise translated as “systems”, “reasons”, “manners”, “negotiators” or “promoters”. And, especially after COVID-19, virtually everyone dedicates a substantial amount of their private and/or working hours accessing, consuming, producing, and interacting with a vast array of information mediated by computational technologies.

These circumstances occur largely due to the endeavours of media and technology businesses which, in order to progressively customise their service, have paradoxically adopted a variety of analogous commercial practices: on countless occasions, we are granted with (often free) access to toolkits (e.g., a software), in exchange for allowing giant corporations to enjoy a great deal of our individual faculties and sociocultural backgrounds. Despite the diverse range of products offered by tech-groups, this sector's organisations tend to share the habit of regularly trading their services for their consumers' information which is then sold to firms interested in identifying and advertising to specifically targeted niches of market, or consumption patterns, in fruitful places and times. Still, seeking to enhance their cybernetic experience, users of what is now known as the Web 2.0 frequently produce and provide free content within these systems controlled by a number of enterprises: veritably, the term Web 2.0 is also known as (aka) the Social or Participatory Web, alluding to platforms which allow for user-generated content, like Wikipedia, blogs and, of course, the Social Media (aka SoMe) such as Instagram or YouTube.

When personalising their networked interaction, these users – who are academically known as prosumers, or PRODUSERS, for simultaneously consuming and producing media content – generate extra value to those conglomerates' database. Since information (aka data) is traded on the Infobahn, rather than the media products and services that are sold online, the prime asset in contemporary markets reportedly is the prosumers' data. Data is the plural of *datum* which etymologically means “something given” and is defined by The Oxford Dictionaries (OED) as “[f]acts and statistics collected together for reference or analysis” (OED, n.d.). And, in this MA Thesis, the dynamic process of data trading may indeed be problematised as one of its main topics; however, contrasting with the criticisms pertaining to the *producers'* data privacy, ownership and value (Fuchs, 2009), I do not tackle *produsage* as an exclusively

problematic issue: because due to recent surges of possibilities for the audiences to effectively interact with their social, political, and cultural environments and artefacts in the cyberspace, I argue that the participatory web can already support the basis for collectively developing an inherent ethos which deems education as a multifaceted and multimedia instrument for socio-political empowerment and emancipation: i.e., online participation may strive for the redundancy of institutional politics, seeking to make it quasi-obsolete – or merely responsible for handling the bureaucracies of instrumentalised demands from the public.

In other words, although I recognise the political, technical, and scientific relevance of discussing the issues involving Data Protection, especially concerning the controversial rights of technology firms to exploit from their consumers' data, I am rather interested in verifying the latent didactic prospects that may emerge from democratically gathering, analysing, and sharing data – due to the extended capacity to store digitalised information, facilitating the trading of internet users' info. Essentially thus, this study sits on the junction of concepts like cyberculture (aka internet culture) and critical pedagogy, concentrating on the role of *produsage* for creating a COLLECTIVE INTELLIGENCE (Lévy, 1997). Hence, as well as observing the contemporaneous notions of PARTICIPATORY CULTURES that JENKINS (2006) advances, I address to paramount theories as the KNOWLEDGE CONSTRUCTION PRAXIS and CRITICAL CONSCIOUSNESS proposed by FREIRE (1968, 1973). Similarly, in connection with DAHLGREN'S angle (2013, 2018) on HABERMAS' premiss of PUBLIC SPHERES (1984), next in the THEORETICAL BACKGROUND, I explore the EDUTAINMENT perspectives of KIILI (2005) on the FLOW THEORY of CSIKSZENTMIHALYI (1975). This is, therefore, a relatively multidisciplinary research, relating to the fields of media, education, and social sciences in general; and even though these studies correlate to numerous areas of expertise – such as the arts, political science, social psychology, and anthropology (Dayan & Katz, 1992), – this somewhat holistic survey is meant for highlighting the potentiality of media literacies to bridge significant progresses in the quest for a genuine civic participation.

In this theoretical study, I employ a constructivist method, primarily substantiated on literature review. Accordingly, in this thesis' third chapter, IMPLEMENTATION, I explain the relevance of that selection of studies for answering my research question. Additionally, I approach how those integrated data are synthesised, following an inductive method of qualitative analysis.

Ultimately, in reference to Herkman's (2007) alternative production as a tool for critical media education analysis, whilst embracing the theories above-listed, I intend to put forward a blueprint for a transmedia-interactive edutainment series: namely, an *eduration* – a media-educative interaction – of which methods, nevertheless, ought to be free from the tolls that

media conglomerates habitually take on their customers, as respectively presented and conferred in this thesis' last chapters: RESULTS & DISCUSSION. In sum, enthused by Hegelian dialectics, I pursue a Collective Intelligence (CI) as the *synthesis* constituted by assessing the fairly topical issues of data sharing as this work's *thesis*, at the same time that I examine the quiescent opportunities within *produsage* and open knowledge as its respective *antithesis*. Finally, endeavouring to shed light on certain existent phenomena that ventures to fulfil the Internet's apparent capability of connecting and uniting humanity, I invite you to join me in this journey towards a democratisation of knowledge.

1.1. THESIS' OVERVIEW – PROBLEMATISING THE STUDY OBJECT

Bearing in mind the possibility that recent and historical advances on media technologies may have been progressively democratising knowledge by means of the propagation of information, I yearn to study CI as a plural, philosophical, and civic quest for a legitimate direct democracy. For this reason, the **primary objective** of this investigation is to theorise about the emergence of a gamified interface that could be utilised as a (scientific) databank. Therefore, the **main question** that I expect to answer in this study refers to practical issues, concerning the current usage of participatory – or rather interactive – media, focusing on several of its aspects that ought to be optimised with the purpose for it to function as a medium through which citizens could partake in building a collective intelligence. Correspondingly, I ask: in today's hyperconnected web, **how interactive media create collective intelligence?**

On that account, both side-questions tackled here deal with the presumed political and pedagogical characteristics of (interactive) media: i.e., why edutaining praxis ought to spur a civic participation? And, what decentralisation of power is engendered by *produsage*? Furthermore, I discuss what is the role of technology in an educative democratisation of knowledge. Howbeit, as observed by Fuchs, who believes that the Web 2.0 is exploited by corporations and politicians to “give voice to the people without listening” (2009, p. 83), I note that the empowering sense which audiences may experience, during their interaction with media contents does not make interactive media some sort of egalitarian, democratic, arena. As a matter of fact, thus far, not even the participatory media seem de facto participative.

To that end, as means of encouraging a praxis for repairing such discursive and, thusly, socio-political discrepancies – which are seen as the most central **problems** in this thesis, – I theorise about a *produsage*-based scheme of civic participation in which interactive media could

epistemologically assist those willing to participate in decision-making processes. To summarise it, formulating a method for unleashing our collective intelligence shall henceforth be understood as the **ultimate goal** of this research; though, precisely due to its collective characteristics, it is critical to first recognise that CI might not be thoroughly definable by any individual conception. Ideally, its conceptualisation – as well as of all collective matters – must be collaboratively contemplated.

1.2. ANTITHESIS: JUSTIFYING THE MOTIVATIONAL RELEVANCE OF CONSENSUS & CONSULTATION

As aforementioned, in this MA Thesis I deal with one of the most topical rules and regulations that our contemporary societies have been failing to democratise: our data-protection policies. Alas, the legal matters that are related to our information privacy continues being widely regulated by the organisations to which we regularly consent the benefit of profiting from our data, in exchange for the opportunity to interact with the content available on their platforms. This is because whenever one agrees to the terms of use that are mandatory for creating a digital account, (s)he is fundamentally granting the permission for the corporation which owns that determined database to decide upon the course of all information that is graciously placed there. Likewise, such endorsement might resemble the executive and legislative procedures that process our socio-political affairs; since, whether it is by approving the terms and conditions for accessing a given content provided in the net, or by accommodating our civic power into elected authorities, we are persuasively consenting that a number of forthcoming decisions – that can directly affect (albeit in different degrees) our individual and collective lives – shall be taken without our effective consultation. As Carpentier et al. (2013, pp. 288-289) observes, “[t]he logics of representation imply the delegation of power, which in turn implies that a power imbalance between rulers and ruled is generated.” In that event, the distinction in between consensus and consultation is key to this research utmost motivation which is to pursue a better understanding of the democracy paradox, where we choose those who choose instead of us. As a result, contrasting to what most of the ongoing political systems like to claim, I consider the premise that, essentially, we are living within relatively anti-democratic political systems, because voting on politicians who decide for us, or by unreservedly signing up to media service providers, we may be consistently consenting on a cyclical process of neglecting our own consultation: forthwith, naively withdrawing ourselves from the civic equation of our contemporaneous civilisations.

Now, just like voters transfer their civic rights to elected representatives, electronically connected consumers unwarily hand over their personal acumen to their organisations of choice: gratuitously. Due to the lack of worldwide standardised guidelines that ought to prevent politicians and CEOs to abuse of the power (and knowledge) that we grant them, they can continue to ostensibly act unreservedly towards their own goals. However, a noteworthy difference in between these two quasi-aristocratic forms of power is that the sites which (often pseudo-)democratic governments rule are defined by a geographic portion (e.g., a state), whereas the authority of the Big Techs' CEOs can be fairly universal online.

The cyberspace defies geographic borders, and in spite of some cybernetic mechanisms – like the infamous Chinese firewall – struggle to minimise the largely globalised aspect of the Internet (or, simply, the net) by blocking the access to certain international content, encryption software, like VPNs, can be downloaded across the globe in order to cross these IT-constructed boundaries, making virtual data largely omnipresent. Still, neither firewalls nor VPNs have considerably diminished the challenges that these global characteristics of the World Wide Web may pose to the logic of present-day (nationally based) legislations. Indeed, the questions of how and, specially, who must regulate such a transnational Infobahn, remain open.

Our (modern) governments have generally and systematically been failing to effectually democratise our societies, raising the question of whether it is politicians who should act to restrict the political reach of cyber-based organisations, or if virtually everyone ought to alternatively discuss – through the supranational power of the web – about the current constitutional arrangements, for example, including (inter)national rules and regulations. As expected, with the required care, caution, and attention, the latter scenario could depict the idea of e-governance which ideally should mediate the civic autonomism that is envisioned in this thesis. Nonetheless, because CEOs and politicians analogously depend on the investments that come heavily from a range of industries, such a genuinely worldwide democratisation sounds simultaneously imperative and highly unlikely to happen in a near future.

Such improbability is deduced due to the fact that businesses generally have to seek profit for surviving, and their natural competitiveness would clash against the concept of social equality, cooperation, and collaboration that is pivotal for such improbable civic progress. In short, hoping for the market's empathy can be comparable to try teaching love to a virus or a machine, because money is a merciless type of blood that runs into our economies' veins. Allegedly, the premise that a socio-democratic revolution will be fuelled by the systems of communication which are mediated by the existing, data-hungry, industry of online services is equally naïve.

Recent history has been showcasing that Big Techs customarily feed their consumers with their own inherently processed inputs. To rephrase it: companies trading data to advertisers are not as interested in what those publicists sell, as they are in what they pay for marketing products, services, ideas, or ideologies. On the other hand, irrespective of the said naïveté, most of these organisations have not (yet) managed to patent some of the technologies designed by them.

For instance, notwithstanding that the Meta Platforms, Inc., which is one of the Big Five North American IT corporations (alongside Alphabet, Amazon, Apple, and Microsoft), owns the copyrights of Facebook, they have neither invented the participatory web, nor they possess the exclusive rights to the whole array of that technology. Consequently, similar media nexus shall continue to emerge, – justifying then the motivational relevance of studies like this, which aims at developing or implementing an (inter)active citizenship by means of participatory engagement within novel models of (social) media technologies. For Frydenberg et al., (2005) “motivation is about energy and direction, the reasons for behavior, why we do what we do [whereas] engagement describes energy in action, the connection between person and activity” (quoted in Kiili et al., 2021, p. 94). To summarise it, attempting to play a part in the emancipatory processes of civic activity and sociocultural empowerment via a uniquely networked medium, I intend to offer insights for educating by entertaining. After all, I suppose that it is safe to affirm that even if understanding the agents of such interactivity game is of high priority, it is the game itself which is at stake in this heuristic and holistic study.

1.3. SYNTHESISING A DEFINITION OF COLLECTIVE INTELLIGENCE (CI)

Despite the Latin origin of the word, ‘defining’ express conclusion via the suffix ‘*finire*’ – that is translated as ‘finish’, – it is important to present the noticeably non-defining definition of Collective Intelligence (CI) by the Tunisian philosopher, cultural theorist and media scholar, Pierre Lévy, who coined the term in 1997, as “the capacity of human collectives to engage in intellectual cooperation in order to create, innovate and invent” (p. 71). Equivalently broadly, the Patrick J. McGovern Professor of Management, Director of the MIT Centre for Collective Intelligence, and Sloan School of Management, the Professor Thomas Malone adds that CI occurs when “groups of individuals [are] acting collectively in ways that seem intelligent” (MIT, 2010). At any rate, because the act of defining is one of setting limits, I do not intend to determine the definite significance of CI, but to add new connotations and insights to these academics’ works and to the studies of others to whom this subject may concern.

Analogously, the very notion of intelligence is fluid and difficult to delineate with a restrictive idea, possessing fixed and essentially finite boundaries, helping to explain how undefined the quoted denotations by Lévy and Malone really are. This is to say that, in contrast to the sense of defining – which is constrictive in its nature, – intelligence is liable to constant change: it can expand itself with the experiences acquired or even be enlarged as an effect of (re-)imagining and creating. Therefore, whilst the act of defining etymologically is one of limiting, the meaning of intelligence apparently is endless in its essence. At any cost, it is interesting reflecting on Lévy’s parallel between Collective Intelligence (CI) and Artificial Intelligence (AI), since he considers them to oppose each other, stating (in Peters, 2015) that CI “is a scientific, technical and political project that aims to make people smarter with computers, instead of trying to make computers smarter than people” (p. 261) like AI allegedly aspires. Then, mutually seeking a virtuous fairness, the welcoming elaboration of CI has to be a just and moral exercise. Yet, since each of us can only retain a limited amount of data on a given thematic, but we share information on specific themes that correlate to our mutual interests, we transform even our media consumption into a cumulative search for knowledge as a result.

In addition, the North American scholar, Provost Professor of Communication, Journalism, and Cinematic Arts, at the University of Southern California (USC), Henry Jenkins, who was also the founder and director of the Comparative Media Studies program at the Massachusetts Institute of Technology (MIT), remarks that “the pursuit of and assessment of knowledge is at once communal and adversarial” (2006, p. 20). He also comments that in the ongoing media-fused age we may understand “how knowledge becomes power” (ibid.). By the same token, Jenkins establishes that the participation of consumers within these multimedia communities leads to what he defines as “transmedia storytelling [which] is the art of world making” (p. 21). For him and Richard Shaull, whose foreword to Paulo Freire’s *Pedagogy of the Oppressed* (1968) is quoted by Jenkins, “education either functions as an instrument which is used to facilitate integration of the younger generation into the logic of the present system and bring about conformity or it becomes the practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world” (in Jenkins & Carpentier, 2013, p. 283). Correspondingly, because we currently live in an era when media converge our collective intelligence, “educators are reassessing the value of informal education” (Jenkins, 2006, p. 22). Thereby, as detailed afterward, this might be the transitional time for *eduractively* experimenting with the *produsage* of media and participating more actively in the construction of a multifaceted *cyberocracy*.

2. THEORETICAL BACKGROUND: CONSTRUCTING A PARTICIPATORY FLOW?

Here, I present the concepts that will aid my analysis on the quiescent role of interactive media as a civically pedagogic tool. Still, instead of isolating a determined theory and examining it as an alienated phenomenon, I intend to cast light on the interconnectedness of selected lines of thought that approach the application of intelligible and computational resources for enhancing the meaning of (online) participation within educational activities. After all, the purpose of this research is to provide a panorama over the interrelation of media and education.

Having that established, Kiili's theorisations on edutainment – which is a portmanteau for “educational entertainment”, however Rey-Lopez et al. (2007) prefer the less common “*Entercation*” to denote for entertaining education, – is central in my quest for a ludic platform that could function as a (scientific) data-pool. Moreover, it is worth noting that his propositions derive from the Flow Theory coined by Csikszentmihalyi. Per contra, I prefer reimagining the links of flow with edutainment over a slant in the direction of sharing and learning a post-structural and intrinsically participative game towards an emancipating sociocultural democratisation, where specialists could actively collaborate within their appropriate areas of expertise, aspiring to develop a “*wikinomical*” strategy – to borrow the concept named by Tapscott & Williams (2008) – that would synergise our collective intelligences. Whence, in this chapter, it is also important to explore the Dahlgren viewpoints on participation.

Pertinently, Dahlgren problematises the present state of representational democracy, whereas parallelly investigating how we are “doing citizenship” (2006) on SoMe and other digital public spheres. He ponders on the relationship between participation and affect which must be studied together, despite their “strands from various tradition” (2018, p. 7). Thusly, it is imperative recognising the intellectual-collective traits of the academia, observing that just as Jenkins' conceptualisations could be perceived as a modern defragmentation of notions attributed to McLuhan, Dahlgren's standpoints are contemporary interpretations of Habermas' public spheres theory (1962). In any case, in this chapter I limit my research on their later reviews.

2.1. (THE EXTRINSIC AXIOLOGY OF) A PARTICIPATORY DEMOCRATIC UTOPIA

As an important agent of our humanity, the academia ideally keeps on profiting from the affordances in the collective nature of our human cognition. As means to justify such statement, I note that just like Kiili draws ideas from a Csikszentmihalyian source, Dahlgren expands his

prospects with the cooperation of other intellectuals – as in the abovementioned, Carpentier et al. (2013) which he co-authors. Likewise, might be reasonable to underline that, analogous to how we have been critically and creatively innovating, producing, processing, transforming, and renovating various civilising resources with technological improvements, we have proportionately been experiencing, at large, global human developments as a consequence of studying diverse cerebral activities in interactive partnerships and networked perspectives.

To that end, in a conversation with Jenkins, looking at the range of possibilities that may emerge from the interplay of media technologies with politics, the executive board member of the International Association for Media and Communication Research (IAMCR) and former vice president of the European Communication Research and Education Association (ECREA), Nico Carpentier, also collaboratively encompass a number of pertinent terms to this MA Thesis: like **citizenship**, **critical theory**, and **participatory democratic utopia**. In that publication, he focuses on the syntactics of participation that, as clarified, departs from the often-interchanged implications of interaction and engagement – which also are key concepts to the rationale of my research. As acknowledged by him – and in depth by Dahlgren (2006, 2011, 2018), – engagement is a paramount prerequisite for participation, because “one has to feel invited, committed and/or empowered to enter into a participatory process” (Dahlgren, 2011, quoted in Jenkins & Carpentier, 2013, p. 275). For Skinner & Belmont (1993, cited in Kiili, 2005, p. 35), engagement is about emotional facets, involving intensities of passion in one’s interaction with a determined task. Indeed, it is in this specific state of involvement that civic participation and Kiili’s (re)interpretation of the Flow Theory intersect.

Engagement has to do with emotional input, inasmuch as participation is a political involvement, dealing with power relations. For all that, Carpentier stresses the “need to start untangling access, interaction, and participation” (Jenkins & Carpentier, 2013, p. 271); since, contrasting to the latter, access and interaction are forms of involvement that do not expect to alter how we realise matters about and around the authorities’ control, their influence and sovereignty. In a slightly divergent manner, Jenkins considers these distinctions by their respective research departments, placing access and interactivity as an outcome of designed technologies, and participation as a force emergent from societal activities.

Ultimately, in respect to the moral and ethical idea of participation, I defend that the value of a “participatory democratic utopia” (pp. 265, 267) is not intrinsic: not in itself. The axiological meaning of such utopia is thus in its idealistic sense: in devotion to the external, real, world. For this reason, as well as the phenomena of citizenship and critical literacy, the participatory

democracy is a powerful view that, although may take different forms – dependant on subject positions, – should not be neglected or disregarded. Eventually, voices claiming for their authentic expression may become praxis: theories in instrumentalised practices.

2.1.1. EFFECTUATING (AN AFFECTIVE) CITIZENSHIP IN PUBLIC SPHERES

Just like all participation is interactive, albeit not all interactivity is participatory, every engagement entails involvement, though not all involvement is engaged. Dahlgren articulates this dissociation with a parallel of engagement and affect. Correspondingly, the author mentions Papacharissi's (2014) interest in the mediatised link of affection and politics, within the agenda of participation in digital public spheres, describing affect as the "collective emotionality that connects with people's shared social experiences" (Dahlgren, 2018, p. 12). For him, "if emotion is a 'state' one is in, affect has to do with the dynamics of how one got there" (p. 9). Resultantly, political participation in cyberspaces presupposes engagement that, in turn, is triggered and fomented by affect which, in such participatory context, implies a mutual desire for democracy as in an active citizenship sense – voiced via online interactions.

Bearing in mind that politics do not necessarily denote to its institutionalised form, Mouffe (2013) clarifies that it is substantiated in diverse circumstances: the political "refers to the ever-present potential for collective antagonisms and conflicts of interest in all social relations and settings" (as cited in Dahlgren, 2018, p. 8). In that event, contesting Habermas' dialectical reasoning of political power, favouring rationalist syllogisms over passional affectivities in public spheres, Dahlgren opts for Hall's (2005) and Dahlberg's (2014) perspectives, arguing that sustaining a dichotomy between logic and emotion is "analytically counter-productive" (Dahlgren, 2018, p. 11), because such dualisms "can become constrictive for subjectivity and its expression, which are central to politics" (ibid.). As Dolan (2002) asserts, and Ninaus et al. (2019) reiterates, "emotions affect virtually all aspects of cognition" (p. 2) – especially, attention and memory, to the same degree that specialists from varied fields, including the neurological examinations of Fastenrath et al. (2014) and Nielson & Powless (2007), demonstrate. In that case, just as Freire would have agreed, predetermined formalisations of syntax, or expressivity, can serve as instruments to exclude, disempower, and oppress groups that are marginalised, privileging the right to participate exclusively to (oppressive) elites.

Language-restrictive policies are like puzzles to which affect apparently is an incompatible piece. As a rule, until rather recently, affect would not customarily be a significant semantical

element within the academic domains of social sciences. Naturally, nonetheless, rationale is a systematic development from our senses which spark the fundamental interests that, subsequently, instigate the search, consumption, absorption, and creation of a knowledge – which, only then, arouse the reasons that may venture to justify and/or generate our (new) emotions and interests: whether sexual, academic, political, or of any other nature.

2.1.2. THEORISING THE DEMOCRATISATION OF AN EXPRESSIVE (AND INSTRUMENTAL?) DISCOURSE

In that regard, subject positions represent a core aspect of discourses. Referring to Laclau & Mouffe's theorisations "towards a radical democratic politics" (1985), Carpentier & De Cleen (2007, p. 276) present 'discourse' as a "situational context of language usage" (Fairclough, 1992, p. 3) and as "a practice that constructs the social" (Philips & Jørgensen, 2002, p. 1). Likewise, it is crucial to determine the often-floating significations, or positions, of subjects.

Words are context-dependant, requiring "nodal points" (p. 112) that can fixate their meanings within discourses: "When nodal points (and the discourses that lie behind them) (start to) obtain social dominance, Laclau and Mouffe refer to the concept of hegemony, as developed by Gramsci" (Carpentier & De Cleen, 2007, p. 269). As a result, along with the identarian equivalences that are created with one's relationship with the hegemonic understanding of language, also a "logic of difference" (p. 270) is generated, marginalising antagonist identities. With this, Alvares & Dahlgren (2016) describe how far-right populists exploit, via an obnoxious logical reasoning, the interplay of affect and politics – through the alienation of dialectical dichotomies.

These polarised antagonisms have actually been largely studied by cultural theorists, like the North Americans Noam Chomsky (linguist) and Edward Herman (media scholar), who correlate this rhetorical appeal with "the political economy of the mass media [which is used for] manufacturing consent" (1988): for example, given that the US were waging war against communism when their book was written, Chomsky has been reconsidering in post-Cold War reviews that the following socio-culturally consented evil with which their homeland has (debatably) been combating is the (Arab) terror(ism) – except that, in his mandate, the former US-president, Donald Trump, deceptively saw in China and Latinos a better fitting, or perchance more present, menace. Carpentier & De Cleen (2007) observe that "[f]rom a discourse-theoretical viewpoint, media are seen not just as passively expressing or reflecting social phenomena, but as specific machineries that produce, reproduce and transform social

phenomena” (p.274). The Jamaican sociologist, Stuart Hall, also addresses to such Manichaeian slants in reference to, the British professor, Richard Dyer.

Comparably, Dyer employs the social-and-stereotypes dualism to explain that our societies “normalise” (1977) only a selection of formalities which form our social norms, whereas Hall presents his view on “cultural representations and signifying practices” (1997) by means of the *otherisation* principle, arguing that the Italian philosopher, Antonio Gramsci, would have agreed with Foucault on the claim that “power cannot be captured by thinking exclusively in terms of force or coercion: power also seduces, solicits, induces, wins consent...it is also productive. It produces new discourses, new kinds of knowledge” (p. 261). Like this, societies normalise hegemonic customs by “otherising” alien traditions – and political positions: the old ‘light vs. darkness’ principle through the ethics’ ‘conservative vs. progressive’ argument.

Conversely, taking the *otherised* position into account, this rhetorical strategy may lead to a paradoxical encounter of distinct realities: ours vs. theirs which, in a way, is at the same time ours, since truth is collectively fabricated via our sociocultural interaction, akin to the Freudian concept of superego. In this paradox, critics and criticised can be concurrently playing an antithetical game of oppressed vs. oppressors; and this is the reason why such a Freirean struggle is manifested in countless social situations – as further elaborated. Surprisingly, this contest is also common in more than a few standard educational settings: once teachers who might feel insecure, or otherwise vulnerable when lecturing, fail to encourage an active participation of their apprentices and, as effect, make use of their expertise for indoctrinating their psychologism into pupils.

Alternatively, the Freirean pedagogy implies a more essential nature of teaching-and-learning techniques, considering education as the enlightening experience of propagating instruction in plural and systemic flows. Freire’s didactic is dialogic and dialectical, in respect of both his method for studying the practices of education – which is done by means of conversation, – and to its Hegelian pursuit of synthesis. Pursuing freedom from the dominance of our (self-styled/economic) elites, Freire suggests that a more humane and emancipating pedagogy has to be forged “with” the oppressed and not “for” them (1968, pp. 17, 19, 22, 26, 33), because it is only the critical thinking that efficiently enable us to think independently (p. 13). Hence, his understanding of pedagogy is as a method in which the students’ views must be contemplated, thereby guaranteeing that the instruction’s approaches generate relatable experiences to those learners, then facilitating their comprehension of not only the topics taught, but more importantly, of their respective realities.

2.1.3. PRODUSING CIVIC EMPOWERMENT?

In recent history, a marketing trend – that primarily involves the application of analyses on prospective populaces – has progressively been shaping the promotion of both (media) products and political campaigning. As of now, these assessments on the public particularly focus on their media consumption and virtual interaction. Resultantly, these studies usually lead to the stage when techniques of publicity or propaganda, – which, in some cases, incorporate the practices of astroturfing and firehosing of falsehood (aka fake news), – are designed to suit the characteristics that most appeal to the preferences of target audiences, which had correspondingly been identified in that prior data collection stage.

Politicians who profit from such easily spreadable artifices, grounding their campaigns in a hateful echo of an algorithmically polarised SoMe, have become known as a new sort of populists (as construed in Alvares & Dahlgren, 2016; Dahlgren, 2018, p. 16): a type that finds its popularity online. As Dahlgren explains, as soon as citizens fail to realise their civic value (see the democracy paradox in 1.2.), their social circles' hegemonic beliefs and emotions (like their anxiety and anger against antagonised groups) can become “stronger than their critical reasoning. Affect can lead people to find short-cuts to deal with the massive amounts of information that confronts them at great speed. Cognitive dissonance is replaced with cognitive comfort, via emotion” (Dahlgren, 2018, p. 17). Moreover, Amer et al. (2019) argues that, for this reason, the frenzy of memes and fake news are so strictly linked to firms like the infamous Cambridge Analytica which, as stated by Brittany Kaiser (a whistle-blower and former director of that company), was involved with the campaigns of Brexit (UK), Trump (USA), and Bolsonaro (Brazil). Spreadable campaigns are also efficient on their score of return-on-investment, since these messages get republished by their targeted public – for free – to like-minded parties, who often are (intimately) related to those who had that specific content spread.

The efficacy of these strategies has been proportionally enhanced with the increase of internet usage; and – regarding these campaigns' reach – they have been yielding astounding outcomes since (at least) the past decade. This is because, in this media trend that Jenkins et al. labels as “spreadability” (2009), the public who adhere to ideals promoted by lobbyists, politicians, and content producers, tend to foster a propagation of their shared beliefs. Notably, this concept has been increasingly exploited on political campaigning – in a cyclical fashion, – when *producers* participate on the diffusion of their preferred candidates' messages, simultaneously providing the data to be mined for new content creation on these politicians' campaigns.

In these circumstances, Dahlgren (2018) instructs that there are two distinct manners of ‘doing politics’ on the Internet or, to put it another way, *de facto* participating in digital public spheres: one is ‘instrumental’ – actively involved with “political-struggle and their outcomes” (p. 14); the other is ‘expressive’ – focusing on “voicing one’s views” (ibid.): “In the age of net-mediated participation, expression is most often easier to enact than effective, instrumental interventions into the political realm... [though if] the steps required for instrumental participation are systematically avoided, the confrontation with power relations is undercut” (ibid.). Therefore, regarding to the extent of how instrumental the myriad academic works of cultural theorists – with reference to the praxis of civic education and active participation in the web, – has hitherto been, indeed, is unclear: justifying the superposition of such expressive participation with Kiili’s instrumental Edutainment.

2.2. (AN INSTRUMENTAL ONTOLOGY OF) EDUTAINMENT

During the past decades, an edutaining format that has been becoming more and more popularised is the podcasts. Respectively, O'Bannon et al. (2011) tested and confirmed that they are alternative platforms which facilitate teaching and learning; because, in juxtaposition with the increase in learners’ autonomy, motivation, and the space-temporal flexibility of lectures, podcasts allow learners to repeatedly listen to every recorded message as many times as needed. Today, podcasts pertinent to a wide range of (scientific) areas are digitally available.

From the puzzles in Benjamin Franklin’s “Poor Richard’s Almanack” (1732) to timeless Walt Disney’s cartoons, as well as from the music in Homer’s Iliad and Odyssey (dating from the 7th century BC) to a variety of educational contents uploaded to YouTube, media products have repeatedly been educating whilst entertaining: e.g., TV programmes such as soap operas have been used by producers as a medium for edutainment, at least since the late 1970s (Rosin, 2006), when Miguel Sabido contributed to a governmental programme, successfully controlling the high birth rate in Mexico (see Soto-Laveaga, 2007). Still, games and toys must be regarded as the pioneering edutainment tools; because the first artefacts to educate by entertaining were already present in ancient child-plays.

Analogously, videogames have been increasingly adopted as an edutainment platform. Kiili et al., for instance, refer to Schwartz & Plass (2020), remarking that the “use of games in education is often justified in terms of their potential to enhance learning by engaging players” (2021, p. 98). In like manner, Granic et al. (2013) argue that gaming is one of “the most

engaging and rewarding activities in everyday life”, as Ninaus et al. (2019, p. 1) write in the inaugurating line of their survey which measured and validated the positive association of learning, and its contents’ retentiveness, with the emotional engagement in game-based education – via facial emotion detected by a machine learning apparatus during gameplay. Consonantly, as next detailed, we can conclude that scientific evidence clearly commends the integration of emotional traits in education, acting on the quality of students’ engagement.

2.2.1. ENGAGING WITH SITUATIONAL INTEREST IN GAME-BASED LEARNING

Ninaus et al. (2019) thoroughly explore Fredricks’ description of engagement (2014; Fredricks, et al. 2004; 2016a; 2016b), attentive that teachers have identified learners’ disengagement as the main challenge in instructional settings and practices. For them, engagement is the “active involvement in a given task or learning” (Ninaus et al. 2019, p. 2), which consists of behavioural, emotional, and cognitive dimensions (Fredricks, et al. 2004; Shernoff et al., 2016 in Kiili et al., 2021, p. 94). For this reason, taking into account that attention, effort, participation, persistence, and positive conduct represent the behavioural engagement dimension, Ninaus et al. (2019) specifies that the intellectual input in instructive practices (see Connell, 1990; Finn, 1989; Finn & Rock, 1997) is the main indicator of cognitive engagement. Yet, as mentioned, Ninaus et al. (2019) rather inspects the implications of emotional engagement, highlighting the weight of emotional engagement in education.

Seeking to enhance learners’ engagement with their educational activities by integrating pedagogy in videogames, the Finnish professor at the University of Tampere, Kristian Kiili (who co-writes Ninaus et al., 2019), investigates how Flow and Situational Interest in Game-Based Learning impact on students’ experience with digital material. For Boekaerts (2016), flow and situational interest have differences as well as similarities: for example, they are both momentary forms of engagement – i.e., neither are “stable states” (Kiili et al., 2021, p. 96). Though, as Kiili et al. (2021) demonstrates, “prior knowledge, game performance, and learning outcomes have varying relations with flow experience and situational interest” (p. 106). In their research, situational interest did not significantly correlate with players’ achievements during gameplay; and contrasting to flow, the situational interest does not substantially impact nor is affected by players’ sense of control and fluency of performance.

Irrespectively, Hidi (2001) and Sun & Rueda (2012) point that, in consonance with the flow experience, “increased situational interest may positively affect attention, cognitive processing,

and persistence and thus lead to increased engagement and individual interest” (Kiili et al., 2021, p. 95) – which is seen as a stronger, long-lasting, sort of involvement (Koskinen et al., 2022). On the other hand, regarding to learning gains in situational interest, Kiili et al. (2021, p. 107) concluded that, contrasting to flow, knowledge is inversely proportional. That is to say: the less one knows, more (s)he learns. Another considerable difference is that, differently from situational interest, flow demands clear goals and immediate feedback within an activity, as explained in the following subheading.

2.2.2. DIMENSIONS OF FLOW: THE “OPTIMAL TASK ENGAGEMENT”

Flow refers to the theory originally proposed in 1975 by the Hungarian psychologist, and fellow of the American Academy of Arts and Sciences, Mihaly Csikszentmihalyi, who conceptualises it as a spontaneous and automatic psychological state typified by the absorption, immersion, involvement, and engagement within a determined objective task: when one is in flow, nothing else matters (Kiili, 2005, p. 37). Since then, it has been scrutinised by numerous scholars (especially in the game environment). Whilst theorising about Interactive Storytelling, Klimmt et al. (2012), for instance, defines flow as the *optimal task engagement* – one of the five dimensions of media enjoyment that are formulated in their study, along with *aesthetic pleasantness*, the *self-enhancement* facet, and the components of *curiosity* and *surprise*.

Moreover, Kiili et al. (2012) advises that “Flow experience goes beyond the basic game elements because it provides a universal model of enjoyment” (p. 79). Harmoniously, after contemplating physical activities, such as rock climbing and dance, Csikszentmihalyi (1991) infers that, in an ideal setup with clear goals, we voluntarily test – and potentially overcome – our limits; or as he assesses, reaching the flow state “provided a sense of discovery, a creative feeling of transporting the person into a new reality. It pushed the person to higher level of performance and led to previously undreamed states of consciousness. In short, it transformed the self by making it more complex” (as quoted in Kiili, 2005, pp. 37-38). Referring to the Hungarian psychologist, Kiili determines that “flow state is sometimes considered also as a peak experience” (Kiili et al., 2021, p. 95), occurring “when one’s body or mind is stretched to its limits in a voluntary effort to accomplish something worthwhile” (Kiili, 2005, p. 44). Then, flow experiences “remain etched” (Jackson & Csikszentmihalyi, 1999, p. 4) in one’s memory. Kiili et al. (2012) apply the concept of flow for testing the learning processes in a game which promotes creative problem-solving and knowledge construction. The flow scales handled in

the questionnaire of Kiili’s data gathering process was found to be a “satisfactory and useful tool for assessing the gaming experience of players” (Kiili, 2005, p. 91). Consistently, Kiili et al. (2012) claim that, aiming to achieve the flow state of mind within an activity, one must synchronously have (part or all of) the following nine dimensions of the flow theory – from which the first eight were put forward by Csikszentmihalyi (1975):

- 1- **Concentration**, connoting to the cognitive resources concentrated on a specific goal-oriented activity
- 2- **Clear Goals**, or the aim within a task
- 3- An autonomous sensation of **Control**: the illusion, or dream, of achieving perfection; namely, mastery
- 4- Merging of **Action and Awareness**
- 5- **Loss of Self-consciousness**: once a player is “focused on playing the game and is able to forget all unpleasant things. Thus, there is no room for self-scrutiny... Such a state of mind is very engaging and facilitates exploratory behavior.” (Kiili et al., 2021, p. 97)

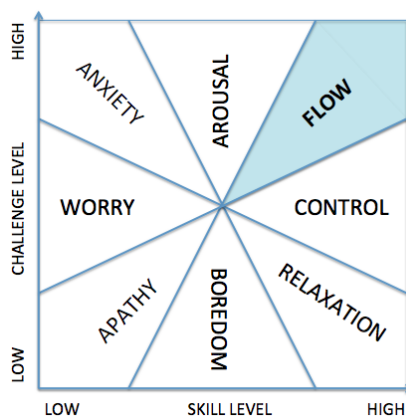


Figure 1.

Mental State in Terms of Challenge and Skill Levels (Pertula et al., 2017, p. 58)

- 6- **Immediate Feedback**: the reports on performance and progression
- 7- **Altered sense of time**: contrasting to all previous, this dimension also engenders the idea of immersion
- 8- Personal **Skills** well suited to the given **Challenges** (see in Fig. 1 & 2)
- 9- And, finally, **Autotelic experience**, or the “intrinsic rewardness” of an activity, as suggested in Jackson & Marsh (1996)

2.2.3. VYGOTSKY’S ZONE OF PROXIMAL DEVELOPMENT & A PSYCHOSOCIAL WELLBEING

In these conditions, when aroused by an engaging exercise, we find ourselves in flow once we have gained control over the challenges of that particular task, becoming more and more involved and immersed within that activity. In this sense, as shown in Fig. 1 and Fig. 2, the “Challenges vs. Skills” element is vital for understanding the flow experience. Consequently, opposing an apathetic state, flow is found in the balance between boredom and anxiety, because a challenge may lead a poorly skilled individual (P3 in Fig. 2) to anxiety, inasmuch as a skilled person (P2 in Fig. 2) is inclined to feel bored if facing a task that is little challenging.

Regularly, once entertained by an activity that matches our abilities, we are apt to adapt our skills to the challenge; being thus “bound to improve” (Kiili, 2005, p. 38). Furthermore, Vygotsky’s zone of proximal development (1962) – “which refers to the difference between

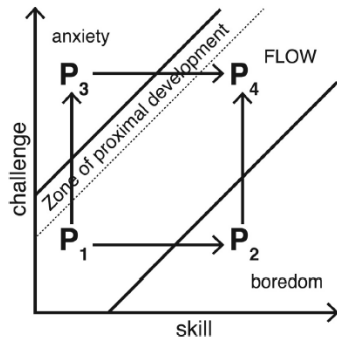


Figure 2.
The Extended
Three Channel Model of Flow
(Kiili et al., 2021, p. 97)

what a player can do without help and what he or she can do when support is provided” (Kiili et al., 2021, p. 96), – is presented in Fig. 2 to stress the “relevance of social and cultural settings in learning” (Kiili, 2005, p. 54), amplifying the flow state dominion by easing what a player can do without help and what he or she can do when support is provided” (Kiili et al., 2021, p. 96), – is presented in Fig. 2 to stress the “relevance of social and cultural settings in learning” (Kiili, 2005, p. 54), amplifying the flow state dominion by easing cognitive processes – whilst fostering critical thinking via the guidance of peers. As a result, such dynamic experience encourages “discovery” (Kiili et al.,

2021, p. 96) and *personal growth*: one of the six key aspects of psychosocial well-being.

Finally, from a psychosocial viewpoint, the flow framework employed in Kiili et al. (2012, 2014a) – for measuring the engagement of students – lead to the conclusion that educative videogames additionally foster learners’ (virtual) *environmental mastery* within the game mechanics. These educational ecosystems can similarly enhance the *positive relation with others* – through Vygotsky’s zone of proximal development. And, seeing flow as the equilibrium at an evasive gateway in between boredom and anxiety, these negative sentiments may inspire players to self-determinately seek the flow state; thereby, games’ immediate feedback tend to prompt, or attempt to certify, the *autonomy* of learners. On top of that, the above-mentioned loss of self-consciousness dimension can encourage pupils towards their *self-acceptance* in search for their *purpose in life*: consummating all components of happiness proposed in Ryff & Keyes (1995) and underscoring the potential of educational games for creating links in between enjoyment, engagement, and efficient experiential learning.

2.3. (THE EXPERIENTIAL EPISTEMOLOGY OF A) CONSTRUCTIVIST PEDAGOGY

Presuming that by engaging in playful knowledge-construction tasks like educative games, the ultimate goal of that media enjoyment is to ease learners’ experiences, Kiili affirms that

“students’ satisfaction is the key to successful education” (2005, p. 35). To put it simply: “If the task is engaging, the user is willing to use more effort to accomplish the task” (ibid.). With that in mind, games must be designed as artefacts, or cultural products, that “arouse meaningful

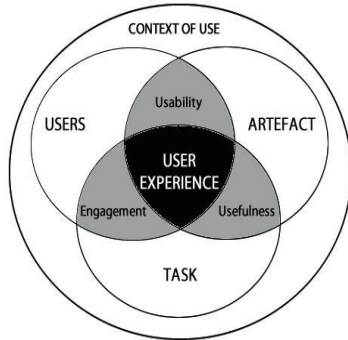


Figure 3.
Elements of User Experience
(Kiili, 2005, p. 35)

immersive experiences” (Kiili et al, 2012, p. 78); in that case, experience connotes to human-environment interplays. Not to mention, as depicted in Fig. 3, concepts such as **usability**, which signifies the quality of users’ interaction with an artefact; and **usefulness**, denoting the relevance, ease-of-use, and productivity of artefacts are central in Kiili’s works, since “good usability, a useful artefact, and an engaging task (challenges that the game provides) create prerequisites for a good educational experience” (p. 80). Ironically, the research conducted during his doctorate in 2005, concentrated on players’ usability, which was a major cause for undermining the students’ flow experiences, because the interface of the

game analysed there required too much cognitive resources from the subjects of that study.

In his PhD dissertation, Kiili also estimates that automatisisation in educational games is likely to happen after sufficient practice; and in that event, *playability*, which incorporates relevant characteristics of flow and usability (Kiili, 2005, p. 45); *perception*, regarding to users’ prior experience, values and emotions (p. 35); and, especially, Sweller’s Cognitive Load Theory (1998) are as well defined as fundamental factors for better understanding his argument. This is because, essentially, the cognitive load theory indicates that meaningful operation of human intellect constructs knowledge by means of action and communication; or in other words, when interacting with an artefact, our mental resources ought to be intrinsic to the accomplishment of that task at hand, in order to cause a shift in users’ cognitive state of mind to a fluent, effortless, and automatic experiential status.

Striving for such knowledge retrieval automatization (Kiili, 2005), he contemplates the experiential learning theory and constructivism. From constructivist theories’ angle, instruction is seen “only as a tool that supports knowledge construction process” (Duffy & Cunningham, 1996; Jonassen, 2000; Jonassen et al., 1999, cited in Kiili, 2005, p. 54), whilst experiential learning is understood as a holistic adaptation of the world, recognising the importance of discovering new concepts rather than merely memorizing material (pp. 55-56). Therefore, the “ideology of experiential learning, supplemented with a constructivist perspective, provides a

fruitful basis for integration of gameplay and pedagogy” (p. 56). Likewise, contrasting to the former – expressive – utopia, edutaining practices may scientifically offer rather real, concrete, ontological implications for a participative knowledge construction praxis.

As substantiated by numerous studies, students’ interaction with educative games – or “serious games” (Kiili, 2005, p. 12) – increases, among other psychosocial aspects, the players’ positive relations with others and their autonomy – which in that specific setting, may alter power relations: readjusting the verticality of the standard classrooms’ hierarchy. On that account, I would argue that, in educational practices, the signification gap between interaction and participation may not be as evident as it is in relation to our involvement with digital public spheres. Purportedly, even if the notion of (democratic) participation is implied as a farfetched idea in socio-political terms, its instrumental adaptation into educational environments looks more plausible.

Appropriately, because the social sciences continuously gain new insights with the intersection and compilation of our human cognition, – viz., with CI – I understand that constructivist edutainment and pedagogical participation can be interchangeably employed towards a civic engagement – as presented in this thesis’ results. At any rate, as I see, teachers must regain their passion for – or genuine interest in – teaching, thus perhaps, playfully. All in all, educators are enthusiasts, connoisseurs, collecting, curating, collaborating, criticising, converging, and creating contents that synthesise and might materialise meaningful methods and manners for systematically reasoning, negotiating, or promoting a collective, constructivist, and perchance transformative and participative (democratic) utopia. Ultimately, instructors are a medium of knowledge; and, be that as it may, nobody knows all, but the sum of all known by each of us is all the knowledge of our multi-millenary humanity. Thence, we ought to find ways of collaboratively connecting the dots with our bits and pieces of information.

3. IMPLEMENTATION OF A CONSTRUCTIVIST META-SYNTHESIS

Pursuing an interactive media education model for civic participation, in this thesis I write an integrative narrative with a constructivist approach. That is, whilst integrating the hypothesis of a participatory democracy with the instrumental employment of edutainment outlined above, in this chapter I theorise on the reasons why these two concepts can be inductively synthesised into a third: which is a pedagogic prototype to mediatise our civic participation or, in this sense, a constructivist framework for consciously *producing* CI. Consequently, this research methodological procedure is qualitatively implemented in a dialectical and philosophically dialogical manner: i.e., as a dialogue in between the literature reviewed in the previous chapter (2. THEORETICAL BACKGROUND) – particularly, those of Kristian Kiili and Peter Dahlgren, which will be henceforth addressed as my primary data.

In this study, I utilise qualitative research methods; and about the narrative facet of such methods, Jones (2004, p. 96) asserts that “qualitative research is always about story reporting and story making and ...narrative is a democratising factor in social science research as it should be in evidence review as well... ‘qualitative data take the form of narrative, with themes and concepts as the analytical device’ (Dixon-Woods et al., 2001, p. 126)”. Similarly, Torraco (2005) adds that literature reviews – like this one, – “‘tells a story’ by critically analyzing the literature and arriving at specific conclusions about it.” (p. 361). Thusly, a narrative review, as a “descriptive/interpretative analysis is a story about stories” (Jones, 2004, p. 107) that must construct new understandings grounded on definitions developed with the synthesis of discourses that are identified as the study’s primary data.

Zimmer (2006) argues that primary data collection corresponds to the first of three stages of (meta-)analyses: when researchers gather the data which structure their studies’ theoretical framework. This process is then followed by a theoretical analysis of that collection of texts, engendering the “secondary level interpretation” (p. 316) that culminates into the final phase of a qualitative meta-synthesis: when synthesists synthesise – with their own methodologically justified subjectivity – their (critical) analysis on the theories presented as their studies’ primary data. In the end, the individual assessments presented as primary data heuristically elucidate a new complex of theories – which, in turn, may aspire to inspire future investigations. For this reason, Cronin et al. (2008), classify meta-synthesis as “the non-statistical technique used to integrate, evaluate and interpret the findings of multiple qualitative research studies” (p. 39). Furthermore, the authors cite Polit & Beck (2006) for contrasting meta-synthesis with meta-

analysis: whereas the latter intends to “reduce findings” (Cronin et al., 2008, p. 39), the former aims to transform findings “into new conceptualizations and interpretations” (ibid.). Thereby, this thesis’ method is rather aligned with the meta-synthetic approach.

Meta-studies use findings from (qualitative) researches, allowing synthesists to interpret their results on a determined topic with an approach that differs from other research paradigms; still, Zimmer (2006) states that the “term meta-synthesis suggests reductionist notions of scientific generalizability that are foreign to the philosophical tenets of the interpretive paradigm” (p. 312). Such interpretative paradigm is also known as hermeneutic, postpositivist, or naturalist approach, and it is characterised by an ontological interpretation of the world. Gergen notes that “hermeneutical deliberations serve the valuable function of thwarting the modes of depersonalisation so common to the empirical research tradition” (1997, p. 733). For all that, a more epistemological view on that paradigm accounts for the subjectivity of variables like the semiotic, semantical, sociocultural, and historical values.

Moreover, that epistemological stance in the interpretive paradigm also considers the philosophical pluralities of our psychological individualities. Ergo, from that standpoint, truth remains contextual, constituted by the real, pragmatic, concrete, and materialised objects; albeit now, without neglecting their essential, idealistic, abstract, and intellectual subjectivity. In that respect, Zimmer (2006, p. 316) describes how Thompson (1990) explicates Gadamer’s (1997) “fusion of horizons”, where “the interpretative grasp of meaning in immediate experience is simultaneously an understanding of what is, and how it is embedded in what has come before.” Curiously, that definition seems to closely relate with the constructivist approach presented in the previous chapter.

Contrasting to the interpretative paradigm, the constructivist approach adopted in this thesis is intrinsically epistemological. Provided that knowledge is constructed with the subjects’ experiences, constructivism is the result of “person-situation-interaction” (Gerstenmaier & Mandl, 2001, p. 2654). And, despite that radical constructivists may reject “any form of ontology” (p. 2655), (social) constructionists analyse truth and reality through the shared knowledge that is constructed via social and circumstantial interactions.

Additionally, a third branch of constructivism, which is addressed in the previous chapter, is involved in studying teaching-and-learning practices – mostly in mathematical disciplines (see Cobb et al., 1997). Analogously, Perkins’ (1991) view on the application of a constructivist theory in the research department of technology is quoted in Woolf (2009) as follows:

“information processing models have spawned the computer model of the mind as an information processor. Constructivism has added that this information processor must be seen as not just shuffling data, but wielding it flexibly during learning – making hypotheses, testing tentative interpretations, and so on” (p. 114). Woolf also observes that Bruner (1986, 1990) saw “learning as an active process in which learners construct new concepts based on current/past knowledge” (2009, p. 115), concluding that, in this process, meaning is constructed collaboratively with the diversity of viewpoints. Accordingly, as the research paradigm selected for writing this paper, such constructivist approach flows throughout this MA thesis.

Finally, in theoretical studies (as this one), instead of an empirical data analysis, researchers apply a contextualisation of coherent concepts, justifying the reasons, relevance, and motivation for that determined investigation, as well as their approach, or methods, and the limitations in the manner that that particular study is conducted. After presenting the first set of items in previous chapters, now I focus on this thesis’ methodological paradigms. In short, here I explain how this study is conducted in order to answer my research questions.

3.1. PRIMARY DATA COLLECTION: THE INTERACTIVE CULTURE OF CRITIQUE

Corresponding to my research objectives, meta-syntheses generally venture to construct, interpret, and/or develop more accessible, and abstract or generalisable, theories as a result of dialectical synthesis. Hence, in this research section, I synthesise some elements that may qualify my thesis’ approach for a sort of “postmodern method of inquiry [in which] the constituent study texts can be treated as the multivocal interpretation of a phenomenon, just as the voices of different participants might be in a singular qualitative study” (Zimmer, 2006, p. 315). Proportionately, by selecting the likes of Paulo Freire, Pierre Lévy, Henry Jenkins, Nico Carpentier, Peter Dahlgren, and Kristian Kiili as my primary data, I have comparatively chosen these authors for performing as the subjects of this thesis’ elaborated debate on the instrumentalisation of a participatory democratic utopia by means of edutainment.

Notwithstanding, since I express my ideas through the medium of these established authors’ theories, by combining a collection of their texts and subsequently dealing with the synthesised product which, in due course, emerges from that merging, I will interpret those concepts’ implications in the specific context of my research questions. Likewise, referring to the synthesists’ inputs, whilst presenting guidelines for integrative literature reviews, Torracco (2005) remarks that “[s]ynthesis integrates existing ideas with new ideas to create a new

formulation of the topic or issue... It is a creative activity that produces a new model, conceptual framework, or other unique conception informed by the author's intimate knowledge of the topic. The result of a comprehensive synthesis of literature is that new knowledge or perspective is created despite the fact that the review summarizes previous research" (p. 362). By way of explanation: my studies' primary data, which are the selection of texts written by those forenamed authors, will be implemented – via constructive critiques – into a scenario that some of these authors perhaps had never imagined – like in the case of 21st century's interactive (and perhaps participative) media technologies' relation with the ideas of critical pedagogy put forward by Paulo Freire (1921-1997).

To summarise it, in this thesis, I endeavour to engage in critical thinking dialectically and creatively. Because, as Torraco (2005) indicates "[n]ew knowledge about previous research is created through critical analysis; synthesis builds on this to create new perspectives on the topic as a whole" (p. 363). Therefore, such critical analysis here will strive to detect what could be dialogically implemented on the theories analysed as this thesis' primary data – which were sought, gathered, and are interpreted following the following terms:

3.1.1. COLLECTIVE INTELLIGENCE & PARTICIPATORY CULTURE

In the previous chapter, I present as the axiology of this thesis' theoretical background what Jenkins & Carpentier (2013) identify in their dialogical debate as "Participatory Democratic Utopia" (pp. 265, 267). In philosophy, axiology is a metaphysical notion concerned with ethical and moral values. In that regard, Fuchs (2009) states that "the axiological dimension of critique is an interface between theory and political praxis" (p. 71). As a result, my intention with the employment of such notion, relative to the theories of Participatory Culture and Collective Intelligence (CI) in this section's headline, is to establish the democratising spirit that should permeate this thesis.

Comparatively, these two heading concepts are (meta-)philosophically integrative. They can only exist with the sum, or exponential multiplication, of the practical and active assimilation of ideas, exceeding the individual capabilities of anyone: alone, no single being can create neither CI nor any (participatory) culture. Resultantly, the collective and participatory aspects of these theories might surpass the boundaries of singular, concrete, real – or ontological – definitions, explaining why these idealistic ideas (as stated above) may never be completely achieved, but sought regardlessly: synthesised as a theoretical and fundamentally plural model.

And as such, it represents this thesis' axiological essence: one that I cannot pragmatically define, but one of which definitions must be democratically negotiated with all interested parts.

Interestingly, more than relatable, these ideal-constituent theories seem to be co-dependent: in society, a culture is substantiated with the collective sense of its members' intelligible beliefs, inasmuch as CI is created with a culture of participation, where agents produce (and *produce*) an intrinsic intelligence which may consequently shape their culture. In this way, seeing Participatory Culture as an ontological antithesis – or the materialised instrumentalisation of a phenomenal (socio-political) utopia, – Collective Intelligence can thus be deemed as the complex of their epistemological synthesis. In other words, hereafter, CI is theoretically seen as the cultural product of a democratically participatory praxis.

As well as tackling both phenomena (CI and Participatory Democratic Utopia), Jenkins is considered the most influential media intellectual studying the participatory culture today. For that reason, after participating in research seminars where I verbalised portmanteaus such as edutainment and *produsage*, Jenkins' works naturally were eventually expected as punctual recommendations of my peers and tutors. Later, keywords related to **participatory culture**, like e.g., Web 2.0, digital public spheres, civic engagement, and collective intelligence were inevitably yielded as an outcome of my independent research with an eye for these particular issues. Respectively, by further examining which authors had coined or otherwise scrutinised such terms, my investigation pointed me into the direction of Pierre Lévy and Nico Carpentier; whilst Peter Dahlgren was also recommended by this thesis' first supervisor. And, in the long run, these names could have ultimately led to a multitude of analyses and approaches which, in turn, would connect, criticise, refer, relate, and/or correlate to other studies in a seemingly infinite manner: which justifies the need for researchers' judgment on what to include and/or exclude in their studies – as addressed in this chapter last subhead: 3.3. THEORETICAL STUDY METHODOLOGICAL LIMITATIONS.

In this MA Thesis, my verdict is analogous to my method: meta-synthetic, heuristic, and holistic: whereas most scholars deal with the phenomenon of participation empirically, especially delving into – the audiences' – existing involvement within a media programme's content, I have instead opted to critically theorise a (perhaps more practical) participation of the scientific community in the political sphere as *producers* of (interactive) media. For that, I will perform a series of synthesis: in micro-scales like this analytical amalgamation between the correlated themes of CI and Participatory Culture; and in a larger scale, when I synthetically implement the idea of a participatory democratic utopia with the pedagogically constructivist

approach of an instrumental edutainment – as further explained. And yet, before that pedagogical approach, the reader must understand the (affective and effective) links between interactive media and edutainment that I propose here.

3.1.2. FLOW THEORY AND INTERACTIVE MEDIA

As aforesaid, parallel to its original theorisation in the field of psychology, the flow experience has been thoroughly studied within the framework of (educational) videogame design. Researchers from the (primarily mathematical disciplines of the) technology domain engage with Csikszentmihalyi's theory to explore the cognitive, behavioural and, specially, emotional effects of edutainment on learners' involvement with games utilised in teaching-and-learning practices. Therein, Kiili – who dismiss the term edutainment, opting instead for “educational games” (2005, p. 13) – look at the purposeful environment supplied by games in problem-based learning; since whenever the challenges within an activity match one's skills, achieving the flow state of mind is inherently worthwhile, leading to long-lasting learning.

In his treatise, Kiili implies that the interactivity inherent to (educative) videogames improves the students' interest and engagement in classrooms. Kiili et al. (2021) stresses that “interest is a core psychological process energizing and directing students' interaction with certain activities in the learning environment” (p. 94). And whereas it is unclear if the findings of Kiili's dissertation, which specifically regards to the educational value of videogames, are applicable to a broader setup – like in e.g., interactive films, – it is worth mentioning that films of this sort were occasionally released and marketed as cinematographic games instead (Planche et al., 2016), due to their strong ties with the videogames' mechanics.

Subsequently, later in this thesis, I will compare Kiili's conceptualisations in the standpoint of interactive movies and series. In fact, Jenkins notes that contemporary filmmakers really are yesterday's gamers, who became professionals after spending years imagining the latent intersections between the media (2006, pp. 8-9). Jenkins reflects on this **convergence culture**, emphasising that “[n]ew media technologies enabled the same content to flow through many different channels and assume many different forms at the point of reception” (p. 11). Such media-amalgamation intrinsically suggests the interconnection of *producers* and their hyperlinked contents in the hyperspace. Yet more importantly to this research purposes is Jenkins' conclusion of his book published in 2006 (*Convergence Culture: Where Old and New Media Collide*) where he articulates that “the skills we acquire through play may have

implications for how we learn, work, participate in the political process, and connect with other people around the world” (p. 23). Then again, in connection to Kiili’s insights, positing an edutaining media convergence which would bring together facets of videogames’ mechanisms and docuseries’ aesthetics, here I theorise how to *produse* media as education.

As well as my first contact with Jenkins, I first read Kiili at the University of Lapland: when requested to present his PhD dissertation as an assignment for the “Research in Media Education” course. Ever since, I knew that in my MA Thesis, I could borrow some concepts learnt from that study. In any case, little did I know that that reference would be implemented in relation to a type of artefact that were yet to be seen.

Notwithstanding, regarding to the meta-synthetic method applied in this thesis, Jones (2004) observes that it “is driven by interpretation, not analysis... an interpretation enables the reader to translate the case studied into her/his own social understanding... it translates qualitative studies into one another, while remembering that the translator is always translating studies into his own world view” (p. 101)”. His observation thus corroborates my methodological approach, condoning this possibility of decoding, rendering, and transmuting the findings on serious games into the context of cinematographic games. Furthermore, my reading of Dahlgren (2018) also acts upon such complexity through his conceptualisation of “instrumental participation” (p. 14), which I associate with the ontology of this thesis’ theoretical background: because, although this study is fundamentally theoretical, materialised objects of study might facilitate the readers’ comprehension. And, both serious and cinematographic games are construed here as concrete, tangible, existing representations of edutainment.

More importantly, here I argue that the mechanics of interactive films and series might be easier to translate into the spectrum of social sciences’ studies than the systemic structures of regular videogames. In common, interactive series, cinematographic games, and (educative) videogames are generally and equivalently operated through hyperlinked commands. After all, provided that interactive films are cinematographic games, all videogames are types of interactive media.

3.1.3. CRITICAL & CONSTRUCTIVIST PEDAGOGY

At last, but not least, the epistemological character of this thesis’ theoretical background is represented by means of its critical constructivist approach. Along with the Csikszentmihalyian Flow Theory, Kiili (2005) introduced the constructivist research paradigm to me, through his

experiential-learning theorisation for knowledge-construction, in which episteme is continuously constructed grounded in social experiences. Though, forasmuch as his research focuses on the usability of players – which, as depicted in Fig. 3, refers to the interaction of users with artefacts, – Jenkins’ statement on the distinction of participation in comparison to interactivity, in respect to their research department, is consistent with Kiili’s methodological decision, favouring an approach mostly attentive on enhancing the design of a specific educative and technological artefact, namely: his “serious games” (p. 12). Wherefore, my critical and interpretive implementation, from a societal stance, primarily contemplates the engagement of users, involving their (affective) involvement with a task – see Fig. 3.

In these circumstances, the task in which I am interested deals with civic participation, regardless of the type of artefacts that could be implemented in this edutaining project. That is to say: independently of its ontological empiricism (or the lack of it), this thesis’ axiological value, or i.e., the spirit of this research must remain intact: towards a participatory democracy. Consequently, whether this is a research on videogame or interactive film is less relevant than the reasons why this study is relevant. Alternatively, instead of preoccupying with ‘what’ objective material could be operated for answering my research questions, I am absorbed by ‘how’ and ‘why’ artefacts should be, in the first place, created towards this study’s objectives.

In constructivist terms, epistemology differs from ontology in the philosophical terms that deals with our reality. Whilst ontological views are interested in rather solid definitions – concerned with the nature of existence, – constructivist epistemology (aka constructionism) organises knowledge in ways that may seem knowledgeable in a given context. In other words, epistemes – and their sets of philosophical items, icons, and ideas – are socio-culturally constructed grounded on conceptual principles, theoretical phenomena, and/or paradigms of discourses that explain both the essence and the existence of things, and how they are represented in reality.

An epistemology of epistemologies, aka the metaepistemology, found that in addition to its constructivist approach, episteme can be studied in several forms, and administered in different contexts: as the social epistemology does – in collective terms, – or the epistemic decolonisation does, by inspecting and criticising the hegemony of Western knowledge. Also in direct connection to this thesis, the politics of knowledge is studied in what the founder of The Paulo and Nita Freire International Project for Critical Pedagogy, Joe L. Kincheloe, called **critical constructivism**. Founded on the field of education, this epistemological branch studies the subjective and plural relations of reason and affect through a Freirean optic within the contexts of media and culture.

Philosophically speaking, in the Freirean critical pedagogy, students and teachers respectively are tutors and tutees – concurrently, – translating and transforming their universes of symbolisms and significations into a more complex and accurate reality. In that event, whereas the notion of ‘educators and learners’ includes lecturers and pupils, anyone in a socially interactive setting potentially is, mentor and mentee altogether, because every shared thought offers additional information to the ones with whom that unique view was communicated. In theory, by interacting dialogically, we all are constantly teaching and learning new data.

On a personal note, it was conceivably due to the ideological contestations that the Freirean praxis implicate in the hierarchy of cultures with such strong inequality problems, that the first time that I unexpectedly heard of him also was in the opening class of this MA programme in Finland, where – as observed by the specialist in intercultural communication, Richard D. Lewis (1996, p. 357), – the society is notably less hierarchical. Trying to tackle certain challenges which I still find myself in urge to overcome, Freire would posthumously become the patron of my homeland’s education (Brazil, 2012); additionally, he was awarded with innumerable honorary doctorates and accolades by various institutions of several nationalities, including the 1986 Prize for Peace Education (UNESCO, 2009, p. 39). In *Pedagogy of the Oppressed* (1968) – which is the third most cited book in the social sciences (Green, 2016), – the post-Marxist author deepens the debates on literacy as a practice of freedom that he had initiated in his preceding work, “*Education for Critical Consciousness*” (1967). Today, the Paulo Freire Institute is headquartered at the UCLA Graduate School of Education and Information Studies: the first unit of the University of California.

And, finally, as the reader of this thesis should have noticed by now, as much as Lévy’s *Collective Intelligence* (CI), Jenkins’ participatory culture, Dahlgren’s digital public spheres, and Kiili’s educational games’ concepts, Freire’s critical pedagogy is a central element in the core of this research. Up to this point, in a way or another, these ideas are involved in the synthesis of nearly every argument made here; and whether several aspects of this study can (and should) be contested – e.g., if it is such critical constructivism which would best represent the axiological spirit of this thesis, or if an instrumental ontology is even necessary in this theoretical paper, – the discussion that I intend to incite with this text theoretically refers to the possible implementation of artefacts for mediatising our civic participation, towards the radical sense of democracy via a critical constructivist education. In this sense, CI is conceived here as a product, rather than a theoretical background, whilst Freire’s, Jenkins’, Dahlgren’s, and Kiili’s theories are seen as variable means for achieving collective intelligence as a result.

3.2. RESEARCH METHODS: AN INDUCTIVE AND INTEGRATIVE NARRATIVE REVIEW

Meta-studies, like meta-synthesis or meta-ethnography, are the synthesists' interpretation of interpretations designated as that meta-study's primary data. These constituent studies conjointly interpreted, as plural case studies, form the basis of a determined narrative review which aims to theorise novel contingent paradigms. Harmonious to both the heuristic and holistic aspects of my inductive methodology, Jones (2004) comments that "[n]o analysis is considered final, since reality is constantly changing. The emphasis in analytic induction is on the whole, even though elements and the relationships between elements are analysed" (p. 105). Accordingly, in this thesis, I have first gathered the above-described material to be studied as my primary data, which is then critically synthesised in order to form a theoretical product that could be handled as the primary data of other synthesised theories.

Moreover, when defining the "polyvocal" (p. 98) principle of qualitative research, in which "the tyranny of numbers is abandoned for the enigma of words" (ibid.), Jones (2004) quotes Hiatt's take in which "[q]ualitative work is in constant, dynamic flux, but moving toward some end-point in an evolutionary way. There are efforts by the mind to concretise meaning and the qualitative dimension has an integrative function for the researcher. Unity provides context and meaning and it is toward such unity that the researcher is striving" (1986, p. 737). Such integrative implementation is done here via comparison, critiques, and what synthesists call translation (see Dixon-Woods et al., 2007; Walsh & Downe, 2005), "encompassing and distilling the meanings in the constituent studies" (Zimmer, 2006, p. 312). For instance, the fathers of meta-ethnography, Noblit & Hare (1988), apply this sense of translation as a method which "seeks to go beyond single accounts to reveal the analogies between the accounts... The senses of different accounts are then translated into one another" (p. 13). To that end, translation is a clarifying conversion of contextualised transcripts, critically constructed and interpreted for conveying and explaining the meanings rendered by synthesists.

Consistently, whilst reminding us that learners are liable for their own learning, Woolf refer to Jonassen (1991), asserting that "a person's knowledge is a function of his prior experiences, mental structures and beliefs" (2009, p. 115). Correspondingly, conjecturing the systemic structure of an ICT arrangement which, as of yet, has been nearly-exclusively addressed in the typically empirical Design-and-Technology (D&T) territory, I strive to synthesise theories from seemingly unrelated disciplines with the inductive application of a constructive perspective from my social sciences experiences. In sum, here I consider how interactive

narratives can be utilised as a media education instrument: a medium for educating whilst entertaining. Therefore, with a critical constructivist approach, I translate the Flow Theory of studies on edutainment into a more societal realm of the Participatory Culture theory.

As a result of this bricolage, I expect to yield a civic-pedagogic method of media participation. Such method could then be employed for *producing* a **collective intelligence** – as discussed in the last chapter. Likewise, the studies reviewed here are not “conducted in isolation” (Zimmer, 2006, p. 311); instead, I avail of a meta-synthetic procedure that seeks to bridge analytical integrations of previous examinations – yet, in this case, from diverging fields of study. Still, this research method is aligned with the propositions of Gough and Elbourne (2002) as “a narrative review that includes... a synthesis that needs to be in the form of new interpretative constructions rather than generalisations, and a qualitative case study approach where the primary qualitative studies are the case studies” (Jones, 2004, p. 101). Then, when concluding this study, I theorise a prototype for an edutaining praxis, alluding to Herkman’s (2007) alternative production as a tool for critical media education analysis.

As presumed, this thesis’ integrative narrative allows for more autonomy to researchers’ ways of thinking, due to its less methodical modes of implementation. Nevertheless, as Torracco (2005) describes, when “Organizing an Integrative Literature... Authors of review articles do not have the benefit of following a well-established format to organize their articles because there is no standardized format for review articles as there is for empirical work” (p. 359). However, as Jones (2004, p. 96) suggests: this is the time “when it may be best to reacquaint ourselves with the adage that ‘the hallmark of good qualitative methodology is its flexibility rather than its standardisation’ (Popay, Rogers & Williams, 1998, p. 346)”. To boot, juxtaposing more systematic meta-synthetic techniques, integrative narrative reviews apparently facilitate the incorporation of studies from otherwise unrelated disciplines: as it is the case of this study. Be that as it may, in a number of characteristics, this research implementation may deviate from other qualitative studies.

3.3. A THEORETICAL STUDY AND ITS METHODOLOGICAL LIMITATIONS

Although it is important to note that, in some cases, researchers may perform meta-ethnography even without acknowledging such methods, it could also be said that this thesis’ methodology may not be entirely qualified as a meta-study. As Dixon-Woods et al. (2007) elucidates “it is not clear how the findings of a review conducted using meta-ethnography might be distinct

from those using narrative review” (p. 415). These authors conducted extensive research on qualitative reports, selecting – through rigorous inclusion/exclusion standards – (N=42) articles that claimed to make use of synthetic methods, “finding that there was little uniformity in the choice of methods for appraisal... given on-going disagreement among practitioners not only about the characteristics that define good quality qualitative research, but also on whether criteria for quality in qualitative research should exist at all” (p. 417). That statement might in fact explain why the authors of that report did not present themselves a clear definition of what criteria was assigned to differentiate narrative reviews from meta-ethnographies, even when arguing that several papers in their review systematically made “amendments to methods without being explicit, and [that] making significant amendments while still retaining the label of the original method, is rich in potential for confusion” (p. 418). As a matter of fact, the authors did not even specify which amendments were done to what idealistic form of meta-synthesis, nor they reported of what attributes should comprise meta-studies.

Having that established, I identify aspects of this research which are akin to those of meta-synthetic methods. Here and there is crucial to detail the objective of investigation and elaborate research questions, delineating a theoretical background – as featured in the previous chapters. Hence, the primary data must be categorised into determined thematics in light of studies’ contextualised interest – like the headings within the previous chapter were meant for. Next, the primary data are analysed through “hermeneutic and dialectic approaches” (Paterson et al., 2001, p. 60) – as attempted at this point of this research-method section. After these phases, – to which Paterson et al. (2001) refer as “meta-data-analysis” (p. 55ff), – a “meta-method” (p. 71ff.) step should be implemented, entailing the “appraisal of the themes and patterns’ found within the studies” (p. 74), before reaching to the “meta-theory” stage (p. 91ff.), when synthesists conclude their research with their theoretical contribution. Thereby, this implementation contrasts with studies based on Glaser and Strauss’ Grounded Theory (1967), which advocates a quasi-eremitic distancing of the researcher from his research.

Appropriately, both meta-method and meta-theory steps will be taken in the following chapters, when I answer my research questions by translating and interpreting that primary data, and then discursively theorise on the issues tackled here. At last, in meta-synthesis, researchers engage in a “dynamic and iterative process of thinking, interpreting, creating, theorizing, and reflecting” (Paterson et al., 2001, p. 112), seeking for “more socially responsible” (p. 111) deconstruction of given phenomena. To that matter, I recall that this MA Thesis’ ultimate goal is to unshackle our collective intelligence for democratising our democracies.

In this thesis' macro-context, videogames – or interactive films and series – are harder to synthesise with a participatory democratic utopia, demanding extra caution from this synthesist. Though, as Jones (2004) remarks: “It is important to remember that even the most quantitative of us still approach work with the ‘hidden agenda’, if you will, of our background, culture, experience, preferences and prejudices. Part of being post modern in our approaches includes acknowledging as much of these things as possible and being vigilant in discovering the more hidden ones” (p. 105). Like this, keeping in mind that the ideas explored here are a reflection of this synthesist's thoughts, I hope that by the end of this study, its reader can grasp “future possibilities” (p. 106) about how interactive media create – via their hyperlinked contents – a collective intelligence.

And, finally, consonant with one of this thesis' main limitations, and with the general challenges around the media literacy topic, Woolf (2009) calls attention to the indiscriminate use of hypertext and hypermedia which “support constructivist learning by allowing students to explore various pathways rather than follow linearly formatted instruction... However, a novice learner might become lost in a sea of hypermedia; if learners are unable to establish an anchor, they may wander aimlessly about becoming disoriented. Constructivist design suggests that learners should not simply be let loose in such environments but rather should be placed in a mix of old and new (objective and constructive) instructional design environments” (p. 116). Indeed, it is difficult to determine when the collected material is enough for writing a thesis' material. On that note, I must acknowledge that much of the most pertinent literature in the themes approached in this thesis – e.g., Kincheloe's work, – will unfortunately be left out due to the restrictions of time and space that could be dedicated to this MA Thesis.

4. RESULTS: A 21ST CENTURY PRAXIS OF *CONSCIENTIZAÇÃO*¹

Up to this point, in this paper, I have dealt with an interrelation of theories, like Lévy's Collective Intelligence (CI) and Jenkins' Participatory Culture, whilst contextualising the difference of consensus and consultation in light of the digital public spheres' conception of Dahlgren. In addition, I have also addressed to Kiili's edutaining application of Csikszentmihalyi's Flow Theory, in reference to a (epistemologically critical) constructivist approach in teaching-and-learning. At last, I have detailed my process for synthesising these ideas for answering the questions posited in 1.1., which will be finally answered in this chapter.

Now, I elaborate my pursuit towards CI as a consequence of an edutaining knowledge construction method that involves a critical analysis on how we have been participating within digital public spheres. Nonetheless, forasmuch as CI is largely undefinable, it should not be undisclosed nor indisputable; on the contrary, its construction must be public, consensual, collaborative, and considerate to all – regardless of e.g., gender, nationality, sexual orientations, or social class. Explaining to Peters (2015), that his “utopian project of an open knowledge space [emerged] from the learning paths of the real people instead of *a priori* hierarchy of prerequisites” (p. 262), Lévy observes “the formalization of knowledge and its transformation into data and algorithms” (ibid.): for him, algorithms connect, converge, and correlate the symbolisms and significances of our human intelligence, converting our data into an emergent collective intelligence. All things considered, in this section I aim to explain **how interactive media create collective intelligence**, by analysing what decentralisation of power is engendered by *produsage* and why edutaining praxis ought to spur a civic participation. As a result, here I hypothesise the emergence of a 21st century conscientisation praxis.

When performing literature reviews – like I endeavour here, – we must “examine the literature with a particular lens defined by the article's objectives. Rarely do reviews examine all aspects of previous research. Rather, this lens points the author (and reader) to specific aspects of previous research that are critically examined and evaluated” (Torraco, 2005, p. 361). Wherefore, from this thesis' constructivist angle, an aspect that demands attention is Woolf (2009) take on situational learning, in which “[c]onstructivist tutors share many principles with situated tutors... Constructivist learning is often situated in realistic settings, and evaluation is

¹ Conscientisation is, according to the Oxford Dictionaries, “the action or process of making others aware of political and social conditions, especially as a precursor to challenging inequalities of treatment or opportunity; the fact of being aware of these conditions.” (OED, n.d.) In that sense, it is a synonym of a critical consciousness-raising within a socio-political context.

integrated with the task, not presented as a separate activity. Environments provide meaningful contexts supported by case-based authentic problems derived from and situated in the real world (Jonasson, 1991). Multiple representations of reality are often provided (to avoid oversimplification), and tasks are regulated by each individual's needs and expectations... Constructivism maintains that because learning outcomes are not always predictable, instruction should foster rather than control learning and be regulated by each individual's intentions, needs, or expectations." (p. 117). Furthermore, Renninger et al. (2019) found that fun, challenging, and computerised settings "may increase situational learning" (Kiili et al., 2021, p. 96). Additionally, situational interest relates to the feeling of being "entertained" (Kiili et al., 2021, p. 95; Schmidt & Rotgans, 2021). Lately, as aforementioned, Kiili has been investigating the correlation of flow with situational interest in game-based learning (Kiili et al., 2021; Koskinen et al., 2022). Such examination also goes well with the conclusion of his PhD monograph, in which he presented and revised the Experiential Game Model (EGM) to include the situational learning theory – within the frame story, – literally sustaining earlier claims which asserted that "learning is a context dependent activity" (Brown, Collins & Duguid, 1989; Lave & Wenger, 1990 as pointed out in Kiili, 2005, p. 85). To summarise it, the author concludes that the quality of flow in educative games often relates to the ease of use or pleasantness of artefacts, and that content creation is an effective learning strategy, being the main cause of flow experience in his PhD dissertation.

Ultimately, the emerging theory from this research is synthesised as a product of those studies depicted as this research primary data. In other words, the 21st Century Praxis of Conscientização put forward here, contemplates scientifically verified implementations of critical, constructivist, experiential, and situational learning, applied to the digital public spheres' settings, where a collective intelligence is expected as a result of *producers'* participation. More importantly, as further elaborated, the agents of digital public sphere are communicators, who can theoretically become entertaining educators, *producing* (in a Freirean pedagogical sense) – or, perhaps, edutaining *edutators* with a critical conscientisation.

4.1. WHY EDUTAINING PRAXIS OUGHT TO SPUR A CIVIC PARTICIPATION?

Towards the ameliorating of our mundane experiences, sociocultural developments depend on continuous and systematic reforms (aka praxis) of our sense of civilisation. Set aside how this aspired praxis has to be performed, it is vital realising that it might only work if all involved

parts would voluntarily realise themselves as singularly distinctive beings with exceptional points of view that may or may not agree with the majority of their societies' opinions. However, adding complexity, it is also fundamental that we paradoxically recognise ourselves as idiosyncratic parts of a whole which must invariably treasure mutualistic standards to the macro environment: and, possibly, that can all serve as a survival mechanism of our species.

Consequently, this cultural deconstruction task proposed here should lead to a self-discovery state-of-mind meant for indicating that some of our ethnologic immersion has thus far been failing to fulfilling some of the innate capacities of humankind – principally in regard to our cooperative faculties. Seeking such deconstruction, which tenets find roots in the Freirean theory of *conscientização* (1968), we would need to question, and sometimes, even refute hegemonic doctrines. Consistently, we can also endeavour to socio-culturally emancipate ourselves by identifying and analysing the ideological threads endorsed by our main sources of information: curating the (media) contents, along with the socio-political repertoire, in which we partake, so as to acquire and preserve novel and noble values that are of more universal canons, instead of the segregationist principles praised by leaders with extremist tendencies.

To put it another way, the subjects involved in the praxis of civic participation hypothesised in this chapter should try finding the ethnological elements that are etched in their minds, luring them into their particular processes of promoting dehumanisation and reification. Referring to the indoctrination of these components in educational settings, Freire (1968) makes an analogy in between our didactic structures and piggybanks, because the educative content often is merely deposited by educators into their students' minds for later been withdrawn by these teachers over their evaluation methods: such as the (multiple-choice) exams. These deposits, according to the Brazilian philosopher, generally favour the oppressors who are empowered by their wealth to set the rules of the capitalist game which is played worldwide.

In respect to our contemporary business models and sociocultural structures, for instance, it is interesting pondering that most of us have been 'hardwired', or rather trained, to admire those who have the key to turn the world's tide to whichever direction their profits may come. During the past decades, the likes of Bill Gates (Microsoft), Mark Zuckerberg (Meta), and Jeff Bezos (Amazon) have been reset as nearly unanimous parameters of success. If truth be told, achievement has been increasingly associated with (financial) accumulation. Notwithstanding the copious scandals that these and other relatable names were involved before achieving their triumphal reputation, we ought to be capable of identifying the moral principles that will ground our verdicts when it comes to positioning ourselves.

Irrespective of which side those continuously criticised characters might be, we must decide to be either one with individualistic oppressors or stand by the oppressed ones – hoping to participate in a collective democratisation of the world. To that matter, Freire tackles the maintenance of an effectually oppressive status-quo by those who “domesticate” (1968, p.14) their realities and themselves, by not engaging in the fundamentally radical processes of critical analysis, thus hampering some of the efforts towards sundry societal changes that have been insisting on remaining urgent. By no means, nonetheless, I mean to claim that these individuals’ media corporations should entirely abdicate of their power and influence over the contents distributed in their platforms. That is because, by allowing countless productions to be published and accessed all over the world, – with no restrictions on *producers*’ colour, creed, or political inclinations, – the web purportedly has the potential for being immensely more participatory than the traditional media, and their professionals’ work, have been.

Furthermore, in harmony to the fact that the media providers which most easily come to mind have been failing to regulate, mediate, and curate a civic participation of their users, the majority of elected representatives in our (so-called) democratic systems have equally been unsuccessful in engaging (specialised) citizens within their decision-making discussions. As Brown (2015) explains and Dahlgren corroborates, the neoliberal capitalism which dominates the ‘soi-disant’ democratic regimes in the West captures our civic power, via electoral consent, and redistributes it to corporations’ representatives, effectively hijacking the sense of citizenship, participation, and democracy – particularly in the current post-truth era. Or, as Dahlgren (2018) construes: “private wealth buys public policies” (p. 16), turning “engaged citizens into enraged ones” (p. 17). In that case, as a replacement for truly exercising their citizenship by participating in their representative democracies as rightful citizens, more than a few voters merely transfer their civic responsibilities to the most public-appealing politicians. Nowadays, voters ordinarily exercise their civic rights merely by voting on candidates who, after elected, decide on (national) matters without their voters’ consultation – and politicians who typically neglect the demands of their community are the lion’s share: especially in places like Brazil, where the vote on elections is not a right, but a sanctionable duty. In effect, the democratic act of voting risks being paradoxically transmuted into a systematically tyrannical event, once many simply choose those who can choose for them – and, essentially, *in lieu* of us – on public-concerning matters. As an outcome, (political) media illiterates prefer withdrawing themselves from antagonist arguments, problematically seeking an ideologic asylum in what contemporary literature pictures as ‘echo chambers’ (see Barberá et al., 2015;

and Sunstein, 2017), because “the gravitational pull of group identity reduces societal insecurity and promotes affective group bonds to reinforce such pathway to knowledge. [Whereas, in] the long run this becomes debilitating for the individual, it fosters cognitive closure of groups, and ultimately damages the critical role of public spheres” (Dahlgren, 2018, p. 17). And yet, as an antithesis to this scenario, the praxis sought in this study begins to be shaped as the dialectical processes in which individuals search – critically and independently – for vital and universal aspects for attaining a mutual well-being within their communities. These welfare factors may include the matters pertaining to healthcare, education, social support, and even the opportunities for acquiring products and services that can provide comfort and satisfaction – evidently linking these civic rights with the political affairs.

Accordingly, after detaching ourselves from those deposits that keep us from being truly free to altruistically think and act for the benefit of our humanity, we shall be empathetically reminded that we all have the same sapiens ancestors. Correspondingly, striving to provide an opportunity for weaker or powerless subjects to voice their objects of volition, we should democratically foster socio-empowering discussions; and this is the exact point where interactive films and series ought to be resourcefully employed as a didactic instrument: by disclosing dialogic and dialectical scientific knowledge. As a matter of fact, this is the very reason why edutaining praxis ought to spur a civic participation.

Appropriately, instead of attempting to confirm or criticise media effects, researchers from the edutainment field theorise *en route* for the (ethnological) benefits of media usage. That is: rather than studying what media might do to people, edutainment specialists delve into what people may do with media (Martín-Barbero, J., 2006, paraphrased in Bujokas-de-Siqueira & Rothberg, 2014). In the same degree, as Cahill & McGaugh (1995) notices, and Ninaus et al. (2019) ratifies, the mere addition of emotional factors (like joy, fear, or pain) in educational narratives improves the reminiscence of their particular contents, describing the neurological analysis of Nieoullon & Coquerel (2003) which indicated that those components stimulate the “neural reward system in the brain”, evoking enjoyable and meaningful educative experiences.

Aptly, observing Plass & Kaplan (2016) that properly incorporates a cognitive affect model of learning in multimedia, emphasising the “inseparable association of emotional and cognitive process during learning” (Ninaus et al. 2019, p. 2), Kiili alleges that games are progressively more employed in educational environments (for an overview consult Sailer & Homner, 2020). To date, Kiili has been testing and verifying the efficacy of that theory in videogame-mediated

educational situations, where even though the flow state is not always pleasant, it produces enjoyment and induces the fulfilment of potentialities (whether in e.g., sports or in e-sports), independently on the activities' outcome. The educationist regards flow to be the root of pupils' engagement, which he affirms that can be designed, "conceptualized as the heightened, simultaneous experience of concentration, interest, and enjoyment" (Kiili et al., 2021, p. 95; Kiili et al., 2014a; Kiili et al., 2014b; Shernoff, 2013; Shernoff et al., 2016). In this manner, aspiring to instrumentalise efficient methods of media education, edutainment techniques foment alternative teaching-and-learning experiences, potentially transfiguring both entertainment and education practices into important allies in this praxis towards a sociocultural democratisation.

Playing videogames usually is an immersive experience of controlling the course of characters for overcoming challenges audio-visually depicted within a plot. Typically in (serious) games, players assume impersonated roles, hypothetically enhancing their affective relation within a narrative: "games or game-based elements, respectively, offer unique and powerful opportunities to increase emotional engagement [that] might positively influence cognitive resource allocation (e.g., Fredrickson & Branigan, 2005) and enhance learning outcomes (e.g., Plass et al., 2014; Um et al., 2012) as observed in recent meta-analyses on game-based learning (Clark et al., 2016; Wouters et al., 2013)" – and summarised in Ninaus et al. (2019, p. 8). Thus, improvement in students' engagement and absorption are triggered by the "implementation of narrative elements, appealing visual aesthetics, and virtual incentives" (ibid.). Comparatively, whilst exploring the educational character of games, considering its latent application into interactive films and series, I will conclude this thesis with a discussion on **how** this 21st century educative method can also be civically employed.

For now, I present Jenkins' studies on how popular culture – including videogames – is incorporated into *producers'* political discourses across different types of media, to justify **why** edutaining praxis ought to spur a civic participation through our communicational – and perhaps participative – capabilities of involvement which are being enhanced by the minute, in relation to both range (or influential reach) and foundation (or theoretical basis). By the means of *Spreadable Media* (Jenkins et al., 2013), "the public helps to shape the cultural and political agenda through curation and circulation" (Jenkins & Carpentier, 2013, p. 272); and, in that way, appropriating of the transversal, quasi-ubiquitous, characteristics of media for participating in a (virtual re-) construction of our traditional ethos. However, as he discerns, "many platforms that describe themselves as participatory do not encourage the development

of any collective understanding of cultural production: the emphasis is on individual self-expression. [Alternatively,] sites like YouTube can be meeting grounds where multiple subcultures intersect... but YouTube itself generates no shared identities or values, as is witnessed by the ruthless comments around YouTube posts” (pp. 272-273). That is, even considering that SoMe platforms remain rather limited and limiting, – regarding how little popular concerns and how much self-promotion have been voiced there, – the augmentation of public expressivity is noticeable in the web. And yet, that improvement still has not expressively been manifested in our (political) participation.

In digital public spheres’ attention-craving domains, the political is a secondary object of interest. It is “marginal and subordinate” (p. 13) to entertainment. Papacharissi (2010) and Dahlgren (2013) classify such marginalisation as a quasi-tribal niche market to a public of which algorithmically commodified engagement “can engender a cosy comfort zone, characterized by ‘slacktivism’ and ‘clicktivism’ [where] the individual mode thus take precedence over collective one, and the horizon of engagement with society *via* the media risks becoming undercut by engagement *in* the media” (pp. 13-14). Bakardjieva (2015) elucidates, and Dahlgren underscores, that even our social affairs, in general, have been increasingly rationed and rationalised by virtual protocols that are “standardized and trivialized forms and gestures” (Dahlgren, 2018, p. 13) computed by recent technologies – such as ‘likes’ and ‘subscribes’. Now, ‘sharing’ in social media is a show: a performance that has shifted the role of friends from private to public, once we (as friends) symmetrically serve as “‘a public’ for our manifestations of our identity” (ibid.). Then, even engaging in political discussions in the net, our participation rarely is evaluated as civic demands, but usually as consumers’ opinions.

At any rate, in line with my Freirean point-of-view, Jenkins is also interested in the dormant benefits of coupling education with participation. As claimed in 2006 (p. 4), he reaffirms (seven years later) that media is increasingly employed for “serious” projects, gradually targeting more complex and collective goals. Addressing to civic learning within an educational reform framework, he points out his intention to make classrooms more participative (Jenkins & Carpentier, 2013, p. 281). Substantially, Carpentier ratifies this view, asserting that “performing democracy through participation generates learning processes that strengthen civic identities, and participation can then be seen as a pedagogical instrument to generate better citizens and increase societal happiness” (ibid.); and, aligning with the angle taken in this research, he adds that “participatory processes take advantage of the existing civil reservoirs of, for instance, citizens’ knowledge and praxis, in turn activating and validating the

citizens that are part of these civil reservoirs” (ibid.). He nevertheless realises that neither participatory culture nor democracy will ever be fully accomplished, even if we keep on advancing towards that fundamentally egalitarian, or socio-equalising direction; and whereas “it is a never-to-be-reached ideal... we need to strive for this radical equality” (pp. 266-267). Similarly, Jenkins notes that we must pursue all necessary changes on that journey, regardless of the “fatalism” (p. 266) or immediatism of critical theorists who might feel that participatory democratic utopias are stillborn. On that account, despite that most may fail to grasp the greatest share of noteworthy civic progressions happening during their lifespan, we ought to be re-encouraged by numerous historical amendments towards general psychosocial wellbeing, including innumerable remarkable moments of humanitarian empowerment and political emancipation – as designated in this thesis’ final chapter. Still, it is critical to be aware of the risks in overemphasising the potential of digital technologies towards an unconfined civic participation, insofar as that approach remains exclusively conceptual.

Ergo, objectively, the synthesis of studies presented here provides answers to **why edutaining praxis ought to spur civic participation** in two levels. The first one regards to its necessity. Tackling the matters of reification that Freire proposes, an active participation towards a reform of our civilisation, through the intellectual resources of its rightful and humane citizens, caring for each other (and for our environment) is necessary for collectively protecting and providing to our kind. And, for that, it is important to first understand how the current system oppresses people: by regulating and moderating our ways of thinking, shaping us as individualistic individuals, who domestically gear this system’s mechanisms, engendering the paradoxical democracy, where we effectively select those who neglect our needs.

In addition, this thesis’ sub-question is also answered with the rather empirical and instrumentalised application of studies on edutainment which, as presented, have consistently demonstrated the efficacy of its practices for teaching-and-learning. Hence, in theory, edutaining praxis ought to spur civic participation because this method of education is feasible and efficient, supporting “knowledge construction, requiring conscious processing” (Kiili, 2005, p. 90). Moreover, as I wrote, edutainment’s empiricism tells more about how than why its praxis stimulates engagement. To that end, I add how cultural artefacts have been implemented as means to express the public power. Ultimately, the public can participate civically and pedagogically in our current civilising practices, via collection, curation, creation, and circulation of a conscientious – in a Freirean sense – material. Therefore, in sum, edutaining praxis ought to spur civic participation because it is both possible and necessary.

4.2. WHAT DECENTRALISATION OF POWER IS ENGENDERED BY *PRODUSAGE*?

From a critical-pedagogic perspective, after acknowledging some vicious impositions of the market, media, governments, or of any other institutionalised establishment with (potentially) oppressive nature, we can start grasping ourselves as culturally emancipated beings: citizens of the world – i.e., people loyal to their species, rather than to their flags. Effectively, we share ground with every person on Earth; and aligned with the viewpoint of the Professor of Global Education at the University of Lapland, Partow Izadi (2003), who primarily sees humankind as a whole entity which must understand that each of its parts is born simultaneously under the responsibility of and responsible for each other, it is important to, whenever possible, listen to everyone's ideas on topics that, in a way or another, concern to all of us; and perhaps the infamous pair of big data and algorithms may facilitate that consultation process.

Media has evolved to be inevitably involved in the construction of our societies' ethos: "the media interplay with each specific sector of society and culture is in some way altering it, and by extension transforming society at large, even if this is far from a unidirectional or deterministic development" (Dahlgren, 2018, p. 7). So, once our distinct roles in improving the communities' psychosocial well-being have been socio-culturally realised, the foundations for fostering discussions with other socio-politically-aware people about ongoing and optimal conditions of our concerns can be determined – preferably online, albeit in a civilised fashion: contrasting to the manners that these threads currently are discussed on SoMe. On these grounds, those proposed debates are bound to work predominantly as a medium, or forums, where a variety of subjects could turn into subsequent projects that, in turn, would evolve into the objects of analysis to be democratically refined towards the achievement of a community's wellbeing.

One-to-one, it is necessary that the practical application of these conceptions, which ultimately result from those envisaged debates, eventually develop into the objects of analysis of ensuing collaborative discussions, in a cyclical method of participatory citizenship. Furthermore, as Carpentier comments, "[b]ecause of the multitude of these voices, a greater diversity is taken into account, which is... deemed to result in more societal happiness and is seen as a better guarantee of good decision making" (Jenkins & Carpentier, 2013, p. 281). Then, the debatable nature of this praxis justifies and motivates the need for the previous stage of conscientisation because, as Izadi (2003) advises, a discussion is only productive if its participants are always respectful to each other whilst maintaining their sincere positions.

That is, after the preliminary processes of conscientisation – in which the goal is to understand our singular assessments on certain civilising principles, – we ought to be able to proceed to the supplementary half of this (circular) praxis, when the co-operative exercise – of debating and, more importantly, testing the many different approaches on each of the predetermined questions – could be put into practice: like the academia has, for the most part, been doing. As a reference to these objects of analysis, Freire presents his concept of “meaningful thematics” (1968, p. 50) which, in sum, defines the topical questions that must be dialectically addressed – ideally, via critical dialogues. Though, an important observation to consider there is the idea that practically any issue may be analysed in broader or narrower stances.

For all that, in a holistic panorama (as adopted in this monograph), the connection between themes that affect each other might be as significant to that investigation as the object of study itself. That being the case, untold matters could fit into what Freire refers as a “thematic universe” (1968, p. 53) which is, in short, the group of meaningful thematics that are relevant to a given cluster of knowledge. Taking, for example, the social sciences domain as thematic universes, it would place the media studies into its meaningful thematics’ category. However, the media studies too can be analysed as a whole complex of meaningful thematics, which encompasses the matters of e.g., media literacy and data protection.

As a result, the data-protection issues undoubtedly produce effects on our socio-political affairs, among other subjects encompassed under the social sciences umbrella, – because no phenomenon within this sphere of activity exists isolated (*in vitro*). In any case, determining an object of analysis is key for conducting research. Yet, the risk in overly narrowing a research problem is considerable. In that regard, when considering our unique individualities, we can all identify in ourselves some specific thematics that intrigue us more than others; and even if we are only able to nurture our familiarity within particular areas of interest to a limited extent, we often find other people with interests that converge with ours.

Still, it is virtually impossible to find somebody with a collection of information on an issue, which is identical to ours; and equally unlikely to find those who would share the exact points of view on our interests with us. Or, as Jenkins (2006) writes: “None of us can know everything; each of us knows something; and we can put the pieces together if we pool our resources and combine our skills” (p. 4). Accordingly, the sum of all that each one of us know about a concept really is all that is yet known on that matter; and, therefore, by dialogically discussing joint interests, engaging individuals tend to somehow enlighten themselves on those thematics: in principle, that is how our realities evolve.

Analogously, the road that leads to a sociocultural democratisation ought to inevitably cross the junction of doubt and difference, because usually is only from one side of overcrowded traffic jams to the other that we have the opportunity to reach a common destination. In other words, although that there are countless paths towards the comprehension and resolution to our conflicts, none can neglect the importance of promoting a dialogue that can bridge the parts. Since we all think differently, we are consistently negotiating the meanings of how we sense and signify the world; and insofar as we continuously change ourselves – with the new information that we acquire, – we have to also revise our views on the past, present, and future of mankind for efficiently participating on the evolution of our kind.

Until very recently, many considered the efforts for conceptualising networks, in which such thematics could be broadly discussed (by people from different ethnicities all over the world), just as naïve as utopic. Indeed, it is still debatable whether interactive media, in the current state of Web 2.0, do provide such effectual possibilities to its users. On the other hand, it is with the purpose of adding to this debate that I endeavour to investigate quiescent means for collaboratively working on a critical upgrade to the denotation of democracy. Because, if the representative democracy as a bureaucratic system for controlling and regulating participation within our communities might have parallelly been maintaining the social inequalities on our planet, the direct democracy as a civically participative and, above all, humane way to lead, may well be the much-yearned raindrops on our drying lands of hope.

In that event, it is crucial to take note on the different types of participation – *through* the media and *in* the media – as put forward by Carpentier et al. (2013, p. 288). Whereas, in the former, media serve especially as the space where people expressively interact, debating, presenting, and representing their citizenship, in the latter, participation is seen rather as an actualised and instrumentalised product, *produced* by content creators and/or organisational decision-makers. Into the bargain, these theorists indicate the contrasts within the spectrum of media and societal participation, ranging from minimalist perspectives, – when participation is either restricted and controlled by media professionals or merely channelled through as the process of electing representatives, – to more maximalist approaches towards democracy as an outcome to the intersection of civic representation with public participation: that is, a civic participation.

With the purpose of illustrating the nuances between media participation, I like to observe the audiences' interaction with reality-shows, such as the Big Brother franchise. There, the public is invited to contribute, in weekly basis, by selecting the gameshow's participants that must depart from their shared and (inter)nationally watched house, where the winner is the last to

leave. Nevertheless, these popular selections can only be carried out after their options have been predetermined by the contestants in lockdown. From there on, the audiences vote to oust competitors, especially motivated by the edition and narration of the shows' producers.

Accordingly, Carpentier et al. (2013) would classify such participation mode as minimalist, media-centred, homogenised, and non-political, because in this scenario "participation remains articulated as a contribution to *the* public sphere but often mainly serving the needs and interests of the mainstream media system itself, instrumentalizing and incorporating the activities of participating non-professionals" (p. 289). Therefore, in these minimalist outlooks, participation is reduced to a level of involvement which is merely interactive: not genuinely participative. In these circumstances, I conversely intend to concentrate on more maximalist perspectives of participation in which the involvement of a diversified public is expected for heterogeneously readjusting the control of media corporations over their interactive contents.

In that matter, Carpentier et al (2013) sees participation as a "political process, where the actors involved in decision-making processes are positioned towards each other through power relationships that are (to an extent) egalitarian" (p. 288). Especially after the Web 2.0, media have irrespectively been contributing to our contemporary processes of democratisation, by offering to the public with a chance to participate in content production whereas dodging, at a great extent, the media industry's control over their *produced*' production: "participation *in* the Internet focuses on the opportunities provided to non-media professionals to (co-)produce media content themselves and to (co-)organize the structures that allow for this media production" (Carpentier et al, 2013, p. 292). Nonetheless, Jenkins (2006, p. 3) observes that although some *producers* are more talented for creating and publishing contents, not even the aggregate value of all *producers* could yet threaten the power of media professionals, who would still exert a greater control on our sociocultural interaction.

Ultimately, in order to answer **what decentralisation of power is engendered by *produsage*?**, it is prudent to remark that, as the Fourth Estate, the (mass) media is inherently conceived as an opposition to the *trias politica* (Ott, 2014): media is innately expected to balance a power struggle between the people and their (legislative, executive, and judiciary branches of) governments. Though, now, this fourth power has been concentrating much of the political, socioeconomical, and educational (or informational) knowledge and power – especially via the internet and its intrinsic organisations. For this reason, one should not expect that the power of media will effectively be decentralised via online interaction; but considering the agents that have been most affected with *produsage*, it is noticeable that a range of archaic institutions –

like some long-established media vehicles or traditional political parties (in Brazil), – are losing much of their control on how, when, where, and which information is dispersed.

As a result, rather than a decentralisation of power, *produsage* is generating a (especially corporative) shift of power, along with a decentralisation of knowledge: whereas formerly newspapers, then radio stations, and TV channels would exert a greater control on the course of information, now the flows of data are streamlined on the net. And apparently, even if diverse media corporations and conglomerates remain extraordinarily powerful, the Big Tech's and their global SoMe have already consolidated a stronger market share in the current sociocultural spheres of power and knowledge. Then again, curiously and crucially, social media's power and knowledge rely almost exclusively in their *producers*' data.

Hence, although the audiences' importance has been critically enhanced, their participative power has hardly increased in a proportional manner – but it already has regardlessly been heightened. Finally, regarding to the political rearrangement of power by *producers*, it is still difficult to determine. As of now, there is an increasingly evident sense of political effect resultant of *producers*'s participation; though, since this effect is still measured in terms of a paradoxical democracy – which overemphasise the (s)elective power of representation, – a civic potential of citizens' *produsage* remains enigmatic. In spite of that, in the following and final subchapter of this thesis' section, I examine a case which, if not characterised as an exceptional sample of collective intelligence, could symbolise, and thereby engender, a decentralisation of political power by means of *produsage*.

4.3. HOW INTERACTIVE MEDIA CREATE COLLECTIVE INTELLIGENCE?

From the beginning, our cultures and societies have been rooted on principles and traditions that are conventionally shared by their respective members – from the communities' elders to their kin in a cyclic fashion, – corresponding to a social constructivist premiss which asserts that the conception and circulation of knowledge have been the underlying cornerstones of our human development. So far, however, our natural aptitudes for exchanging information have not led to the forging of self-governing civilisations that are *de facto* collaborative. Whereas, throughout the centuries, our life expectancy, means of communication, and perhaps quality of life may have, in general, been enhancing at an incredible rate, we still are not as – collectively – organised as other species: bees and ants, for instance, are renowned cooperative beings whose survival mechanisms parallelly preserve a vital harmony to their colonies.

Irrespectively, for all the datum that homo sapiens is hundreds of million years younger than these eusocial organisms of the Hymenoptera order (see Thorne et al., 2001; White et al., 2003), we have rather rapidly learned to identify, analyse, and share detailed data on issues that can either hamper or enhance ours' and other organisms' longevity. In these circumstances, when interviewed by Peters (2015), Lévy stated that “the birth of automatic computing... was the result of a long cultural enterprise to formalize and augment human intellectual operations” (p. 261). Since data, or information, is (before anything) an instructive asset, our kind's innate capacity to apply skills obtained over practice and instruction are oriented to enhance our existing standards of civilisation. Evidently, with the employment of novel technologies we have been innovating like never before; and the tendency is that our propensity for crafting systems, developing devices and apparatuses leads to the advent of yet newer technologies.

There is no doubt that technology and mass communication have been facilitating our access to information, and in so doing, partly helping to democratise knowledge. In a parallel, the Internet presumably also offers fresh openings for greater cultural integration and social empowerment, whilst potentially challenging the certainties of our mediatised consciences' erstwhile moderators. At any rate, it is somewhat intriguing that, more than ever, information is increasingly valuable and available, defying one of the most known tenets of economy: the law of supply and demand proposed in 1776 by the Enlightenment philosopher, Adam Smith.

This is because, rather than in the quality or quantity of cybernetically gathered data, the market value of information is largely measured in the form that that info can be processed. As yet, this value of the most invaluable assets in the market is thus set on their analysis process: a service that seemingly is best delivered by the machines' algorithms – which have largely remained owned by the bourgeoisie. Still, despite that the machinery's notoriety for processing information is proportionally heightened with the substantial increase of data gathered on the Infobahn, the importance of such processes fundamentally lies on the search for a deeper understanding of our human capacities.

In due course, because we program algorithms for systematically organising our information, their function is to ease our knowledge retrieval procedures, potentially becoming a distinct ally of multiple methods for educating as well as, of course, entertaining – as further explored. The amelioration and augmentation of data processing systems should then reflect on our assembled power of analysis: this is to say that we could get smarter with the development and application of smart(er) devices because, in sum, networked databases are the cumulative compilation of knowledge, dynamically processed and *produced*, as a result to the computation

and multiplication of algorithmic systems. Congruently, our communal aptitudes for employing symbolisms and operating technologies are contemplated by both Lévy and – the Canadian philosopher who is considered by many as the most influential media and communication scholar of all times – Marshall McLuhan (1964), as means of extending our human abilities: Lévy, for example, foresees an “epistemic revolution [in which] we will be able to *observe* our collective cognitive processes and to understand more precisely how we think and act together” (Peters, 2015, p. 264). On the other hand, solicitous to many who, like Peters (2015), might fear an imminent apocalyptic (r)evolution of robots, Lévy urges them to “not reify technology” (p. 265). Thereupon, the mechanisms that process our human adroitness must only operate in equivalent ways to the hypertexted media and/or videogames: responding to our commands, or interactive stimuli, for providing reciprocal reactions.

Because data are etymologically given, they can be perceived as presents gifted and offered from us to our (future) selves: just like our history and education, or even our lives – that are duly given and generally guaranteed by a series of non-partisan rights, which we have attained and maintained as just and equal human beings. For this reason, the infamous data protection issues might not be a problematic matter primarily because of the data collection itself – as repeatedly argued (see Fuchs, 2009, 2011, or Terranova, 2000). Contrastingly, perhaps, the questions orbiting this realm ought to inquire, especially, the supposed abuses of individual and institutional rhetoric, as a consequence to the capitalisation, or the poorly regulated monetisation, commodification, and exploitation of *producers*’ expressivity.

Over and above, as already read and replicated in the first texts ever printed (on Gutenberg’s Bible), both media narratives and political discourses continue to habitually speculate about determining much of what is wicked in the world, whilst posing to (re)present (as) the most suitable saviour to that (hypothetical) problem at hand. To summarise it pragmatically, the best-selling stories of heroes and villains – which have been fairly established as an apparent new formula for high-grossing (sci-fi) films – are, metaphorically speaking, the same old tales of ‘good vs. evil’ that, for centuries, have been helping to convert religious believers, elect heads of states, lure youngsters to die on wars, or to reifiedly sell the (Western) world to a greedy consumerism that is literally rotting the biosphere. Even so, since ‘sharing’ has become an axis for knowledge communities to function properly on the Internet, the plurality of on-line data has progressively grown to be a natural outcome of our media interactivity; and restricting such free movement of ideas – as far as those opinions are not criminous or discriminatory – strikes me more like a preoccupation of oppressors than of the oppressed groups.

For all that, in their case study of the Media Ethnic Institute, Cruz & Djive (2013, p. 134) draw a parallel between the concepts of Collective Intelligence with Participatory Culture, observing the dynamic, instructive, and collaborative processes of electronically connected organisations, where virtually anyone can contribute. These groups are joined by members with common interests, who strive for participating in public debates on determined themes, sharing their unique viewpoints on established thematics. Accordingly, their collective consciousness is “materialised as a multidimensional electronic figure, in permanent transformation, flourishing with new inventions and discoveries” (Cruz & Djive, 2013, p. 136); and in line with Lévy (2011), who deals with the peculiarity of cyberspace, noting the “deterritorialization” (p. 14) of cybercultural environments, – where we can indiscriminately wander by, and involve with, a diverse universe of technological, cultural, intellectual, legislative, and socioeconomic phenomena – irrespective of our physical movement, – Cruz & Djive (2013) mentions Tarde’s theory (in Carvalheiro 2010, p. 67), in which the author also associates the affinities of modern societies not predominantly by their geopolitical residency, but due to their argumentative decisions to unite human cooperatives that seek to act socio-politically.

Thence, this is likely to be the main reason why the combination of media literacy skills with the increase of data-sharing practices and platforms may pose as a threat to the current (territorialised or nationalist) status-quo: in fact, the sum of these global democratising factors might be identified as the primary thrust towards what I understand as the grassroots foundation of the civic engagement and sociocultural emancipation movement sought in this research. It is worth to point out, however, that such participative involvement has, so far, been a privilege of few empowered citizens who can afford to dedicate time and any other resources needed for interacting socio-politically within their virtual circles. And yet, referring to this matter, Jenkins (2006) notes that whilst “the focus remains on access, reform remains focused on technologies; as soon as we begin to talk about participation, the emphasis shifts to cultural protocols and practices” (p. 23). Forasmuch as the digital divide persists in remaining a quite prominent issue that ought to be indispensably tackled by the academia, I alternatively concentrate on the interactivity of those who have access to the hyperspace.

As long as the ease of access to ICTs keeps increasing, marginalised groups are gradually being empowered to voice their own objects of volition, publicising their distinct concerns, experiences, and awareness; thereby, participating more actively in a sort of self-governing processes for ethnological order and progress. Similarly, dealing with the political web and the significance of alternative democracy, Dahlgren calls attention to the “efforts aimed at attaining

social change by democratic means, while circumventing electoral politics” (2013., p. 3). Parallely to Jenkins, he underscores the importance of participation in pop culture and transmedia approaches (Dahlgren, 2013, p. 85), examining a number of empirical studies (including Castells, 2012) on the Occupy movement, and remarking that “while the net is an impressive tool of historic dimensions, it does not, by itself, politically mobilize citizens who may otherwise lack engagement” (Dahlgren, 2013, p. 34). Nonetheless, Cruz & Djive (2013) prefer highlighting that ICTs promote a real-time democratisation, by providing us with communities through which a multitude of meanings and signifiers can emerge, bypassing even our institutionally elected representatives. Cruz & Djive view “internet as a platform for collective actions... and alternative creativity” (2013, p. 135). On that account, more and more, associations within cybernetic environments can be utilised as instruments for crafting and constructing transformation.

At which point, it would be imperative that new media organisations could, *in lieu*, act as simply moderators, concentrating on the curation and mediation of contents distributed over their systems with the exclusive objective of not tolerating the intolerable, such as the reported propaganda and discourses of intolerant bigots. Jenkins (2006) would relate such enterprise to what he coined as the “convergence culture, ... where grassroots and corporate media intersect” (p. 2). That convergence implies the free movement of productions and their *producers*, who in turn ought to interact and collaborate with each other, reorganising the power construct of media industries, by participating with their personal acquaintanceship via various networks in the quest for an augmented collective intelligence. Jenkins regards CI as an “alternative source of media power” (p. 4) which soon will be exerted for important purposes. According to him, whilst discussing popular culture, the masses already are affecting the existing states of, *inter alia*, religion, education, law, and politics.

And, from pop to public culture, educationally interactive – or, as I propose, *eduractive* – programmes can start to take shape when educators, acting as *producers*, are mutually empowered for producing contents to be curated as hyperlinked lectures – with a similar game-mechanism of the Netflix’ interactive-series that is contemplated in the next chapter. Inspired by Etermax’s Trivia Crack (mobile game), the Trivia Quest – that premiered in Netflix on April 1st, 2022 – is an educative sample of this state-of-the-art genre which offers multiple interaction points between productions’ contents and their public, providing possibilities for the members of audiences to authentically interact with several alternatives that can be explored within a

given hypertextual narrative. At the same time, the system of this medium allows producers to collect information on the spectators' interactions with that particular content.

The mechanics' logic of this relatively new videogame format is, in a way, similar to the data-gathering model that already was broadly employed significantly earlier the advent of interactive series: on the social web, where content producers collect information generated by virtue of their public interaction. Accordingly, it is also important to justify the relevance of this type of interactive media with their introduction to the streaming market by the leading OTT-services provider – with over 222 million paid subscriptions (Netflix, Inc., 2022); because, over this specific medium, the 1997-founded, California-based, streaming service enhances its already impressive data-collection apparatus – which algorithmically employs analyses to learn their audiences' habits and preferences (within the Netflix' platform), before producing tailored contents that meet the consumption-demands of their subscribers.

And, just like the interaction of SoMe users have deeply affected the traditional course of information, Netflix's interactive trivia invite their audiences to influence, by directing – through their remote control, smart phones, tablets, consoles, personal computers (PCs), etc., – how the productions' narratives and their hypertexted experiences ought to proceed. That is just like controlling a videogame character; except that, in interactive films, – such as the Swiss *Late Shift* (Planche, Kassam, & Weber, 2016) or Netflix' episode of the *Black Mirror* series, named *Bandersnatch* (McLean & Slade, 2018), – the characters controlled are real actors, playing their scripted roles in different scenarios, following the outcomes indicated by their audiences' commands. To that matter, Kiili et al. (2012) comments that “the basic elements that comprise every game are: mechanics, story, aesthetics, and technology” (p. 79), whereas Kiili et al. (2021) adds that “if players do not enjoy the game... they will play the game only superficially without investing cognitive resources to consider the challenges and the content of the game deeply enough, i.e. they are not fully engaged with the gameplay” (p. 106). With this in mind, for concluding this thesis with a theorisation on yet untapped possibilities within *produsage*, I look into some of the latest media developments which could possibly contribute to meaningful improvements on our practices of participative citizenship.

Then, in such hyperlinked hypothesis, educative matters of various thematic universes could be cooperatively taught by doyens, through networked lectures, with new hypertexts being added to the storylines of their lessons inasmuch as they were being produced and curated, as a critique to divergent interpretations on those phenomena previously presented via that unique interactive-video production. In that event, **interactive media could create a Collective**

Intelligence, by means of an edutaining praxis which could spur a civic participation for democratising knowledge via *produsage* – in turn, (re-)creating and cyclically transforming our collective intelligence – as I further discuss. Like this, such type of series would theoretically serve as a *wikinomical* platform for identifying which views on particular meaningful thematics are favoured in each time and space: that is, socio-cultures: possibly, democratising knowledge and reorganising power as a result.

Ultimately, notwithstanding that this *eduration* undoubtedly is my own (mediatic) utopia, most of what we see around us equally was until quite recently – from the quasi-Foucaultian genealogical and archaeological perspective (as adopted in the following chapter). The internet, just as the PCs, the printing press, or every single language and each of their letters, once were unimaginable or even laughable dreams and thoughts, until being courageously and unequivocally shared and sought. Hence, just like the advent of press inflamed the transitional Renaissance period, – that productively ended the Dark Ages, – the contemporaneous electronically connected reality, in which we presently partake, inspire the resurgence of other artistic-centred movements, fomenting a revitalisation of our generations' ethos via *produced* contents and artifacts. In fact, as soon as educators begin to practice their civic act by creating and presenting interactive content, they will be effectively not only democratising but also radically mediatising and '*artisticising*' education; and consequently, easing the access to their enviable scholarly collectanea of knowledge: or rather, their (and essentially) our collective intelligence.

5. DISCUSSION: CONSENTING ON AN *EDURACTIVE* CONSULTATION?

Presupposing that knowledge is a psychosocial construct, we can affirm that the historical impact of the printing press' advent was unavoidable and is undeniable. At the extent that letters supply means for writers to register their thoughts, these culturally conventionalised characters lead their readers – who, concurring or disagreeing, could decode the ideas which were harmonically presented over that symbolic arrangement of types – to their singular courses of character-building. The messages that we share thus have the capacity to inform and in so doing, instruct, impact, construct, persuade, and/or transform our individual and social selves.

Despite that, as recent research have verified, messages cannot be guaranteed for generating specifically designed results on all members of an audience – as proposed in the nearly centennial Magic Bullet theory, aka the Hypodermic Needle, in which the American political psychologist, Harold Lasswell (1927), studied the impact of Nazi propaganda and Hollywoodian cinema on society as a one-step flow communication model, assuming that the public would behave as merely passive receptors of broadcast messages. Still, the cultural influence of mass communication has remained scholarly relevant over the years: because even if scientifically confirming the psychosocial effects of mass media has been fairly intricate, attempting to prove otherwise could be, at the least, just as complex. The ever-increasing investments on publicity and advertising, for instance, are clear indications that the messages communicated by means of any appropriately designated medium might truly affect a considerable share of their audiences.

Typically, these effects tend to impact especially on media-illiterates (who routinely are targeted by ads), due to the fact that they have not yet been ready to critically analyse media contents. Then again, striving to read in between the lines, media-literates must seek a sort of analytic antidote that should be critical against the rhetoric publicised in the media. Particularly, in a quest towards the (previously presented) idea of cultural emancipation, one should aim at understanding, through independent thinking, the structures that shape our reality in order to avoid being exploited by those who can effectively control our (alleged) democracies – i.e., the agents of our collective intelligence, like the *trias politica* and the Fourth Estate.

For all that, the public of social-interactive media may have increasingly been getting the impression of participating in an effective sociocultural democratisation via content creation, or i.e., *produsage*. Notwithstanding, due to the greatly increased number of alternative sources for information on the Internet, various of these *produced* contents essentially are capable of

(mis)educating as much as they can entertain. Likewise, understanding the implications of a critical media literacy today is imperative to all citizens who pursue civic engagement, because such skillset enables us to not only access and assess the information published in media, but also to produce, treat, and/or alter them – like routinely witnessed on the Web 2.0.

The flows of data indeed appear to be more decentralised in the cyberspace (compared to long-established media formats like the printing press, radio, or the – not smart – TV), though the contents which are shared by and to *producers*, who interact with materials that not seldomly aspire to be labelled as entertainingly educative (or ‘entercative’), recurrently are unreliable. Occasionally, even the sources which have a determined information published are untruthful – such as when astroturfing artifices are manipulated by lobbyists, politicians, or stakeholders in general, who seek to disguise their own ideology or propaganda as if they were messages authentically voiced by grassroots movements: like in the ‘Twitter bots’ cases, where fake profiles are created for supporting a given idea, ideal, or campaign. In addition, the fact that we all find within ourselves our idiosyncratic truths can lead to a cynically generalised – instead of a critically analytic – disbelief in certain significations that are promoted by the media, by our political representation and, believe it or not, even by science – as in the scepticism of Antivaxxers (an anti-vaccine group) amid the coronavirus’ pandemic. On that account, recent history has been proving that being critical before being ready for an analytic criticism might be just as problematic as being simply domesticated.

Although it is probably only through debates that our human traditions can develop and progress, it is indispensable to understand what agents propose what facts and with which intentions. Moreover, echoing the purpose that, for centuries, myths had served, – explaining even natural phenomena by means of mythological chronicles, – the media have successfully been steering our societies’ attention towards or against many of the contents which fabrication they judge to be (dis)advantageous. Politicians, on the other hand, typically dictate the ways we may go about our everyday lives, at the same time that educators can ordinarily indoctrinate their students with their own (politicised) judgements.

Though, since media is mainly studied in this research as the means across which cultural productions are channelled, the materials handled in pedagogic processes (not unlike books) are likewise hold here as media types. And to illustrate how diverse areas of interest under the unique umbrella of social sciences similarly manufactures our ethnographic consent and domesticate our realities – with specifically selected samples of truth, – the Eurocentric indoctrination of (Latin) American students serve as an example: regrettably, on a personal

note, I am not likely to ever understand my own native culture as much as I was socio-culturally coerced to learn about the Lusitanians that still inhabit the imaginary of my (compatriots') colonised mind(s) – which, as a reaction, might cause what we Brazilians identify as our national 'mongrel complex'. Even so, just as a great share of the political continuum and/or of religious doctrines diverge – amongst themselves – with regard to an immeasurable amount of thematics, also a great deal of media outlets and many social sciences scholars disagree on the matters of their common domains; and this miscellany of concepts certainly reflects the truths' continua of our holistic reality, leading to the problem of addressing subjective themes in merely binary (right vs. wrong) manners.

By way of explanation, such subjectivity, which is inherent to most (if not all) social sciences' sphere, paradoxically allows dissonant interpretations from specialists in their specialised subjects. Yet, for a reason, some historic representations of given phenomena are favoured for remaining as the legitimate viewpoints to be deposited into the learners' minds, whereas other equally significant details are systematically ignored in educational curricula; and because teachers regularly are obliged to follow a (ministerially conventionalised) curriculum which recommends specific materials that, in turn, communicates their writers' peculiar opinions – from which students of a determined nationality and age are evaluated, – those cherry-picked ideas tend to become hegemonic. That being the case, the questions and criticisms concerning those established authors' depictions turn out to be marginalised – or *otherised*, – emerging from unusual, unorthodox, unofficial, and unfortunately, often uneducated sources.

Still, as the technologies involved for spreading those ostracised opinions nowadays are largely accessible, (with a little luck and faith in the mechanics and automation of these platforms' applied sciences) students shall, before long, also have an opportunity for playfully learning a *mélange* of methods, scientifically verified, within their didactic curricula: over their educators' production – just as soon as these teachers attain the support required for grouping their intellectual achievements into interactive materials that may well serve as a holistic basis for their teaching. In other words: at the circumstantial moment that even the laymen's assessments on many of those subjective subjects are now recorded, edited, published and (virally) spread in the social media, there is no reason for believing that competent educationalists cannot yet organise themselves for producing and promoting a properly qualified edutaining material. Such statement might in fact lead to the supposition that pedagogues may either have a sort of bias against such socio-interactive databases, or perhaps, a solid disbelief in the yet quiescent interest of academic institutions for supporting a pedagogical reform that would effectually

incentivise the active cooperation of those participating teachers. Thus alas, the traditional systems and methods of education in most (developing) countries insist on remaining customarily prescriptive, even when the subjectivity of numerous disciplines progressively entails more discursively articulated approaches and the technologies for upgrading those methods become more and more available and accessible – as further discussed.

5.1. WHAT IS THE ROLE OF TECHNOLOGY IN AN EDUCATIVE DEMOCRATISATION OF KNOWLEDGE?

Since its genesis, humankind has been relying on its aptitude for creating devices that could improve our living conditions. Indeed, the archeologically recognised ability of *homo habilis*, which were our earliest direct predecessor, to make use of stone tools is the first factual evidence of homo-species' dexterity for producing and manipulating apparatuses to protect and provide to their communities (Schrenk, Kullmer & Bromage, 2007). Ergo, the prominence of *technología* – i.e., the study of *tekhnē* (Greek for “art” or “craft”); or the “application of scientific knowledge for practical purposes” (Oxford Dictionaries, n.d.) – for the evolution of mankind is so evident that the periods within the prehistory were named in respect of the materials from which our ancestors managed to craft instruments: the stone, bronze, and iron (ages). As in prehistory, the required talent and technology for (re-)inventing and implementing artefacts (which is literally translated from the Latin for “art made”) remained fundamental for etymologically classifying the subsequent epochs of written history.

Accordingly, the alphabet unveiled by the Greek must be regarded as one of the most valuable artefacts, or technological innovations, for the history of Western civilisations, defining the turning point amid prehistory, ancient history, and the dawn of our documented history – as discussed in 5.1.1. THE AGE(NTS) OF OUR COLLECTIVE CONSCIENCE. Merging its decay into the birth of medieval times, the first stage within the recorded history pulsed for nearly 1400 years until the 6th century AD, especially in the ancients Greece and Rome (Whitrow, 1993). Contrasting with its epochal successor, this phase which is known as the classical antiquity exhibited great manifestation of rationale and originality through its illustrious classics of literature, singularly exquisite sculptures, and typically sophisticated architecture.

On the other hand, the Middle Ages (directly translated from the Latin for medieval: *medium aevum*) is often labelled as the Dark Ages, due to its poorly enlightened aspects that were temporally encompassed in the millennium between the classical age and its revival: The Renaissance – named after the Latin word for rebirth. This period, which lasted for

approximately two centuries until the 17th century, is also thought to be the first moment of our modern years (Monfasani, 2015), and it is immortalised by its astonishing tributes paid to the classical era. Originally sponsored by the Florentine elite, which was then most notably joined by the Venetian and Genovese influential patrons, the Renaissance initially was an artistic-centric venture that escalated into a historic edifying movement; and it is most meaningfully related to this study because Johannes Gutenberg's printing press – which gave name to the press in the journalistic sense that we know today – was created in those days, enabling a noticeably broader diffusion of information: again, aligning with the above-proposed hypothesis that the technological innovations of each circumstantial cycle affect, in one way or another, the ethnological progression that, in turn, spur the pivotal turning-points of each epoch. Surely, the establishment of the printing press as a novel technology for publicising written information represented the birth of mass communication – which is a central element to this research. The invention of such media technology thereby corresponded to the staggering moment when the common public could begin to understand that literacy ought to supply them with a greater social involvement and influence within their communities. In this sense, Gutenberg essentially ignited the process of knowledge democratisation in c.1440 because his invention would eventually ease the masses' access to information. Yet, following the logic of Renaissance's inspiring relation with the classics, one may assume that much of which is known is due to the fact that they have been repeatedly taught. On that account, materials curated by either media producers or educators can communicate a determined view of the world that have been put forward generation after generation, aptly suiting the purpose of normalising certain customs that have been maintaining the hierarchical order of our social structures: to wit, the (classist and perhaps classicistic) status quo. Notwithstanding that we are who we have been learning (and, definitely, habitually taught) to be, it apparently is our consciousness that should define who we really are.

In other words, contrasting to the notion of swarm-intelligence (which is intrinsic to hives), it most likely is our ability to think independently that characterise ourselves. And remarkably, launching the (post-Renaissance) epistemological line of thought that is identified as Rationalism, René Descartes wrote: “*ego cogito, ergo sum*” (1644). As a result, our idiosyncrasies are built upon our own creative modes to read the world. During that rationalistic modern age, many intellectual and civilising amendments were triggered by what is now known as the Scientific Revolution, albeit it was probably the ‘discovery of a new world’ that would supposedly have the most significant impact on our contemporaneous societies.

This is because the concurrent Age of Discovery, which was enabled by the technological enhancements on ships' production, effectively prompted the processes of globalisation. Analogously, Brook (2007) construes that the Dutch East India Company (established in 1602) is one of the main agents in the origin of our globalised socioeconomic politics; to boot, they were the multinational organisation that would pioneer the stock market. However, it is necessary observing that preceding the Americas colonisation by Europeans, which began in 1492, indigenous civilisations such as the Mayas, Incas, and Aztecs had already emerged in the continent. Consequently, the term "discovery" ought to be accounted as Eurocentric because it was, *in lieu*, a course of exploration, where colonisers were notably more interested in exploiting the indigenous people than in discovering their values. After centuries of slavery, unhuman abuses, and the decimation of native people in the Americas – where Cook (1998, p. 13) argues that 50-90% of the indigenous population were annihilated by diseases to which they had not yet been exposed, – a number of colonies started to gain their independence during the decades described by the British historian and social theorist, Eric Hobsbawm (1962), as the Age of Revolution. Enthused by ideals that the Enlightenment philosophers were promoting (particularly in France) at that point, the USA became the first American colony to achieve its national sovereignty in 1783 – eighteen years after first rebelling against the British crown. Shortly after, in 1789 the French Revolution also broke out, representing for Bayly (2004) the historical shift from the early to the late modern age. The progress of that then new liberalist situation that ascended Napoleon Bonaparte to power, represented the decline of clerical and monarchical regimes that were characteristic of earlier times in Europe.

In tandem, another important change was ready to shake the global structures: the Industrial Revolution which was initiated around 1760 and lasted for about seven decades, thus being considered the first of all others that erupted during the Age of Revolution (Landes, 2003) – once again in line with the foregoing proposition, suggesting that our periodisation is broadly stimulated by the key technological expansions at that time. The (First) Industrial Revolution showcased a striking switch in the means of production – from manual to mechanical – in the textile industry, and later, in the agriculture, metallurgy, transport sectors, etcetera. Evidently, the sociocultural impacts of these revolutions were to be greatly perceived: they affected people's conditions for working and living, whereas the urban environments and global ecosystems were developing to be drastically altered.

Along with that period's formation of new metropolises and states, the ideas of liberalism and democracy got under way, culminating in numerous uprisings – like the Haitian Revolution

(1791-1804): the only rebellion successfully led by a former slave, then leading to the acknowledgement of the first Latin American republic (Jackson & Bacon, 2013). Likewise, most of the Spanish America liberation, as well as the independence of Brazil, would occur between 1809 and 1824. After various turbulent rallies in Europe (1848), that were to be identified as the Springs of Nations, claims for better socioeconomic conditions (which had equally been a high-priority theme tackled by Enlightenment philosophers) were starting to grow increasingly unison. Though, before managing to properly address to each of those socio-political matters, a second wave of industrialisation would again revolutionise the world.

Occasionally referred as the Technological Revolution, the Second Industrial Revolution lasted from c.1870 until the beginning of the Great War (Mokyr, 1999). That generation saw, amongst other innovations, the telegraph's invention, which triggered a new surge in the processes of globalisation that had fundamentally been inaugurated in the Age of Discovery – the telephone and the electric power industries also were created shortly after the telegraph. Once again, a technology-driven revolution resulted in great socioeconomic impacts, ranging e.g., from considerable advances on public health and sanitation provisions on one hand to the increase of unemployment, caused by the intensification of work done by machines, on the other – especially in England: the first industrialised nation (Hobsbawm, 1962, p. 27). During that historic moment, the world witnessed major progresses in the paper, fertilizer, rubber, petroleum, and maritime industries, for example. Over and above, the applied sciences too appeared to become more popularised as an educational practice, substantially improving, for instance, the methods of business administration. Hence, whilst Santos-Dumont was flying his 14-Bis biplane around the Eiffel Tower in 1906, the commerce of cars and bicycles was analogously taking off due to the adoption of production-line operations in factories.

Moreover, even though that there certainly were purposeful technological growth during the timespan encompassing both World Wars (WWI, 1914-18; and WWII, 1939-45) – especially in the medical, communicational, logistical and, of course, military fields, – it was only in the late 1940s, that a third industrial revolution – aka the Digital Revolution – began with the development of more advanced computing systems at the Bell Labs, where researches for AT&T (co-founded by the telephone's inventor, Graham Bell) were conducted until 2016: when it was acquired by Nokia – see more in 5.1.2. THE AGE(NTS) OF OUR COLLECTIVE INTELLIGENCE. More importantly, at the Bell Labs, a specific study was carried out, eventually resulting in John Bardeen and Walter Houser Brattain jointly award of the 1956 Nobel in Physics with William Bradford Shockley "for their researches on semiconductors and their discovery of the

transistor effect" (Nobel Prize, n.d.) – that led to the implementation – also at Bell Labs, in 1960, – and propagation of the silicon-based transistors called MOSFET, which became “the most frequently manufactured human artifact in history” (Laws, 2018): a fundamental component for the proliferation of, inter alia, PCs, mobile phones, and smart devices.

This post-war phase is seen by some historians as the foundation of our contemporary era (Brivati, 1996); and it is distinguished by the shift from mechanical to digital technologies. At the end of that decade, the Space Race (which was prompted by the follow-up of the WWII, namely, the Cold War) reached its climax after the Apollo 11 landed the first man on the moon; however, yet more extraordinary (to this research purposes) is that, in the same year, an experiment named ARPANET, a packet-switched network, would finally lead to the advent of the internet: the foremost ICT in this thesis and possibly the most indispensable technology of our modern days. Indeed, the net is likely to be the main force that triggered the epochal shift to the present-day contemporality which is often designated as the Information Age: once information – alias data – has effectively grown into the most valuable asset of the global market (Amer et al., 2019). Accordingly, the decades that followed the emergence of the web have turned out to be the ideal scenario for intense technological advancements.

Three years after the creation of ARPANET, another remarkable technology was developed by the German-American inventor, Ralph H. Baer, to get to be one of this study’s central subjects: the videogames. His Magnavox Odyssey would be the first of its kind to arrive in thousands of (American) homes. Months later, inspired by that introductory console, the Americans Nolan Bushnell and Ted Dabney – founders of Atari – released their earliest arcade game: Pong; and, by 1981, Atari had reached an estimated market share of 65% in the already billionaire videogames industry which would yet double its size on the following year, corresponding to a third of the entire toy-industry’s revenue in the USA at that time. Invariably, Kelly, S. et al. (2021, p. 20) claim that more than a third of the world population actively play videogames today, and the greatest part of the industry profits to date comes from mobile games – that are typically purchased and played on mobile devices since the late 1990s.

Although, in 1983, the Motorola’s DynaTac came to be the first mobile phone ever commercialised, it had previously been presented to the public – ten years earlier. And then, in the following year, the U.S. Bureau of the Census promptly started to collect data on the Americans’ internet usage (Kominski, 1988) – five years before the invention of the World Wide Web (www), by Tim Berners-Lee, which was to become public in its second year. Almost concomitantly, in 1991, the Finnish Radiolinja’s 2G networks would come to be the pioneer

on the delivery of SMS-text messages – operating on the Global System for Mobile Communications (GSM). At that point, there were about 12.5 million cell phone subscriptions and 2.8 million electronically connected users worldwide (United Nations, n.d.); thus far, as stated in the same source, 4.5 billion people are actively online and, since 2016, there are more mobile subscriptions than persons in the world.

And, ultimately, granted that the existing Information Revolution is frequently branded as the Fourth Industrial Revolution, I prefer analysing it as the basis of a genuine (n)ethnographic evolution: a human-electronic/algorithmic unfolding of our online interaction, attempting to cyclically review our varied viewpoints, aided by the exponential enlargement of data storage with which the digital technologies supply us. Contrasting to most (and at least all industrial) revolutions cited here, the main factor of such e-evolution – that is, information – is constantly produced by virtually every citizen in the world, with or without (an official citizenship nor) the operation of machinery. Thus, appropriately, this e-evolution presents the potential to embody a considerably more humane, though also politic, and economic, transformations than any of the other revolutions because, essentially, all humans possess the data's means of production – as put forward in 5.1.3. THE AGE(NTS) OF A COLLECTIVE EMERGENCE.

5.1.1 THE AGE(NTS) OF OUR COLLECTIVE CONSCIENCE: A PRE-EMINENTLY OUTWARD DATA-FLOW

Humanity has historically been relying on peoples' cognitive abilities for surviving and developing; likewise, our cultures depend on the intelligible data shared by their respective societies to emerge. Correspondingly, the primary meaning ascribed to culture by the Oxford Dictionaries is as a synonym to the humanities: “[t]he arts and other manifestations of human intellectual achievement regarded collectively” (n.d.). Through art, cultures portray their own historical context, serving as a documented medium of these societies, whilst carrying a set of informational signs from a group of people to another. From the most primitive cave paintings until its digital and interactive era, art has continuously been facilitating our own understanding as species, via its creative means for exchanging information: e.g., it is largely due to the archaeological study of Egyptians', Harappans' and Sumerians' artefacts that we could identify them as the earliest civilisations in history – heralded by the Neolithic, aka Agricultural, Revolution in Sumer, Southern Mesopotamia, from circa 11700 until 6500 BC.

Whereas much of their customs remain mysterious to our contemporary civilisations, these ancient people can be considered the original avant-gardists who successfully transcribed their

realities into quasi-eternal pieces of data – since every artefact share information – that have been resonating with our generations over millennia. Curiously, traces of cuneiform characters are dated back to something like fifty centuries ago in these prehistoric civilisations (Kramer, 1971), making of them the literacy pioneers too. Hence, it is sensible asserting that the dawn of our collective conscience coincides with the moment when the primary records began to be registered by our kind. Interestingly, these cultures’ documented dexterity was similarly explored by ancient Greeks, whose influence stayed evident specially in our contemporaneous philosophy and politics. One of the main signs of that social exchange, was the Greeks’ precedent desire for also instituting their language’s own writing techniques which, as the cuneiform writings cited above, found its origins in the Phoenician: a language spoken by those Mesopotamian civilisations and the Mediterranean people for approximately thirteen centuries until the 2nd century AD (Holmstedt, 2017). In fact, alphabet is a term derived from the Greek vowel α (*alpha*) and the consonant β (*beta*), depicting the originality of their invention, which was the first script to include vowels, facilitating its phonetical reading and teaching.

Accordingly, towards the end of the 8th century BC, Homer’s Iliad and Odyssey were ensued from the earliest stages of that writing system, to be held as the watershed in between history and prehistory. Perhaps, as much as the Greek language, their alphabet turned out to be an information-and-communication tool that facilitated the unification of Greece as a nation: it was only then that that society could embark on studying itself as a unity. In that event, added to the increased ease for documentation allowed by the improvement of post-papyrus technologies – such as the large-scale parchment production in Pergamon (in ancient Greece) and the invention of paper (in China) – Greece would grow into a paramount educational hub and, indubitably, the cradle of the academia in the ancient world.

In addition, the classical Greece was to become the forerunning centre of Western politics – which, like *philosophía* (or, etymologically, the “love of wisdom”) and *dēmokratia*, is a word with Greek origin: *politēs* means “citizen”, since *polis* is the Greek for city. Therefore, together with our present schooling traditions, the foundations of our modern civilisations have been conveyed by the diffusion of their ancient information and communication practices; and even though that the ideas and ideals of moral principles develop continuously, our Western societies’ ethics, or ethos, have noticeably remained grounded on classical guidelines.

Then, establishing their semantic syntax earlier than other people, provided to Greeks with the power for advancing their hegemonic discourses to neighbouring populaces – until the decline of the Roman Empire which lasted from 27 BC until AD 1453: vide the infamous barbarian

connotation that was enacted to belittle the cultures which were alien to theirs. Analogous to such conduct is the principle of power and knowledge coined by Michel Foucault (1972), in which he calls attention to the aspect that with enough power (and the necessary means), one can spread an information that is likely to be regarded as knowledgeable – occasionally, regardless of its actual knowledgeability. To be precise, whether knowledge is a cause or a consequence to power, with the required knowledge on a given theme – and means for communicating that, – we ought to gain a level of competence and confidence, simultaneously potentializing our status for meaningfully engaging in a discourse, thereby participating in the situational alteration of authority (power) and intellectual capacity (knowledge).

In the end, the knowledgeable ones are rewarded with power, albeit the powerful ones may decide upon what sort of knowledge is knowledgeable – and sensible to be kept as such for keeping them powerful. Consonant with Foucault's understanding of discourse as "systems of thoughts composed of ideas, attitudes, courses of action, beliefs and practices that systematically construct the subjects and the worlds of which they speak" (Lessa, 2005, p. 285), Freire observes, in a dialogue with Macedo, (1987, pp. 5, 8, 13, 29) that only after we can "read the world" – rather than merely words, – we will be able to significantly understand our reality. Finally, amongst the several agents that seem to have historically been accountable for constructing our shared concepts of reality in today's aeon of collective conscience, the churches, media, and schools persist in being some of the most dogmatic, peremptory, and magisterial examples of institutions that allegedly possess the required prowess and control for establishing, or instead maintaining, the prevailing status-quo; and in spite of the detail that these foundations have little in common, they all share an extraordinary talent and interest for gathering, handling, and spreading the information that best favour, fulfil, serve or satisfy their particular gods, goods, and goals – just as it was traditionally done (and taught) by ancient sages, tribal chiefs, and, of course, artists.

5.1.2. THE AGE(NTS) OF OUR COLLECTIVE INTELLIGENCE: IN THE ASCENDANCY OF AN INWARD DATA-FLOW

Recently, at least, the institutional interest in collecting, scrutinising, and distributing data seems to be on the rise, leading to the surge of prospective didactic possibilities within *produsage* on one hand, and data-privacy concerns on the other. And yet, as history has shown us, when properly exerted, technological advances spur cultural progress, which is the ultimate goal of this and, probably, of all social sciences studies. Likewise, in respect of the agents

emphasised in the previous section, even considering the philosophical significance and political implications of the work done by e.g., religious institutions throughout the past millennia, I will opt in examining their current impact merely through the churches' educative aspects embodied in pontifical schools. After all, this is a MA Thesis in Media Education, and whereas I acknowledge the magnitude of religions' sociocultural influence, I do not feel particularly competent (nor especially interested) to explore their impact in this specific study.

In these circumstances, I use this subhead for merely addressing to prominent corporations that are, or could be, involved in curating and moderating our collective intelligence; because, as stated, the Infobahn potentially conceals hitherto latent opportunities to be enhanced as a knowledge democratisation tool. Taking these following enterprises efficiency in establishing themselves as leading symbols of the technology sector into account, it is interesting to acknowledge their power of influence for reorganising the political structures – in some cases even serving as an instrument for *producing* media as education. In this sense, these enterprises inspire the development and participate in the collection, analysis, and/or diffusion of our data; thereby mediating and mediatising a collective intelligence.

Fittingly (from Finland), I start with the largest Finnish multinational in history: founded in 1865, Nokia did not enter the market of electronic technologies until 1970's and, in 1998, it became the world's largest mobile phone vendor, surpassing the pioneering Motorola – which operates in the US since 1928, even after selling its cellular infrastructure to Nokia itself in the early 2010's. In 2011, Google (launched in 1998) too would acquire a spinoff of Motorola, before trading it to the Chinese, Lenovo, three years later. Last year, Lenovo (established in 1984), became the biggest PC seller on Earth, seventeen years after also purchasing that corresponding division of the, now 111-years-old New Yorker, IBM. Presently, in the US, Nokia competes with the 11-years-younger-Swedish Ericsson, as the top 5G developer.

As well as Lenovo's, China is the birthplace of the 2nd largest smartphones-maker thus far. Instituted in 2010, Xiaomi quickly surpassed another Chinese firm to secure that position: Huawei (inaugurated in 1987). Indeed, the espionage controversies linked to the latter's 5G developments – that would climax in a trade war between the previous US-administration and China, – influenced Huawei's fall from the top of that list. At that point, in 2020, Huawei had just recently overtaken the (then, and now again,) leading mobile manufacturer: the South Korean, Samsung, which started as a trading company in 1938 – one year earlier than the IT-native, Hewlett-Packard (HP). As yet, HP is only behind Lenovo in annual PC sales worldwide.

Since 1939, HP has been headquartered in California, where the global centre of technology is increasingly consolidated, namely the Silicon Valley. From there also originated, in 1976, the largest IT-conglomerate by revenue and market capitalisation of all: Apple, which is in the Top 5 of phones', PCs', wearables', and videogames' sales. So far, also their OTT (over-the-top) media service, Apple+, is – alongside HBO Max, Disney+, Amazon Prime Video, and Netflix – one of the leading video-streaming platforms on the planet.

Disney (which was also created in the United States, nearly a century ago) has several streaming services, including ESPN+ and Hulu. Besides its theme parks, resorts, and cruise lines all over the world, Disney possesses studios in several audio-visual markets, chronologically ranging from their original Walt Disney Animation Studios to their latter acquisition from the Australian media mogul, Rupert Murdoch, in 2019: the Fox Corporation. Appropriately, Disney became the parent company – with a 73% stake – of the 20th Century Fox Studios (a development of the 1915's Fox Film Corporation), in addition to their subsidiaries, like the 1997-launched, National Geographic Channel, and the 28-years-old Searchlight Pictures. Moreover, Disney added other notorious players in the media entertainment sector to their portfolio, like the American Broadcasting Company (ABC, which was set up in 1943, and purchased by Disney in 1996), and its subsidiary that, up to this point, is (one of) the most-watched cable-TV channels: ESPN (inaugurated in 1979 and acquired by ABC in 1984). Not to mention, in 2009, Disney bought the Marvel Entertainment (originally, Timely Comics from 1939, before becoming Marvel Comics 30 years later, until its subdivision into Marvel Films in 1993, Marvel Studios in 1996, and Marvel Enterprises in 1998 until 2005); and since 2012, the Lucasfilm (organised in 1971) and its graphics division (from 1986), Pixar, amongst other holdings – from which the Latin American OTT, Star+, is the only which did not originate from the United States – also belong to the 99-years-old, Disney.

Another important OTT provider is the Hollywoodian Paramount+ of Paramount, which produces and distributes films and television content since 1912. Lately, nonetheless, the studio has been falling behind its contenders, as one of the leading media agencies that intermediate our contemporary information. Like, for instance, the aforementioned AT&T which was constituted in 1885, also in the US, and held the country's telecommunications monopoly of phone services for nearly a century. That control intensely contributed to their exponential expansion, which would culminate in the globe's largest media conglomerate. In 2016, AT&T purchased the Time Warner group – which is home of many of the most renowned players in the media market, like CNN, HBO, and DC Comics. Hitherto, their main competitor is, the

Philadelphian, Comcast (established in 1969) which, in 2011, became the parent company of NBCUniversal, securing e.g., their film and animation studios (such as DreamWorks and Illumination) and thematic parks. Into the bargain, Comcast acquired the Sky Group in 2018. Though, whereas AT&T already owns two streaming platforms – HBO Max and Discovery+, – Comcast only provides a video-streaming service, known as Peacock, to the United States, United Kingdom and five other European countries until now.

Correspondingly, 28 years ago, Jeff Bezos started operating, in the Washington State, an online book shop which would become one of the largest multinationals in the technology sector: Amazon. Currently, that is one of the few companies developing autonomous vehicles and artificial intelligence; and since 2022, Amazon owns the MGM studios, enhancing the films and series library of its streaming services: the Prime Video. Plus, Amazon has inter alia its own AI-assistant (Alexa); music streaming platform (Amazon Music); audiobook and podcast service, named Audible (released in 1997 and purchased by Bezos in 2008); virtual database of films and series – IMDb, which was activated in 1990 and sold to Bezos in 1998; – social cataloguing, called Goodreads, that was presented in 2006 and acquired by Bezos in 2013, and a video-streaming site focused on games: the Twitch, launched in 2011 and, since 2014, is Amazon's. By the same token, Amazon develops and trades various items and devices online.

Like Amazon, other noteworthy companies in e-commerce are the, also North American, eBay – which was set up in 1995 and owned (from 2002 to 2014) the financial technology company instituted in 1998, PayPal, – and the Chinese, Alibaba, which since its foundation in 1999, has been growing astronomically, turning into one of the most valuable brands in history, and the second in China, behind Tencent. Created in 1998, Tencent is one of the top multimedia companies in the world and, right now, the main investor in the video game industry. Over and beyond, Tencent announced in 2011 the WeChat – an instant messaging app, similar to Meta's WhatsApp or the Telegram that was introduced by the Russian Durov-brothers, in 2013. WeChat, however, also offers mobile payment features and has over 1 billion of active profiles. Let alone Tencent Music which is operative since 2016, reaching over 800 million active consumers – matching nearly 75% from the paying-subscribers amount of the Swedish, Spotify: the leading music streaming service provider with 188 million subscriptions (Spotify, 2022). Started in 2008, Spotify signed an exclusivity agreement with Sony's PlayStation Music in 2015, becoming the official source for music via that console's system.

Operating since 1946, Sony is the leading Japanese multinational in the technological field. It is the main video game publisher, the second largest music record label, and the third TV and camera manufacturer in the world. Sony is similarly famous for its high-quality audio devices, mobile phones, drones, and even robots. In 1989, Sony bought one of the five main cinema studios in the US: the joint-venture of Columbia (founded in 1924) and TriStar Pictures (open since 1982), becoming the third largest cinema studio worldwide. Additionally, in 2021 the, also North American OTT service, Crunchyroll was sold from AT&T to Sony; and in 2012, Sony became the #1 music publisher after buying the British, EMI.

In the video-game consoles industry, Sony surpassed the supremacy of its compatriot Nintendo (established in 1889), in 1994, with the release of PlayStation's first generation, which sold over 100 million units. Microsoft too entered the consoles market, in 2001, with the Xbox. Presently, the Xbox is in its fourth generation, whilst the PlayStation 5 was released two years ago: 2 days after the Xbox Series S and X. Nintendo's Switch, on the other hand, is a handheld console released in 2017, which has already sold over 100 million units as well. But, for the past 28 years, neither Nintendo nor Microsoft have threatened Sony's reign of consoles' sales.

Notwithstanding, consoles are far from being Microsoft's main industry. In fact, even the name of the Albuquerquean-native is a portmanteau of 'microcomputer software', highlighting that, since its foundation in 1975, the company's focus alternatively is on programming. Microsoft is specially known by its products, such as the MS Office suite – which includes the cloud software OneDrive, and classic productivity applications such as Word, Excel, and PowerPoint, – as well as being the parent company of the standard operating system in most desktops on our big blue marble: the Windows. In 2019, Microsoft became the third North American public company to be valued at over US\$1 trillion, after Apple and Amazon. Other important products in Microsoft's catalogue are the Californian social media, LinkedIn (set in motion since 2003, and sold to Microsoft in 2016), and the Luxemburg-originated Voice-over-Internet-Protocol (VoIP): Skype (also from 2003), which succeeded the Microsoft's MSN Messenger (1999-2012), after being purchased by the corporation in 2011. In that same year, one of the companies which would grow the most during last years' pandemic was introduced with a similar purpose: the Silicon-Valley based, Zoom.

These projects, alongside Apple's FaceTime, Google Meets, (also) Microsoft's Teams, and Meta's Messenger and WhatsApp make clear that technologies which were only dreamt of on previous decades, such as self-driving vehicles, space shuttles, or even videoconferencing for

remote work can become standardised in no time. Somewhat nostalgically, I remember chatting through, the Israeliian-founded, ICQ (which continues functioning since 1996), at the same time that I was interacting with communities in Orkut – which was launched in 2004 by a Turkish designer, working at Google and, by 2008, was the most visited website in my home country. Little did I know that, by accessing my friends' band page within the platform put in place by the US-based, MySpace (in 2003), I would be involved in the growth of an industry which is as dominant in today's market as it is central to this MA Thesis: the social media (SoMe).

Ever since, numerous technological advances have contributed for the establishment of participatory media as one of the main socioeconomical forces thus far. In 2005, for example, the North American social bookmarking, Reddit, would be designed with similar purposes of SoMe's, to become one of the most accessed pages to date. Another social platform that must be pointed out is, the also US-founded (in 2006) Twitter: the most popular microblogging in history. And the list of prominent Web 2.0 platforms keeps increasing since the advent of Facebook in 2004, when the New Yorker, Mark Zuckerberg – alongside his Brazilian roommate, Eduardo Saverin, and North American colleagues Andrew McCollum, Dustin Moskovitz, and Chris Hughes, in Harvard College, Massachusetts, – established the (probably) biggest social media phenomenon of the current era. Now, Facebook is under the Meta umbrella, which concomitantly owns Instagram (inaugurated in 2010) and WhatsApp (released in 2009) – each of these apps have over a billion active users worldwide.

Lately, one of the Social Web's hottest sensations is the Chinese TikTok, launched in 2017 as a mobile application. Though, I must stress that, these days, we can find apps for the most varied applications. As an illustration, it is unlikely that latter generations look for temporary accommodations without consulting their options in apps such as the Airbnb (which originated from North America in 2008), or that there they will call a taxi, before checking if, the also North American, Uber (that is running since 2009) operates in that area. Since 2014, Uber has added Uber Eats as its subsidiary, which is amongst the main, increasingly popular, food delivery services in the West, along with other companies that were likewise created during the last decades: e.g., the Dutch JustEat Takeaway.com (2000), the German Delivery Hero (2011), the British Deliveroo (2013), and the Californian DoorDash (2013). And, since 2015, a Finnish start-up named ResQ has been innovating with their app, by allowing customers to 'rescue' unsold meals from sustainable restaurants, cafes, or even grocery stores with a lowered price, intending to reduce those establishments' waste. Accordingly, the yet to come generations are already being benefited by the application of some technologies. In fact, more

than a few are even being ‘generated’ as a consequence of applications like the 2012-formed, California-headquartered, Tinder that has ‘matched’ billions of couples all over the world.

Still, none of those companies have ostensibly been as significant to the net’s growth as Google. Inspired by earlier search engines, like Yahoo! – which was created in 1994 by two students at the Stanford University, as ‘Yet Another Hierarchical Official Oracle’, – Google currently invests in the development of quantum computers, artificial intelligence, self-driving cars, consumer electronics, etc. but especially, software. To boot, Google has maintained, for decades, its search engine as (one of) the most used webpages in the world. The first and largest national broadcasting corporation in history, the British BBC (which is broadcasting since 1922), claimed that Google is the “most powerful company in the world” (Jack, 2017); and even considering the astronomical growth of companies with a similar purpose of Google’s, like the Chinese Baidu which was inaugurated in 2000, and the largest Russia technology multinational, Yandex, which operates since 1997, the position of Alphabet (that technically is the parent company of Google, since 2015,) within the Big Five, seems to be increasingly secure. From 2001 until last April, Alphabet had completed at least 250 merging and acquisitions to their portfolio, which include: the British AI project, DeepMind, that was initiated in 2010 and integrated to Alphabet’s group in 2014; the Silicon-Valley-native smart home developer, Google Nest, which was introduced in 2010 and acquired by Google also in 2014; the Taiwanese company of consumer electronic HTC, which was founded in 1997 and have partially sold its businesses to Google in 2017; the Israeli GPS-mapping app Waze, that was conceived in 2006 and purchased by Google in 2013; and Fitbit, a 2007-originated North American wearable maker which is part of Alphabet’s Wear OS collection since 2021.

The most relevant Google subsidiary for this research purposes nevertheless is their video-sharing platform that is accessible since 2005, having Google as a parent company since the following year: the, Californian, YouTube – which itself also offers several products, including YouTube Music, YouTube Kids, YouTube Studio, and YouTube TV. YouTube Premium is, like the Spotify Premium, sold as a paid-subscription account that allows users to stream music and, contrasting to Spotify, also videos with no ads, albeit advertisements may be inserted within the contents of streamed videos. At the moment, YouTube is only after Google Search as the world’s most visited site, with more than a billion hours of video watched in their site every day, and more than 500 hours of video content being uploaded there per minute.

At last, but not least, I must mention two other companies which, although offer similar services than others cited here, deviate from them in respect of their values: the open-source operating system Linux, programmed in 1991 by the Finnish engineer, Linus Torvalds; and the wiki-based open collaboration encyclopaedia, Wikipedia, co-created in 2001 by the North Americans, Jimmy Wales and Larry Sanger. Linux is the operating system running in Google's Chromebooks; in the most sold TV brands, Samsung and (the, also South Korean, 1947-established) LG, respectively; and in Tesla's, Mercedes', and Toyota's vehicles, among others. On top of that, even some Spaceships and Rovers in Mars use Linux's OS. And, in addition to Wikipedia, Linux is an example of free and open-knowledge collaboration. To this point, Wikipedia is among the five most visited sites in the world, establishing itself as a key player towards the democratisation of knowledge via open access information – *co-produced* by CI.

In common, each of these organisations share a nearly scientific interest in gathering and curating our human intelligence. Whereas hardware developers and automakers (such as Tesla) prefer a quite specific knowledge of selected individuals for improving their state-of-the-art vehicles, ventures like Wikipedia and YouTube are rather involved with our collective intelligence in a more comprehensive and inclusive way, which does not necessarily discriminate the engaged participation of individuals by their educational backgrounds, professional experience, portfolio, or any specific measure. In any case, the project envisioned in this thesis hopes to be situated in between these extreme relations of dataflow architecture, where media is intended for democratising contemporaneous civilisations whilst civically educating by entertaining their cultures' *producers*. Eventually, I believe we may all avail of these players' collective consultation, as much as they have been benefiting from our individual consents: once the game changes again, we could all intelligently start to play it together.

Although henceforth in this chapter I concentrate on the mechanics of a new interactive genre, – observing the characteristics of this type of productions that could motivate the public's engagement, – I found important to list a number of high-profile market players which could enable such participation in a near future. Regardless of these agents' noteworthiness, here I merely contemplate the competitive connection in between them, which may relate to the reasons why they could be involved in providing a fruitful ground for civic empowerment: via technological innovations. Though it is important stressing that (most of) these agencies may not have the resources or intention of contributing to an(other) artistic-centric, (n)ethnographic, civically interactive transformation that is proposed in this thesis – echoing the Renaissance's cultural effects that still resonate today.

Considering how the development of media technologies have been progressing towards a knowledge democratisation, with a nearly ubiquitous circulation and homologation of information, CI can start to be envisaged as the *eduractive* product of the civic participation method hypothesised in this thesis. On that account, towards an artistic resurgence of a sociocultural movement, hereafter I theorise about an interface that could be (pedagogically) employed as a gamified database. Appropriately, such platform (as most) ought to be materialised from its producers' proficiency and prowess; but in this case, it should emerge from its *producers'* collective intelligence which will then become both cause and consequence from that system. Then, it is paramount highlighting that a genuinely civic and cooperative involvement of experts from various scientific fields of study, as moderating agents at the curatorship of this conceptualised databank, could result in more plural and authentic perspectives to their areas of expertise: potentially broadening, strengthening, and enhancing, whilst, in the long run, democratising their individual and aggregated knowledge as an effect.

Seeking a sort of ethos that may regard education as an apparatus for political empowerment and emancipation, in the following and final section of this thesis, I present a cyclic model that endeavours for the communities' effective participation in order to instrumentalise their public demands. Bearing in mind that those experts are not necessarily (post-)graduated individuals, it is interesting recalling that with the usage increase of the already quasi-omnipresent ICTs, the sum of our information holistically and collectively accumulated, could eventually results in the entirety of our humanity's knowledge – if pooled together. In that event, all citizens could civically express their wisdom via a critical and meaningful content creation on certain thematics, actively participating as globalised members of Earth, with rights and obligations, continuously moving towards a democratic reform to our senses of civilisation – utilising their collective intelligence as an antithesis to the democracy paradox introduced in this thesis' first chapter. And, although much of this intelligence has not yet been translated as scientific disciplines, here I focus on samples of scholastic domains – with the intention of simplifying this discussion in which I aim to present several traits of SoMe's current state that could be enhanced with the purpose of it to serve as a *de facto* participative media.

Contrasting to the majority of existing studies that address to media participation looking into the audiences' engagement with the productions' contents, I hypothesise the latent involvement of **educators** with digital public spheres as *eduractive producers*. This way, I look instead into

the prospective participation of specialised content producers, regardless of the contents *produced* by them. In these circumstances, here I deal with civic participation – irrespective of the media format or matter that that project could implement.

In short, synthesising the concept of Participatory Culture with the instrumental and constructionist approach of edutainment, I theorise the emergence of an engaging, educative, and participative collective intelligence praxis. Because, as confirmed by various studies, students' engagement with gamified artefacts improves their learning outcomes. Consequently, educators can improve both their students' and, thereby, also their individual engagement with their practices of instruction via situational interest.

Correspondingly, in respect to the situational interest in game-based learning, Kiili co-authors – with Manuel Ninaus – the premise that it is “a novel method that can respond to digital natives' learning preferences and ways of thinking[:] effective and interesting” (Koskinen et al., 2022, p. 54; Prensky, 2003). Moreover, as Koskinen et al. (2022) conveys, situational interest is a “content-dependent” (p. 55) catalyst for engagement that although has a positive correlation with learning, is yet to be thoroughly explored in game-based education (see Nietfeld et al., 2014; O'Keefe et al., 2017; Knogler, 2017). In due course, Kiili remarks that artefacts must be designed aiming the shift from cognitive to fluent processes (2005, p. 40): to wit, players/users should be able to apply cognitive resources significantly, leading to another important point raised by him, since in educational videogames, the ideal interface is “transparent” (Kiili, 2005, p. 79); because, as the cognitive load theory recommends: systems' mechanics should be learnt effortlessly (Forlizzi & Ford, 2000, paraphrased in Kiili et al., 2012, p. 80). After all, in his assessment, knowledge is constructed with an inherent application of cognitive resources.

Likewise, next I present how, in addition to videogames, YouTube videos or interactive films (aka cinematographic games) and series could be seen as enhanced means for the formulation of an alternative pedagogic model that might civically support an experiential learning towards a rather emancipatory sociocultural democratisation. In other words, pursuing CI as a result of an edutaining method of civic participation, in the next and final subchapter I conceptualise an *eduractive* praxis' prototype: or a cycle for *producing* interactive narratives for educating by entertaining.

Foremost, in this thesis' theorised praxis, it is crucial that those who critically strive for an unconfined sociocultural democratisation, – where a de facto civic participation could be

effectuated, via independent thinking, – recognise that a number of our prescriptive customs are rooted on biased and discriminative ideologies. On numerous occasions, our societies' prevailing guidelines have been oppressive, taking us in directions opposite to the preservation of our humanity. As means of depicting some occurrences when mankind was endangered by civic misbehaving, issues such as slavery, climate changing, and all acts of war, like the holocaust or the bombings of Hiroshima and Nagasaki, come to mind. Indeed, the self-destructive and incoherent behaviour of our kind, which Freire describe as necrophiliac (1968), has repeatedly happened throughout history, hitherto reverberating whilst we struggled against the COVID-19 pandemic – when certain groups refused to follow (the World Health Organization's) safety recommendations and, in some extreme cases, denying even the efficacy of vaccines, – leading to a wide-spread contagium and millions of (perhaps avoidable) deaths.

These devastating circumstances were caused by decisions taken, manufactured, or consented collectively. Conversely, towards our collective intelligence, a methodological revision – or theoretical praxis – must also be done in holistically and taxonomically; after all, we are beings of a unique species, inhabiting the same ecosystem. Otherwise, by neglecting a critical consciousness-raising, we may be simultaneously refusing a fairer future to our children and their children's children, regardless of ours or their political inclinations.

Overall, therefore, even considering that humanity has been challenged by uncountable moments of crises in its relatively short history, I would argue that technology – that indeed refers to the engineering and employment of creative, practical, and/or scientific artifices – has so far been comparatively benign to the evolution of mankind, because it is difficult to imagine any other time that our collective intelligence had been more treasured and sufficiently capable of protecting and providing to our global communities: especially with the latent and yet mandatory interest of authorities, industries, and corresponding stakeholders in a legitimately instructive, or merely opinative data. Especially in the net, media has been increasingly employed as a system where we negotiate meanings and promote reasonable manners that may permeate a sociocultural democratisation via a civic participation. Still, in order to avoid even deeper social inequalities, it is vital that each member of the public can quickly be established and integrated as a unique part of a universal, holistic, and anthropological reality, opposing to the hegemonically nationalist, individualistic, and reified myth in which we currently coexist.

For that task, a praxis that would indispensably require peoples' critical analysis and participative engagement towards an emancipatory reconstruction of their own realities seems necessary. Accordingly, hereafter, sociocultural democratisation will be perceived as the ever-

evolving results of manifold private and/or collective processes of cultural ripening, aspiring to reform our modern societies' community spirit by civically engaging their citizens. Then, the first step for decoding such praxis is the one that I identify as the **cultural emancipation** phase. In absence of a conventional denotation of the term, I refer to it and as the starting point from which our respective interpretations of the world are distinguished and critically analysed, outside the boxes imposed by specified social norms through which our varied ethos have been historically established. And even though this part does not necessarily relate to the field of media, it is imperative to master that task before reaching to the second stage of this exercise.

Although it is worth clarifying that I do not mean to imply that our contemporaneous ethical normative is the greatest threats to a premiss of autonomous socio-cultures, it is fundamental understanding that, parallelly to the Foucaultian conceptualisation of discourse, the act of participating (as in taking part) is a power struggle. Yet, for untold reasons, as it analogously happens with our own selves, whether online or offline, some are more as others are less free and proficient for neurologically operating themselves (without) following the guidelines of an inherently oppressing status-quo. And, ultimately, this is indeed the reason why I believe that it is the intellectual elites who must champion such an ethnologic emancipation, empowering those who wish to partake in the cooperative construction of an effective, collective, and *wikinomical* e-governance. Be that as it may, it is important to observe that, seeking political engagement, this novel interactive platform must ultimately be designed following a civic rationale in collaboration with their governments, simultaneously entangled with the knowledge and technologies of educationists and media industries.

5.2. A SOCIOCULTURAL MEDIATISATION: THE ARTISTICAL RESURGENCE

In harmony with the medleyed aspects of our collective individualities, the interactive series format popularised by Netflix allows the depiction of several angles through different narrative paths within the same audio-visual production. Therefore, within this new media technology, teachers of (the often-subjective disciplines of) social sciences – like history, politics, economy, or philosophy, – may find distinct means (and meanings) for (practically and artistically mediatising their) teaching, from different viewpoints, the contents of their spheres of activity. And, subsequently, the audiences of these interactive narratives could decide which lines of thought they would like to follow for learning each of the matters tackled by that particular pedagogic production.

Resultantly, this venture could give rise to a (scientific) data-bank, from which students (and others to whom those subjects may concern) could learn, verify, and *produce* the correlation between time and space (or socio-cultures), comprehending varied standpoints on many issues; for example: which points-of-view on the privatisation of state-owned enterprises are preferred by PhD candidates of economy in Finland, compared to corresponding prospects in Brazil, during concurrent presidential mandates. Similarly, decision-makers, as the politicians in our governments, could benefit from the data gathered with that meaningful mediation and curatorship of the public discussion for algorithmically selecting, via these platforms, some of the thematics which could be addressed at their plebiscites. Nonetheless, for further consultation, before being mediated by our elected representatives, these public directives would invariably be digitally documented onto open-access systems – with similar mechanisms to the ones that have already been algorithmically developed by (social) media providers; thereby adding a long-yearned transparency to a range of decision-making procedures, which should be consistent with the public stances.

Simultaneously, the information collected from these audiences' interactions should teach the teachers about their pupils' distinguished perception of reality in perspective with the disciplines taught in that (virtual) class: as an effect, easing the educators' processes for determining their lessons' plans. Analogously, McGuinness (2011) calls attention to what tutors learn about their tutees' learning, considering their behavioural, cognitive, social, and relational aspects. In that sense, teachers should encourage, inter alia, “interactive...animated or video demonstrations (e.g. YouTube); peer-learning: [where] students demonstrate resources to each other and discuss approaches; group presentations; group discussion and analysis of the different ways of approaching a task or problem” (p. 91) among other activities that aim to activate the students' meaningful learning. Accordingly, after attending and reattending to those digitalised video-classes (as many times as needed), students could discuss the content of those interactive videos in their classrooms, critically reviewing – with the mediation of their teachers – the most delicate/critical points that had been identified with the data gathered on and by that group which had just *produced* their own paths for learning the subjects taught on that educative interaction – namely, *eduration*.

In the pedagogic model proposed here, these groups of students ought to be arranged in their classrooms based on which paths they had preferred in a given interactive production (previously explored as e.g., their homework), with each group collectively deciding on which points had to be reinforced or criticised, departing from the stances portrayed on the lines of

thought that they had *eduractively produced* when interacting with the material presented on this hypothesised interactive docuseries. Such *eduractive* media would then provide more autonomy to learners, who could subsequently decide, argumentatively, upon which depictions among those peer reviewed narratives that best related to their own life experiences: possibly, facilitating their understanding of that precise thematic – as advised by Freire. Be that as it may, due to a presumed lack of commercially appealing facets in such project, the costs for developing and enabling this platform, where interactive materials could be *produced* by the scientific community, at first would probably rouse little interest from the Big Techs, alternatively calling for self-fundraising initiatives from academic organisations and associations, or governmental financing – except if, for example, new regulations could legally bind a determined percentage of media conglomerates’ revenue for investments with socio-educative implications.

Between this and that, (certified) educators could have their lectures filmed and edited into docuseries-like episodes: much like YouTube videos are *produced* today – albeit approaching meaningful thematics. Moreover, even though it is necessary to take into consideration that this incentive towards plural intersections between students and teachers of social sciences would be intended for further democratising knowledge – through a galvanisation of both tutors’ and tutees’ critical thinking, – this theoretical phase of such *eduractive* praxis may not play a significant role in decentralising the prescriptive, one-step flow, struggle of power that demotivate and underestimate undergraduates, echoing the passive audiences from the Magic Bullet theory. That is especially because, as already mentioned, the materials produced by lecturers should be curated by moderators, – i.e., authorities, – who although would have to be certified experts in their given fields, would probably also have their own (politic and/or corporative) interests and ambitions.

To that matter, the aspirations of scientists, professionals, and stakeholders could be algorithmically moderated by a complementary gamified social platform which would recompensate factual information and intelligible knowledge with a ranking system – influenced by their peers’ ‘likes’ and ‘dislikes’, or rather, ‘agrees’ and ‘disagrees’; and whereas uneducated connoisseurs should also be welcome to participate in such discussions, their interaction would have to be either de-emphasised by that ranking system, or even limited to an access-only form: for avoiding a trivialisation of the participatory sense in specific meaningful thematics, mimicking what we have been witnessing in today’s majority of social media platforms. Ideally, however, the public participation could be simply filtered, with

mechanisms that would verify and identify the accreditations of participants, refining and classifying groups by specialisation-authenticated profiles in distinguished thematics, synchronously allowing multidisciplinary intersections between topics and users, interest communities, nationalities, age groups, etc.; in so doing, both the market and the participating professors would proportionately reward purposeful contributors to a specific thematic universe – through ‘likes’, ‘shares’, and/or ‘agrees’, – with a greater power to influence in that gamified platform, thereupon generating more evidence and exposition to those relevant specialist and, as a consequence, reorganising the structural agency of participatory media as a systemically abductive methodological operation. Additionally, participants should, likewise, be able to ‘dislike’ or ‘disagree’ determined publications, then decreasing the prominence of irrelevant posts (and their authors) in this conceptual social game. In that case, each ‘dislike’ or ‘disagree’ would require that the antagonist would counter-part his interaction with an open-text explanation, so that that disagreement could also be ‘liked’ and advocated, ‘agreed’ and shared, or ‘disagreed’, ‘disliked’, and subsequently rejoindered, contested, and/or refuted.

5.3. EDURACTIVE MEDIA FOR POLITICAL ENGAGEMENT & AN EMANCIPATING CONSCIENTISATION

At least since the alphabet’s advent and especially after the beginning of the age of digitalisation – that came along with an exponential increase of internet-usage which, in turn, stimulated an institutional propagation of big data systems that is characteristic to the present epoch, – our human intellect began to virtually leave perpetual trails. Theoretically, our thoughts can now be registered in eternal databases. Thus, our collection of human intelligence has become essentially and existentially endless; and according to Hegel, truth is the dialectic of essence and existence (Fuchs, 2009). In fact, our collective intelligence has become everlasting not only in its endurance (or existence) and substance (or essence), but also in its extent. Nowadays, examples of potentially never-ending artifacts are commonly found in digital contents like films, series, and especially (MMORPG, or Massively Multiplayer Online Role-Playing Game) videogames. And if games, films and series were once seen as merely capable of entertaining and/or (mis)informing about a determined matter, now they can communicate with their public at a higher degree of interactivity.

As written in this thesis’ second chapter, interaction have been placed by scholars as a central element towards participation; however, slightly contrasting to Jenkins & Carpentier (2013, p. 271) propositions for extricating the meanings of access, interaction, and participation, I would

prefer to begin this continuum from the interactivity point, replacing the tacit signification of access with a more fundamental value of engagement towards participation. Expressly, here I propose that, when interacting with an artefact, the sense of participation can only be achieved with its users' engagement. As a result, the scale of participation proposed in this thesis is instead composed in the following manner: interaction – **engagement** – participation.

In this way, I highlight the irrefutable importance of engagement, in different circumstances, – as well as its semantic and syntactic nuances among interactive and participatory types of involvement. As an illustration, whereas Kiili's take on engagement addresses to the relation of students' involvement with learning materials, Dahlgren tackles a seemingly unrelated engagement of *producers* in digital public spheres. However, probably the main observation there is that neither approaches are simultaneously instrumental and de facto participative: whilst Dahlgren deal with the political idea of engagement examining its participatory features, Kiili's research happens to put emphasis on a more instrumental form of interactivity, designing tools that aim to positively affect the involvement of learners, whilst endorsing his approach with the results of studies which assess that "learners who do not feel emotionally engaged in their academic life begin to disengage behaviorally and cognitively (Archambault, Janosz, Fallu, & Pagani, 2009; Green, Rhodes, Hirsch, Suárez-Orozco, & Camic, 2008; Hirschfield & Gasper, 2011, cited in Ninaus et al., 2019, p. 2). Deliberately, unlike Dahlgren, Kiili does not seem to engage with the political spectrum of participation in his work; albeit Dahlgren clearly favours an instrumentalisation of participation which apparently has not been effectuated.

Therefore, both researchers deal with the audiences' engagement in their works and, apparently, neither seem to have already effectuated a participatory employment of their theories: at least not in the previously presented sense of participation as a political struggle of power that is proposed by the media scholars in this research primary data. On the other hand, whereas Kiili's studies seem to fully achieve the instrumentalisation of engagement which he seeks, Dahlgren's contribution is, like mine, rather theoretical. For that reason, especially grounded on Kiili's findings, edutainment will be henceforth theorised in this thesis as a pedagogical – and instrumental – medium for civic participation.

Notwithstanding, in the vast spectrum of edutainment possibilities with which the net provides us, it is best if we avoid mistaking subjectivity for subjectivism; or to rephrase it: one must not disregard the knowledgeable power of online data only because – in the current state, – analogous to the mass media, the web too is abundant with (often memetic mis)information.

Particularly in the hyper-connected reality that media technologies provide and promote today, it is paramount to aim at understanding which stakeholders are positively and negatively affected by the perpetuation of individual ideas, ideals, idols, and ideologies. One of the most critical skillsets to deal with the problems posed by the promotion of these 4-IDs is found in the above-presented idea of media literacy. Then again, appropriately, a collective intelligence can emerge from mediated participation; and if digitally curated and analytically discussed, the materials *produced* as a product of the cyclic praxis theorised here – as depicted in Fig. 4 below, – could clearly connect the pedagogic process sought in this thesis with the media sphere. In addition, this collaborative praxis – or concerted engagement – could indeed characterise the second act of such 21st century conscientisation project: the stage of **civic empowerment** (as explained in 2.1.3.) – following the sociocultural emancipation phase tackled in the last chapter.

Future research could also investigate, empirically testing, the production cycle that I propose, in which conscient *producers* should engage with meaningful thematics, voicing their civic proposals whilst contributing to the digital public spheres with *eduractive* productions. Like this, the public could share whichever is their primary interest, and/or specialisation, thereby artistically participating in a critical, and constructivist, pedagogical practice. And, contrasting to the way that such civic participation has currently been attempted in existing SoMe platforms, the most fundamental facet of the *produsage* scheme put forward in this thesis would lie on the Freirean meaningful thematics – as presented in Chapter 4.

Correspondingly, with the above-proposed option of filtering the access to interactions with a given postage on this thesis' envisaged SoMe platform, *producers* could engage in

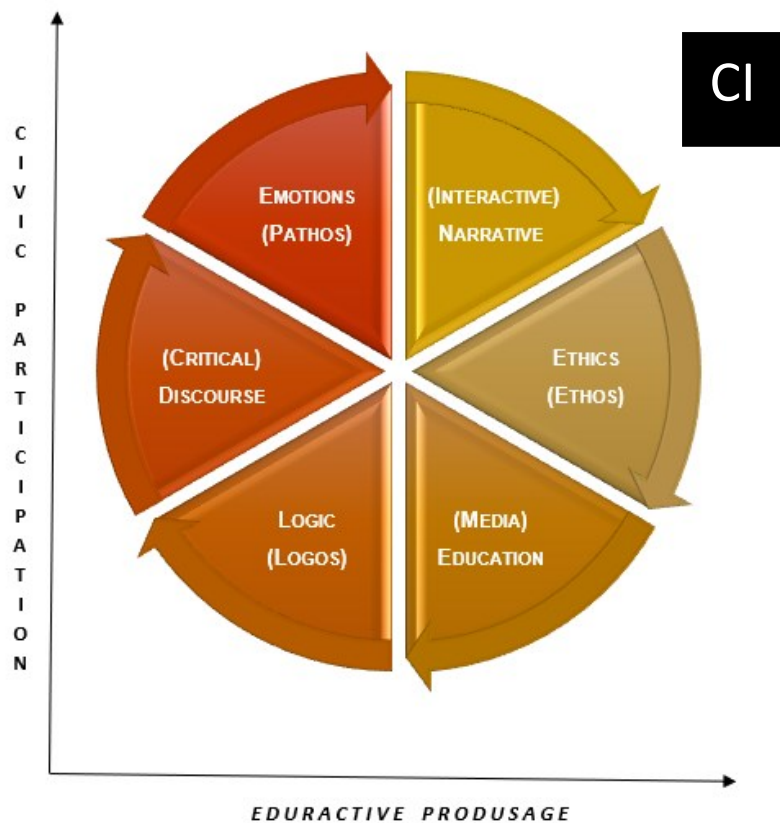


Figure 4. The 21st Century Praxis of Conscientização

public debates that inherently involved their particular expertise. As addressed in the previous subhead, such filters should be established according to the interest and relevance of peers within a determined field of study, geolocation, age, etc. – like is done especially in quantitative studies. Equally important would be the mechanism for filtering posts by their date; because, due to the above-referred atemporal (and potentially permanent) aspect of online databases, researchers could then better observe, with this filtering factor, how the debates on their theories presented via *produsage* have been evolving along the years.

In the end, the sum of these elements could make of this hypothesised platform, a meaningful SoMe, where thematics could be civically discussed for informing decision makers about the public demands. Likewise, the questions regarding to whether these features could be implemented in existing sites where *producers* are already interacting – in e.g., YouTube and Netflix, – or if novel platforms ought to be created with the intrinsic purpose of serving as a common place where meaningful thematics could be discussed, remain open. Furthermore, this study explores an interactive characteristic of narratives that, so far, has been nearly exclusively produced by Netflix which, on the other hand, has not delve into educational *produsage* to the same extent that content creators have been through the medium of YouTube.

As already clarified, CI is projected as an emergent effect from the 21st Century Praxis of *Conscientização* – as depicted in Fig 4. Towards the production cycle of logical, engaging, and meaningful interactive narratives, which could serve as the discursive basis in a plural pursuit of ethical, creative, critical, and constructivist (media) education practices, the axis of the *Eductive Produsage* cycle, that I propose here, pivots with the above-elaborated practice of civic participation, in which *producers* are expected to merely **consent on the consultation** of materials *produced* by them: on a quest towards the democratisation of (their) knowledge and the materialisation of our collective intelligence. And, ultimately, as theorised here, this *eductive produsage* should be especially attentive to three pairs of elements: 1- a rather epistemological (Media) Education and its Logic, especially involving the media in teaching-and-learning practices; 2- a more axiological (Critical) Discourse, aware of the involved Emotions which may affect, justify and motivate the approaches of that critique, observing the interplay of media and our psychosocial well-being; and, finally, 3- an empirical and ontological employment of an Ethical (Interactive) Narrative as the product of this *produced* process, in respect of the media's involvement with the ethos of a society.

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