

From volitional action to transformative agency: double stimulation in services for families with young children

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This article examines how transformative agency arises in families where parents are struggling with aspects of caring for young children. The mechanisms of how volitional action develops into transformative agency in everyday settings are not well understood. A fine-grained analysis of change is presented in the case of a parent who resolved difficulties relating to her daughter's feeding. This case is situated within a broader dataset relating to diverse Australian parenting support services. Through double stimulation, parents used multiple auxiliary tools to construct new motives, enabling them to expand understandings and develop new possibilities for action. Evidence of transformative agency was apparent in longer trajectories in which the conditions of parenting were transformed. Relationships between expansive learning, double stimulation and transformative agency are conceptualised dialectically, offering fresh insights into the dynamics of transformative agency 'in the wild'.

Keywords: double stimulation; mediation; epistemic resources; parenting; agency; Vygotsky

Introduction

Parenting young children can be a site of struggles which, if left unaddressed, can have harmful impacts on children's development and wellbeing. This paper examines how parent education can assist parents to take control of their actions in difficult situations (volitional action) and change the conditions in which their parenting unfolds (transformative agency). Taking a cultural-historical approach, the analysis explores situations where parents are torn between one course of action and another, and the cultural artefacts used to resolve them. It shows how parents' agency as learners is implicated in and promoted by double stimulation in everyday practices as they are reshaped as a result of engaging with parent education and support services.

The cultural-historical researcher is interested in the use and development of tools that change understandings of a problem and responses to it (Edwards 2017). This paper analyses the history of transformative change in the case of a parent struggling with feeding her daughter. This case is connected with patterns in a wider dataset to present dialectic arguments linking transformative agency, volitional action, and expansive learning.

Double stimulation can be understood as a process whereby people use tools in a way that fundamentally changes the way they work on a problem. Sannino's (2015b) Vygotskian model conceptualises double stimulation as a principle of volitional action, but gaps in understanding the agentic character of double stimulation remain (Sannino 2015b, 2017). Is volitional action necessarily the conclusion of double stimulation, or may it, in some circumstances, go further? Sannino (2015a) outlines the possibility of a link between double stimulation and transformative agency—volitional actions that transform the world we inhabit. Sannino (this issue) refers to this using the shorthand 'TADS'—transformative agency by double stimulation. The work to trace this empirically is just beginning.

This paper investigates the emergence of transformative agency in contexts where parents of young children engage with parent education services. This adds to a growing body of research examining double stimulation 'in the wild' (Engeström & Sannino 2012), meaning in the context of work and everyday practices as opposed to in experimental settings. Analysing longitudinal qualitative data, it offers new insights by tracing the dynamics of transformative agency as it is enacted and developed.

Support for parents of young children

Child development occurs in the context of relationships, experiences and environments. The quality of these matters enormously, and parents lie at the centre of this, bringing something that no-one else can (Edwards & Evangelou 2019). Parenting practices are among the most powerful influences on children's wellbeing and development in the early years, and are therefore often the focus of early intervention services. The early years shape children's long-term trajectories, and high-quality support services can strengthen parents' role where this might otherwise be compromised (Moore & McDonald 2013; CCCH 2018). Circumstances beyond parents' control can create challenges for parents where assistance through respectful parent education is both ethically warranted and welcomed by families (Hopwood & Clerke 2016). This paper looks in detail at one family who engaged with a parent education service, following the history of change over nearly a year. This case is then linked to analysis of a broader set spanning a diverse range of parenting support services.

Conflicts of motives are common in parenting. They often arise in relation to sleeping, feeding and behaviour management—frequent sites of struggle in parenting (Hedegaard 2008; Hopwood & Gottschalk 2017). Table 1 introduces these alongside the common struggle between caring for the child and caring for the self as a parent. Consistent with Sannino's (2015b) model, Table 1 outlines the conflicting stimuli and motives characteristic of these struggles. The case discussed in detail below relates to the first conflict in Table 1.

Table 1 Common conflicted situations in parenting

Activity	Stimulus	Motive	Conflicting stimuli	Conflicting motive
Feeding (eg. Ching)	Child shows hunger signs	Child to get sufficient nutrition	Child cries, refuses food, screams	Avoid over-feeding child and child distress
Behaviour	Child displays aggressive behaviour	Keep child and others around the child safe	Child cries, protests	Avoid negative relationship with child
Sleep and settling	Child shows tired signs	Child to get sufficient rest	Child cries, resists sleep	Avoid child becoming distressed
Self-care	Child conveys need for attention	Provide care and nurture the child's needs	Exhaustion, own appearance, messy state of home	Maintain health and wellbeing, keep home safe and clean

A cultural-historical perspective offers valuable insights into how such conflicted situations can be resolved. The challenge for the parent is not to ‘fix’ the child (Hedegaard 2018). Instead, what is needed is a means to act in a way that escapes entrapment between two conflicting motives. This begins with volitional action and could potentially develop into transformative agency, but the mechanisms of this potential development are poorly understood. So, this paper asks:

- (1) How do parents’ volitional acts develop into transformative agency such that the conditions in which parenting unfolds and conflicts are encountered are changed?
- (2) How can the relationship between double stimulation, expansive learning and transformative agency be understood in the context of education and support for families with young children?

Double stimulation, volitional action and transformative agency

Vygotsky (1960/1997) described the use of cultural artefacts or tools in terms of a dialectic leap that produces a qualitative change in the psychological structure of human action. It changes our understanding of a problem and responses to it, by establishing an indirect path between a subject and the object being worked on (Vygotsky 1997). This is referred to as mediation. The Vygotskian focus on activity mediated through cultural artefacts is central to understanding double stimulation (Ferryhough 2008).

“As adults we frequently find ourselves needing to do something that we do not want to do... unable to find the stimulus that will allow us to move ourselves” (Vygotsky 1932/1987, 358). In common everyday examples, the necessary stimulus is drawn from a repertoire of cultural tools, as with counting ‘1-2-3’ out loud before jumping into cold water, or using alarm clocks to get out of bed in the morning. The problem for many parents is that relevant tools are not obviously or immediately at hand. Prior research has suggested services for parents can play an important role by making such tools available to parents (Hopwood & Gottschalk 2017).

Sannino (2015a, 2015b, 2016; Sannino & Laitinen 2015) associates double stimulation with situations where there is a conflict of motives, resolved through volitional action (see also Thorne 2015). Volition is not merely a matter of choosing, but of taking control of the situation and creating a new basis for action so that the subject is no longer at the mercy of conflicting motives (Sannino 2015b).

It is increasingly important to understand how people form willful actions aimed at changing their circumstances and shaping their uncertain futures... Transformative agency by double stimulation (TADS; Sannino this issue) transpires in a problematic, polymotivated situation in which people evaluate and interpret the circumstances, make

decisions according to the interpretations and act upon these decisions (Sannino 2015b, 1).

Volitional actions are regarded as at the core of transformative agency (Haapasari et al. 2016; Sannino & Laitinen 2015). The expansion of momentary individual initiative (volitional action) into sustained collective effort has been described in terms of expansive learning in the context of change laboratories and work practices (Engeström & Sannino 2013; Haapasaari & Kerosuo 2015). Sannino and Laitinen's (2015) experimental work suggests that a wide array of possibilities to agentively transform the situations can become available through volitional action (2015). Volitional action thus constitutes a promising focus to better understand transformative agency in everyday practices such as parenting.

Virkkunen's (2006) defines transformative agency as breaking away from a given frame and taking initiative to transform. It involves an extended temporal dimension that may not necessarily be implied in specific, volitional actions (Engeström et al. 2014). However, the relation between the two appears to be more complex than simply a question of repetition or endurance. Change laboratory research suggests transformative agency emerges when people are placed in demanding situations, critically analyse them, envision future possibilities, commit to concrete actions, and take consequential actions, in a process mediated by cultural artefacts (Engeström et al. 2014; Haapasaari et al. 2016). Does this also apply in everyday contexts? This paper explores this through the two research questions, examining parenting practices, and how they are transformed through widely adopted approaches to parent education.

For the purposes of this paper, we distinguish volitional action as a willful response to an immediate conflicted situation, and transformative agency as concerning changes that address the conditions in which conflicts arise, going beyond responses to

one particular instance or a recurrence of it. This leaves the details of how the former gives rise to the latter open for empirical investigation. While it would be interesting to conceptualise how accepting help can itself be an agentic action connected to conflicts of motives, this falls outside the scope of the present analysis. The study was not designed to address this, so parents' engagement with a particular service is treated as part of the context in which volitional action and transformative agency emerge, entwined with the everyday practices of the family.

In what follows we refer to practices as the contexts in which motives (and by extension, conflicts of motives) arise. This follows Chaiklin's (2012) argument that, from a cultural-historical perspective, it does not make sense to speak about motives without relating them to the (societal) practice in which people act. At the same time, acting in such practices is regarded as a psychologically formative phenomenon. We also refer to 'situations' as particular instances when conflicts are manifest, which (following Hedegaard 2018), arise through and as a result of participation in practices.

Studies of double stimulation 'in the wild'

A growing body of work explores how double stimulation arises and functions 'in the wild' of everyday work practices, rather than in experimental settings (Thorne 2015; Hopwood 2015) or change laboratories (Engeström et al. 2014; Engeström & Sannino 2013; Haapasaari et al. 2016; Virkkunen 2006). These settings include parent-child interactions in problem-solving activities (Portes et al. 1997), school teaching (Thompson 2013, 2015), family therapy in mental health services (Sundet 2010), children's play (Waermö 2016) and in-home support for the elderly (Engeström et al. 2015).

Hopwood and Gottschalk (2017) traced connections between Sannino's (2015b) model and double stimulation in interactions between professionals and parents of young children. That analysis found:

- (1) Double stimulation functions as a principle of volitional action when professionals address the absence of auxiliary stimuli that enable parents to resolve conflicted situations;
- (2) Outcomes for parents can be understood in terms of developments arising from the use of cultural artefacts as tools eliciting new responses to conflicted situations;
- (3) Significant work may be required to make auxiliary stimuli acceptable to parents and buttressing them against precarious conditions;
- (4) Double stimulation involved complexes of decisions and actions that were repeated over time and 'progressively cultivated' (see also Sannino & Engeström 2016)
- (5) Consequently, double stimulation in the wild may be accomplished gradually, temporally dispersed, iterative, recursive, fragmented, and multi-threaded.

Those findings did not speak to explicitly to the development of transformative agency—a shortcoming that this paper addresses. The present analysis contributes further by folding concepts of expansive learning and epistemic levels of mediation into the analysis.

Change laboratories have examined double stimulation in relation to cycles of expansive learning at a systemic level (see Sannino et al. 2016). However, connections between double stimulation and the theory of expansive learning at the level of interactions within everyday activities such as those of parenting are not well understood.

Mediation has been discussed in terms of the kinds of work artefacts do in given activities, being particularly useful for asking, ‘what?’, ‘how?’, and ‘why?’ questions, for example (Engeström 2007). Despite the centrality of mediation to double stimulation, this epistemic aspect has not been much explored. It is taken up in the present analysis as part of the apparatus used to trace changing tool use in the emergence of transformative agency.

Empirical details and study context

Congruence between methods and the cultural-historical framework was maintained by gathering data that captured changing tool use as it unfolded over time (Edwards 2017). A combination of observations and interviews enabled detailed examination of social interactions, materiality, embodied actions, and motives.

The data analysed here are drawn from the longitudinal phase of a larger study of parenting education and child and family health services in Australia (see Hopwood & Clerke 2016; Hopwood & Edwards 2017; Hopwood & Mäkitalo 2019; Hopwood & Nerland 2019). In this phase, 15 families were recruited prior to their first appointment with a particular service. Observations were conducted when families attended course sessions, clinics, or were visited in the home. Professionals and parents were interviewed mid-way through the service and shortly after the final contact. Parents were interviewed again between six and nine months later, and some offered a further interview several weeks later still. Fifty-five interviews were conducted, and 19 appointments observed.

Parents were informed of the study by an administrator linked to the service they were attending. Information and consent forms were provided, making clear that the decision not to participate would not affect access to help on offer in any way. Verbal consent was sought prior to each observation, giving parents additional moments to opt

out (prior to the researcher being present, to make opting out less awkward). The researchers received training to comply with Australia's mandatory reporting legislation, which covers suspected child abuse and neglect, and also applied to all professionals in the study.

Using MAXqda software, all longitudinal data were coded to identify conflicting stimuli and motives, tools used (with subcodes including the body, concepts, household objects), instances of tool use that were expansive in nature, and evidence of significant change as mentioned by participants themselves. This produced an analytical 'map', orienting subsequent analyses to the most relevant data.

Cultural-historical approaches favour studying phenomena in motion, engaging with the dynamics of change as it unfolds (Vygotsky 1960/1997; Edwards 2017). All data relating to each of the 15 families were reviewed, and a synoptic summary was produced, capturing changes in families and in parents' use of tools (see Hopwood 2018). This enabled analysis of the emergence of transformative agency through the history of changes in parenting practices. From the 15 families followed longitudinally, a subset of five was selected where: volitional action resolved conflicted situations; data relating to this process was richly detailed in observations and interviews; and significant changes occurred. These were the most promising to analyse in response to the research questions. These five cases were analysed in detail, and a consistent pattern found to be common to all.

The next section focuses on one case—of a mother called Ching (a pseudonym) who completed a Circle of Security® Parenting™ program (COS-P; Powell et al. 2016)¹. The subsequent section presents details of other families to demonstrate the empirical basis of the key arguments and their relevance to other conflicted situations and forms of professional support.

In the COS-P studied, two nurses facilitated eight weekly sessions lasting two hours. Eight parents attended (seven mothers and one father). Each week, key concepts were introduced, usually on a video, and a group discussion was facilitated, linking them to parents' struggles and experiences. In the observed group, around 20 to 30 minutes were taken at the beginning of each session to revisit the ideas from the previous week in light of what had happened in the interim.

Tracing the history of transformative agency

The case of Ching and her family will now be discussed in terms of how conflicts relating to feeding (see Table 1) were resolved through double stimulation as a principle of volitional action, and how this became a basis for transformative agency, for TADS. Ching and her husband grew up in China; their daughter Fia was born in Australia. Fia was seven months old when Ching enrolled in COS-P, referred by a health practitioner who was concerned about Fia's nutrition, and high maternal and child distress during mealtimes. Ching had been diagnosed with post-natal depression and was seeing a psychiatrist at the time.

Prior to the program, Ching had been force-feeding Fia. This was not satisfying her motive to avoid upsetting the child, as Fia was getting distressed. Nor was it satisfying her motive to ensure her daughter ate enough, as Fia was not gaining sufficient weight. In interview she described Fia 'crying, refusing, her face turning red, screaming, pushing me away, throwing all the food, throwing all the spoons'. The sense of this being an unworkable situation was clear:

When she's refusing, I'm upset and I always try to push her to eat. I force her to accept the spoon, accept the food, anything. Even then she's turning away, and even when she's screaming, she opens her mouth, right? I try to put food into her mouth, then she screams harder.

She had tried baby-led weaning from breastmilk to solid foods, and discussed this at one of the group sessions.

I've tried baby-led weaning. It's a nightmare. Food everywhere. She eats a bit and then drops [it] straightaway. Like "Are you going to eat anything?" I've prepared so much, but I'm running out. You're not eating. What shall I do? It became frustrating, like the shark music. It's really hard to stay being calm and kind to her.

Fia referred to the idea of 'shark music' that had been introduced the week before. In COS-P moments of frustration, anger and fear are understood as times when their shark music is playing. This became part of a constellation of cultural artefacts that Ching used in resolving conflicts around feeding.

Ching's comment connected with another concept from COS-P: that the parent's role is to be 'bigger, stronger, wiser and kind'. A key aspect of this for her was remaining calm. In the next session, Ching described her efforts to be a 'cheerleader' in meals, offering excitement, encouragement and fun, rather than pressure on the child. One facilitator asked whether Ching's shark music was decreasing as she implemented a new technique of cheerleading and trying to make meals more relaxed and fun rather than pressured. Ching replied:

It's still there but it's easier to manage. If you know that's the shark music, that's the discomfort you have with that situation, you have to pull yourself up, instead of being reactive to it, you have to play a good example. For me the kindness is the hardest thing, because I didn't get that kindness when I was young.

The group discussed how adults taking time out can be a useful way of dealing with shark music—looking after themselves in order to be able to look after the child (see Table 1). Ching described turning away from Fia, taking deep breaths, and calming herself down so the shark music subsided

and she could come back to being with Fia: 'We have to organise our own feelings. With shark music, it triggers me back to my childhood, which is not [a] very good feeling'.

A third concept from COS-P that became significant for Ching was that of hearing the child's message. This was explained on a video shown to the group:

Many programs ask us to focus on changing our children's behaviour. Circle of Security offers a fresh way to look at this. Behaviour is communication. Suddenly, the task isn't to change behaviour. The task is to hear and respond to the message.

The facilitators developed this with the group, discussing how children's messages are often unclear, and perhaps contrary to what they appear on the surface. For example, when they push a parent away, the message is really that this is a moment when they need a parent's help, love and security the most. Ching explained to the group how this connected with her:

Fia is not liking spoons. It's not about the spoons, it's about forcing her to eat. I wasn't seeing the message and that's why she's being difficult.

Thus, Ching's understanding of her feelings when Fia was being difficult around food expanded. She made new associations with concepts like shark music and bigger, stronger, wiser, kind. A new role of cheerleading was folded into the activity, alongside a new responsibility to hear the child's message and respond accordingly. When things got hard, her attention in the situation was re-directed from Fia as a problematic child to what she was experiencing herself, accompanied by embodied practices such as deep breathing in time out to help her cope. The idea of being kind was expanded in terms of how it might be enacted in the moment, but also in terms of its connection with how she was parented as a child.

In the interview soon after the COS-P program ended, Ching explained what had changed around mealtimes with Fia.

After Circle of Security I realised she's not against me, she's not angry with me. It's just that she can't control herself because she's really tired.

Everything is too much for her. As a parent you have to always be bigger, stronger, wiser and kind. So I have to keep myself especially with the kind one. You have to remind yourself that you have to be kindness to your baby.

Through COS-P she realised that 'you have to separate the baby from your emotions, the shark music, then you have to see through the behaviour. Their behaviour is usually saying their needs, you have to figure what's their needs'. As she had said in the class, being kind was hard. She described her parents as offering 'conditional love—I love you, but you have to do this, this, this so you can get my love'. Being kind was something Ching had to work on.

After the Circle of Security class I learned how to separate the situation from my emotions. I'm okay to be upset. It's okay for me to take time out. So I turn away and deep breathe. "She'll be fine, she's just tired"—I talk to myself like that. I talk to her as well, "Mummy knows that you are just very tired. It's okay to be tired. Mummy understands that it's been a long day for you", and then we will just wait.

Ching described mealtimes shortly after the course as totally different from those beforehand. Ching was working to be calm and kind, and was beginning to read Fia's messages, finding that when Fia became calmer, she would often start accepting food. Gradually, she learned how to distinguish Fia being full from her being tired and needing a break. In Ching's words:

I can tell what's her need, I can see through her behaviour and start to realise my own issues as well... that's why the being strong, bigger, wiser and kind thing is always in my head now.

Changes in her family kept going long after COS-P finished. Months later, Ching reported that Fia now 'eats like a horse', describing giving the child options and allowing her to make decisions about when to eat, what to eat and when to stop eating. For a while, Ching saw Fia playing with food as a way in which she learned about food, which was a big change from her former sense that it constituted a refusal or naughty behaviour.

Fia was growing and changing herself. By the final interview, Fia had started teething, and at times was 'hardly eating anything'. However, there was no return to distress and conflict. Instead, Ching was able to read the message that it was uncomfortable for Fia:

So she refused to eat a lot of days for a certain period. But I remained calm compared to before. Now I think because you provide her with that exploration, like the freedom to eat and to choose, now she loves food so much.

Ching stated that this was all a 'long process'. Learning to remain calm and be kind had taken time, but was something she was accomplishing more easily now.

Ching: The problem is I have to deal with my shark music. Now it's—like this morning she was throwing bananas and throwing eggs out from her table. I was very kind. I was so calm and just pick it up and talk to her.

Interviewer: How do you keep calm?

Ching: It takes a while to change it. But you have to keep telling yourself that's not her problem. A lot of parents think it's the kid's problem when

they throw things. It's not. It's our problem. If you think from their perspective, it's easier to take.

Ching described how she had enrolled her husband into the changes in thinking and acting that were prompted by the program.

Circle of Security's more like pulling you to think from their perspective as well. You're treating them as a human being, an individual, and you have to respect them... I always try to tell myself and my partner to follow your child's needs whenever it's possible, and take charge whenever is necessary.

Initially, she explained shark music to her husband, but he had said he didn't have any. However, over time, he realised that his anxieties around dirt and risk were his shark music. By the final interview Ching described a shared understanding that 'we as parents are afraid of certain emotions, afraid of facing or solving certain emotions.' Previously, this (unrecognised) fear had led them to try to change the child, whereas now, they worked on recognising their emotions rather than ignoring them. As Fia grew and they faced new challenges, Ching found the same ideas helpful. Her own words capture the profound sense of change she felt:

It is not just changing your relationship with your kid. It actually changes yourself, the way you're seeing your relationship and your connection with the world. I think Circle of Security, helped me too much. I can apply every theory, every core theory, into every moment of my life.

Conceptualising the dynamics of double stimulation and volitional action

The initial force-feeding involved a conflict of motives, linked to a conflict of stimuli between Fia's apparent refusal of food and her poor weight gains. Ching's experiment

with baby-led weaning was not successful: the child was still not eating much and Ching was left stressed by the mess and still feeling rejected. Breaking out of this involved the use of multiple auxiliary tools to construct new motives.

The emergence of this solution began with three concepts (shark music; bigger, stronger, wiser, kind; and the child's behaviour as communicating a message). These provided a basis for expanding understandings of the child's behaviour and Ching's experiences, through which means to break away from this conflicted frame and taking initiative to transform came into view. However, these needed to be anchored in a material realm to become effective. This was done through commitments to and performances of embodied practices of deep breathing and temporarily turning away from the child. Over time Ching became more confident in interpreting Fia's bodily cues. Rather than being at the mercy of conflicting motives, Ching took control of the situation, acting on the basis of new motives—to give Fia more of a say in feeding, to acknowledge her own emotions, and to be kind.

Her use of mediating tools spanned and connected different epistemic levels of mediation (Engeström 2007), addressing questions of what to do, how, in what order, in which location, why, and where to? Reading the child's behaviour as a message spanned several epistemic levels. It worked through (locating) Fia as tired or full in order to explain why she plays with food. It also helped Ching develop if/then logics: if she seems tired, give her a break and she may eat more. The concept of shark music provided Ching with a basis for understanding causes—why she found it hard remaining calm. Bigger, stronger, wiser, kind provided a model of how Ching wanted to be, slowly taking root as Ching learned the embodied practices through which she could enact this vision.

This history of change demands conceptualisation on dialectic rather than linear terms. Her expanding understandings enabled steps towards volitional action while her volitional actions contributed to her expansive learning. Expanded concepts and interpretations helped to produce new motives leading to new actions, while those actions expanded understandings of how concepts might be embodied, when they were most relevant, and how they were effective. Ching broke away from the conflicted frame through actions mediated by cultural artefacts from COS-P. At the same time the use of those cultural artefacts was stabilised through committed, embodied actions. This mediation spanned, and connected, diverse epistemic levels, addressing questions of What? In which location / category? Why? and Where to? (Engeström 2007).

From volitional action to transformative agency

Ching took control of the feeding situation, acting with volition where previously she had been at the mercy of conflicting motives. A claim about transformative agency rests on establishing whether her actions transformed the conditions of her parenting practices, not just particular situations.

There are several indicators that this was indeed the case for Ching. The concepts and their associated embodied performances provided a consistent basis for volitional action even as the conflicted situation changed. Thus Ching was learning to see new possibilities or potential in activities initiated in specific situations. When Fia ate less due to teething, there was no return to conflicted situations, but a re-interpretation of how the auxiliary tools were relevant. Similarly, as Fia grew older the changing meaning of her playing with food (from a way of learning to a signal that she was full) was folded into a stable but flexible framework for interpretation and action. The conditions of parenting around feeding had changed. Rather than being reactive around a problematic child, Ching was now understanding and responding to challenges

through new motives to read Fia's messages, attune to her needs, remain calm and be kind. She accomplished practices aligned with these motives through the use of mediating tools which functioned on multiple epistemic levels (Engeström 2007).

The tools used were not static, nor were they used to remain still. In this respect, their function can be metaphorically likened to that of kedges, anchors used to help move a floating vessel rather than to keep it still. Sannino (2014, 2017, this issue) suggests this retains the dynamics of human action, and Ching's bases for volitional action were implanted in different situations and used to move through new challenges. She did not use these tools to stay in place but to move, to come unstuck.

There is further evidence that Ching went beyond volitional action as she enrolled her husband into the new ways of thinking and acting. She not only committed individually to the lessons from COS-P, but envisioned their use by her husband, and took consequential actions to transform the relevant concepts into a basis for new actions. This involved helping him to recognise his own shark music (critique his current activity) and 'read' Fia's messages. Shared, new motives came to shape both parents' practices, connected to common epistemic mediation around location, explanation, procedural, and envisioning work. Embodying a shared vision of being bigger, stronger, wiser, and kind became a joint, ongoing, epistemic project, accomplished through classifying Fia's behaviours, specifying their causes, figuring out their implications.

The conditions of parenting were transformed in this process, as both parents attuned to their own emotions and found new, common bases for interacting with their daughter. This evidence of critique, envisioning, expanding possibilities, commitment and consequential action matches, in an everyday setting, features and expressions of

transformative agency that have been found in change laboratory studies (Engeström et al. 2014; Haapasaari et al. 2016; Haapasaari & Kerusuo 2015; Virkkunen 2006).

Ching's efforts to be kind, both required and were an expression of agency that addressed conditions of parenting. Kindness was not readily available to her either as an inherited model from her own experiences as a child, nor as an embodied action. Yet, it was crucial to overcoming feeding difficulties. Over time, kindness shifted from being something hard, a painful reminder of what her parents had not offered her, to the core of an expanded understanding of what the role of a parent is in relation to the child: to see the child as a human being, with needs, who may communicate those needs in more or less clear messages. A statement written on a board in one of the COS-P sessions took root as a means Ching used to learn to be kind:

Love and security are the two things any child needs most when they seem least deserving of it.

The legacy of Ching's childhood as a feature of the conditions of parenting Fia was transformed, no longer occupying the same position as problematic point of departure.

It can be argued that the history of change in Ching's family went from a conflicted situation, to volitional action *and beyond* to transformative agency. This is a case of TADS in action. While the latter did not happen within the temporal confines of the COS-P program, this agency had its genesis in the program as the auxiliary tools and motives that were specified during the program took root as stable yet flexible features in broader trajectories of change.

Situating Ching's case with patterns in the wider dataset

In this section we make brief reference to other families whose trajectories of change were analysed, in order to show how the key findings discussed in relation to Ching

reflected patterns in the broader dataset. These offer a picture of how TADS unfolds in diverse family settings. Key to these patterns are the dialectic relationship in which expanded understandings both enable and are produced by volitional actions, and volitional actions both contribute to, and are stabilised and secured by, transformative agency. Also important is the orientation of volitional action towards specific situations, and that of transformative agency towards the conditions in which those situations and responses to them arise.

Across the families studied, expansive learning was part of how volitional action was accomplished, and a result of those actions that resourced qualitatively different expressions of transformative agency. This was always connected with the use of cultural artefacts, including concepts drawn from established professional expertise, everyday objects, and translated into embodied practices. Taking deep breaths was a means used by several parents to diffuse their own heightening anxiety or distress and come back to being with the child (see Hopwood & Gottschalk 2017). The use of parents' bodies was also expanded through actions of role modelling, listening, mimicking, using tone of voice, patting mattresses, caressing infants and so on. In Ching's case, the meaning of everyday objects of food and spoons expanded as they became part of new ways of feeding Fia. For other parents the meaning of curtains, blinds, toys, mattresses, prams, blankets, photographs, stairs and iPads all expanded as their connection with conflicted situations was clarified and their potential as auxiliary tools was discerned.

The idea of reading the child's behaviour as a message was a concept used in several families as a tool to take control in conflicted situations. A child's cries were expanded in terms of their possible meaning, and thus parents' possible responses in varied situations including struggles to fall asleep, and toddler tantrums. Other concepts

were more specific to particular services, such as the PRIDE mnemonic used in Parent-Child Interaction Therapy (Hembree-Kigin and McNeil 1995), which describes a parent's role in special play in terms of praise, reflection, imitation, description and enjoyment (see Hopwood & Clerke 2019). PRIDE helped to establish new motives, from controlling or disciplining the child, to increasing shared enjoyment of play by looking for elements that can be praised, reflected, imitated, and so on.

As with Ching, a crucial aspect of this tool use, across the wider data, was that it mediated parents' activity on a range of epistemic levels. The following comment by a nurse during a home visit shows how expansions relating to objects around the child and the parent's objects were linked with epistemic work of 'how' or 'in which order', based on an if/then logic, and also 'where to', in terms of a vision of a pattern to work towards (Engeström 2007):

Might I suggest next time you cradle him in arms, close the blinds together, and when he's breathing nice and calm, then put him in bed; think about feed, play, sleep.

Location work, involving classifying and categorising, was also widespread. In one case a distinction between real and corrected age was mobilised as an auxiliary stimulus to resolve conflicts a mother experienced around her son, who had been born prematurely. Stimuli relating to 'normal' developmental trajectories conflicted with those relating to her own child. Locating the child on trajectories based on corrected age helped transform the conditions of parenting from doubt and frustration to confidence, through a new motive to provide corrected-age-appropriate care. Just as Ching came to work with categories of tired, hungry, full (etc.) in new ways, so many other parents expanded their understandings of their children in terms of protest, confusion, distress, and so on. Such expansions helped other parents model the future, explain the present,

construct narratives about the past, and create possibilities for how to proceed. These all depended on establishing new motives to understand children's messages or states and respond accordingly.

Finally, all the cases of change that were studied in more detail revealed the same dialectic relation and qualitative difference between volitional action and transformative agency. Auxiliary tools and motives needed to be stabilised so that volitional action was more than an ephemeral outcome. However, the anchoring of the means to break away in concrete actions or objects was not in order to stay still, but to move. This echoes the warping that Sannino (this issue) identifies as a crucial feature of TADS. Accordingly, the tools used and their uses were not rigid but rather evolved and were attuned as the conditions of family life began to change, while at the same time helping to bring about these changes. There was a clear sense in parents' accounts that the changes they experienced were more profound than taking control in particular situations.

The quotation below is from a mother who was visited several times in her home by a nurse, having struggled with a conflict between what baby books said a child's sleep routine should look like, and her baby resisting sleep. She felt she was failing as a parent, neither she nor the baby were getting much sleep, and she was close to a breakdown, having abandoned her self-care almost completely (see Table 1). The nurse helped the mother take control of settling the child for sleep, establishing following the child and her own self-care as auxiliary motives, made actionable by various conceptual, material and embodied tools (respectively, for example, sleep cycles, objects providing comfort, and shushing, patting etc). By the final interview months later, not only was the problem something of the past, but the conditions of parenting

had transformed. With help from the nurse, this mother had used a range of tools to pull herself out of a situation in which she was stuck, arriving at a radically different place:

I was talking to the nurse about just remember to do those things. Because you just feel a bit guilty, actually taking time to yourself. But I've found, if I do that, I am so much better with her. Now that she goes down for a nap for an hour, I do my own things. Then when she's awake, I'm completely focused on her. I can play with her, I can talk to her, I can read her stories.

Here, again, we see evidence of transformative agency, specifically of TADS. There is a critical stance towards past activities, envisioning of different ways of being and doing, commitments to and performances of consequential actions. These not only changed specific moments but transformed the conditions of parenting.

Conclusion

We set out to address gaps in understanding transformative agency by double stimulation (TADS; Sannino, this issue). Specifically, we explored connections between double stimulation as a principle of volitional action, and transformative agency. We asked:

- (1) How do parents' volitional acts develop into transformative agency such that the conditions in which parenting unfolds and conflicts are encountered are changed?
- (2) How can the relationship between double stimulation, expansive learning and transformative agency be understood in the context of education and support for families with young children?

Answering these questions contributes important knowledge regarding how people not only resolve struggles in everyday life but change the conditions of their lives in a more fundamental manner.

We found that TADS was enacted through stable yet flexible use of tools that responded and attuned to changing conditions in the family, while also changing those conditions. These tools were used like keel anchors used in warping (Sannino 2014, 2017, this issue), to move rather than to stay still. This highlights the dynamic nature of mediation in TADS in everyday settings. Professionals helped parents make new connections between ideas, situations and embodied actions, and parents were learning to use tools in ways that enabled them to *move* in the sense of arriving somewhere new in the way their family life unfolded. Parents came to have at their disposal tools that helped in resolving conflicts in diverse situations, and led to other changes, such as new forms of collaboration between parents, new understandings of what parenting involves, and new possibilities for acting as parents. This was taken as evidence of transformative agency.

Answering question 1, transformative agency develops through the formation of new motives and their anchoring in materiality and embodied practices. This process involves mediation at diverse epistemic levels and is driven by, and itself contributes to, expansive learning. Transformative agency can emerge when parents put auxiliary tools to use expansively, in ways that promote new understandings and new possibilities for action. Over time this can expand beyond specific, conflicted situations to forms of breaking away from given frames that incorporate other family members, respond to new conflicts, and ultimately change the conditions in which parenting practices unfolded.

Answering question 2, we furnish the notion of TADS by conceptualising the relationship between expansive learning, double stimulation and transformative agency in dialectic terms. Expansive learning and volitional action through double stimulation both create arrays of possibilities, enabling and resulting from each other. New understandings help to produce new motives, leading to new actions. Those actions can expand understandings of how concepts or abstract ideas can be embodied, and when specific actions can be most effective, and what they are moving towards—these are epistemic developments.

The emergence of new motives both reshapes participation practices, and that participation is psychologically formative (Chaiklin 2012)—generative of motives and stabilising them through embodied acts and the material world. TADS involves more than repeating volitional action in recurring conflicted situations. It involves changes that address the conditions in which those situations arise, including changes in people’s sense of self, their connection with the world and what is or becomes possible in it.

We need to understand how people act willfully in ways that change their circumstances and reshape their futures (Sannino 2015a, 2015b). Parent education and support services can provide a context in which such transformations are catalyzed and the bases for them can take hold. The professional role is not to fix the problem, but to facilitate processes through which concepts become actionable in embodied, materially grounded ways, and tools from everyday environments such as the home can be used expansively, mediating activities across multiple epistemic levels.

We acknowledge the limitations of our analysis. The empirical focus on a small number of families was sufficient to detect patterns, but not to explore relationships between service settings and histories of change in families. While the longitudinal approach, collecting data over several months, enabled analysis of changing tool use

over time, it could be argued that the most robust evidence of transformative agency would require further follow-up with families, and additional data that could link forms of tool use with other outcomes, for example relating to parents' wellbeing and coping, or children's learning and development. These limitations do not, however, undermine the contribution of this paper through detailed unveiling of the dynamics of transformative agency through double stimulation in the wild.

A cultural-historical approach characteristically rejects linear causality and chronology in favour of dialectic understandings (Leont'ev 1978; Hedegaard 2018; Stetsenko & Ho 2015; Vygotsky 1960/1997). The key insights of this paper share this dialectic motif, offering new, rich descriptions of the emergence of transformative agency. We have elucidated the dynamics of resolving conflicts of motives, revealing processes that start with volitional action made possible by the use of auxiliary tools introduced by professionals in parent education and support services. The development of transformative agency was found to result from the stabilising of associated new motives through materialities and embodied practices that drove and resulted from expansive learning, such that double stimulation was not merely a solution to specific conflicts, but the basis for changing the conditions in which parenting practices unfolded.

Endnote

¹ This case was one of several considered by Hopwood and Clerke (2019) in terms of how professionals build parents' understanding of what matters to their children. The present analysis deploys different conceptual tools to develop a complementary argument.

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