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TEN 10 YEARS

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TEN 10 YEARS

From the Editor

We are celebrating the start of the Journal of Montessori Research's tenth year and are proud of the 69 articles we have published.

The spring 2024 issue includes three fascinating articles on a range of topics from language acquisition, Montessori fidelity, and educational pacifism. This issue also includes the second installment of The Mortarboard Review in which Joel Parham and Jennifer Moss review doctoral dissertations completed during 2023.

In the first article, "Maria Montessori and the Mystery of Language Acquisition," Stephen Newman and Nathan Archer suggest reevaluating Montessori's work through the philosophy of Ludwig Wittgenstein to gain a better understanding of her contributions related to child development and first language acquisition.

Jaap de Brouwer, Vivian Morssink-Santing, and Symen van der Zee examine an assessment tool in the "Validation of the Teacher Questionnaire of Montessori Practice for Early Childhood in the Dutch Context." They argue that it is especially important to develop robust measures of fidelity in the Netherlands because of the country's history of flexible implementation of Montessori principles coupled with the fact that such measures do not yet exist in the country.

The final article is "Educational Pacifism and Montessori Education." In exploring educational pacifism, Nicholas Parkin argues that the dominance of mass formal schooling systems unjustly harms many students and that Montessorians ought to be educational pacifists, meaning they should ". . . recognize, understand, and reject systematic educational harm and ensure that it does not occur in their own practice." He concludes that Maria Montessori was an educational pacifist and that Montessori education should be viewed as a nonharmful educational alternative to mass formal schooling.

I hope you enjoy the spring 2024 issue.

Sincerely,

Angela K. Murray, PhD
Editor, *Journal of Montessori Research*
Director, Center for Learner Agency Research and Action (CLARA)
Program Chair, AERA Montessori Education SIG

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Maria Montessori and the Mystery of Language Acquisition

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Keywords: *Montessori, Wittgenstein, first language acquisition*

Abstract: Maria Montessori's work remains popular and influential around the world. She provided fascinating descriptions of her observations of children's learning. Yet at the heart of her work is a lacuna: the issue of how children learn their first language. For Montessori, it was a marvel, a miracle—but a mystery. We argue that the later philosophy of Ludwig Wittgenstein offers a way forward. With the clearer view offered by Wittgenstein's reminders, we propose that Montessori's work can be reevaluated to better understand Montessori's contribution, child development and, in particular, how children acquire a first language.

Maria Montessori's work remains popular around the world. She provided fascinating descriptions and a wealth of commentary (with, in some cases, diagrams and photographs) of her observations of children's learning. So vivid is her writing that one can almost be transported back into the environments with which she was familiar. The focus of this paper is what Montessori termed in one chapter heading "The Mystery of Language" (Montessori, 1946/2019, p. 44). We will draw chiefly on the work of Montessori and of the philosopher Ludwig Wittgenstein to explore this aspect of Montessori's thinking further and to suggest new insights. The approach we will take is that of a descriptive literature review where, through a detailed examination of a comprehensive selection of Montessori's work, we identify and highlight the key issues that form the focus of this paper. We then turn to consider the later work of Wittgenstein. Although we are not the first to make a connection between Wittgenstein and Montessori (see, for example, Consalvo & Tomazzolli, 2019; Montessori Europe, n.d.), our purpose in so doing is to offer a new perspective on Montessori's contribution. As such, our approach can be seen as offering a hermeneutic interpretation (Guignon, 1990; Shotter, 1978, 2008; Trede & Loftus, 2010). Wittgenstein is relevant as a frame of reference because his later thinking, and particularly that in the *Philosophical Investigations* (Wittgenstein, 1967) can be viewed as an inquiry into the mystery of language acquisition; in other words, how we learn our first language. As we will show, Wittgenstein starts to address this issue in the very first remark of the *Philosophical Investigations*.

Some Preliminaries: Montessori and Wittgenstein

Montessori and Wittgenstein were contemporaries, their lives overlapping for 62 years, as Montessori was born in 1870 and died in 1952, aged 81, and Wittgenstein was born in 1889 and died in 1951, aged 62. Both led far from conventional lives. Montessori, who trained as a medical doctor, had at one time an interest in mathematics (Kramer, 1988, p. 28), and briefly considered becoming an engineer at one stage of her life (Kramer, 1988, p. 33). Her work in medicine then led to her developing an interest in education (Kramer, 1988, pp. 72–75). During her life, Montessori traveled around the world, from Italy to, for example, Spain, the Netherlands, the United Kingdom, India, Austria, Ireland, Germany, France, Argentina, Denmark, Ceylon (now Sri Lanka), and Pakistan (Kramer, 1988). The influences on her work have been documented by others, as pointed out and detailed by Campanelli (2021, pp. 12–16).

Wittgenstein's life and work have also been documented extensively (for example, Malcolm, 1958/1984; McGuinness, 1988; Monk, 1990). Born in Austria-Hungary, he later became a British citizen. He too traveled widely, including to Norway, Germany, Ireland, the then Soviet Union, the United States, Iceland, and Italy, as well as to other places where he was posted in his time in the military.

Wittgenstein came to philosophy by way of engineering and mathematics. After completing his early work, eventually published as the *Tractatus Logico-Philosophicus* (Wittgenstein, 1921), Wittgenstein became, among other things, a primary school teacher in different locations between 1920 and 1926 (Monk, 1990; Standish, 2021). His training and his work as a teacher were influenced by the principles of the School Reform Movement under the influence of Otto Glöckel (Danto, 2018, p.143), but Monk has argued that Wittgenstein had misgivings about the School Reform Movement (Monk, 1990, p. 194) and that his reaction to it was, at best, ambivalent (Monk, 1990, p. 189). However, Danto considered that Wittgenstein's teaching of children shared some of the basic principles of the Reform Movement, the most important of which was that a child should not be taught simply to repeat what it has been told (Danto, 2018, pp. 142–143). Tentative links between Glöckel (1874–1935) and Montessori have also been suggested (Ebenberger, 2015, p. 14). Those tentative suggestions notwithstanding, there is, as far as we are aware, no evidence that Montessori had heard of Wittgenstein, or vice versa. Like Montessori, Wittgenstein seems to have promoted the importance of practical experience for children in his teaching (Monk, 1990, pp. 193–223). He compiled a vocabulary book (Wittgenstein, 1926) for the children of the Otterthal school, detailing simple and important words for the children in his class (Consalvo & Tomazzolli, 2019, p. 144; Monk, 1990, pp. 225–228). To what extent these activities marked a consistent approach in his teaching is contested, as too is whether his time as a schoolteacher had any bearing on his later philosophy (Consalvo & Tomazzolli, 2019; Hargrove, 1980).

Between 1926 and 1928, Wittgenstein was an architect for his sister's house (Last, 2008). He then returned to philosophy and to Cambridge where he developed what is now usually known as his later philosophy, most of this work being published posthumously.

Both Montessori and Wittgenstein, each in their own way, broke boundaries, both intellectual and social (Consalvo & Tomazzolli, 2019, p. 138). Here we suggest that, looking back at their work from the perspective of the 21st century, Wittgenstein's insights, and those of some more recent research, give us a valuable way to better understand Montessori's contribution. We concentrate here on issues concerning accounts of the child's acquisition of their first language.

A few caveats would seem to be in order. The first of these is to note that the reader of both Montessori's work and that of Wittgenstein is often reading them in translation. As far as Montessori's work is concerned, the repeated translations into and out of different languages can cause real difficulties (Kramer, 1988, pp. 357–359). In addition, as Kramer points out, "much of what appeared under her name late in her life consists of expressions of her ideas . . . surviving only in secondhand form in translations of lecture notes taken down by her students" (Kramer, 1988, p. 356). A not dissimilar caveat can be noted in relation to some of Wittgenstein's work, as *The Blue and Brown Books* (Wittgenstein, 1969a) are based on notes dictated by Wittgenstein to his students (Malcolm, 1958/1984, p. 48). Another work, *Vermischte Bemerkungen* (Wittgenstein, 1978), consists of "a selection from the posthumous remains" of Wittgenstein's writing, this being the subtitle given to a later translation into English under the title *Culture and Value* (Wittgenstein, 1998). However, Wittgenstein's works, even in translation, have a beauty and elegance to them that is worthy of note (O'Grady, 2001). That said, translations differ, and some changes, not all of them popular, are made, possibly to update the texts (Cartwright, 2011).

Wittgenstein's philosophy is customarily divided into two parts: his early philosophy and his later philosophy. Some also recognize a transitional or middle phase (Gilroy, 1996; Luckhardt, 1979; Monk, 1990), and there has been a more recent suggestion that Wittgenstein's later work can itself be subdivided to recognize a *third* Wittgenstein (Moyal-Sharrock, 2004, p. 1). Here, we take the generally agreed-upon view that *Philosophical Investigations* (Wittgenstein, 1967), and *On Certainty* (Wittgenstein, 1969b) are two works that consist of remarks written after approximately 1945 and so belong to the later Wittgenstein philosophy. We confine our attention to them. There is evidence that Wittgenstein was reasonably satisfied with the arrangement of the material for the *Philosophical Investigations* (Monk, 1990, pp. 363–364).

In passing, we note that in some quotations from Montessori's writing, gendered language of the time is used, such as the pronouns *he*, *him*, or *it* being used to refer to the child. In common with Feez (2007, p. xix), we have retained this usage when quoting. As will become clear, when we use the term *child*, we mean infants or preverbal children unless otherwise specified.

Montessori and the Mystery of Language Acquisition

The issue of the child's acquisition of their first language was a theme in Montessori's work to which she returned time and time again. One aspect that Montessori noted is that "generally, by the time it's two and a half, the child can speak its mother-tongue grammatically" (Montessori, 1950/1989b, p. 10). For Montessori, the acquisition of a first language is a "marvellous phenomenon" (Montessori, 1950/1989b, p. 10). The child is directed by a "grand mysterious power" (Montessori, 1949/2009b, p. 23). "The learning of language is a great intellectual acquisition" (Montessori, 1949/2009b, p. 5); "a tremendous achievement!" (Montessori, 1949/2009b, p. 20). There is a "mysterious inner development" (Montessori, 1946/2019, p. 46) akin to a miracle (Montessori, 1949/2009b, p. 24); "It is like a mental chemistry that takes place in the child" (Montessori, 1949/2009b, p. 22). For Montessori, the small child "is really a living miracle! . . . In two years he has learnt everything! This is a deep mysterious fact" (Montessori, 1949/2009b, p. 103). Interpreters of Montessori often take a similar approach—see for example, P. P. Lillard, who considered the development of language to be a "mysterious phenomenon" (P. P. Lillard, 1996, p. 18).

How does the child achieve this remarkable transformation? "How is it that the child acquires language?" (Montessori, 1949/2009b, p. 21). Montessori's answer to this question is provided in her accounts of language development in, for example, *The Montessori Method* (Montessori, 1912/1964), *The Discovery of the Child* (Montessori, 1950/1967) and in *The Absorbent Mind* (Montessori, 1949, 1949/2009b).

Montessori considers that in early infancy up to the age of two or three (Montessori, 1946/2019, p. 20), the language of a child is primordial (Montessori, 1912/1964, p. 45). In her view, the child is not able to ask for things in a language that is clear and easily understood. Nevertheless, she suggests, "Observation proves that small children are endowed with special psychic powers" (Montessori, 1946/2019, p. 8); "the child has a type of mind that absorbs knowledge, and thus instructs himself" (Montessori, 1946/2019, p. 8). Elsewhere, Montessori wrote that "This construction [of the mechanism of language] is not the result of conscious work, but takes place in the deepest layers of the sub-conscious of the child" (Montessori, 1949/2009b, p. 95). It is a "mysterious feature of the deep subconscious" (Montessori, 1949/2009b, p. 96). This is the first of two periods in the development of language, which she calls the "lower one" (Montessori, 1912/1964, p. 312). It is this lower period "which prepares the nervous channel and the central mechanisms which are to put the sensory channels in relation with the motor channels" (Montessori, 1912/1964, pp. 312–313). This lower period is followed by a "higher one determined by the higher psychic activities which are *exteriorized* by means of the preformed mechanisms of language" (Montessori, 1912/1964, p. 312):

> *In this period of life by the mysterious bond between the auditory channel and the motor channel of the spoken language it would seem that the auditory perceptions have the direct power of* provoking *the complicated movements of articulate speech which develop instinctively after such stimuli as if awaking from the slumber of heredity.* (Montessori, 1912/1964, p. 315)

We will come shortly to examine these two trajectories.

What did Montessori mean by saying it is mysterious? Having placed her faith in observational science, presumably she was referring to the fact that although observations were able to show that language had been acquired, the details of this mysterious and miraculous

phenomenon seemed to be inexplicable. In fact, it seems paradoxical: the child learns when no one can teach him or her. We see this when Montessori considers how the child absorbs the constructions of the language. Montessori wrote:

> *It is said "he remembers these things," but in order to remember, he has to have memory and he had no memory; he has still to construct it. He would have to have the power of reasoning in order to realize that the construction of a sentence is necessary in order to understand it. But he has no reasoning power. He has to construct it.* (Montessori, 1949/2009b, p. 22)

> *The only language that man learns perfectly is acquired at this period of childhood when no one can teach him.* (Montessori, 1949, p. 5)

> *The greatness of the human personality begins from the birth of man. This is an affirmation full of reality and strikingly mystic at the same time. But, practically speaking, how can one give lessons to a child that is just born, or even to children in the first or second year of life? How can we imagine giving lessons to a babe? He does not understand when we speak, he does not even know how to move; so how can he learn?* (Montessori, 1949, p. 2)

As an account of first language acquisition, it leaves a lot of questions unanswered. Mysterious and marvelous, even miraculous, it may seem. But, as we will argue, how first language acquisition occurs is not explained, merely that it does. At this point, it seems justifiable for us to argue that, in considering how children acquire their first language, Montessori met something of an impasse in her reasoning.

It has been suggested that Montessori's view of language development emerged from her 19th century medical training and by her early experience teaching children with learning disabilities (Irby et al., 2013; Trabalzini, 2023). These influences are evident in, for example, Montessori's book *Pedagogical Anthropology* (Montessori, 1913). Campanelli (2021, p. 12) suggested that Montessori's medical training emphasized the importance of observation to determine a diagnosis and suggest treatments. In these respects, Montessori can be thought of as at the forefront of much empirical and scientific research as it stood at the time of her writing and its application to education.

Montessori's approach was also in keeping with her wish to see pedagogy based on observational science, which means that it was entirely natural for her to draw attention to the observation that children living in poverty often seemed to have been adversely affected physically and mentally, and in their social and linguistic development, by their poor environment (Montessori, 1913, p. 19). This was part and parcel for her, of the development of a "scientific pedagogy" (Montessori, 1913, p. 32) in which she drew on the work of, among others, Séguin. Séguin was a proponent of the physiological method of treating those who, a century ago, were sometimes termed the "feeble-minded" (Myers, 1913, p. 538). This method has been summarized as involving, first, training the muscular system, then training the nervous system, then educating the senses, then acquiring general ideas, and then developing thinking in abstract terms (Minnesota Governor's Council on Developmental Disabilities, 2023). Séguin himself studied under Itard, who wrote about a boy who came to be referred to as Victor, the Wild Boy of Aveyron (Itard, 1801/2009). At this distance of time (and even at that time), it is impossible to ascertain the exact details of the life of the Wild Boy. In particular, for our purpose, it is not clear at what age the boy became isolated from social interaction with other humans or, indeed, whether he had any particular unidentified learning needs. It is speculated that he had been abandoned in the woods of Aveyron in France since approximately the age of 5 years (Newton, 1996, p. 179) until possibly his early teens (Minnesota Governor's Council on Developmental Disabilities, 2023).

We can see the influence of both Séguin's physiological method, and of Itard's work, on Montessori. In the case of Séguin's physiological method, to which Montessori herself referred (Montessori, 1912/1964, p. 34, p. 42), we see it in Montessori's approach to the development of language described previously, with a lower period "which prepares the nervous channel and the central mechanisms which are to put the sensory channels in relation with the motor channels" (Montessori, 1912/1964, pp. 312–313), followed by a "higher one determined by the higher psychic activities which are *exteriorized* by means of the preformed mechanisms of language" (Montessori, 1912/1964, p. 313). This also seems to have been influenced by de Saussure's notions of *langue* and *parole* where "*langue* denotes a system of

internalized, shared rules governing a national language's vocabulary, grammar, and sound system . . . [and] *parole* designates actual oral and written communication by a member or members of a particular speech community" (Mambrol, 2020).

The influence of Itard's work on Montessori is taken by some to lead to practical implications. Isaacs (n.d.), for example, considered that the example of the Wild Boy inspired Montessori to include nature in education. For Kramer (1988, p. 211), the influence of Itard's work can be seen in the Montessori materials and other games and toys sold around the world. These influences continue to have importance "because the materials and individual approach were designed to reach all children of *all* abilities . . . [which is] a key component of quality Montessori education" (Lopez-Brooks, 2022, online).

The relevance of the example of the Wild Boy on language acquisition also needs to be considered. Here Montessori is less explicit. However, the case of the Wild Boy of Aveyron seems to at least suggest that language itself is not innate and does not automatically emerge fully formed, as it were, without a social context and interactions. Montessori expresses this point in *The Secret of Childhood* when she explicitly states that the newborn child does not have within itself a fully formed language (Montessori, 1936/2009a, p. 27).

Wittgenstein and the Mystery of Language Acquisition

Wittgenstein addressed the issue of first language acquisition in the very first remark of the *Philosophical Investigations*, presenting St. Augustine's account of how St. Augustine considered he learned his first language (*PI*, §1, p. 2e[1]). Wittgenstein wrote:

> *These words, it seems to me, give us a particular picture of the essence of human language. It is this: the individual words in language name objects—sentences are combinations of such names.—In this picture of language we find the roots of the following idea: Every word has a meaning. This meaning is correlated with the word. It is the object for which the word stands.* (*PI*, §1, p. 2e)

This is a picture that Wittgenstein regarded as misleading. In criticism of St. Augustine's account, Wittgenstein wrote:

> *Augustine describes the learning of human language as if the child came into a strange country and did not understand the language of the country; that is, as if it already had a language, only not this one. Or again: as if the child could already* think, *only not yet speak. And "think" would here mean something like "talk to itself."* (*PI*, §32, pp. 15e–16e)

How the child moves from having no language to developing their first language thus comes to the fore. There are three interrelated aspects to which it is worth drawing attention in this context of considering how an infant child acquires its first language, noting that, by using the term *language* here, we do not mean to suggest that the child already has a public language of the sort which our ordinary uses of that term would suggest. Indeed, as already noted, Montessori explicitly rejected the idea that such a language is innate (Montessori, 1936/2009a, p. 27). The first of these interrelated aspects concerns the difficulties involved in arguing that, to learn a first language, a child must already have a language that is innate, inner, and private, in which he or she can test and formulate his or her ideas. Of significance here is that we cannot posit what Wittgenstein described as a private language. Wittgenstein discussed this issue in connection with coming to understand the meaning of the word *pain* (*PI*, §§257–263, pp. 92e–93e). He forwarded the notion that one learns the meaning of the word *pain* by concentrating "attention on the sensation—and so, as it were, point to it inwardly" (*PI*, §258, p. 92e). In this way, he considered the proposition that: "I impress on myself the connexion between the sign and the sensation" (*PI*, §258, p. 92e). He countered this suggestion in the following remarks:

> *But "I impress it on myself" can only mean: this process brings it about that I remember the connexion* right *in the future. But in the present case I have no criterion of correctness. One would like to say: whatever is going to seem right to me is right. And that only means that here we can't talk about "right."* (*PI*, §258, p. 92e)
>
> *And hence also "obeying a rule" is a practice. And to* think *one is obeying a rule is not to obey a rule. Hence it is not possible to obey a rule "privately:" otherwise thinking one was obeying a rule would be the same thing as obeying it.* (*PI*, §202, p. 81e)

By definition, a language must have meaning to be a language. It must be the case that terms can be used correctly or incorrectly, and incorrect uses be capable of correction. Now, for a supposed private language, this is not the case. There is, therefore, as Malcolm (1981, p. 11) pointed out (in relation to the work of Chomsky), no check on the use of any such words in such a supposed language. Therefore they cannot have meaning and cannot be understood, and so "are not items of a language or of a system of representation" (Malcolm, 1981, p. 11).

This brings us to the second theme, which emerges from the view that, for Montessori, "the child's acquisition of a language [is] . . . a great intellectual feat" (Montessori, 1946/2019, pp. 8–9). Such a view is implicit in many of Montessori's works as when, for example, she wrote of the child who can "make their speech and reconstruct in their mind what they have been told" (Montessori, 1946/1989a, p. 45). Exactly what this means is unclear. For Montessori, the "construction [of the mechanism of language] is not the result of conscious work, but takes place in the deepest layers of the sub-conscious of the child" (Montessori, 1949/2009b, p. 95). Thus, for Montessori, being subconscious, the presence of any such mechanism cannot be determined by introspection. This is, presumably, one aspect of why this was, for Montessori, mysterious.

For the third point deserving recognition, let us suppose for a moment that all the above was possible; that an infant child could have "a type of mind that absorbs knowledge, and thus instructs himself" (Montessori, 1946/2019, p. 8). Montessori asserted that the fact children acquire language proves her account to be true. She wrote: "Observation proves that small children are endowed with special psychic powers and points to new ways of drawing them out . . . by cooperating with nature" (Montessori, 1946/2019, p. 8). However, what these "special psychic powers" are remains mysterious. These assertions were, despite appearances, not based on empirical observations. How do we know that only children who have these "special psychic powers" learn a language? Suppose that there were children who did not have these "special psychic powers" but who, nevertheless, acquired a language. Presumably, given the remark about how observation proves that small children are endowed with special psychic powers, Montessori would deny that this could be so, but this conclusion is not based on any tests to establish that only a child who "instructs himself," as Montessori described, acquires a first language. The observations themselves, that children each appear to have "a type of mind that absorbs knowledge" (Montessori, 1946/2019, p. 8) from encountering and engaging with the environment, may be a good description of an empirical observation, but it is not evidence of any such type of inner processes or powers. The empirical observations present us (and Montessori) with a picture of a child's supposed mental processes, but it is a picture which causes confusion.

Wittgenstein's Alternative Perspective

In his later work, Wittgenstein came up with what might appear to be an astonishing contention, namely that language does not emerge from reasoning (*OC*, §475, p. 62e), that language does not have to rest on belief or on knowledge. Here we can refer to Wittgenstein's view that "A *picture* held us captive" (*PI*, §115, p. 48e). Although it might seem as if first language is acquired through some internal mental processes, that impression is misleading, indeed nonsensical. Instead, Wittgenstein proposed that it is "our *acting*, which lies at the bottom of the language-game" (*OC*, §204, p. 28e), and that language emerges because we have immediate instinctive reactions to certain events in our relationships with others. He wrote:

> *Try not to think of understanding as a "mental process" at all.— For* that *is the expression which confuses you. But ask yourself: in what sort of case, in what kind of circumstances, do we say, "Now I know how to go on."* (*PI*, §154, p. 61e)

This is an important aspect of Wittgenstein's later work (Malcolm, 1981, p. 1; Monk, 1990, p. 579). What did he mean by it?

In brief, the suggestion is that the child instinctively reacts in such and such a way (*OC*, §538, p. 71e). Wittgenstein (in *On Certainty*) and Malcolm (1981, 1989) gave many examples of these reactions: A child recoiling as a dog rushes at it; responding to an injured person; natural human responses to heat and cold; the immediate reaction if a child gets knocked down by another; brushing away an insect that is tickling the skin; crying out when in pain; following instructions; a child reaching for its milk or the mother's breast. Wittgenstein asked: "Does a child believe that milk exists? Or does it know that milk exists? Does a cat know that a mouse exists?" (*OC*, §478, p. 63e). In such situations there is an instinctive reaction to the cause but it is "a certainty in behaviour, not in prop-

ositional thought" (Malcolm, 1981, p. 5).

We can see aspects of this approach in the work of Halliday (1975) and of Painter (1984/2015). Here the focus on first language acquisition has moved to the social context (Halliday, 1975, p. 5) where "early language development may be interpreted as the child's progressive mastery of a functional potential" (Halliday, 1975, p. 5). Both Halliday and Painter concentrated their attention on the study of an individual child (Nigel in the case of Halliday, and Hal in Painter's work) from the age of 9 months to 18 months (Halliday, 1975, p. 11), and 9 months to 2 years (Painter, 2015, p. 1), and both concentrated on verbal utterances (Halliday, 1975, p. 5; Painter, 2015, p. 47). Although both said little about the period before 9 months, Halliday considered the possibility that "the child already has a linguistic system before he has any words or structures at all" (Halliday, 1975, p. 6). The reference here to a "linguistic system" is perhaps a reflection of Halliday's transitional position between the work of Chomsky and of others (Gilroy, 1996, p. 149) but significant here is his remark that:

> *We are setting up meanings in terms of certain generalized contexts of language use. The child is learning to be and to do, to act and interact in meaningful ways . . . . But none of it takes place in isolation; it is always within some social context.* (Halliday, 1975, p. 15)

This argument opens up the perspective that, in such social contexts, the adults around the child infer the meaning not only from the child's utterances but also from what the child does:

> *In other words, proceeding solely from observation, and using just the amount of commonsense the researcher ought to possess if he did not suspend it while on duty, we could reach generalizations such as "this child says nananana when he wants to get something handed to him." And we could arrive at this on a purely inductive basis—or as nearly inductive as one ever gets: the educated adult cannot proceed very far without imposing some kind of theory as he goes along.* (Halliday, 1975, p. 15)

Similarly, Painter (2015, p. 49) referred to work by Sylvester-Bradley and Trevarthen (1978) that showed how a "mother 'mirrors' her baby's vocal and gestural behaviours" in the first few months of the baby's life. Painter drew on Newson (1978), who argued that

> *whenever he is the presence of another human being, the actions of a baby . . . are being processed through a . . . filter of human interpretation, according to which some,* but only some*, of his actions are judged to have coherence and relevance in human terms—either as movements born of intentions, or as communications (or potential communications) addressed to another socially aware individual.* (Newson, 1978, p. 37)

Here is evidence that the speakers of a language may say that the infant knows or believes something but those are terms used by speakers of the language to note some particular behavior in particular circumstances. Importantly, the adults do not need to ascribe some inner process to the child; rather, "the adults producing communicative behaviour directed towards the child take the child's behaviour as *being* communication, even though it may not be" (Gilroy, 1996, p. 155). It is the whole context that provides the frame of reference for deciding on the meaning to be given to a particular behavior (Gilroy, 1996, p. 160), where "the infant, *qua* potential communicator, has certain of its functional (that is, primitive means/ends), non-verbal behaviours treated as verbal communicative behaviours through the shared medium of the non-verbal" (Gilroy, 1996, p. 161). As Kaye (1982) put it:

> *The kind of exchanges with adults that facilitate sensorimotor and later linguistic development require little from the infant at first except regularities in behavior and expressive reactions that parents tend to interpret* as if *they were meaningful gestures.* (p. 3)

We see this suggested by Shotter who, in describing mother-infant interactions, wrote that the mother "acts to *motivate* certain types of activity in her child . . . [and], having motivated some characteristically human activity, she now acts to interpret it as having a *meaning*" (Shotter, 1978, p. 57). In this respect, from the outset, mothers treat their babies as persons (Shotter, 1978, p. 57), and it is the interpretation (i.e., the meaning) that she gives to the situation, including the infant's responses (Shotter, 1978, p. 67) that is crucial.

Further examples come to mind: a child's interactions with its mother (Kaye, 1982); a child smiling, grasping, crawling, or walking (A. S. Lillard & McHugh, 2019, pp. 25–26); a child looking at someone or something, and possibly making prolonged eye contact (Shotter, 1978, p. 64). Here we can take Montessori's description of a baby,

only a month old, when his father and uncle suddenly appeared together (Montessori, 1936/2009a, p. 36). Montessori wrote that "the baby made a start of intense surprise and almost of fear" (1936/2009a, p. 36), then, as the two men separated, the baby turned to gaze at one, and then the other, with looks alternating between anxiety and fear, interspersed with some smiles (1936/2009a, p. 37). Keeping in mind that this is a description of a month-old baby, and with the new clarity offered by Wittgenstein's reminders and those of, for example Kaye, Halliday, Painter, and Shotter, we can see that it is the adults in this example who ascribe to the situation the meaning that

> *light [had] dawned in his little brain . . . [and] he had understood the fact that there was a different kind of being from the many women who surrounded him. He had understood that the world held a different kind of human being from his mother, his nurse, and the various women he had had occasion to notice, but never having seen the two men together he had evidently formed the idea that there was only* one *man.* (Montessori, 1936/2009a, p. 37)

Although it might be tempting to believe that the month-old baby has understood all the rules of meaning implicit in the above interpretation and then applied them (with all the difficulties that follow from that view), the reinterpretation allows us to see that it is the baby's behaviors that are taken by others to have a particular meaning (Gilroy, 1996, p. 113).

How, then, does the child learn the meaning of words? Wittgenstein answered this question thus:

> *But if a person has not yet got the* concepts, *I shall teach him to use the words by means of* examples *and by* practice.*—And when I do this I do not communicate less to him than I know myself . . . . I influence him by expressions of agreement, rejection, expectation, encouragement. I let him go his way, or hold him back; and so on.* (*PI*, §208, pp. 82e–83e)

This alternative view removes the initial assumption (that the preverbal child must mean something), and so avoids the difficulties inherent in that view as outlined earlier. Instead, there is a recognition that the instinctive behaviors of the preverbal child are taken by the speakers of language as meaning something. Bit by bit, by means of persuasion, imitation, and so on, the infant develops meaningful communication. This view dissolves any supposed paradoxes of learning (such as those suggested by Montessori and the "complex-first paradox" to which Gärdenfors [2019, p. 459] refers) because it does not require the preverbal infant to mean anything by its instinctive reactions and behaviors; by "his biological predisposition to attend and respond to communicative behaviour addressed to him" (Painter, 2015, p. 49).

Conclusion

With these issues considered, we can read afresh Montessori's work. Montessori has given us a view of the child and of teaching that has endured for more than a century. She drew attention to many fascinating aspects of children's development, not least their acquisition of a first language. When we see infants beginning to develop their first language, it may indeed appear to be some kind of miracle. It certainly appears to be a marvelous phenomenon. How does an infant so quickly come to acquire their first language? It is remarkable, yet the fact that it happens is commonplace and it is, in that sense, often overlooked and unremarkable, as Montessori herself noted in her remark that it had not been "sufficiently considered" (Montessori, 1949/2009b, p. 93). Montessori observed that a child "normally achieves with facility the speech of his environment" (Montessori, 1946/2019, p. 20). It is usually only when the child does not achieve this that it strikes us as something unusual and worthy of note. In this context, we can take Montessori's description of the "psychic life" of the child (Montessori, 1949/2009b, p. 63) and emphasize Montessori's use of the term *psyche* as a way of expressing the importance she attached to recognizing and respecting the infant child as fully human. We can see this when she wrote:

> *If we envisage the baby with a psychic life, with the need to develop its consciousness by putting itself into active relation to the world about it, the image that appears to us is impressive. We see a soul, imprisoned in darkness, striving to come to the light, to come to birth.* (Montessori, 1936/2009a, p. 23)
>
> *If there is an individual incarnation directing the psychic development of the child, the child must possess a psychic life antecedent to its life of motion, existing before and apart from any outward expression. Hesitant and delicate, it appears at the threshold of consciousness, setting the senses in rela-*

> *tion to their environment, and immediately acting through the muscles in the effort to find expression.* (Montessori, 1936/2009a, p. 26)

The relevance for Montessori practitioners is clear. The term *psyche* is thus expressing an attitude toward the child, and Montessori's work brings forward examples, and is itself an example, of how adults attribute communicative intent to infants, where (as we have argued) certain of their instinctive primitive means-end behaviors are treated as meaningful (Gilroy, 1996, p. 161). We do this even for unicellular beings: "they move away from danger, towards food, etc." (Montessori, 1949/2009b, p. 63); even more so are those descriptions we use about animals and about humans (Montessori, 1949/2009b, p. 69).

Here we may turn again to the case of the Wild Boy of Aveyron to which Montessori referred in her work (Montessori, 1912/1964, p. 150), and to the later work of Wittgenstein. The relevance of this example for our consideration of language acquisition is that it gives us an indication that language is part of our natural history as humans:

> *But we could no more exist without language games than we could without food. The very distinction between nature and culture is irretrievably blurred in the case of human beings. We are naturally cultural beings. Children deprived of any human culture do not become natural human beings—the natural human being* is *the socialized human being. This is Wittgenstein's point in saying that speaking is as much a part of our natural history as walking and eating.* (Williams, 2010, p. 370)

In this regard, Montessori highlighted the natural instinctive reactions or tendencies (A. S. Lillard & McHugh, 2019, pp. 27–28) of children in different contexts, including their drive to interact with others. For example, sometimes she drew attention to the child's instinct to look at the faces of others as in the case

> *of a child of four months, who likes to watch the mouth of a speaker and expresses himself with vague, soundless movement of his lips, but above all by the look of keen attention on his face, that shows him wholly absorbed by the interesting phenomenon before him.* (Montessori, 1936/2009a, p. 35)

As the child develops, experienced speakers of a language can, through the "expressions of agreement, rejection, expectation, encouragement" mentioned by Wittgenstein (*PI*, §208, pp. 82e–83e), "train the child's attention to follow sounds and noises . . . to recognise them and to discriminate between them" (Montessori, 1914/2005, p. 79) in order "to prepare his attention to follow more accurately the sounds of articulate language" (Montessori, 1914/2005, p. 80). Taking into account the importance Montessori attached to our view of the child, with Wittgenstein's reminders, and the work of some more recent writers on language acquisition, we have a clearer view of how children acquire their first language. The mystery of language acquisition has been dissolved.

Note

1. In accordance with customary practice, Wittgenstein's works *Philosophical Investigations* and *On Certainty* are referenced by initials, with paragraph numbers indicated thus: §, and page numbers having the suffix e indicating a translation into English.

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References

Campanelli, C. J. (2021). *Birth to three language acquisition: Influences of ambient language in the Montessori setting* [Doctoral dissertation, Long Island University]. Digital Commons @ LIU. https://digitalcommons.liu.edu/post_fultext_dis/29/

Cartwright, P. (2011, September 14). Some thoughts on translating Wittgenstein. *Philosophical Investigations*. http://lwpi.blogspot.co.uk/2011/09/some-thoughts-on-translating.html

Consalvo, G., & Tomazzolli, E. (2019). Montessori e Wittgenstein. Il linguaggio come costruzione del mondo [Montessori and Wittgenstein. Language as construction of the world]. *RELAdEI* (Revista Latino-

americana de Educación Infantil), 7(2-3), 137–147. http://www.reladei.com/index.php/reladei/article/view/298/340
Danto, E. A. (2018). The Hietzing years. *The Psychoanalytic Study of the Child*, *71*(1), 137–148. https://doi.org/10.1080/00797308.2017.1420984
Ebenberger, A. (2015). Development of the Austrian educational system: From a new teaching philosophy to a new educational system. In E. Silva, C. Pais, & L. S. Pais (Eds.), *Teaching crossroads: 10th IPB Erasmus week*. Instituto Politécnico de Bragança.
Feez, S. M. (2007). *Montessori's mediation of meaning: A social semiotic perspective* [Doctoral dissertation, The University of Sydney]. Sydney Digital Theses. http://hdl.handle.net/2123/1859
Gärdenfors, P. (2019). From sensations to concepts: A proposal for two learning processes. *The Review of Philosophy and Psychology*, *10*(3), 441–464. https://doi.org/10.1007/s13164-017-0379-7
Gilroy, P. (1996). *Meaning without words: Philosophy and non-verbal communication*. Avebury.
Guignon, C. (1990). Philosophy after Wittgenstein and Heidegger. *Philosophy and Phenomenological Research*, *50*(4), 649–672. https://doi.org/10.2307/2108228
Halliday, M. A. K. (1975). *Learning how to mean: Explorations in the development of language*. Edward Arnold.
Hargrove, E. C. (1980). Wittgenstein, Bartley, and the Glöckel School Reform. *Journal of the History of Philosophy*, *18*(4), 453–461. https://doi.org/10.1353/hph.2008.0002
Irby, B. J., Lara-Alecio, R., Tong, F., & Rodriguez, L. (2013). Montessori bilingual education and brain-compatible learning. In T. B. Jones (Ed.), *Education for the human brain: A road map to natural learning in schools* (pp. 83–111). Rowman and Littlefield Education.
Isaacs, B. (n.d.). Outdoor experiences. *TeachEarlyYears.com*. https://www.teachearlyyears.com/enabling-environments/view/outdoor-experiences
Itard, J. M. G. (2009). *An historical account of the discovery and education of a savage man: Or, the first developments, physical and moral, of the young savage caught in the woods near Aveyron in the year 1798*. BiblioBazaar. (Original work published 1801)
Kaye, K. (1982). *The mental and social life of babies: How parents create persons*. University of Chicago Press/Harvester Press.
Kramer, R. (1988). *Maria Montessori: A biography*. Perseus Books. (Original work published 1976)
Last, N. (2008). *Wittgenstein's house*. Fordham University Press.
Lillard, A. S., & McHugh, V. (2019). Authentic Montessori: The Dottoressa's view at the end of her life Part II: The teacher and the child. *Journal of Montessori Research*, *5*(1), 19–34. https://doi.org/10.17161/jomr.v5i1.9753
Lillard, P. P. (1996). *Montessori today: A comprehensive approach to education from birth to adulthood*. Schocken Books.
Lopez-Brooks, E. (2022). Montessori and inclusion. *Tier 3 Montessori*. https://tier3montessori.com/montessori-and-inclusion/
Luckhardt, C. G. (1979). Editor's introduction. In C. G. Luckhardt (Ed.), *Wittgenstein: Sources and perspectives* (pp. 13–22). The Harvester Press.
Malcolm, N. (1984). A memoir. In N. Malcolm (Ed.), *Ludwig Wittgenstein: A memoir* (2nd ed., pp. 21–84). Oxford University Press. (Original work published 1958)
Malcolm, N. (1981). *Wittgenstein: The relation of language to instinctive behaviour*. University College of Swansea.
Malcolm, N. (1989). Turning to stone. *Philosophical Investigations*, *12*(2), 101–111. https://doi.org/10.1111/j.1467-9205.1989.tb00266.x
Mambrol, N. (2020, October 11). Langue and parole. *Literary Theory and Criticism*. https://literariness.org/2020/10/11/langue-and-parole/
McGuinness, B. (1988). *Young Ludwig: Wittgenstein's life 1889–1921*. Clarendon Press.
Minnesota Governor's Council on Developmental Disabilities. (2023). Edouard Seguin. *Parallels in time: A history of developmental disabilities*. https://mn.gov/mnddc/parallels/four/4b/4.html
Monk, R. (1990). *Ludwig Wittgenstein: The duty of genius*. Jonathan Cape.
Montessori Europe. (n.d.). "The limits of my language mean the limits of my world." *Montessori Europe*. https://www.montessori-europe.net/inspiration/the-limits-of-my-language-mean-the-limits-of-my-world/
Montessori, M. (1913). *Pedagogical anthropology*. The Maple Press.
Montessori, M. (1949). *The absorbent mind*. The Theosophical Publishing House. http://www.daneshnamehicsa.ir/userfiles/files/1/18-%20Maria%20Montessori%20-%20The%20Absorbent%20Mind.pdf
Montessori, M. (1964). *The Montessori Method*. Schocken Books. (Original work published 1912)

Montessori, M. (1967). *The discovery of the child* (M. J. Costelloe, Trans.). Ballantine Books. (Original work published 1950)
Montessori, M. (1989a). Course lecture, London 1946 (C. Juler & H. Yesson, Trans.). In M. Montessori (Ed.), *The child, society and the world: Unpublished speeches and writings* (pp. 44–50). Cleo Press. (Original work published 1946)
Montessori, M. (1989b). Extract from a radio interview, 1950 (C. Juler & H. Yesson, Trans.). In M. Montessori (Ed.), *The child, society and the world: Unpublished speeches and writings* (pp. 9–10). Cleo Press. (Original work published 1950)
Montessori, M. (2005). *Dr. Montessori's own handbook*. Dover Publications. (Original work published 1914)
Montessori, M. (2009a). *The secret of childhood* (B. B. Carter, Ed. & Trans.). Orient BlackSwan. (Original work published 1936)
Montessori, M. (2009b). *The absorbent mind*. BN Publishing. (Original work published 1949)
Montessori, M. (2019). *Education for a new world*. Aakar Books. (Original work published 1946)
Moyal-Sharrock, D. (2004). Introduction: The idea of a *third* Wittgenstein. In D. Moyal-Sharrock (Ed.), *The* third *Wittgenstein: The post-*Investigations *works* (pp. 1–11). Ashgate.
Myers, K. (1913). Seguin's principles of education as related to the Montessori Method. *Journal of Education*, 77(20), 538–541; 550–551. https://www.jstor.org/stable/42754542
Newson, J. (1978). Dialogue and development. In A. Lock (Ed.), *Action, gesture and symbol: The emergence of language* (pp. 31–42). Academic Press.
Newton, M. (1996). *The child of nature: The feral child and the state of nature* [Doctoral dissertation, University College]. https://discovery.ucl.ac.uk/id/eprint/1317523/1/244110.pdf
O'Grady, J. (2001, January 11). Elizabeth Anscombe: An exhilarating philosopher, she took to sporting a monocle and smoking cigars. *The Guardian*. https://www.theguardian.com/news/2001/jan/11/guardianobituaries.highereducation
Painter, C. (2015). *Into the mother tongue*. Bloomsbury Academic. (Originally published 1984)
Shotter, J. (1978). Cultural context of communication studies. In A. Lock (Ed.), *Action, gesture and symbol: The emergence of language* (pp. 43–78). Academic Press.
Shotter, J. (2008). *Conversational realities revisited: Life, language, body and world*. Taos Institute Publications.
Standish, P. (2021). Education and the linguistic turn. In A. R. English (Ed.), *A history of western philosophy of education in the modern era, volume 4* (pp. 227–252). Bloomsbury. https://doi.org/10.5040/9781350074569.ch-009
Sylvester-Bradley, B., & Trevarthen, C. (1978). Baby talk as an adaptation to the infant's communication. In N. Waterson & C. Snow (Eds.), *The development of communication* (pp. 75–92). Wiley.
Trabalzini, P. (2023). Origins of the pedagogy: The Montessori Method and the discovery of the child (D. Michener-Rutledge, Trans.). In A. K. Murray, E.-M. Tebano Ahlquist, M. K. McKenna, & M. Debs (Eds.), *The Bloomsbury handbook of Montessori education* (pp. 53–61). Bloomsbury Academic.
Trede, F., & Loftus, S. (2010). Hermeneutic research: Exploring human understanding. In J. Higgs, N. Cherry, R. Macklin, & R. Ajjawi (Eds.), *Researching practice: A discourse on qualitative methodologies* (pp. 185–195). Sense Publishers.
Williams, M. (2010). Normative naturalism. *International Journal of Philosophical Studies*, *18*(3), 355–375. https://doi.org/10.1080/09672559.2010.492115
Wittgenstein, L. (1921). *Tractatus logico-philosophicus*. Blackwell.
Wittgenstein, L. (1926). *Wörterbuch für Volks- und Bürgerschulen* [Dictionary for folk and citizen schools]. Hölder-Pichler-Tempsky.
Wittgenstein, L. (1967). *Philosophical investigations* (G. E. M. Anscombe, Trans.; 3rd ed.). Basil Blackwell.
Wittgenstein, L. (1969a). *The Blue and Brown Books: Preliminary studies for the 'Philosophical investigations'* (2nd ed.). Basil Blackwell.
Wittgenstein, L. (1969b). *On certainty* (D. Paul & G. E. M. Anscombe, Trans.; G. E. M. Anscombe & G. H. von Wright, Eds.). Basil Blackwell.
Wittgenstein, L. (1978). *Vermischte Bemerkungen: Eine Auswahl aus dem Nachlass* [Miscellaneous remarks: A selection from the estate]. Suhrkamp.
Wittgenstein, L. (1998). *Culture and value: A selection from the posthumous remains* (P. Winch, Trans.; G. H. von Wright & H. Nyman, Eds, revised 2nd ed.). Blackwell.

Validation of the Teacher Questionnaire of Montessori Practice for Early Childhood in the Dutch Context

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Abstract: Montessori education has existed for more than 100 years and counts almost 16,000 schools worldwide (Debs et al., 2022). Still, little is known about the implementation and fidelity of Montessori principles. Measuring implementations holds significant importance as it provides insight into current Montessori practices and because it is assumed that implementation might influence its effectiveness. In the Netherlands, it is especially important to measure fidelity because of the country's history of flexible implementation of Montessori principles. No instruments currently exist that are specifically designed to measure Montessori implementation in the Dutch context. This study aims to validate a translated version of the Teacher Questionnaire for Montessori Practices, developed by Murray et al. (2019), within the Dutch early childhood education context. Additionally, it seeks to investigate the extent to which Montessori principles are implemented in Dutch early childhood schools. Data were collected from 131 early childhood Montessori teachers. Confirmatory factor analysis revealed that the Dutch dataset did not align with the factor structure proposed by Murray et al. (2019). Subsequent exploratory factor analysis led to the identification of a 3-factor solution, encompassing dimensions related to Children's Freedom, Teacher Guidance, and Curriculum, which shows some similarities with Murray et al.'s (2019) factors. Implementation levels in the Netherlands varied, with the highest level of implementation observed in Children's Freedom and the lowest in Curriculum.

Montessori education is a globally recognized pedagogical approach adopted across diverse cultural and educational contexts. With almost 16,000 schools in 154 countries, Montessori education is the largest educational reform movement in the world (Debs et al., 2022). Montessori education is a child-centered educational approach that considers children's individual abilities, needs, and interests. While Montessori schools adhere to this philosophy, it is widely recognized that there are implementation differences across Montessori schools (Demangeon et al., 2023; Lillard, 2019; Randolph et al., 2023). Literature on Montessori implementation identifies three possible explanations for implementation variation among others: Montessori teacher training, public or private funding, and national educational regulations (e.g. Debs, 2023; Gerker, 2023; Randolph et al., 2023). Discussions of Montessori implementation often revolve around the concept of fidelity, which refers to how well a program is implemented relative to the original model (Lillard, 2012). Greater fidelity in Montessori implementation would then be characterized by a strict implementation of Montessori's original principles and a close alignment with her original ideas (Lillard, 2012; Lillard et al., 2017). Some evidence suggests higher fidelity results in greater effectiveness (e.g. Lillard, 2019; Randolph et al., 2023). However, empirical evidence demonstrating the impact of implementation differences on Montessori effectiveness is still scarce. To better understand Montessori effectiveness, it is of critical importance to study Montessori implementation.

The Netherlands is a unique and interesting context for studying Montessori implementation variation. From the early 20th century, calls for school reforms resonated in the Dutch educational landscape. Conventional, traditional schools were criticized for their rigidity, authoritarianism, and narrow focus on cognitive development (Imelman & Meijer, 1986). In addition, until 1917, government funding was exclusively allocated to conventional public schools, leading to a clear divide between government funded public schools and privately funded schools, which included religious schools or schools based on alternative educational philosophies. Individuals with different social and religious opinions, as well as different ideas about the role of education, campaigned for public funding of all types of schools, which led to the so-called School Struggle (schoolstrijd), which started in 1889. This School Struggle was settled in 1917 with Article 23 of the Dutch constitution, often referred to as the Freedom of Education Act (Rietveld-van Wingerden et al., 2003). The Freedom of Education Act stipulates that the government funds all types of schools, thereby eliminating the distinction between privately and publicly funded schools and thereby establishing parity within the Dutch educational system. In addition, the constitution stipulates that the government decides on the core educational objectives and supervises educational quality, but schools themselves are free to choose their educational methods and adapt the curriculum how they see fit, leading to moderate government regulations (Slaman, 2018). Consequently, in addition to religious schools, progressive education, such as Montessori, Dalton, and Jenaplan, was introduced into the Dutch educational system (Slaman, 2018). Throughout the 20th century, these schools remained part of the Dutch educational landscape and their numbers grew steadily. Currently, the Netherlands has great diversity in publicly funded schools with a range of pedagogical orientations: about 10% of all Dutch schools implement an alternative educational philosophy, such as Montessori, Dalton, Freinet, Jenaplan, or Waldorf (Sins & van der Zee, 2015).

Due to the government funding for Montessori schools and moderate government regulations, the Dutch context offers ample opportunities for Montessori schools to shape their own practices. From the founding of the Dutch Montessori Association in 1917, the implementation of Montessori education has been an ongoing debate in the Dutch Montessori movement. In their seminal review of progressive education in the Netherlands, Imelman and Meijer (1986) even argued that debating Montessori implementation has become an integral part of the Dutch Montessori movement over the years. Therefore, it is likely that there is considerable variation in Montessori implementation. If this variation in Montessori implementation can be measured, we can examine how specific ways of implementing Montessori education are related to differences in effectiveness. In addition, the Dutch Inspectorate of Education periodically assesses the quality of schools, particularly learning outcomes. Since 2018, this assessment has included the examination of the educational quality of 29 elementary Montessori schools. Among these, 18 Montessori schools received favorable ratings for their quality while the remaining 11 were deemed insufficient (Inspectorate of Education, n.d.). It is worth examining how these schools implemented Montessori principles and how this is related to the assessment conducted by the Dutch Inspectorate of Education. Considering these factors, the unique Dutch context creates an intriguing opportunity for studying Montessori implementation.

Early Dutch Montessori Implementation Debate

Even before the Dutch translation of Montessori's book *The Montessori Method* in 1916, Montessori schools were already emerging in the Netherlands. The first Montessori school started in The Hague in 1914, initially as a kindergarten (Joosten-Chotzen, 1937). However, from the start, there was hesitation about applying the Montessori principles (Hazenoot, 2010). For example, Montessori's emphasis on freedom presented practical challenges, including classroom disorder and children's lack of engagement and, therefore, teacher disillusionment in the Montessori Method (Philippi-Siewertsz van Reesema, 1924, 1954). Careful implementation of Montessori principles was complicated when World War I prevented direct contact with Montessori herself coupled with the limited availability of Montessori's books translated to Dutch. Consequently, a wide range of interpretations and experimental implementations of Montessori's principles emerged in the Netherlands. For example, such experimental implementations included the Montessori–Froebel combination, with morning classroom instruction and free Froebel play, followed by Montessori activities in the afternoon and a blending of Montessori and Decroly principles, and later combinations of Montessori and Dalton (Eyssen, 1919; Hoencamp et al., 2022; Philippi-Siewertsz van Reesema, 1954; Schwegman, 1999).

Initially, flexible and experimental Montessori implementations were part of the widespread dissemination of the Montessori Method in the Netherlands (Leenders, 1999). In 1920, however, Montessori herself endeavored to recapture a stricter implementation of her Method. During lectures in Amsterdam, she stated that learning materials may only be used in accordance with fixed instructions, and Montessori teacher training programs must be approved by Montessori herself (Leenders, 1999; Philippi-Siewertsz van Reesema, 1954). In addition, Montessori, among others, was involved in amending a Dutch education act in 1922, whereby the possibility of exemption from the fixed timetable was obtained—something that had been seen as an obstacle to a more strict implementation of Montessori education in the Netherlands (Joosten-Chotzen, 1937). Moreover, Montessori (1971) criticized the Dutch mixture of her Method with other pedagogies, arguing that such approaches would not yield the same results she had achieved. Montessori (1989) stated that "her method also bears her name to distinguish her work of those others establishing new forms of education" (p. 3). This resulted into a series of articles in *Montessori Opvoeding* (Montessori Education), the journal of the Dutch Montessori Association, addressing numerous disagreements regarding the rigid adherence to exclusively using Montessori's materials (Philippi-Siewertsz van Reesema, 1954).

Despite initial implementation problems in the early 1930s, the Montessori movement thrived in the Netherlands due to the stable Dutch political climate, government funding, and moderate government regulations (Kramer, 1976). According to Kramer, "Of all the Montessori schools throughout the world, the Dutch had the most consistently best" (p. 323). Kramer describes how the Dutch Montessori schools gradually developed into demonstration schools, for example in Amsterdam, where foreign visitors could see the Method "in operation at its best" (p. 292). However, it is important to note that Kramer's focus was primarily on those Dutch schools strictly following Montessori principles, excluding other variations like Montessori–Froebel and Montessori–Decroly mixtures, which were also prevalent in the Netherlands. For example, Montessori herself visited a Dutch school that mixed Montessori's material with Froebel's and reportedly "utterly disapproved" (Philippi-Siewertsz van Reesema, 1954, p. 103).

Over time, diverse types of Montessori schools emerged within the Dutch Montessori movement, ranging from classic Montessori schools, closely following Montessori's guidelines, to more flexible, experimental Montessori schools that incorporated Froebel and Decroly principles alongside Montessori principles (Hazenoot, 2010; Leenders, 1999; Philippi-Siewertsz van Reesema, 1954). These types of Montessori schools also had their own teacher training programs. For instance, the Amsterdam training program, which started in 1919, adhered strictly to Montessori's directions, while the The Hague Montessori training course, which started in 1918, embraced a broader spectrum of pedagogies, including Decroly, Ligthart, Froebel, and Parkhurst (Hazenoot, 2010; Joosten-Chotzen, 1937; Leenders, 1999). The early adaptation of Montessori principles in the Netherlands, characterized by its varied implementations, suggests that the initial fidelity to Montessori's original principles was somewhat restrained. Montessori principles were integrated to enhance and complement existing

educational practices. On the other hand, however, Montessori called for a stricter implementation of her principles in the Netherlands. The tension between Montessori's call for a stricter adherence to her principles and the diverse interpretations and implementations of Montessori education in the Netherlands highlight the importance of understanding Montessori implementation to gain a better understanding of how practices align with Montessori's original principles and her original ideas.

Dutch Montessori Movement from the 1940s to Today

The internationally unique Dutch context has resulted in various implementations of Montessori education. The debate regarding the diversity of Montessori implementation, observed until the 1940s, endured within the Dutch Montessori movement even in the post-World War II era. For example, at the international Montessori conference in Amsterdam in 1950, Montessori again raised the issue that reforms she developed after 1940 were never implemented in the Netherlands (M. M. Montessori, 1961). On the other hand, Sixma (1956), a former Dutch Montessori teacher and principal who later became a professor of educational sciences, advocated for flexibility, asserting that there was no single "Montessori school" but a wide range of Montessori schools, each influenced by different interpretations of Montessori theory. Conversely, the Montessori Center, founded in Amsterdam in the mid-1960s, aimed for a stricter adherence to Montessori principles. This Montessori Center, which included Mario Montessori as its secretary, pursued an Association Montessori Internationale (AMI) certified training, but Dutch government restrictions complicated this endeavor (Imelman & Meijer, 1986).

In the 1970s, the Montessori Center collaborated with the Dutch Montessori Association to publish a book providing guidelines for the use of Montessori materials with the goal of improving the alignment of Montessori teacher training in the Netherlands. However, in the preface, Mario Montessori (M. M. Montessori, 1973) wrote that the book was born out of necessity, completely contrary to Maria Montessori's will, and emphasized that this initiative was solely Dutch as no equivalent standardized book exists anywhere else in the world. The book led to increased attention to teacher professional development, resulting in the introduction of a framework for Montessori teacher training in 1980s. The purpose of this framework was to promote consensus and uniformity in teacher training, bringing more consistency to the way Montessori education was implemented (Dutch Montessori Association, 1983). However, despite the publication of this book on Montessori materials and an increased focus on teacher professional development, variation among Montessori schools remains. This more centralized and standardized approach, which the Dutch Montessori Association adopted, failed to achieve the intended results, and the debate on Montessori implementation persists. Nevertheless, the Dutch Montessori Association continues its efforts to standardize, which is also demonstrated by the establishment of the Dutch Montessori Association's own accreditation system in 1997. This accreditation system was intended to "determine whether member schools meet its standards and thus may call themselves a Montessori school" (Vos, 2007, p. 75). However, creating such an accreditation system has proven challenging due to diverse perspectives within the Dutch Montessori movement regarding implementation and a lack of consensus regarding these different views (Vos, 2007). On a national level, there appears to be some shared understanding among members of the Dutch Montessori Association, particularly regarding the importance of having trained teachers and supporting children's free choice (Vos, 2007). However, this consensus is limited and can only be comprehended in general terms as details are lacking, providing schools with little guidance on how to implement Montessori education. In addition, many Montessori schools cherish their autonomy to choose their educational methods and adapt the curriculum how they see fit, as they are entitled to do under the Freedom of Education Act. As a result of this lack of consensus on Montessori implementation on a national level and the autonomy of schools given by the law, practitioners started to introduce adaptations to Montessori education that affect its implementation. For example, some Montessori schools in the Netherlands have single-age classes or use supplementary materials in addition to Montessori materials. Two Dutch Montessori teacher trainers, Stefels (current trainer) and Rubinstein (former trainer), contended that lacking a sufficient central approach has led some schools to deviate from Montessori fidelity, questioning the choices being made by these schools (Vos, 2007). Throughout the final three decades of the last century, there was a consistent pattern of oscillation between straying from Montessori fidelity and reverting back to it.

To structure the enduring debate in the Netherlands, Berends and de Brouwer (2020) compiled a volume that delved into various perspectives on Montessori education in the Netherlands. The book contributed to understanding the nuances of implementing Montessori principles in Dutch educational settings. Specifically, it addressed the debate between adhering strictly to Montessori principles or adopting a more flexible approach. The different perspectives in the book underscored the complexity of measuring Montessori implementation fidelity in the Netherlands and highlighted the ongoing discussions within the Dutch Montessori movement regarding the best practices for implementing Montessori education.

Considering the history of the Dutch Montessori movement, the conflicting viewpoints highlight the inherent tension between fidelity to Montessori's original ideas, as outlined in her books, versus adaptation to contemporary educational practices, insights, and cultural norms. Currently there are 219 Montessori schools in the Netherlands: 38 preschools (0–4-year-olds), 162 Montessori elementary schools (4–12-year-olds), and 19 secondary schools (12–18-year-olds), all still government funded and with a high degree of school autonomy (Dutch Montessori Association, n. d.).

Contemporary Montessori Fidelity Measurement

Historically, the Dutch Montessori landscape exhibits diversity in implementing Montessori principles, highlighting an ongoing debate between adhering to Montessori's original ideas and adapting to contemporary practices, emphasizing the necessity for further empirical examination. Although implementation variation has been, and still is, the subject of ongoing debate, there has paradoxically been no prior empirical study in the Netherlands that examined whether and to what extent Montessori schools differ from one another. Therefore, this research aims to examine the fidelity of Montessori implementation, where fidelity is defined as the degree to which a program is implemented relative to Montessori's original principles and closely adheres to her original ideas (Lillard, 2012). This approach does not presuppose that higher fidelity Montessori implementation is better. Instead, it acknowledges that empirical evidence regarding the implementation of Montessori's original principles contributes to a more comprehensive discussion on overall implementation.

Although several measures have been used in previous studies to represent Montessori implementation (e.g., AMI credentials, time children spent on working with Montessori materials, using predetermined criteria), there is no widely accepted instrument to assess the fidelity of Montessori implementation (Murray & Daoust, 2023). The Teacher Questionnaire for Montessori Practices (TQMP), as developed by Murray et al. (2019), is a robust tool with some validity evidence to measure Montessori implementation. The TQMP consists of two questionnaires, one for early childhood and one for elementary, and allows teachers to indicate the practices in their classrooms in a granular way, taking several dimensions into account. Given the authors' call for continued research in the instrument in different environments, we used this instrument within the Dutch Montessori context.

This article focuses on the early childhood questionnaire as the elementary questionnaire is addressed in another study. Therefore, the aim of this study is to provide validity evidence for the translated TQMP by evaluating its psychometric properties. A second aim of this study is to explore how Montessori principles are implemented in Dutch early childhood Montessori schools.

Methods

Participants and Procedure

The Dutch Montessori Association invited all early childhood teachers of the 162 Dutch elementary Montessori schools to participate in this study by email. Montessori elementary education in the Netherlands is organized into three stages: Early Childhood groups (ages 4–6), Lower Elementary (ages 6–9), and Upper Elementary (ages 9–12). The email included a link to the online questionnaire and schools were asked to have their Early Childhood teachers complete the questionnaire. The questionnaire was administered in June–July 2019 after receiving active informed consent by the participants. This procedure complies with the standards set by the ethical commission of our university (den Ouden, n.d.). The questionnaire took approximately 15 minutes to complete.

The questionnaire was completed by 131 Early Childhood teachers from 97 different Dutch elementary Montessori schools, which represents 60% of all the Early Childhood Montessori schools in the Netherlands. The participants' ages ranged from 20 to 66 years ($M = 45.63$, $SD = 10.95$). Of the participating teachers, 74% had over five years of experience in Montessori education, 80.9% had completed their Montessori teacher training, 6.1% of the participants were not Montessori trained, and 13% were attending Montessori training. Approximately half

(50.4%) of the participants came from schools in the Randstad, a densely populated urban area in the western Netherlands, while the remaining half (49.6%) came from different parts of the Netherlands.

Instrument

We built on the efforts of Murray et al. (2019), who gave a detailed overview of the literature they used to construct their questionnaire. This is a self-report measure which, although subjective, provides a quick insight into the perceived level of Montessori implementation according to teachers. To develop an instrument that reliably reports Montessori implementation in early childhood, Murray et al. (2019) proposed three factors to measure Montessori implementation: Classroom Structure, Curriculum, and Children's Freedom, which are all grounded in the original works of Maria Montessori, to measure Montessori implementation fidelity.

The TQMP for early childhood consisted of 18 items, formulated as statements, and rated on a 4-point Likert scale ranging from (1) *strongly disagree* to (4) *strongly agree*. All 18 items of the TQMP were translated into Dutch. We adjusted the original scale to (1) *never occurs in my classroom* to (4) *always occurs in my classroom*, to simplify the questionnaire. Although Murray et al. (2019) operationalized the three factors in their questionnaires, the theoretical framework does not provide definitions. A definition of these factors is essential to establish content validity (Hardesty & Bearden, 2004). We added these definitions to clarify the three factors in the TQMP. Classroom Structure is defined as the ways in which the group is organized and how children are instructed to foster their independence and individual development (e.g., Montessori, 1937, 1949, 1997). The Montessori Curriculum for early childhood is defined as carefully constructed materials and activities to support the child's entire development, from social skills to mathematics. The curriculum covers exercises for Practical Life, Sensorial, Language, and Math skills, as well as an introduction to Cultural Subjects and related activities such as Art and Music. Children's Freedom is defined as the extent to which children have the freedom to make their own choices (e.g., Montessori, 1935, 1937, 1997).

After the translation of the items, seven Montessori teachers and/or Montessori teacher educators, all part of the Dutch Montessori Research Group, gave feedback on the phrasing of the items of the TQMP and the terminology of the 4-point Likert scale to indicate whether the wording and phrasing of the items was correct and familiar to them. After discussing the feedback, no items needed rephrasing and the questionnaire was digitalized. Next, we piloted the questionnaire with Early Childhood Montessori teachers who volunteered to complete the TQMP to estimate the time required for completing the questionnaire, assess the smoothness of its digitization, and determine the clarity of the items. This pilot indicated that the phrasings of the individual items were well known and straightforward to Early Childhood teachers. They were able to complete the questionnaire in approximately 15 minutes, and the online version functioned correctly and required no further adjustments. Finally, the Dutch version of TQMP was administered digitally using Qualtrics, starting with a brief introduction about the aim of the study. It consisted of 18 items formulated as statements and questions could not be skipped to avoid missing data.

Analysis

Since the TQMP was already developed and tested by Murray et al. (2019), confirmatory factor analysis (CFA) was performed to evaluate how well the collected data fits into the prespecified factors (Brown, 2015). Additionally, multiple goodness-of-fit indices were examined to confirm the predicted three-factor structure: root mean square error of approximation (RMSEA), comparative fit index (CFI), the Tucker–Lewis index (TLI), and chi-square (Prudon, 2015). To indicate a good fit, RMSEA should be below .06, CFI and TLI values should be close to .95 (Hu & Bentler, 1999), and a chi-square test should be nonsignificant (Brown, 2015). Factor loadings higher than 0.3 were considered to indicate a moderate correlation between the item and the factor (Tavakol & Wetzel, 2020). The data were analyzed using JASP version 0.17.1.0. There were no missing data. Afterwards, an exploratory factor analysis (EFA) was conducted as the CFA resulted in a poor fit (as described in the Results section). According to Schmitt (2011), EFA is a reasonable next step when the CFA model has a poor fit.

To test the suitability of the data for an EFA, the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy (Kaiser, 1974) and Bartlett's (1954) test of sphericity were tested. The KMO measure should be above 0.50, and Bartlett's test should be significant (Williams et al., 2010) for EFA to be acceptable. The EFA was performed using oblique rotation as the factors were allowed to correlate with one another (Fabrigar et

Table 1
Descriptive Scores for All Items

	M	*SD*	Min.	Max.
Classroom structure				
Lessons are mostly given to individuals	3.30	.54	2.00	4.00
Children's activities are recorded each day	3.27	.84	1.00	4.00
Children give lessons to one another	2.87	.71	1.00	4.00
There is a 3-hour uninterrupted work period	1.75	.99	1.00	4.00
At least 3 age levels	2.82	1.39	1.00	4.00
Observation is used for daily lesson planning	3.45	.73	1.00	4.00
Curriculum				
Walk on the line carrying objects	1.67	.85	1.00	4.00
Care for classroom plants	3.57	.79	1.00	4.00
Children carry out Practical Life exercises during the work period	3.05	.89	1.00	4.00
Classroom books feature realistic stories	2.98	.72	1.00	4.00
Older children do golden bead addition	3.27	.71	1.00	4.00
A full set of Montessori materials is available	3.57	.69	1.00	4.00
Children regularly prepare food	1.60	.82	1.00	4.00
Garden in a designated area	1.89	.80	1.00	4.00
Children's freedom				
Choose their work/activities	3.53	.52	2.00	4.00
Determine how long to work with an activity	3.28	.59	1.00	4.00
May choose to work alone or with others	3.64	.53	2.00	4.00
Decide where they will work	3.47	.67	1.00	4.00

Note. All items are sorted by the constructs found in Murray et al. (2019).

al., 1999). The number of factors was determined based on parallel analysis (Horn, 1965), which is sometimes considered the best available alternative for determining the number of factors (Thompson & Daniel, 1996). In parallel analysis, expected eigenvalues are computed by simulating normal random samples that mimic the characteristics of the observed data in terms of sample size and number of variables. These expected eigenvalues are then compared to the observed eigenvalues, and the factor is considered significant when "the associated eigenvalue was bigger than the mean of those obtained from the random uncorrelated data" (Ledesma & Valero-Mora, 2007, p.3). Subsequently, problematic items were removed from the questionnaire, meaning that items with factor loadings lower than 0.3 were excluded from subsequent EFAs as well as cross-loading items with less than a .15 difference from the item's greatest factor loading (Tavakol & Wetzel, 2020; Worthington & Whittaker, 2006). Before omitting these items, their content and formulation was critically examined by the researchers, to ensure that the content of the item indeed did not align with the factor structure. In the final model, the content of the items was examined, and a label was assigned by the researchers.

Results

Table 1 shows the descriptive statistics for all items of the questionnaire. These items are sorted according to the constructs found by Murray et al. (2019).

Confirmatory Factor Analysis

CFA was performed to check if the suggested factorial structure as derived from Murray et al. (2019) fits the data. Of the goodness-of-fit indices, only the RMSEA met the accepted threshold; the others did not, suggesting a poor fit of the predicted three-factor model of the TQMP (RMSEA = .06; TLI = .80; CFI = .83; χ^2 (132) = 188.98, $p < .001$). Additionally, six items featured low factor loadings of < .30. Table 2 displays the factor loadings obtained by the CFA. Based on these results, the factorial structure of the Dutch TQMP needed to be revised to improve its goodness of fit.

Table 2
Factor Loadings Derived From Confirmatory Factor Analysis

	Classroom structure	Curriculum	Children's freedom
Lessons are mostly given to individuals	.130		
Children's activities are recorded each day	.457		
Children give lessons to one another	.315		
There is a 3-hour uninterrupted work period	.510		
At least 3 age levels	.482		
Observation is used for daily lesson planning	.439		
Walk on the line carrying objects		.494	
Care for classroom plants		.337	
Children carry out Practical Life exercises during the work period		.582	
Classroom books feature realistic stories		.242	
Older children do golden bead addition		.298	
A full set of Montessori materials is available		.312	
Children regularly prepare food		.167	
Garden in a designated area		.204	
Choose their work/activities			.249
Determine how long to work with an activity			.396
May choose to work alone or with others			.302
Decide where they will work			.379

Note. Confirmatory Factor Analysis (CFA) was conducted with JASP version 0.16.4. Values represent factor loadings.

Table 3
Factor Loadings Derived From Exploratory Factor Analysis Based on a Three-Factor Structure

	Children's freedom	Teacher guidance	Curriculum
Determine how long to work with an activity	.681		
Decide where they will work	.614		
May choose to work alone or with others	.576		
Choose their work/activities	.355		
Children's activities are recorded each day		.663	
A full set of Montessori materials is available		.579	
Observation is used for daily lesson planning	.311	.475	
Care for classroom plants		.360	
Children carry out Practical Life exercises during the work period			.570
Garden in a designated area			.569
Walk on the line carrying objects			.483
Children regularly prepare food			.355

Note. Exploratory factor analysis (EFA) was conducted with JASP version 0.16.4 with oblique rotation. Values represent rotated factor loadings, which are only displayed for items with loadings > .30.

Table 4
Descriptives of the Final Factors and Factor Correlations

						Factor correlatives		
	M	*SD*	Min	Max	α	Children's freedom	Teacher guidance	Curriculum
Children's freedom	3.48	.41	2.00	4.00	.66	-		
Teacher guidance	3.47	.53	1.75	4.00	.64	.233	-	
Curriculum	2.05	.55	1.00	3.75	.56	.264	.281	

Note. Subscale means are based on the average of items in the final factor structure. Mean scores could range between 1 and 4.

Exploratory Factor Analysis

The KMO statistic verified the sampling adequacy for the analysis (KMO = .692), which was above the acceptable limit of 0.50 (Williams et al., 2010). Additionally, Bartlett's test of sphericity was significant, χ^2 (153) = 454.13, $p < .001$, indicating that a factor analysis is suitable. The first iteration of the EFA showed a three-factor model with a moderate goodness of fit (RMSEA = .05; TLI = .85; CFI = .90; χ^2 (102) = 130.85, $p = .029$). Subsequently, considering the content of the items, items were omitted from consecutive EFAs when they showed a factor loading lower than .30. After several EFA iterations, the results of the improved models without problematic items suggested a three-factor model (RMSEA = .03; TLI = .95; CFI = .97; χ^2 (33) = 38.21, $p = .244$). Six items were omitted from the final analysis based on a low factor loading, resulting in three factors with a total of 12 items (see Table 3).

Four items loaded onto the first factor. All items were related to the freedom of children to choose and consisted of the same items as the scale Children's Freedom from Murray et al. (2019). Therefore, this factor was labeled *Children's Freedom*. The items in this factor reached Cronbach's α of .66. Four items loaded onto the second factor. One of these items had a cross loading with the first factor, but as this loading was higher than .150, the item was considered to be part of the second factor. Most of these items were related to how the teacher provided guidance to the child. Therefore, this factor was labeled *Teacher Guidance* (Cronbach's α = .64). The third factor consisted of three items from the original Curriculum scale. Therefore, this factor was labeled *Curriculum* (Cronbach's α = .56).

Montessori Implementation in the Dutch Context

The means of the factors give some insight into the extent of Montessori implementation in Dutch early childhood. Table 4 shows descriptive statistics and Cronbach's α of the factors. Additionally, factor correlations are displayed in the table. Children's Freedom is implemented the most in Dutch Early Childhood Montessori classrooms, whereas Curriculum is implemented the least. The variation of the scores was the smallest for Children's Freedom, and largest for Curriculum. Mean scores within the factors ranged between 1.75 and 4.0 on a four-point scale with the largest range for Curriculum and the smallest range for Children's Freedom. Finally, all factors correlated with one another, with Teacher Guidance and Curriculum having the highest correlation.

Discussion

The unique Dutch educational policy, which includes government funding since 1917 and moderate regulations, offers a context in which Montessori schools have a great deal of autonomy to decide how to implement Montessori principles. This unique characteristic of the Dutch context has led to variations in implementing Montessori education since its introduction. These different perspectives on how to best implement Montessori principles, ranging from classic Montessori schools, closely following Montessori's guidelines, to more flexible, experimental Montessori implementation, have been a subject of ongoing debate in the Netherlands. However, to better understand the relationship between implementation and effectiveness, and to elucidate the varied effects of these implementation differences, research on Montessori implementation is essential. Therefore, this study aimed to validate the early childhood TQMP questionnaire and explored the implementation of Montessori principles in Dutch early childhood.

Main Findings

The initial CFA results for the translated TQMP indicated a poor fit with the Dutch context, prompting the need for adjustments to align the questionnaire's factor structure better. The EFA revealed a different factor

structure compared to the one identified in the Murray et al. (2019) study. Our findings indicate a three-factor model for assessing Montessori implementation in early childhood, comprising the dimensions of Children's Freedom, Curriculum, and Teacher Guidance. The first two factors, Children's Freedom and Curriculum, remained similar to Murray's original questionnaire. Children's Freedom retained the same items as the original TQMP, while in the Curriculum factor, the items "classroom books feature realistic stories" and "older children do golden bead addition" were omitted, and the items "a full set of Montessori materials is available" and "children care for classroom plants" were positioned into the Teacher Guidance factor. Indeed, the remaining factor, Teacher Guidance, diverged from the original TMQP. This factor consisted of four items, three of which reflected the teacher guidance of the child, complicating the interpretation of this factor.

We conducted calculations for mean, minimum, and maximum scores along with standard deviations to assess the implementation of Montessori principles in Dutch early childhood education using our three-factor solution (see Table 4). These results should be interpreted with caution because of the low alpha scores of the factors. Children's Freedom and Teacher Guidance were rated as being implemented the most; the mean score for Curriculum also indicated agreement among teachers regarding their level of implementation. However, for this factor, the minimum scores fell within the range of "completely disagree" and "disagree," suggesting that some teachers may not perceive these aspects as fully implemented in their Montessori classrooms. Standard deviations are the best indicator for variation between the different Montessori schools. The most variation was shown in the Curriculum factor, followed by Teacher Guidance and Children's Freedom. As Children's Freedom had both the highest mean and the lowest standard deviation, this suggests that it is implemented the most across Montessori schools, and its implementation is comparable across schools.

The results suggested that Montessori implementation in the Netherlands demonstrates diversity, with varying degrees of application for different Montessori principles. The standard deviations in the mean scores and the wide range of scores illustrated variation across the three factors, implying that schools employ these Montessori principles differently. On average, a strict, high-fidelity implementation of Montessori principles in the Netherlands is not prevalent, although the level of implementation is not low, either.

Directions for Future Research

While our study adhered to rigorous procedures for establishing validity, there is room for improvement in the Dutch TQMP, especially concerning the reliability of the factors. Many researchers recommend a Cronbach's α threshold of 0.70 (Tavakol & Dennick, 2011), although some argue that during the initial stages of research values as low as 0.50 can suffice (Field, 2018). None of the factors in the Dutch TQMP reached a score above Cronbach's α 0.70. Cronbach's α partly depends on the number of items in the scale; if the number of items increases, the reliability of the scale will increase (Field, 2018). All factors now contain four items. To enhance reliability, a first step for future research is to add more items to all factors. Additionally, the content of the factor Teacher Guidance is difficult to interpret and does not align with classifications in the literature. Therefore, it is necessary to review the theory and add additional items based on the literature to this factor. In addition, to increase reliability, existing items should be reviewed as well. Therefore, the forthcoming step is to refine the questionnaire, add additional items, followed by another round of data collection. Then, with the new collected data, revalidate the questionnaire to evaluate its psychometric properties. One other way to increase the validity of the findings on Montessori implementation is through triangulation. This can involve cross-referencing Montessori implementation data using methods such as classroom observation. Observation is a good method for overcoming the shortcomings of a self-report questionnaire. Therefore, forthcoming research should prioritize the development of a classroom observation tool that aligns with and complements the (Dutch) TQMP.

A first direction for further research is to improve and revalidate the Dutch TQMP. When completed, the next step could be the characterization of implementation types using latent profile analyses. While our study offers an overarching view of Dutch Montessori implementation, the substantial variability in Montessori implementation, as indicated by the standard deviations in mean scores, suggests the potential for identifying and describing distinct implementation profiles using latent profile analysis. A multilevel analysis, in which we explore at which level the variance in mean scores occurs (i.e., teacher, class, or school level) might also be part of further research.

Our study underscores the importance of considering the national context when assessing Montessori implementation. The validation of the TQMP revealed its

inadequacy within the Dutch context. Exploring whether the original questionnaire is also unsuitable for use in other international Montessori contexts warrants further investigation. We therefore call, in line with Murray et al. (2019), for the further development and refinement of both the elementary and early childhood questionnaires, with a larger and more diverse sample in different contexts.

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References

Bartlett, M. S. (1954). A note on the multiplying factors for various χ 2 approximations. *Journal of the Royal Statistical Society. Series B (Methodological)*, 296-298.

Berends, R. & de Brouwer, J. (2020). *Perspectieven op Montessori* [Perspectives on Montessori]. Saxion University Progressive Education University Press.

Brown, T. A. (2015). *Confirmatory factor analysis for applied research* (2nd ed.). Guilford Publications.

Debs, M. (2023). Introduction: Global Montessori Education. In M. McKenna, A. Murray, E. Alquist, & M. Debs (Eds.), *Handbook of Montessori education.* Bloomsbury Publications.

Debs, M., de Brouwer, J., Murray, A. K., Lawrence, L., Tyne, M., & Von der Wehl, C. (2022). Global diffusion of Montessori schools. *Journal of Montessori Research*, *8*(2), 1–15. https://doi.org/10.17161/jomr.v8i2.18675

Demangeon, A., Claudel-Valentin, S., Aubry, A., & Tazouti, Y. (2023). A meta-analysis of the effects of Montessori education on five fields of development and learning in preschool and school-age children. *Contemporary Educational Psychology*, Article 102182. https://doi.org/10.1016/j.cedpsych.2023.102182

Dutch Montessori Association. (n.d.). *Onze scholen op de kaart* [Our schools on the map]. https://montessori.nl/scholen/

Dutch Montessori Association. (1983). *Raamplan Montessori opleidingen* [Framework plan for Montessori teacher training]. Nederlandse Montessori Vereniging.

Eyssen, C. H. (1919). *Iets over de Montessori gedachten in de Fröbelschool* [Thoughts about Montessori in Fröbel schools]. *Correspondentieblad van den Bond van Onderwijzeressen bij het Fröbelonderwijs*, *15*, 37–38.

Fabrigar, L., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, *4*(3), 272–299. https://doi.org/10.1037/1082-989X.4.3.272

Field, A. (2018). *Discovering statistics using IBM SPSS statistics.* SAGE.

Gerker, H. E. (2023). Making sense of Montessori teacher identity, Montessori pedagogy, and educational policies in public schools. *Journal of Montessori Research*, *9*(1), 1–15. https://doi.org/10.17161/jomr.v9i1.18861

Hardesty, D. M., & Bearden, W. O. (2004). The use of expert judges in scale development. Implications for improving face validity of measures of unobservable constructs. *Journal of Business Research*, *57*(2), 98–107. https://doi.org/10.1016/S0148-2963(01)00295-8

Hazenoot, M. (2010). *In rusteloze arbeid: de betekenis van Cornelia Philippi-Siewertsz van Reesema (1880-1963) voor de ontwikkeling van het onderwijs aan het jonge kind* [In restless labor: The significance of Cornelia Philippi-Siewertsz van Reesema (1880-1963) for the development of early childhood education]. [Unpublished doctoral dissertation]. University of Groningen].

Hoencamp, M., Exalto, J., de Muynck, A., & de Ruyter, D. (2022). A Dutch example of New Education: Philipp Abraham Kohnstamm (1875–1951) and his ideas about the New School. *History of Education*, *51*(6), 789-806. https://doi.org/10.1080/0046760X.2022.2038697

Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika*, *30*(2), 179–185. https://psycnet.apa.org/doi/10.1007/BF02289447

Hu, L.-I., & Bentler P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new

alternatives. *Structural Equation Modeling*, *6*(1), 1–55. https://doi.org/10.1080/10705519909540118
Imelman, J. D., & Meijer, W. A. J. (1986). *De nieuwe school, gisteren en vandaag* [The new school, yesterday and tomorrow]. Elsevier.
Inspectorate of Education. (n.d.). *Toezichtresultaten [Monitoring results]*. https://toezichtresultaten.onderwijsinspectie.nl/zoek?q=montessori&page=1§or=BAS
Joosten-Chotzen, R. (1937). *Montessori opvoeding. Haar toepassing in ons land.* [Montessori education. Its application in our country]. Bijleveld.
Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika, 39*(1), 31-36. https://doi.org/10.1007/bf02291575
Kramer, R. (1976). *Maria Montessori: A biography.* Diversion Books.
Ledesma, R. D., & Valero-Mora, P. (2007). Determining the number of factors to retain in EFA: An easy-to-use computer program for carrying out Parallel Analysis. *Practical Assessment, Research, and Evaluation*, *12*(1). https://doi.org/10.7275/wjnc-nm63
Leenders, H. H. M. (1999). *Montessori en fascistisch Italië: een receptiegeschiedenis* [Montessori and fascist Italy: A reception history]. Intro.
Lillard, A. S. (2019). Shunned and admired: Montessori, self-determination, and a case for radical school reform. *Educational Psychology Review*, *31*, 939–965. https://doi.org/10.1007/s10648-019-09483-3
Lillard, A. S. (2012). Preschool children's development in classic Montessori, supplemented Montessori, and conventional programs. *Journal of School Psychology*, *50*(3), 379–401. https://doi.org/10.1016/j.jsp.2012.01.001
Lillard, A. S., Heise, M. J., Richey, E. M., Tong, X., Hart, A., & Bray, P. M. (2017). Montessori preschool elevates and equalizes child outcomes: A longitudinal study. *Frontiers in Psychology*, *8*. https://doi.org/10.3389/fpsyg.2017.01783
Montessori, M. (1935). *De Methode der wetenschappelijke pedagogiek* [The Montessori Method]. Van Holkema & Warendorf N.V. (original work published 1914)
Montessori, M. (1937). *Het geheim van het kinderleven* [The secret of childhood]. Van Holkeman & Warendorf N.V.
Montessori, M. (1949). *The absorbent mind.* Theosophical Press.
Montessori, M. (1971). *The formation of man.* The Theosophical Publishing House. (original work published 1955)
Montessori, M. (1989). *The child in the family.* Clio Press. (original work published 1975)
Montessori, M. (1997). *The California lectures of Maria Montessori, 1915.* Clio Press.
Montessori, M. M. (1961). Waarom Montessori lycea [Why Montessori high schools]. In M. A. Allessie, O. Cornelissen, J. Haak, L. D. Misset, & W. P. Postma (Eds.), *Montessori perspectieven* (pp. 15–21). J. H. De Busy.
Montessori, M. M. (1973). Voorwoord [Preface]. In M. J. ten Cate, T. J. Hoeksema, & E. J. Lintvelt-Lemaire, (Eds.), *Het montessori material deel 1* (pp. 3–5). Nederlandse Montessori Vereniging.
Murray, A. K., Chen, J., & Daoust, C. J. (2019). Developing instruments to measure Montessori instructional practices. *Journal of Montessori Research*, *5*(1), 75–87. https://doi.org/10.17161/jomr.v5i1.9797
Murray, A. K., & Daoust, C. J. (2023). Fidelity issues in Montessori research. In M. McKenna, A. Murray, E. Alquist, & M. Debs (Eds.), *Handbook of Montessori education.* Bloomsbury Publications.
Philippi-Siewertsz van Reesema, C. (1924). Voorlopers van Montessori [Predecessors of Montessori]. *Pedagogische Studiën*, *5*, 72–77.
Philippi-Siewertsz van Reesema, C. (1954). *Kleuterwereld en kleuterschool* [Toddler world and kindergarten]. Wereldbibliotheek. https://objects.library.uu.nl/reader/index.php?obj=1874-205180&lan=en#page//21/44/33/214433412463262601371835210893975514 76.jpg/mode/1up
Prudon, P. (2015). Confirmatory factor analysis as a tool in research using questionnaires: A critique. *Comprehensive Psychology*. https://doi.org/10.2466/03.cp.4.10\
Randolph, R. J., Bryson, A., Menon, L., Henderson, D., Mauel, A. K., Michaels, S., Rosenstein, D. L. W., McPherson, W., O'Grady, R., & Lillard, A. S. (2023). Montessori education's impact on academic and nonacademic outcomes: A systematic review. *Campbell Systematic Reviews*, *19*(3), 1–82. https://doi.org/10.1002/cl2.1330
Rietveld-van Wingerden, M., Sturm, J. C., & Miedema, S. (2003). Vrijheid van onderwijs en sociale cohesie in historisch perspectief [Freedom of education and

social cohesion in historical perspective]. *Pedagogiek, 23*(2), 97–108. https://dspace.library.uu.nl/handle/1874/187625

den Ouden, M. et al. . (n.d.). *Saxion Ethische commissie* [Saxion Universitiy of Applied Sciences Ethical commission]. https://srs.saxion.nl/ethische-commissie/

Schmitt, T. A. (2011). Current methodological considerations in exploratory and confirmatory factor analysis. *Journal of Psychoeducational Assessment, 29*(4), 304–321. https://doi.org/10.1177/0734282911406653

Schwegman, M. (1999). *Maria Montessori 1870–1952*. Amsterdam University Press.

Sins, P., & van der Zee, S. (2015). De toegevoegde waarde van traditioneel vernieuwingsonderwijs: een studie naar de verschillen in cognitieve en niet-cognitieve opbrengsten tussen daltonscholen en traditionele scholen voor primair onderwijs [The added value of progressive education: A study of the differences in cognitive and noncognitive outcomes between Dalton schools and traditional primary schools]. *Pedagogische Studiën, 92*(4). https://pedagogischestudien.nl/article/view/14174/15663

Sixma, J. (1956). *De Montessori lagere school* [The Montessori elementary school]. Wolters.

Slaman, P. (2018). *In de regel vrij. 100 jaar politiek rond onderwijs, cultuur en wetenschap* [Generally free. 100 years of politics around education, culture and science]. Ministerie van OCW.

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education, 2*, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

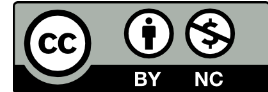
Tavakol, M., & Wetzel, A. (2020). Factor analysis: A means for theory and instrument development in support of construct validity. *International Journal of Medical Education, 11*, 245–247. https://doi.org/10.5116/ijme.5f96.0f4a

Thompson, B., & Daniel, L. G. (1996). Factor Analytic Evidence for the Construct Validity of Scores: A Historical Overview and Some Guidelines. *Educational and Psychological Measurement, 56*(2), 197–208. https://doi.org/10.1177/0013164496056002001

Vos, W. (2007). Aandacht voor kwaliteit [Focus on quality]. In M. Stefels & M. Rubinstein (Eds.), *Montessorischolen in beweging* (pp. 75–80). Garant Uitgevers.

Williams, B., Onsman, A., & Brown, T. (2010). Exploratory factor analysis: A five-step guide for novices. *Australasian Journal of Paramedicine, 8*, 1–13. https://doi.org/10.33151/ajp.8.3.93

Worthington, R. L., & Whittaker, T. A. (2006). Scale development research: a content analysis and recommendations for best practices. *The Counseling Psychologist, 34*(6), 806–838. https://doi.org/10.1177/0011000006288127



Educational Pacifism and Montessori Education

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Abstract: Educational theory and practice is dominated by mass formal schooling systems, which routinely and unjustly harm many students. I call this stance "educational pacifism," and in this paper argue that Montessorians ought to be educational pacifists. That is, they ought to recognize, understand, and reject systemic educational harm and ensure that it does not occur in their own practice, so that Montessori students are not harmed during their education and so that Montessori education might provide a nonharmful educational alternative to mass formal schooling. I suggest that Maria Montessori was, broadly speaking, herself an educational pacifist, and that not only is educational pacifism the morally right position for a Montessorian, but also that it is naturally a Montessorian position.

Education represents a great range of different ideas, approaches, and actions. Today, however, education across the world for children over the age of five or six is dominated by mass formal schooling systems. Developed in Europe during the industrial revolution and now spread across the globe (Anderson-Levitt, 2003; Ramirez & Boli, 1987), these systems are characterized by discipline, testing, hierarchy, controlling and suppressing pedagogies, divisions of age, timetabling, and results-based and content-focused curricula. Most importantly, they unjustly harm many students by negatively affecting their important interests and treating them as mere means to ends. This matters for Montessorians not only because Montessori education is a peace education but also because it can—and ought to—provide a functional and morally just alternative to the harm caused by mass formal schooling systems.

In this paper, I forward *educational pacifism*, a particular moral analysis of mass formal schooling and educational harm, which holds educational harm to be both widespread in mass formal schooling ideology and practice and morally unjust. I use this term to highlight the position's function as a pacifist analysis of harmful educational practice and its ideological connection to antiwar pacifism (see Parkin, 2023; Parkin, in press).

I argue that Maria Montessori was, broadly speaking, herself an educational pacifist. And I argue that Montessorians ought to be educational pacifists; they ought to reject educational harm and ensure that it does not occur in their practice, so that Montessori students are not harmed

during their education, and so that Montessori education might provide a nonharmful alternative to mass formal schooling—a viable, effective, and morally acceptable shelter from the storm.

Educational pacifism makes two main claims. The first is that mass formal schooling systems harm students in ways often unrecognized or misunderstood by educators, leaders, and bureaucrats, especially in terms of systemic harm, and so mass formal schooling systems cause much more harm than is commonly recognized or understood. Systemic harm includes structural harm, which is caused by patterned relationships that exist among components of social systems, and objective harm, which is caused by hierarchical structures and systems, inequality, and the current economic order. While most scholarship on mass schooling has focused on the spread and effects of compulsory schooling (e.g., Anderson-Levitt, 2003; Ramirez & Boli, 1987; Westberg et al., 2019), critiques of the ideologies, operations, and effects of mass schooling, including discussion of the "factory schooling" and various "compulsory schooling" models, can be found in the influential work of Michel Foucault (e.g., 1979), Pierre Bourdieu (e.g., 2012), and Paulo Freire (e.g., 1972), among others. Some commentators (e.g., Gatto, 2005; Harber, 2004) have explored the failings of mass schooling, while others (e.g., Bowles & Gintis, 2002; Klees, 2020; Robinson, 2016) have focused on the relationship between mass schooling and the international capitalist economy. In the first section, I outline how mass formal schooling systems harm students.

Educational pacifism's second claim is that systemic educational harm is unjust or wrongful because it treats students as mere means and negatively affects their important interests. In the second section, I make this argument, and I consider the claim that educational harm might be justifiable as a means to some important end. Note that educational pacifism is a negative position; it criticizes mass formal schooling systems in particular ways but does not necessarily propose alternative ways of educating children. Montessori education can be that alternative. Just as nonviolent resistance compliments antiwar pacifism's negative arguments against war by providing a nonharmful alternative (Chenoweth, 2021), so too might Montessori education complement educational pacifism's negative arguments against mass formal schooling by providing its own nonharmful alternative.

In the third section, I propose that Montessori was, broadly speaking, an educational pacifist. She thought that mass formal schooling systems caused harm to students by suppressing their abilities to realize their own potential. Although she did not attempt a comprehensive critique of mass formal schooling systems in any one work, a pacifist thread runs through her writings on education. Her analysis of formal schooling systems is educationally pacifist.

In the final section, I ask contemporary Montessorians to seriously consider the educational pacifist view for two reasons. First, educational pacifism provides a compelling analysis and rejection of educational harm, which applies not only to mass formal schooling systems but to any education system, including Montessori's. Second, it is generally taken that contemporary Montessori theory and practice should align with the theoretical dictates of Montessori herself. Therefore, if Montessori herself is an educational pacifist, then contemporary Montessorians also ought to be educational pacifists. I suggest that some Montessori practice problematically strays from educational pacifist principles and, consequently, Montessori principles.

Antiwar pacifists worry about the moral exceptionalism used to justify war: Why is large-scale political harm generally accepted as a means to peace? Similarly, educational pacifism questions the moral exceptionalism used to justify harm in education: Why is harmful schooling generally tolerated as a means to educate? I hope that a pacifist analysis of educational harm might precipitate a shift in educational thinking, policy, and practice, and that Montessori education, as a peace education, might play an important role in that shift. Good Montessori ideology, pedagogy, and practice ought to include a pacifistic component; it should be aware of, understand, and reject educational harm. Montessorians ought to both avoid unjustly harming their own students and provide a nonharmful alternative to the harms of mass formal schooling.

Mass Formal Schooling Systems and Educational Harm

The motivation for developing and defending the educational pacifist position comes from the ubiquity of mass formal schooling systems (Ramirez & Boli, 1987), the harm that they cause, and the generally unnoticed or accepted nature of that harm. The systemic harm caused by mass formal schooling systems is rarely critiqued, in part because education is generally assumed to be good. We tend to overlook the pervasive and significant harm caused by the hierarchical and authoritarian nature of

those systems (Harber, 2004). And many would argue that the ends of education—learning, critical and creative thinking, self-expression and self-realization, empowerment, social meritocracy, well-being, and so on—justify the means.

It is widely accepted that "schooling is good for society, that literacy and numeracy are needed for professional and social integration, that an educated person is empowered and thus disenfranchised groups need to access education . . . and that formal learning is essential for individual and group well-being" (Hughes, 2020, p. 24). Perhaps schools rightly constrain students' behavior so that they may receive the benefits of education because children lack—and therefore require assistance with—motivation, awareness of what they need, decision-making, and so on. Perhaps students are harmed for their own good. But educational pacifism rejects educational harm as a means to those educational goods. So, the argument here centers on two contentions: what can and cannot be defined as *harm* in educational practice (the broader and more serious the harm, the stronger the moral argument against it); and whether that harm is morally wrongful or unjust, as I explore in the second section.

Following Feinberg (1985), to harm someone is to adversely affect her important interests, the distinguishable components of her good or well-being. Similarly, John Stuart Mill defined harm as roughly injurious to someone's important interests, particularly those of autonomy and security (see, e.g., Turner, 2014). That which is in someone's interests is beneficial to her, and that which goes against her interests is harmful to her. Acts that harm are those that cause someone's important interests to be in a worse condition than they would have been had those acts been different.

This section provides a brief taxonomy of the ways that mass formal schooling systems harm students by negatively affecting their important interests. This harm manifests in personal and systemic forms. Personal harm is noticeable because it disturbs normality. It can be physical or psychological and mostly comes in the form of student-on-student bullying, including physical violence, threats, name-calling, theft, gossip, teasing, humiliation, and exclusion. Educator-on-student physical harm is rare these days in many countries, but plenty of verbal harm remains (Hughes, 2020). Student-on-educator physical and verbal harm is still common (Hughes, 2020). Some personal violence seems normal, inevitable, and even tolerable to schools, who are ill-equipped or underequipped to deal with difficult emotions and relationships. Many schools explicitly or tacitly condone student hierarchical violence, initiation rituals, and normalized bullying. Nevertheless, most liberal education systems have addressed personal harm with broadly positive results.

While most personal harm is noticeable because it disturbs normality, systemic harm goes relatively unnoticed because it is, in fact, normality. But compared to personal educational harm, systemic educational harm is more common, wide-ranging, and harmful. Systemic harm is present when someone's interests are in worse condition than they would have been had that harm not been present. While we all agree that students ought not to be hit, most educational harm is systemic and unnoticed or ignored by educators, educational bureaucrats, and leaders. In what follows, I divide systemic educational harm into three main categories: structural, objective, and symbolic.

Structural harm is caused by patterned relationships that exist among components of social systems, including unorganized subjective attitudes or practices (sexism, racism, ageism, etc.) and organized subjective practices (official restrictions of civil liberties, oppressive regimes, institutional policies or practices that support discrimination, etc.). Education has historically been defined by the struggle between critical consciousness, liberalism, and participation on one side, and control, conformation, and docility on the other (Harber, 2004). Mass formal schooling systems prioritize the latter and now play a key role in creating and maintaining systemic political and social control.

The history of schooling explains its approach and effect today. During the industrial revolution, education became schooling, which mimicked the factories for which students were being prepared. Schooling "became an anticipatory mirror, a perfect introduction to industrial society [through] the regimentation, lack of individualization, the rigid systems of seating, grouping, grading and marking, the authoritarian role of the teacher" (Toffler, 2022, p. 399). Since then, mass formal schooling systems have used authoritarianism to foster obedience and conformity. Schools have become institutions of imbalanced power, producing students with "the subordinate values and behaviours necessary for the modern bureaucratic, mass production workplace and the existing social order—regularity, routine, monotonous work and strict discipline" (Harber, 2004, 60).

Mass formal schooling places the teacher as the omnipotent controller of knowledge transfer, content, pedagogy, delivery, and discipline. The student is pow-

erless, empty, and unconscious, a depository for static knowledge (Freire, 1972). While schooling is typically seen as a liberating and mobilizing good, these practices have caused it to be "one of the most effective means of perpetuating the existing social pattern, as it both provides an apparent justification for social inequalities and gives recognition to the cultural heritage, that is, to a *social* gift treated as a *natural* one" (Bourdieu, 2012, p. 46). This subordinates students' intellectual, creative, and economic expression, which harms them by negatively affecting their important interests.

Coercive practices in schooling also cause structural harm. Coercion is expressed via educational structures, curricula, assessments, inspections, qualifications, school organization, teaching, and exclusionary practices (Alexander, 2000). Students experience threats of punishment for bad behavior or work (negative coercion) and rewards and admiration for good behavior or work (positive coercion). Positive coercion is coercive because, like negative coercion, it creates incentives toward unnatural or forced effort on the part of the student (e.g., Montessori, 2004); it provides external, rather than internal, motivation. Coercive practices cause many students to feel excluded from the educational process, especially those experiencing academic or social failure, behavioral problems, alienation, absence, and home issues. Coercion harms students by negatively affecting their interests in terms of educational confidence, motivation, engagement, and critical and creative thinking.

Objective harm is caused by hierarchical structures and systems, inequality, and the current economic order. Education systems have been greatly affected by recent global economic developments—over the last 50 years or so, dominant capitalist states, corporations, and groups have progressively reduced or dismantled redistributive and social welfare systems; resubordinated labor through deregulation, deunionization, and flexibilization; increased neoliberal policies and trade; and commodified public goods (Robinson, 2016). The structures, norms, and values of mass formal schooling systems prepare students for life in the capitalist economy using disciplinary processes, hierarchies, and hidden curricula. They make "the promise of petty (and generally banal) consumption and entertainment, backed by the threat of coercion and repression should dissatisfaction lead to rebellion" (Robinson, 2016, p. 4). Many students are harmed by schooling systems that support and entrench an economic system that requires scarcity, inequality, and subjugation to survive. The ones that are harmed the most are those who are prepared for a subordinate existence within that system. While education can and should liberate and mobilize, mass formal schooling does not.

Symbolic harm is a type of nonphysical harm manifested in power differentials between social groups. It exists in thought, language, and ideology. It is normalized subordination—the harmful status quo. Mass formal schooling systems produce symbolic harm via content and pedagogy. Curricula transmit ideologies of control and acquiescence, capitalist work and productivity, preparation for the working life, and particular viewpoints, communication styles, and aesthetic and moral tastes (Bourdieu, 2012). Note that transmission of culture is not necessarily harmful—Montessori (e.g., 2004), for example, was largely in favor of this sort of practice; it depends on what is being transmitted. Neoliberal ideologies are "tacitly embedded messages in educational design, discourse, and syllabus choice" (Hughes, 2020, p. 28). Pedagogical choices such as certification, testing, and ranking, especially of adolescents, impose "a dull uniformity on curricula, reducing learning to rote memorization, routine, punctuality, and obedience" (Robinson, 2016, p. 15). Enclosure, surveillance, rewards and punishments, hierarchy, and judgements on student achievement create oppressive power processes and imbalances, and institutional communication—lessons, questions, orders, differentiation of student "value" and knowledge, and obedience—develops both oppressive and subservient mindsets and behaviors (Foucault, 1979). Content transfer and testing are prioritized over critical and creative thinking, intellectual freedom, self-realization, and well-being. Violent attitudes, pedagogies, and curricula in mass formal schooling systems curb and restrain what they perceive to be human nature (Parkin, 2023). Mass formal schooling systems fail to provide neutral educational environments in which students can freely learn, think, and act in favor of ones that judge, punish, and abandon.

This brief taxonomy shows the ways by which students' important interests are negatively affected by the policies, practices, and attitudes of mass formal schooling systems. Those systems confuse by providing information that is excessive, out of context, disconnected, and lacking meaning. They entrench the hierarchy of intelligence and ability and teach students that their place in the hierarchy is determined. They create emotional dependency via strict chains of command and suppression of individuali-

ty. They create intellectual dependency because educators hold all knowledge and power, and critical and creative thinking are either deprioritized or discouraged. They teach that self-esteem ought to depend on expert opinion, that a student's worth depends on how they are perceived by the power holders. And they constantly survey students and erase their privacy (Gatto, 2005). Granted, an argument might be made that some of those negative effects amount to offense rather than harm. But it seems clear that many students' important interests are negatively affected by mass formal schooling systems, and that a good proportion are more serious than mere offense.

The Morality of Educational Harm

Conditional antiwar pacifists argue that even if war is sometimes the only means of preventing great evil, the nature of modern war is such that it cannot be justified even as a lesser evil (e.g., Holmes, 1989, 2017). They do so by employing the Kantian "formula of humanity" formulation of the categorial imperative (the supreme principle of morality): "So act that you use humanity, whether in your own person or in that of any other, always at the same time as an end, never merely as a means" (Kant, 1996, p. xxiii). Modern war harms too many people who, morally speaking, may not be harmed because harming them treats them merely as a means to an end. Those people are innocent in the relevant sense. Essentially, and in contrast to the just war tradition, conditional antiwar pacifists argue that modern war may only be waged if and only if the condition that it does not harm innocents is satisfied, and that the nature of modern war means that it never satisfies that condition. Compare the related but distinct contingent pacifism (e.g., May, 2015), which holds that the presumption against killing innocents may be overridden when doing so is the only means of preventing some sufficiently great evil, but that the threshold at which this presumption could be overridden is very high and unlikely to be met by modern war. Educational pacifism holds educational practices such as schooling to be just if and only if the condition that they do not harm innocents is satisfied (due to the Kantian formula of humanity), and that the nature of mass formal schooling systems means that they do not satisfy that condition, due to the extensive harms discussed here.

Innocence—from the Latin *innocere*, or not harming—applies to those not unjustly harming or threatening to harm (McMahan, 1994). A patient-centered (as opposed to agent-centered) deontological educational pacifism rests on the impermissibility of harming innocents. Innocents are prima facie illegitimate targets for harm because to harm them would be to fail to treat them as an end. They can only lose their innocence by unjustly harming or threatening to harm others; note that general moral character does not affect situational innocence. This is sometimes called "material" innocence (as opposed to "moral" innocence, the opposite of guilt).

Most students at most times are innocent in the relevant sense because they are not engaged in harming or threatening to harm others and are thus illegitimate targets for harm. They may not always be considered persons (John Locke's account [e.g., 2004] of personhood dictates that persons are those who possess moral agency and the capacity to be held responsible for their actions), though adolescents, perhaps, ought mostly to be considered as such. Whether or not students are persons, however, affects neither their innocence nor their illegitimacy as targets for harm. Personhood is not a prerequisite for innocence in this context. Children have legitimate negative claims against harm and oppression, and positive claims to protection (Ezer, 2004). Although younger children require guidance, meaning their choices may sometimes be legitimately overruled by parents or educators (Brennan & Noggle, 1997), the harms discussed here go beyond guidance. Guidance does not negatively affect their interests, but rather works in favor of them. The same cannot be said for many of the harms suffered by students in mass formal schooling systems (I discuss paternalism in the last section).

The harm present in mass formal schooling systems could be accidental or intentional. Educational choices are necessarily political; they serve some interests and hinder others (Freire, 1985). Education can be liberatory, but also oppressive. Education is subservient to and manipulated by states and other powerful actors who shape class structure and limit economic and social mobility. It is not surprising that mass formal schooling systems, designed during the industrial revolution and shaped by capitalist and colonial attitudes and practices, reflect those attitudes and practices.

It is worth noting that while the greatest challenge to the deontological claims of antiwar pacifism is the argument that sometimes war ought to be waged when it is the only means of preventing some great evil, which forces the pacifist to weigh her absolute stance against treating people as mere means to ends against the moral obligation to prevent great harm (Parkin, 2019), educational harm does not itself prevent any great harm. More-

over, viable and peaceful alternatives exist; mass formal schooling cannot be considered a last resort. Montessori education is one such alternative, of course, but there are others. Peace educationalists have proposed and developed a range of approaches that elicit desire for peace, nonviolent conflict management, and critical analysis of unjust and unequal structural arrangements (Harris & Synott, 2002). Much has been written on how to educate peacefully and toward peace (e.g., Bajaj, 2008; Harris & Morrison, 2013; Noddings, 2012; Salomon & Cairns, 2011), and on the moral foundations of peace education (Page, 2008).

This, then, is the educational pacifist position: the harm to students in mass formal schooling systems is systemic and more pervasive and serious than often assumed, and it is morally unjust because it treats innocents as means to ends. If one thinks that some or all of the "harms" I identify are not harms at all (but rather, say, offenses, to follow Mill's distinction), or that these harms are simply less important than their associated outcomes—according to some consequentialist calculation—then one will likely disagree with the educational pacifist view. I have not argued that schooling is inherently harmful, nor that mass formal schooling ought to be jettisoned entirely—it does many things well. Nor have I suggested that all mass formal schoolings systems harm students all of the time, but rather that they cause significant harm to many students a lot of the time.

Montessori, Peace, and Educational Harm

Much attention has been given to Montessori's thoughts on peace, but very little to her interpretation of the educational harm she aimed to avoid. This section shows that Montessori's views on mass formal schooling systems broadly aligned with the educational pacifist view, although her terminology is different, and she was unlikely to have considered herself a pacifist in the modern sense. While Montessori's primary objective in this context was to forward positive arguments (and a pedagogy) toward peace (see Moretti, 2021), she also argued against educational harm, and in particular against positive and negative coercion (Montessori, 2004). It is one thing to educate for peace, another to educate to eliminate educational harm; I hope to show that Montessori did both. To do so I first discuss Montessori's peace goals, then I examine her comments on the mass formal schooling systems of her time and her arguments toward a peaceful alternative.

It is common knowledge that Montessori believed education to be the optimal and perhaps only means of achieving peace: "education is the best weapon for peace" (Montessori, 2002, p. 28). By peace she meant positive peace; an enduring and expansive peace rather than a mere absence of violence: "Preventing conflicts is the work of politics; establishing peace is the work of education. We must convince the world of the need for a universal, collective effort to build the foundation for peace" (Montessori, 2002, p. 24). For Montessori, education was a necessary means to peace, and peace was the primary objective (Montessori, 2002; Moretti, 2021).

Montessori (2002) held education to be singularly important because she believed that interpersonal peace, including national and international peace, could only be achieved via intrapersonal peace: "We must develop the spiritual life of man and then organize humanity for peace" (p. xii). That is, only the peaceful person can construct a peaceful planet, otherwise peace will only ever be negative peace, a stopgap between feuds and fights and wars, a temporary cessation of violence. And only the child can become the peaceful person, for it is only she who remains free from the influence of cyclical violence in the world. Only the child can form a new world free from violence. Thus, education of the child is the only way to positive and lasting peace. Peace is literally the work of education, and education only.

During the Sixth International Montessori Congress in 1937, the theme of which was *educate for peace*, Montessori (2002) outlined her conception of peace as positive peace: "When we speak of peace, we do not mean a partial truce between separate nations, but a permanent way of life for all mankind" (p. 60). The purpose of the congress, she stated, was "to defend the child" (p. 37). This means a systemic defense of the child, meaning defense from the systemic harms (structural, objective, and symbolic) outlined here. Temporary or personal peace is not true peace. Montessori's conception of peace was both positive and systemic, and broadly aligns with the cessation of systemic harm as defined here.

Montessori's recorded thoughts on peace date back to 1917, when she delivered a series of lectures in which she argued that her educational method could form peaceful people who establish meaningful and respectful relations with those around them, thereby transforming humanity and creating peace (Montessori, 2013; Moretti, 2013). The thread of systemic peace runs through Montessori's entire taxonomy of education and life itself: "The history of Montessori's thought follows an inexorable logic lead-

ing definitively to social reform first and peace second; that is, social reform pointing towards a new definition of peace" (Kahn, 2013, p. 5). Montessori education focuses on the child, but "Montessori pedagogy . . . was never about an individual child—or even about the children of a single nation—but instead about the mission for global peace" (Moretti, 2021, p. 4). Understanding the development of Montessori's educational philosophy via her experiences in medicine and psychology bears this out—she viewed education as the solution to a particular set of problems, including global peace (e.g., Gutek, 2004; Kramer, 2017). Montessori education leads to peaceful people, who in turn form peaceful communities, who work toward systemic and lasting peace. Montessori was a peace educator and a peace theoretician. Let us now see if she was an educational pacifist, in my technical sense of the term.

Montessori's moral philosophy provides the foundation for her critique of the mass formal schooling systems of her time. Her view centered on respect, and shared elements of the Kantian formula of humanity categorial imperative discussed here (only treat people as ends and never as mere means) to ground an ethics of action. Instead of preference-satisfaction, liberty rights, or interests, however, the fundamental societal—and therefore educational—good on which Montessori education focuses is harmony of activity (Frierson, 2021). Consequently, the respect owed to others creates duties to not interfere or interrupt harmonious activity. And because Montessori education focuses on encouraging, facilitating, and protecting free harmonious activity (Montessori, 2004), educators have (perfect) duties to respect that activity by not intervening and (imperfect) duties to create the conditions for it to continue: "He who interrupts children in their occupations in order to make them learn some predetermined thing . . . confuses the means with the end and destroys the man for a vanity" (Montessori, 2007a, p. 134). In both senses, students must be treated as ends in themselves, otherwise an important moral imperative is violated. This paper does not critique mass formal schooling systems' abilities (or lack thereof) to assist with students' interests (following Kant) or activity (following Montessori), but rather their failure to not unjustly harm by intervention. Since the modus operandi of mass formal schooling systems is to control and dictate, and thus interrupt, we can infer some educational pacifist tendencies from this foundational moral position of Montessori's.

At times, Montessori explicitly challenged the schooling practices of her day. Her critique of mass formal schooling systems centered on the student and the moral impermissibility of suppressing a child's natural drive to learn and work. The student is harmed because she is separated from her potential—she is worse off than she would have been without it:

> *Education today causes the individual to dry up and his spiritual values to wither away. He becomes a cipher, a cog in the blind machine that his environment represents. Such preparation for life . . . is a crime, a sin. And education that represses and rejects the promptings of the moral self, that erects obstacles and barriers in the way of the development of intelligence, that condemns huge sectors of the population to ignorance is a crime.* (Montessori 2002, xiii)

Montessori's (2002) assessment of the mass formal schooling systems of her time was that they failed in their duties to students, to whom they owed freedom and assistance. She argued that their methods "dominate the child," that they "bring him into subjection" and "make him obedient . . . by any means whatever" (p. 31), and "suffocate and deform him under the error of common prejudices" (Montessori, 2007b, p. 66). Montessori highlighted the coercive harm caused by those systems, which were guided by arbitrary principles that serve only to oppress: "There is good reason to regard education as a tyrannical and dictatorial coercion exercised over every aspect of children's lives . . . . The simple truth, as our experience has amply demonstrated, is that the laws the child is forced to obey are arbitrary and that he must no longer be subject to them" (Montessori, 2002, p. 105).

It would follow, then, that any signs of peace within mass formal schooling systems are either illusory or mere flashes of negative peace. Illusory or fleeting peace is the best that can be hoped for because "peace" in these contexts is achieved not via liberation, but rather domination: "The adult defeats the child; and once the child reaches adulthood the characteristic signs of the peace that is only an aftermath of war—destruction on one hand and painful adjustment on the other—remain with him for the rest of his life" (Montessori, 2002, p. 15). Many educators in mass formal schooling systems would surely agree that peace in their schools and classrooms, at least as it is defined here, is fleeting at best.

Montessori (2002) argued that the competition present in mass formal schooling systems harmed students, who were taught "to regard themselves as isolated individuals who must satisfy their immediate needs by competing with other individuals" (p. xi). She recognized the political nature of these educational choices and their

outcomes, where collections of individuals were prepared for participation and likely subordination in the capitalist economy: "Each person is set apart from every other by his own private interests; everyone wants only some sort of work that will satisfy his material needs; everyone is attracted by and trapped in the interlocking gears of a mechanized and bureaucratic world" (p. xii). She also argued that students were prepared to accept that participation and subordination:

> *The obedience forced upon a child . . . prepares the adult to resign himself to anything and everything . . . . [This creates a] spirit of unthinking respect, an indeed almost mindless idolatry, in the minds of paralysed adults toward public leaders, who come to represent surrogate teachers and fathers, figures upon whom the child was forced to look as perfect and infallible. And discipline thus becomes almost synonymous with slavery.* (p. 19)

The child who does not learn to work by herself, set her own goals, and find her own motivation becomes the adult who needs the approval of others, cannot motivate herself, and will do what she is told. And although Montessori focused on activity, not interests, her comments reflect a sense that the child's interests are also negatively affected; she is harmed according to Feinberg's (1985)—and Mill's (Turner, 2014)—definition. Montessori's analysis here resembles my own analysis of formal schooling, as well as the critical analyses of education provided by Bourdieu (e.g., 2012), Foucault (e.g., 1979), and Freire (e.g., 1972), among others.

Montessori also rejected coercion as a means of educating. Positive and negative coercive practices such as rewards and punishments "are every-ready and efficient aids to the master who must force into a given attitude of mind and body those who are condemned to be his listeners" (Montessori, 2004, p. 77). Like her predecessors Jean-Jacques Rousseau and Friedrich Fröbel, she argued against the prevalent notion that children are innately disorderly and need to be disciplined via rewards and punishments so that they may learn (Gutek, 2004). Montessori viewed coercion as an unjust limitation of liberty: "the soul of the normal man grows perfect through expanding, and punishment as commonly understood is always a form of *repression*" (Montessori, 2004, p. 78).

Like educational pacifism, Montessori (2002) considered both individual (micro) and political (macro) levels of educational harm. Montessori education aims first for the liberation of students and second for reform toward a general improvement of humanity and peace. The individual student should first be considered "a citizen, as a dignified human being with a right to live and be protected" (p. 73). Students should be free from interference, interruption, and control, for "Freedom is the key to the entire process . . . . Individual personality could not develop without individual freedom" (p. 102). Montessori appeared to value freedom so highly for two reasons, the first deontological and the second consequentialist: first, we ought to protect students' freedom so that they can become the person they have the right to become (and so they do not become separated from their potential or have their interests negatively affected); and second, only free students can become free and peaceful adults, and a truly peaceful world is not possible without free and peaceful adults.

Harmonious activity provides the link between peaceful individuals and peaceful society. The Montessori environment is designed to allow freedom of activity and to help that activity be internally and externally harmonious. In the Montessori classroom, harmonious individuals create a harmonious microsociety:

> *Harmonious interaction—when it exists, as in the child—represents the normal relationship that should exist between the individual and his surroundings. And this relationship is one of love. Love impels the child not toward the possession of an object, but toward the work he can do with it. And when work begins in a certain environment, association with one's fellows also begins, for no one can work alone.* (Montessori, 2002, p. 57)

The prepared environment, Montessori (2002) asserted, naturally impels the student toward freedom, strength of will, and communal enterprise. These are precisely the values devalued and suppressed by mass formal schooling systems. Good education allows children the freedom to follow their own developmental impulses and matches the environment to their "boundless aspirations" (p. 21). Conscious and free, the student chooses her own tendencies and values, and reveals herself (Montessori, 2004; Moretti, 2021).

Peaceful, free, and harmonious students create peaceful, free, and harmonious classrooms. Those students become adults, and create peaceful, free, and harmonious societies. We thus shift from the classroom to the idea of social change arising from a new and free child-turned-

adult. As discussed, positive and systemic peace requires social injustice to be significantly reduced or even ceased. Montessori (2002) proclaimed the need for reform: "Inherent in the very meaning of the word peace is the positive notion of constructive social reform" (p. xi); particularly, "A vast educational reform and above all a vast social reform are called for today" (p. 82). Montessori rejected the mass formal schooling model because it subjugates and conditions for further subjugation. Free of it, she argued, people can achieve individual and communal satisfaction, liberated from the yoke for which they have hitherto been prepared:

> *An education capable of saving humanity is no small undertaking; it involves the spiritual development of man, the enhancement of his value as an individual . . . . The secret is this: making it possible for man to become the master of the mechanical environment that oppresses him today. Man the producer must become the master of production.* (Montessori, 2002, p. 30)

I take Montessori's "mechanical environment" to be meant both literally and figuratively. The mechanical environment is not only the machines and factories of industrialism, but also its spirit—the apparatuses of control in education and the preparation of students for subjugate roles in the economic system. It causes harm to students and Montessori rejected it. Montessori education is aimed at peace, and Montessori critiqued the mass formal schooling systems of her day. Those systems bear many similarities to today's, and Montessori's critique—though it employed different terminology—resembles the educational pacifist position in many ways. She saw injustice and systemic harm in those systems and concluded that if we are to work toward peace, "we must begin by recognizing the greatest injustice of all—our injustice toward the child [who] we must still make a radical effort to set free" (Montessori, 2002, p. 72).

Contemporary Montessori Education

It is my view that contemporary Montessorians ought to share the educational pacifist view. That is, their pedagogy, curricula, and general practice ought to reject educational harm and protect their students from it. Three main arguments support my position. The first argument, a moral one, is that educational pacifism provides a compelling moral analysis of the harm caused by mass formal schooling systems, and thus a normative argument against educational harm. If systemic peace, including the cessation of systemic harm in all its contexts and incarnations, is not found at the forefront of an educational approach's pedagogy and curriculum, then that approach is unlikely to support the educational pacifist view.

The second argument, both moral and from the authority of Montessori herself, is that she advanced compelling arguments that lead toward educational pacifist principles. She critiqued mass formal schooling systems in ways that align with the broad principles of educational pacifism; it makes enough sense to say that she was an educational pacifist even if she did not use that term herself. Montessori education solves a range of educational problems (see Lillard, 2017, for a compelling and comprehensive discussion of the benefits of quality Montessori education). But what matters for our purposes here is that Montessori education plays its part in eliminating the educational harm caused by mass schooling systems by rejecting all of the harmful attitudes and practices of those systems, and that it works toward intrapersonal and interpersonal peace: "Montessori reform must be directly linked to . . . real and focused service to improve spiritual, ecological, social, and economic realities for present and future peace on earth" (Kahn, 2013, p. 14).

The third argument builds on Montessori philosophy: if Montessori's views are important to contemporary Montessorians, then her views on educational harm ought to be important too. Contemporary Montessorians ought to share and be encouraged to share (via their own education) Montessori's pacifist take on education and educational harm. Montessori's classrooms aimed to allow children to develop internal peace and harmony with and morality toward others and the environment, thereby eschewing competition and power imbalances (Duckworth, 2006; Moretti, 2021). Good education systems are cohesive and driven by overarching educational and philosophical principles, and educational pacifism aligns well with the fundamentally important peace aims of Montessori education.

One might argue that the Montessori educational experience is one of structured freedom, and educational pacifism seems to point toward a more absolute level of freedom. But while educational pacifism rejects educational harm, it need not reject nonharmful educational guidance and structure, and therefore does not reject the contemporary Montessori view that "children need firm structure and warm love, and to be treated in ways that recognize their need for freedom with guidance" (Lillard,

2017, p. 380). Contemporary Montessori pedagogy aligns with educational pacifism by providing microlevel order and structure in terms of routines and expectations, but macrolevel freedom in terms of activity, learning, and being.

Relatedly, both contemporary Montessori education and educational pacifism reject *paternalism*, which is to act to override or coerce another's agency to promote her own good. In education, paternalism manifests as domination of the student for their own good. The expression "don't treat me like a child" reveals a standard account of the supposed asymmetrical moral statuses of adults and children, which allows adults to be treated one way and children another. As Frierson (2021) argued, however, students have "agency worthy of direct respect" (p. 145). That is, according to the Montessorian moral prioritization of the values of character, agency, respect, and solidarity, students do not require "adult forms of deliberation and reflection . . . to live flourishing ethical lives" (Frierson, 2022, p. 145). Although they are not adults and do not act like adults, students nevertheless have legitimate claims to agency and freedom from oppression. Unwanted interference, therefore, is not justified assistance but rather unjustified paternalism. While children sometimes need guidance and help that capable adults do not need, both Montessori education and educational pacifism reject any difference of treatment that results in harmful practice.

Frierson (2022), using "broadly Montessorian" (p. 147) arguments based on assertions made by Montessori herself, claims that educational paternalism is flawed for three reasons (p. 147–173). First, both adults and children are generally better than others at promoting their own interests; we have guiding instincts that help us toward activity and flourishing even when we are not aware of them. Second, both adults and children deserve dignity and agency, and paternalism infringes on this unconditional claim by not allowing them to properly develop character. Third, since character develops through free and effortful work, paternalism represses, perverts, and erodes character by inhibiting its expression. Here we have a set of compelling contemporary Montessorian arguments that aligns with one of educational pacifism's main complaints against mass formal schooling—the restriction of students' freedom based on the idea that they mostly do not know what is good for them and could not act to achieve that good even if they did know. While Frierson's (2022) arguments against paternalism posit personhood for children, and in the section The Morality of Educational Harm, I suggested that children have legitimate moral claims against harm and oppression, and positive claims to protection even if they are not considered persons, I do not view these two positions as incompatible. Rather, I made my assertion because I do not want children's claims against harm to rest on the question of their personhood. Arguments against paternalism function even if children are denied personhood because they have legitimate negative claims against harm and oppression and positive claims to liberty, or at least all others have duties to protect them from such harms. Arguments against unjustified educational paternalism serve to strengthen both the claim against educational oppression and the link between educational pacifism and Montessori.

Some worry that while Montessori school design, pedagogy, and curriculum strongly support freedom and democratic citizenship—and thus nonharmful educational practice—there are many Montessori schools that do not reflect this view or at least do not act accordingly (Thayer-Bacon, 2011). Internal tendencies or external pressures to timetable, test, and coerce cause some Montessorians to move away from Montessori's central peace objectives. Lillard (2019) reports having seen many instances of "weak implementation" amounting to "clear violations of core principles," including "desks in rows with computers and no materials, and timers limiting children's work time, and children filling out worksheets instead of using Montessori materials" (p. 958). As another commentator stated, "it is increasingly difficult to find authentic Montessori education" in terms of respect for student autonomy and coercive practice (L'Ecuyer in Robson & Franco, 2023, "The Montessori Brand" section). In the United States, for example, Montessori education, designed for the poorest and least powerful (who most suffer from systemic harm caused by inequality), has been criticized for mostly catering to the elite (Debs, 2016; Winter, 2022). And although some see the many U.S. public Montessori schools as having "been widely successful in bringing students from all racial and socioeconomic backgrounds together" (Debs, 2016, p. 28), others argued that they mostly follow the same pattern of "becoming whiter and wealthier with time" (Winter, 2022, para. 13). Timetabling, testing, and coercion, as well as racial and economic segregation, all create the conditions for systemic harm to students.

A solution could be to increase homogeneity (of theory, practice, and training) across the Montessori world (as sought by Montessori herself), but this also has

its drawbacks, especially for countries outside of Europe, multicultural countries, and countries wrestling with the effects of colonialism. A problem facing any quality pedagogy, including Montessori pedagogy, is how to ensure quality practice, especially as it relates to a cessation of harm and promotion of peace. It is too easy to revert to control and repression, for that is the history of industrialized education; educators tend to educate as they were educated, leaders lead as they were led, adults think and live as they were taught. If Montessorians revert to standard schooling practices such as testing, timetabling, hierarchy, emotional and intellectual dependence, and so on, then they are doing their students a disservice from the perspective of both educational pacifism and Montessori.

I have previously suggested that educators could (and perhaps should) form a version of Lenin's revolutionary vanguard, to assist in the liberation of harmed students (Parkin, in press). Students often cannot be expected to recognize and understand the systemic harms they endure, both because of their age and because those harms are normalized. Given the goals and methods of Montessori education, Montessori educators ought to be well placed to form such a vanguard. In fact, perhaps Montessorians ought to form such a vanguard given the unique positioning of Montessori education as a nonharmful alternative to mass formal schooling and the peaceful underpinnings of its educational philosophy.

It is said that peace is the natural outcome of Montessori education, but this is only true if it is done well. "Done well" means many things to many people, and to me it means doing something without harming. The students in today's mass formal schooling systems suffer many of the same harms suffered by those of Montessori's day. The historical development of those systems and their influence on current practice is clear, and it is recognized and rejected by both Montessori and educational pacifism. Mass formal schooling systems are outdated and unsurprisingly cause many students to dislike their schooling experience, which they mistakenly conflate with all educational experience. This explains why "so few children really flourish in school, and why so many strongly prefer snow days to school days" (Lillard, 2017, p. 1). Children do not dislike education. They are not harmed by education. They dislike and are harmed by schooling. Montessori education can and should avoid these pitfalls.

Montessorians ought to reject educational harm and ensure that their own practice meets the moral requirements of nonharmful education, not only because educational harm is morally unjust, but also because Montessori education is uniquely placed to provide a nonharmful alternative to mass formal schooling. That alternative should be provided as effectively and justly as possible, and to as many students as possible. Many Montessorians do, of course, act according to the broad tenets of educational pacifism. They embrace peace and liberty, and they reject harm. But it is not easy. There is constant pressure from leaders, bureaucrats, parents, economists, and society to pressure, suppress, test, schedule, and harm. We do not need more efficiency, or content knowledge, or obedience. We need peace, and we need justice. Educational pacifism rejects harmful educational practices; Montessori education provides a nonharmful solution.

> *Man today lies slumbering on the surface of the earth, which is about to swallow him up. What will he do?* (Montessori, 2002, p. 23)

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References

Alexander, R. (2000). *Culture and pedagogy: International comparisons in primary education*. Blackwell.

Anderson-Levitt, K. M. (2003). A world culture of schooling? In K. M. Anderson-Levitt (Ed.), *Local meanings, global schooling: Anthropology and world culture theory* (pp. 1–26). Palgrave Macmillan. https://doi.org/10.1057/9781403980359_1

Bajaj, M. (Ed.). (2008). *Encyclopedia of peace education*. Information Age Publishing.

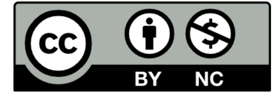
Bourdieu, P. (2012). The school as a conservative force: Scholastic and cultural inequalities. In J. Eggleston (Ed.), *Contemporary research in the sociology of education* (pp. 32–46). Routledge. https://doi.org/10.4324/9780203128374

Bowles, S., & Gintis, H. (2002). Schooling in capitalist America revisited. *Sociology of Education*, *75*(1), 1–18. https://doi.org/10.2307/3090251

Brennan, S., & Noggle, R. (1997). The moral status of children: Children's rights, parents' rights, and family justice. *Social Theory and Practice*, 23, 1–26. https://doi.org/10.5840/soctheorpract19972311

Chenoweth, E. (2021). *Civil resistance: What everyone needs to know*. Oxford University Press. https://doi.org/10.1093/wentk/9780190244392.001.0001
Debs, M. C. (2016). Racial and economic diversity in U.S. public Montessori schools. *Journal of Montessori Research*, *2*(2), 15–34. https://doi.org/10.17161/jomr.v2i2.5848
Duckworth, C. (2006). Teaching peace: A dialogue on the Montessori method. *Journal of Peace Education*, *3*(1), 39–53. https://doi.org/10.1080/17400200500532128
Ezer, T. (2004). A positive right to protection for children. *Yale Human Rights & Development Law Journal*, 7, 1–50. http://hdl.handle.net/20.500.13051/5836
Feinberg, J. (1985). Wrongful conception and the right not to be harmed. *Harvard Journal of Law & Public Policy*, *8*(1), 57–78.
Foucault, M. (1979). *Discipline and punishment: The birth of prison*. Vintage Books.
Freire, P. (1972). Education: Domestication or liberation? *Prospects*, *2*(2), 173–181. https://doi.org/10.1007/bf02195789
Freire, P. (1985). *The politics of education: Culture, power, and liberation*. Bloomsbury.
Frierson, P. (2021). The moral philosophy of Maria Montessori. *Journal of the American Philosophical Association*, *7*(2), 133–154. https://doi.org/10.1017/apa.2019.41
Frierson, P. (2022). *The moral philosophy of Maria Montessori: Agency and ethical life.* Bloomsbury Academic. https://doi.org/10.5040/9781350176409
Gatto, J. (2005). *Dumbing us down: The hidden curriculum of compulsory schooling*. New Society Publishers.
Gutek, G. L. (2004). Introduction: A biography of Montessori and an analysis of the Montessori method. In M. Montessori, *The Montessori Method: The origins of an educational innovation* (pp. 1–66). Rowman & Littlefield.
Harber, C. (2004). *Schooling as violence: How schools harm pupils and societies.* Routledge. https://doi.org/10.4324/9780203488423
Harris, I., & Morrison, M. L. (Eds.). (2013). *Peace education*. McFarland.
Harris, I., & Synott, J. (2002). Peace education for a new century. *Social Alternatives*, *21*(1), 3–6.
Holmes, R. L. (1989). *On war and morality*. Princeton University Press. https://doi.org/10.1515/9781400860142
Holmes, R. L. (2017). *Pacifism: A philosophy of nonviolence*. Bloomsbury. https://doi.org/10.5040/9781474279857
Hughes, C. (2020). Addressing violence in education: From policy to practice. *Prospects*, 48, 23–38. https://doi.org/10.1007/s11125-019-09445-1
Kahn, D. (2013). Converging passages: Social reform, peace, and Montessori education for life. *AMI Journal*, 2013(1-2), 5–16.
Kant, I. (1996). *Practical philosophy* (M. J. Gregor, Trans.). Cambridge University Press.
Klees, S. (2020). Beyond neoliberalism: Reflections on capitalism and education. *Policy Futures in Education*, *18*(1), 9–29. https://doi.org/10.1177/1478210317715814
Kramer, R. (2017). *Maria Montessori: A biography*. Diversion Books.
Lillard, A. S. (2017). *Montessori: The science behind the genius*. Oxford University Press.
Lillard, A. S. (2019). Shunned and admired: Montessori, self-determination, and a case for radical school reform. *Educational Psychology Review*, 31, 939–965. https://doi.org/10.1007/s10648-019-09483-3
Locke, J. (2004). *An essay concerning humane understanding, Volume I, Books I and II*. Project Gutenberg. https://www.gutenberg.org/ebooks/10615 (Original work published 1690)
May, L. (2015). *Contingent pacifism: Revisiting just war theory*. Cambridge University Press. https://doi.org/10.1017/cbo9781316344422
McMahan, J. (1994). Innocence, self-defense and killing in war. *The Journal of Political Philosophy*, *2*(3), 193–221. https://doi.org/10.1111/j.1467-9760.1994.tb00021.x
Montessori, M. (2002). *Education and peace.* Clio Press.
Montessori, M. (2004). *The Montessori Method: The origins of an educational innovation*. Rowman & Littlefield.
Montessori, M. (2007a). *The advanced Montessori Method, Volume I*. Montessori-Pierson.
Montessori, M. (2007b). *The formation of man.* Montessori-Pierson.
Montessori, M. (2013). Peace lecture I, the first of four special lectures. *AMI Journal*, 2013(1-2), 32–36.
Moretti, E. (2013). Teaching peace in a time of war: Maria Montessori's 1917 lectures. *AMI Journal*, 2013(1-2), 17–31.
Moretti, E. (2021). *The best weapon for peace: Maria Montessori, education, and children's rights*. Universi-

ty of Wisconsin Press. https://doi.org/10.2307/j.ctv1qwwhx5
Noddings, N. (2012). *Peace education: How we come to love and hate war*. Cambridge University Press. https://doi.org/10.1017/cbo9780511894725
Page, J. (2008). *Peace education: Exploring ethical and philosophical foundations*. Information Age Publishing.
Parkin, N. (2019). Moral tragedy pacifism. *Journal of Moral Philosophy*, 16(3), 259-278. https://doi.org/doi:10.1163/17455243-20182479
Parkin, N. (2023). Pacifism and Educational Violence. *Journal of Peace Education*, *20*(1), 75–94. https://doi.org/10.1080/17400201.2023.2169263
Parkin, N. (in press). A moral analysis of educational harm and student resistance. *Journal of Philosophy of Education*.
Ramirez, F. O., & Boli, J. (1987). The political construction of mass schooling: European origins and worldwide institutionalization. *Sociology of Education*, *60*(1), 2–17. https://doi.org/10.2307/2112615
Robinson, W. (2016). Global capitalism and the restructuring of education: The transnational capitalist class' quest to suppress critical thinking. *Social Justice*, *43*(3), 1–24.
Robson, D., & Franco, A. (2023, January 31). Montessori: The world's most influential school? *BBC Future*. https://www.bbc.com/future/article/20230131-does-the-montessori-method-actually-work
Salomon, G., & Cairns, E. (Eds.). (2011). *Handbook on peace education*. Routledge. https://doi.org/10.4324/9780203837993
Thayer-Bacon, B. (2011). Maria Montessori: Education for peace. *Factis Pax*, *5*(3), 307–319.
Toffler, A. (2022). *Future shock*. Penguin.
Turner, P. N. (2014). Harm and Mill's harm principle. *Ethics*, *124*(2), 299–326. https://doi.org/10.1086/673436
Westberg, J., Boser, L., & Brühwiler, I. (2019). *School acts and the rise of mass schooling: Education policy in the long nineteenth century*. Palgrave Macmillan. https://doi.org/10.1007/978-3-030-13570-6
Winter, J. (2022, March 3). The miseducation of Maria Montessori. *The New Yorker*. https://www.newyorker.com/books/under-review/the-miseducation-of-maria-montessori



Mortarboard Review: Montessori-Related Dissertations 2023

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Keywords: *Montessori research, Montessori dissertations, antibias and anti-racist, ABAR, teaching practices, equity in education, public Montessori education, learning environments, teacher training*

Abstract: This is the second article in an ongoing series, published annually, highlighting a selection of English-language dissertations from the previous calendar year related to Montessori philosophy and education. Thirteen doctoral dissertations completed and approved during the 2023 calendar year were identified. The authors selected three dissertations to spotlight because they represent high-quality research in an area that is relevant to the current educational landscape: antibias and anti-racist (ABAR) educational practices.

Each year, doctoral students around the world complete their programs in higher education by writing and defending their dissertations. These students have completed a significant project that results in a thoroughly researched manuscript. Unfortunately, these papers are not widely indexed and may be stored only within an institutional repository or a database devoted solely to dissertations and theses. This process limits exposure to other scholars, yet many of these works make valuable contributions to the field. This article is part of an annual series that spotlights doctoral dissertations from the previous year that are relevant to the field of Montessori education and research. This article highlights three of the 13 dissertations considered from 2023 (see the Appendix for a list of all 13 dissertations considered).

As with the previous review in this series, the authors began the selection process with a search across databases and repositories with international coverage of dissertations and theses: EBSCO Open Dissertations (https://biblioboard.com/opendissertations), Networked Digital Library of Theses and Dissertations (NDLTD; http://search.ndltd.org), Open Access Theses and Dissertations (https://oatd.org), and ProQuest Dissertations and Theses (https://www.proquest.com). The authors then compiled a list, which yielded 13 unique dissertations in English from the 2023 calendar year.

These dissertations were then categorized by topic or subject matter. This exercise indicated that most of the works focused on the practices of Montessori educators. Given this commonality, we decided to focus our reviews

on works that addressed this topic with a keen focus on those that dealt with timely issues of culturally responsive practices. Our evaluation excluded any dissertations that were subsequently published (e.g., article, book), and all dissertations were evaluated on their own merit regardless of the university's status (e.g., nonprofit/for-profit, public/private, religious/secular).

Antibias and Anti-Racist Practices in Montessori Programs

The three dissertations we selected to review focus on culturally responsive practices that are practiced within the Montessori classroom and their presence in Montessori training programs. The concepts and practices of antibias and anti-racist (ABAR) education have a history rooted in what is known as critical pedagogy, which relies on foundational texts by Paolo Freire (1968), Henry Giroux (1988, 2011), bell hooks (1994, 2003), Peter McLaren (1989, 2016), and, more recently, Zaretta Hammond (2015), among others. Critical pedagogy is a philosophy that encompasses several pedagogical practices that emphasize racial and social justice (e.g., anti-oppressive education, antibias curriculum, anti-racist education) to address the unique needs and experiences of BIPOC educators and students, who have historically been overlooked, dismissed, and denigrated.

From teacher preparation to educator practices to learning environments, White cultural structures and practices have historically predominated Montessori schools and many other educational models (Debs, 2019). Through a critical pedagogical lens, it is readily apparent that this foundation is exclusive, inequitable, and unresponsive to the needs of BIPOC communities. The Montessori community within the United States is actively attempting to counteract this unfortunate reality through intentional actions and practices that seek to center BIPOC experiences and cultural practices. To this end, the following reviews seek to highlight the work of three doctoral students who are engaged in this arena.

Bass-Barlow, K. (2023). *Examination of Montessori training: Experiences of People of Color in public and charter Montessori schools* [Doctoral dissertation, Arkansas State University]. https://www.proquest.com/docview/2856660597

In this dissertation, KaLinda Bass-Barlow centers the experiences of teachers of color in Montessori teacher training[1] provided by Association Montessori Internationale (AMI) training centers. For this phenomenological study, Bass-Barlow interviewed 14 teachers of color about their experiences moving through AMI Montessori teacher training, asking each participant nine questions related to their experiences of working in a public Montessori school while enrolled in or after being enrolled in AMI training. The interview questions included inquiries concerning the workload of training, balancing work and training, experiences of travel required for training, and financial implications of training. The interview questions also included opportunities for participants to make suggestions to AMI based on their training experiences, to describe their feelings about training, and to describe how training prepared them to be effective educators in Montessori classrooms. Participants fit one of three categories, and thus shared their experiences from one of three perspectives: teaching in public settings after completion of the AMI Montessori teacher training (five participants), teaching in a public Montessori school while enrolled in AMI teacher training (five participants), and working as a Montessori assistant under a trained teacher while enrolled in AMI teacher training (four participants).

Bass-Barlow is successful in executing a primary aim of her study: sharing the perspectives of BIPOC Montessori teachers, an area of vital need both in educational spaces generally and in Montessori education specifically. The rich descriptions from her interviews paint a picture of some of the ways these participants experienced their Montessori training and their work in public settings. For this reason alone, Bass-Barlow's work makes a vital contribution to the field. A second noteworthy contribution Bass-Barlow makes to the field of education research generally and Montessori research specifically is in identifying and recommending topics for continued scholarship, based on her findings. With this dissertation being, perhaps, the only study related to the experiences of BIPOC teachers in Montessori training, Bass-Barlow's important findings merit attention and expanded inquiry.

Findings from this study related to five themes: experiences of training, training work/course load, social emotional wellness, training deficits, and financial implications. Several findings were consistent with prior

1. Although the journal typically uses the term *teacher preparation*, we follow the dissertation author's use of the term *teacher training* for this article.

research on Montessori teacher training generally (e.g., Cossentino, 2009), including findings that the training was described as meaningful, complex, and challenging, requiring significant time and focus. Participants felt that training should incorporate more content related to special education, cultural competencies, and classroom management. Some participants described significant financial obligations, including unexpected costs for album and material making, that were part of their program. However, one finding that was not expected by the researcher was a significant impact of training on participants' mental health and well-being. This theme emerged in relation to a variety of other themes, including travel, time pressure, stress related to examinations, and other aspects of training. Bass-Barlow reported that "At least one trainee from each group shared experiences they considered to be traumatizing" (p. 99). Bass-Barlow asserts that this leads to the most significant implication of the study: a need for further research into the social and emotional wellness of individuals (and especially persons of color) who are enrolled in training programs. In addition to a call for additional research, Bass-Barlow offers several relevant suggestions for Montessori programs, including a need to pay attention to the impact of training on mental health and well-being. Bass-Barlow suggests that the programs should incorporate mindfulness activities, offer health and wellness days (without penalizing attendance) by adding additional days to the academic calendar, create space for reflective journaling, and provide support teams and assistance programs for any students experiencing acute stress or other mental health challenges.

Another striking finding of Bass-Barlow's study was the description of "Montessori trainers who were insensitive or unaware of the perceptions of POC" (p. 114), indicating a need for all Montessori trainers to demonstrate proficiency in culturally responsive teaching practices, ensuring cultural representation in materials and training environments.

One facet of study design not thoroughly explained by Bass-Barlow was the decision to focus exclusively on teachers with experience of AMI teacher training programs, rather than potentially also including teachers with experience of American Montessori Society teacher training programs, or programs accredited by the Montessori Accreditation Council for Teacher Education. There may have been several reasons for this design choice, including that AMI training centers are generally expected to ensure as much consistency as possible from one center to another. In this vein, Bass-Barlow describes an "emphasis on maintaining AMI training as a prescriptive training model which conforms to Maria Montessori's original methodology" (p. 111). Other potential reasons for this design choice could have been related to researcher access or a desire to contribute specifically to the future of AMI training centers or schools. Similarly, Bass-Barlow also does not specify a focus on a particular level of AMI training, though some participants are identified as having completed Elementary level preparation (for children ages 6 to 12) and some as having completed Primary level preparation (for children ages 3 to 6). So while Bass-Barlow does not claim generalizability of findings, hopefully future research will help unpack the lived experiences of teachers (and especially teachers of color) who have experienced trainings across the various levels, and/or whose training occurred through other (non-AMI) organizations. Bass-Barlow offers several recommendations for the directions of future research, a need illuminated by her work, yet this study's findings merit significant attention in the field of Montessori teacher education.

D'Cruz Ramos, G. O. (2023). ***Critical Montessori education: Centering BIPOC Montessori educators and their anti-racist teaching practices*** **[Doctoral dissertation, University of Maryland]. http://hdl.handle.net/1903/30199**

In this dissertation, Genevieve O. D'Cruz Ramos used a critical ethnographic lens to examine how one Black Montessori educator implemented the Montessori method in her classroom at a public Montessori charter school. The study focused on how the educator, who was assigned the pseudonym Lauren, critically and intentionally incorporated culturally responsive pedagogy (CRP) and culturally sustaining pedagogy (CSP) in her practices and classroom: "Because of the lack of explicit centering of race in Montessori, Montessori spaces, culturally, are not always spaces inclusive of BIPOC educators and students and require active work to become inclusive spaces" (p. 52).

D'Cruz Ramos's study was guided by three research questions:

1. "How does a Black Montessori teacher interpret the Montessori philosophy to more relevantly support her BIPOC students?"
2. "How does she practice the Montessori method through culturally relevant and sustaining practices?"

3. “What are the structural barriers that continue to challenge her as a Black educator doing her work?” (pp. 13–14).

Additionally, a “Critical Montessori Model” (CMM)—grounded in critical race theory (CRT)—is proposed and defined by the author (p. 117). The core of this model is an assumption that “the Montessori method must be practiced with a critical racial understanding and implementation of the Montessori method, with an overarching framework of [CRT]” (p. 117). Further, CMM incorporates community cultural wealth (CCW) “to support BIPOC Montessori students’ and educators’ racial identities, the use of CSP to value student knowledge and their racial identities, and the specific emphasis on counter-storytelling for valuing student knowledge and BIPOC Montessori educators’ voices” (p. 117). The author asserts that the purpose of CMM is “to offer a critical lens specifically for BIPOC Montessori educators and students” (p. 117) and this model informed her interpretation of the ethnographic data captured.

The study itself relied on data captured through ethnographic interviews with and observations of Lauren, a Black Montessori educator at a public Montessori charter school. This data was collected, reviewed, coded, and analyzed to assess to what extent Lauren’s practices and classroom environment coalesced or aligned with, or even challenged CMM. In D’Cruz Ramos’s words, “overall, the [CMM] allowed me to identify particular aspects of Lauren’s classroom practice and space that centered the voices and experiences of BIPOC educators and students” (p. 120).

In the literature review, D’Cruz Ramos spotlights the lack of literature that centers the voices of BIPOC Montessori educators and students. While D’Cruz Ramos was able to identify sufficient literature to inform the study’s assumptions, she also acknowledged the dearth of studies pertaining to the experiences of BIPOC Montessori educators and students. As a result, it is worth mentioning some recent works and studies that are adjacent: Canzoneri-Golden & King, 2020, 2023; Cooper, 2022; Moquino, 2023; Moquino et al., 2023; Welch, 2023.

D’Cruz Ramos used ethnographic research methods and, as such, the sample size was small—one individual—which limits the generalizability of this study. Regardless, the results and insights that D’Cruz Ramos identified are valuable for both practitioners and researchers. She documented the experiences and practices of one public Montessori educator, and in doing so, she provided a model for other Montessori educators to adopt or adapt.

What struck us most about D’Cruz Ramos’s study was the novel establishment of the CMM and the ethnographic examination of a BIPOC Montessori educator’s practices (including her preparation of the learning environment). The CMM provides other researchers and practitioners with tangible, articulate, and structured guidelines for implementing the Montessori method in a way that respects, acknowledges, and honors the lived experiences of BIPOC Montessori educators and students. Furthermore, the CMM is also relevant to educators’ practices across different pedagogical models as it demonstrates how CRT, CRP, and CSP can be incorporated into pedagogical practices. Simultaneously, the ethnographic research conducted by D’Cruz Ramos demonstrates one way that the CMM is implemented by a Black Montessori educator. We encourage practitioners and scholars alike to consult this dissertation for themselves to obtain a more intimate understanding of D’Cruz Ramos’s study and findings, including the extensive appendices; fortunately, this dissertation is readily accessible.

Hammons, M. S. (2023). *Antiracist pedagogy in White spaces: An exploration of antiracist White teachers and their commitment to create antiracist classrooms* [Doctoral dissertation, San Francisco State University]. https://doi.org/10.46569/8p58pm94q

Michelle S. Hammons began her qualitative exploration of anti-racist teaching by White Montessori teachers by acknowledging her own positionality. She is White and an experienced Montessori teacher from California who grew up in Cincinnati, Ohio, with parents who created a multicultural, multiethnic environment for their family. After her years of working to create anti-racist spaces in schools, she shifted her focus to how other White teachers create anti-racist spaces, especially when they teach a majority of White students.

Hammons pointed out that the educational system in the United States displays and perpetuates many aspects of racism and White supremacy. White children attend schools where everyone looks like them and they have few opportunities to connect with children who look different. In 2021, over 78% of White elementary and secondary public school students across the United States attended a school that was at least half White, even though fewer than half of public school students in the

United States are White (Schaeffer, 2021).

Hammons referenced James Baldwin's statement about how racism is the problem of the White community and that nothing will change until the White community engages with the problem. With that backdrop, she pointed out that while there has been work on how White school leaders successfully create anti-racist schools, there has been little work done on how White teachers successfully practice anti-racist teaching.

For her dissertation research, Hammons did not intend to focus on Montessori educators initially, but upon reflection, she realized that there were three key reasons Montessori pedagogy was well-suited to her focus on anti-racism: (a) the focus on peace education, (b) the opportunities that teachers have to incorporate alternative narratives, and (c) the focus on the education of the whole child. Hammons's research questions were: "How do White teachers committed to antiracism develop their personal antiracist stance? How do White teachers who are committed to antiracist practice manifest that practice in their classroom? What impact do White antiracist teachers hope to have on students?"

She sought out White, public Montessori Elementary teachers who taught in schools where at least 40% of the students were White and no other group made up more than 20% of the school population. From across the United States, she was able to secure four participants who met the criteria. With these teachers, she conducted two focus groups with all four participants and three semi-structured interviews with two of the participants, each lasting less than one hour.

From the data she collected in the interviews and focus groups, Hammons reported on how her participants developed their anti-racist stance from being aware of White supremacy culture, doing formal work through their schools, and personally reflecting on their own biases and privilege. They expressed their commitment to not turn a blind eye to injustices that do not affect them personally.

When asked how this anti-racist work manifested in their classrooms, the participants' responses revealed three themes: intentionality, curriculum, and disrupting White supremacy culture. Teachers were intentional with their choices to bring diverse materials into the classroom and have difficult conversations with their students. The second way that their anti-racist stance manifested in the classroom was through their approach to the curriculum by updating the materials to avoid racist and colonial messages. The third way that the participants' anti-racist approach was carried out in their teaching was through the ways that they disrupted White supremacy culture by both resisting perpetuation of White supremacy and fear of conflict.

Related to Hammons's last research question, she found that her participant teachers hoped to help their predominantly White students expand their viewpoints by striving toward a classroom that decentered whiteness.

Based on her data, Hammons offered suggestions to encourage future anti-racist Montessori teachers. First, she argued that all Montessori training programs need to include antibias and anti-racist training to help their candidates understand the world in which they will be working. Second, she suggested that school leaders need to create transformative change to encourage and support this work. Last, Hammons suggested that there should be better ways both to connect White anti-racist educators to support one another and to find ways for these White educators to connect with groups of diverse, minoritized people.

Regarding limitations, Hammons acknowledged that this dissertation should not be considered a definitive account of White anti-racist teachers. This is a snapshot of four teachers, from their own statements and participation. Classrooms were not visited, and observations were not conducted. Throughout the dissertation, both Hammons and her participants also acknowledged that this work is not learned in one training session. They also freely acknowledged that this work is never finished. There are always new teachable moments in the classroom and new students who need the lessons.

Hammons suggested future research examining ways to involve school leaders in ABAR work, as well as longitudinal studies examining ABAR classrooms. She also suggested that studying the students in anti-racist classrooms would provide a fruitful direction for research.

Hammons detailed how four White teachers have worked—and continue to work—toward more equitable spaces for all students. Her accessible dissertation shares the voices of these teachers, uplifting their efforts and acknowledging that, for those who choose to see the uncomfortable truths, the work to be anti-racist is never done.

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References

Bass-Barlow, K. (2023). *Examination of Montessori training: Experiences of People of Color in public and charter Montessori schools* [Doctoral dissertation, Arkansas State University]. https://www.proquest.com/docview/2856660597

Canzoneri-Golden, L., & King, J. (2020). *An examination of culturally relevant pedagogy and antibias-antiracist curriculum in a Montessori setting* [Doctoral dissertation, Lynn University]. https://spiral.lynn.edu/etds/360

Canzoneri-Golden, L., & King, J. (2023). Montessori education and critical race theory in the United States. In A. K. Murray, E.-M. Tebano Ahlquist, M. K. McKenna, & M. Debs (Eds.), *The Bloomsbury handbook of Montessori education* (pp. 503–511). Bloomsbury Academic.

Cooper, J. (2022). *Searching for equity in education: A qualitative study examining the experiences of African American families in accessing and financing Montessori education* [Doctoral dissertation, Saint Joseph's University]. https://www.proquest.com/docview/2806396666

Cossentino, J. (2009). Culture, craft, & coherence: The unexpected vitality of Montessori teacher training. *Journal of Teacher Education*, *60*(5), 520–527. https://doi.org/10.1177/00224871093445

D'Cruz Ramos, G. O. (2023). *Critical Montessori education: Centering BIPOC Montessori educators and their anti-racist teaching practices* [Doctoral dissertation, University of Maryland]. https://doi.org/10.13016/dspace/twpw-zy3r

Debs, M. (2019). *Diverse families, desirable schools: Public Montessori in the era of school choice*. Harvard Education Press.

Freire, P. (1968). *Pedagogy of the oppressed*. Seabury Press.

Giroux, H. A. (1988). *Schooling and the struggle for public life: Critical pedagogy in the modern age*. Minnesota University Press.

Giroux, H. A. (2011). *On critical pedagogy*. Bloomsbury.

Hammond, Z. (2015). *Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. SAGE.

Hammons, M. S. (2023). *Antiracist pedagogy in White spaces: An exploration of antiracist White teachers and their commitment to create antiracist classrooms* [Doctoral dissertation, San Francisco State University]. https://doi.org/10.46569/8p58pm94q

hooks, b. (1994). *Teaching to transgress: Education as the practice of freedom*. Routledge.

hooks, b. (2003). *Teaching community: A pedagogy of hope*. Routledge.

McLaren, P. (1989). *Life in schools: An introduction to critical pedagogy in the foundations of education*. Irwin Publishing.

McLaren, P. (2016). *Pedagogy of insurrection: From resurrection to revolution*. Peter Lang.

Moquino, T. (2023). The need for Indigenous Montessori teacher education. In *Equity examined: How to design schools and teacher education programs where everyone thrives* (pp. 42–44). American Montessori Society.

Moquino, T., Walker, N., & Kitchens, K. (2023). Beyond authenticity: Indigenizing Montessori education in settler colonial United States. In A. K. Murray, E.-M. Tebano Ahlquist, M. K. McKenna, & M. Debs (Eds.), *The Bloomsbury handbook of Montessori education* (pp. 513–524). Bloomsbury Academic.

Schaeffer, K. (2021). *U.S. public school students often go to schools where at least half of their peers are the same race or ethnicity*. https://policycommons.net/artifacts/2047148/us/2800212

Welch, A. M. (2023). *Racial identity development in the early years: A Montessori student/educator's autoethnographic study* [Master's thesis, California State University, Los Angeles]. https://www.proquest.com/docview/2849816249

Appendix: List of 2023 Dissertations Considered

Allen-Blevins, E. H. (2023). *Public Montessori early childhood educators' perceptions of psychological needs fulfillment* [Doctoral dissertation, University of Kansas]. https://www.proquest.com/docview/2827944915

Ansong, K. D. (2023). *An interpretative phenomenological analysis of lived experiences of graduate-level peace educators: Voices for sustained peace* [Doctoral dissertation, Nova Southeastern University]. https://www.proquest.com/docview/2910128900

August, A. M. (2023). *A theological analysis of the educational method of Maria Montessori using an inverse consistency protocol* [Doctoral dissertation, The Southern Baptist Theological Seminary]. https://www.proquest.com/docview/2911078211

Bass-Barlow, K. (2023). *Examination of Montessori training: Experiences of People of Color in public and charter Montessori schools* [Doctoral dissertation, Arkansas State University]. https://www.proquest.com/docview/2856660597

Brown, D. (2023). *Strategies to support classroom integration among new elementary Montessori students: Qualitative case study* [Doctoral dissertation, University of Phoenix]. https://www.proquest.com/docview/2812358688

D'Cruz Ramos, G. O. (2023). *Critical Montessori education: Centering BIPOC Montessori educators and their anti-racist teaching practices* [Doctoral dissertation, University of Maryland]. https://doi.org/10.13016/dspace/twpw-zy3r

Falchuk, W. A. (2023). *Communication and collaboration across student support teams and Montessori classroom teachers* [Doctoral dissertation, Northeastern University]. http://hdl.handle.net/2047/D20483531

Hammons, M. S. (2023). *Antiracist pedagogy in White spaces: An exploration of antiracist White teachers and their commitment to create antiracist classrooms* [Doctoral dissertation, San Francisco State University]. https://doi.org/10.46569/8p58pm94q

Hudson, L. (2023). *An investigation of Montessori education efficacy versus the traditional general education classrooms for improved achievement* [Doctoral dissertation, Southern Wesleyan University]. https://www.proquest.com/docview/2766709220

Knight, M. (2023). *An attitudinal study of 5th-grade teachers' perceptions about mathematics and the influence on instruction* [Doctoral dissertation, Southern Wesleyan University]. https://www.proquest.com/docview/2773934537

Knowlin, Z. N. (2023). *An assessment of Montessori education in public middle schools in South Florida: A mixed-methods inquiry* [Doctoral dissertation, Barry University]. https://www.proquest.com/docview/2838922202

Perkins, K. (2023). *The public Montessori journey: A phenomenological study of the transition experiences of public Montessori teacher interns* [Doctoral dissertation, Liberty University]. https://digitalcommons.liberty.edu/doctoral/5053

Postlewaite, E. L. (2023). *The development of adolescent students' self-directed learning skills within a Montessori program during COVID-19: A longitudinal mixed-methods study* [Doctoral dissertation, The Claremont Graduate University]. https://www.proquest.com/docview/2835696862