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WaterChildrenWorldings

On the Notion and Entanglement of Water Relations and Early Childhood

Abstract (E)

Stories about WaterChildrenWorldings form the core of this contribution. Drawing on posthumanist and new materialist philosophies, they let us explore the relational "becoming-with" (Haraway 2008, 4) of children and water in the context of early childhood education. As a first analytical step, we examine three video stories generated through posthumanist ethnographic research in Swiss kindergartens to trace the relational processes through which children and water become-with one another. These empirical insights are then situated within the Common Worlds approach developed by Affrica Taylor (2013) and colleagues at the Common Worlds Research Collective, which challenges romanticized notions of nature and childhood that position humans as separate from their environments. Inspired by Hastrup's (2017) notion of "Waterworlds" and the Common Worlds approach, we propose the term "WaterChildrenWorldings" to describe the dynamic, non-innocent entanglements where children and more-than-human actors – i.e. puddles and ice – co-constitute shared worlds. From this perspective, the focus shifts from viewing water as a mere resource or pedagogical tool towards a pedagogical reorientation: away from learning *about* nature toward *becoming-with*, *amidst*, and *through* common worlds, emphasizing attentiveness and "response-ability" in the context of the Anthropocene.

Abstract (D)

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Geschichten über WasserKinderWelten bilden den Kern dieses Beitrags. Sie beleuchten relationale Werdensprozesse (“becoming with”, Haraway 2008, 4) von Kindern und Wasser im Kontext frühkindlicher Bildung und stützen sich dabei auf posthumanistische und neu-materialistische Philosophien. In einem ersten Schritt werden drei Videogeschichten analysiert, die im Rahmen einer posthumanistisch-ethnografischen Forschung in Schweizer Kindergärten entstanden sind. Mit ihnen werden die relationalen Prozesse beleuchtet, durch die Kinder und Wasser gemeinsam-werden. Die empirischen Einsichten werden anschließend im Common-Worlds-Ansatz verortet, der von Affrica Taylor (2013) und Kolleg:innen des Common Worlds Research Collective entwickelt wurde und romantisierte sowie dualistische Vorstellungen von Natur und Kindheit kritisch hinterfragt.

An diesen Ansatz anschliessend, schlagen die Autor:innen in Anlehnung an Hastrups (2017) Waterworlds den Begriff „WasserKinderWelten“ vor, um jene dynamischen, nicht-unschuldigen Verflechtungen zu beschreiben, in denen Kinder und mehr-als-menschliche Akteur:innen – wie etwa Pfützen und Eis – gemeinsame Welten konstituieren. In einer solchen Sichtweise verschiebt sich die Perspektive von einer Betrachtung von Wasser als bloße Ressource oder didaktisches Werkzeug hin zu einer pädagogischen Neuausrichtung: weg vom Lernen *über* Natur hin zu einem *Werden-mit*, *inmitten von* und *durch* Common Worlds. Dabei werden Achtsamkeit und „Response-Ability“ im Kontext des Anthropozäns betont.

Stories: WaterChildrenWorldings

From drinking and washing to playing, exploring, and simply being present, water permeates everyday kindergarten life. It is present in children’s bodies and in their material environments, continuously shaping their daily practices. Sometimes, water becomes a visible focus of learning and pedagogical processes; at other times, it remains unnoticed, despite its ongoing presence and significance. The following

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analyses of video stories of WaterChildrenWorldings focus on different forms of water (i.e. puddles and ice) and the entanglement of these water forms in Common Worldings as entangled human/more-than-human stories. Drawing on Hastrup's notion of "Waterworlds" (2017), we call them WaterChildrenWorldings: local and temporary worlds in which bodies, materials, weather, affects, and social norms become entangled. The embedded videos serve as illustrative material and, at the same time, as an analytical tool. Drawing on empirical data from the SNF-funded project "*Negotiating NatureChildhoods. An Ethnography of Relations with Nature in Kindergartens of the Anthropocene*", the videos tell stories of children as "becoming-with" (Haraway 2008, 4; Spyrou 2018, 130). Writing, weaving and storytelling will let us create less human- and object/subject-centred and more inclusive narratives, and allow us to focus on relations and world-making processes. This raises questions such as: what does it mean when childhood research understands the child as "becoming-with"? And how might water itself be understood as becoming-with the child?

Video Story 1: Playing in, around, with, and within the puddle

Puddle Dance. Copyright Juen, Rißler, Sieber Egger, Unterweger.

Video 1 was filmed at the end of March 2023 during a field trip to a farm owned by the family of one of the children attending the kindergarten, located in a remote area of the Canton Zurich. The farm raises Angus cattle and produces beef. We spent the entire morning at the farm and walked back to the kindergarten around noon.

During the morning, a puddle caught the children's attention. This is what prompted the ethnographer to start observing and filming the scene. She notes: "The puddle is somehow the centre of the whole arrangement of people, animals, toys, barn, equipment, machinery, garden, house, etc. None of the adults intervenes because of the puddle and the dirty water that keeps splashing up and around." (Fieldnotes

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March 21, 2023) In the first ten seconds of the video, the elongated puddle is visible. It falls within the ethnographer's line of sight and enters the camera's frame. What comes into view is a composition, an assemblage of diverse material elements: cobblestones, asphalt, concrete, curbs, and other ground surfaces. The setting is the farmyard. Colourful clothing contrasts with the grey, dirt-covered ground, creating the impression of a bleak winter landscape in which conventional markers of "nature" seem notably absent. Bright, reflective, V-shaped kindergarten safety vests identify the children as kindergarteners in Switzerland. Their gloves and winter hats suggest a cold morning, and the children are bundled up against the chilly weather. Apart from their faces, the children's bodies remain mostly hidden beneath layers of winter clothing. But what exactly are they prepared for? The cold and the weather – or the water they are about to encounter? A handkerchief and traces of dirt float in the puddle, raising questions about the quality of the water. Is it polluted? At first glance, water appears to be something from which the children should be protected. It emerges as a potentially problematic element.

However, the puddle is not just something to be avoided. It invites engagement and relations. The children linger at its edge, stepping around it and negotiating its boundaries. A shared challenge emerges: not to step *into* the water. As the children move, their actions begin to resemble choreographed dance. The first child's wide, straddling step is mirrored by the second child, creating a moment of coordinated movement around the puddle. But could it also be a planned choreography? It seems too effortless for that; it's a constant flow of bodies. The first child loses their balance and takes a straddling step across the water. The other children quickly follow suit, unfolding into a collective choreography at the water's edge. There are rapid sequences. What unfolds resembles an improvisational choreography in which new impulses are continually taken up by others. The children explore different ways of moving in relation to the puddle: straddling it with wide steps, hopping, jumping across obstacles, swinging their arms as they walk, and nudging objects with their feet. Circles form in the puddle when a foot steps in. As the ripples spread across

the water's surface, relations between the children's bodies, the water, their movement, and the ground beneath their feet become visible. It's reminiscent of a theatre stage when one child replaces another. Enter Child 1, Child 2, Child 3... The water takes center stage. One action leads to another without verbal coordination, whether through laughter, shouting, or movement alone. The scene resembles a silent movie, accompanied by ambient sounds. After the first ten seconds, a basketball enters the scene, kicked through the tunnel of legs. It, too, becomes entangled with the water.

In contrast to the surrounding ground, the puddle presents a reflective surface that sometimes resembles a clear, sharply defined mirror. Its reflective qualities are almost captivating, giving the puddle an aesthetic presence. The children both engage with and preserve this fragile surface. When they disturb it with their movements, sediment stirs up, and the clear reflection gives way to muddy water. Yet this transformation is only temporary. Moments later, the water settles again, restoring its smooth, reflective appearance. Thus, the puddle continually shifts between disturbance and calm, transparency, opacity, and reflection.

What brings a puddle into being? Water, uneven ground, and a lack of drainage. Yet the puddle is more than just the product of these conditions. It becomes a gathering point. The children are drawn to it, taking turns and moving in relation to one another without touching. Their movements remain open, fluid, and largely unregulated. Relations emerge between bodies, water, ground, movement, and attention. The children touch the water; the water touches the children. Around the puddle, a common world comes into being. While a nearby adult appears disengaged from the unfolding event, the ethnographer attends closely to it, keeping the puddle at the centre of the camera's gaze.

Video Story 2: Splashing – PuddleWorlds

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Glunge gumpe. Copyright Juen, Rißler, Sieber Egger, Unterweger

Video 2 focuses on the relational events of “Glunge gumpe” (Swiss German for splashing), seen as locally shared worlds co-produced by humans and more-than-human participants. From the Common Worlds perspective, these events emerge from the relations between children, rain, earth, pebbles, mud, shoes, gravity, temperature, water, and other human and more-than-human participants. The situation unfolds at a research site located in an urban area. At this kindergarten, Fridays are so-called “forest days”, regardless of season and weather conditions (see Unterweger & Sieber 2022, 47). On Fridays, the kindergarten travels to the forest together. After taking a public bus to the outskirts of the city, they continue on foot, moving across a changing landscape of surfaces: from paved, and thus sealed, sidewalks and streets to a gravel path, and finally a narrow dirt trail that opens onto a small clearing with a fire pit.

On a sunny but cool spring day, children and puddles meet on this paved, partially sealed gravel path. Murky brown water has gathered in ruts and hollows, forming puddles of different sizes across the uneven surface. The puddles did not wait for the children. They formed on their own, collecting dust and reflecting the sky, the clouds, and the surrounding landscape. Yet once children’s bodies enter into relation with them, their form changes abruptly. Jumping feet propel water upwards, creating fountains and thousands of droplets that scatter through the air in shifting patterns. Shoes sink into mud. Water, earth, and bodies are set in motion. Splashes and squelches resonate through the cool morning air. These encounters unfold in different ways. Some children jump in with both feet, producing dramatic splashes; others engage more tentatively. Each movement elicits a different response from the puddle, creating distinct sounds, rhythms, and patterns of relation.

Not all encounters are explosive. Sometimes, shod feet approach the puddles slowly and with great care. The soles lightly graze the water’s surface, skimming across it and submerging only briefly. Small waves spread across the water’s surface,

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travelling towards the edges of the puddle before gradually fading away. At the same time, different ways of relating to the puddles emerge. Some children leap enthusiastically; others approach more cautiously. Some are not supposed to get wet, while others remain at the margins, quietly observing the encounters unfolding before them.

A peculiar rhythm also emerges from the act of walking and stopping, as well as from the events unfolding with the puddles. Some children are drawn to the puddles, while others see them as obstacles to be navigated around. Regardless of whether children are drawn to the puddles or avoid them, relations emerge between bodies, water, mud, and movement. The children can feel the depth, texture, and resistance of the water through touching or jumping; they hear and produce diverse sounds (such as the splash in the video); they can experience the interplay of temperature, humidity, and/or wetness (caution: wet shoes); they can react to and perceive different splashes. Encounters with puddle water are also avoided – however, this co-structures the paths. Every jump, every touch, every pause changes the situation: the ground becomes different, the water spreads differently or anew, new sounds emerge. The children, in turn, respond to this with new movements. They do not act according to a fixed, and thus internal, plan, or a pedagogical system. Rather, they move attentively in response to the properties of the material(s): water, body, movement, and environment. These elements respond to one another reciprocally and generate a specific rhythm.

Water, here in the form of puddles, possesses its own history and temporality (Dietzsch 2023). Formed by rain, puddles expand, evaporate, are transformed through encounters with children, and eventually disappear. From this perspective, puddles are not passive background elements. They participate in the constitution of social life by shaping movements, encounters, relations, and possibilities for action. As such, they co-produce particular social orders and forms of agency.

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Video Story 3: Ice, Mouse, Hands

Ice Mouse. Copyright Juen, Rißler, Sieber Egger, Unterweger

Ice Mouse. Copyright Juen, Rißler, Sieber Egger, Unterweger

Videos 3 and 4 capture a relational event that we provisionally named “Ice Mouse” during our initial analytical sessions. The event unfolds in the schoolyard of a kindergarten, another urban research site, on a cool April morning with light snowfall. Here, water takes on a different form: snow. We observe a girl moving her hands against one another in a wave-like rhythm, a movement that appears continuous and self-sustaining. It resembles a loop, with neither a discernible beginning nor an end. Through the child’s hands, the snow becomes compacted and appears almost like an icy substance. The snow melts under the warmth of the child’s hands, their movements, and the pressure, while it simultaneously solidifies. Hands, snow, warmth, pressure, and movement are caught up in an ongoing process of mutual transformation. During our analytical discussions, we repeatedly found ourselves referring to the snowy object as a mouse. This naming seemed to arise from the particular quality of the encounter. The compacted snow was handled less like an object and more like a small living creature. The child’s hands moved in gentle, repetitive strokes, as if in response to the presence of a furry animal. Through this sustained tactile engagement, the snow gradually melted away. However, the encounter was reciprocal: while the child’s hands transformed the snow, the coldness of the ice simultaneously acted upon the child’s fingers, requiring pauses to restore warmth before the interaction could continue.

In this relating and common worlding, the water is becoming-with the child as a material that affects the body of the child, that is malleable, that can be played with in an intimate and affectionate way, and that can and will disappear, that is temporal and yet leaves its mark on the cold, wet fingers and clothes (and maybe even other marks and markers on a microlevel). Later, when we started paying more attention

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to the ice mouse, we realized that it was actually more of a snow mouse, and we began to wonder whether a label such as “mouse” might be too narrow to describe this scene. In any case, the term “mouse” does say something about the relations that develop here.

WaterChildrenWorldings make it possible to perceive water not just as a resource, not just as part of a cycle to be understood, and not just as something used to wash one’s hands. Rather, water emerges as a playmate, a space for exploration and experience, and as a material force that affects and is affected by bodies. Even the ethnographer filming the scene at close range does not appear to disrupt this encounter. The child remains fully absorbed in the responses of the piece of snow held in her hands.

Background Stories

Our contribution addresses the topic of water without writing about extreme weather events or dwindling drinking water supplies, both of which are major concerns that Switzerland will face in the future (BAFU 2025). On the contrary, our insights into the field of early childhood education institutions focus on mundane, playful, and seemingly unproblematic scenes involving water. Our stories revolve around the worldings that emerge with this water. The teachers who are present do not always use it in a pedagogically guided way: two of the three scenes took place outside the pedagogical focus. Importantly, our stories are neither innocent nor complete accounts. They are situated and partial (Haraway 1988, 1997), acknowledging that it is impossible to know everything. “Knowing everything and then trying to control it is a quality of human exceptionalism that we are attempting to resist” (Blaise et al. 2017, 39). Our stories, too, should not pretend that everything is already known – even though, as reports show (BAFU 2025), there is a substantial body of knowledge about water in Switzerland and the issues surrounding it. Instead,

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they are intended to open up other perspectives on water and on childhood, expressed through our text and the accompanying videos from our fields. In the words of Donna Haraway: “It matters what matters we use to think other matters with; it matters what stories we tell to tell other stories with; [...] It matters what stories make worlds, what worlds make stories” (2016, 12). With this in mind, we aim to bring more stories about “waterworlding” to life and, in doing so, give our readers a glimpse into our posthumanist ethnographic research project on childhoods in Swiss educational institutions.

In the relatively young but rapidly growing field that connects posthumanist and new materialist philosophies with childhood studies (Rosiek et al. 2024; Taguchi & Eriksson 2021; Balzer & Huf 2019; Taylor & Giugni 2012), the central subjects of childhood research – child(ren) and childhood(s) – are reconceptualized as dynamic, relational, and continuously emerging phenomena (Spyrou 2019). This perspective not only sets these concepts in motion but also contributes to the ongoing transformation of childhood studies as a field. As part of a broader shift in theorizing children and childhoods, scholars have begun to revisit a range of foundational questions. These include what a child is (not) (Murris 2016, 90; Spyrou 2019; Spyrou 2022); how childhood development can be understood from a post-developmental perspective as a process of nature-culture co-constitution (Lenz Taguchi & Bodén 2025, 46); how the material dimensions of childhood can be reconceptualized and granted greater analytical significance (Bollig et al. 2020; Myers 2019); and how agency is distributed across relational assemblages in shared common worlds (Taylor 2013) and child-animal worlds (Taylor & Pacini-Ketchabaw 2019), where humans and more-than-human others co-shape shared worlds (Malone 2018).

In the wake of debates surrounding the Anthropocene and the related discussions on ethical living (see Barad 2007; Haraway 2016; Tsing 2021), childhood studies have also increasingly addressed the question of how life in shared, more-than-human worlds can be conceived. The “Common Worlds” approach, influenced by posthumanist and

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new materialist considerations, is based on a deconstruction (see Taylor 2013) of historical definitions of nature and their (con)fusion with conceptions of children and childhood. Our fundamental critique of romanticized notions of nature, the child and childhood shows how strongly modern conceptions of childhood are historically linked to ideas of the primal, innocent, pure child who is closer to a supposedly unspoiled nature than to the social world. In education, this notion manifests itself in pedagogical concepts of teaching and learning about, in, from, and through nature. The problem here is the tendency to detach children from the actual conditions of their worlds. Children then appear as beings who must be protected from the world, rather than as subjects already entangled in it. Additionally, idealized notions of nature obscure the damage, conflicts, and precariousness of the contemporary world (Tsing 2021). The “Common Worlds” approach thus seeks to rethink nature, childhood, children and the world: not as separate spheres, but as processes of joint world-making. “Common worlding” refers to the ongoing creation of shared worlds by human and non-human actors. These worlds are contradictory, conflict-ridden, fragile, and constantly in the process of becoming.

In such worlds, children live with animals, plants, objects, technologies, smells, atmospheres, infrastructures, and landscapes.

Amidst the diverse debates and questions that have emerged in recent years, we turned to the idea of a continuous becoming-with, amidst and alongside discontinuous, open NatureCulture Common Worlds. This concept is situated within debates on the relationship between childhood, children, and nature, and is informed by evolving understandings (or shifting conceptions) of agency. Secondly, we drew on the central childhood-theoretical concept of Common Worlds, which has been extensively discussed and further developed in recent years by Affrica Taylor, Veronica Pacini-Ketchabaw, and colleagues of the Common Worlds Research Collective (Common Worlds Research Collective | Worlding, Commoning, and Inheriting). Our aim in doing so was, as Blaise et al (2017, 41) have put it: “We [...]

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advocate about the response-ability early childhood should have towards matters of concern and propose the use of lively stories to show how modest witness(ing) can rework early childhood observations into ethical, political and entangled forms of open-ended dialogue".

WaterChildrenWorldings – some concluding thoughts

The three stories from our research project point to forms of relating that go beyond the acquisition or transmission of knowledge (such as learning that water splashes when one jumps into it). Instead, they highlight attentiveness, responsiveness, and ways of being-with water in relation to the wider world. This perspective also shifts how childhood is understood. Rather than centring the sovereign and competent child, it draws attention to zones of entanglement, ambivalence, and co-constitution in which children, water, materials, and environments become-with one another.

Relations between children and their environment are thus no longer a matter of teaching and learning about, in, from, and through nature, but rather of teaching and learning *with*, *for*, *amidst*, and *through common worlds*. Our research project follows this perspective by examining material-discursive practices in kindergartens. We focus on the everyday moments in which common worlds emerge: when children enter into relations with soil, plants, animals, objects, atmospheres, or in this case water; when the boundaries between nature and culture, the human and the non-human, become blurred; and when it becomes apparent that childhood has always been a more-than-human entanglement. And if storytelling, as Fenske and Peselmann (2020, 11) put it, is a central practice in world-making and world-understanding, and a strategy for dealing with crisis-ridden events and turning them constructively, then telling stories about common worldings that are not (obviously) crisis ridden is also important. When terms like "children" and "nature" are mentioned or discussed, certain (romanticised) images seem to emerge almost

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automatically: visions of children running happily and in wonder through forests, joyfully playing with water, watching animals with fascination, tinkering with sticks, sand, leaves, seemingly intuitively connected to their environments and the world around them. While not universal, the idea that children need experiences in nature to grow up healthy is widespread in Western societies of the Global North. Forest days at preschool, mud pants, fire pits, and the promise of "natural" learning are often seen as ideal and as a necessary alternative to today's seemingly digitalized and domesticated childhoods (Schierbaum 2024).

Such notions, however, are by no means innocent. They draw on a romantic tradition in which childhood is imagined as a stage of life that is particularly close to nature. Since Jean-Jacques Rousseau (2001), a close connection has been established between the young child and nature, understood as primal: the child appears innocent and unspoiled, closer to nature, and authentic. This conceptual framework continues to influence pedagogical ideas to this day, as does the notion that children are natural, biological beings in development (Eßer 2013). Their growth must be observed, supported, and optimised in educational upbringing and socialisation processes. From this perspective, children themselves are also seen as "observers" and "naturalists." Alongside the concept of the child as both a natural and developing being is the idea of the child as a "cultural being" who must undergo a process of civilization (Gilliam et al. 2017; Gilliam and Gulløv 2014). At the same time, this reflects specific cultural and social norms. For some, forests, mud, the cold, snow, wetness, and being outdoors in all weather conditions are a natural part of everyday family and school life. Others, however, experience these expectations as more of an irritation (see for example for Norway, cf. Herrero-Arias et. al. 2020). Not all families are familiar with or agree to such practices. This reveals a specific conception of a "good" childhood: a childhood closely linked to being outdoors and resilience in all weather conditions, and the romantic notion of a child's connection to nature. Video Story 3 with the ice mouse reveals traces visible in the materialities that tell us something about being well or ill equipped for icy, snowy conditions.

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However, it can also be interpreted differently, as the 'other' of culturally dominant forms of engaging with ice and snow – without falling into the realm of romanticizing conceptual frameworks that ultimately rest on a fundamental separation of nature and culture. Although children are initially situated on the side of "nature," they are expected to become responsible cultural beings through their education and intensive contact with nature, learning to treat the environment with care. It is striking that nature is generally considered as something "external": as a place to explore, a resource, or even an educational backdrop. Consequently, the extent to which humans have always been interwoven in diverse interdependencies and relationships with water, animals, materials, infrastructure, or atmospheres often goes unnoticed. As Fenske and Peselmann (2020, 10) so aptly put it, it is therefore not merely a matter of being attentive, but – in the sense of 'response-abilities' (Haraway 2008) – of 'responsibility as an ability and willingness to respond to the relational, emerging interconnectedness of the world' (Gesing et al. 2019, 37). Over the course of three years, we ethnographically observed children in various kindergartens as they encountered water, earth, materials, animals, places, humans and more-than-humans. Rather than focusing on whether "nature" is beneficial to the children, their upbringing, or their learning, we explored how children form relations with non-human elements in specific situations, how they respond to their co-worlds, and how these responses can inform a (different) approach to being in the world. We also examined the connection between education, childhood, and ecological coexistence. In this essay, we aimed to explore these ideas and discuss them in relation to WaterChildrenWorldings. Through the text and videos, we intended to highlight the various forms of world relations and perhaps make them tangible to inspire discussions about alternative ways of being in the world.

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