Teaching and Learning About Audio-Visual Media:

A Critical Media Literacy Perspective on the Use of Games in the Contemporary Upper-Secondary Classroom

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Abstract

In this chapter we present a theoretical framework to facilitate teaching and learning about, rather than with and through, audio-visual media in upper-secondary education in Norway. Drawing upon Stuart Hall's encoding/decoding model, we show how aspects of production, form, reception, and reproduction can be approached in school contexts to treat audio-visual media as more than allegedly neutral tools for set educational purposes. Arguing for the continued relevance of a critical media literacy tradition also in contemporary digital classrooms, we illustrate the applicability of our approach through illustrating analyses of the historical digital game *This War of Mine* and the online game platform *Roblox*.

Introduction

In this chapter, we interrogate possible ways to approach audio-visual media (a/v media) in the contemporary classroom. We distinguish three main perspectives: 1) Teaching and learning *with* a/v media: How can educational films, series, and videogames be used in schools?, 2) Teaching and learning *through* a/v media: How can commercial and independently produced films, series, and video games contribute in educational settings?, and 3) Teaching and learning *about* a/v media: How can knowledge about films, television series, and videogames be conveyed in school and why is this important? We argue that the latter perspective – teaching and learning *about* a/v media – so far has received too little attention compared to the former two focal areas. In treating a/v media as objects of critique rather than apparently neutral educational tools, we develop a framework that can aid the development of critical literacy and, more specifically, critical media literacy in the contemporary upper-secondary classroom.

Initially, we take recourse to Stuart Hall's (1977, 1997) approach to representation and cultural communication to establish a theoretical framework that allows us to critically address the role of a/v media in politics and society. In combining Hall's framework with a critical literacy and media literacy tradition

connected to the works of for instance David Buckingham (2003), Alan Luke (2012), Douglas Kellner (1995), or Hilary Janks (2009, 2014), we explain why teaching and learning *about* audio-visual media is an important aspect of contemporary education aimed at fostering critical, self-reflective, and confident citizens, before we direct attention to the medium of digital games as the currently most rapidly expanding sector of the contemporary culture industry. Finally, we illustrate how teaching inspired by critical media literacy can be realized with two specific games: The historical game *This War of Mine* (11bit Studios, 2014) and the collection of mobile games *Roblox* (Roblox Corporation, 2006).

Cultural production, meaning, and ideology: Schools as conveyors of critical media literacy

As scholars such as Stuart Hall (1997) or Douglas Kellner (1995) have shown, the field of cultural production and communication is highly politicized. The way we represent and imagine one another on television or in films and games, has an impact upon the day-to-day conceptualizations and performances that incrementally construct the social world in a particular manner. Those controlling the means of representation have a decisive influence on how the world is perceived by others and on the actions shaped by these world views. Therefore, the ability to both actively use and critique mass media representations becomes an important element of contemporary education. In the following, we will use the framework by Stuart Hall (1977) to support our further inquiry into how the complexities of representation by means of various media can and should be addressed in school.

Hall bases his model on an understanding of communication as inherently material and closely tied to social, economic, and political practices. In contrast to many narrowly formalist approaches, Hall's model embeds aesthetic form in complex societal processes. According to him, various factors predispose the composition of formal elements through which a particular representation systematically invites certain meanings and performances; relations of production, available technologies and technical infrastructure, as well as received frameworks of knowledge or discourses. Once issued, the mediated cultural forms do not determine audiences. Rather, they are subjected to complex processes of negotiation and appropriation in context that selectively engage with various aspects of the disseminated content and the means through which this content is conveyed. In Hall's model, the notion of dominant or hegemonic potentials of meaning takes precedence over an understanding of ideological messages slavishly binding receivers to specific subject positions. This view implies that the production of meaning is neither determined by textual structures nor is it entirely up to the whims of the receiver.

For Hall, reception is a complex process of negotiation and appropriation that is framed by received frameworks of knowledge, technologies of mediation, and, above all, encoded cultural form. In his model, meaning is the constantly emerging and ultimately contingent result of various patterns of support and restraint that more or less systematically nudge both producers and receivers into particular directions, without determining their activities in the last instance. To imply that a passive mass audience might be inclined to relatively uncritically reproduce the intended dominant potentials of meaning encoded by powerful actors into cultural expressions designed for mass consumption, does not mean to imply the necessary passivity of all audiences in any thinkable context of reception. It only means taking the socio-political implications of the entire circuit of cultural production, form, reception, and reproduction seriously.

Hall developed his model in the 1970s for an analysis of the ideology of television programmes. Since then, his ideas have been adapted to analyses of other areas of cultural production, in particular commercial film. In this chapter, we widen the medial frame even more and look at how digital games can be analyzed and critiqued using Hall's concepts. As we will exemplify below, also in the case of games the dimensions of production, form, reception, and reproduction interact and together predispose dominant potentials for meaning and ideological content. However, in games these dominant potentials are not limited to understanding content in a rational act of decoding meaning, but also include frames for player actions that can reconfigure the narrative. As Pötzsch and Sisler (2019) have shown, a performative engagement with games' sign systems through practices of play can recalibrate what story is told and from which perspective. Consequently, in the case of games, Hall's three strategies of engaging with cultural expressions (that he termed dominant, negotiated, and oppositional forms of reading) have to be extended to include different strategies of player engagement that we will refer to as dominant, negotiated, and oppositional play. In this framework, games emerge as story-machines producing a wide variety of narratives that are then read and interpreted by others (Pötzsch and Sisler 2019).
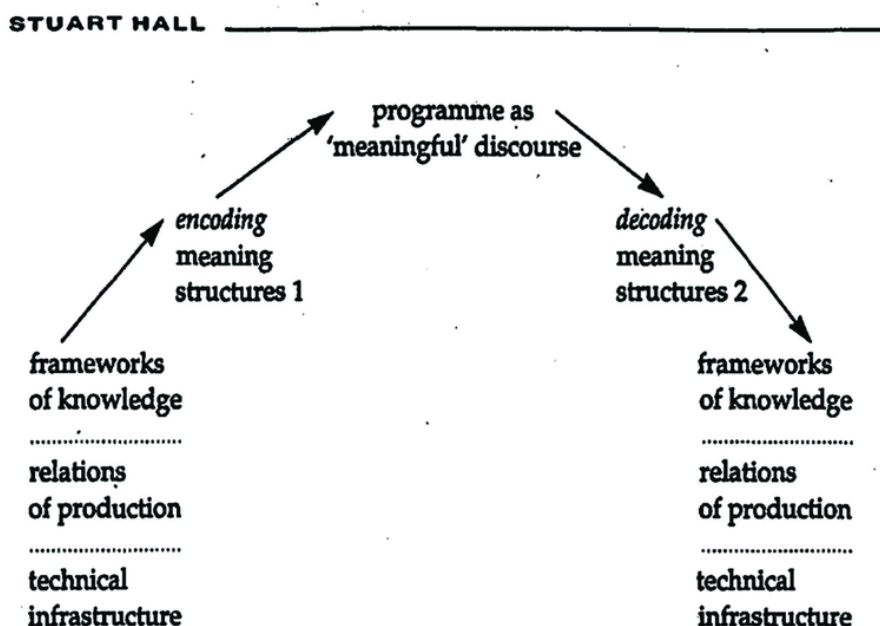
STUART HALL

Figure 1: The encoding/decoding model according to Hall (1977)

As earlier studies on film and game production (Pötzsch 2019, Hammar 2019) have shown, adapting a work to the market logics of contemporary for-profit cultural production is not a politically neutral endeavor but leads to cultural forms that systematically invite the reiteration and reinforcement of a received ideological status quo. Understanding the material and discursive frames of production and reception that facilitate the emergence of such hegemonic products is one key dimension of critical media literacy aimed at teaching and learning *about* (rather than merely with and through) cultural expressions.

The theoretical tradition of critical literacy and critical media literacy is often associated with among others David Buckingham (2003), Margaret Hagood (2009), Douglas Kellner (1995), Hilary Janks (2009, 2014), and Alan Luke (2012). The framework grew out of an awareness that traditional understandings of literacy as the ability to read and write needed to be expanded in encounters with new audio-visual and eventually digital technologies. Kress and Leuwen's (2001) and Hagood's (2009) practice-focused studies of how various media can be used for communication purposes in different settings and contexts opened up a multi-modal perspective that was bent toward increasing participation and empowering people in relation to complex and manifold multi-media environments (multi-modal literacy). Drawing upon the tradition of

critical pedagogy (Freire 1970), scholars also directed focus on the content conveyed by these media (Luke 2012, Janks 2009), and on the conditions under which this content can emerge.

In sum, critical media literacy focuses not only on how media can be actively used and appropriated by learners for their own purposes, but also directs attention to teaching about the biases and ideologies implied in genres and specific cultural expressions offering ways to actively resist and subvert these. In doing so, issues of ideology and power in relations of production, form, reception, and reproduction move center-stage. We will now turn to the question if and how such positions are reflected in current Norwegian upper-secondary curricula to prepare the grounds for an introduction of concrete examples to illustrate our approach.

Critical media literacy in the Norwegian upper-secondary curriculum

The Norwegian school curriculum consists of one main part covering all levels of basic education in Norway, and separate curricula for each of the different subjects taught in schools. Together, they are reflections of the Education Act and govern the content of Norwegian education at all levels. While the main part deals with general values and principles and constitutes the basis for the entire curriculum, the separate curricula for each different school subject contain key competence goals for teaching and learning. These are in line with the values and principles defined in the main part of the curriculum and specify which skills and knowledge the students are to acquire in the various subjects.

In 2006 the term "digital competence" was first introduced in the Norwegian curriculum (Klausen 2020, p. 102). Already at this time, source criticism, interpretation, and analysis of digital genres and media forms were elements of the term digital competence. However, at this stage the curriculum defined digital skills in a very open and general manner and with little attention to the specificities of digital technologies and media (Ibid. p. 104–105, Erstad 2010 p. 92). In 2020 the entire curriculum was revised, and both the main part and the separate subjects' curricula were updated and cast in new form. An important argument for the revision was that the defined content should be relevant for society and the economy and should be future-oriented (Utdanningsdirektoratet 2021). Among the components emphasized in the new curriculum are critical thinking, information literacy skills, and digital competence. It is highlighted that it is crucial for future generations to be able to assess what they can and cannot trust when facing the massive information flows typical for digital platforms (ibid.). However the term digital competence is still defined similarly as it was in 2006, with the addition of adding programming and algorithmic thinking as priority focal areas (Kunnskapsdepartementet 2017b, p. 18).

Besides the mentioning of critical thinking in general as an important part of the future-oriented education, critical media literacy is not mentioned explicitly in the core values summarized in the main part of the Norwegian school curriculum. The responsibility for training students' digital competence is with the new curriculum given to a few selected subjects, and the Norwegian government has stated that in addition to Mathematics and Science, Social Studies is given a special responsibility for developing the student's digital competence (Regjeringen 2018, last paragraph). This is made visible through competence goals at upper-secondary level, requiring the students to amongst other things be able to use digital tools to find, process and navigate information, and to be capable of exercising digital source criticism and refer to sources in a reliable way. Students should also be able to understand how algorithms affect information search, develop digital judgment and follow rules and norms for digital interaction and communication, privacy and copyright (Kunnskapsdepartementet 2019a, p. 5–6).

Research has shown that the government's definition of digital competence is perceived as vague and indistinct by the teachers who administer the curriculum and put it into practice (Klausen 2020, p. 173–177). This means that the curriculum's guidelines give room for ample interpretation, and which digital skills the students are being trained in will be up to the individual teacher to decide. The teachers participating in the aforementioned survey call for clearer concretizations about which digital skills the students are to be trained in, and express frustration at not knowing whether their teaching covers all required aspects (ibid. p. 175). In addition, the relation between digital literacy and more general notions of media and critical media literacy that we align to in the present chapter remain somewhat opaque in the currently valid curriculum.

The current Norwegian school curriculum is based on socio-cultural and social constructivist learning theories that see students as naturally curious and actively seeking new knowledge (Buland et al. 2011). Drawing upon this theoretical apparatus, in discussions about the overall goals and instruments of school education as is detailed in the national curricula (e.g. Kunnskapsdepartementet 2017a), critical thinking moves center stage. Individual self-reflective maturation, capacity for informed critique, and general 'Bildung' are important keywords in these documents that together form general objectives to be reached through such means as creative exploration and in-depth learning. The Norwegian school curricula's core values are based, among other things, on the assumptions that critical thinking and ethical awareness are both a prerequisite for, and part of, learning in many different contexts, and contribute to students developing capacities for independent and self-reflective judgment. In terms of education *about* media advocated in the present chapter, this general framework seems to resonate well with Hall's Encoding/Decoding model and our focus on the tradition of critical media literacy as a key component of contemporary teaching and learning.

In the following, we will address by way of concrete examples, how educators can relate to the challenges of activating and conveying a critical form of media literacy across a variety of media technologies and genres. Following the four dimensions of Hall's model - production, form, reception, and reproduction - we illustrate how Norwegian upper-secondary education can convey critical media literacy practices in relation to the important and still emerging technology of video games. In doing so, we imply that, in spite of political moves threatening to transform critical media literacy into a "living dead" (Buckingham, no year), the framework is an important, and indeed vital, aspect of contemporary education and will continue to be so in the future.

Ways of engaging with audio-visual media in the classroom: Teaching and learning not only *with* and *through*, but also *about* video games

Audio-visual media have for a long time been part of established classroom practices. Multiple textbooks and articles have been published on how to use films, games, and social media for teaching and learning in both formal and informal settings (Rosenstone, 2006; McCall, 2016; Chapman 2016; Hartzman 2021, Skaug et al. 2019). Today, both educational and entertainment films, television series, and lately also video games, are regularly used for teaching and learning. We believe that such an openness for new technologies meeting in particular young learners 'where they are' is important. However, in such attempts to harness the power of technologies to improve learning, these media are often treated as if they were neutral tools simply improving the efficiency of teaching particular subjects. Consequently, the genre of survey-based effect-studies pertaining to prove the increased learning effects of technology-enhanced education is rapidly growing. However, this tradition of assessment and evaluation misses the important aspect of teaching and learning *about* media entirely.

Teaching with and through both educational films or games as well as commercial titles carrying a certain aura of accuracy and authenticity, is a rather wide-spread practice. Many scholars and educators, however, are acutely aware of the shortcomings the practice inevitably holds and have developed various methods to amend this problem. One line of criticism is to point out that teaching with and through media often assumes merely external rewards as a motivating factor to improve learning (Linderoth 2012, Dís Ísfold Sigurðardóttir 2016). Another strain of criticism focuses on behaviorist assumptions underlying the theories of learning that such practices implicitly align to (Säljö 2019, p. 71). In terms of using video games for

learning, practitioners have warned that one cannot expect the game to teach students anything other than how to succeed in the game, and that the often-prevailing attitude that games are motivational in themselves is mistaking motivation for attraction through the promise of fun (Skaug et.al. 2019, p. 35–38). Our focus on educating about media was developed with an eye on amending such shortcomings.

The idea that watching a historical film or playing a historical game can facilitate learning about a historical event has been critiqued by historians and other scholars, who often point out historical inaccuracies and, more importantly, ideological biases in the various representations regularly emanating from the culture industry (Rosenstone 2006, Pötzsch & Sisler 2019). In our view of contemporary education inspired by critical media literacy such critiques do not imply that such media, commercial or not, should not be used in schools. On the contrary, these critiques only reveal the weakness of didactical approaches reducing media-use in school to teaching with and through. When taking critical media literacy and Hall's communication model seriously it becomes apparent that precisely debates about the questionable nature of the content of historical films and games, their intrinsic biases, and attention to the frames creating these and facilitating their massive dissemination are key elements of contemporary education *about* media.

These issues, we believe, matter because representations frame perceptions of reality and thereby agency (Kellner 1995, Hall 1997, Young 2021). Massively distributed commercial films, tv series, and video games are particularly powerful in this respect. Yet it is not sufficient to only understand these representations. Teachers and learners also need to critically assess the conditions that produce and reproduce them. It is our contention in this paper that such media criticism currently has too little space in upper-secondary school education in Norway and (presumably) elsewhere (Buckingham, no date). We posit that Hall's model offers a useful template on how to engage with audio-visual media in general, and games in particular, adopting a critical media literacy perspective.

Where digital games are part of a broader academic context, they can be excellent tools for creating a dialogical space for reflection and discussion, maybe particularly so in the case of history education (Chapman 2012). . Meaning making in games is predicated upon both the story conveyed and the mechanical system predisposing how players can engage with the game world and its characters. As Chapman puts it, "the particular audio-visual-ludic structures of the game operate to produce meaning and allow the player to playfully explore/configure discourse about the past" (Chapman 2012, n.p.). When we

consider a game's mechanical system, the context for conversation and reflection can be changed in line with the classroom discussion, as the player's choice of action affects the development of game narratives. This dynamic interaction between players and games opens up what McCall describes as a historical "problem spaces" (McCall 2016) where contentious issues can be explored from different vantage points and various choice-alternatives can be tested and discussed.

Critical attention of educators also needs to focus on how games as objects of critique (teaching about) predispose what players, and therefore, learners can and cannot do and thereby learn. In games, educational and otherwise, mechanics and rules limit player options for action and engagement in a manner that can convey ideological content by defining what is and what is not a viable alternative in specific historical or other scenarios. Besides critiques of story, characters, or events, also this "procedural rhetoric" (Bogost 2006) of games needs to be critically addressed in contemporary education aimed at conveying critical media literacy. As Adrienne Shaw (2017, p. 595) points out in her application of Stuart Hall's model to digital media: "Designs and environments like media representations do not tell us what to think or do, but they do shape what we think with." And how this happens should be of considerable concern to education.

Teaching *about* games means to convey to learners that these technological media are designed structures that tacitly shape how players see and interact with virtual worlds. The relation between simulation and actual world is contingent and subject to complex negotiations that vary across contexts and player constituencies. As Hall's model makes visible, players can activate and negotiate the meaning potentials offered to them, but the game form at the level of both narrative and mechanics still predisposes their decoding activities and practices of play. As Shaw (2017) writes, media "exist within systems of meaning that guide, yet still do not determine, how they are interpreted." (ibid.). It is this premise that shows the importance of teaching and learning not only *with* and *through* but also *about* games and other a/v media.

Teaching and learning about a/v media

We now turn to a summary of how critical knowledge *about* audio-visual media can be conveyed in a school setting along the four different dimensions of form, production, reception and reproduction. In doing this, we bring together Hall's communication model with teaching practices based on an understanding of critical media literacy in line with the values, principles and skill sets outlined in the national Norwegian

upper-secondary education curriculum. Finally, we illustrate the emerging paradigm by showing how two video games can be taught about in a critical manner employing these frames.

Teaching about form

This is the dimension of contemporary cultural production that is maybe most crucial to teaching about a/v media. When teaching about Hollywood cinema, new streamed series, or the latest blockbuster video game title, attention can be directed at the formal elements through which content is conveyed. What narrative is presented? By which means and from whose perspective? Who are the protagonists and antagonists and how is their relationship portrayed? Who gets to speak and who is excluded or marginalized? How are enemies portrayed and what are players able to do within the game's established boundaries? Such and other questions are important to be asked in upper-secondary education because they can provide important insights to young people trying to navigate the multitude of screen-based a/v narratives disseminated in their everyday lives. In terms of critical media literacy, it is important to sensitize learners for how class, race, gender, age, disability, and other factors are treated in film, on television, and in games both today and in the past. In addition to this, it is salient to enable students to reflect on the different values and norms that are implicitly or explicitly articulated and thereby reproduced in the media in question. It is salient that learners are made aware of why the ideological bias of individual works, whole genres, of the entire industry is an important issue worthy of critical attention.

Teaching about production

Critical media literacy, however, cannot be reduced to a critique of aspects of audio-visual texts and the potentials of meaning these textual devices invite. An additional important question needs to be how the emergence of particular ideological positions in mainstream audio-visual media can be explained. Here attention to the context of production of film, television series, and videogames becomes an important area for critical teaching and learning (Mosco 2011, Hammar 2019, Pötzsch 2019). Focus on the structural limitations under which cultural production operates enables a critical exploration of how interests and ideological viewpoints of producers predispose representations. This can offer learners important insights into the wider socio-economic processes that systematically motivate the constant reproduction of generic narratives, characters, and conflict scenarios. Here, factors such as profit-orientation of (large parts of) the culture industry, dependence upon marketing and the targeting of specific segments of the audience, working conditions in and the ecological footprint of the industry, as well as monetization of data and fan

labor become important. This allows students to explore how material aspects of media technologies shape culture and society and enables them to critically reflect upon aspects such as the relentless data gathering and commodification in digital environments for economic and political purposes.

Teaching about reception

How cultural expressions, once issued, are read, played, and understood both individually and in groups can productively be addressed in class. By means of discussion about own viewing or playing experiences teachers and learners can explore the ultimate contingency of textual structures and devices that always will be read differently by different audiences in different contexts of reception. In this area of critical media literacy it is important to increase sensitivity towards the fact that audiences differ widely and that a hegemonic audience segment does not reflect a generalizable attitude to the product in question. Also simplistic cause-effect models regarding media impacts as exemplified by the games and violence discourse can effectively be questioned and challenged allowing for a necessary nuancing of often assumed clear-cut effects and implications (see for instance Egenfeldt-Nielsen, Heide Smith & Pajares Tosca 2020; chapter 9). Through such an inquiry of reception, learners can also be encouraged to critically relate to and compare their own and others' media experiences and connect these to particular norms and values.

Teaching about reproduction

The last segment of teaching and learning about audio-visual media through the template of critical media literacy addresses the question of how and why the three areas of critical teaching and learning introduced above matter both on individual as on collective terms. This area should be able to explain the inherently political nature of media representation connecting practices of mediated marginalization, exclusion, and othering to political discourse and propaganda. Also working conditions in the industry and the ecological implications of energy and resource-use can be addressed here subverting the still commonly held idea that streaming and digital devices are free from material effects on human beings and the environment (Maxwell, Raundalen & Vestberg 2014; Crawford 2021). This focus can facilitate discussions on the connection between economic growth, living standards, and quality of life in a global and sustainability-oriented perspective. The reproduction side of teaching about audio-visual media brings together the three corners of Hall's model and offers explanations for the importance, and indeed urgency, of addressing these and similar questions in the contemporary classroom.

We will now exemplify possibilities of teaching about video games with reference to the games *This War of Mine* (11 bit Studios 2014) and *Roblox* (Roblox Corporation, 2006-). When doing this, we acknowledge the difficulties of isolating video games (or films and television series) as singular media with clearly determinable borders. As among others Jan-Noël Thon (2016) has shown, in today's media landscape, narratives spread and are disseminated across media and genre with for instance video games inspiring graphic novels or movie universes spreading into video games or television series and vice versa. Regardless of this important observation, we treat the following examples as clearly distinguishable entities.

Teaching about games: The cases of *This War of Mine* and *Roblox*

This War of Mine

This War of Mine is a resource management game that was produced in 2014 by Polish developer 11bit Studios. The game puts the player in charge of three characters attempting to survive in a bombed-out building in a generic Central or Eastern European urban war zone. The main mechanics are nightly scavenging raids combined with daily routines structured around feeding and healing characters as well as building machineries and trading items. *This War of Mine* is loosely built upon the war memories of survivors of the siege of Sarajevo (1992-96) – most notably Barbara Demick's and Zlata Filipovic's autobiographical books as well as interviews with Emir Cerimovic (Kwiatkowski 2016). In 2016 the expansion pack *This War of Mine: The Little Ones* introduced children as non-playable characters thus significantly increasing the emotional impact of the title. The game has received positive reviews and has been recommended for its treatment of civilian suffering in war that was described as an important challenge to received conventions in war game design (House 2020; Kampe 2020).

When teaching about the aesthetic form of *This War of Mine* it is not necessary to play the game or even to have the commercial title available in the classroom. One important aspect of the formal dimension of the game is the way it addresses and challenges received conventions regarding the presentation of war and violence. To account for those, teachers can draw upon game trailers or walk-throughs that are available via for instance YouTube (in particular the teaser trailer[1] from March 2014 is useful in this respect). Showing a trailer and then jointly analyzing it in class will enable debates about how popular cultural

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[1] The trailer is available here: https://www.youtube.com/watch?v=Hxf1seOpijE (accessed February 15, 2022).

expressions usually present wars and how *This War of Mine* differs in this respect. In case the game is available for (joint) play, it opens up challenging meta-historical problem spaces for students to maneuver through and, this way, enables reflections about the ethics of war and the moral pitfalls of trying to survive in a conflict zone. Important aspects that might be pointed out in classroom debriefings and discussions are the blank spots filled by the game that a "selective realism" (Pötzsch 2017) of received popular cultural war discourse creates, the title's consistent denial of conventional power fantasies, and its avoidance of glorification of war as an arena for self-assertion and heroism. This allows students to reflect on the contingency of historical representations that are always the product of someone's choices, points of view, and context. Based on this, classroom practice can move to comparisons of different media representations of specific historical events.

At a formal level, *This War of Mine* opens for play experiences that create what Jørgensen (2016) has termed "positive discomfort" – negative feelings that are experienced as something positive by players because they point to deeper issues considered worthy of critical reflection. On the other hand, the game can be criticized for a tendency of cannibalizing the suffering of others that are reduced to a resource management mechanic incapable of adequately conveying actual war experiences. In addition, the de-contextualized presentation of the presented sufferings makes these potentially useful for propagandistic rallying cries aimed at manufacturing support for humanitarian interventions and war allegedly aimed at stopping such atrocities. Precisely such ambiguities connect the meaning potentials invited by the formal aspects of *This War of Mine* to a critical media literacy tradition applicable to the contemporary upper-secondary classroom.

When teaching about the production side of *This War of Mine*, the commercial nature of the title is a salient aspect to deal with. Similar to the critique of the formal aspects outlined above, also budget and profit orientation of the developing company 11bit Studios have positive as well as negative implications for what the game can and cannot achieve in relation to hegemonic discourses and practices of war. When devising *This War of Mine*, 11bit Studios was a comparably small company. The estimated costs of producing the resource management game were low compared to highly commercialized, blockbuster war games such as the *Call of Duty*-, *Battlefield*-, or *Medal of Honor*-series. This economic frame enabled more creative freedom as the production team could disregard the expectations and preferences of hegemonic segments of the audience that are usually catered to in larger productions to ensure returns of investments (see

Hammar 2020). On the other hand, minor productions often fail to reach wider audiences thus significantly reducing their influence on hegemonic discourses and practices (de Smale, Kors, & Sandovar 2019). Interrogating such questions can increase the sensitivity of learners for such aspects of game production and by means of extension to cultural production in general and are therefore important components of classroom practices aimed at developing critical media literacy.

Educational reflections about <u>reception</u> can take learners' own play experiences as a point of departure before these can be contrasted with other players' experiences and practices accessible via walk-throughs or *Let's Plays* available on for instance YouTube. Alternatively, if the game is not available in the classroom, different play practices of others can be critically examined and compared. Important here is to raise awareness for the contingency of potentials for meaning invited at the level of encoded form upon actual play practices that actively negotiate, and potentially subvert, these potentials in concrete contexts of reception. Again, what is asserted for the specific case of playing *This War of Mine* retains validity also in relation to other games and the reception of cultural expressions in general.

When reflecting upon various play practices, it will quickly emerge that *This War of Mine* is played differently by different players and that these differences are often connected to varying attitudes towards the game and its content (jfr. Hall's (1977) strategies of dominant, negotiated, and oppositional reading). Some players will suffer their ways towards an untimely death of (most of) their characters and then reflect upon the multiple possible meanings of the events, while others will systematically test out alternatives to improve their own performances with the overarching objective to beat the game rather than vicariously experiencing civilians' sufferings in war.

In *This War of Mine*, the game's mechanics and user interface have been deliberately designed to make purely instrumental types of play difficult (Pötzsch 2019b&c). For instance, saving progress and then retrying certain challenges is impossible, making learning to beat the game a tedious and time-consuming, yet not impossible, endeavor. In addition, the title does not contain a tutorial that usually gradually introduces and explains controller functions and key mechanics. Instead, the game casts an entirely unprepared player into the various challenges of the game world. This "procedural form of ostranenie" (estrangement) (Pötzsch 2019c, p. 241) de-familiarizes conventionalized player expectations and de-habitualizes play practices accommodated to receiving all necessary information prior to meeting specific

challenges. According to the developers, this was a deliberate choice aimed at replicating the total unpreparedness of persons suddenly exposed to war situations and to increase reflections of players regarding such conditions (cited in Pötzsch 2019c, p. 245). Awareness for such design techniques and the varying player responses they entail are salient components of a game-focused critical media literacy that can inform classroom discussion and/or game session debriefings.

Another important factor regarding the reception side of *This War of Mine* is the modding center introduced by the developers to the PC- and console-based versions when launching the extension *This War of Mine: The Little Ones* in 2016. The modding center allows players to access the game 'behind the scenes' and investigate how the system establishes and changes certain in-game variables such as variations in weather condition, available resources, the gravity of injuries, combat mechanics and effects, as well as characters' stats, psychological dispositions, or carrying capacities. As Pötzsch (2019b) has argued, this allows for a pro-active form of reception unique to games that not only allows players to navigate a game world but also makes it possible for them to change this world's most fundamental settings and conditions. According to him, this offers players a role that is reminiscent of the spect-actors constitutive of Augusto Boal's forum theater and offers a good example for new oppositional reading or playing strategies afforded by the medium of digital games.

In a school context, the modding center enables discussions and critical reflections about the realism and authenticity of the game at a system level and makes it possible to question and change key determinants of the game world to bring play experiences into correspondence with own understandings or simply test out alternative playing strategies along the dominant-negotiated-oppositional scale suggested by Hall (1977) and then discuss the emerging results. In the sense of Pötzsch's (2019b) reading of Boal, joint reflections about how *This War of Mine* simulates certain aspects of the depicted events, about how it pre-structures player interactions with the game world and its characters, and about how these factors can be amended for certain pre-defined purposes can offer new venues for teaching and learning about cultural representations of war and violence. Here, as elsewhere, knowledge *about* the media technology in question is an important precondition for critical and reflective teaching *with* and *through* it.

Roblox

Roblox is an online game platform that offers its users a proprietary toolset called *Roblox Studio* to create their own smaller games within that platform. The platform has existed since 2006 with little popularity but has within the last years attained an immense growth that resulted in a market evaluation of 68 billion USD in 2022 and 43.2 million daily active users – primarily children and younger adults (Dean 2022). Roblox is a distribution platform that allows its users to create and distribute self-created games. Still, the popularity and, often-hidden, affordances of the platform make it an important focus for contemporary education about games. As a game platform with an embedded economy Roblox motivates serious engagement with questions such as: Who is producing games on the Roblox platform? How are they being compensated for the labor they dedicate to producing them? How is Roblox able to earn billions of dollars in revenue when the offered services are supposedly free? What makes some games on the platform popular and others less so? And how do players of Roblox discover a game that they want to play?

At the level of <u>form</u>, Roblox differs in each game produced on the platform dependent upon the aesthetic choices of its producers. Because Roblox provides the tools and platform to develop your own game, it also means that each game is different in terms of story, world, characters, and mechanics. However, each game in Roblox still relies on the same type of rendering, lighting technology, and audio-mix that motivates productive questions on contemporary graphics technology, texturing processes, available choices, and the relationship between designers, users, and the graphics technology in question.

It is therefore less obvious how to teach and analyze Roblox because the game platform offers a multitude of different genres. Again, this difference in game design based on what the Roblox platform allows developers to design can motivate productive investigations into the mechanical differences between games and the constraints set by technology such as the Roblox engine. In classroom settings, teachers can invite students to select two or more contrasting cases to analyze, such as a popular game and one less popular game on the Roblox platform. What are players able to do within the game? What world is the game in question representing? What devices do players need to best play the games? In turn, the difference in popularity can prepare a subsequent inquiry into why students think one game is more popular than the other and the contributing factors at play.

Turning to a focus on the <u>production</u> side of Roblox, it is interesting to ask how the Roblox Corporation earns money, especially when playing and designing games is supposedly free. In this respect it becomes apparent that on the Roblox platform, the roles of producers and receivers increasingly blend. By using the platform to produce one at same time becomes the recipient of the very constraints the platform puts such activities under. This is particularly fruitful for teachers to take up, since much of everyday entertainment, online services, and even news is supposedly free to access, yet there are still economic transaction going on 'behind the scenes' that, in effect, transforms users of these applications into profile-based products for sale to third parties (Fuchs 2021). One can argue that, given the significant spread of commercial social media and other online platforms for peer interaction, this is a particularly important issue to make learners aware of when educating them in critical media literacy in a future-oriented school.

As a company, Roblox makes profit when users interact with the platform (data gathering and commodification) and when they buy the artificial 'Robux' currency that can then be spent in online shops to customize player avatars and purchase equipment. In addition, profits are generated through the subscription model 'Roblox Premium' that allows subscribers to get store discounts as well as through company cuts of 52% from every transaction between users conducted on the platform. In this freemium model the Roblox Corporation functions as the sole mediator between buyers and sellers in the in-game/on-platform economy – it controls the marketplace and its conditions. At the same time, those who produce the games offered for sale on the Roblox platform are compensated by the Roblox Corporation with only 25 percent of the earned revenue from the in-game transaction. This revenue is paid to developers in the in-game currency Robux and can only be exchanged into actual valuta through a premium subscription. This can be compared to the infamous practices of mining companies that used to pay workers in 'company scrip' that could only be spent in company shops that, in lack of competition, could charge very high prices.

On the <u>reception</u> side, Roblox offers multiple examples of how players across many age groups behave and relate to each other in virtual environments via the offered game and platform constraints. Additionally, player activities and game production on the Roblox platform are monetized to such an extent that the company earns a massive return of investment with increasing profits driven by the monetization of children activities that could cynically be termed a form of child labour (People Make Games 2021; Parkin 2021). Such factors are important to explore for learners as they need to understand and get used to such business models that become more and more typical for the digital economy. This will allow for an assessment of

how innovation and technology, and the exercise of power affects individuals and society. Teaching and learning about these and comparable exploitative practices is important and a key component of contemporary critical media literacy.

Due to how Roblox advertises itself as a platform where players can make their own games and perhaps even earn money, the entire circulation of play activities and user-generated content is not only the lifeblood of the platform, but is also the foundation of its entire business model – and a miniature model of key aspects of contemporary digital capitalism. Without free and fan labor the company profits and stock-market value would sharply decrease. Thus, Roblox is a useful case study for students learning about some of the most important and contentious issues in contemporary mediated society where platforms, such as Netflix, Amazon, Facebook, Instagram, Twitter, Youtube, Ebay, Apple's and Google's app stores, Twitch, Uber, Deliveroo, etc., increasingly structure and monetize our everyday lives (Srnicek 2016). As research has shown, these platforms are profit-oriented and exploit both users and producers (Hammar 2021). Their dynamics entail serious problems for democracy (Zuboff 2019). A classroom analysis of the dynamics and intrinsic logics of the Roblox platform's digital economy via the parameters introduced through Hall's model is therefore a useful endeavor and can help to throw light upon 'hidden' aspects of games and platforms that many children and youth use daily and that might maintain a grip on their lives also as they become adults. Through an analysis of the reception side of Roblox, the teacher can facilitate discussions on how personal finances, commercial impact, and consumption affect both individuals, groups, and society at large. Implementing critical media literacy in upper-secondary education in this manner can offer learners the sets of knowledge and skills necessary to be able to critically reflect upon, question, and ultimately challenge and resist the exploitative structures underlying digital platforms and apparently free-to-play games for fun.

Conclusion

Through the above examples, we have shown how Hall's four dimensions of cultural communication (form, production, reception, and reproduction) can be productively used in classrooms to explore key issues of contention salient for the current digital era. Connecting Hall's thinking to the critical media literacy tradition of Buckingham, Janks, and Kellner we explained why teaching *about* audio-visual media along all these four dimensions needs to be an integrated component of school curricula and educational practice in Norway and elsewhere.

Throughout this chapter, we have shown how Hall's theoretical framework supports teaching *about* audio-visual media and resonates well with the theoretical underpinnings and content of the Norwegian school curriculum. Still, we argue that critical media literacy is currently not sufficiently embedded in the curriculum to adequately prepare learners for the various challenges a hypermediated world holds for future citizens and laborers in particular with attention to digital media and technologies. Today, the term 'digital competence' as it is used in the subject-dependent curricula is not yet clearly enough concretized and leaves significant leeway to individual schools and teachers. This creates the danger of compartmentalizing Norwegian classroom practices concerning digital skills and of dispersing them across subjects without sufficient integration in an overarching framework such as a critical literacy tradition that might guide dispersed educational practices.

In this chapter, we see digital and non-digital technologies as subject to similar logics and as posing similar challenges and opportunities to teaching and learning. In treating popular film, television, and video games as objects of analysis and critique rather than allegedly neutral educational devices we argued for the importance of a contextual understanding of cultural expressions and their varied societal, political, and economic implications. Engaging with questions of production, form, reception, and reproduction, we advance a model to guide educational endeavors towards questions of ideological content as well as exploitative economic and other frames.

Critical analyses of audio-visual media along the conceptual lines suggested by Hall's framework can provide the knowledge and skills necessary for students to reflectively and confidently maneuver today's hyper-mediated world and might facilitate both active participation and the promotion of democratic values. Using the examples of *This War of Mine* and *Roblox* we have illustrated how a critical media literacy approach based on Hall's model can be implemented and which results it might yield for teachers and learners. As we have shown, this way of teaching and learning about audio-visual media is in line with the core values enshrined in the Norwegian curriculum. We hope that this chapter can inspire others to follow a similar course

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