Journal of Childhood Studies

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Volume 48, numéro 1, janvier 2023

Time Special Issue

URI : https://id.erudit.org/iderudit/1097288ar
DOI : https://doi.org/10.18357/jcs202320568

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Éditeur(s)

Canadian Association for Young Children

ISSN

2371-4107 (imprimé)
2371-4115 (numérique)

Découvrir la revue

Citer cet article

Chachkhiani, K., Palandjian, G., Silova, I. & Tsotniashvili, K. (2023). Pedagogies of Time: “Editing” Textbooks, Timelines, and Childhood Memories. *Journal of Childhood Studies*, *48*(1), 111–125. https://doi.org/10.18357/jcs202320568

Résumé de l'article

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Drawing on the concept of "pedagogies of time," this article analyzes early literacy textbooks and our own childhood memories of temporal socialization in (post)Soviet Armenia, Georgia, and Latvia. While textbook analysis reveals purposeful socialization of children into modern linear timelines, memory stories interrupt these predetermined trajectories and shift attention toward multiple forms of temporalities that coexist alongside and entangle with each other. Using a speculative thought experiment, we "edit" a chronological timeline in one of the stories from early literacy textbooks as an attempt to simultaneously (re)write the dominant timespaces of socialist modernity and the way childhood appears there.

Key words: *childhood memories; collective biography; time; time traveling; diffractive analysis; (post)socialism; textbooks*

In the science fiction novel *The Future of Another Timeline*, Annalee Newitz (2019) imagines a time when editing may entail not only texts but also historical timelines. In such a world, travellers who move across timelines to make "edits"—or those who experience "edits"—return "with memories of lost histories, previous versions of the timeline they had witnessed" (p. 57). As the sci-fi adventure suggests, future temporal trajectories may shift based on the edits made in the past, disrupting seemingly linear, irreversible trajectories set in motion by the arrow of time. But while Newitz's novel requires time travel to edit past events in order to influence possible future trajectories, similar editing practices have been routinely conducted in the real world by scholars (especially historians) who write—and consistently rewrite—school curriculum and textbooks. In particular, many imperial histories have been repeatedly rewritten in a concerted effort to erase and forget—rather than to remember—the dark side of imperialism, including its violence, crimes, and injustices. In a more recent history of the Cold War, school textbooks on both sides of the Iron Curtain were promptly edited after the fall of the Berlin Wall to redraw maps, to correct controversial narratives about political events, or to replace old heroes with the new ones.

Notwithstanding different historical and geopolitical contexts, most of the official efforts to edit timelines have focused on keeping the arrow of time moving forward in an abstracted, linear, irreversible, and infinite timespace continuum. In this process, schools have played a central role in socializing children into strictly linear temporalities to accelerate progress toward predetermined futures, whether socialist or capitalist ones. In particular, *temporal* socialization of children has been primarily shaped by the concepts of (Western) modernity/coloniality where time is perceived as "structured and measurable, as a ' duration' and as an 'occasion' during which an action, process or condition exists and continues, or is extinguished" (Tesar et al., 2016, p. 360). It has been also presented as "a series of linear instances," the flow of which could be carefully regulated and "(re)routed through human intervention and to predetermined outcomes" (Tesar et al., 2016, p. 360). In early childhood settings and schools, for example, clocks and "clocking practices" have been enforced to coordinate behaviours, activities, and arrangements throughout the course of the day, producing particular knowledges about what it means to be a child (Pacini-Ketchabaw, 2012, p. 155). In the socialist state contexts, precise clocking practices were used to ensure that children's learning experiences across the vast territory of the Soviet Union—from Riga to Tbilisi and Yerevan—were synchronized to such an extent that the same lessons were taught "from the same books with the same methods at the same time" (Hamot, 1996, as quoted in Silova, 2006, p. 40). In this way, both children—and the futures they represented—were firmly positioned on a developmental trajectory toward teleological notions of adulthood, progress, and development as part of the much bigger imperialist project to "modernize the world" (Common Worlds Research Collective, 2020; see also Burman, 2021).

Aiming to better understand the role of school textbooks in temporal socialization of children, we chose to focus on early literacy textbooks, which were commonly used by us (and previous generations) to learn our first languages—Armenian, Georgian, and Latvian respectively. As we delved deeper into the textbook analysis, lessons about linear temporalities were unexpectedly interrupted by our childhood memories of time, which refused to diligently follow the linear timelines meticulously mapped in textbooks. Rather than ignoring these disruptions, we decided to engage with them. In this process, we wove together critical discourse analysis of early literacy textbooks with our own childhood memories through a collective biography approach to examine both official efforts of temporal socialization and our own memories of engaging with different temporalities of childhood. We have analyzed our memories vis-à-vis textbook narratives of time through a diffractive analysis (Barad, 2007), reading memories both *through* each other and simultaneously *through* the textbooks' narratives. In the process of diffractive analysis, temporal dimensions that appeared to be firmly "settled into an apparent fixity, a binary, a category" started "moving, not in repetitive iterations but in leaps and bounds toward the new" (Davies & Gannon, 2012, p. 371). We followed the entry points triggered by the memories to complicate the dominant education narratives about childhood socialization in time by bringing into focus multiple temporalities that have always coexisted alongside each other.

Taking our diffractive analysis a step further, we engaged in a speculative thought experiment to reimagine what the early literacy texts would look like if we edited them to reflect the different temporal experiences brought up in our childhood memories. In this article, we invite you to time-travel with us to edit early literacy textbooks along different epistemological and ontological timelines, while simultaneously (re)writing the dominant timespaces of socialist modernity and the way childhood appears there.

Childhood, time, and memory

Literature on childhood socialization is often shaped by concepts of Western modernity where time is presented as future oriented and linear, leading toward a predetermined future. In Western societies, the child has been commonly presented as a "signifier" of Western modernity and was simultaneously perceived as "the key arena in which to instill such civilization" through education for a capitalist economic workforce (Burman, 2008, p. 77). Meanwhile, in a socialist version of modernity, a child has been generally seen as "malleable tabula rasa" that could be carefully shaped through

proper social, psychological, and pedagogical techniques to become a powerful agent of building a socialist future (Mead & Silova, 2013, p. 197). Despite differences, childhoods on both sides of the Iron Curtain have had much more in common than may have initially been apparent, especially in terms of positioning a child on a journey toward linear, irreversible trajectories of modern progress and development.

The linear and irreversible concept of time has emerged from the dominant Western culture, which is founded on the idea of progress and development (Lee & Liebenau, 2000). Mignolo (2011) points out that the modern linear conception of time is an epistemic tool that is rooted in the logic of modernity/coloniality. Emerging from a similar modernity/coloniality logic, childhood temporality is likewise controlled by the ideas of progress, development, and productivity, as well as by the dreaded scenario of falling behind. Such linear, irreversible time takes away children's presence "in their own right" (James & Prout, 1997, p. 230), rendering the child a subject of "becoming an adult" and seeing childhood as a time of preparation for adulthood separated from the notion of "being a child" (James & Prout, 1997; Mead & Silova, 2013). Prout and James (1997) further argue that the concept of child socialization downplays and suppresses "childhood's present tense" (p. 27), focusing on past mistakes or future goals rather than on children's participation in constructing their own lives and relationships.

Shifting attention to a broader conceptualization of time, we turn to the idea of the "pedagogies of time" that encompasses multiple temporal dimensions—linear, segmented, circular, iterative, or lived time, among others—which are viewed, not as oppositional or independent of each other, but rather as relational and coexisting (Silova, 2019; see also Rappleye & Komatsu, 2016). Similarly, ancient Greek philosophy describes different temporal dimensions in terms of chrónos, kairós, and aión. According to Kennedy and Kohan (2008), the chrónos is a chronological, linear conception of time where time stages are defined in continuity or hierarchical order. This is the conception of time that governs modernity's futures toward predetermined destinations. In contrast, kairós is defined as "'measure,' 'proportion' and, in relation to time, 'critical time,' 'season,' opportunity'" (p. 6). Kairós is understood as the time when conditions are aligned or for the right moment. Finally, aión is defined as "the intensity of time in human life—a destiny, a duration, an unnumbered movement, not successive, but intensive" (p. 6). During aión, the lived time is nonlinear and is marked as a period of time. While all three are temporal references, each serves as a distinct type of time and each can be simultaneously present in our daily experience.

In approaching this research, we specifically focused on these various dimensions of time to examine how the socialization of the child—through textbooks and in our memories—has been premised on particular epistemologies and ontologies of time and its progression, or what we refer to here as pedagogies of time. Such a broader conceptualization of time is helpful in several ways. First, it disrupts the modern concept of linear time and brings into focus multiple temporalities that coexist alongside each other. Second, it enables us to see how different pasts, presents, and futures affect and entangle with one another (Barad, 2018; Murris & Kohan, 2021). And third, it makes visible the connections between time and space, connecting child socialization to particular contexts and more "emplaced" ways of being (Massey, 2004; Strang, 2015). Shifting attention away from the dominant (Western) form of temporality, the pedagogies of time thus offer a unique lens for analyzing children's early literacy textbooks together with our own memories across Soviet and post-Soviet temporalities of childhood in Armenia, Georgia, and Latvia.

Examining pedagogies of time: Methodological approaches and speculative experiments

Methodologically, this article approaches the study of childhood and time by combining critical analysis of texts and illustrations from early literacy textbooks with our own memories of reading these textbooks through a diffractive analysis approach. As Newman and Paasi (1998) explain, educational narratives found in school texts provide a special "reading" of social norms, values, and symbols attached to them (see also Mead & Silova, 2013). Critical discourse analysis is productive

in unpacking these special "readings," allowing us "to analyse opaque as well as transparent structural relationships of dominance, discrimination, power and control as manifested in language" (Wodak, 1995, p. 204). In particular, our analysis was guided by searching for and examining concepts representing multiple temporalities across texts and images, which included words associated with time, such as clocks, calendars, and schedules, but also more broadly concepts that represented a change across periods of time, which included milestones in childhood, changes in seasons, or intensity of time experienced in children's lives. Using critical discourse analysis, we analyzed the different dimensions of childhood time across our textbook sample. First, each of us individually and independently (re)read textbooks in our subsamples to identify the themes and images reflecting different dimensions of time. We then met frequently to share our notes and findings, corroborate our interpretations, and identify commonly recurring (as well as diverging) themes about the pedagogies of time within and across each of the subsamples. For the purposes of this chapter, we decided to highlight the examples that resonated with us and the literature in interesting and unexpected ways.

For the analysis of early literacy textbooks, we used convenience sampling to obtain textbooks published in Georgia, Armenia, and Latvia. Overall, we examined 4 Armenian, 5 Georgian, and 5 Latvian early literacy textbooks which were published in the Soviet Union between the 1950s and early 1990s (for a complete list of the textbooks, see the appendix). All of the textbooks in the sample were approved by the ministries of education and were widely used in schools in each of the respective countries at the time of publication. Importantly, some of the textbooks included in the sample were the ones we ourselves had used as children to learn our native languages of Armenian, Georgian, and Latvian respectively, which helped us both to make inferences into what the books communicate to their child readers and to examine how readers may interpret and experience the texts.

Importantly, we analyzed pedagogies of time through a diffractive analysis, reading the textbooks' narratives through each other and simultaneously through our own memories, which interrupted textbook analysis in critical and productive ways—sometimes adding contextual and affective details and sometimes telling different and divergent stories compared to those found in the textbooks. Inspired by Donna Haraway's (1988, 2016) and Karen Barad's (2007) work, we understand and approach diffractive analysis as an embodied engagement with the materiality of research data. In our research, this engagement entailed analyzing textbook data alongside other materials—our own perspectives, memories, experiences, and emotions—to provide insights into the pedagogies of time. In this process of reading materials, memories, and emotions through each other, we paid particular attention to how differences make a difference and how they matter, rather than identifying sameness or looking for similarities through themes or categories.

We specifically focused on a collective biography approach, which was initially articulated by Friga Haug and collective (1987) and further developed through the poststructural lens by Brownyn Davies and Susanne Gannon (2006) and more recently through the decolonial lens by Iveta Silova, Nelli Piattoeva, and Zsuzsa Millei (2018, 2021). In our collective biography research, we followed memory stories that emerged during the textbook analysis and shared these memories in a group, aiming to fill in the gaps, recapture details, images, tableaus, glimpses, and scents through which memory first emerges and focusing on the commonalities and differences of our childhood experiences (Haug et al., 1987, pp. 71–72). By moving from individual perceptions to the affective and perceptive life of the research collective, the collective biography approach constitutes "the process that is involved in escaping from the tedious repetitions of the clichés and explanations that go to make a story of "me" and "my life" or the official metanarratives (Davies & Gannon, 2012, p. 369; see also Millei, Silova, & Gannon, 2019). In this process, memory work became "a lived process of making sense of time and the experience of it" (Keightley, 2016, p. 55)—collectively and diffractively—enabling us to navigate complex temporal narratives and structures we had learned through school socialization, while ascribing new meanings, not only to the past, but to the present and future.

It is inevitable that our diffractive analysis of early literacy textbooks and childhood memories led us to a speculative

thought experiment aimed at (re)imagining what school textbooks would look like if they were edited to capture multiple and entangled childhood experiences of time. Inspired by science fiction time-hopping journeys (Hayashi, 2010; Newitz, 2019) and related speculative fabulation in academic research (Barad, 2010; Haraway, 2016; Murris & Kohan, 2021), we thus engaged in a speculative thought experiment to edit textbooks with our own childhood memories in an effort to reclaim and decolonize our childhood experiences of school time, as well as to trouble the dominant concepts of time constructed by school textbooks. As Barad (2010) explains in reference to Kyoko Hayashi's (2010) novel *From Trinity to Trinity* (which strongly resonates with our research),

> what is at stake is not setting time aright (as if that were possible), but rather the undoing of time, of universal time, of the notion that moments exist one at a time, everywhere the same, and replace one another in succession.... It is also a story of time-being that undoes modernity's unified notion of self and what it means to be human. (Barad, 2010, p. 70)

By working diffractively across texts, images, and childhood memories we thus engage in an ongoing labour of cutting through and undoing the logic of modernity/coloniality in order to bring into focus alternatives and rewrite childhood and time along different epistemological and ontological lines.

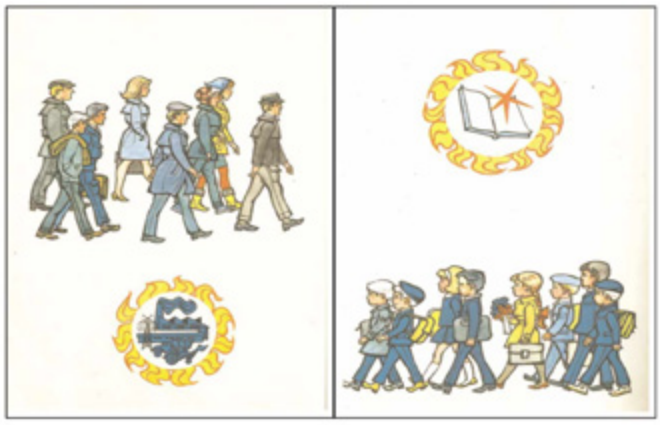
Learning (linear) time

Before diving into a speculative thought experiment, we will first outline the dominant concept of time—chrónos—which consistently appears across all early literacy textbooks in our sample. The linear, chronological, and consecutive time underpins most of the stories, poems, images, sentences, words, and even letters presented in the Soviet early literacy textbooks, diligently mapping children onto strict schedules and predetermined timelines.

Across textbooks, children are consistently portrayed—literally and figuratively—as "adults in the making" or "miniature adults, moving towards 'correct' understandings and habits" (Kirschenbaum, 2001, p. 117). For example, one Georgian textbook shows an image from the Soviet household, where children mirror the actions of the adults: The girl sits at the table and talks to her mother with the same engaged and thoughtful face as her dad when talking to the grandmother. A little boy is depicted reading as diligently as his grandfather. Similarly, in a Soviet Latvian textbook, an image of adults going to work is complemented by a mirror image of children going to school on the opposite page (see Figure 1). Furthermore, textbooks show children engaged in "socially useful labour" of various kinds—harvesting grapes, picking apples, or taking care of poultry in the farms. Even when portraying children at play, the activities are often simulations of their future—adult—lives building rockets and ships, marching as soldiers, teaching children, or driving tractors (see also Palandjian et al., 2018). As Kirschenbaum (2001) notes, such purposeful blurring of childhood and adulthood, or play and work, reflects the Soviet government's efforts to "put children's interests first" in the name of the Soviet future, insisting that the life of the child should revolve around "work rather than play" (p. 120).

The clock, a symbol of the chronological, measured, and successive time, takes a central place in all early literacy textbooks. When teaching letters of the alphabet, a clock is introduced while teaching the letter "s" in Georgian (the first letter of the word for *saati*, or clock), "p" in Latvian for *pulkstenis* and ժ or "zhuh" in Armenian for *zhamatsoyts*. Texts also tell about children receiving watches as gifts as well as being proud of wearing a watch and being able to tell the time of the day. Chronological time is further reinforced by the expectation for children to master clock time by following schedules, meeting deadlines, and managing time for homework and afterschool activities. Textbooks also introduce children to the concept of calendar time by recounting months and seasons, often aligning chronological time or calendar months with changes in nature or the passing of different seasons. From the change of seasons, children learn that new beginnings are marked by flocks of birds returning, flowers blossoming, and the lush green of Mother Nature re-dressing the forests. Even the structure of the textbooks itself presents content through seasons where the beginning of the school year is associated with the mark of fall harvest followed by winter landscapes, then a return of spring flowers and birds, and ending with

images of the summer months by the end of the school year and the end of the book (Silova, 2019; see also Mead & Silova, 2013).



Latvian textbook by Ņesterovs and Osmanis (1984), pp. 6–7

Georgian textbook by Botsvadze and Burjanadze (1957a), p. 99

Georgian textbook by Ramishvili (1989), p. 3

Georgian textbook by Botsvadze and Burjanadze (1957a), p. 41

Georgian textbook by Botsvadze and Burjanadze (1957a), p. 55

Armenian alphabet book Der-Krikoryan (1987, 1990), pp. 2-3

Armenian textbook Der-Krikoryan (1988, 1989), p. 117

Armenian textbook Der-Krikoryan (1988, 1989), p. 61

Figure 1. Mapping childhood onto adulthood in early literacy textbooks.

Above all, the textbooks place a strong emphasis on careful management of the daily routine, focusing on the hourly activities of the children. For example, almost all of the reviewed textbooks include texts describing the morning routine of a child, precisely timing every step and each activity from the moment the child wakes up to the moment he or she gets to school. While most textbooks describe the morning routine of an everyday child, some begin by sharing the morning routine of Vladimir Lenin, or Volodya (his child name), setting an example for all children to follow. A story from a Latvian textbook published in 1965 contains such a story, "In the Morning" (Lubāniete et al., 1965):

> *Volodya wakes us at a specific time. Exactly at seven, he wakes up on his own—without anyone waking him up—and gets up right away. He brushes his teeth, washes thoroughly, and makes his bed himself. Then Volodya begins to review his homework, which he already studied well the night before. During this time, his mother makes him breakfast.*
>
> *Then children gather in the dining room and eat everything they were given. Volodya is especially keen that everyone finishes their food. He always had a great appetite and he laughed at those who ate unwillingly...*

Figure 2. "In the Morning": Volodya's daily routine.

Source: Lubāniete et al., (1965), Ābece 1. Klasei [ABC for the 1st Grade], pp. 190–191

Interestingly, Volodya (Lenin), as an exemplary student and pioneer, is far ahead even of those students who accurately manage their daily routines by diligently following the clock-dictated time. Volodya has already overcome the bodily and emotional struggles and is in no need of anyone waking him up in the morning. His natural bodily time is now entirely identical to the clock time. Thus, he has learned to function in precisely measured temporal units without even looking at the clock. Other students are also expected to perceive and feel clock time with the same accuracy and precision. Otherwise, they will be considered lazy, slow, or empty-headed human beings. In addition, an Armenian textbook describes Volodya as a "very capable, hardworking and punctual" student (Der-Krikoryan, 1988, 1989, p. 108), setting an example for others. The text "Volodya in School" describes how a hard-working boy listens to his teachers and manages to learn all his lessons at school instead of bringing school work home. We see clock time here as a tool of modernity/coloniality, which is introduced in humans' lives from the schooling years to categorize children and manage their lives (Fabian, 2002; Mignolo, 2011).

A story from a Georgian textbook echoes Lenin's morning routine, describing a meticulous timing and precise management of the child's movements as soon as the day begins. In this text, however, children are introduced to the morning routine of a regular girl—just like them—who appears to practically mirror all of Lenin's movements step by step, including the exact timing and sequence of activities from waking up to eating and rehearsing (or reviewing) the homework in the morning.

Natela

"Natela got up at 7 am. The girl rehearsed the lessons for the day, had breakfast, and went to school. On her way to school she walked very carefully. Natela got to school on time. She always gets to school on time."

Source: Georgian textbook by Ramishvili (1989), p. 48

While setting expectations for schedules and routines, the early literacy textbooks contrast well-behaved, organized, responsible, and hardworking children like Volodya and Natela against lazy and careless ones who are unable to follow the clock time. In an Armenian alphabet book, for example, Zaven is portrayed as an irresponsible boy whose bedroom is messy and who often arrives late to school (Der-Krikoryan, 1987, 1990, p. 146). The two questions at the bottom of the text offer a discussion point to remind—and to further instill in—children the expectation that they will never be late to school. If children take care of their things, they will not be late and can be more efficient because they are able to locate their things or organize themselves well. Furthermore, by focusing on the clock and its role in defining, regulating, scheduling, and organizing children's lives, the early literacy textbooks set a well-structured pathway from childhood to adulthood, focusing children on their future as adults and what they need to do at present to accomplish those dreams and expectations, while ignoring the children's lives in the present.

Remembering time

As we engaged in a critical discourse analysis of texts and illustrations across the three countries, our own childhood memories emerged unexpectedly, interrupting linear presentations of time in the school textbooks. Because we had used some of the same textbooks during our own schooltime, we began to remember, not only what it felt like to read these books as children, but also how we had experienced time differently from what we learned from textbooks. Although the texts were intimately familiar, we were surprised by how much these texts aimed to "time" childhoods, managing children's time and placing them into linear, predicted, and prescribed timelines. At the same time, we were doubly surprised by the intensity of the childhood memories that these texts triggered in us. While our memories have generated many stories about different experiences of time, given the limitations of space we will primarily focus on one iterative moment in children's everyday lives—the time of going to school in the morning. We chose to focus on children's morning routine because it appeared in all of the early literacy textbooks in our sample, both visually and in the text, mapping children onto linear and predictable timelines and creating strict, predetermined schedules for children to follow. When we (re)read the textbooks, we were surprised—by the strong emotions that emerged when sharing memories, by the small details of the experiences we remembered, and also by the details that the textbooks glaringly omitted. Our memories started filling in these gaps almost intuitively.

> *The sound of TV wakes the girl up. She cannot see what time it is. But if the TV is on, this means her dad is already getting ready. She also gets ready, as fast as her dad does—she needs to be prepared to leave the house together with her dad. She gets dressed and gets her backpack ready. "Your tea is getting cold"; she hears her mom's voice in the kitchen.* ***"Don't be late"****—Dad's voice comes next. This means he is already having breakfast. She starts her breakfast, eating as fast as her dad does. She is done with her breakfast. Her favourite*

> *cartoon starts on TV. What if she watches it for two minutes? But Dad's voice calls again,* ***"We are late, hurry up."*** *She immediately takes her eyes off the TV. But what if they are a* ***little late****? Once? The girl asks herself and right away answers her own question—"No, Dad* ***cannot be late*** *to work." She* ***cannot be late*** *for school either.* ***No time*** *for her favourite cartoon. Instead, she follows her dad into the street. She walks as quickly as her dad.* ***No time*** *for* ***falling behind.*** *Dad's steps are so big. She needs to make two steps for every one of his steps to* ***catch up and keep pace****. She tries hard,* ***walking as fast as*** *her dad does. Her dad gets to work* ***on time****. The girl also gets to school* ***on time****.*

The memory story follows exactly the same timeline as presented in early literacy textbook stories about Volodya and Natela, describing their morning routine. It recounts the chronological order of the activities—from waking up and dressing, to eating breakfast and rehearsing the lessons—revealing a strict management of different segments of time. Just like in the textbooks described above, the girl is expected to imitate the behaviour of adults, her parents, waking up when her father wakes up, eating breakfast when her father eats breakfast, leaving the house when her father is ready to leave the house. There is no time for the child to be on her own. Rather, the girl's morning revolves around the adult timeline, making sure that the rhythm of the adults' lives is not interrupted. It also follows the same pace as that of the adults—walking or working fast, being efficient with time. The girl thus becomes a clear manifestation of the child-as-becoming or adult-in-the-making rather than a young human being in her own right (Uprichard, 2008, p. 304; see also Mead & Silova, 2013). In this process, the girl is tuning out everything else (including her favourite cartoon) to fit into the adult world and ignore any urge to be—be a child.

And although the girl silently and momentarily remembers how to be a child (e.g., when her interest was piqued by the sound of her favourite cartoon on TV), she still obediently follows the timeline planned for her by the adults to make sure that she is ready and on time for school—and eventually, ready and on time for work. Thinking about this childhood memory and the textbook images and texts diffractively, we see a parallel between the girl's experience and that of the cosmonaut boy (standing in front of the space shuttle) from the Armenian textbook. There is a sense of uneasiness about their participation in these adult-like activities and perhaps even a hint that each child is eager to escape the destination planned for them by the adults, although neither one acts on it. In a memory, the girl already knows that time is something that passes, something that is counted very accurately, and something that she has to follow unconditionally and use effectively. As a child masters how to follow these temporal expectations, her agency gradually weakens, threatening her capacity to make her own decisions and foreclosing the possibility to exist in the now. The girl is also acutely aware that she is not allowed to introduce any novelty into the carefully planned schedule. Instead, she lives the life that revolves around an adult-structured and normed temporality. Her memory invokes feelings of anxiety and stress that signal the girl's concern for her father and his obligation to be on time for his important work. Everything and everyone else fades into the background.

But as we "travel hop" deeper into our memories, along with the chronological time we also remember the time in a moment, as an embodied lived experience, duration, intensity, nonlinearity—or kairós and aión (Heraclitus, as cited by Kennedy & Kohan, 2017). Without knowing the exact clock time, the girl recognizes the temporal meanings of specific events. For example, if she hears her dad's voice it means he is already having breakfast and it is breakfast time for her too. She knows that she needs to catch up with and tune into her dad's morning rhythm because they need to leave the house together. This knowledge accelerates the intensity of her aiónic experience of time. She becomes excited about the possibility of watching a cartoon and even though it is a short one—lasting only a couple of minutes—she decides against it because there is "no time." The memory also captures the intensity of the girl's walking and the double effort she has to put into her strides to keep up with her dad's big steps.

Drawing on the connections of time and temporality in childhood education, Tesar et al. (2016) claim that there are

"multiple, and often contradictory, philosophical and practical enactments" of time (p. 360). Against this context, childhood is considered to be a "culturally and historically contingent space that embodies, encloses and lets loose different possibilities in its performance … constructed as discursive spaces in our imagination against the normal process of leaving 'childhood'" (p. 362). Given the emotional intensity of experiencing precisely timed and strictly scheduled childhoods, delinked from bodily and emotional experiences (Shahjashan, 2015), remembering time allowed us to collectively "undo the injustice" (Murris & Kohan, 2021, p. 583) inflicted on our childhood selves in the dominant timespaces of socialist modernity—from subordinating children's bodies and minds to dismissing their emotional struggles. We can begin undoing the injustice by unsettling the dominant relationship to time, including the adult/child binary and adult temporalities, through our own childhood memories, which bring into focus different and diverse dimensions of time.

Remembering a strict morning routine associated with school time triggered memories of different time experiences during the summer months, especially the time of spending summers with grandparents in the countryside. For example, one girl remembers summer as *"the best time of the year"* when she could enjoy playing ball with her friends, picking apples, riding her bike, playing with the dogs, swimming and hiking, and eating "yummy cheese bread her grandma makes for her." But the memory zeros in on the presence of a calendar book that hangs on the kitchen wall. The grandmother starts each day by tearing out a page in the calendar, marking the day passing by. At the same time, the girl counts the summer day passing by. Although this marking of time does not bother the girl during the first weeks of the summer, she becomes more anxious about this morning ritual as the summer comes to an end. *"The thinner the calendar book gets, the sooner summer will end,"* she remembers worrying about. The girl even asks her grandmother to take the calendar off the wall, as if to prolong the experience of the unstructured summer time. Without having to look at the calendar, she can spend the rest of the summer *"neither counting the days, nor worrying about the remaining days of the summer."*

Our memories included other attempts at avoiding linear, chronological time to escape the routine of the school time. For example, a girl in one of the memory stories remembers filling out the dates in her school diary and unconsciously extending the month of December infinitely by going beyond December 31—adding December 32, 33, 34, 35, 36, and further. She only stops when her mother notices the mistake and scolds her for being so silly and inattentive. "How can a month have 66 days?" the girl's mother asks. The girl's emotions shift from shame to sadness at the realization that the winter break is almost over and she has to go back to school, which also means going back to a rigid morning routine. In her mind, she wonders how great it would be "if the winter break would last a little longer, if there were simply more than 31 days in December."

Despite mastering the clock time in school, our childhood memories tell about digressing and "reconfiguring human-clock boundaries and relations" on a daily basis (Pacini-Ketchabaw, 2012, p. 156), reminding us that human (child) bodies are always in relationships with other nonhuman bodies that coexist in different, intersecting timespaces. Remembering these intra-actions enables us to notice and engage again with temporalities that have always coexisted alongside the chronological one. Although these memories had become dormant as we grew older, they reemerged during our textbook analysis. This reawakening is well illustrated in a memory about a more leisurely and slow routine of going to a kindergarten every morning.

> *A girl and her sister are going to the kindergarten in the village. On their way to the kindergarten there is a pond. Girls know that "Tavkombalas" (small fish with a big head and thin body) are living in the pond. In the morning, they walk by the pond silently. It is so difficult for the girls to wake up in the morning; they do not want to wake up Tavkombalas, too. But on their way back from the kindergarten, the girls are getting excited to get closer to the pond. They stomp their feet as they pass by the pond and Tavkombalas are starting to swim and jump around. Girls are happy that their Tavkombala friends are "playing" with them. Probably Tavkombalas were waiting for the girls to come back from school in the afternoon, too.*

In this memory, the girls' morning routine is set within the familiar linear timeline (or chrónos) that includes routine preparation to attend the kindergarten in the morning. Unlike textbook stories about enthusiastic children waking up with the alarm clock or on their own, the girls in this memory feel sleepy and recall the difficult time of waking up so early in the morning. Unwilling to enforce the same chronological routine on others, they walk very quietly by the pond in order not to wake up the fish sleeping there. The girls seem to be fully aware of their surroundings, including the pond and the fish that do not have to follow clock time or adhere to the same strict schedule as the girls. The end of a strictly organized school day is marked by the lapse of time as the girls return home from school. On their way from school, the girls' time is no longer measured by the clock, allowing them to experience aiónic time. Unaware of the wishes of the fish, they happily stomp their feet as they walk by the pond, looking forward to playing with their fish friends. When time is not measured by the clock, the girls become fully aware, more attuned, and deeply connected to the worlds they are a part of, where the ponds are awake and their inhabitants—the fish, the frogs, and the long cattails—are impatiently waiting to play with them.

Our childhood memories share some interesting similarities in terms of the chronological sequence of the daily routines, the emotional and bodily intensity of lived experiences, as well as the temporal dissonances present in our childhoods. At the same time, each memory is full of unique features, highlighting different temporal dimensions and our various experiences with them. What connects our memories and the textbook narratives together is the persistent coexistence and deep entanglement of different temporal dimensions that cannot be undone—neither by textbooks nor by memory.

(Re)learning time

To relearn time is to acknowledge that multiple temporalities always coexist simultaneously. It also means remembering that all lived experiences are not confined to one space and time but rather unfold and entangle across multiple temporal possibilities. Having engaged with our collective memories and textbook narratives diffractively—listening to each other's childhood memories and (re)reading textbooks and memories through one another, picking up the threads and weaving them together apart—we aim to trouble the uniform narratives and create a new "superposition," that is, a state of being between two positions: "not be[ing] here or there, or even simply here and there: rather, it is to be indeterminately here-there" (Barad, 2007, p. 65). It means being simultaneously "here-there" also in terms of childhood/adulthood temporal relationships: "adult is also child and … child is also adult" (Murris & Kohan, 2021, p. 585). From this perspective, different coexisting temporalities contribute to the overall pattern of time.

Being in this timespace of superposition opens an unexpected opportunity to imagine how textbooks could be edited, altering the temporal trajectories they have imposed on our childhoods and adulthoods. Engaging in a speculative thought experiment, we therefore return to the original (and recurring) textbook story about the child's morning routine in order to make edits—literally and figuratively—by infusing it with our own memories and experiences, including the story about keeping up with father while preparing for school and caring for the Tavkombalas in the pond. We used these edits to add details to the original textbook story, highlighting sensations in the girl's body, her observations and thoughts. Collectively, these edits illustrate the here-there of multiple temporalities that inevitably entangle with the linear, mechanical flow of the morning routine.

Natela: Edited Timeline

> *The girl woke ~~got up at 7 am,~~ with the warm rays of sun reaching through her bedroom window. It took her a while to wake up, but she heard the sound of her favourite cartoon on TV, and she jumped out of her bed right way. Natela was so happy that she was able to watch a few minutes of TV before rushing to school. She rehearsed the lessons for the day, had breakfast, and went to school. On her way to school she walked very ~~carefully~~ fast, trying to keep up with her dad who was always in a hurry to get to work on time. They walked by*

the pond, but they were too busy to stop and enjoy the reflection of the slow-moving clouds in the water. Natela wondered whether the fish were still asleep. Natela got to school on time. She always gets to school on time. *But she wishes she could slow down on her way to school to say hello to the fish in the pond and look at the reflection of the clouds and the sun in the water.*

Although the edited story is only one of many possible edits, it helps us imagine how textbooks could be written (or edited) differently to open the timespaces for multiple temporal possibilities beyond the single trajectory of linear, chronological time. It also helps us imagine what might happen if textbooks continue to insist on a universal mastery of linear, chronological time, as if nothing else exists outside of it. In such a spacetime, children would have mastered the rigid schedules and straight timelines so well that they forgot to notice the pond and the Tavkombalas swimming in it. Over time, they would have also failed to notice how the pond was drying up and shrinking. And now, travel-hopping in time 30 years after the "Tavkombala" story, when children pass by the pond on their way to school, their experience is different. The pond is now empty. It has dried up, and there are no Tavkombalas there anymore. The girls do not walk silently along the pond in order not to wake up the fish in the mornings. They are no longer looking forward to playing with the Tavkombalas on the way back from school, and there are no Tavkombalas waiting for the girls to play with them in the afternoons either.

Figure 4. The pond 30 years after the Tavkombalas and the girls played there.

The dried-up pond is a powerful metaphor for the disappearing future—a "bright future with infinite possibilities" (Millei, 2021, p. 62)—which was so clearly sketched in early literacy textbooks and which seemed guaranteed if we only followed its predetermined linear path. But although the pond from the childhood memory has dried up, its disappearance does not signal an erasure of memory or disappearance of time. As Barad (2010) states, "memory—the pattern of sedimented enfoldings of iterative intra-activity—is written into the fabric of the world. The world 'holds' the memory of all traces; or rather, the world is its memory" (p. 261). From this perspective, editing linear timelines with childhood memories creates new possibilities for noticing and engaging with the multiple temporal traces in the fabric of the world. Such broader conceptualization of time brings attention to intra-actions between human and nonhuman bodies, encompassing affective and bodily experiences of time—from communicating with Tavkombalas to losing track of calendar time during the summer holidays—making visible multiple, coexisting temporalities. More importantly, engaging with pedagogies of time opens up the possibility for (re)learning how to live with one another—and with human and more-than-human worlds—in ways that rupture narratives of historical progress and reshape our possible futures.

Appendix

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