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'It's not cardboard, it's a house': cartographies of agentic assemblage in the early childhood classroom

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ABSTRACT

The concept of assemblage, drawing on the posthuman theorisations of Deleuze and Guattari, delineates a dynamic and new materialist approach to an event. In this approach, desires, material agency and (de)(re)territorialisation emerge as key concepts, and open ways to understand the school classroom in early childhood as a territory where lines of flight challenge the boundaries of normative education. This paper focuses on a classroom assemblage and aims to cartography the material relations between human and non-human bodies, where (de)(re)territorialisation forces are constant. We draw on diffractive ethnography in order to think-with-theory, making use of a vignette and a diagram containing its material relations. Our analysis highlights the agentic relations of matter in the assemblage, the role of desire as a dynamic force and the ever-changing flow of (de)(re)territorialisations that emerge in it. This study shows the complexity of material experience in early childhood, where desire and deterritorialisation frame creative and unexpected processes that defy the idea of education and classroom activities as linear processes controlled by adults. On the contrary, the cartography depicted in this research supports an idea of education as a space for the emergence of creative lines of flight, material relations and non-linear meaning-making.

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Introduction

Studies in childhood and education have incorporated in recent years new approaches to research, such as those proposed by Deleuze and Guattari's theoretical framework (Boldt 2017). Researchers have embraced concepts from assemblage theory (Bennett 2010; Buchanan 2021; DeLanda 2006; Latour 2005) applied to educational contexts, such as deterritorialisation, desire or assemblage. Thinking-with these theoretical concepts (Jackson and Mazzei 2023) helps us to create meaning about the relations between children and their environment. This brings us closer to the logic of assemblages, through the elements and circumstances that come together in a specific event. Assemblages have been described as 'heterogeneous groupings of human and non-human components' (Lenters 2016, 283) unable to act individually. Furthermore, assemblages are emergent and temporal, and the relations of their components are non-hierarchical. Far from being a mere set of human and non-human

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bodies, assemblages are specific units of relations condensed and created by desires that act as relational forces among bodies. Desire flows and creates assemblages (Buchanan 2021) and, as described by Deleuze and Guattari, it 'is always assembled; it is what the assemblage determines it to be' (1987, 229). Desire is described as productive, not linked to the lack of something, but to actual productions. This productive nature spreads into assemblages, which become forces capable of producing and which acquire meaning through what is being produced (Buchanan 2021).

The merger of the human and non-human in an assemblage brings us closer to the concept of agentic assemblage (Bennett 2010), which incorporates the constant dynamism of intra-active practices in the analysis of knowledge production in childhood (Barad 2007). Drawing on Barad (2007), we adopt the concept of intra-action instead of interaction, marking the lack of boundaries among agents and the absence of causality and intentionality prior to the assemblage. Intra-actions, seen from a new materialist perspective, put the spotlight on the 'in-betweenness' of assemblages, whose elements cannot be analysed individually. Thus, each agent in an agentic assemblage exists as far as the agent participates in the assemblage, and it neither precedes nor anticipates it. This idea of 'in-betweenness' refers to the spaces where agents connect and intra-act, and where they integrate and become boundless, grey-shaped and creative (Kuby and Christ 2020). Hence, agents are connected by an emergent causality (Bennett 2010), whose outcomes and intensities are unpredictable and unexpected (Jackson and Mazzei 2016). Bennett's theorisation of vital materiality helps us to reach a better understanding of children's relations through avoiding subject/object (Braidotti 2013) and adult/child (Murriss 2016) binaries. In the same way, the concept of *thing-power* (Bennett 2010) implies an active role of non-human agents in children's meaning making in school spaces. Jane Bennett proposes in *Vibrant Matter* (2010) a vital materialism where objects, bodies and spaces possess agentiality (*thing-power*), and where human and non-human agents affect and are affected. Human and non-human assemblages are rooted in this relational materiality.

Assemblages configure dynamic sets of relations, immersed in an ongoing process of material change. Deleuze and Guattari (1987) propose the idea of territory as a form of materialising assemblages. For them, territory is a set of configured relations, a process of expression that culminates in the creation of the territory itself (Matthews 2018). The concept of territory goes beyond the physical and emerges as a product of the reorganisation of functions and forces. Kuby and Rucker (2016) underline that the processes of territorialising 'make received models of reality eminently visible; in other words, they are representational and show us what we might expect, the norms, in a situation' (34). Territorialisation is the intensity that drives these relations to what is well known and familiar. In a school context, territorialisation processes are materialised in the curriculum, the school building, the teaching methods and routines, the power relations established in classroom, etc. (Paakkari and Rautio 2019). However, sometimes small variations happen and challenge the territorialised stiffness of the system. Children's desires create lines of flight that take territories to new configurations, which are hard to anticipate (Paul 2021). Buchanan (2015) explains that the line of flight is an occurrence that evades normativity and takes territories to something different, a 'path of a particular de-territorialisation' (89). Deterritorialisation becomes a 'breaking up' of codes (Boldt and Leander 2017), owing to its power to challenge the established relations between the agents in a territory. In this sense, deterritorialisations do not seek reasons nor causes anticipated by adults (Murriss 2016).

Childhood experiences, from this perspective, are characterised by the emergence of relations. These relations between children and other bodies (things, spaces, their past

experiences or dreams, other humans) are embodied and generate new assemblages (Olsson 2009). According to Daniels (2021), assemblages can provide 'a way of thinking about what is generated through complex combinations and interactions of material objects and discursive qualities or attributes (for example, those circulating around childhood, education, pedagogy)' (575). Thinking with assemblage theory not only transforms the way we conceive meaning, but also how this meaning is built. Children are not only passive recipients of content, but they also become active agents in the meaning-making processes (Hackett 2021), where they embrace human and non-human bodies. Nevertheless, children's assemblages with non-human agents have been generally neglected, prioritising human logic and cognitive proficiency (Barron, Taylor, and Macrae 2020).

Children's assemblages are constantly moving and changing. They can advance to the already known, the familiar, through territorialisations, or they can take directions towards the unexpected, the unpredictable, through deterritorialisations (Boldt and Leander 2020). Bodies are dynamic as they are immersed in a continuous 'becoming', 'defined as a process of change or movement' (Lenters 2016, 284) in an assemblage, whose elements are immersed in an ongoing shifting to something new. In the process of becoming, 'a participant in an assemblage experiences deterritorialisation – it is decontextualised and subsequently resituated elsewhere' (Lenters 2016, 284). Deterritorialisation can be interrupted by reterritorialisation processes, in which new territories emerge (Buchanan 2021). Lenters (2016) highlights how the human creation arises in the assemblages of an event and its continuous (de)(re)territorialisations. Assemblages are therefore built to a large extent as deterritorialisations, where the child's desire materialises an assemblage's intensity through a non-verbal and non-representational discourse (Mozère 2007). For Lenz-Taguchi (2017), assemblages evidence constant deterritorialisations in school contexts, as human and non-human act and different kinds of knowledge are generated. The understanding of children and classrooms as part of an ever-changing assemblage (Lenters and McDermott 2020) offers alternatives to a linear learning model. Moreover, body and space acquire educative dimensions thanks to their affective potential (Massumi 2015; Olsson 2009). Karen Murriss (2016) points out that rupture and deterritorialisation contribute to embodied ways of being and doing, and to increased young learners' creativity. These processes highlight the desire-dependent nature of agentic assemblages, considered as ever-changing and never stable (Jackson and Mazzei 2023).

Our research addresses the relations that exist 'in-between' (Kuby and Christ 2020) assemblages, understanding inter-individual spaces as dynamic and set in a constant 'becoming' (Deleuze and Parnet 2007). From this perspective, we draw on Kuntz's idea of 'cartography', referring to the search for new knowledge, understanding contemporary research limitations and 'accounting for the very relations that potentially shape what we have yet-to-become' (Kuntz 2019, 11). According to Kuntz, cartography as inquiry means to avoid the logics of extraction: an overemphasis on methodological processes aimed at extracting 'things' out of their context thus making them impossible to analyse, turning researchers into technocrats and driving inquiry far from any political or ethical change (Kuntz 2015). Doing cartography means to track the production of knowledge while accepting subjectivity, but also implying an effort to document and explore articulations and practices in a different way (Braidotti 2019; Warren 2021).

Our article aims to tackle the cartography of material relations of human and non-human bodies as a part of a process of deterritorialisation, desire and assemblage in an early childhood education classroom. To this end, our research aims to answer these research questions:

- (1) Which relations configure the assemblage in an early childhood education event?
- (2) How do deterritorialisation and desire facilitate dynamic material relations in the classroom?
- (3) How do cartographies of assemblage unfold the ways in which children make meaning in the early childhood classroom?

Methodological framework

Our research has been carried out in an early childhood classroom in a school in the south of Spain as part of a wider research project. The families attending this school have low incomes and different heritages, and the participating children are five years old. We had been visiting the school weekly for one year before the event analysed in this paper took place. We focus on an event that arose during an activity in which children were asked to transform waste materials into newly created artifacts. After that, the children used flashlights to project shadows of these artifacts onto various walls around the school. The activity was intended to be an opportunity for assemblages to emerge, and to explore the relations of children with different kinds of bodies. The event analysed was registered through participant observation, including the use of video and audio recordings made with video cameras, audio recorders and GoPro cameras attached to the researchers. The whole project was designed and conducted in accordance with the ethical requirements of this journal and our research institutions. All names used in this article are pseudonyms.

Our project draws on diffractive ethnography (Gullion 2018) to explore what unfolds in a specific moment of an early childhood classroom and the relation between the bodies taking part in it (García-González, Véliz, and Matus 2020). Diffractive ethnography enables the researchers to be part of the children's material-discursive practices, immersed in the human and non-human intra-actions. These material-discursive practices highlight how children's discourse is built in material relations involving bodies, movements, things or sounds (Barad 2003). At the same time, the researchers avoid the search of causal relations in the children's actions (Gullion 2018). We engage with data, and consider them as material, assembled and dynamic entities (Ellingson and Sotirin 2020a). As MacLure (2013) states, 'data cannot be seen as an inert and indifferent mass waiting to be in/formed and calibrated by our analytic acumen or our coding systems' (660). Our research recognises data as the product of a material process that involves participants, researchers' bodies, and the materiality of non-human agents that take part in the research process. Data also have their own materiality, as they are created, transformed, listened to, photographed, recorded, lived, read, etc (Koro-Ljungberg and Maclure 2013). Data emerge 'within a dynamic assemblage of actions, technologies, discourses, and economies' (Ellingson and Sotirin 2020b, 822). They are constructed from the assemblage in relation to human and non-human bodies in order 'to explore the ways in which actors perceive and respond to social situations, especially "sensitive" social situations that may be practically or ethically difficult to observe first hand' (Jenkins, Ritchie, and Quinn 2020, 2). Our construction of data delved into corporal relations, intensities, thoughts and matter that stood out during the assemblage (Truman et al. 2021). Hence, this framework addresses issues that traditional qualitative methods reshape or dismiss in trying to facilitate representation, like bodily assemblages, human and non-human intra-actions or immanence (St.Pierre 2019).

Data in our research are used to think-with-theory (Jackson and Mazzei 2023), specifically DeleuzoGuattarian assemblage theory, and with Bennett's

conceptualisation of material agency (Bennett 2010). We also draw on Kuntz's 2019 idea of cartography, which examines the limitations of research and the display of material relations in a particular phenomenon. During the process of data creation, researchers think-with all these theories, connecting them with practice and lived experience (Jackson and Mazzei 2023). Videos, pictures, sound recordings and vignettes are our data gathering tools, and they allow us to read them diffractively (Barad 2007). Far from trying to reproduce and represent the experience of being in the field, vignettes aim to emphasise the sensory, emotive and material complexity of the event (Flewitt 2011). Vignettes outline transgressive data (St.Pierre 1997) that raise potential difficulties when coding or categorising and allow a certain kind of analysis that considers the influence of the researcher in the occurrence of the event (Warren 2021). Accordingly, we decided to analyse a vignette through which different kinds of knowledge production in early childhood are addressed: subjectivity, non-representationalism and emergence in meaning-making.

The vignette analysed in this paper was chosen owing to the possibilities offered to explore agentic assemblage in the classroom. The vignette embraces the complexity of sounds, intensities, time (past, present, future) and body movements in a classroom space (Gallagher and Prior 2014; Hackett and Somerville 2017). We (José and Giovanna, another member of the research team involved in the project) are part of the built data analysed in the vignette, and our subjectivity allows us to grasp this event from a non-representationalist and new materialist viewpoint (Truman et al. 2021). As researchers, we took part in the event, promoting actions and immersing ourselves in the classroom. We also chose the position and focus of the video cameras recording the event. Additionally, our use of a vignette as a way of presenting research data leads us to 'provide a single point of reference for a complex set of ideas whilst recognising that further ethnographic research is needed to explore the nuanced relationships between the material and immaterial in diverse contexts' (Burnett et al. 2014, 92).

Our vignette doesn't seek to be a narrative based on a logical temporary sequence. On the contrary, our vignette is a story containing 'traces' of human and non-human relations, that have enabled the researchers to build a landscape of relations in this event. As underscored by Tsing (2015), 'such tracks and traces speak to cross-species entanglements in contingency and conjuncture, the components of "historical" time' (168). Hence, our vignette evidences the creation of research data through a non-linear story of material relations: 'History, then, is the record of many trajectories of world making, human and not human' (Tsing 2015, 168).

'It's not cardboard, it's a house': a vignette

It's a sunny Tuesday morning in a city in the south of Spain. The research team has been doing activities with the children at the school for three days, and today we are playing with their artifacts and exploring the shadows created by them. Giovanna and I (José) engage with a small group of six children.



#1. I (José) am sitting at the table, next to the children and another researcher (Giovanna). A bakery box, intended to be used as a time machine in a previous activity, has been removed from the table and placed on the floor. This box was also used to store recycled materials.



#2. We are sitting on the floor. Each child is cutting out a box flap, in their own way: Abi has problems because the cardboard is so rough; Maya comes and goes carrying objects; Roby pricks the cardboard with the scissors. I fear he may hurt himself, so I say 'Take care' to him.



#3. Riley wants to decorate the box.
'No' — Maya says to her, — 'and also, I am going to take this to my house'. . . 'to sleep here at night'. . . 'I am going to get myself into and sleep here at night'.

They all continue cutting out. Maya says to Roby:

— 'This is a house, isn't it?'

Maya stands up; she tries to close one of the flaps of the box. Maya caresses the flap over and over. It's the same flap she was trying to cut before.



#4. — 'I am making a door for the house, ok?', says Roby. 'Maya nods. He goes on cutting out 'the window' (he cuts a little bit more) — 'no, the door'.

Roby tries to pierce the cardboard with the top of the scissors.

— 'Roby, you shouldn't do that. I am going to help you, ok?' —, I say to him, and I hold the cardboard for him.

— 'There you go. Put the scissors over there and cut a little bit out'.

— 'I knooooowww' says Roby, and he continues cutting out following my instructions.

— 'It's better this way, isn't it?', I ask him, and he says:

— 'nooo'.

Roby asks Maya what he has to do now. Maya gives him instructions.

Giovanna and I look at each other; we've never seen Maya so involved and leading a classroom task. Maya turns around and says,

— 'Miss! I'm making a house'.



#5. Maya — 'I'm going to sleep at night'.

José — 'Are you going to sleep at night in this house?'

Maya — 'No, in my house'

José — 'Are you taking this with you and sleep there at night, isn't it?'

Maya nods.

Riley — 'You can't [sleep] here, you need a blanket and the blanket doesn't fit in here'.

José — 'Riley says that you can't sleep here because you need a blanket'.

Maya: 'Yes I have one, in my bed'.

Riley — It doesn't fit here.

José — 'Do your feet fit here?'

Maya nods.

José — 'Yes, your feet fit here. We are trying it later. Do you want to try it?'

Maya nods.



#6. The children are alone in the classroom. The box goes from resting on its side to being face down, making visible the sealing tape holding its structure. The box now looks like a table. Maya and Riley start drawing in one of the formed rectangles. José assigns one of the sections to each child when some discussions emerge between them.

(Continued)

(Continued).



#7. Iris, as she pierces the box with a marker, says:
— 'I make dots, I am going to make dots'.

Giovanna asks Iris to use a pen for making the dots, because otherwise she could break the marker's point. The space occupied by the box, the children and the researchers is filled with the sound produced by the pens when they pierce the box. This sound gets louder and rhythmic. We are all making holes now, except for Riley, who continues painting her section. The intensity of this piercing movement grows, and Giovanna and I try to make sure they don't get hurt. Occasionally Maya aims to pierce Riley's section, but she protects it with her arms. Maya passes her hand over the tape; she taps the cardboard, hearing the sound and the hollow material.



#8. I signal that the playing time is over:

José — 'Is it now the time to flip the box? Shall we show them one thing, Giovanna?'

I stand up and look for a torch while Giovanna takes the house. I give the box to Maya, who opens it on both sides and walks around inside it, saying 'piii'.

Thinking-with-agentic assemblages, desire and (de)(re)territorialisation

When we (researchers) returned to our data and field recordings, we became firstly engaged with the different moments of the box throughout this event (box-house-bed-table-car). We wondered about the haphazard way in which they all occurred with no apparent logic. We considered different ways of reading it, aiming for a diffractive reading (Barad 2007) in which the diverse layers concurring in the event could be addressed. We portrayed the bodies in the assemblage in a diagram (Figure 1) that enabled us to think in a non-hierarchical way, and to focus on the relations and desires of the bodies. This diagram, renamed as *desiragram*, guided our analysis and became a part of our data-building process. It also turned into a cartography, containing both the process and the result. As a process, it enabled us to be present and to 'map' the relations in the assemblage. As a result, it marked the 'cardinal points' guiding our analysis's further implications for research and teaching practice.

Box as agent and agentic assemblage

This vignette contains the relations between human and non-human bodies: the group of children, two researchers, the teacher, the markers, scissors, box, the feel of the box caressed by Maya, or the sound of the markers piercing it. These relations do not take place in a single direction, where humans would be the only origin of actions (Barad 2007). Instead, the relations of/with the different kinds of matter define matter in each moment, as happens when the blanket transforms the box into a bed. As noted by Barad (2003), 'The world is an ongoing open process of mattering through which "mattering" itself acquires meaning and form in the realisation of different agential possibilities' (817).

The assemblage in this vignette asks us to decentre the focus from the human agents, and to pay attention to the relations between the material agents creating, and at the same time transforming, the event (Kuby and Rucker 2016). The relations emerging in the novel situation of the agent-box reveal a line of flight that moves from the table-chair-task to the floor-movement-bodies (#1 and #2). The children-box build an assemblage

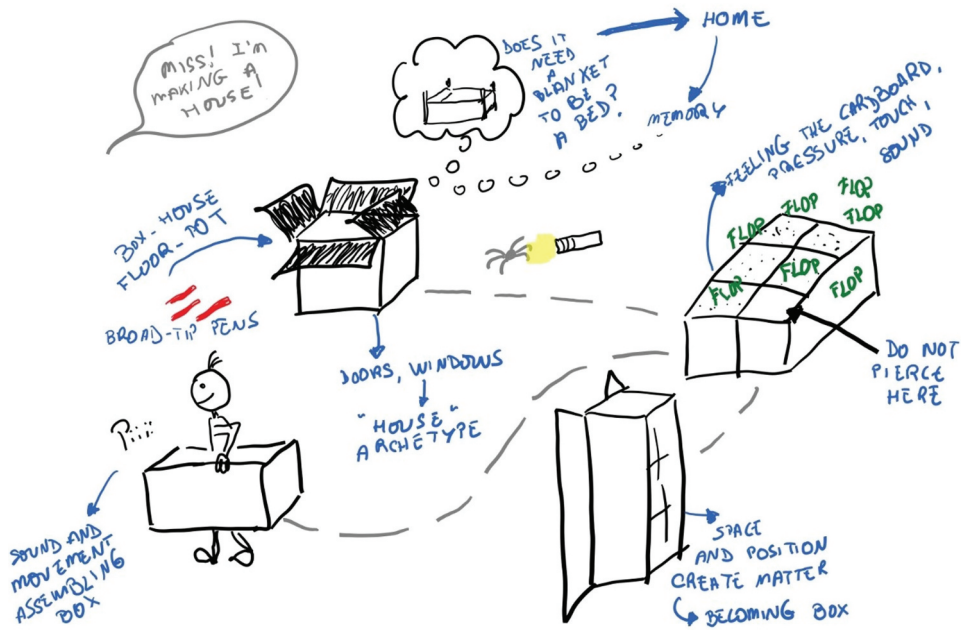


Figure 1. Desiragram of a cardboard box assemblage.

throughout the vignette, drawing on the material relations of agents (Lenz-Taguchi 2010), where the children and the box attune, like the vibrant matter theorised by Bennett (2010).

This relational experience of matter is dynamic, like the ever-changing ways of children's embodiments: box-house, box-bed, box-table, box-car, etc. The analysis of these unexpected networks leads us to consider knowledge in childhood as unpredictable and non-linear (Murriss 2022). They lack any order, they appear, disappear and overlap in an ephemeral way. The relationality of/around/in the box is a flow in which children, sounds and spaces are entangled. The children-box-researcher assemblage highlights the material nature of relations in childhood and shows how meaning making in childhood is not determined by verbal logic, rather constituting a nomadic learning. In a DeleuzoGuattarian terminology, nomadic refers to the constant motion and the multiple ways in which things materialise (Deleuze and Guattari 1987). Thus, 'thinking with nomadicity implicates that neither the writer, nor the text, nor the educational setting inhabits a unique identity, rather, all are in a constant interplay, opening up new ways of becoming and configuring the situation' (Hermansson and Saar 2017).

The frequent negotiations among the children (#4 and #5), intended to define the box's becomings, underline the conflicts between the verbal and other material elements (#5). The word 'blanket' transforms the box's materiality, it moves from the house to the box, and posits the idea of bed itself. In this dynamic transformation the box, its resistance to the markers' piercing, or the feel of its sealing tape, continually modifies the children's sensoriality and their dynamic relation with things (MacRae 2020). As highlighted by Rautio (2013), this new material perspective permits the understanding of learning from the otherwise, where the children-box creates new meanings with/through matter, as

happens in #3. The stability offered by verbal communication is endlessly turned into a continuous and unintentional transformation by the vibrant matter (#5). The transformative dynamics of matter is defined not by ‘what it is’, but rather by ‘what it may be in relation with’ (Hackett 2021).

The thing-box, as a body without any intentionality or specific aim, reveals the agentic assemblage and how thing-power enables unexpected relations (Hackett 2021). In #7 (children-with-markers and markers-with-children) or in #2 and #3 (children-with-scissors and scissors-with-children), ordinary affects are built, in which children create new meanings (Bennett 2010) and reconfigure well-known classroom materials. The energy and intensity in the agentic assemblage build new relational material experiences, without any specific aim in them. As stated by Rautio (2013), we should attend to how children relate with other bodies from the non-causality and non-linearity. In our vignette, agents come-to-be in unpredictable actions and relations intertwining without any previous intentionality. The adult’s logic and finality disappear when we focus on the agentic assemblage and the children’s narratives, drawing on ephemeral material relations of bodies (Thiel 2015).

Desire of matter and agentic assemblages

Assemblage theory (Buchanan 2015) describes assemblages as networks transcending the mere group of bodies put together. Instead, they are defined by the desires and forces attaching bodies. Desire, as the basis of behaviour (Buchanan 2021), is what ‘selects materials and gives them the properties that they have in the assemblage’ (56). In our vignette, the idea of agentic assemblage implies that the children, the box, the researchers or the floor are connected through desire (#1). Desires are relational forces connecting the more-than-human bodies in the assemblage (Buchanan 2021). Maya’s or Roby’s desires boost the rematerialisations of the box (#4), as well as the desire in the floor and the box, when it shifts its position and becomes a table. In these rematerialisations, different becomings of bodies come-to-be, creative and relational. Affective relations emerge among humans and non-humans, based on intensities, as Rautio indicates (2013), in #5. In the vignette touch, sound (#7), or Maya’s memory of her home (#5) evidence the complexity of these relations. Their embodied desire links box, bed, Riley, and the idea of a house inhabiting Roby’s cardboard box.

These desires move in all directions (Buchanan 2021), as we depict in our *desiragram*. In this assemblage any human/non-human hierarchy is absent. On the contrary, as a materialisation of desire, this assemblage is governed by the ungovernable, and bodies come-to-be in it (Mazzei 2017). In this sense, assemblages have been described as ever-changing networks of relations (Deleuze and Guattari 1987). In these networks, desires are not linear, and they follow no structured sequence, bodies assembling in them without linearity or causality (Thiel 2015). In our vignette’s agentic assemblage, different desires coexist at the same time (#3); Maya’s desires move her to sleep in the box at home, while Roby is cutting doors, and only later (#4) Riley and Maya argue about the blanket and the box’s desire to be a bed. Intentionalities emerge around/in/with the box: a space for drawing (#6), piercing (#7) or sleeping (#5). None of them pre-existed desires, and human beings are not to be invested with control over the relationships that arise (Murriss 2022).

Language is not the agent in the rematerialisations of the house, as actions precede words. This is the case when the children have been cutting for a long while before any house was referred to (#2). On some occasions the adult sparks the desire of verbal coding ('Miss! I'm making a house', #4). This agentic assemblage flees the boundaries of language, where the box-house-bed-car come-to-be table-sounds in the desire and action, with no need for putting these dynamic processes into words (#7). In sum, words are not the privileged means for constituting the assemblage, as seen in the relations of the children, the box, the floor, the sounds of the cardboard piercing or the touching of the flaps. However, not being privileged, words and language are not absent in the assemblage, and they materialise desires ('I make dots', #7) and are part of the assemblage's relational network ('Riley says that you can't sleep here because you need a blanket. - Yes, I have one, in my bed', #5).

(De)(re)territorialising agentic assemblages

The connection of bodies is required to generate the flow of desire that produces interest (Hackett 2021). As the children move to the floor (#1), the floor connects them with the box and the rest of bodies in the assemblage, anchoring them in a classroom space outside the classroom's conventional channels (Stivale 2012). This movement deterritorialises the initial routine of the classroom and opens the path to the unexpected. Deterritorialisation is conducted via language and bodies when, in #4, Maya says to the teacher: 'I am making a house!'. Here, verbal communication establishes boundaries, creates territories and generates repetition (Albrecht-Crane 2005). The box-house is verbally declared when Roby names the 'house' for the first time, and Maya reterritorialises it when she says that 'she is building a house'. A new code is created, and the territory 'box-house' is accepted by the other bodies. The box-house is de-territorialised when the desire for a bed emerges ('I am going to sleep at night', #5), and this world-building (worldling) is reaffirmed in the relations created by the children through language when they argue about the blanket. Every child's construction of the world is different, and all these worlds dialogue constantly and are built in their relations (Murriss 2016).

The assemblage in our vignette is a dynamic sequence of (de)(re)territorialisations hosting diverse worldlings. The dynamism of the world-building in childhood (box-house-bed-table-car) underlines the way in which children de-territorialise the world of adults and the intentionalities put into objects. The status quo of territorialised adult worlds in the school is disrupted by lines of flight in which thing-power and desires iteratively open new (de)(re)territorialisations. The relations of the box's thing-power and the children show how the box is de-territorialised in a house (#3). The flow of worldling de-territorialises it and builds new meanings as box-bed (#5), box-table (#7) or box-car (#8). The box's thing-power, its shape, texture, colour, originate new meanings in/with the children, as happens when the box's changing position shifts the box-house into a table (#7). In this case, this deterritorialisation is not generated in the children, but in the embodied and material relation of the human and the non-human. Assemblages are therefore uncertain and unsettled/unsettling, not built upon what agents are, but through what agents may become (Hackett and Somerville 2017).

(De)(re)territorialisations are non-linear ways of learning through experience, matter and relations (Paakkari and Rautio 2019). Sensoriality and embodiment unchain lines of flight that move away from limits established by adults' semiotic codes (Leander and Boldt 2017). The sound of the pencils crossing the box, the feeling of the collapsing cardboard (#7), the memories of house (#5), they all participate as agents in the assemblage relating matter, meaning and bodies. In this way, barriers to meaning-making are dismantled thanks to the 'immanent capacity of our students to learn and produce' (Nadler 2015, 151).

(Becoming) final thoughts

The things-children relations in our research have highlighted the complexity and heterogeneity of material experiences in childhood, based on the concepts of desire, agentic assemblage and (de)(re)territorialisation. As noted by Tsing (2015), 'we are contaminated by our encounters; they change who we are as we make way for others' (27). In our analysis, these encounters give way to different forms of (de)(re)territorialisations emerging in agentic assemblages. Following Kuntz (2019), we have outlined a cartography of the relations of human and non-human bodies in the context of an early childhood classroom. This cartography has allowed us to describe divergent ways of building knowledge in childhood, and to analyse how these desires and assemblages, based on intensity, have left a trace on the way children make meaning of the world around them. Analogous experiences have been depicted by Hackett (2021) and Murriss (2016). Drawing on them, we have underlined how classrooms are immersed in a momentum of continuous (de)(re)territorialisations. In the latter, adults' attention to children does not always accommodate the subjectivity of these new material relations taking place inside the classroom (Warren 2019).

The analysis of children's unexpected reactions leads us to a different way of describing how they generate their creativity (Kuntz 2019). This creativity, materialised in the divergent and unexpected actions in which children get involved in the classroom, is born in constant (de)(re)territorialisations as part of the desire for/of vibrant matter (Bennett 2010). At the same time, our new materialist analysis of this assemblage has allowed us to approach the non-linear and non-causal relationships of human and non-human bodies. This non-linear perspective permeates our *desiragram*, where the logic of material affect generates diverse and unexpected assemblages. The *desiragram* also embraces the affective involvement of the researchers and a construction of the data that breaks the temporal axis of the narrative.

This article contributes to support, in theoretical terms, the design of an educational curriculum that takes de-territorialisation processes into consideration. Building upon the classroom context, this article expands the existing new materialist research literature that advocates the creation of a rhizomatic and divergent curriculum based on difference (Murriss 2016). The control of body, time and space at school, from a Foucauldian perspective (Foucault 2020), constitutes the axis upon which school's discipline is built. In our research, these relations escape the rigidity of a classroom, where children are part of assemblages that create new material relations between human and non-human (Hackett and Somerville 2017). (De)(re)territorialisation processes are part of the early childhood classroom, and re-configure space, time and body at school thereby challenging social

control. Their emergence in our vignette leads to troubling ways of considering meaning making in childhood. Therefore, a posthumanist education may offer ways to host spaces for emerging creativity, children's relationality in a material way, and knowledge as a non-linear agent. Our article expands and takes to educational settings propositions about children's present relations with matter and their potential to their future selves, involving an iterative process of becoming (Barron, Taylor, and Macrae 2020). This may help researchers and educators to acknowledge material relations as a source of meaning making in early childhood, encouraging them to provide children with scenarios where material-discursive practices are recognised and positively considered (Barad 2003). In them, children may find their place as own-worldling agents. Accordingly, our research opens a path towards a new materialist perspective on education, where children are seen in their relation with-through-in the world.

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