Ma Nishtana: Why is this Night Different? Photo by Gabriel McCormick.

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"This is a Zombie Apocalypse – it's an Entirely Different Situation." Teachers' Deductive and Inductive Framing of Digital Games in Ethics Education

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Abstract
This article investigates teachers' instructional strategies when using *The Walking Dead* (2012) in ethics education, in a course intended to teach students how to use ethical theories like deontology and utilitarianism as a basis for their own moral reasoning. By analyzing audio and video data from several teachers' classes, the study has identified two main instructional strategies, labeled *deductive* and *inductive* framing. The former sees class discussions carefully staged by the teacher in a manner that gives a good overview of the game's dilemmas, and with ethical theories being foregrounded as general principles through which the dilemmas are discussed. Inductive framing, inversely, starts with discussing the particularities of the dilemmas, and with teachers asking open-ended questions that can be answered in either a curricular or an everyday manner. Analysis indicates that deductive framing is useful when students have yet to fully appropriate the ethical theories, whereas inductive framing often leads to confusion and unfocused classroom discourse. However, inductive is well suited for when students have made the ethical theories their own, as it affords them an opportunity to think in a critical and independent manner, without too much reliance on the teacher's guidance and instruction. The paper concludes that a combination of the two instructional strategies can be a fruitful approach for teachers wishing to use digital games in ethics education.

Keywords: Digital Game-Based Learning, Digital Game-Based Teaching, Framing, Instruction, Deduction, Induction, Ethics, Education, Dialogue, gamevironments

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The ethical aspects of digital games and gameplay have been discussed by several scholars (Sicart 2011, Whitty, Young and Goodings 2011, Young 2014, Gabriel 2020, Schrier 2020, Schrier 2021). Digital games can be useful for teaching ethics (de Sousa, Rasmussen and Pierrioux 2018) as they offer possibilities for perspective and role-taking, and for making choices and experiencing their consequences (Schrier 2020). When used in ethics education, games can allow students to practice moral problem-solving skills in meaningful situations (Schrier 2021) Ethical dilemmas can be defined as problems where different values come into conflict, making us unable to act in a wholly ethical manner (Kvalnes 2019). Dilemmas in games like *The Walking Dead* (2012) can serve as thought experiments in that they encourage deliberation and reflection prior to making a choice (Sarian 2018). The dilemmas also offer students a chance to see moral problems from other perspectives and the opportunity to step into the role of various fictional characters. The students are positioned as ethical subjects (Sicart 2011) as the games encourage them to think critically about the moral implications of their actions. Moreover, games can be an improvement on classical thought experiments like the trolley problem, which can sometimes be too sterile, making solutions too obvious. At the same time, the dilemmas and fictional setting of games like *The Walking Dead* are far enough removed from the reality of contemporary society that students cannot easily parrot solutions to real-world dilemmas they have heard in the news or other sources.

While games certainly can have pedagogical utility, it has been long established that teachers play an important role in unlocking this potential (Molin 2017). Quality teaching requires clear goals and feedback (Hattie and Timperly 2007, Klette, Blikstad-Balas and Roe 2017), and the use of games in formal educational contexts is no different. Therefore, it is important to investigate how teachers facilitate learning ethics with digital games. This study aims to provide more insight into this by asking

the question: *what instructional strategies do teachers apply when using games in ethics education, and how does this affect the form and content of classroom discourse?*

Teaching and Learning with Digital Games

Schrier (2020, 150) argues that games are good for teaching ethics and empathy due to "the fact that they can encourage participants to take on the role of another (fictional) person, and see the world, act, and behave as if they inhabited them." However, claims concerning digital games and their utility in ethics education rest on the assumption that players experience games in homogeneous ways. While games as artefacts have qualities that are invariant across contexts, the *experience* of playing games can vary greatly. The way games are practiced and experienced is very much dependent on contextual, situated, cultural and social factors (Steinkuehler 2006, Malaby 2007, Consalvo 2009). Hence, we cannot make assumptions on how the player will experience and reflect on ethical issues and problems in a game based solely on an analysis of the game as a designed artefact. After all, one can imagine a player doing wrongful deeds in *Red Dead Redemption 2* (2018) just for the spectacle. Or a player might perform inconsiderate, aggressive, or selfish acts in *Mass Effect* (2007) just to gain enough renegade-points to level up the renegade-skill. Heron and Belford (2014) even argue that morality systems in games are often binary and utilitarian, as players can defend their actions based on desirable gameplay outcomes. Such variation in player experiences can become an issue for teachers seeking to use digital games in ethics education.

If two players have played the same game, but are left with different experiences, it is likely they have noticed different aspects of the game, while also thinking about different themes or topics while playing. One player might have compared their

actions in a game to real-world atrocities, whereas another player might have simply been searching for the gameplay aspects that offer them the most enjoyment. To better account for this difference in experience, we can turn to *variation theory* (Marton and Booth 1998, Marton and Trigwell 2000, Marton et al. 2004, Marton 2015). This describes differences in experience as "differences in the structure or organization of awareness at a particular moment or moments" (Marton and Booth 1998, 100). Differences in our experience of the world manifests itself as figure-ground structures (Marton 2015), where one aspect of the world is kept in our focal awareness against a background of non-focal awareness. To separate one aspect of the world from other aspects, we must generally keep several aspects of the world in our awareness at the same time.

This is how we differentiate, or *discern*, the world into meaningful parts. For example, we cannot perceive the greenness of a cucumber "without separating it from the cucumber" (Marton 2015, 59). When we perceive the color of an object, we keep it in our focal awareness against a background of other aspects of the object, like its shape, size, etc., but these aspects are *still in our awareness*. Likewise, to discern the content of a text, such as its main argument or presuppositions, we must separate it from its form, structure, quality of writing, and grammar. Learning is thus about increasing our ability to differentiate the world around us into discreet meaningful elements. In this perspective, technology like digital games could conceivably offer experiences in which we can learn to make such differentiations by encouraging us to keep relevant aspects in our awareness simultaneously.

However, studies have shown that students can interact with technology in the manner intended by the teacher without necessarily making the distinctions necessary for learning (Bergqvist and Säjlö 1994, Säjlö and Bergqvist 1997,

Wyndhamn 2002, Krange and Ludvigsen 2008). Other studies have shown that students can have problems identifying the relevant aspects of a game pertaining to a particular learning goal (Squire 2004, Egenfeldt-Nielsen 2004, Egenfeldt-Nielsen 2006, Berg Marklund 2015, Sandberg and Silseth 2020, Klevjer 2021, Sandberg 2023). These studies illustrate how there are several ways to experience and perceive a game (or any phenomenon), only some of which are conducive to a given learning objective. Having students engage in pure, unaided interaction/gameplay is likely to overwhelm them, and risks them not identifying relevant aspects of the game, or playing the game without regard for the subject matter.

The ability to make meaningful differentiations is often contingent on a set of previously discerned differences and aspects. Whether students learn to differentiate their experience of the world into comprehensive structures and patterns depends not only on "what there is to be experienced but of what things are experienced simultaneously" (Marton 2015, 66). If a student is playing a historical game in history class, they must be able to separate the game elements related to history as a subject from those whose function is to facilitate an enjoyable gaming experience. If the game is played in a class on economics, then other elements of the game might have to be distinguished. If we are unable to separate figure from ground, and to distinguish some aspects of a phenomenon apart from others, then the phenomenon will appear to us as an undifferentiated, overwhelming whole. Whether we are learning with games or other technology, learning (to see) something new becomes challenging if we do not know what to look for. As such, we need other people to guide and aid us, pointing out the relevant aspects of a phenomenon so that relevant figure–ground structures become perceivable to us. The object of this study is how a group of teachers use *The Walking Dead* in just such an endeavor.

Institutional Context and Lesson Design

This study explores how teachers frame and guide students' attention in *The Walking Dead* in a course on ethics. The background for this study is a lesson plan developed by me and a colleague back in 2012, for the subject Religion and Ethics. This subject is mandatory for Norwegian third-year high school students (aged 18 to 19 years, thus meeting the game's recommended age restriction), and concerns major world religions as well as topics pertaining to ethics, humanism, and philosophy (Toft 2020). With regards to ethics, the national curriculum states that students should be able to "explain some key ethical concepts and argumentation models and recognize and assess different types of ethical thinking" and "conduct dialogues with others on relevant ethical questions" (The Norwegian Directorate for Education and Training 2006, 5). In the classroom, this generally entails students becoming capable of discussing moral dilemmas and applying models of ethical reasoning. In our case, these models were virtue ethics, consequential ethics (including utilitarianism), duty ethics (including Kant's deontology), and relational ethics.

The lesson employs a whole-class approach (Lee and Probert 2010, Sandberg 2023), using a single copy of the game displayed on a classroom TV or an auditorium projector. After an introductory lesson by the teacher on moral philosophy and associated ethical theories, the class starts playing the game, with one student at the controller while the rest of the class offer their suggestions on what to say and do. Upon encountering one of the game's major dilemmas, the teacher pauses the game and directs the class to deliberate solutions in smaller groups, utilizing the ethical theories covered in the curriculum. This is followed up by a whole-class discussion, with the different groups providing their solutions and arguments. Students then vote on the next course of action using an online survey tool, resuming gameplay until the next dilemma appears. A class typically spends two to three weeks on introductory

lectures, gameplay, and discussions, with a final week dedicated to summative assessment, which would involve the students applying the ethical theories to contemporary real-world dilemmas.

Data and Method

The data for this study consists of field notes and audio and video recordings of seven teachers and their classes. Some teachers were using *The Walking Dead* for the first time, while others had been using it for years. The data was collected during the spring and autumn semesters of 2019 and transcribed for analysis.[i] The transcripts were partitioned into episodes with defined start and end points, given the natural clustering of class discussions around the game's dilemmas, bookended by periods of gameplay. This division enabled the tracing of the evolution of topics in student and teacher conversations throughout the classes.

Analysis drew inspiration from variation theory (Marton and Booth 1998, Marton et al. 2004, Marton 2015), which emphasizes how a phenomenon appears to others, and how we can draw conclusions from this from what others say and do from a second-order perspective (Marton 2015). Extra attention was given to how students seemed to perceive and comprehend the relationship between the game's dilemmas and ethical theories, and whether this appeared to change throughout the classes. The topic of students' utterances during discussions were interpreted as indicative of what aspects of the game had been constitutive of their experiences.

The initial pass through the data utilized open coding (Charmaz 2014) to determine the topic of teachers' and students' utterances, with the aim of discerning what was under discussion in the various episodes. By studying the degree to which students

kept their attention both on the relevant aspects of the game, and on the ethical theories, three temporary categories emerged: *focused*, *semi-focused*, and *unfocused* discussion. These labels were not given to individual utterances, but rather to longer exchanges between teacher and students, or to whole episodes. Focused discussion saw students and teachers highlighting ethical theories and the dilemmas simultaneously. Semi-focused discussions, while engaging with the dilemmas, often lacked explicit use of the ethical theories. Unfocused dialogue revolved around subjects external to the game and the ethical theories and were thus discarded from further analysis.

The second sweep focused on the *focused* and *semi-focused* categories to explore their dynamics and patterns. A more focused coding process (Charmaz 2014) was applied to clarify the differences between the two categories. Two dominant patterns, labeled *deductive* and *inductive* framing, emerged. Though displaying partial overlap with focused and semi-focused exchanges, they proved different enough that a new set of labels was required. The term *framing* was adopted to denote how classroom discourse was influenced by teachers' efforts to guide students' attention towards facets of the game and the ethical theories. The categories of *focused* and *semi-focused* discussion, while useful in the initial phase of the analysis, proved somewhat coarse for further analysis. The perspective they provided – were students keeping their attention both on the game and on the ethical theories? – was, however, incorporated into analysis of the two framing strategies.

The final analytical pass also employed focused coding, with the end goal of determining whether, and under what circumstances, deductive or inductive framing were conducive to students becoming able to distinguish between aspects of dilemmas through use of the various ethical theories.

Deductive and Inductive Framing of Ethical Dilemmas in *The Walking Dead*

In this section, I will go into detail of what constitutes episodes of deductive and inductive framing, and what sets them apart. While not mutually exclusive, episodes were categorized as primarily deductive or inductive, based on how the teacher frames the dilemmas and subsequent discussions, especially how they were staged and initiated.

Deductive Framing

In episodes characterized by deductive framing, the teacher generally guides students' attention gradually and methodically towards different aspects of the dilemma. Discussion starts with a clear basic premise, with the teacher asking questions concerning what course of action the different ethical theories would suggest, after which the discussion delves deeper into the specificities of the dilemma in a manner that follows naturally from the premise. The framing thus moves in a top-down manner from general statements to the minutiae of the dilemma.

In addition to the vertical movement from top to bottom, there is also a horizontal movement in how teachers and/or students draw in other ethical theories to put the dilemma in another perspective. This initiates a sideways shift in how the dilemma is framed, from which a new delve into other particularities of the dilemma can be explored. The horizontal shift introduces nuance afforded by the various theories, for example by exploring different virtues in virtue ethics, ways of estimating the happiness, utility, or pleasure in consequential ethics, and so on. Students are thus given the opportunity to compare the different theories and the solutions they provide.

The teacher generally leads class discussion with specific questions encouraging students to focus both on ethical theories and relevant aspects of the dilemmas, ensuring that the discourse is goal-oriented and purposeful. At the beginning of most episodes of deductive framing, the teacher starts by unpacking the dilemma for the students. This presents students with a good overview of the dilemma before diving into its various parts. While the details vary from teacher to teacher and from episode to episode, teachers' staging of the dilemmas are variations that include some or all the following points:

1. Summarizing the events leading up to the dilemma.
2. Describing the scenario in which the dilemma takes place.
3. Identifying the involved and/or affected parties.
4. Describing the alternatives and relevant factors.
5. Identifying values that come into conflict.
6. Instructing the students to provide solutions to the dilemma using the ethical theories.

The teachers unpack the dilemmas through use of explanations, descriptions, questions, or any combination thereof. Teachers also often use handouts, slides or notes on the whiteboard with short summaries of the ethical theories to help students keep their attention in the right place. While not all deductive episodes include all these points or in this exact sequence, they all see the teacher in some way unpacking the dilemmas by directing students' attention towards specific elements and aspects. This affords students a good overview of the problem and helps identify relevant aspects for the following discussion. By instructing students to use the ethical theories as a basis for their moral reasoning, the teacher is thus staging the dilemma as a moral problem, and not simply a practical one or a way of creating

player agency in the game's interactive narrative.

An example of how a deductive episode is staged can be seen in the following excerpt, which concerns a dilemma where the game's protagonist has been in a heated argument with his older brother. The protagonist, a young man named Javier, is late to a family gathering; his father laying on his deathbed. Javier arrives too late to say his final goodbyes, and his older brother David berates him for it, eventually punching Javier in the face and knocking him to the ground. After cooling down, David offers his hand to Javier with the intent of helping him back up on his feet. The class must now decide whether to accept this gesture of apology, or to refuse. The following is an excerpt from a few minutes into this episode (students are given aliases in all excerpts in this paper, and teachers are referred to with gender-neutral pronouns):

"Teacher: (walks in front of the class) Okay, while you sit and talk. Do we have an overview of the situation? Who are the people involved here? Who is involved here, what is the relationship between them?

Student 1: There are two brothers who have just been through something traumatic, so even if the brother is in pain, he somehow has to understand that...

Teacher: (Interrupts) Yes, so then we have a grasp of that side of the situation. What are the options now? There were actually two. Accept that the brother was violent, or not. Those are the choices here. What do you think? Which values are relevant? And what I'm wondering is what values are in conflict here? Because some will think you should accept, take the brother's hand, and some will think you shouldn't. What values are there that come into conflict?

Student 2: Well, he didn't actually show up there when his father first fell ill. And he wasn't there in time when his father died. So he kind of deserved that blow. And in this case, the best thing is to just get it sorted out and just be friends again afterwards. Because now there is a child present, and if there is to be a bad atmosphere in addition to that, it's probably the grandfather of the child who died, then it will create even more problems.

Teacher: Yes. That is very interesting, because now you have the very sensible way of saying what is a correct choice in such a situation. And, right, that is something that you must have. What I'm looking for now, the question is, which values, that is, one word, what is one word that explains what is an important value that helps to decide what is right in this dilemma. What can be a value here? We start with Sofie. Just say it out loud.
Student 3: Self-respect?
Teacher: Self-respect. Integrity. Have you heard of it before?
Students: No
Teacher: Okay. If you are being bullied. Then it is your integrity that is violated. If you are beaten, if someone does something violent to you, it is your integrity that is at stake. So, integrity is an important concept to explain when something, to be involved in explaining a situation, an ethical dilemma. And here something violates the integrity of the person being beaten. Do you agree?" (Classroom recording 1, 28 January 2019)

Here we can see how the teacher slowly unpacks the dilemma and directs the students' attention towards the persons involved and the relationship between them. The teacher interrupts an irrelevant answer and provides some clarifying remarks. The teacher further specifies the question by asking what values might pertain to the dilemma. The student draws in several aspects of the dilemma: what the main character had done, how his brother's actions can be justified, any potential aftermath related to other family members, and so on. Instead of picking up on any of these topics, the teacher reframes the discussion by asking about relevant values. When "self-respect" is suggested by a student, this is further highlighted by the teacher to make sure everybody has a grasp on the concept.

In the dialogue that follows this excerpt, the class continues exploring what other values might be at stake, and agree that family might be a conflicting value, which they then discuss briefly in terms of relational ethics. They then move on to explore what kinds of solutions the different ethical theories might provide, with students suggesting solutions based on utilitarianism, deontology, and virtue ethics. The

teacher continues to ask questions probing deeper into the dilemma and the students' understanding of it, asking what virtue the students think is relevant in this situation and elaborating on the students' responses. This creates a line of progression deeper into the dilemma using the ethical theories as a guide, moving from general circumstances, to involved parties, to the available choices, to the values represented by these choices, and then finally to the course of action dictated by the different ethical theories. However, the discussion is somewhat hampered by the students relatively short answers, leaving it to the teacher to provide the necessary elaborations.

After dilemmas have been staged, the teacher generally instructs students to discuss the dilemma in small groups. The teacher ambulates between the various groups and prompts them with further questions. If there are no misconceptions among the students that are in urgent need of repair, teachers and students have a focused conversation where they explore solutions provided by the theories one at a time, gradually zooming their focus out on the dilemma and its aspects. In a similar way to how the dilemmas are staged, this progression evolves by gradually shifting attention to relevant aspects of the dilemma that follow logically from the theory currently under discussion. As new theories are drawn in, new aspects of the dilemma are illuminated. Relational ethics tend to highlight social relationships and the structures of power and responsibility therein; virtue ethics emphasize virtues and vices, utilitarianism encourages consideration of how all involved parties will be affected by different actions, and deontology investigates the grounds for the available options and whether this can be universalized into general ethical rules. In this way, students demonstrate their ability to differentiate between various relevant aspects of the dilemmas according to the ethical principles applied.

In the event that students are unsure of what solutions the theories would provide, teachers step in and attempt to guide the students' awareness in a more direct manner. This gives the teacher an opportunity to help the students perceive the dilemma in a manner that is in accordance with the theory at hand. We can see such an exchange in the following example. Here, students are discussing a dilemma from the third installment of the game, *The Walking Dead: A New Frontier* (2016). Here, the group of survivors, two adults, Javi (the player-character and main protagonist) and Kate, and two teenage siblings, Gabriel and Mariana, find a trailer in a junkyard. It is stocked with food and furnished with mattresses and blankets. The group must now decide whether to break in, steal the food and even stay the night, or if to move on. The teacher has just approached a group of students:

"Teacher: Alright, is everything okay? Do you have the handout? If you just take it out, we can take a look, we'll go through it together, but just do a quick overview. So, if you could try to consider now, whether we should stay or leave. What would consequentialist thinking illuminate here?
Student 4: I don't know, to be honest.
Student 5: Let's see, for most people, it could have been the kids, because… (indistinct)
Teacher: Yes, true. Because it's about maximizing the overall happiness for the most people, right? And what's best for the community if you look at the whole situation?
Student 5: It somewhat depends on what he wants, then.
Teacher: Well, is what he wants that important?
Student 5: No, because then it's two against two.
Teacher: You need to consider the consequence of the action, right.
Student 4: He should adapt to her or the kids.
Teacher: But what's best for...
Student 5: Yes, then consequential ethics would say he should choose the kids, since
there are more of them, and that way, more people will be happy.
Teacher: Yes, then according to that perspective, more people would be happy." (Classroom recording 3, 12 March 2019)

The teacher asks the students to apply an ethical theory to the dilemma. The use of the metaphor “illuminate” prompts the students to consider how the theory could reveal some aspects of the dilemma, but not all. The student admits they are unsure of how to answer. The other student starts formulating an answer seemingly using a more commonsensical approach to the question, with the phrase “for most people.” The teacher then interrupts, encouraging the students to see the dilemma in way more in line with consequentialism. Note that the teacher here orients the students’ awareness simultaneously towards the principles of consequentialism and the relevant aspects of the dilemma. While the comment from the student might be applicable in other ethical perspectives, the teacher does not deem it relevant. But then the student seems to have made the necessary distinction, separating a relevant aspect of the dilemma (what action affects the most people), and formulating an argument in line with consequentialist thinking.

Episodes of deductive framing are generally concluded by a plenary discussion led by the teacher, where they invite the students to share their arguments with the rest of the class. The teacher summarizes what course of action the different ethical theories suggest, comparing them to each other. This ties the discussion together, giving it a structure starting with an overview of the dilemma, breaking it down into various aspects through groups discussions and the application of moral concepts, and then coming back to an overview of the dilemma now puzzled together by the elements highlighted by the ethical theories. The plenary discussion helps the students keep several aspects of the dilemmas in their awareness while also being mindful of the ethical theories and how these can be used to differentiate between these aspects.

Inductive Framing

Episodes of deductive framing are, in many ways, an inverted image of deductive

framing. Here, discussion also moves vertically, but from the bottom up instead of top-down, form specific to general. It often starts with the class discussing open-ended questions or various specific circumstances of the dilemmas, and then reaching a conclusion from there. Instead of prompting use of specific theories, teachers ask questions like what students think they should do, what they would have done if it were them making the choice or inquiring into specific circumstances of the dilemma. Methodical overviews of the dilemma are generally omitted.

Contrary to deductive framing, episodes of inductive framing are often exploratory and multivoiced. The open-ended nature of teachers' questions invites a more thorough and unbiased exploration of the dilemma and its various circumstantial elements. For example, inductive episodes often see students spending considerable amounts of time discussing other involved characters besides the main character, how they would regard him, how they would feel, what the main character should do, and so on. Students also often ask the teacher to clarify circumstantial elements of the dilemma at hand. Inductive framing casts a wider net, and the margins for relevant contributions are thus wider than in deductive episodes. This allows for a broader range of perspectives and opinions from the students, since they are not restricted to only the answers afforded by the ethical theories.

The following excerpt is illustrative of how episodes of inductive framing often are initiated by the teacher. This dilemma involves a young boy, Duck, who may or may not have been bitten by a zombie, and thus might prove a danger to the group. The survivors are currently held up in an abandoned pharmacy, seeking shelter from a horde of zombies. The boy's family fights to defend him, while the rest of the group worry about the risk involved in keeping him.

> "Teacher: What are we thinking? Did we see what happened outside? There was a zombie that pounced on him [Duck] and was doing something. I didn't quite see what was happening.
> Student: Was he bitten?
> Other students: No
> Teacher: We don't know.
> Student 5: No!
> Teacher: No? You feel no, like that in your heart, don't you?
> Student 5: In my heart and in my head.
> Teacher: So, two and two together: shall we defend Duck, or was he bitten or was he not? Should we side with him, or is it too dangerous? We know what happens if one is bitten, right? Shall we take his side? Is he bitten or is he not bitten? Two and two or three and three, whatever works best. And then discuss." (Classroom recording 2, 29 January 2019)

In contrast to the example showing deductive staging, this excerpt sees the teacher diving head-first into specific aspects of the dilemma. In this case, the focus is on whether Duck was indeed bitten or not. Instead of the slow theoretically oriented progression we saw in the excerpt from deductive framing, this excerpt was followed by a quite heated debate largely concerning Duck's innocence. This exemplifies another trait with inductive episodes, in that they often see higher levels of student verbal engagement, likely due to how it facilitates multivoicedness and invites several perspectives.

Yet the open-ended quality of inductive episodes makes them not always pertinent to the intended learning goal of the classes. In the example above, questions of whether being bitten is equated with being *guilty* of being a zombie certainly can be a relevant factor in the dilemma. But the way this episode is staged results in the discussion being fully dominated by whether Duck is guilty or not and thus deserving of the punishment of being tossed out on the street to meet his demise. The problem is consequently framed as epistemic (was Duck in fact bitten?) and judicial (is Duck guilty and deserving of punishment?) in nature rather than moral.

Without the teacher guiding the students' attention, the rich experiences offered by the game can become a double-edged sword. On one hand, students who already have a reasonably good understanding of the theories are afforded a chance to think critically about the relevant and irrelevant aspects of the dilemma. They are invited to use their subject-specific knowledge in an independent manner instead of being guided and prompted by the teacher. However, students who have yet to make the subject matter their own, often struggle with applying the theories to the dilemmas.

Due to the teachers' open-ended questions, arguments are often presented before the selection of an ethical theory. Students often give their personal opinions or present some general arguments first, after which the teacher prompts them to decide what ethical theory they believe best applies to their argument. This often proves challenging for the students, which the following excerpt illustrates. The dilemma at hand also involves Duck, and a young man named Shawn. Both are being attacked by zombies, and the students must now decide who to save.

"Student 1: But Shawn might expect you to save Duck. So the good deed must be to save Duck.
Teacher: Women and children first. Possibly just children first. What type of ethics is that? If we want it to always be the case that if it comes down to adults vs. children, then we always save children first. Yes?
Student 1: Virtue ethics? Because you think about the big picture?
Teacher: You think about the big picture, yes. So, for the species…
Student 1: Yes, very big picture (laughs).
Teacher: Is there anything else? A little more like that?
Student 2: Consequential ethics
Student 3: Ethics of duty
Teacher: Ethics of duty yes. Because we want it to be a standard for you to always save children. What do you think, Anders?
Student 4: No, just forget it.
Teacher: Never mind, then. Is there another perspective we haven't looked at, Lisa?
Student 1: Aren't Duck's parents the owners of that place? And they had a boat?

Teacher: Mmm. Wouldn't it be nice to have a boat now?
Students: Yes!
Teacher: Yes. What kind of ethics is that, Lisa?
Student 1: Uhm… several ethics?" (Classroom recording 4, 12 September 2019)

This exchange displays some differences to the example we looked at in the section on deductive framing. Here, the conversation is less focused and more subject to rapid topical shifts. Furthermore, the students' lines of reasoning become a bit cluttered due to how they are prompted to apply ethical theories not to the dilemma itself, but to already formed arguments. What is being differentiated is therefore not the dilemma, but the ethical theories and how they can be applied to a line of reasoning. The students disagree whether the principle of saving children first relates to consequential or deontological ethics. One of the students rightfully states that the act of pleasing Duck's parents with the hopes of joining them on their boat can apply to several ethical theories.

In other episodes of inductive framing, when asked what kind of ethics they have used, students give answers like *logic* or the more humorous *wait-it-out-ethics*. Though logic might not be an ethical principle, it might very well be what the student used to reach their conclusion. Since the student has not kept the theories in their awareness while formulating an argument, they are not improving their ability differentiate between the various theories and how they give different answers to the same moral problem. They are also not getting practice with using the theories to differentiate between various aspects of the problem.

As mentioned above, students who do have a reasonably good understanding of the ethical theories fare better when asked open-ended questions. In the following excerpt, the students are discussing whether Javier should lie on behalf of a teenage girl named Clementine, who has just unwittingly shot and killed another person. The

lie involves stating that Clementine acted in self-defense. The teacher has asked students whether they should lie or not but has not staged the discussion in any detail apart from gently encouraging the students to use the theories when discussing. The teacher approaches a group of students who have been discussing for a few minutes:

"Teacher: What do you think?
Student 1: So, with consequential ethics...
Student 2: Three of them say you should lie
Student 3: Well, I've played that game, and I know you have to protect Clementine no matter what.
Teacher: Well, that's the most important thing in the game, but now we're talking about ethical...
Student 2: But, this one, I mean that according to this one, he should lie, because it's best for most people because then it doesn't turn out negatively for anyone.
Teacher: That's right, absolutely right, because then you look at the consequences of that choice

Student 1: But why? If you lie, you're only lying to her and him. And there is only one person who is...
Student 2: You get the most happiness for...!
Teacher: If you look at him as a character, as a person, did he seem like a very good person?
Student 1: Who?
Teacher: The one who was shot now
Student 1: For us, no, oh yes
Teacher: So you have to look at the consequences if
Student 3: It is only the ethics of duty that say you must tell the truth
Teacher: If you then lie, or choose to tell the truth, then it will have consequences for
Clementine, which in turn may have consequences for your family again, because you are dependent on having her with you.
Student 1: But isn't that relational ethics if you think like that?
Teacher: Yes
Student 3: It could also be relational ethics
Teacher (pointing to the handout): Relational ethics is that you have a duty to help Clementine, because you already have a relation to her.
Student 3: It's a bit fluid

Teacher: It goes a little into each other, quite right. It covers different sides."
(Classroom recording 5, 20 September 2019)

In this excerpt, students seem to have kept the theories in mind, despite little staging on part of the teacher, and with the teacher approaching them with a quite broad question. The students show that they have already considered the theories in a comparative way, stating that all but one dictate that Javier should lie. As such, they have successfully identified relevant ways of solving the problem without depending on the teacher staging the dilemma or asking them specific questions. For example, student 2 demonstrates a solution provided by consequentialist thinking (best outcome for most involved parties). Another interesting aspect of this excerpt is how the students question the teacher's reasoning. The student challenges the teacher's statement that lying gives the best outcome for most people, given the fact that Javi is only telling a lie to two people. The students might have given more thought to the circumstances of the dilemma, given the open-ended nature of inductive episodes, and consequently imagining more potentially affected parties than only those depicted in the scene. The student has correctly identified that more than one ethical theory can apply to the same argument, a feat that other students struggled with in the previous inductive excerpt. The discussion between students and teacher is more open-ended than deductive episodes, with students asking questions and exploring more aspects of the dilemma, while still maintaining focus on the ethical theories. This excerpt indicates that inductive framing can give students useful practice in critical thinking and independent use of the ethical theories, with the teacher leaving them with less of a scaffold for their discussion than is seen in deductive framing.

Summary and Conclusion

This study has investigated two different instructional strategies: deductive and

inductive framing. While both have their merits, they differ in ways that are pertinent to the prospect of using games in ethics education. First, analysis has indicated that the deductive approach is most suited in cases where students have yet to integrate various ethical theories in their way of thinking. This approach sees the teacher purposefully and methodically introducing the dilemma to the students, highlighting its various aspects, before giving them clear instructions for how it should be dealt with. This brings the relevant aspects into the students' awareness so that they may learn to differentiate and distinguish parts of the dilemma from the whole. However, this approach is quite rigid, and has a narrow definition of what counts as relevant contributions to class discussions.

Inductive approaches, on the other hand, seem ill-fitted to helping students learn, as they do not always bring the ethical theories to bear when formulating solutions to moral problems. Instead, students resort to more commonsensical or everyday strategies for solving the dilemmas. This results in opinions being formulated and ethical theories being applied post hoc, which seems to confuse more than enlighten. However, this approach also appears the more engaging of the two framing strategies, as inductive episodes tend to have a more even balance between student- and teacher talk. These episodes are also more multivoiced, as more students bring to bear a wider array of perspectives. The inductive approach also seems best suited when students have gained a reasonable grasp on the theories. As Marton (2015, 90-91) remarks, when we want to find out if students have made the subject matter their own, questions should be asked

> "with regard to the difference between everyday and scientific conceptualizations (it should be possible to answer them from either perspective). And above all, the questions should not point out the relevant aspects of the problem to be solved, as this is exactly what the students are supposed to find out (discern)." (Marton 2015, 90-91)

While games might be useful in ethics education on account of being rich, engaging experiences, they might be overwhelmingly so, to the extent that players' awareness is completely dominated by the game. This might leave players so engrossed in the gaming experience that they might not consider the ethical aspects of the game, or any eventual concepts or theories they are to learn. Therefore, games are not to be considered self-contained learning experiences. Teachers are needed to orient the players' awareness towards the aspects of the game most pertinent to a learning objective.

Games are potentially powerful learning experiences in that they offer the chance not only to step into the shoes of people different from us, but also to act in their stead. Games situate decision-making in a meaningful context, and this can have a profound impact on ethical learning experiences. However, if choices in the game are not perceived as moral decisions, then this potential is likely to remain untapped. Thus, mere reflection on past decisions it not enough, but students must also be encouraged to keep a certain perspective on their gaming experience, a perspective that often needs to be guided and maintained by a teacher.

Thus, this paper concludes that a combination of deductive and inductive instructional strategies might be a fruitful approach to using games in ethics education, as it brings out the best of both while potentially negating the negatives. Starting with deductive framing might help students learn to differentiate aspects of the dilemmas using the theories, helping them to make the concepts their own. Framing can then shift towards a more inductive approach, where students can learn to think critically about the teachers' open-ended questions. The analysis provided in this paper has no clear answers for whether a combination of both instructional strategies is beneficial, as the data does not include enough such arrangements of

deductive and inductive episodes. This could prove a fruitful endeavor for future research projects.

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[i] The excepts come from transcripts recorded in Norwegian and translated into English by the author. The recordings were taken during classes in a Norwegian high school in 2019, using a wireless microphone worn by the teacher and two recorders distributed among the students. Ethical approval for this study was granted by Sikt – Norwegian Agency for Shared Services in Education and Research.