

Opettajankoulutuslaitoksen julkaisuja 382

**Jaakko Hilppö**

**Children's Sense of Agency: A Co-Participatory Investigation**

Academic dissertation to be publicly discussed by due permission of the Faculty of Behavioral Sciences at the University of Helsinki, in the XIV Auditorium of the university main building (Fabianinkatu 33), on Saturday, 2nd April 2016, at 10 o'clock.

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**Jaakko Hilppö**

## **Children's Sense of Agency: A Co-Participatory Investigation**

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### **Abstract**

This dissertation focuses on children's sense of agency. The aim is to investigate the kinds of agentic experiences children undergo in their everyday lives and examine the kinds of events and activities in which these experiences take place. The dissertation thereby seeks to contribute to current understandings of the particularity of individual engagement in collective activities and enrich descriptions of the connectedness of individual and social level processes.

To understand children's agentic experiences from their perspective, this dissertation employs and develops co-participatory visual methods for studying children's sense of agency. The empirical data analyzed here come from two different case studies in which preschoolers and elementary school pupils documented their agentic experiences, and then reflected on these experiences in either open-ended interviews or joint focus groups. The empirical analysis focuses on the social construction of children's sense of agency in these reflection situations. In addition, the role of the visual tools as part of the reflection situations is examined via embodied interaction analysis.

The results of the dissertation demonstrate the different ways in which children experience their agency in everyday life. Analysis of how sense of agency is socially constructed provides evidence that children's accounts of their agentic experiences range from straightforward statements to complex reports. Furthermore, the results suggest that children's agentic experiences take place in mundane and ordinary events in addition to special occasions. The results also show how the visual tools served acted as mediational means in the telling and listening that took taking place in the reflection situations.

Overall, the dissertation results suggest that parents, educators, and other professionals who want to encourage and foster children's sense of agency could benefit from paying attention to the small agentic moments in children's daily lives as potential growth points for the children's awareness of their own agency. The visual documentation methods employed and developed in the course of this research could function as a meaningful pedagogical practice in this regard.

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*Keywords:* Sense of agency, children's everyday life, co-participatory and visual methods, socio-cultural psychology

**Jaakko Hilppö**

## **Lasten toimijuuden tunne: osallistava tutkimus**

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### **Tiivistelmä**

Tämä väitöskirja käsittelee lasten toimijuuden tunnetta. Tutkimuksen tavoitteena on selvittää millaisia lasten toimijuuden kokemuksien ovat heidän arjessaan ja minkälaisissa tilanteissa he kokevat olevansa toimijoita. Väitöskirja pyrkii näin lisäämään ymmärrystämme yksilöllisen osallistumisen erityispiirteistä ja rikastamaan yksilöiden ja yhteisen toiminnan välisiä yhteyksiä koskevia kuvauksia.

Ymmärtääkseen lasten toimijuuden tunnetta lasten omasta näkökulmasta, tässä väitöskirjassa sovelletaan ja kehitetään osallistavia visuaalisia tutkimusmenetelmiä lasten toimijuuskokemusten tutkimiseen. Tutkimuksen empiirinen aineisto koostuu lasten kanssa käydyistä reflektiivisistä keskusteluista. Ennen keskusteluita lapset dokumentoivat arkensa toimijuuskokemuksia digikameroiden avulla. Myöhemmin he reflektivat näitä kokemuksiaan joko avoimissa- tai focusryhmähaastatteluissa. Väitöskirjan analyysi koskee toimijuuden tunteen sosiaalista rakentumista näissä tilanteissa. Lisäksi väitöskirjassa analysoidaan miten visuaaliset työkalut välittivät tätä toimintaa.

Väitöskirjan tulokset puhuvat sen puolesta, että lasten arjen toimijuuskokemukset dynaamisia ja rikkaita. Tarkastelemalla toimijuuden tunteen rakentumista vuorovaikutuksessa väitöskirjan analyysi osoittaa, että kokemuksia koskevat kuvaukset vaihtelevat suoraviivaista monimutkaisempiin kuvauksiin. Tulokset viittaavat siihen, että lapset kokevat toimijuutta hyvinkin arkisissa ja tavallisissa tilanteissa erityisten tapahtumien lisäksi. Lisäksi tulokset tuovat esiin miten eri tavoin visuaaliset työkalut välittävät reflektiio-tilanteissa tapahtuvaa kertomista ja kuuntelemista.

Kaikien kaikkiaan tulokset viittaavat siihen, että vanhempien, opettajien kuin muidenkin lasten toimijuuden tunteen tukemista tärkeänä pitävien olisi hyvä kiinnittää huomiota lasten pieniin toimijuuden hetkiin heidän arjessaan. Nämä hetket voivat olla lapsille merkittäviä hetkiä heidän oman toimijuutensa ymmärtämisen kannalta. Väitöskirjassa hyödynnetty ja kehitetty tapa dokumentoida ja jakaa näitä hetkiä muiden kanssa voi toimia hyvänä pedagogisena käytäntönä tässä suhteessa.

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*Avainsanat:* Toimijuuden tunne, lasten arki, kanssatutkijuus, visuaaliset menetelmät, sosio-kulttuurinen psykologia

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Evanston, IL, USA, 03.03.2016

Jaakko Hilppö





# List of original articles

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## Introduction

Sense of agency, the feeling of being the author of one's actions, is a key issue in any educational endeavor. As Bruner among others (1996) has argued, assessing what education does to children's awareness of their possibilities for action is crucial in understanding the quality of the educational process (see also Lipponen & Kumpulainen, 2011; Rainio, 2010; Derry, 2004). Bruner's argument outlines the fundamental idea that, through learning and education, a person, persons or a larger community can become more aware of the world and its makings and thus have agency in relation to them. In a word, learning and education are essentially emancipatory processes at best.

Sense of agency is also important not just as an educational outcome, but also as a measure of the goodness-of-fit between the participants and the educational practice. In other words, the extent to which educational practices can enable children's sense of agency is argued to be conducive to the quality and intensity of their engagement (e.g., Zimmerman, 2001; Fuchs et al., 2009). This argument, which underlies different approaches to self-regulated learning (e.g., Zimmerman & Schunk, 2011), dialogical pedagogies (e.g., Matusov, 2009), and pedagogies emphasizing participatory learning structures (Niemi, Kumpulainen, & Lipponen, 2015; Siry et al., 2016) is that learners can and should be given the latitude to control their own learning process. Instead of strict teacher control, if learners are provided with guidance and a supportive learning environment, learners' personal authorship of the learning process will lead them forward and feed positively into the quality of the learning. While the pedagogical approaches differ with respect to the ways in which these learning environments should be constructed or conceptualized, they all agree on the value of the learner's awareness of their agency.

In broader terms, sense of agency is considered one of the cornerstones of human well-being (Sen, 1985; Welzel & Inglehart, 2010). First, the mere feeling of having the possibility to influence and direct one's actions and life course affects our well-being positively, regardless of whether these opportunities are pursued. Second, if and when these opportunities are pursued they lead to more opening opportunities for actions. What Welzel and Inglehart (2010) endeavor to show in their analysis is that greater feelings of agency lead to a self-nurturing cycle in which well-being and the opening of life opportunities support and affect each other. A similar argument can be found in current research on positive psychology, specifically, within the broaden-and-build theory (e.g., Fredrickson & Branigan, 2005).

Yet recent research on children's well-being as well as different surveys indicate that children's sense of agency is challenged. Paradoxically, it appears that, although most western countries are experiencing increasing prosperity, at

the same time they are exhibiting signs of increasing emotional stress levels and behavioral disturbances, which coincide with problems of family, peer group, and school settings (Layard & Dunn, 2009). For example, in Finland, a small but growing number of children is in danger of being prevented from having a balanced childhood (Aira, Hämylä, Aula & Harju-Kivinen, 2014). Other national assessments and follow-up studies have revealed growing differences in children's and young people's psycho-social welfare and learning outcomes, as well as in the equal provision of supportive services, such as health care and welfare (Finnish National Board of Education, 2011; Kumpulainen, 2012). Leaving school early and dropping out are also being recognized as problems that cause marginalization and exclusion. At the same time, these children are at risk of being excluded from educational opportunities and working life. Inequality and marginalization in childhood and in the lives of the young can lead to serious negative multiplicative effects, the economic, social, and human costs of which are considerable, both for the individual and for the whole of society (Ahola & Kivelä, 2007; Kumpulainen, 2012).

Children's sense of agency is further challenged today by the collision of permanent and changing environments in their lives. The sheer number of communities and activities in which children learn and participate is growing. More to the point, these communities present differing opportunities, demands, and challenges in terms of what counts as legitimate participation, knowledge and knowing, and moral action (Gonzalez, Moll, & Amanti, 2005; Resnick, 1987; Flier & Hedegaard, 2010). What counts as prudent action in different social media communities may be valued very differently at home, in school or among peers (e.g., Hasinoff, 2015). Children are not always provided clear guidance in such cases. Furthermore, the importance of school as a site for new knowledge and learning and its significance in the lives of Finnish children has decreased (e.g., Säljö, 2004; Salmela-Aro et al., in press). In a similar vein, a recent survey reported that one-third of Finnish secondary school pupils did not know how to take part in decision-making at school; when they did take part, their opinions were not taken into account in school development (National Institute for Health and Welfare, 2013). It thus seems that children need support mechanisms to strengthen their belief in their own potential and to become agentic individuals with the competence required to nurture socio-emotional well-being (Weare, 2010).

Although research has shed light on pivotal issues related to children's socio-emotional well-being, it has also been contended that research has predominantly focused on identifying risk factors (Boekaerts, 1993; Hascher, 2003). What the existing literature tells us is that, in addition to the importance of primary caregivers, relationships outside the family can also be beneficial to children's socio-emotional well-being. For example, teachers can play an especially important role in creating social contexts for supportive classroom interactions and

relationships that contribute to children's sense of agency and well-being (Johnson, 2008; Luther & Zelazo, 2003). Given the arguments above, it seems evident that formal educational institutions, such as daycare centers or schools, could do better in supporting pupils' socio-emotional development and helping all learners to build confidence and understanding in their agency, which is needed in today's society (McLaughlin, 2008; Ohl, Fox, & Mitchell, 2012). However, there is little research available on the ways in which protective factors can be proactively utilized to promote children's sense of agency and their socio-emotional well-being in their everyday lives (e.g., Seligman et al., 2009), and especially about the interactional processes taking place in these efforts.

Furthermore, children's sense of agency has seldom been the focus of empirical studies embedded in the everyday lives of the participants or across the different activities taking place in educational settings. Whereas existing studies have focused on, for example, children's understanding of their agency in relation to different subjects or academic domains (e.g., Määttä & Järvelä, 2013) or single activities such as peer collaboration, the way in which other events in school, at home, or elsewhere affect this understanding has not been explored. Furthermore, although theoretical and experimental studies on sense of agency have advanced our understanding of the qualitatively different ways in which we can experience our agency (cf. Gallagher, 2012), how these differences play out in various activities has not been analyzed. Moreover, while existing studies on children's agency (e.g., Markström & Halldén, 2009; Bjerke, 2011; Barton & Tan, 2010; Rainio, 2010) have often pointed out the value of the reflective aspect of agency, they have not focused on sense of agency as a topic in its own right.

Briefly put, our present research knowledge is limited in its understanding of how different settings and situations in children's everyday lives play into their sense of agency. Yet such understanding is vital if we want to foster and support children's sense of agency. Without knowing how and in which situations children see themselves as agents, any supportive effort runs the risk of not meeting the children's own perspective. The aim of this dissertation is to contribute to this understanding by researching children's sense of agency from the children's perspective and extending the scope of empirical investigations of children's sense of agency to the different settings and events of children's everyday lives.

## Sense of agency: A socio-cultural reading

In this dissertation, sense of agency is conceptualized from a socio-cultural perspective<sup>1</sup> (e.g., Wertsch, 1988). The socio-cultural perspective emphasizes that a person's awareness or experience of his or her agency is mediated by and distributed between the individual and the surrounding context. Thus, rather than focusing on the individual phenomenological experience or the underlying cognitive structure of sense of agency, the socio-cultural perspective emphasizes that sense of agency is infused with and embedded in a specific social and cultural environment, which both supplies a sense of agency and makes it possible.

From a socio-cultural perspective, sense of agency can be understood as a higher mental function (e.g., Vygotsky, 1978). In socio-cultural theory, higher mental functions signify new, qualitatively different manifestations of human cognitive capacities, such as perception, attention, and memory. These new formations emerge in ontogenesis when social and cultural influences meet and merge with biological lines of development. Different social and cultural practices, such as formal education, have a bearing on the way human cognitive capabilities develop and are manifested in any given situation. Significantly, higher mental functions, such as sense of agency, are not solitary individual mental phenomena, but rather fundamentally social and are distributed between a person and that individual's social and cultural context. Although Vygotsky's general genetic law stipulates that higher mental functions originate in and are internalized through social interactions, the importance remains of social and cultural practices for the manifestation of higher mental functions. In fact, from a socio-cultural perspective, higher mental functions are always subject to the activities in which they take place; they also influence the shape of the activities themselves. In other words, the way in which we experience our agency is mediated by the specific social and cultural context in which we are embedded.

In socio-cultural theory, cultural tools and artifacts play a significant role in the emergence and manifestation of sense of agency. In more general terms, one of the central arguments of socio-cultural theory is that higher mental functions are mediated by different cultural implements. Vygotsky's studies maintain that applying different tools in activities does not just fortify or extend existing human capabilities, but transforms them and thus accounts for the occurrence of higher mental functions in the first place (Vygotsky, 1978; Vygotsky & Luria, 1994). In relation to sense of agency, this means that the way in which we experience our own actions is mediated by our cultural context. In reflecting on our

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<sup>1</sup> Socio-cultural perspectives depict a broad range of theoretical work stemming in part from the work of Lev Vygotsky. Rather than differentiating between perspectives here, this study aligns with Stetsenko (2008) on the need to develop integration between the different perspectives within socio-cultural and CHAT lines of inquiry.

actions, either while still engaged in them or in hindsight, our awareness of those actions is provided and made possible by the cultural context and the tools we use to reflect on them. For example, when we think about yesterday's lunch, we use different cultural tools such as language and other semiotic resources to make sense of our actions in that particular moment. These cultural tools thus mediate our reflections and also affect which actions we highlight in our reflections and how we interpret them. In other words, from a socio-cultural perspective, the relationship between the reflections and the tools with which the reflections come about is mutually constitutive. Reflecting on one's actions is thus not an act of individual agency, but rather more a moment of an individual-acting-with-mediational-means making these reflections, which are fundamentally socio-culturally mediated and distributed (Vygotsky, 1978; Wertsch, Tulviste, & Hagstrom, 1996; Gillespie, 2007; Valsiner, 2001).

When conceptualizing sense of agency from a socio-cultural perspective, it is important to emphasize the qualitative difference between reflective awareness of one's actions while engaged and reflection on one's action after the fact. For socio-cultural theorists, an event is not defined solely by human agency, but rather is an aggregate of multiple social, material, and historical influences (Fenwick, Edwards, & Sawchuk 2011; Hasse, 2015). For although humans can influence the ways in which events unfold, human agency cannot fully account for the emergence and shape of these events. This creates considerable ambivalence and open-endedness in any circumstances, as the determinants of the event cannot be known in advance (Pelaprat & Cole, 2011). For example, even seemingly mundane and routine situations, such as making coffee in the morning, are not under our full command and can abruptly turn into new situations if the coffee spills or the electricity goes out. These uncontrollable happenings have an important bearing on how actors experience the events, as well as how they experience their own agency in that moment. While we have agency over a course of action and can respond to unexpected changes and emerging novelties, the fundamental open-endedness of events means that we understand the extent of our agency only after the event has ended. In effect, while sense of agency is part of how we experience events as they develop, until the event has come to a close, we cannot say in what way our actions have had an impact on what happened. In this manner, sense of agency becomes fully available to us only in retrospective reflection.

Furthermore, from a socio-cultural perspective, reflecting on one's actions is an agentive act in itself. Rather than viewing reflections as passive reproductions of an ongoing or past engagement, people have agency over their reflections. In this respect, sense of agency is not solely something people feel and provide a narrative account of, but is also something that people invoke or choose not to invoke in certain situations (e.g., Wetherell, 2005). Persons have agency over how they reflect on their actions in different situations and how they use cultural

tools in doing so. This theoretical argument has important implications for children's sense of agency. First, while the argument provides the opportunity to consider a person's reflective actions as strategic and even manipulative, significantly it also serves to highlight our ability to respond to the ongoing flow of social interaction. In interaction, we are not just responding to what others are saying, but also to what we ourselves are saying and how we are responded to in turn by others. In other words, reflective accounts of one's actions are always produced in certain situations and thus subject to the various social aspects of those situations. Accordingly, the way in which sense of agency manifests in interviews or other narratives, for example, should be understood as being embedded in that particular situation and as being produced for it in a joint activity (e.g., Roth, 2008).

Second, rather than seeing this embeddedness as an indication of the frailty of human memory, it reveals how consistency, continuity, and change operate across time in human-centered socio-technical or socio-material networks (e.g., Latour, 2005). Accounts of one's actions that persist over time and through different occurrences of telling are thus the result of the agency of the teller, the means she or he employs in telling, and the encompassing network that partakes in the telling. More fundamentally, highlighting the agency of the teller underscores the ontology of the original event as something more complex than a simple right or wrong dichotomy can provide. Any event or situation can be described in more than one valid way. One's sense of agency constructed in retrospect can be different at different times without necessarily calling into question the plausibility of the constructions.

To summarize, sense of agency has thus far been outlined as a phenomenon from a socio-cultural perspective. It has been conceptualized as a reflective awareness of one's actions constituted by and distributed between the social and cultural context of its manifestation. Sense of agency is furthermore fully available to the experiencing person in retrospect. In this connection, the section has also established that persons have agency over their reflections and thus over how they present themselves to others via their jointly constructed reflections. These tenets form the core theoretical argument of this thesis. However, in order to proceed with a more specific analysis of children's sense of agency, intermediate theoretical concepts which provide a way to bridge this general theoretical position and the empirical analysis needs to be developed (cf. Engeström, 2005).

## **Modalities of Agency: A potential intermediate theoretical tool**

Over the last decade, agency has become one of the most often conceptualized and researched topics in different educational and socio-cultural studies, especially in education (Rainio, 2010). In the wake of this development, a number



of critical voices have been raised about the lack of theorizing on the individual actor (e.g., Roth, 2007; Nardi, 2005, Eteläpelto, Vähäsantanen, Hökkä, & Palo- niemi, 2013). Stetsenko (2008, p. 481) explains:

. . . a number of approaches tend [sic] to collapse the individual dimen- sion onto the social realm of everyday practices while undertheorizing the former, as in participatory learning and discursive theories where individual subjectivity is explained as being equivalent to, or a replica and sometimes a correlate of, the social-level process such as discourse, collaborative activity, or participation in shared practices of communi- ties (e.g., Harre 2002).

In other words, the more nuanced dynamics of individual agency, which contribute to the emergence of these practices, are not adequately addressed by current theoretical tools. For example, the way in which an actor's aspirations, beliefs, or acquired and physical competencies relate to concrete actions taken in social situations is not accounted for. While from a socio-cultural perspective these attributes are not static, but rather always relationally connected to the practical situation of their emergence, they nevertheless contribute to how we engage in different situations and to how we make sense of our engagements later. The challenge for the study of sense of agency from a socio-cultural perspective is thus to answer these critical claims and develop analytical conceptualizations that fully comprehend the social and situated construction of sense of agency. To this end, we will draw on the notion of the modalities of agency (Greimas & Porter, 1977; Fontanille, 2006) as a potential intermediate theoretical tool with which to respond to this challenge.

In the semiotics of A.J. Greimas, modalities of agency refer to the underlying structure of different cultural narratives which constitute the actors in the story and their intentions in relation to an object or a given course of action (Greimas & Porter, 1977; Fontanille, 2006). In the Finnish context, Jyrkämä (2008; see also Engeström & Nummijoki, 2010) previously used the six basic modalities commonly referred to in narrative semiotics, as follows: 1) *to want* – positioning the person in question as desiring something in order to do something; 2) *to know* – ascribing particular knowledge and know-how to an individual; 3) *to be able* – characterizing the physical abilities and limitations of a person; 4) *have to* – ascribing something that a person must do; 5) *to feel, experience, appreciate* – positioning a person as being able to feel and experience; and 6) *to have the possibility* – ascribing the option to do something in a given situation.

Although these kinds of modal descriptions of agency are frequently used in both everyday and academic discourse to indicate an actor's orientation to a given state of affairs or practice (see, for example, Davydov, Slobodchikov, & Tsukerman, 2003, p. 74), there are few, if any, empirical research studies that use

the conceptualization of modalities of agency as an analytical tool. While frame analysis (e.g., Goffman, 1974), for example, or position analysis (e.g., Harre & Langenhove, 1999) also present fruitful theoretical tools to address the way in which children position themselves in reflecting on their actions, modalities afford a closer description of the constructed positions. Furthermore, the underlying theoretical position within narrative semiotics acknowledges the cross-cultural nature of how these modalities are used in different narratives. As Fontanille (2006) explains, in western cultures the modality of *have to* is often used as the central modality driving actors in different narratives. In contrast, if we were to place a similar premium on the modality of *want to*, the nature of our cultural narratives would be altered significantly, according to Fontanille.

In this dissertation, in accordance with the socio-cultural perspective outlined above, the modalities of agency are understood as discursive tools that people use to make sense of and socially construct their sense of agency within a social setting. Although the modalities as expressed through spoken language are just part and parcel of the overall cultural mediation of children's (as well as adult's) experiences and how these experiences are constructed and brought into being in any given situation, such modalities nonetheless carry significant weight for the people who are interacting and provide a salient and readily available entry point for the analyst into how sense of agency is constructed. In sum, sense of agency is conceptualized in this dissertation as a socially-constructed relation between an individual's capabilities, aspirations, and perceived opportunities and the limitations on taking action in a given practice.

## **A note on neighboring concepts: Self-efficacy and sense of agency**

Sense of agency is not a novel research topic in educational psychology or related fields. However, researchers in these areas often employ different conceptualizations of the phenomenon and therefore study it in different ways. For example, in more socio-cognitive oriented psychology, a person's understanding of his or her agency is conceptualized via Bandura's notion of self-efficacy (1997). Self-efficacy denotes one's personal evaluations of the outcome of the tasks at hand. These evaluations feed into how we engage with a task or whether we engage with it at all. While Bandura's theoretical work emphasizes the triadic interplay among a person, their behavior, and the environment, the crux of his conceptualizations of human agency lies in personal outcome evaluations, that is, self-efficacy beliefs (Bandura, 1997). Given this centrality, self-efficacy beliefs have been widely studied in psychology. Recent studies have, for example, addressed the connection between self-efficacy beliefs and social competence (Määttä, Järvelä, & Perry, 2015) or the role of experiences of confidence and self-efficacy in relation to different types of classroom activities (Määttä & Jär-

velä, 2013). More generally, educational and learning research within this domain has found various ways in which pedagogical activities can provide room and support for learners' control over their engagement or their self-regulated learning (e.g., Mykkänen, Perry, & Järvelä, 2015; Perry & Rahim, 2011).

Within cognitive phenomenology, sense of agency is defined in a similar vein as the individual's subjective awareness of being an initiator or executor of actions in the world (e.g., de Vignemont & Fournieret, 2004). A common example involves raising one's hand: I am aware that my hand moves and that I am responsible for that movement; hence, I have a sense of agency regarding this movement. In this fashion, sense of agency points to our basic experience of being an actor in the world. A further differentiation is often made between first- and second-order sense of agency (e.g., Gallagher, 2012). First-order sense of agency points to a person's pre-reflective awareness of initiating an action, such as raising one's hand. In comparison, a second-order sense of agency points to a more reflective account of one's actions, as in "I raised my hand because I knew the answer to the teacher's question and wanted to answer." Regarding this latter form, Gallagher (2012, p. 28) further defines it as "... reflective consciousness about whether what I plan to do or have done is consistent with my belief system, or with my conception of efficient means-end relations."

In contrast to the socio-cognitive and phenomenological perspectives mentioned above, the socio-cultural grounding of this dissertation highlights the situative, distributed, and socio-culturally mediated nature of sense of agency. Moreover, the socio-cultural perspective emphasizes that our understanding of our personal agency, as well as actions in general, are complex formations constituted by different cultural tools, personal endeavors, and collective motives. While both theoretical perspectives can be rightfully criticized (e.g., Martin, 2004; Martin & McLellan, 2008), a more extended comparison and critical analysis between these three perspectives is neither the impetus nor the focus of this dissertation. Rather, the stance of this work is more aligned with an integrative pluralist perspective (Greeno, 2015), one that emphasizes the importance of producing and promoting multiple, overlapping lines of inquiry and theorization of children's understanding of their agency. In other words, the aim of this dissertation is to offer an alternative reading and an empirical analysis of the same general phenomenon that the above-mentioned perspectives endeavor to study. My hope is that the results will promote a productive dialogue between these perspectives.

## Methodological challenges

Researching children's sense of agency in their everyday lives as conceptualized in the previous section presents three methodological challenges. First, aspiring to understand the various ways in which sense of agency manifests in children's everyday lives necessarily relies on each person's willful engagement in reflecting on their own experiences, in some form or another. Also given that sense of agency can be an elusive phenomenon in the flow of everyday life, co-participatory visual methods (e.g., Thompson, 2008) offer a fitting methodological avenue for studying children's sense of agency with children themselves. Yet co-participatory methods as such have not been previously employed for this kind of study. Therefore, this dissertation presents one way of adapting the methods for this purpose. Second, while visual tools, such as photographs and drawings, have often been used by researchers and practitioners as essential elements of co-participatory approaches to learn more about children's perspectives on different matters, the way these tools have been used has not been scrutinized in detail. In this dissertation, the challenge is approached with the help of embodied interaction analysis (e.g., Goodwin, 2000). Finally, while the modalities of agency provide a potential intermediate theoretical tool to conceptualize and study sense of agency more closely, they do not function directly as analytical tools as such. Rather, as with any new conceptualization, the way in which the modalities are implemented in empirical analysis needs to be carefully observed and scrutinized. The following sections will elaborate on both of these challenges and how they have been addressed in the studies presented here .

### Co-participatory approaches in research with children

Different co-participatory approaches in research with children have gained popularity and momentum, especially in educational research, ever since their adoption in the early 1990 (e.g., Christensen & James, 2000; Karlsson & Karimäki, 2012). The overall argument in the methodological literature is that traditional research designs often position children as objects of research rather than as its subjects. Thus, what we can know about children and their life worlds, and know with them, is limited. Whereas previously our understanding of children's everyday lives, for example, was based on different parental or professional reports, research today more often encompasses the children's own perspectives, with children themselves engaged in the different phases of the research process (e.g., Tudge, 2008). In addition to fundamental ethical arguments, children are considered experts on their own lives, and their expertise slips away if we do not make more opportunities for children's participation in research on them.

In this line of work, children's participation in the different phases of the research process often varies. For example, in Kellett's study (e.g., 2004), children participated in all aspects of the research, from the initial idea to learning data collection and analytical methods and finally to reporting the results of the study. The role of the adult researcher in these cases is often to support and facilitate the engagement of the children, for example, by teaching different research methods, as Kellett herself has done. In these types of participatory approaches, children have considerable range and control over the research process. By contrast, in other studies (e.g., Miller, 2014; Plowman & Stevenson, 2012; Cook & Hess, 2007), children have taken part in implementing the research while adult researchers established the main focus of the study and were responsible for carrying out the work. What sets this latter set of studies apart from the traditional child-oriented research is the way in which children have more influence on and guidance in the research process and how the adult researchers attempt to understand and describe the ways in which children themselves see the world around them, to describe, in effect, their perspective (Sommer et al., 2010).

Focusing on children's sense of agency situates the overall research design of this dissertation in the latter set of participatory studies. While the focus is on trying to understand children's own perspective on their agency, this goal was established for the participating children without their consultation. The challenge of this type of inquiry is that presetting the goal is in itself antithetical to its achievement; if the participating children are not interested in or do not understand the focus of the research, the potential of gaining new understanding of their lives is significantly diminished. Trying to understand children's sense of agency is thus crucially challenged by the need to tap into children's own interests and understanding regarding the focus of the research. In some sense, the position of the researcher here is akin to the contradictory position of teachers who are required simultaneously to deliver a prescribed educational curriculum in a certain sequence and at specified time intervals while fostering children's interest in the curriculum topics (e.g., Matusov, 2009).

The challenge is further heightened by the academic tone of the concept of sense of agency. Although the phenomenon is ever-present in daily life, the concept of sense of agency belongs more to academic psychological and educational discourse rather than to everyday conversations with or between children. Finding a way to talk about sense of agency with children in a fashion that retains the focus of the academic content and yet at the same time is accessible and a productive focus for them is a central issue in researching children's sense of agency. In addition, experiences of agency are cumbersome to grasp for further reflection when a person is simultaneously engaged (e.g., Lipponen et al., 2015). Without an explicit focus on these experiences and some way to retain them, agentic moments can easily slip away in the continuous flow of experience (Valsiner, 2001; Roth & Jornet, 2013).

In order to address these challenges within a co-participatory research on children's sense of agency, the present dissertation draws on the literature of positive psychology and children's resilience, as well as on visual studies with children (e.g., Thomson, 2008). First, studies in positive psychology have shown how positive experiences broaden a person's perspectives on possible actions (e.g., Fredrickson & Branigan, 2005). In effect, experiencing positive moments, such as getting something right or succeeding in a task, are believed to expand the opportunities for action that people see for themselves. Closer to the socio-cultural framework, a similar argument for the role of positive experiences or more precisely, moments of joy, in relation to feeling more active in the world has been made on the basis of the philosophical work of Spinoza and Nietzsche (Greco & Stenner, 2013). Second, Johnson's (2008) work on children's resilience has demonstrated that personal experiences of struggle and confronting obstacles can also be used in research with children (see also Puroila, Estola, & Syrjäälä, 2012; Nordensvard, 2014). Both of these lines of inquiry indicate how both positive experiences and moments of striving or trying hard at something can potentially be effective ways of orienting oneself to a sense of agency while engaged in action.

Finally, to aid in capturing these moments for further reflection, this dissertation draws on the example of prior co-participatory studies in which children have documented and shared their perspectives and life worlds with the help of photographs and drawings (e.g., Clarke, 2005; Cook & Hess, 2007). Here the dissertation connects with a long tradition of sociological and anthropological research in which visual artifacts have been used in interviews (e.g., Collier, 1957; Harper, 2002). From a socio-cultural perspective, photographs and drawings can be understood as visual artifacts created by the participants, artifacts that reify (Wenger, 1999) or capture the particular moment in material form. These artifacts can then be used as mediational means in later reflection to recall and share that particular moment with others. In effect, making and using visual artifacts in this fashion re-mediates both the situation being documented as well as the situation in which it is being reflected on. Interestingly, while visual tools are often considered to occupy a central means through which children's accounts and perspectives emerge in practice and in different research endeavors, how these tools are employed in actual practice is seldom a topic of interest in itself. This leads us to our second challenge.

## **Embodied interaction analysis**

Visual tools often occupy a central position in research with children. Depending on the research design, visual tools such as drawings and photographs mediate children's participation in a number of ways. For example, these tools are believed to provide a familiar way of working; they are interesting in themselves,

they offer an alternative way of communication, and they are a friendly avenue for exploring and discussing topics difficult to verbalize (e.g., Thompson, 2008). However, in the literature on visual methods with children, a number of researchers have recently raised the issue of how the use of visual tools is presented and conceptualized (O'Brien et al., 2012; Barker & Smith, 2012; Wohlwend, 2009; Knoblauch et al., 2008; Sewell, 2011; Pyyry, 2013; Gallagher & Gallagher, 2008; Westcott & Littleton, 2004).

The crux of their argument is that, while the idea and rationale for employing visual tools in research with children is well presented, the actual use of these tools is far less so. In fact, how the tools are used by the participants is often only briefly explained by the authors or is simply glossed over, when it is mentioned at all. In most cases, children's views are presented to the reader as clearly written sentences or as summaries of what was said. While this type of representation often serves its purpose by providing valuable clarity on children's views, the way these perspectives emerge with the aid of the visual tools is overshadowed. Given that the methodological field of visual studies is striving for reflexivity and authenticity in its practices (e.g., Tisdall & Punch, 2012; Radley, 2010; Angell et al., 2014), scrutinizing and describing the use of visual tools constitutes a substantial challenge for the field. In this dissertation, this challenge is approached using embodied interaction analysis (e.g., Goodwin, 2000).

A central thesis of embodied interaction is that spoken language is just one of the many semiotic resources people use to be understood and to understand others in joint interactions (Goodwin, 2000). For Goodwin, any action, such as telling about one's experiences, is constituted of a complex arrangement of multiple semiotic fields, such as gestures, the body, and spoken language, which are deployed simultaneously and which elaborate on each other. Each of these fields has its own distinct properties as a medium for communication. The material surroundings also provide various semiotic fields that make certain actions possible. A teacher's explanation of a scientific concept or tomorrow's homework would not be understandable without taking into account the blackboard as one semiotic field used to accomplish the action of explaining. The moment-to-moment arrangement of the various semiotic fields is called a contextual configuration. In the course of an unfolding action, new semiotic fields can be brought in and old ones treated as irrelevant, depending on present purposes. As a result, the contextual configuration shifts over time.

From the point of view of embodied interaction analysis, visual tools such as photographs and drawings are thus a potential situational resource that can be employed in joint interaction as part of the contextual configuration. Significantly, the focus in embodied interaction is on how and whether the visual tools are relevant to the participants themselves. In other words, while photographs and drawings can be readily available to children in reflecting on their everyday lives, this does not mean that the tools themselves are employed in the reflections.

Thus, the empirical challenge for a researcher interested in how visual tools are used in research with children is to examine carefully how the visual tools are used by the children and by the adults during the research process.

## **Implementing the modalities of agency**

As discussed in the previous section, from a socio-cultural standpoint the modalities of agency can be viewed as discursive tools people use when engaging in reflective talk with others. Conceptualizing the construction of sense of agency in this fashion takes the dissertation methodologically into the realm of discourse analysis. However, discourse analysis is often described as a fairly wide and varied field within which researchers have many ways of doing research (Gee, 1999; Mercer, 2010; Wetherell, 2001). While discourse analysts agree that language is neither a transparent nor a neutral medium for constructing meanings between participants, but rather is constitutive of social activities (Roth, 2005; Wetherell, 2001), the way in which people employ different cultural conventions in interactions is situative and specific. For this reason, Gee argues that a discourse analyst needs to adopt and adapt “specific tools of inquiry and strategies for implementing them” (1999, p. 6).

For an analysis of the way in which the modalities of agency are used in constructing a sense of agency, two methodological challenges emerge. First, the conceptual home of the modalities of agency lies within narrative semiotics. Within narrative semiotics, modalities have been used previously to analyze character positions and development in written narratives (Fontanille, 2006). In other words, there is no direct analytical framework available to analyze the use of modalities in social interaction. Second, the methodological literature on different adult-child interactions clearly demonstrates how riddled these interactions can be in terms of power dynamics or lack of intersubjectivity among the participants (e.g., Hviid, 2008; Elbers, 1996; Westcott & Littleton, 2004). The analytical framework needs to be attentive to the interactional dynamics of the reflection situations, especially the extent to which the children willingly share their experiences or without being led by adults or the other children present. In practice, potentially relevant interactional moves in this regard could be minimal responses to questions, lack of self-initiated interactional turns, or competing in instances of overlapping speech. In contrast, asking questions, providing lengthy answers, and attempting to control the flow of the interaction on the children’s part could be seen as signs of more balanced interactional dynamics. Overall, the analytical framework needs to be attentive to how a “working consensus” (McDermott, Gospodinoff, & Aron, 1978) is achieved regarding that specific situation and what that consensus is.



## Objectives of the study

The overall objective of this dissertation is to study children's sense of agency from their perspective. More specifically, the aim is to understand the various ways in which children experience their agency in everyday life and the kinds of situations in which these experiences take place. To this end, participatory visual research methods have been employed and further developed in this dissertation. Moreover, the study has focused on how children's sense of agency manifests in social interactions when the participating children reflected on their everyday lives with the help of photographs they themselves had taken. The result of this analysis form the substantial contribution to the literature on children's sense of agency.

In this context, the dissertation provides two methodological contributions. First, it attempts to develop discourse analysis methods for the study of children's agency by highlighting how modalities of agency mediate the construction of children's sense of agency whenever they reflect on their everyday experiences. Second, through embodied interaction methods, the dissertation highlights how the photographs of their experiences taken by the children are used in their interactions with adults and other children.

The empirical analyses are based on two different data sources, Case Helsinki and Case Tampere. In Case Helsinki, four elementary school-age children reflected on their everyday lives with the help of photographs they had taken in various contexts over a three-day period. In Case Tampere, a preschool class documented positive experiences during the school day and later reflected on the experiences in focus groups. The data selection and its analysis were based on interactional research methods (e.g., Jordan & Hendersson, 1995; Ericsson, 2006).

In short, the objectives, the specific research questions, and the connected individual studies that make up this dissertation can be described in the following way:

*Objective 1: To study children's sense of agency from their perspective*

In what ways does sense of agency manifest when children reflect on their everyday lives?

In connection, Wwhat day-to-day events are talked into being when children reflect on their everyday lives?

Objective 1 and its connected research questions are addressed in studies 1, 2, and 3.

*Objective 2: To develop co-investigative visual and discourse analysis methods for studying children's sense of agency*

In what ways do different modalities of agency mediate the social construction of children's sense of agency when children reflect on their everyday lives?

In what ways do photographs mediate the social construction of children's sense of agency when children reflect on their everyday lives?

Objective 2 is addressed in studies 2 and 4. More specifically, study 2 focuses on the first connected research question, whereas study 4 is devoted to the second connected research question.

## **Research designs, participants, data sources, and methods**

In order to address the objectives outlined in the previous section, two research designs were created. They share similar features based on the common framework of children's participation in the research. Both also have differences, stemming from their respective focuses, the particular context in which the research was carried out, and the lessons learned during the implementation. The next sections will present brief, narrative descriptions of both research designs and the respective data sources generated. The narratives also entail an account of the research process and of the participants who engaged in the research. After this, a short overview of employed analysis methods is provided. The section closes with a consideration of research ethics and a table summarizing the findings.

### **Case Helsinki**

The focus of Case Helsinki was on children's sense of agency in the various contexts in their daily lives. The design of Case Helsinki was in two phases and took place during the fall of 2010 with two third-grade classes in the Helsinki metropolitan area. The socio-economic background of the pupils represented the lower- and upper-middle class of Finnish society. In the first phase, the pupils and their teachers participated in a two-week enculturation process focusing on and capturing the positive moments in school life. The rationale for the first phase was to introduce the idea of co-participatory visual research to the pupils, let them familiarize themselves with the cameras, and build rapport between the researchers and the pupils. In addition, the two-week period gave the researchers time to learn about the daily life and its rhythms in both classrooms.

In practice, during the first week the pupils were allowed to use the cameras to take pictures based on their own interests. The week began with a short joint discussion about the research. The researchers explained that they were there to learn about the daily life at school and the pupils' experiences, and they encouraged the pupils themselves to come up with ways in which their experiences could be researched. During the week, the researchers also engaged with the pupils in spontaneous and informal discussions about the experiences during the school day and the reasons why this type of research should be conducted. In the second week, the children were asked to focus more directly on their positive moments during the school day and to document these moments. After each day, the children were invited to share and discuss their documented moments in focus groups of four to five. The groups followed a semi-open format. In the focus

groups, each pupil was encouraged to share her or his experiences and talk about them. Also the focus group format was thought to encourage the pupils to ask questions, make connections between experiences, and learn from each other. The first phase ended with a joint discussion with the whole class about what had been learned during this phase of the research.

In the second phase of Case Helsinki, the teachers of both classes were asked to choose two pupils (a girl and a boy) from the class whom they considered potentially the most interested in documenting and sharing their experiences in everyday life contexts. The teachers were also asked to consider how potentially interested these pupils' families might be having their lives documented, since engaging in this phase of the research would require effort on the part of the parents as well. The teachers suggested Anna, Liisa, Erno, and Eetu<sup>2</sup> and helped us contact their families. After securing the assent of the children and the consent of their families to participate in the second phase, the researchers then agreed with the children on the times each child would document their daily life and when each would be individually interviewed. The documentation began with the children getting a digital camera to use over a three-day period during which schoolwork and other activities proceeded according to their own pace. The children were encouraged to take photos of "agentic moments" during those three days. Specifically, Anna, Liisa, Erno, and Eetu were encouraged to take photographs of people, things, and situations that were important to them. In addition, the children were asked to photograph situations in which they felt happy, very glad, did not want to stop doing something, felt sad, angry, or that something was difficult. This set of guidelines was discussed with the children and also given to them in print along with the cameras. The parents were likewise informed of the guidelines and asked to remind the children to take photographs and to discuss them at home.

There were two reasons for the notable change in focus for the documentation in phase 2 in Case Helsinki, a change that called for a wider array of moments. First of all, during phase 1 we learned that the positive moments were all too readily interpreted as institutionally framed. In our informal discussions as well as in the focus groups, the pupils often shared moments in which they had succeeded in formal school tasks or activities, such as getting a good test score or answering the teacher's questions. While these undoubtedly were positive moments, on the basis of our observations during phase 1 they were not the whole story. In addition to these, we often observed other, more informal occasions, especially those in which the pupils persistently tried to do something and either succeeded or not. These, however, did not make it into the focus group discussions, and we felt that important lessons could be learned about the children's sense of agency if these situations were reflected on. Second, between phases 1

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<sup>2</sup> Anna, Liisa, Erno, and Eetu are described in more detail in Study 2.

and 2 we were inspired by Bruce Johnson's (2008) work on children's resilience. In his paper, Johnson shares a set of interview questions used in a longitudinal research project on the resilience of at-risk pupils in Australia; significantly, these questions addressed moments in the children's lives when things did not go smoothly or the children faced obstacles. Johnson's work, in other words, presented us with an example of how to focus on these moments with children.

In addition to widening the focus of the documentation, the way in which the children reflected on their experiences was changed between phases 1 and 2. Instead of sharing and reflecting on the experiences in focus groups, we decided to conduct open-ended interviews with the children. The rationale stemmed in part from our observations of the phase 1 focus groups and the change in the focus of the documentation. While the interaction between pupils in the focus groups had been supportive and respectful, only a few of them had asked questions or made connections to their own experiences. Although we suspected that this might have been due to the kinds of moments that were shared, it also seemed that the focus group design (i.e., sharing and discussing one photograph at a time, then moving on to the next pupil) was not encouraging extended joint reflection. Also, because the new focus of the documentation could potentially bring forth moments that the pupils might not want to share with a wider audience, we thought that open-ended interviews would provide a more confidential context in which the children could reflect and elaborate on their agency.

The open-ended interviews with Anna, Liisa, Erno, and Eetu were conducted one to three days after their three-day documentation period had ended. The interviews were done on school time, either in the lunchroom or in a silent hallway corner during class. The children brought along photographs they themselves had taken of various contexts during the three-day period. The pictures were uploaded from the camera to a laptop at the beginning of the interview and were visible on the screen the whole time. The interview was loosely guided by a written interview guide (Kvale, 2007; see Appendix 1), which reminded the interviewers of potentially important topics to discuss. In general, the interactional dynamics of the interviews were reciprocal and co-participatory in nature. In practice, the children decided, for example, which photographs to reflect upon and which topics to explore further; they also asked questions about the everyday lives of the researchers. In this connection, the children said that they had talked about the photographs briefly with their parents at home and had deleted those which either were of poor quality or they did not want to share. This implies that the children were prepared to interact with the photographs and reflect upon their experiences. The interviews lasted from 25 minutes to an hour, and Anna, Liisa, Erno, and Eetu discussed 67 different photographs. The interviews were video- and audio-recorded, and these recordings comprise the data source (Erickson, 2006) for Case Helsinki – a total of 1 hour and 45 minutes of interaction. This data source was analyzed in studies 1 and 2.

In more general terms, Case Helsinki can be viewed as a case of Finnish elementary school children reflecting on their day-to-day experiences with the aid of photographs and the help of familiar adults whom the children had known for short time. Although the activity itself was fairly new to the children and the researchers, it nevertheless resembled similar situations in which experiences have been shared and talked about using photographs (e.g., Middleton & Brown, 2005). And while an in-depth sociological analysis of the children's everyday lives would provide more grounding to talk about the representativeness or typicality of Case Helsinki in relation to other Finnish children or western childhood more generally, to us the lives of Anna, Liisa, Erno, and Eetu seemed to reflect the larger social and cultural-historical milieu of urban Helsinki and Finnish society at large. On the basis of what we learned about their lives by listening to and observing how Anna, Liisa, Erno, Eetu, and their classmates interacted in school, the four children's lives seemed particular and invested with personal meaning, and yet not foreign to other scholarly accounts of Finnish childhoods (e.g., Strandell, Haikkola, & Kullman, 2012).

## **Case Tampere**

The focus of Case Tampere was on children's sense of agency in day-to-day life in preschool. The design of Case Tampere was also in two phases and was implemented in the spring of 2011 in a preschool in the Tampere metropolitan area. As in Case Helsinki, here too preschool children and their families represented, to the best of our knowledge, the lower and upper-middle class of Finnish society in terms of socio-economic backgrounds. Altogether 19 children (ages 6-7, including 9 girls and 10 boys) and their preschool teacher took part in carrying out the research design, facilitated by the research assistants Jonna Jaatinen and Tuuli Mikkonen from our research group.

The first phase of the research began with the two assistants taking part in the daily life of the class and engaging in informal discussions with the children about their positive experiences in preschool. The assistants also made observations regarding the daily activities and rhythms of preschool. In a later report, they characterized the community as supportive of the children, and they encouraged the children to voice their opinions and thoughts; the reigning atmosphere in the community, they reported, was trusting and caring (Jaatinen, 2012). Based on their observations, the preschool environment and its practices did not differ noticeably from other Finnish preschools. The children participated in a rich set of activities during the day, ranging from more formal desk-top activities to free play, outdoor activities on the playground, occasional field trips, a daily rest time, and meal times. During the first phase, the children familiarized themselves with the digital cameras and also engaged in making drawings about everyday situations in preschool based on their own interests. The first phase ended

with a joint storytelling visualization, during which the children first listened to a narrative about a fictional character, Hillevi Mouse, who had experienced a moment of joy, and then drew a picture about the narrative.

Moments of joy (*ilon hetki* in Finnish) represent the way in which “agentic moments” of children’s preschool life was talked about with the children. Originally, the research team had suggested that a good way to verbalize these moments would be to talk about “sparkling” or “bubbly moments,” connoting a feeling of accomplishment. The preschool teacher, however, felt that the underlying meaning of these terms would not be understandable to the children. Instead, she suggested the term of “moments of joy,” which she felt would be more accessible to them. The story about Hillevi Mouse was also her idea as a way of explaining the focus of the documentation; meanwhile, making drawings of stories and different abstract phenomena was already an established way of working in the classroom.

In the second phase, the children began to document the positive moments of their preschool day-to-day life with the help of sketchbooks and digital cameras. Each child was provided with a personal sketchbook in which to draw their moments of joy whenever one occurred. The children were also were intermittently encouraged to draw in the sketchbooks every day. All the children were provided with a digital camera for a day. Prior to the distributions of the cameras, the children took part in a short conversation that served to remind them of what to capture in the photographs during the day.

As in Case Helsinki, the intended focus of the documentation was provided along with the cameras, this time as a visualization attached to the camera. By the end of the day, all of the children who had taken photographs took part in a joint focus group session where they could view, share, and discuss the photographs they had taken. The children could also share pictures from their sketchbooks in these focus groups. The documentation carried out in the second phase did not significantly alter the day-to-day life and its rhythms in the preschool. Also, during the second phase the children came up with their own ways of talking about their moments of joy. The children talked about “acemoments” (English for *ässähetket*) or moments when someone was “doing something excellent.” The children did not restrict their documentation solely to these kinds of moments, but also played around with the cameras and documented different kinds of moments and artifacts.

The focus group situations were designed to encourage the children to share and discuss the moments they had documented. Two to three children participated in a focus group at time in addition to Tuuli and Jonna. On the whole, the interactional dynamics of the interviews were reciprocal and open to initiatives from each party. In practice, the groups began with Tuuli and Jonna uploading the photographs onto a laptop. The children sat in a semi-circle around the computer, and all could view the screen easily. Once the order in which the children

would share their experiences was decided, the interaction proceeded with each child sharing his or her pictures at a time, while the others listened. In comparison to the first phase of Case Helsinki, the children in Case Tampere commented much more on each other's photographs and also interacted more. The role of the researchers was to guide the focus groups and keep the discussions centered on the pictures. The researchers also paid careful attention to emerging topics and to the children's initiatives in order to foster their participation in the groups. Although the researchers asked most of the questions and also handled the computer, the children guided the interaction as well, for example, by playing around with the cameras, asking the researchers questions, and engaging briefly in other activities during the focus groups. Altogether six focus group sessions were held during which 74 pictures were shared and reflected on in addition to other, undocumented moments. The focus groups were video recorded, providing a total of 3 hours and 14 minutes of interaction, which comprises the data source for Case Tampere. This data source was analyzed in studies 3 and 4.

Overall, Case Tampere can be described as a situation in which Finnish preschoolers talked about their positive experiences during the school day with the help of photographs. Although the activity itself and the adults with whom the children shared and discussed their experiences were new to the children, but, as in Case Helsinki, making and sharing visual documents was not a far cry from the normal ways of working in the preschool. Furthermore, what we learned about the preschool, its practices, and the children through their documentation and sharing was familiar to us from previous experiences and interactions with Finnish preschools, their staffs, and their children. The familiarity of the preschool's practices was also borne out by other recent research on Finnish preschools (e.g., Puroila et al., 2012; Alanen & Karila, 2009).

## **Analytical procedures**

The analysis of the data sources generated in both Case Helsinki and Case Tampere was grounded in micro-level interaction analysis (e.g., Jordan & Hendersson, 1995). In interaction analysis, audio and video recordings of interactions are treated as data sources from which the researchers, via multiple viewings, construct a specific data set or sets for further analysis in various studies (Ericsson, 2006). To facilitate this construction, we made content logs on tape of the verbal, visible, and material conduct of the participants for each individual study. In practice, we began by viewing the entire data source in full and, during that viewing, produced a written, episode-based document describing the structure and interactional order of each interview or focus group from the participants' perspective. In later viewings, further detail about the interaction was added, and on occasion the initial episode-based partitioning of the data source was changed, owing to clarified understanding of the interaction taking place. Also, while



Studies 2 and 4 used the data sources that had already been scrutinized (Case Helsinki was used in Studies 1 and 2, and Case Tampere was used in Studies 3 and 4) and thus benefited from the content logs and transcriptions, the differences in the specific focus of the studies meant that the content logs had to be revised to match the new focus more accurately.

In Study 4, we used embodied interaction analysis developed by Charles Goodwin and his colleagues (e.g., 2000) to analyze how photographs functioned as mediational means when the children shared and reflected on their experiences in Case Tampere. After selecting all the episodes in which the children told about their experiences, we analyzed closely how, if at all, the photographs functioned as semiotic fields in the interaction. In addition to analyzing the material with the research group, we held joint data sessions with researchers from other groups employing similar methods. In interaction analysis, joint data sessions are often viewed as a good way to validate observations made from the data (Jordan & Hendersson, 1995).

## **Research ethics**

The ethical decision-making in the design of individual studies, their implementation, data analysis, and publication, as well as the curation of the data sources created for this dissertation were guided by the ethical principles of research in the humanities and the social and behavioral sciences, provided by the Finnish Advisory Board on Research Integrity (2009). However, while the principles provide valuable direction on all aspects of the process, working with children, especially when applying video and visual methods, requires special attention to questions of ethics. Regarding these questions, prior methodological literature on the topic (e.g., Dockett, Einarsdottir, & Perry, 2009; Thomson, 2008; Lahman, 2008; Bertram et al., 2015) guided our conduct.

One especially troublesome aspect of participatory visual research is the fact that the research design intentionally aims to produce records of human interaction (e.g., photographs and videos), which are not fully under the control of the researchers. Participants, in this case, children, their parents, and teachers are provided with the means and latitude to record and circulate visual material at their discretion. While joint discussions, agreements, and guidelines aid in establishing a clear and shared practice for producing the records, part of the decision-making (“what to record?”) rests by default with the participants and their judgment. Furthermore, while recording a video or taking a photograph in itself is often not harmful to participants, the questions of who gets to see the recorded material, where, and for what purposes are a different matter. In addition, with the rapid development and affordability of various kinds of recording devices, which seem to be ubiquitous, capturing previously hard-to-reach interactions in greater scope has been made easier than ever. However, just because researchers

now have the means to record these interactions should not dictate that such things should automatically be recorded. To borrow a striking analogy from Goldman (2007), visual researchers need to consider whether their designs and methods are replaying the colonization agenda of explorers of earlier times.

These questions arose especially in phase 1 of Case Helsinki. As part of the design, the participating pupils were given cameras to document positive moments during their school day. In practice, this meant that the children took photographs during breaks and lunch hour, thereby on occasion capturing other pupils, teachers, and school staff in the pictures. Although the need to be respectful of others was emphasized and discussed with the pupils, as was making an effort to frame the photographs so that only consenting persons were shown, the mere fact of pupils taking photographs and looking at them in joint school spaces – something which is not a common practice – created disruptions. On occasion, the participating pupils' playful orientation to the documentation and taking of mock-up shots made some teachers as well as other pupils wary of the research and dubious of whether sufficient attention had been given to the issue of privacy. In addition to providing the teachers and pupils in question with more information regarding the study, its goals, and its data handling procedures, these instances were also discussed jointly with all the participating pupils before cameras were handed out the next day.

What the experiences from the early parts of Case Helsinki highlight, as do those from the overall implementation of our design, is that conducting research with and within different human organizations always necessitates intervening in the lives of certain persons and their practices and creates conditions for a potential clash between differences in the values espoused by the researcher and those upheld by the participants (Cole & Engeström, 2007). Thus, the success and value of the research is in part determined by the way in which the participants assign value and importance to the study and how much agency they are allowed in relation to the design. Being aware of this, and of the fact that the researchers' goodwill and efforts alone would not make the research participatory, we asked the children in both cases to reflect on the research process and how they felt about it.

In Case Helsinki, all of the children in the case study said that taking the photographs and talking about their experiences was fun and easy for them. They also considered both research phases to be interesting, bringing positive variety to their school days. One of the children thought that the method would be especially good for shy children who otherwise find it hard to share their experiences. She also thought that sharing and talking about the pictures with the whole class in phase 1 was a good way to learn what other pupils in the class saw and appreciated. In Case Tampere, the children were enthusiastic about being part of the research. In reflecting on the process, they said that taking the pictures was fun and felt nice. Also, they reported, sharing the pictures was inte-

resting, as they could see and hear what the other children had documented with their cameras. One of the children even stated, “*When I am older, I will join your research group.*” While these statements demonstrate the children’s positive reactions to being part of the study, in reviewing the recorded focus groups in Tampere, it was also evident that the children’s interests in the research fluctuated; at times, they eagerly tell about their experiences and are engaged with the focus groups; at other times their interest is grabbed by something else in the room or their minimal participation indicates that they do not want to talk about their photographs.

Table 1 summarizes and compares the core aspects of Case Helsinki and Case Tampere.

Table 1. Comparison between core aspects of Case Helsinki and Case Tampere						
	Focus	Participants	Orientation work	Instructions	Data sources	Analysis methods
<b>Case Helsinki</b>	Sense of agency across contexts	Anna, Eetu, Liisa and Erno, 9-10 year-olds from the Helsinki metropolitan area	Two weeks of documenting. First week self selected focus. Second week focus on positive moments.	Over a three day period, take pictures of people, things and situations that are important to you. Take also picture of moments in which you felt happy, very glad, didn't want to stop doing something, sad, angry or when doing something felt difficult	1 h and 45 min of recorded open ended interviews	Interactional analysis  Modalities of agency
<b>Case Tampere</b>	Sense of agency in preschool	a preschool classroom from the Tampere metropolitan area	One week of documentation on self selected focus.	Draw or take pictures of your moments of joy during preschool.	3h and 14 min of focus group interaction	Interactional analysis  Modalities of agency Embodied interaction analysis

## Overview of the original articles

This dissertation consists of four individual studies. The first three address children's sense of agency, and the fourth focuses on methodological issues of visual research methods with children. Study 1 examines the social of practice of photo-reflection situations as a site for the emergence of children's sense of agency with four third-grade children who reflect on their day-to-day life in various settings with the help of photographs they had taken. Study 2 further investigates the forms of agency talked into being in these photo-reflection situations and the different practices to which these forms of sense of agency are connected. Study 3 focuses on the different manifestations of sense of agency when preschool-age children reflect on positive events during their daily life in preschool. Studies 1, 2, and 3 make a substantial contribution to the literature on children's sense of agency.

In turn, Study 4 provides a methodological contribution by investigating how visual tools, in this case, photographs, are used by children and adults in reflection situations to share and discuss children's experiences. In addition, Study 2 offers a methodological contribution by developing and implementing an analytical framework for analyzing the emergence of children's sense of agency by its modalities (see Appendix 2). This framework was also used to analyze children's sense of agency in Study 3.

In all, the studies were guided by the following two hypotheses. First, we assumed that children can engage in detailed reflection on their agentic experiences, given that the encompassing research design is open to their agency. Second, we also assumed that the social and cultural-technological arrangement of these reflection situations would mediate the emergence of children's sense of agency and thus play into its formation. The empirical investigations into children's sense of agency and its culturally-mediated emergence in social interactions have further refined and explored the boundaries of these hypotheses. This is demonstrated by the sequential progression of the theoretical conceptualizations and analytical tools employed in the studies. In short, the series of studies moved from analyzing sense of agency with the broad theoretical vocabulary provided by previous empirical studies on agency (Study 1) to focusing more closely on the nuanced differences in how the connection between an individual and a given practice or moment was constructed in the joint reflection (Study 2). In addition, the conceptual boundaries of sense of agency was explored with the help of the concept of radical passivity (Study 3). The next section will elaborate on and contrast each study more closely. The main differences and similarities between the studies are also summarized in the table (Table 2.) at the end of this section.

## **Study 1. Building on the Positive in Children's Lives: A Co-participatory Study on the Social Construction of Children's Sense of Agency**

Study 1 represents an exploratory investigation into the social construction of children's sense of agency. As the first part of a series of studies, the aim of Study 1 was to introduce the overall co-participatory research design and explore its implementation and its potential for fostering and studying children's sense of agency. More specifically, the study sought to understand how sense of agency was manifested when children reflected on their everyday lives and also what counted as positive events in these reflections.

The design of Study 1 was based on joint work with two third-grade elementary classes in the Helsinki metropolitan area. In the first part of the study, the pupils, teachers, and researcher together learned how to document and discuss the positive events in children's everyday school lives. In practice, each pupil engaged in documenting positive moments during the school day with the help of a digital camera, and afterwards reflected on and shared these moments in focus groups of four to five. In the second part of the study, four pupils (Anna, Liisa, Erno, and Eetu, a girl and a boy from each classroom) continued documenting their lives in different everyday settings. The subsequent reflection situations conducted with these four pupils were video or audio recorded, and the material comprises the data sources used in this study.

In order to analyze the manifestations of sense of agency, as well as what was constructed as positive moments in the reflection situations, we employed micro-level interactional analysis of the recorded material. Specifically, after the completion of detailed content logs of the material, our analysis focused on thematically coherent episodes of interaction and looked closely at what seemed to afford positive moments in a child's daily life, as well as how his or her sense of agency was talked into being in these episodes.

The results revealed that the positive moments of the children's lives were embedded in a range of different social practices. These moments were afforded by relationships with important others, the use of artifacts in various social practices, and engagement in everyday activities and accomplishments. More importantly, the analysis revealed that documenting and reflecting on these positive moments gave rise to different manifestations of children's sense of agency. Specifically, the results entailed relational and transformational agency and appreciating one's own efforts and the resulting success.

Overall, the results of the preliminary study demonstrated how the social practice of documenting, sharing, and collective reflecting on photographs of positive moments provided a supportive context for the social construction of the children's sense of agency. Furthermore, the study argued that these manifestations could be seen as important contributors to children's well-being. Yet despite these important contributions, the study also revealed a need to develop new

theoretical conceptualizations and analytical tools that would be more attuned to the nuanced ways in which children's sense of agency was talked into being in the reflection situations.

## **Study 2. Sense of Agency and Everyday Life: Children's Perspective**

The aim of Study 2 was to investigate children's sense of agency in a way that would be sensitive to the children's perspective and also add to our understanding of how different settings and practices play into the way children fathom their agency. In contrast to previous conceptualizations of sense of agency, the study emphasized the socio-culturally mediated and situated nature of children's reflections on their agency. Furthermore, the study argued that current socio-cultural theorization could not describe in detail how children's different aspirations, competencies, or beliefs related to concrete actions taken in social situations.

To address this need, we used the concept of modalities of agency, originally employed in narrative semiotics, to theorize more closely how sense of agency was socially constructed in photo-reflection situations. Significantly, the potential of this theoretical contribution was explored by re-analyzing the photo-reflection interaction of Anna, Liisa, Erno, and Eetu in Study 1. To achieve this, we developed an analytical framework with which to examine the social construction of sense of agency by means of its modalities. Also, the unit of analysis was expanded to include all episodes of interaction that connect thematically to the same practice. Altogether 56 different practices and 270 different occurrences of modalities of agency were identified in the data set.

The results of Study 2 revealed a more nuanced picture of the social construction of sense of agency in the photo-reflection situation than Study 1. Analyzing sense of agency by its modalities highlighted how differently the sense of agency of Anna, Liisa, Erno, and Eetu manifested in relation to the various practices in their everyday lives. To characterize this relative difference in the data, we called the most strongly contrasting manifestations a straightforward account of sense of agency and an elaborate account of sense of agency respectively. Moreover, the analysis demonstrated how the children's perspective on their agency entailed understanding how their agency was connected to other people, such as friends and various adults, as well as an appreciation of the conflictual and contested nature of agency.

The results of Study 2 reveal the practice-related nature of children's sense of agency and demonstrate how different settings provide different agentic experiences. The study addressed the under-theorization of individual agents embedded in social practices by employing the concept of modalities of agency. In this regard, the study also provided evidence of the potential of the modalities of agency as an analytical framework for studying children's sense of agency.

**Table 2. Comparison between core elements of thesis articles**

Article	Focus	Main theoretical concepts	Research questions	Dataset	Unit of analysis	Method
Building on the Positive in Children's Lives: A Co-participatory Study on the Social Construction of Children's Sense of Agency	The social construction of children's sense of agency and its manifestations	Agency Sense of agency	<ol style="list-style-type: none"> <li>1. What accounts for a positive event in the children's social interaction during the collective photo-reflection situation?</li> <li>2. How is children's sense of agency manifested in their social interaction during the collective photo-reflection situation?</li> </ol>	<i>Case Helsinki</i> , i.e., four case study children reflect on their everyday life across contexts	Thematic episodes of interview interaction	Co-participatory research Micro-level analysis of social interaction
Sense of Agency and Everyday Life: Children's Perspective	The social construction of children's sense of agency by its modalities.	Sense of agency Modalities of agency	<ol style="list-style-type: none"> <li>1. How do children draw on different modalities to characterize their own agency when reflecting on different practices of their life?</li> <li>2. What kind of insights can we, as analysts, draw from these reflections regarding their sense of agency in these practices?</li> </ol>	<i>Case Helsinki</i> , i.e., four case study children reflect on their everyday life across contexts	Thematically connected episodes of interviewer interaction relating to specific practices	Co-participatory research Micro-level analysis of social interaction Analysis of sense of agency by its modalities
Children's Sense of Agency in Preschool: A Socio-Cultural Investigation	The social construction of children's sense of agency by its modalities	Sense of agency Modalities of agency Radical passivity	<ol style="list-style-type: none"> <li>1. In what ways are children's sense of agency and relating activities talked into being when discussing children's preschool day experiences?</li> </ol>	<i>Case Tampere</i> , i.e., preschool children reflect on their positive experiences in preschool	Thematic episodes of focus group interaction	Co-participatory research Micro-level analysis of social interaction Analysis of sense of agency by its modalities
Visual Tools as Mediatlional Means: A Methodological Investigation	The function of photographs and drawings as mediational means.	Explicit mediation Contextual configuration Semiotic field	<ol style="list-style-type: none"> <li>1. How are drawings and photographs used as parts of contextual configurations when children and adults discuss children's preschool day experiences?</li> </ol>	<i>Case Tampere</i> , i.e., preschool children reflect on their positive experiences in preschool	Thematic episodes of focus group interaction	Co-participatory research Embodied interactional analysis

Table 3. Summary of research findings from empirical articles

Research question	ARTICLE 1	ARTICLE 2	ARTICLE 3	ARTICLE 4
In what ways does sense of agency manifest when children reflect on their everyday life?	<p>We identified moments of:</p> <ul style="list-style-type: none"> <li>relational agency</li> <li>transformational agency</li> <li>appreciation of one's own competent engagement in different activities</li> </ul>	<p>We discovered that children's sense of agency was practice related, i.e., it varied in relation to the practices being reflected on. We also identified two contrasting manifestations of sense of agency:</p> <ol style="list-style-type: none"> <li>straightforward account of sense of agency, and</li> <li>elaborate account of sense of agency</li> </ol>	<p>We identified five different forms of sense of agency talked into being in the focus groups situations:</p> <ul style="list-style-type: none"> <li>I can</li> <li>I want to</li> <li>I can and want to</li> <li>I want to and it's possible</li> <li>I want to, I can, and it's possible</li> </ul>	
What different day-to-day events are talked into being when children reflect on their everyday life?	<p>We identified events where the children:</p> <ul style="list-style-type: none"> <li>were with important family members</li> <li>used various artefacts in different ways</li> <li>engaged in mundane or routine activities</li> <li>accomplished or succeed at something</li> </ul>	<p>The events ranged from <i>mundane activities</i> (reading), <i>more special practices</i> (planning one's future professions and hobbies), and <i>being a family member</i> (playing with one's siblings) to <i>taking part in the research process</i></p>	<p>We identified four different events in relation to which the children voiced their sense of agency. The activities were:</p> <ul style="list-style-type: none"> <li>Play</li> <li>Care and mundane activities</li> <li>Guided activities</li> <li>Research</li> <li>Unspecified</li> </ul>	
In what ways do different modalities of agency mediate the social construction of children's sense of agency when children reflect on their everyday life?		<p>The modalities provided a fitting intermediate theoretical tool to analyze the construction of sense of agency. The different modalities were used to a different degrees in the reflections</p>		
In what ways do photographs mediate the social construction of children's sense of agency when children reflect on their everyday life?				<p>We determined that the pictures functioned both as representations of details in events and as backgrounds for re-evaluating the original events. We also identified moments when the photographs were not used as part of telling about one's experiences.</p>



### **Study 3: Children's Sense of Agency in Preschool: A Socio-Cultural Investigation**

The aim of Study 3 was to investigate children's agentic experiences in day-to-day life in preschool. While the previous study highlighted the qualitatively different degrees of children's sense of agency in various everyday life contexts, Study 3 set out to determine how these differences come into play in preschool and its various activities. Furthermore, the study identified the need to explore the more ambivalent aspects of children's sense of agency through the concept of radical passivity.

The design followed that of Study 1, but with a concentration on the interactional data from the focus groups. In the first phase, the researchers, the preschool children, and their teacher engaged in discussions about the children's positive experiences during everyday life in preschool. In the second phase, the children were provided with digital cameras and sketchbooks with which they could document their experiences. These documents were discussed by the researchers in focus groups with two to three children per group. The focus group interaction was video recorded and totalled 192 minutes during which 74 pictures were discussed. This data source was then further sectioned into 141 thematic episodes of which 71, all centering on children's preschool day experiences, were selected to form the dataset analyzed.

The subsequent micro-level interactional analysis employed the framework developed in Study 2. In addition, the analysis also took into account the possibilities of the concept of radical passivity in outlining the conceptual boundaries of sense of agency and its manifestation in social interaction.

In line with Study 2, the results of Study 3 highlighted the wide range of agentic experiences manifested in the photo-reflection situations. More specifically, the study revealed five different forms of sense of agency that were talked into being. These forms, which differ in composition and degree of complexity, ranged from sense of agency characterized by personal skills and desires to sense of agency described in more detail via multiple modalities of agency. Furthermore, the analysis demonstrated how mundane activities, such as walking to the library or dressing up, can function as potentially significant sites for an emerging sense of agency, thereby expanding our understanding of how children's sense of agency plays out in preschool settings.

The results of Study 3 give further evidence of the ways in which children's sense of agency is open to descriptions of degree. The study also highlighted how these various manifestations of sense of agency were related to the different activities taking place in the day-to-day life of the preschool in question. In addition, the study demonstrated the importance of the concept of radical passivity in providing a valuable conceptual contrast to theorizations of sense of agency, which emphasize the intentionality of human agency and theorize its ambiguous aspects.

#### **Study 4: Visual Tools as Mediation Means: A Methodological Investigation**

The aim of Study 4 was to provide a methodological contribution to visual studies with children. Specifically, the purpose was to reveal how visual tools, such as photographs, were used by the research participants. Moreover, the study highlighted how photographs functioned as mediational means when children shared and reflected on their experiences.

The data sources used were the same as in Study 3. As part of the analysis, the video-recorded interactions in the preschool focus groups were revisited with specific interest in how the participants used the photographs and drawings. As result, 82 episodes out of a total of 133 were selected for closer analysis<sup>3</sup>. The analysis applied embodied interactional methods and hence focused on the photographs as semiotic fields, which were part of the larger contextual configuration employed by the children and adults to share and discuss the children's preschool experiences.

The results showed that the photographs functioned as explicit mediational means in the focus groups. The analysis showed how this mediation took different forms during the interaction. In short, photographs were used to share details about the children's experiences and also provide a background for reappraising the original event. In addition, the analysis identified moments in which the visual tools were not used to aid the children's reporting.

Overall, Study 4 showed how the visual tools were central to the participants' meaning making in the focus groups. The study argued that the shifts identified in different uses of the visual tools pointed to the children's agency as tool creators in the focus groups. This also highlighted the material resistance of the tools themselves and thus also how their material agency was entangled in the interaction. The fact that there were moments of relating events in which the photographs were not used by the participants pointed to the possibility that the encompassing research context, especially the making of visual tools, could potentially be a significant feature in co-creating a trusting and familiar ethos in focus group situations.

Table 2 below summarizes and compares the main aspects of the four studies that make up this dissertation. Table 3 collates the findings from the four studies.

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<sup>3</sup> The difference between the number of selected episodes in Studies 3 and 4 is explained by the order in which they were completed in practice and eventually published. The analysis in Study 4 was completed before we engaged in the closer analysis of Study 3. As a result, the sectioning of the data sources from the preschool for Study 3 benefited from the previous micro-level analysis done in Study 4 and thus could be done in more detail.

## Discussion

This section summarizes the main results of this dissertation in relation to the objectives outlined. The section will also discuss the results in relation to related research. The section will finish by highlighting the different contributions of this dissertation and examine potential future lines of inquiry.

### Main results

The main objective of this dissertation was to study children's sense of agency from the children's perspective. In recent years, educational and learning sciences have experienced a surge of research focusing on the agency of learners of different ages (Rainio, 2010). Yet seldom have researchers paid attention to what the learners themselves have to say about their agency and how they experience agency. By examining the joint reflective discussions, the present dissertation provides empirical evidence for the various dynamic ways in which children experience their agency. The dissertation thereby contributes to existing lines of inquiry on the particularity of individual engagement in collective activities (McCarthy, Sullivan, & Wright, 2006; Nasir & Hand, 2008; Nardi, 2005; Rajala, Martin, & Kumpulainen, submitted).

In addition, the dissertation advances understanding of children's agentic experiences by expanding the scope of current research. Within the existing literature, the study of children's agency and their awareness of it often focuses on formal learning situations or settings such as preschools, classrooms, or specifically designed learning activities within these settings. In other words, children's agentic experiences in other situations within these settings or in other settings altogether have not been studied. The empirical evidence presented in this dissertation highlights how children's agentic experiences take place in many different situations in their everyday lives in addition to more formal learning situations. Here, along with other studies (e.g., Hedegaard, Aaronson, Højholt, & Skjær Ulvik, 2012; Erstad, Kumpulainen, Mäkitalo, Pruulmann-Vengerfeldt, & Jóhannsdóttir, 2015), the dissertation argues for the importance of developing a holistic understanding of children's lives as they move through different situations and settings.

Furthermore, by employing and developing participatory visual methods discourse analysis, the dissertation adds to our current understanding of how different cultural means, that is, discursive and visual tools, partake in the process of social construction of children's sense of agency. While the importance and impact of visual tools in participatory research efforts is often championed, for example, the ways in which these tools are used when children relate their views or experiences is seldom demonstrated when the findings are reported. The pre-

sent dissertation provides new understanding of how visual tools act as mediational means when children reflect on their everyday experiences. In addition, the development of an analytical framework for studying the construction of sense of agency by its modalities provides a potential way to study empirically the dynamics of individual engagements in social level processes (e.g., Sannino, 2008).

Overall, the results of this dissertation speak to the potential of co-participatory research endeavors with children with regard to their daily lives and experiences. Each of the sub-studies presented above demonstrates how the participating children engaged in detailed joint reflection on their experiences and how their reflections yielded new insights into the children's awareness of the possibilities for taking action in various activities. While the research process overall entailed much learning on the part of the researchers themselves, demonstrated, for example, by the conceptual progression of the theoretical framework of each individual study, these four studies in fact provide evidence of how rich and elaborate the reflective discussions with children can be and how these types of discussions have much to teach us about children's lives and perspectives.

The more specific research results of the dissertation's individual studies can be summarized as follows:

### **Objective 1: To study of children's sense of agency from the children's perspective**

*Question 1: In what ways does sense of agency manifest when children reflect on their everyday lives?*

The results of Studies 1, 2, and 3 show that children's sense of agency manifests in different complex arrangements in their reflections. In the Study 1, we identified and characterized this complexity in relation to existing conceptualizations of agency. Here, we identified passages in the joint reflection in which such things as relational or transformative agency were brought up. In Study 2, with the help of the modalities of agency we could talk more specifically about the nuances of children's sense of agency. Rather than adopting different categorizations, we characterized the manifestations of sense of agency as two contrasting categories: straightforward accounts of sense of agency and elaborate accounts of sense of agency. What this analysis revealed was how the socially constructed position of the children in the joint reflections on their experiences was at the core of the complexity. In other words, in one account the child's position could be relatively more intricate or "more woven into" the structure, so to speak, of the discussed event or activity in comparison to other accounts by the same child. While Study 2 remained at the level of a broad categorical distinction, in Study 3 the complexity of the manifestations was mapped in greater detail. With the help of modalities of agency, we identified five different accounts

of sense of agency in the joint reflections, ranging from rather uncomplicated accounts to more detailed and complex ones. The results of Study 3 thus echoed the less granular observations of Study 2, but brought out more detail in relation to the substance of the accounts.

In terms of the different accounts, when the rationale for doing something could be described as something that a child could do or wanted to do, this would be an example of a straightforward account of sense of agency. Erick, for instance, one of the boys participating in Case Tampere, explained how he could take part in a short moment of playing with his friend because he could play with knights. A step towards a more complex account would then incorporate more description of the rationale for engagement. Eetu, a boy from Case Helsinki, explained how he often traced and drew different animals from pictures because he liked the activity and believed he was good at it. Then there are the most complex or elaborate accounts, those in which the actions taken could be described not just by talking about wanting something or being able to do something, but those relating in detail how that moment was experienced, whether or not the person in question had the competence to engage in the action or if the actions were demanded or requested by someone else. For example, Anna, one of the girls participating in Case Tampere, explained how she read aloud to another child for the first time, how it felt to experience that, and how, in reading, she had to be careful not to disturb the other children napping in the next room.

What the results of Studies 1, 2, and 3 exemplify in broader terms can be described using Alessandro Duranti's concept of "intentionality continuum" (2015). With this concept, Duranti, a linguistic anthropologist, attempted to capture is the

range of graded ways of being disposed or mentally (and sensorially) connected with some entity in the world, from a basic relationship between our consciousness and some entity that attracts our attention (through sound, vision, smell, taste, or touch or any combination of them) all the way to our partly explicit anticipation or planning of complex activities, resulting from several hierarchically organized dispositions, like telling a story, having a dinner party, or preparing for a business meeting and then running it. (Duranti, 2015, p. 291-292).

Duranti's conceptualizations are an attempt to bring more granularity and nuance to discussions of human intentionality, which, according to him, have thus far mainly operated with dichotomous concepts, such as I-intentions/we-intentions or intentions and Intentions (e.g., Searle, 1990). Significantly, Duranti's conceptualization is grounded in his anthropological work in Samoa. While the theoretical background of the intentional continuum is deeply imbued with philosophical readings, it also has an empirical foundation based on observations

of how different people talk about intentionality. What this helps to highlight is that the concept of the intentionality continuum is meant to make distinctions not only in philosophical notions, but also in how different levels of intentionality are awarded in joint discussions.

With regard to the results of this dissertation, the intentional continuum can be used to describe the varying complexity of children's sense of agency. The more straightforward accounts of sense of agency could be understood as demonstrating that part of the continuum where intentions are more easily described, are uncomplicated, or even are just forming. The more complex or elaborate accounts of sense of agency would then reflect the opposite end of the continuum where the sources and inspirations of actions and their compounded and tangled nature is emphasized. More important, Duranti's notions also help to accentuate that the results here mark differences in how intentionality is assigned to certain actions in joint discussion between adults and children. Rather than conflating the jointly accomplished accounts of the children's actions fully with the intentionality of the actions that took place in the moment talked about, the different forms of sense of agency identified can be seen as interactional achievements and different ways in which children and adults talk about intentional action with each other.

In addition to the results already discussed on children's sense of agency in this dissertation, one more observation needs to be made. In Studies 2 and 3, both of which used the analytical framework of modalities of agency, the analysis also highlighted accounts in which the children's sense of agency encompassed tensions or a short narrative of change or a problem being solved. In reflecting on different positive or other moments in their everyday lives and on their own actions, the children would talk about how they encountered a problematic situation and then solve it. For example, a situation which we characterized as transformative agency in Study 1 involved Anna, one of the girls taking part in Case Helsinki, who shared the fact that she changed from writing on the computer to writing with a pen and paper in order to continue writing on the streetcar while accompanying her mother to buy groceries. While accounts such as this demonstrate the mundane and prosaic features of children's sense of agency, they also provide insight into what sparks and leads to volitional action in children's everyday lives. The results of this dissertation connect with recent studies on the emergence of volitional action in double-bind situations (Sannino & Laitinen, 2015). Yet notably, the results presented in the studies only begin to pave the way for research into this topic in the context of children's everyday lives from a socio-cultural perspective.

*Question 2. What day-to-day events are talked into being when children reflect on their everyday lives?*

The results of Studies 1, 2, and 3 address the second research question in this dissertation, each in their respective ways. What the results of the studies show is that children's sense of agency is manifested in their reflections in relation to many different activities in their everyday lives. In both Case Helsinki and Case Tampere, the children documented their agentic experiences not just in one or two situations, but in situations ranging across multiple places and institutions. In Case Helsinki, Anna, Liisa, Erno, and Eetu documented their experiences at home, at school, while doing their hobbies, and in the most mundane situations, like walking home from school, as well as in more extraordinary moments such as imagining their future professions and hobbies. In Case Tampere, the children documented their experiences during the preschool day. What the analysis of the joint reflection situations highlighted was that the children's sense of agency was voiced in relation to the many activities they engaged in during the school day. As with Case Helsinki, here too the children talked about experiences that took place outside the more formally arranged learning activities, such as play situations or mundane activities like dressing up.

This dissertation makes an important contribution to the existing literature on children's understanding of their agency in two connected ways: first, by highlighting that, from a child's perspective, ordinary and routine events play a part in constituting a sense of agency; and second, by showing that these events take place both within and outside of the more formal learning situations. In relation to the first point, the fact that the children documented and discussed moments such as being sick and staying home or walking to the library underscores the importance of these events for understanding their sense of agency. While special and extraordinary events, such as starting school or learning a new skill (to read, for example), are vital to understanding our agency, it is also the commonplace and fleeting moments of our daily lives that constitutes the core of our experience and thus plays a central role in shaping how we come to understand ourselves as actors in the world (see also Johnson, 2008). The results of this dissertation highlight these kinds of experiences in the context of children's daily lives. In relation to the second contribution, the reported results also highlighted how meaningful experiences of one's agency take place outside formal learning situations. Previous research, such as Määttä, Järvelä, and Perry (2015) and; Robson (2010) have focused on efforts to understand children's awareness of their agency in formal educational experiences. Although the importance of mastery or vicarious experiences taking place outside academic domains is clearly apparent in the theoretical impetus for this line of research, the experiences are seldom reflected in empirical studies. This dissertation takes a step in that direction.

Overall, the results relating to the second research question posed here oblige us to consider children's awareness of their agency from a more networked or holistic perspective (e.g., Hedegaard, Aaronson, Højholt, & Skjær Ulvik, 2012). Instead of focusing on agentic experience provided by a certain type of event or events within certain institutions, be they at home, school or something else, children live their lives and gain agentic experiences in many different events and settings. Given, for example, that the children in Case Helsinki documented agentic experiences in multiple settings potentially speaks to the robustness of a network of people and practices around the children in providing them with opportunities to act agentially and thus to be aware of their own agency.

## **Objective 2: To develop co-investigative visual methods and discourse analysis methods for studying children's sense of agency**

*Question 1: In what ways do different modalities of agency mediate the social construction of children's sense of agency when children reflect on their everyday lives?*

Study 2 in this dissertation addressed this question most directly. In this study, a framework was developed for use in analyzing sense of agency by means of its modalities. The purpose was to understand how the modalities of agency were used as discursive tools in reflection situations. This framework was also adapted for use in Study 3.

In general, the results of both studies emphasized that the modalities of agency were used in manifold ways to construct the children's sense of agency in joint reflection situations. Through the modalities, the children could position themselves in numerous ways in relation to the various practices or events of their daily lives. More specifically, there were individual differences in the ways certain modalities were employed. For example, in both studies, the modality most often apparent in reflective talk was *"to feel, appreciate and experience."* While this could be interpreted as reflecting the children's competence in engaging in emotional conversational rhetoric (Edwards, 1999), the expressions of this modality can also be seen as implying the role of heightened emotional experiences, both in constituting and in becoming aware of one's sense of agency. Within the socio-cultural framework, a similar argument for the role of positive experiences or, more precisely, moments of joy, in relation to feeling more active in the world has been made on the basis of the philosophical work of Spinoza and Nietzsche (Greco & Stenner, 2013). In contrast, the modality which was least apparent in the reflective discussion in both Studies 2 and 3 was the modality *"to be able to."* This relative difference to other modalities could indicate that aspects of agency connected to one's body and its capabilities is not a highly salient issue from the children's perspective.



Overall, in both studies the modalities provided a fitting intermediate theoretical tool with which to analyze the construction of children's sense of agency. In this regard, the present dissertation points out the applicability of the modalities of agency as a theoretical and empirical construct to address the under-theorization of the individual actor in socio-cultural approaches to agency (Stetsenko, 2008). Through the modalities, we were able to extend existing conceptualizations of the individual actor by incorporating aspects that highlight how the actor's own aspirations, beliefs, and competencies, from their perspective, connect with a particular practice. Indeed, the modalities of agency as an analytical tool allowed us to bring forth the particularity of individual engagement in collective activities (McCarthy, Sullivan, & Wright, 2006; Nasir & Hand, 2008; Nardi, 2005; Rajala, Martin, & Kumpulainen, submitted).

*Question 2: In what ways do photographs mediate the social construction of children's sense of agency when children reflect on their everyday lives?*

Study 4 set out to answer the fourth research question above for this thesis. The study's empirical results demonstrated that the photographs the children had taken of the positive moments acted as explicit mediational means in different two ways. The results also highlighted how the specific meaning of the pictures could change in the course of the interaction and thus afford a topic for joint reflection. Both of these observations speak to the dynamic and situative nature of the photographs as mediational means. What seemed to drive this dynamic use was partly the fact that not all aspects of the documented moment could be portrayed in the photograph. Interestingly, while previous research has often emphasized visual tools as being flexible and open to multiple readings and uses (Thomson, 2008; O'Brien et al., 2012; Van House, 2011), the observations of Study 4 suggest in addition that their stability and resistance to certain usages mattered to the participants in the focus groups.

In contrast, along with highlighting these moments of visual tool use, the analysis revealed moments in which the children did not use the pictures to reflect on their experiences. In other words, the analysis identified moments when telling about their experiences was not mediated by the photographs. Rather than regarding this finding as undermining the relevance of visual tools in the construction of children's sense of agency, we see it as pointing to the significance of the tools in the overall research design. In effect, the process of creating the visual tools in itself might be seen as paving the way for a trusting and familiar ethos in focus group situations. This suggests that visual tools are not just *aides-memoires* or cognitive instruments (Clarke, 2010), but that they might also mediate the social organization in moments of telling and listening and the affective attunement in these moments, as Pyry (2013) has argued.

## **Excursions into the future: Emerging thoughts on potential lines of inquiry**

A broad socio-cultural perspective on human action and agency (e.g., Wertsch, 1988) has served as the theoretical backbone of this dissertation. This perspective aided in outlining the ways in which the main focus of this work – children’s sense of agency – is fundamentally grounded in and endowed by the social, cultural, and historical setting of its emergence. In order to contribute to this line of work and, more generally, to our understanding of children’s awareness of their agency, this dissertation has highlighted the particularity of individual engagement in collective activities. More specifically, through the modalities of agency, the dissertation has brought to the fore different ways in which children and adults differentiate and assign intentionality to children’s daily life events in joint reflective discussions. In this way, sense of agency, from a socio-cultural perspective, has been conceptualized as a socially constructed relation between an individual’s capabilities and aspirations and the perceived opportunities and limitations to taking action within a given situation.

However, while the above conceptualization clarifies the theoretical stance of this dissertation on sense of agency, it is not without its caveats. The crux of the conceptualization lies in its focus on the intentional reflection of one’s actions, specifically, enacted agency. As Rainio (2010) has noted, agency, and the sense of it, should not be reduced to visible actions alone, and researchers should endeavor to grasp its more elusive aspects. Such a conceptualization of sense of agency might overshadow areas of human experiencing, which elude reflection and clear-cut conceptualizations. Gallagher (2012, p. 28) further elaborates:

Although conceptually we may distinguish between different levels (first-order, higher-order), and neuroscientifically we may be able to identify different brain processes responsible for these different contributions, in our everyday phenomenology we tend to experience agency in a more holistic, qualitative, and ambiguous way which may be open to a description in terms of degree.

In other words, our own understanding of our agency might in actual practice be more varied than a simple dichotomy would allow and also less available to our conscious reflection while we are engaged in action or in afterthought. One potential conceptual avenue for overcoming this dichotomy is the notion of radical passivity.

The notion of radical passivity (e.g., Roth, 2010; Hofmeyr, 2009) attempts to conceptualize the human ability to be impressed by and open to the world around us and to each other. Building on the philosophical work of authors such as Levinas and Derrida, Roth argues that radical passivity represents another dialectical moment of human experience in relation to agency. Radical passivity

does not mean intentional non-engagement or willful non-participation (“I don’t participate”), but rather the possibility of being intentional about something. Whereas agency builds on intentionality, radical passivity is its opposite, the fundamental possibility to be moved by something we could not expect (and thus intend) and how it can affect us. Radical passivity therefore outlines what lies beyond intentionality and accounts for why something can call us to be intentional in the first place. In terms of sense of agency, radical passivity is potentially an important concept, because it provides the theoretical means to talk about how intentionality can emerge.

Although the notion of radical passivity has not been discussed at length in the socio-cultural literature, there are indications of the same idea in the work of Vygotsky and Leont’ev. For example, when writing on the role of external signs and tools in the formation of human will, Vygotsky (1997) argues that the control we have over our behavior is indirect and comes through our ability to create tools with which we control ourselves. In other words, our agency stems from our willful submission to the tools we utilize (Rainio, 2010) and from how the tools operate on us. Elsewhere, Vygotsky writes that “things and events we meet manifest for us a more or less determined will, they stimulate us to certain actions: Beautiful weather or a lovely landscape move us to take a walk” (1998, p. 10; see also Hviid, 2008). In similar fashion, Leont’ev’s arguments (1978; see also Engeström, Nummijoki & Sannino, 2012) concerning goal formation can be seen as outlining a theoretical position in which the possibility of being impressed and affected by the unfolding activity is central to goal formation. What these arguments more or less suggest is that we should pay attention, not just to how humans have agency, but also to how that agency stems in part from being able to be impressed by and subjecting ourselves to the world around us. In essence, these arguments point, in Roth’s terms, to the other dialectical moment of human experience, to radical passivity.

In the context of this dissertation, radical passivity has been used in part in Study 3 to address conceptual borders of sense of agency and thus to conceptualize experiences of agency more fully (see also McCarthy et al., 2006). What Study 3 showed was that, while radical passivity is a theoretical construct worthy of a line of research of its own, it can also be a useful concept for the study of sense of agency. Together with studies focusing on the emergence of volitional action (Sannino & Laitinen, 2015), radical passivity could be employed in empirical studies on how children (or adults) become aware of new possibilities to engage in action, for example, in new learning environments or in everyday life situations. These potential studies could process important knowledge concerning how pedagogical innovations play into and afford new agentic experiences, perhaps even empowering experiences, for learners.

In addition, the findings of this dissertation have pedagogical implications for early childhood educators as well as for class teachers. Prior research has called

attention to how little space children are given to express, reflect on, and develop their personal perspectives on their engagement in educational activities (e.g., Määttä & Järvelä, 2013). As a result, teachers often guide the pedagogical work based on their own, albeit limited, observations. Collecting and jointly reflecting on the positive moments of children's everyday lives could potentially function as a way for teachers to learn about children's experiences and at the same time serve as a pedagogical approach to foster children's sense of agency. While the reflection situations analyzed in this dissertation were not entire classroom discussions and encompassed only a few children at a time, the discussions nevertheless offered useful opportunities for the children to express various perspectives on and ways of talking about their lives and agency. Gillespie (2012) has argued that this kind of perspective exchange is at the heart of developing agency. Moreover, similar activities could be thought of as spaces for re-mediation whereby documenting, sharing, and reflecting serve as means for appropriating novel ways to see one's life (Wertsch et al., 1996). In this connection, an undervalued aspect of the creation of these kinds of visual tools is their potential to depict or inspire the imagining of alternative futures and thereby serve as imaginative tools for pedagogical work (e.g., Lipponen et al., 2015).

In this regard, more longitudinal pedagogical innovations employing participatory structures and tools of these types could potentially provide very interesting avenues for future research. For example, the data sets analyzed in this dissertation were all based on single reflection sessions. How these reflections and the construction of children's sense of agency therein would alter and be developed if they had been continued is an open question. Zittoun and de Saint-Laurent's work (2014) regarding adolescents' life-creativity points interestingly in this direction. If similar documentation activities were to be continued, it would be useful to learn what the local and more distal qualitative and interactional consequences (e.g., Maxwell, 2004) of this activity potentially are. Whereas studies in positive psychology (e.g., Seligman, 2009) have indicated that this type of documentation and reflection has potentially good outcomes for pupils, closer analysis of these pedagogical activities is lacking. In addition, exploring the aspect of relationship building identified in Study 4 (i.e., joint creation of artifacts) and its significance is one potential direction for further investigation (cf. Holland, Renold, Ross, & Hillman, 2010).

## References

- Ahola, S., & Kivelä, S. (2007). 'Education is important, but ...' young people outside of schooling and the Finnish policy of 'education guarantee'. *Educational Research*, 49(3), 243 – 258. doi: 10.1080/00131880701550441
- Aira, T., Hämylä, R., Aula, M., & Harju-Kivinen, R. (2014). *Lasten hyvinvoinnin tila kansallisten indikaattoreiden kuvaamana*. Lapsiasiavaltuutetun toimiston julkaisuja 2014:4. Retrieved 25 February, 2016 from website [http://lapsiasia.fi/wp-content/uploads/2015/03/lasten\\_hyvinvoinnin\\_tila.pdf](http://lapsiasia.fi/wp-content/uploads/2015/03/lasten_hyvinvoinnin_tila.pdf)
- Alanen, L. & Karila K., (Eds.). 2009. *Lapsuus, lapsuuden instituutiot ja lasten toiminta*. Tampere: Vastapaino
- Angell, C., Alexander, J., & Hunt, J. A. (2014). 'Draw, write and tell': A literature review and methodological development on the 'draw and write' research method. *Journal of Early Childhood Research*, 13(1), 17-28. doi: 10.1177/1476718X14538592
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York : W.H. Freeman.
- Barker, J., & Smith, F. (2012). What's in focus? A critical discussion of photography, children and young people. *International Journal of Social Research Methodology*, 15(2), 91-103. doi: 10.1080/13645579.2012.649406.
- Barton, A. C., & Tan, E. (2010). We be burnin'! Agency, identity, and science learning. *The Journal of the Learning Sciences*, 19(2), 187–229. doi: 10.1080/10508400903530044
- Bertram, T., Formosinho, J., Gray, C., Pascal, C., & Whalley, M. (2015). *EECERA Ethical Code for Early Childhood Researchers*. Retrieved 25 February, 2016 from website <http://www.eecera.org/ethical-code/>.
- Bjerke, H. (2011). 'It's the way they do it': Expressions of Agency in Child–Adult Relations at Home and School. *Children & society*, 25(2), 93-103. doi: 10.1111/j.1099-0860.2009.00266.x
- Boekaerts, M. (1993). Being Concerned With Well-Being and With Learning. *Educational Psychologist*, 28(2), 149-167. doi:10.1207/s15326985ep2802\_4
- Bruner, J. S. (1996). *The culture of education*. Cambridge, MA: Harvard University Press.
- Christensen, P. M., & James, A. (2000). *Research with children: Perspectives and practices*. London: Falmer Press.
- Clark, A. (2005). Listening to and involving young children: A review of research and practice. *Early Child Development and Care*, 175(6), 489-505. doi: 10.1080/03004430500131288.

- Clark, A. (2010). Young Children as Protagonists and the Role of Participatory, Visual Methods in Engaging Multiple Perspectives. *American Journal of Community Psychology*, 46(1-2), 115-123. doi:10.1007/s10464-010-9332-y
- Cole, M., & Engeström, Y. (2007). Cultural-historical approaches to designing for development. In Jaan Valsiner & Alberto Rosa, (Eds.), *The Cambridge Handbook of Sociocultural Psychology* (pp.484-507). New York, NY: Cambridge University Press.
- Collier, J. J. (1957). Photography in Anthropology: A Report on Two Experiments. *American Anthropologist*, 59(5), 843-859. doi: 10.1525/aa.1957.59.5.02a00100.
- Cook, T., & Hess, E. (2007). What the Camera Sees and from Whose Perspective Fun methodologies for engaging children in enlightening adults. *Childhood*, 14(1), 29-45. doi: 10.1177/0907568207068562.
- Davydov, V. V., Slobodchikov, V. I., & Tsukerman, G. A. (2003). The Elementary School Student as an Agent of Learning Activity. *Journal of Russian and East European Psychology*, 41(5), 63-76. doi:10.2753/rp01061-0405410563
- Derry, J. (2004). The unity of intellect and will: Vygotsky and Spinoza. *Educational Review*, 56(2), 113-120. doi:10.1080/0031910410001693209
- Dockett, S., Einarsdottir, J., & Perry, B. (2009). Researching with children: Ethical tensions. *Journal of Early Childhood Research*, 7(3), 283-298. doi: 10.1177/1476718x09336971
- Duranti, A. (2015). *The anthropology of intentions: Language in a world of others*. Cambridge: Cambridge University Press.
- Edwards, D. (1999). Emotion discourse. *Culture & psychology*, 5(3), 271-291. doi: 10.1177/1354067X9953001
- Elbers, E. (1996). Cooperation and social context in adult-child interaction. *Learning and instruction*, 6(4), 281-286. doi:10.1016/s0959-4752(96)00016-3
- Engeström, Y. (2005). *Developmental work research: Expanding activity theory in practice*. Berlin: Lehmanns Media.
- Engeström, Y., Nummijoki, J., & Sannino, A. (2012). Embodied germ cell at work: Building an expansive concept of physical mobility in home care. *Mind, Culture, and Activity*, 19(3), 287-309. doi: 10.1080/10749039.2012.688177
- Erickson, F. (2006). Definition and analysis of data from videotape: Some research procedures and their rationales. In J. L. Green, G. Camilli, & P. B. Elmore (Eds.), *Handbook of complementary methods in education research* (pp. 177-205). Mahwah, NJ: Erlbaum.

- Erstad, O., Kumpulainen, K., Mäkitalo, Å., Pruulmann-Vengerfeldt, K., P., & Jóhannsdóttir, T. (2015). *Learning across contexts in the knowledge society*. Rotterdam: Sense publishers.
- Eteläpelto, A., Vähäsantanen, K., Hökkä, P., & Paloniemi, S. (2013). What is agency? Conceptualizing professional agency at work. *Educational Research Review*, 10, 45–65. doi:10.1016/j.edurev.2013.05.001
- Fenwick, T. J., Edwards, R., & Sawchuk, P. (2011). *Emerging approaches to educational research: Tracing the sociomaterial*. Milton Park, Abingdon, Oxon: Routledge.
- Finnish Advisory Board on Research Integrity. (2009). *Ethical principles of research in the humanities and social and behavioural sciences and proposals for ethical review*. National Advisory Board on Research Ethics. Retrieved 25 February, 2016 from website <http://www.tenk.fi/sites/tenk.fi/files/ethicalprinciples.pdf>
- Finnish National Board of Education. (2011). *The school of opportunities. Towards every learner's full potential*. Helsinki: Kopiojyvä Oy.
- Fleer, M., & Hedegaard, M. (2010). Children's development as participation in everyday practices across different institutions. *Mind, Culture, and Activity*, 17(2), 149–168. doi:10.1080/10749030903222760
- Fontanille, J. (2006). *Semiotics of Discourse*. (H. Bostic, trans.). New York: Peter Lang.
- Fredrickson, B. L., & Branigan, C. (2005). Positive emotions broaden the scope of attention and thought-action repertoires. *Cognition & Emotion*, 19(3), 313–332. doi:10.1080/02699930441000238
- Fuchs, L. S., Fuchs, D., Prentice, K., Burch, M., Hamlett, C. L., Owen, R., & Schroeter, K. (2003). Enhancing third-grade student' mathematical problem solving with self-regulated learning strategies. *Journal of Educational Psychology*, 95(2), 306–315. doi:10.1037/0022-0663.95.2.306
- Gallagher, L. A., & Gallagher, M. (2008). Methodological Immaturity in Childhood Research? Thinking through 'participatory methods'. *Childhood*, 15(4), 499–516. doi: 10.1177/0907568208091672.
- Gallagher, S. (2012). Multiple aspects in the sense of agency. *New Ideas in Psychology* 30(1), 15–31. doi:10.1016/j.newideapsych.2010.03.003
- Gee, J. P. (1999). *An introduction to discourse analysis: Theory and method*. London: Routledge.
- Gillespie, A. (2007). The social basis of self-reflection. In Jaan Valsiner & Alberto Rosa, (Eds.), *The Cambridge Handbook of Sociocultural Psychology* (pp. 678–691). Cambridge: Cambridge University Press
- Gillespie, A. (2012). Position exchange: The social development of agency. *New ideas in psychology*, 30(1), 32–46. doi:10.1016/j.newideapsych.2010.03.00

- Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. New York: Harper & Row.
- Goldman, R. (2007). Video Representations and the Perspectivity Framework: Epistemology, Ethnography, Evaluation, and Ethics. In R. Goldman, R. Pea, B. Barron, S. Derry (Eds.), *Video Research in the Learning Sciences*, (pp. 3-37). Mahwah, NJ: Lawrence Erlbaum Associates.
- Gonzalez, N., Moll, L. C., & Amanti, C. (2005). *Funds of Knowledge: Theorizing Practices in Households and Classrooms*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Goodwin, C. (2000). Action and embodiment within situated human interaction. *Journal of pragmatics*, 32(10), 1489-1522. doi:10.1016/S0378-2166(99)00096-x
- Greco, M., & Stenner, P. (2013). Happiness and the Art of Life: Diagnosing the psychopolitics of wellbeing. *Health, Culture and Society*, 5(1), 1-19. doi: 10.5195/hcs.2013.147
- Greeno, J. G. (2015). Commentary: Some prospects for connecting concepts and methods of individual cognition and of situativity. *Educational Psychologist*, 50(3), 248-251. doi:10.1080/00461520.2015.1077708
- Greimas, A. & Porter, C. (1977). Elements of a Narrative Grammar. *Diacritics*, 7(1), 23-40. Retrieved from <http://www.jstor.org/stable/464872>
- Harper, D. (2002). Talking about pictures: a case for photo elicitation. *Visual studies*, 17(1), 13-26. doi:10.1080/14725860220137345.
- Harré, R., & Van Langenhove, L. (Eds.). (1999). *Positioning theory: Moral contexts of international action*. Oxford: Blackwell Publishers.
- Hascher, T. (2003). Wellbeing in school – why students need social support. In P. Mayring & C. von Rhöneck (Eds.), *Learning emotions – the influence of affective factors on classroom learning*, (pp. 127-142). Berlin: Peter Lang.
- Hasinoff, A. A. (2015). *Sexting Panic: Rethinking Criminalization, Privacy, and Consent*. Urbana: University of Illinois Press.
- Hasse, C. (2015). The material co-construction of hard science fiction and physics. *Cultural Studies of Science Education*, 10(4), 921-940.
- Hedegaard, M., Aronsson, K., Hojholt, C., & Skjær Ulvik, O. (Eds.). (2012). *Children, childhood, and everyday life: children's perspectives*. Charlotte, NC: Information Age Publishing.
- Hofmeyr, B. (Ed.). (2009). *Radical Passivity: Rethinking Ethical Agency in Levinas* (Library of Ethics and Applied Philosophy). Dordrecht, The Netherlands: Springer-Verlag New York.
- Holland, S., Renold, E., Ross, N. J., & Hillman, A. (2010). Power, agency and participatory agendas: A critical exploration of young people's engagement in participative qualitative research. *Childhood*, 17(3), 360. doi: 10.1177/0907568210369310.



- Hviid, P. (2008). Interviewing using a cultural–historical approach. In M. Hedegaard & M. Flear (Eds.), *Studying Children: A Cultural–Historical Approach* (pp. 139–156). New York, NY: Open University Press.
- Jaatinen, J. (2012). *Onnistumista ja iloa esiopetuksen arjessa. Lapset omien kokemustensa dokumentoijina*. (Masters dissertation, University of Tampere). [Title in English: Joy and success in the everyday life of preschool. Children documenting their own experiences]. Retrieved 25 February, 2016 from website <http://urn.fi/urn:nbn:fi:uta-1-23169>
- Johnson, B. (2008). Teacher-student relationships which promote resilience at school: a micro-level analysis of students' views. *British Journal of Guidance & Counselling*, 36(4), 385–398. doi: 10.1080/03069880802364528
- Jordan, B., & Henderson, A. (1995). Interaction analysis: Foundations and practice. *The Journal of the Learning Sciences*, 4(1), 39–103. doi:10.1207/s15327809jls0401\_2
- Jyrkämä, J. (2008). Toimijuus, ikääntyminen ja arkielämä: hahmottelua teoreettis-metodologiseksi viitekehykseksi. *Gerontologia*, 22(4), 190–203. [title in English: Agency, aging and everyday life: a sketch of a theoretical-methodological framework.]
- Kellett, Mary. (2004). “‘Just Teach Us the Skills Please, We’ll Do the Rest’: Empowering Ten-Year-Olds as Active Researchers.” *Children & Society*, 18(5): 329–43. doi:10.1002/chi.807.
- Knoblauch, H., Baer, A., Laurier, E., Petschke, S., & Schnettler, B. (2008, September). Visual Analysis. New Developments in the Interpretative Analysis of Video and Photography. *Forum: Qualitative Social Research*, 9(3). Retrieved 25 February, 2016 from website <http://www.qualitative-research.net/index.php/fqs/article/view/1170>.
- Kumpulainen, T. (Ed.). (2012). *Koulutuksen tilastollinen vuosikirja 2011. Koulutuksen seurantaraportit 2012:5*. Helsinki: Finnish National Board of Education. Retrieved September 13, 2012, from [http://www.oph.fi/download/141011\\_Koulutuksen\\_tilastollinen\\_vuosikirja\\_2011.pdf](http://www.oph.fi/download/141011_Koulutuksen_tilastollinen_vuosikirja_2011.pdf) [Title in English: The Statistical Yearbook of Education 2011]
- Kvale, S. (2007). *Doing interviews*. Thousand Oaks, CA: Sage.
- Lahman, M. K. (2008). always Othered: ethical research with children. *Journal of Early Childhood Research*, 6(3), 281–300. doi: 10.1177/1476718X08094451
- Latour, B. (2005). *Reassembling the Social. An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.
- Layard, R., & Dunn, J. (2009). *A good childhood*. London: Penguin.
- Leont'ev, A. N. (1978). *Activity, Consciousness, and Personality*. Englewood Cliffs, NJ: Prentice-Hall.

- Lipponen, L., & Kumpulainen, K. (2011). Acting as accountable authors: Creating interactional spaces for agency work in teacher education. *Teaching and Teacher Education*, 27(5), 812 – 819. doi:10.1016/j.tate.2011.01.001
- Lipponen, L., Rajala, A., Hilppö, J., & Paananen, M. (2015). Exploring the foundations of visual methods used in research with children. *European Early Childhood Education Research Journal*, 1-11. doi:10.1080/1350293x.2015.1062663
- Luther, S., & Zelazo, B. (2003). Resilience and vulnerability: An integrative view. In S. Luther (Ed.), *Resilience and vulnerability: Adaptation in the context of childhood adversities* (pp. 510–550). Cambridge: Cambridge University Press.
- Määttä, E., & Järvelä, S. (2013). Involving children in reflective discussions about their perceived self-efficacy and learning experiences. *International Journal of Early Years Education*, 21(4), 309–324. doi: 10.1080/09669760.2013.867836
- Määttä, E., Järvelä, S., & Perry, N. (2015). Personal and Contextual Contributors to Young Children's Activity-Based Perceived Self-Efficacy. *Scandinavian Journal of Educational Research*, 1-18. doi: 10.1080/00313831.2015.1024161
- Markström, A. M., & Halldén, G. (2009). Children's strategies for agency in preschool. *Children & society*, 23(2), 112–122. doi:10.1111/j.1099-0860.2008.00161.x
- Martin, J. (2004). Self-regulated learning, social cognitive theory, and agency. *Educational Psychologist*, 39(2), 135-145. doi:10.1207/s15326985ep3902\_4
- Martin, J., & McLellan, A. M. (2008). The educational psychology of self-regulation: A conceptual and critical analysis. *Studies in Philosophy and Education*, 27(6), 433-448. doi:10.1007/s11217-007-9060-4
- Matusov, E. (2009). *Journey into Dialogic Pedagogy*. Hauppauge, NY: Nova Science Publishers.
- Maxwell, J. A. (2004). Causal explanation, qualitative research, and scientific inquiry in education. *Educational researcher*, 33(2), 3-11. doi: 10.3102/0013189x033002003
- McCarthy, J., Sullivan, P., & Wright, P. (2006). Culture, personal experience and agency. *British journal of social psychology*, 45(2), 421–439. doi: 10.1348/014466605X49140
- McDermott, R. P., Gospodinoff, K., & Aron, J. (1978). Criteria for an ethnographically adequate description of concerted activities and their contexts. *Semiotica*, 24(3-4), 245-276. doi:10.1515/semi.1978.24.3-4.245
- McLaughlin, C. (2008). Emotional wellbeing and its relationship to schools and classrooms: A critical reflection. *British Journal of Guidance & Counselling*, 36(4), 353–366. 10.1080/03069880802364486

- Mercer, N. (2010). The analysis of classroom talk: Methods and methodologies. *British Journal of Educational Psychology*, 80(1), 1-14. doi: 10.1348/000709909x479853
- Middleton, D., & Brown, S. D. (2005). *The social psychology of experience: Studies in remembering and forgetting*. London: Sage.
- Miller, K. (2014). Learning about children's school preparation through photographs: The use of photo elicitation interviews with low-income families. *Journal of Early Childhood Research*. doi: 10.1177/1476718X14555703
- Mykkänen, A., Perry, N., & Järvelä, S. (2015). Finnish students' reasons for their achievement in classroom activities: focus on features that support self-regulated learning. *Education 3-13*, 1-16. doi: 10.1080/03004279.2015.1025802
- Nardi, B. (2005). Objects of Desire: Power and Passion in Collaborative Activity. *Mind, Culture, and Activity*, 12(1): 1, 37-51. doi:10.1207/s15327884m-ca1201\_4
- Nasir, N., & Hand, V. (2008). From the court to the classroom: Opportunities for engagement, learning, and identity in basketball and classroom mathematics. *The Journal of the Learning Sciences*, 17(2), 143-179. doi: 10.1080/10508400801986082
- National Institute for Health and Welfare. (2013). School Health Promotion Study. Retrieved 25 February, 2016 from website <https://www.thl.fi/fi/tutkimus-ja-asiantuntijatyo/vaestotutkimukset/kouluterveyskysely>.
- Niemi, R., Kumpulainen, K., & Lipponen, L. (2015). Pupils as active participants: Diamond ranking as a tool to investigate pupils' experiences of classroom practices. *European Educational Research Journal*, 14(2), 138-150. doi:10.1177/1474904115571797
- Nordensvard, J. (2014). Dystopia and disutopia: Hope and hopelessness in German pupils' future narratives. *Journal of Educational Change*, 15(4), 443-465. doi:10.1007/s10833-014-9237-x
- Nummijoki, J., & Engeström, Y. (2010). Towards co-configuration in home care of the elderly. In H. Daniels, A., Edwards, Y., Engeström, T., Gallagher, & S. Ludvigsen. *Activity theory in practice: Promoting learning across boundaries and agencies*, (pp. 49-71). London: Routledge.
- O'Brien, M., Varga-Atkins, T., Umoquit, M., & Tso, P. (2012). Cultural-historical activity theory and 'the visual' in research: exploring the ontological consequences of the use of visual methods. *International Journal of Research & Method in Education*, 35(3), 251-268. doi:10.1080/1743727X.2012.717433.
- Ohl, M., Fox, P., & Mitchell, K. (2012). Strengthening socio-emotional competencies in a school setting: Data from the Pyramid project. *British Jour-*

- nal of Educational Psychology*, 83(3), 452-466. doi: 10.1111/j.2044-8279.2012.02074.x
- Pelaprat, E., & Cole, M. (2011). "Minding the Gap": Imagination, Creativity and Human Cognition. *Integrative Psychological and Behavioral Science*, 45(4), 397-418. 10.1007/s12124-011-9176-5
- Perry, N., and A. Rahim. 2011. "Studying Self-Regulated Learning in Classrooms." In B. Zimmerman and D. Schunk (Eds.), *Handbook of Self-Regulation of Learning and Performance*, (pp. 122–137). New York: Routledge.
- Plowman, L., & Stevenson, O. (2012). Using mobile phone diaries to explore children's everyday lives. *Childhood*, 19(4), 539-553. doi: 10.1177/0907568212440014.
- Puroila, A.-M., Estola, E., & Syrjälä, L. (2012). Having, loving, and being: Children's narrated well-being in Finnish day care centres. *Early Child Development and Care*, 182(3-4), 345 – 362. doi: 10.1080/03004430.2011.646726
- Pyry, N. (2013). 'Sensing with' photography and 'thinking with' photographs in research into teenage girls' hanging out. *Children's Geographies*, 13(2), 149-163. doi:10.1080/14733285.2013.828453.
- Radley, A. (2010). What people do with pictures. *Visual Studies*, 25(3), 268-279. doi:10.1080/1472586X.2010.523279.
- Rainio, A. P. (2010). *Lionhearts of the Playworld: An Ethnographic Case Study of the Development of Agency in Play Pedagogy*. (Doctoral dissertation). Helsinki: University of Helsinki.
- Rajala, A., Martin, J., & Kumpulainen, K. (Eds.,) (submitted). Agency and learning: Researching agency in educational interactions. Special issue in *Learning, Culture, & Social Interaction*.
- Resnick, L. B. (1987). The 1987 Presidential Address: Learning In School and Out. *Educational Researcher*, 16(9), 13–20. doi: 10.3102/0013189x016009013
- Robson, S. (2010). Self-regulation and metacognition in young children's self-initiated play and Reflective Dialogue. *International Journal of Early Years Education*, 18(3), 227–241. doi:10.1080/09669760.2010.521298
- Roth, W. M. (2005). *Doing qualitative research: Praxis of method*. Rotterdam: Sense Publishers.
- Roth, W. M. (2007). On the subject, self, and individual or monolingualism of the other and the possible impossibility of babel fish. *Mind, Culture, and Activity*, 14(4), 227–234. doi:10.1080/10749030701623599
- Roth, W. M. (2008). The nature of scientific conceptions: A discursive psychological perspective. *Educational Research Review*, 3(1), 30-50. doi: 10.1016/j.edurev.2007.10.002

- Roth, W.-M. (2010). *Language, Learning, Context: Talking the Talk (Foundations and Futures of Education)*. New York: Routledge.
- Roth, W. M., & Jornet, A. (2013). Toward a theory of experience. *Science Education*, 98(1), 106-126. doi:10.1002/sce.21085
- Säljö, R. (2004). Learning and technologies, people and tools in co-ordinated activities. *International Journal of Educational Research*, 41(6), 489-494. doi:10.1016/j.ijer.2005.08.013
- Salmela-Aro, K., Muotka, J., Hakkarainen, K., Alho, K. & Lonka, K. (in press). School Burnout and Engagement Profiles among Digital Natives in Finland: A Person-oriented Approach. *European Journal of Developmental Psychology*.
- Sannino, A. (2008). From talk to action: Experiencing interlocution in developmental interventions. *Mind, Culture, and Activity*, 15(3), 234-257. doi: 10.1080/10749030802186769
- Sannino, A., & Laitinen, A. (2015). Double stimulation in the waiting experiment: Testing a Vygotskian model of the emergence of volitional action. *Learning, Culture and Social Interaction*, 4, 4-18. 10.1016/j.lcsi.2014.07.002
- Searle, J. R. (1990). Collective intentions and actions. In Philip R. Cohen, Jerry Morgan and Martha E. Pollack (Eds.), *Intentions in communication*, (pp. 401-416). Cambridge: MIT Press.
- Seligman, M. E., Ernst, R. M., Gillham, J., Reivich, K., & Linkins, M. (2009). Positive education: Positive psychology and classroom interventions. *Oxford review of education*, 35(3), 293-311. doi: 10.1080/03054980902934563
- Sen, A. (1985). Well-being, agency and freedom: the Dewey lectures 1984. *The Journal of Philosophy*, 82(4), 169-221. doi:10.2307/2026184
- Sewell, K. (2011). Researching sensitive issues: a critical appraisal of 'draw-and-write' as a data collection technique in eliciting children's perceptions. *International Journal of Research & Method in Education*, 34(2), 175-191. doi:10.1080/1743727X.2011.578820.
- Siry, C., Wilmes, S., & Hilgers, J. M. (2016). Examining children's agency within participatory structures in primary science investigations. *Learning, Culture and Social Interaction*. doi:10.1016/j.lcsi.2016.01.001
- Sommer, D., Samuelsson, I. P., & Hundeide, K. (2010). *Child perspectives and children's perspectives in theory and practice (Vol. 2)*. Dordrecht : Springer Verlag.
- Stetsenko, A. (2008). From Relational Ontology to Transformative Activist Stance on Development and Learning: Expanding Vygotsky's (CHAT) Project. *Cultural Studies of Science Education*, 3(2), 471-91. doi: 10.1007/s11422-008-9111-3

- Strandell, H., Haikkola, L., & Kullman, K. (2012). *Lapsuuden muuttuvat tilat*. Helsinki: Vastapaino Oy. [Title in English: *The Changing Landscapes of Childhood*]
- Thomson, P. (Ed.). (2008). *Doing visual research with children and young people*. London: Routledge.
- Tisdall, E. K. M., & Punch, S. (2012). Not so 'new'? Looking critically at childhood studies. *Children's geographies*, 10(3), 249-264. doi: 10.1080/14733285.2012.693376
- Tudge, J. (2008). *The everyday lives of young children: Culture, class, and child rearing in diverse societies*. Cambridge: Cambridge University Press.
- Valsiner, J. (2001). Process structure of semiotic mediation in human development. *Human Development*, 44(2-3), 84-97. doi: 10.1159/000057048
- Van House, N. A. (2011). Personal photography, digital technologies and the uses of the visual. *Visual Studies*, 26(2), 125-134. doi:10.1080/1472586X.2011.571888.
- Vignemont, F. D., & Fourneret, P. (2004). The sense of agency: A philosophical and empirical review of the "Who" system. *Consciousness and Cognition*, 13(1), 1-19. doi:10.1016/s1053-8100(03)00022-9
- Vygotsky, L. (1978). *Mind in society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L. S. (1997). Chapter 12: Self-control. In R. W. Rieber (Ed.), *The collected works of L.S. Vygotsky. The history of the development of higher mental functions, Vol. 4*. (pp. 261–281). New York: Plenum.
- Vygotsky, L. S., & Luria, A. (1994). Tool and symbol in child development. In R. van der Veer & J. Valsiner (Eds.), *The Vygotsky Reader* (pp. 99-174). Oxford: Blackwell Publishers.
- Vygotsky, L.S. (1998). Chapter 1: Development of Interest in the Transitional Age. In R. W. Rieber (Ed.), *The Collected Works of L.S. Vygotsky. Child Psychology, Vol 5*. New York: Plenum Press.
- Weare, K. (2010). Promoting mental health through schools. In P. Aggleton, C. Dennison, & I. Warwick (Eds.), *Promoting health and well-being through schools* (pp. 24–41). London: Routledge.
- Welzel, C., & Inglehart, R. (2010). Agency, values, and well-being: A human development model. *Social indicators research*, 97(1), 43-63. doi:10.1007/s11205-009-9557-z
- Wenger, E. (1999). *Communities of practice: learning, meaning, and identity*. Cambridge, MA: Cambridge University Press.
- Wertsch, J. V. (1988). *Vygotsky and the social formation of mind*. Cambridge, MA: Harvard University Press.
- Wertsch, J., Tulviste, P., & Hagstrom, F. (1996). A Sociocultural Approach to Agency. In E. Forman, N. Minick, & C. Stone (Eds.), *Contexts for Learn-*

- ing-Sociocultural Dynamics in Children's Development* (pp. 336–356). New York, NY: Oxford University Press.
- Westcott, H., & Littleton, K. (2004). Interviewing children: Context, competence and joint meaning making. In S. Greene, & D. Hogan (Eds.), *Researching Children's experience: Approaches and methods* (pp. 141-157). London: Sage.
- Wetherell, M. (2001). Debates in Discourse Research In M. Wetherell, S. Taylor & S. J. Yates (Eds.), *Discourse Theory and Practice - A Reader* (pp. 380-399). London: Sage.
- Wetherell, M. (2005). Unconscious conflict or everyday accountability? *British Journal of Social Psychology*, 44(2), 169-173. doi: 10.1348/014466605X39619.
- Wohlwend, K. E. (2009). Mediated discourse analysis: Researching young children's non-verbal interactions as social practice. *Journal of Early Childhood Research*, 7(3), 228-243. doi:10.1177/1476718X09336950
- Zimmerman, B. J., & Schunk, D. H. (Eds.). (2011). *Handbook of self-regulation of learning and performance*. New York: Routledge.
- Zimmerman, B., J. (2001). Self-regulated Learning. In N. J. Smelser & P. B. Baltes (Eds.), *International Encyclopedia of the Social & Behavioral Sciences* (pp. 13855–13859). Oxford: Pergamon. doi:10.1016/B0-08-043076-7/02465-7
- Zittoun, T., & de Saint-Laurent, C. (2014). Life-creativity. In V Glăveanu, A Gillespie, J Valsiner (Eds.), *Rethinking Creativity: Contributions from Social and Cultural Psychology* (pp. 58-75). Routledge: New York.

# Appendix

## Appendix 1. Case Helsinki open interview questions

What have you done and what happened during the three days you had the camera?

Did something special happen during those days?

What are the important things that happened during the three days?

Which important people in your life did you meet during the three days?

What is important to you in your life?

What are you good at?

Do you have plans for the future? What are you going to do? What could interfere with that? Or what could help you?

In what kinds of situations have you been happy?

What has made you mad? Could you tell us what happened then?

Did something happen that you wished had not happened? How did you take it?

Did something unpleasant happen? How did you take it?

What has made you proud during the last three days or in life in general?

Has there been any situation in which you have not wanted to stop doing something?

If you could teach others, how would you instruct them in taking photographs?

Have you learned anything during the three days? What? What have you learned through the research? Is it important?

Has this activity helped you see which things are important in your life?

How would you guide others in this regard?

How were your parents involved in taking the pictures?

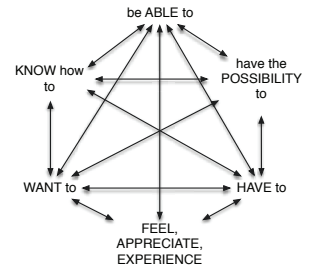
Could you show us a picture which is important to you? Which picture would you like to talk about the most? Can you choose two or three?



## Appendix 2. Analytical framework for modalities of agency

### General instructions:

- Mark modality each time it manifests in an interview interaction.
- A minimal yes or no response will not do. The modality has to be integrated into a longer turn-at-talk to be marked.
- One turn-at-talk can entail multiple modalities. If this happens, all the modalities are to be marked separately.



Modalities of Agency  
Jyrkämä (2008)

### TO WANT = Goals, targets, motivations

**Jyrkämä's description:** "To want" relates to motivations, being motivated, being willful, wanting something, goals and targets.

In the interactional episodes the child talks about what s/he aspires to, wants to do, wants to make, get done, what things are interesting, what s/he strives for, despite its difficulty.

**The following expressions can be thought of as possible discursive manifestations of the modality TO WANT**

- I want
- I have the goal of
- I am interested in
- I want to try to
- I won't stop when
- I don't want to stop doing

### TO BE ABLE TO = Physical characteristics

**Jyrkämä's description:** "To be able to" is primarily about physical and psychological abilities and competencies.

In the interactional episodes, the child describes his/her physical or psychological abilities either negatively or positively. Lacks can be due to an outside influence or are more permanently part of the child.

**The following expressions can be thought of as possible discursive manifestations of the modality TO BE ABLE TO**

- I am able / I am not able to
- I can reach
- I have the strength / I don't have the strength
- I can make it

## **KNOWING HOW TO = skills and knowhow**

**Jyrkämä's description:** "Knowing how to" refers broadly to the knowledge and skills or different competencies one has learned in life.

In the interactional episodes, the child talks about his / her skills and knowledge, what s/he knows how to do. Telling about doing something suffices to mark this modality. However, the modality is not marked if it seems that the skills are clearly very basic, such as walking, talking, and so on.

The talk can also entail descriptions of NOT knowing how to do something. The quality or quantity of what is related does not affect the marking. These can be something like social skills, technology competencies, games, etc., as well as episodes in which the child knows what effects his / her learning are talked about.

**The following expressions can be thought of as possible discursive manifestations of the modality KNOWING HOW TO**

- I can
- I know how to
- I know that
- I can't / I do not know
- I did something great (it is good)
- I can solve problems
- I can

## **HAVE TO = musts, necessities, obstacles, limitations**

**Jyrkämä's description:** "To have to" entails both physical and social, normative and moral obstacles, musts and limitations

In the interactional episodes, the child verbalizes different limitations directed at him/her or talks about situations in which s/he has had to do something or act according to someone else's directions. Who sets the demands does not matter; it can be the child him/herself or someone else. For example, if the child has to do something in order to get what he wants, it is an example of TO HAVE TO.

Limitations related to one's body (like burning your finger) are TO BE ABLE TO. If the limitation is social (I can't go out because I'm sick, although I feel fine), these are marked as HAVE TO.

**The following expressions can be thought of as possible discursive manifestations of the modality TO HAVE TO**

- I must
- I have to do something
- I can't do something

**TO FEEL, APPRECIATE, EXPERIENCE = feelings, values, and important things**

**Jyrkämä's description:** "To feel, appreciate, experience" relates to our basic ability to value, appreciate, experience, and attach feelings and emotions to things or situations that happen to us.

In the interactional episodes, the child talks about what is important to him or her, what s/he values, what s/he care about and what is meaningful. Also descriptions about emotional states, what the child feels like or has experienced some event can be indicated here.

**The following expressions can be thought of as possible discursive manifestations of the modality TO FEEL, APPRECIATE, EXPERIENCE**

- I feel like
- This is important to me
- I value this
- I like / dislike this

**TO HAVE THE POSSIBILITY = possibilities, options, alternative**

**Jyrkämä's description:** "To have the possibility to" refers to different options or opportunities in a situation afforded by the different structural or situational factors.

In the interactional episodes, the child describes his/her possibilities to do something. Also different situations where choice is available or made can be marked as "To have the possibility to." The choice does not have to be pursued and can also be more abstract or can be taking place in the future. Furthermore, a situation in which there is more than one solution is marked "To have the possibility to."

**The following expressions can be thought of as possible discursive manifestations of the modality TO HAVE THE POSSIBILITY**

- I can choose to
- I have the possibility to
- I can decide to

