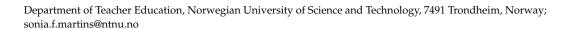




Article

Critical Thinking (Dis)Positions in Education for Sustainable Development—A Positioning Theory Perspective

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Abstract: In a threatened world, the need for pathways to sustainability has become urgent. Teachers have a significant role in using critical thinking (CT) as an integrated aspect of education for sustainable development (ESD). As part of the Critical Thinking in Sustainability Education (CriThiSE) project, this paper explores how primary school teachers positioned themselves with regard to CT in ESD during group interviews. Among the findings derived through critical discourse analysis, "otherness" positions were identified in teachers' discourse. These positions were interpreted via positioning theory (PT) as part of the critical discourse analysis while tracing personal pronouns. Here, different positions were identified through the use of the pronouns they, theirs and the generic you, suggesting that otherness reflects a tendency to "care about" (CT disposition). Another finding was that the teachers' collective positions, through the pronouns such as we, us, they, theirs, ours and the generic you, might suggest an implicatory denial embedded in the sociocultural perspective in relation to sustainability. From the ESD perspective, the findings highlight that CT is more than a matter of skills. The study highlights the importance of taking into account teachers' CT dispositions as an important consideration to better understand teachers' engagement with CT in ESD.

Keywords: critical thinking; critical discourse analyses; positioning theory; education for sustainable development



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1. Introduction

In today's world, there is an increased need to develop pathways for sustainability. In the context of sustainability in health and education, it is essential to deal with different sources of information in order to make decisions that affect our future. At the same time, living in today's world of overloaded information means being subjected to vast amounts of information. In this context, critical thinking (CT) can be particularly valuable, both as a useful guidance tool and as a necessary part of the formation of critical citizens [1]. CT, as developed by Ennis, can play an important role in decision-making actions since it provides a foundation for "reasonable reflective thinking focused on deciding what to believe or do" [2]. CT encompasses both skills and what Ennis calls "dispositions". Dispositions can be considered as "affective states" [1] or a tendency to do something given certain conditions [3].

CT, a 21st century competence promoted by the European Commission [4], has been integrated into the Norwegian curriculum [5] based on the idea that it can help students develop their ability to make well-founded choices. A recent systematic review of systematic reviews of the literature on the promotion and development of CT in higher education shows a consensus on the importance of CT for professional development in different fields [6]. However, the review reveals that the literature focuses almost exclusively on the concept of CT as skills (idem) [6]. For example, in studies of health profession education, references to CT dispositions are minimal (idem) [6]. This highlights the need for research on dispositions in CT. Thus, the focus of this study is on teachers as critical thinkers. It is an

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attempt to shed light on how teachers' CT dispositions are revealed through their discourse on sustainability concerns.

In this article, I first provide some background information about education for sustainable development (ESD) and critical thinking (CT). After that, I elaborate on positioning theory (PT), which is used as a methodological tool within the framework of critical discourse analysis (CDA).

The study is based on one focus group interview with sixth-grade teachers in a Norwegian school. During the interview, teachers highlighted the annual national charity telethon called "TV Auction/Campaign" ("TV-aksjonen" in Norwegian, as a useful source for working with environmental concerns; I provide a brief section on TV-aksjonen as part of Norwegian identity.

This study is a part of a project called Critical Thinking in Sustainability Education (CriThiSE) funded by the Research Council of Norway. The aim of CriThiSE is to improve the teaching and learning of CT skills in relation to education for sustainable development (ESD) in primary schools (grades one to seven) in Norway.

2. Education for Sustainable Development (ESD)

Education for sustainable development (ESD) can be defined as a reaction or response to the urgent and dramatic challenges the planet faces [7]. The United Nations General Assembly declared the 2030 Agenda for Sustainable Development with the aim of a prosperous and inclusive future for all citizens. This agenda stipulates 17 Sustainable Development Goals (SDGs) and 169 targets [8]. While ESD is directly implicated in the 17 Goals, it is probably most emphasized in SDG 4 (quality education). The need to implement the 17 SDGs has increased due to climate change, as emphasized in the recent Intergovernmental Panel on Climate Change (IPCC) report [9].

Keeping in mind the importance of ensuring proper action in the current era of information overflow, ESD provides learners at all different age levels with "the knowledge, skills, values and agency to address interconnected global challenges including climate change, loss of biodiversity, unsustainable use of resources, and inequality" [10]. In other words, educating for sustainability should enable citizens, as part of the ecosystem, to make informed decisions in both individual and collective settings. Due to the urgency of the unpredictable scenarios—in part, due to climate change—and also because of scientific innovation and development, educational efforts are essential. In this way, CT plays a critical role in the ESD context. This is reflected in UNESCO's "New Contract for Education", where teachers' professional development for the teaching of ESD is specified [11]. Although such professional development is about helping teachers gain the skills and knowledge required to teach students about current environmental and societal issues, many such professional development programs only provide content or information about environmental issues without formulating relevant actions for the students to engage with the environment [12]. Teachers' actions play an important role in helping students to develop as critical thinkers.

3. Critical Thinking

Many citizens do not feel sufficiently empowered to participate in decision-making processes regarding socio-environmental issues [13]. Critical thinking (CT) is recognized as a key competence for issues and challenges related to sustainability [4,14]. This recognition of CT as a key competence for sustainability has been defended by Rieckmann et al. [15] as the ability to question norms, practices and opinions as a way to reflect one's own values, perceptions and actions and, more importantly, to take a position in the sustainability discourse. Under the CriThiSE project, Munkebye and Gericke [16] showed that primary teachers have a coherent idea of CT, but their understandings of it are quite narrow. Teaching CT was found to be mostly related to attitudinal aspects, such as skepticism, source criticism and argumentation as generic skills.

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CT has been newly reinforced in the Norwegian governing documents [17]; however, CT formulations in the Norwegian curriculum are still vague and scarce [18]. Most references to CT are made in relation to abilities or skills, while aspects of disposition are less represented. The conclusions reinforce the idea that sustainability competence and CT are mentioned in many places but that few of the sustainability competencies are directly linked to CT and sustainability education.

Drawing on the various definitions of CT [19,20], such as "reflective thinking" [21], "creative thinking" [22] and "reasonable thinking" [2], CT can be conceptualized as a guide for using a combination of skills and dispositions, typically in education [2,19,23].

CT skills (also termed "abilities") [24] can be grouped into main categories: basic clarification, bases for decisions, inference, advanced clarification, suppositional thinking and auxiliary abilities. Based on decades of theoretical and practical work on CT [19], we know that skills and abilities can be both measured and taught; dispositions, on the other hand, are not taught, nor are they something easily measured [19]. Dispositions can be characterized as being disposed to or having a tendency to do something given certain conditions [3]. Ennis points to three types of "caring" in CT dispositions. When considering teachers' discourse, one could argue that these types of caring are embedded in teachers' professional ethics due to the nature of their profession. Teachers have the disposition to "care to 'get it right' to the extent possible" [24] (p. 1). Through this definition, one can also see teachers' disposition to "care to understand and present a position honestly and clearly, theirs as well as others'" [22] (idem) and to "care about every person" [22] (idem, p. 2). Dispositions can be thought of as actions (i) in relation to the self, (ii) in relation to others and (iii) in relation to the world [1]. However, identifying a teacher's dispositions presents challenges. Ennis provides an analogy about dispositions: "We can not see that glass is brittle simply by looking at it" [3] (p. 166). However, we can make observations about teachers' positions through their discourse. By applying positioning theory (PT), we might get an indication of how teachers are "disposed" towards ESD.

4. Positioning Theory

As pointed out in the previous section, dispositions are not easily or directly detectable in critical thinkers. One way to seek dispositions is by analyzing the way critical thinkers position themselves when interacting with others in a particular social realm. PT [25] provides a framework to analyze social interactions from a dynamic and social constructionist approach [26] and can help shed light on teachers' engagement with ESD. It is during the dynamic interactions of teachers—both with other teachers and with students—that the recognition of a continuous process of negotiation of meanings takes place (as outlined in PT) and positions become evident. These positions reveal how teachers "tend to" position themselves through "speech acts" [25]. Through "speech acts", how the speaker's words connect with structures in the social realm becomes visible. According to Harré and Gillett [27], through speakers' use of pronouns (i.e., the indexical word "I"), it is possible to gain a sense of how people create their moral individuality in relation to those they are addressing. Tracing the use of personal pronouns such as I, you and we can contribute to understanding how teachers "tend to" position themselves. These tendencies to positioning themselves can contribute to understanding teachers' CT dispositions in ESD discourses. The results of a recent study using PT to make sense of teachers' positioning suggest that Norwegian sociocultural practices tend to view environmental issues from a collective "we" standpoint [28]. In this study, published under the CriThiSE project, teachers considered the importance of ESD in their classrooms in connection to the use of CT.

5. Critical Discourse Analysis

Critical discourse analysis (CDA), as a form of critical social analysis, focuses on relations between discourse and other aspects of social life. CDA offers a way to identify possible tensions between a social context and what is being "said" and socially shaped [29]. The importance of using a CDA lies in the fact that it might provide a social explanation

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of phenomena happening in local social settings [30]. Tirado and Gálvez [31] highlight the importance of analyzing local social phenomena by paying attention to (i) the role the language plays in production of social reality; (ii) the practical reasoning taking place at the organization level; and (iii) the rules and resources that govern such social explanations, negotiations and managing of meaning in the actual interaction happening in a local social phenomenon. In other words, language is a context-bound and social phenomenon that can be understood through the social and cultural contexts in which it occurs [32].

In Figure 1, the CDA framework has been adapted to show (i) an outer box presenting the macro dimension of CDA—sociocultural practices, including the Norwegian societal context concerning ESD; (ii) a middle box—the actual text production (i.e., the situation in which teachers express themselves); and (iii) an inner box—the micro dimension of CDA, using PT to make sense of teachers' "speech acts" by tracing the personal pronouns (I/you/we/us/ours/they/theirs).

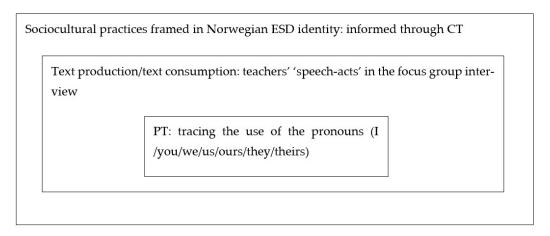


Figure 1. Adaptation of framework for CDA for a communicative event [29].

In this study, teachers' "speech acts" took place in a specific setting—a focus group interview—as shown in the middle box and comprised the actual text analyzed. The setting of the interview is represented by the interface between the outer box (sociocultural practices, beliefs and attitudes) and the inner box (the specific words used).

The inner CDA box [29] was adapted to show that PT can be applied to individual words to understand how teachers position themselves in their "speech acts" [25]. In this regard, relying on PT helps us make sense of how teachers negotiate meaning and apprehend embedded social patterns that inform us about teachers' positions. According to Foucault [33], discourse is a practice with clear rules of production, a social practice with historical rules fixed in time and space. In other words, one particular episode is defined by a certain community in a concrete period under the conditions where it occurs [31].

5.1. Sociocultural Practices: Identity in Relation to Environmental Issues

Keeping in view the close interaction between teachers' approaches to CT and their positions anchored within sociocultural practices, in this section, I elaborate on "societal identity" by presenting various aspects of the sociocultural practices and understandings that comprise the outer box of the framework. For instance, one of the assumptions that influences Norwegian society is Norwegians' sense of belonging to/with nature [34]. The Norwegian self-image includes a strong identification with being humanitarian and environmentally alert as nature-loving people [35]. Moreover, Norway is regarded as a country that shares egalitarian values, portraying Norwegians as being receptive to norms and values such as codetermination, integration and economic equalization [36]. These social values can be considered part of teachers' CT dispositions in relation to ESD: they are social values embedded in cultural and social dimensions that determine actions towards ESD.

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These societal characteristics can, however, be challenged through what the sociologist Stanley Cohen calls implicatory denial [37]. Implicatory denial can be interpreted as explanations that do not deny the reality of an event but tend to deny the moral implications of a certain event. This has been characterized as a socially organized process that is not individual but collective [38]. Implicatory denial has been identified in Norway when people collectively tend to ignore climate change, despite the fact that, as individuals, they recognize the phenomenon; they tend to deny facts in favor of their economic interest [35]. Norgaard's ethnographic study shows how the inhabitants of Bygdaby (a fictitious name of a Norwegian city), through features of daily life, such as skiing activities, reveal that they are turning a blind eye to weather patterns as potentially connected to global warming. The community members, relatively wealthy citizens of the world, deny the accepted knowledge of climate change. Implicatory denial draws attention to how privileged people, in spite of being well-informed and living in the globalized information age, still perceive environmental problems as increasingly distant (idem) [38]. One of the explanations for this implicatory denial in Norway might be that Norwegian economic prosperity is secured through oil production; i.e., the collective denial of climate change facilitates Norwegian economic interests (idem) [38].

5.2. Sociocultural Practices Exemplified through the TV Campaign/Auction Telethon

During the first interview, teachers suggested the TV Campaign/Auction telethon (Norwegian: TV-aksjonen) as a reliable source that teachers can use with their students when approaching environmental concerns and sustainability issues. "TV-aksjonen" (https:// blimed.no/om-tv-aksjonen-nrk/tv-aksjonen-2021/) (accessed on 19 October 2022) is an annual telethon hosted since 1974 with the aim of raising money for humanitarian purposes. It is produced by the Norwegian public broadcasting system (NRK). Each year, the focus is on a different fundraising project that is usually aimed at aiding one or more countries. In 2020, the specific focus of the telethon was the collection of plastic from the ocean. This theme can be perceived as one way of mitigating catastrophic environmental issues at both local and global levels. TV-aksjonen and fundraising for humanitarian purposes have been described as part of the collective Norwegian identity and identified as a Norwegian ritual of rich moral ideology [39]. Through teachers' assumptions about the importance of TV-aksjonen, Norway is portrayed as peaceful, neutral and active in redistributing funds. All these aspects are part of the Norwegian self-image [40]. The "TV-aksjonen" perspective can also reveal an imbalance of power: the power of the collective we-giving in contrast with the weakness of the others-receiving [39].

Norwegian teachers, with their educational foundations, are part of a social process. Therefore, it is of interest to understand how they position themselves when considering the Norwegian telethon as a resource in their teaching related to sustainability. The underlying idea of this study is to trace personal pronouns that can indicate how teachers "tend to" position themselves from a CT disposition perspective. It is also of interest to see how these pronouns might indicate power distributions in peoples' discourse. As suggested by Tirado and Gálvez [31], PT attempts to overcome strict macro or micro social limits; i.e., it seeks to create a type of empirical analysis that conveys micro and macro processes in a single explanatory whole. The micro processes are clarified via PT while, at the same time, being clarified by and clarifying the macro processes located in cultural and social contexts.

5.3. Materials and Methods

As previously stated, this study is part of a larger qualitative research project (CriThiSE) that aims to investigate teachers' understandings and instructional practices in connection with CT and ESD. There are four work packages under the CriThiSE project. One of the work packages handles teachers' understanding of CT in ESD. The general context of the CriThiSE study with more details is provided by Scheie et al. [18], Munkebye et al. [16] and Felix et al. [28]. In the first phase of the CriThiSE study, a total of 388 Norwegian primary school teachers (grades one to seven) answered items in a Web survey regarding their

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perceptions of CT. Among those who completed the survey, teachers from teaching grades five to seven (n = 34) from three different schools took part in semi-structured focus-group interviews. The teachers taught a variety of school subjects and had an average of 14 years of teaching experience.

In the specific case of this study, excerpts from one focus-group interview conducted in one of the schools located in Trøndelag are presented and analyzed. The three teachers who participated in the interview were selected by opportunity sampling [41], based on geographical location. The focus of the interview was the teachers' understanding of CT and ESD. This interview provides an example of teachers' discursive process, which is situationally developed and constituted as a diagnosis of the present, of the guidelines and rules of social relationships [31].

The "speech-acts" analyzed in this study took place during one 60-minute interview at the end of a school day in November 2020. The interview was conducted by one interviewer and one researcher (the author of this article) responsible for taking field notes, both from the CriThiSE project. The participants were three teachers responsible for teaching sixth-grade students in a Norwegian public primary school. The teachers in the selected focus group interview were given the letters A, B and C. Even though all teachers are expected to be able to teach all subjects, teacher A was mainly responsible for mathematics, teacher B for social sciences and teacher C for Norwegian (standard language education).

The guidelines for the interview were discussed and established by the CriThiSE group and included the following main sections: sustainable development, CT and the connection between sustainable development and CT. Teachers were asked about their understanding of sustainability development and how they had been teaching the concept in the classroom. Teachers were invited to reflect and answer questions such as: Do you have experience in teaching CT? What are the core elements you consider in teaching CT? In what subject(s) do you teach CT? What are the differences and similarities in the way you are teaching CT in different subjects? Do you feel you are prepared to engage in CT? Do you see connections between ESD and CT? The teachers' answers comprised the "speech-acts" that were analyzed [42]. The interview occurred at the end of the first year of the project when teachers had only three project seminars (as part of teacher training in CriThiSE project).

The interview was recorded and transcribed by a native Norwegian speaker. The translations were undertaken by a non-native speaker. The interview was transcribed and read several times. Each teacher "speech-act" was numbered: (i) to help to locate the excerpt in the interview corpus; (ii) to be able to identify the original context of each excerpt; and (iii) to be able to identify the correspondence between the original version (Norwegian language) and the translated English version. In the analysis of the interviews, I read through the transcript repeatedly looking for teachers' indications of CT dispositions, keeping in mind that those dispositions were embedded in sociocultural practices. In the micro analysis, I looked for teachers' positions. I paid particular attention to the personal pronouns I, you and we, typical for PT analysis, but also looked for various uses of the personal pronouns they, ours, us and theirs. PT is a way to begin to understand the production of CT and the effects that has on the teachers' community in which it is produced [31].

The study was conducted as part of the CriThiSE project and was approved by the Norwegian National Data Protection Agency (NSD). All interviews were anonymized, and informed consent was collected from all participating teachers, who were informed that they had the right to withdraw from the project at any time.

5.4. Results

In this section, I elaborate upon the interview as it was analyzed in accordance with CDA as an analytical framework to connect the inner level or micro dimension—specifically, through the use of pronouns interpreted through PT—to the macro/outer level, which

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included sociocultural practices framed by Norwegian education for sustainable development. Relevant CT dispositions as defined by Ennis are referred to throughout the analysis.

5.5. Using PT to Capture Micro-Level Aspects within CDA

After reading the whole interview several times, I started to trace the use of the pronouns to try to understand teachers' positions, which provide information about their dispositions in the context of CT. In the Norwegian context, it was important to trace the pronoun you in addition to I and we, as these three pronouns encapsulate both individual and collective meanings.

As stated above, the "speech acts" in the interviews shed light on the sociocultural aspects of the teachers' views about CT and ESD. Initially, the focus of teachers' discourse lay in an explanation about the way they worked with CT in the classroom. In connection with a discussion about classwork with newspaper articles, some questions arose about CT in relation to ESD. In the excerpt below, two teachers are trying to define CT as they use it in the classroom:

31 C: Critical thinking in relation to it? Who are you? How do you look at things? I did not have all the hours [referring to teaching in all the school subjects] so I do not know.

32 B: We may not have been so much into it.

In this case, teacher C (#31) uses "you" as a generic pronoun for people in general (in English, you, we, they and one can all refer to people in general). Teacher C uses an individual "I" standpoint only when providing a reason for his own lack of knowledge. Teacher B (#32) seems to agree with this position while acknowledging that "we have not been so much into [CT]". Here, "we" refers to all of the teachers at the school who are taking part in the CriThiSE project, previously identified as the institutional we [28]. What might be significant is that both teachers seemed to avoid the individual I pronoun and instead used the collective we/you.

Teacher C did not indicate one specific episode that occurred in his classroom; instead, he tried to explain his understanding of CT. While doing so, he showed a tendency or disposition regarding the handling of CT through a process of questioning himself, being "alert for alternatives" and "open-minded" [2]. The fact that the teacher asked and answered questions of clarification demonstrated his CT skill/ability to ask critical questions [43].

Later, as shown in the excerpt below, the topic of CT continued to be questioned. Here, again, the teachers were reinforcing the importance of questioning as being "open-minded" [2] from a dispositional perspective while sharing ways of asking important questions, like "can it be true?" and "do you agree with that?", as presented in the excerpt below:

66 C: Question things, I think. Considering statements like "can it be true?", "do you agree with that?", "why, why not?" and then have students evaluate.

67 A: Yes, it is a bit like us.

In this excerpt (#66), teacher C suggests that, by asking many questions, students can learn to evaluate a source and make sense of it as a way of developing their CT. He positions himself as having knowledge to share with his students. However, teacher C adds "I think". This may be his way of indicating to the other teachers that "I am uncertain" or "you maybe know better than I do". According to this second interpretation, teacher A was trying to carry on this discussion without taking a position that was too domineering; it could also have been a way of inviting his colleagues to share his opinion, positioning himself as an equal.

In this excerpt (#66), the reference to "then have students evaluate" shows a direct link between teachers' CT dispositions and students' CT skills. The implication is that teachers' disposition to "be open-minded" [2] (p.32) indicates a subsequent action or concern regarding the CT skills the students need in order to be able to "judge the credibility

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of a source" [2] (p. 33). Teacher A (#67) agrees with teacher C's position, while, again, using a collective "us", which might indicate their common understanding of trying to be role models for their students.

Norwegian sociocultural aspects were reflected in the teachers' recognition of the telethon as a useful tool to work with ESD in the classroom. When teacher C gave his opinion (#37), he was, at the same time, questioning the (Asian) group target chosen as the focus for the fundraising telethon.

37 C: Just on the telethon on TV last week, it was also a bit compared to why is it...why is the focus of this telethon on an Asian context? Why do they support this [Asian context]? Why can't they...why yes...what is the difference between our country and theirs? What if you were living there? Why don't they focus on that trash lying in the streets? So, then there are different "glasses" in terms of realizing that there is a priority on getting food and housing and somehow making money. So, Maslow's hierarchy of needs comes in here. It is going to get a little higher then, we are a little bit on top. There, so then ours... then we see things differently.

When questioning the reason why the Asian context could be important for Norwegian society, the teacher first starts with some questions, among which is why the Asian context was chosen. In the question, "Why do they support this?", "they" refers to the Norwegian Broadcasting Corporation, an institution owned by the government and representing the Norwegian people. Thus, "they" could logically be "we" (all Norwegians), but the teacher distances himself by using "they".

For the next instance of "they", in "Why can't they...", the teacher indicates the difference between "their" (Asian) and "our" (Norwegian) situations. This is followed by the contrast between "you" (those with a Norwegian perspective) and "they", Asians who seem not to focus on trash lying in the streets. Teacher C quickly changes his position by pointing out that "there are different glasses" ("glasses" refers to perspectives). From the perspective of CT disposition, this could be considered a "basic disposition", characterized as "seeking clarity and understanding" [3]. In other words, despite a first reaction from a "judging society" perspective, teacher C is able to try to think: what would happen if he were in Asia? He then refers to Maslow's pyramid as a way of trying to understand the others' context. According to Maslow's hierarchy, there are different levels of needs: physiological, security, social, esteem and self-actualizing needs and, later, self-transcendence [44]. In other words, Maslow's pyramid helps to show how others' realities can be seen through "different glasses" since the basic needs of food and housing are more important (for "them") compared to the Norwegian reality, where we "are a little bit on top". This indicates that teachers "tend to care" about the context of others; i.e., they have a disposition where they care to understand and "present a position honestly and clearly, theirs as well as others'" [24] (p.1). An interesting point is that, in excerpt #37, "There, so then ours..." implies a collective responsibility, as if there is a Norwegian societal responsibility, through the statement "we see things differently", indicating a humanitarian being [35]. This might be aligned with the idea that there is a collective we-giving, but not because of the weakness of the others [39] but rather because of the needs of the others.

The teachers' words suggest how sociocultural practices can be elucidated through dispositions, perceived as a tendency where teachers show a focus on care [24]. This was particularly elaborated through Maslow's pyramid example. In other words, sociocultural practices can be elucidated through CT dispositions.

At the end of the interview, teacher C shares his individual opinion while responding to the interview question about the use of CT in ESD contexts.

315 C: Yes, it is important that *I* follow with a certain content [in CT]...

316 B: Yes, then you know how to start with it.

317 A: Yes, also you have something that has... that is (...) Whatever it is, helps to focus on something, and then you want to stick with that. Focus on that!

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Here, teacher C seems to indicate that teaching from a CT perspective requires a teacher to understand what knowledge is built on.

In addition to considering the importance of discussing sources (a CT skill) in sustainability issues, the teachers felt the need to know what exactly they were to discuss. *TV-aksjonen* served the purpose of being a useful source while offering a perspective from other realities.

In other words, the collective action was here interrogated from the actual knowledge (from the I position). The you mentioned in #316 seems to suggest a generic you, allowing individuals to be a part of a normative discourse. The generic you might indicate a collective underlying meaning. The PT analysis of the interactions between the teachers shows that the teachers tended to agree with each other's opinions. A closer look at the whole interview reveals that collective statements often included a generic you as a way of agreement.

Teachers A and B reinforced the normative sociocultural discourse by stating their opinion about the importance of further work on CT and sharing the following opinions without using any type of pronoun:

318 B: To raise the discussion.

319 A: Yes, it is more about that. How to lift up...

6. Discussion

The purpose of the study was to show how teachers' dispositions can be revealed through their discourse during a group interview. The main findings highlight that tracing and analyzing pronouns through PT provides a connection between teachers' discourse and their dispositions. Teachers' social practices are immersed in societal, institutional and situational practices that are visible through the ways of thinking that influence speech performances. The way pronouns were used in the teachers' CT discourse revealed the norms and values of the Norwegian culture that formed the teachers' CT dispositions.

The analysis of the interactions between the teachers showed that teachers tend to position themselves as collective and not as individual "I's", with only a few exceptions (#31, #66 and #315). Collective statements were uttered with a variety of pronouns, such as we, us, they, theirs and ours, indicating that most of the individual "speech-acts" are framed in a collective way. Interestingly, the generic you (#31) was also used to indicate a collective underlying meaning.

Teachers' speech acts using we, us, they, theirs, ours and the generic you may indicate the avoidance of the use of the I pronoun. This seems to have been the case, even when questions were formulated from the perspective of an opinion (e.g., do you feel you are prepared to engage in CT?). It might be stated that there was a denial regarding the use of the I pronoun. In other words, the avoidance of I might point to implicatory denial [35,37,38] as most of the teachers' "speech-acts" seemed to be legitimated using collective statements providing collective moral accountability rather than individual accountability.

A closer look at the collective statements shows another type of collective statement. For example, in #37, when teacher C used the Maslow pyramid as an illustration, the pronouns they and theirs referred to the others' collective reality, not the teachers' collective reality. In other words, these pronouns indicated a position of otherness that seems to have been based on the teachers' sociocultural practice.

That the teachers' extended their perspective to the collective sociocultural realities of others reveals their tendency to "care about". Caring about others' reality can be perceived as a "social disposition" [43]. This dimension is concerned with being "sensitive to the feelings, level of knowledge and degree of sophistication of others" [43] (p. 46).

At the same time, teachers demonstrated "otherness" regarding their students. Again, showing that they care about others' reality, they discussed their wish to use CT to raise more discussions in their classrooms, and they wished to gain more knowledge about how to help their students develop their own CT; for example, by asking questions like "Can it be true?" (#66). This "otherness" is particularly relevant when considering that the teachers

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were referring to the example of the *TV Campaign/Auction* telethon. *TV Campaign/Auction* could be seen as an action to generate financial resources for the purposes of providing a response to climate change. However, this response can be interpreted in relation to how these generated resources are justified in terms of the distributional logic within discourse that a particular society generates to contribute to the overall global response to climate change. Within this context, others (those who are in the Asian context) are supposed to take more responsibility to handle their climate change problems. Through this interpretation of otherness, the question of the justification of the politics of the distribution of resources generated within the Norwegian context is raised.

Another finding informed by some of the collective statements was that teachers tended to agree with each other's opinions. They positioned themselves in alignment with Norwegian society, which was framed in a caring and agreeing position and associated with normative values, probably because the society is based on egalitarian popular opinion [36].

It can be stated that CT dispositions are culturally determined. In the Norwegian ESD context, CT shows a commitment to action [45] and a cultural sense of sharing Norwegian egalitarian values [36].

7. Concluding Remarks

This paper reveals a variety of CT (dis)positions prevalent in ESD discourse through the way teachers position themselves and others while they deal with sustainability in the school context. Teachers' positions (the micro level of CDA via PT) indicated CT dispositions as a prevalent tendency to care about others' needs. This aligned with Ennis' (2011) [24] three types of care: (i) care to get it right to the extent possible; (ii) care to understand and present a position honestly and clearly, one's own as well as others; and (iii) care about every person. Understanding the reality of others is also part of the strategy of the 17 Sustainable Development Goals.

In other words, using PT, teachers' CT (dis)positions were revealed through their collective statements including the otherness and agreeing positions, which were framed by Norwegian sociocultural practices. In this way, ESD structured in the socio-practical context seems to indicate teachers' disposition towards understanding "others'" needs, framed in relation to others' perspectives [1]. This seems to mitigate teachers' positions as framed in the collective statement "we are a little bit on top" (excerpt #37) as a "given-part", as identified previously [39].

From the ESD perspective, and while facing an era of climate change exacerbation, it is important to recognize that CT is more than a matter of skills; dispositions also play an important role. Teachers' dispositions related to ESD influence not only the types of critical thinking skills students learn but also the critical thinking dispositions they acquire.

8. Limitations and Future Research

This article limited its focus to the analysis of teachers' use of pronouns to position themselves in a single group interview about CT in ESD. However, despite the limited data, the findings provide some understanding about teachers' positions and dispositions in a sociocultural context.

However, the paper has a number of limitations; for instance, it did not take into consideration the discourse that goes on in the community surrounding the teachers, such as the interaction of the teachers with leadership. New studies on tracing pronouns by paying attention to the interaction between teachers and leaders around CT and ESD could provide deeper insights into the ways that CT and ESD positions are enacted and negotiated within a school context.

Moreover, there is a need to conduct more longitudinal studies on the formation of teachers' dispositions in relation to CT in ESD, especially taking into account, among other things, the influence of teaching experience over time.

Another limitation of this study was the difference between the Norwegian and English use of generic pronouns. Thus, it was not always possible to determine whether the

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interlocutor was indicating a specific person or persons or simply using a generic pronoun (which would, in English, be translated as you, we, they, or one).

According to the results of this study, teachers' CT skills and dispositions seem to be largely embedded in Norwegian sociocultural practices, with a prevalent sense of sharing egalitarian values [36]. Here, it is important to note that this study was informed by Norwegian sociocultural practices only. In a different culture, the findings could be different depending on the overall social orientation of the culture. For example, cultures that are more centered on an individual orientation might have a distinctively different orientation towards the use of pronouns. In the future, a further investigation will be conducted on how different configurations of pronouns are invoked by teachers in the large datasets collected as part of the CriThiSE project as a whole.

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