

Toward an Expanded Identity: Ecological Self and Inclusion within the Ecopedagogical Paradigm

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Abstract: This article proposes the concept of expanded identity as a pedagogical category for rethinking the relationship between the ecological self, learning, and inclusion within the ecopedagogical paradigm. Drawing on the theory of the extended mind and on Arne Næss's ecosophy, the article argues that ecological education cannot be limited to the transmission of environmental knowledge or the prescription of sustainable behaviours; rather, it must address the formation of the self and processes of identification with the living world. The transition from extended mind to expanded identity is understood as a pedagogical transposition of the extended paradigm: if cognition is distributed across the body, the environment, and relationships, then identity formation must also be conceived as a situated, embodied, affective, and relational process. From this perspective, the ecological self becomes the foundation of a subjectivity capable of distinguishing itself without separating itself, and of recognising places, communities, other living beings, and ecosystems as constitutive dimensions of its own experience. Finally, the article shows how this perspective makes it possible to redefine inclusion not merely as access to educational contexts, but as an ecological quality of relationships and as an expansion of the field of care and responsibility.

Keywords: expanded identity; ecological self; ecopedagogy; inclusion; extended mind; outdoor education



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1. Introduction

Where is the mind located today? Responding to this question entails a profound transformation in the way learning is understood. In contemporary educational ecosystems, shaped by digital networks, hybrid environments, ecological crises, and new forms of social interdependence, a conception of the mind as an internal, individual, and self-sufficient reality appears increasingly inadequate (Bateson, 1972; Clark & Chalmers, 1998; Hutchins, 1995). This crisis concerns above all the very image of the learning subject: it is a matter of pedagogical anthropology (Bellingreri, 2010; Biesta, 2010; Morin, 1999). The separate ego, conceived as an autonomous centre of representation and decision-making, reveals its limitations in the face of formative processes that always unfold within networks of bodily, affective, technological, social, environmental, and institutional

relationships (Clark & Chalmers, 1998; Varela, Thompson, & Rosch, 1991; Hutchins, 1995).

This crisis of the separate ego becomes particularly evident when viewed from an ecopedagogical perspective. If the ecological crisis is analysed at a surface level, it appears as a technical, economic, and managerial problem; at a deeper level, however, it calls human beings to question their relationship with the living world (Næss, 1973, 1989). The ecological crisis reveals the inadequacy of an environmental education reduced to the transmission of information or the prescription of correct behaviours (Strongoli, 2019). Rather, the central core of the ecopedagogical approach concerns the formation of identity: the way in which the subject perceives itself, its own boundaries, and its belonging to the web of life (Pascucci & Gentilozzi, 2025).

An exclusively cognitive reading of mental extension risks remaining pedagogically insufficient. The transition from extended mind to expanded identity is not a direct deduction, but a pedagogical transposition: if cognition is distributed across the body, the environment, and relationships, then the formation of the self must also be conceived as a situated, embodied, affective, and relational process. By expanded identity, this article refers to a configuration of the self in which the subject recognises its own formation and self-realisation as inseparable from its relationships with other human beings, places, living beings, and ecosystems.

The article's hypothesis is that the concept of the ecological self developed by Arne Næss (1989) makes it possible to understand the transition from the theory of the extended mind to the concept of expanded identity. The ecological self does not simply describe a subject who is sensitive to environmental issues; rather, it denotes a form of identity that expands through processes of identification with the living world (Næss, 1989). In this sense, expanded identity indicates the educational possibility of overcoming the separate ego by recognising that human well-being cannot be separated from the quality of relationships with places, other living beings, communities, and ecosystems. This also entails a redefinition of the concept of inclusion. Within the ecopedagogical paradigm, inclusion concerns not only the access and participation of human subjects in educational contexts, but also the expansion of the field of care and responsibility (Pascucci & Gentilozzi, 2025). This contribution is theoretical and argumentative in nature and proceeds through a critical dialogue between the theory of the extended mind, Næss's ecosophy, ecopedagogy, and the pedagogy of inclusion.

2. The Ecological Self as a Form of Expanded Identity

The concept of the ecological self developed by Arne Næss (1987) constitutes one of the most fruitful theoretical nuclei for rethinking the relationship between identity, learning, and the environment. From the perspective of ecosophy, the human being cannot be understood as a separate individual standing before nature, but rather as a relational node embedded within a broader field of interdependencies (Næss, 1989).

From this perspective, the ecological self may be understood as a form of expanded identity. Identity is not conceived as a closed structure, defined once and for all by the boundaries of the individual, but as a possibility of expansion through relationships of identification with other beings, places, and living systems (Valera, 2018). Næss proposes a transformation in the way the subject perceives itself. Deep ecology, indeed, does not merely call for ecologically correct behaviours, but invites us to question the ontological, perceptual, and affective premises that define the relationship between the human being and nature (Valera, 2015).

In Næss's thought, the process of identification enables the transition from the narrow ego to the ecological self. Identifying with the other, whether human or more-than-human, does not mean dissolving individuality into an indistinct totality, nor does it erase the difference between beings (Næss & Haukeland, 2002). Rather, it means recognising that one's own realisation is intertwined with the realisation of other living beings (Næss, 1987). Personal identity is not denied, but relocated within a broader web of relationships. What is rejected is a view of the human being as a self-sufficient, competitive, and separate individual, in favour of a new individual whose identity is open to the inclusion of alterity within the self (Valera, 2018).

Within the Næssian perspective, self-realisation thus assumes an ecological structure: the subject realises itself to the extent that it is capable of recognising itself within the web of life. Care for the living world therefore arises not solely from a moral duty, but from a transformation of identity. If nature is perceived as external, its protection appears as an obligation, a norm, or an ethical responsibility. If, however, the living world enters the field of the self, care becomes the expression of belonging (Macy, 1990).

From this perspective, beings are not isolated entities that subsequently enter into relationships, but relational configurations. The identity of a living being depends on the field of relationships that constitutes it. For this reason, the distinction between subject and environment cannot be assumed as the ultimate point of departure: the human being is not a subject situated 'within' an external environment, but part of a broader relational field (Valera, 2015, 2019, 2022).

This notion of the total field therefore makes it possible to think identity in ecological terms. If reality is relational, the self must also be interpreted as a relational process. The idea of expanded identity emerges as a consequence of the relational structure of experience. The subject is not added to the world from the outside, but emerges within a system of bodily, perceptual, affective, social, and environmental interdependencies (Mead, 1934).

Clark and Chalmers open their well-known essay by asking: “Where does the mind stop and the rest of the world begin?” (Clark & Chalmers, 1998, p. 7). When interpreted from an ecopedagogical perspective, this question concerns not only the boundaries of cognition, but also the boundaries of the self. If mental processes are not confined to the brain, but are distributed across the body, the environment, and artefacts, then identity too may be conceived as an open, situated, and relational process. The ecological self radicalises this perspective: it is not only the mind that extends into environmental circuits, but also the sense of self that may expand so as to include the living world as part of its horizon of belonging.

Expanded identity finds further support in environmental psychology, which has shown how places participate in the construction of the self. Place attachment refers to the affective bond with the environment, while place identity expresses the way in which places enter into the definition of personal identity (Proshansky, Fabian, & Kaminoff, 1983; Scannell & Gifford, 2010). From an ecopedagogical perspective, the subject becomes itself also through the places it inhabits.

The idea of a self open to alterity is the cornerstone of a new pedagogical anthropology that regards the individual in formation as an intrinsically relational subject. The egoic and closed self must mature toward an ecological self. On this issue, Fox (1990, 1995) goes so far as to propose a transpersonal reading of the ecological self, in which the sense of personal identity fades toward a fusion with the whole. According to Valera (2015), “the idea of the ‘extension of the self’ does not sound like the possibility of annihilating the boundaries of the ego in favour of a fluidification and mystical loss of the individual” (p. 31, auth. trans). According to the same author, the theory of the ecological self as transpersonal “finds no correspondence within Næss’s philosophical speculation, since the self, in order to extend its field of moral consideration and embrace the entirety of other forms of life (ecological self), must necessarily pass through a process of identification, which implies the persistence of an ego that enacts such a process” (Valera, 2019, p. 24, auth. trans).

In fact, transpersonal psychology argues precisely that “awareness of the limit frees one from the limit [...] and I am beyond the duality of the dividing mind. When I have understood that unity is diversity and flow is difference, then I have

understood the further way; then I can separate by unifying and unify by separating; then I can draw boundaries without actually drawing them” (Lattuada, 2018, p. 44, auth. trans). However, it must be emphasised that “transcending boundaries does not mean confusing them” (Lattuada, 2018, p. 41, auth. trans); on the contrary, only through a genuine awareness of boundaries can one transcend them. A true understanding of one’s self occurs through the understanding and experience of the limit; this is nothing other than an authentic experience of the self. From this perspective, transcending the self means fully understanding it; it means experiencing diversity within unity.

In ecopedagogical terms, speaking of expanded identity does not imply the annihilation of the ego (Valera, 2019), but rather its relational expansion. Identification with the living world requires a subject capable of recognising its own boundaries and, precisely for this reason, of opening them to alterity. Transpersonal psychology may be useful if it is understood not as an indistinct fusion with the whole, but as an education in the awareness of limits. Educating for the ecological self therefore means forming an identity capable of distinguishing itself without separating itself, and of belonging without dissolving itself.

3. Ecopedagogy: The Education of the Ecological Self

If the ecological self does not coincide with the annihilation of the ego, but rather with its relational expansion, then educating ecopedagogically means creating the conditions through which the subject may learn to perceive itself not as a separate centre of the world, but as part of a network of living relationships (Hung, 2023). From this perspective, the ecological crisis does not challenge education merely at the level of environmental content or sustainable behaviours, but at the deeper level of the formation of the self: it concerns the way in which the subject knows, feels, inhabits the world, and includes alterity within its own horizon of belonging.

Philosophical ecopedagogy (Hung, 2021) explicitly refers to Næss’s ecosophy as the philosophical foundation of a new pedagogical paradigm. Ecopedagogy thus takes the form of a genuine education of the ecological self. This pedagogy assumes the educational task of facilitating the transition from an egoic, ontologically closed self toward the ecological self. In Buberian terms, it fosters the formative transition from instrumental I–It attitudes to relational I–Thou attitudes toward the living world (Buber, 2018). In this sense, the education of the ecological self intersects with Bellingreri’s pedagogy of the self, according to which “empathetic education, when rethought within the horizon of M. Buber’s *Bildung*, coincides with education for dialogue as a way of being and relating” (Bellingreri, 2006, p. 77, auth. trans).

In Næss's view, the ecological self is structured through the process of identification; therefore, educating for the ecological self necessarily implies a pedagogy of identification. According to Næss, "the intensity of identification with other life depends upon milieu, culture and economic conditions. The ecosophical outlook is developed through an identification so deep that one's own self is no longer adequately delimited by the personal ego or the organism. One experiences oneself to be a genuine part of all life. Each living being is understood as a goal in itself, in principle on an equal footing with one's own ego. It also entails a transition from I-it attitudes to I-thou attitudes, to use Buber's terminology" (Næss, 1989, p. 174).

Cagol's radically relational pedagogy makes it possible to further clarify this transition. His question: "would it not be preferable to give (good) form to relations rather than to persons?" (Cagol, 2022, p. 252, auth. trans), may be taken as a central provocation for ecopedagogy. Educating the ecological self does not mean shaping an isolated subject, but rather arranging relationships, environments, experiences, and contexts in which the subject may mature as a responsible node within a network. In this sense, expanded identity requires what Cagol defines as a "weakening of the ontological identity of the subject" and, at the same time, a "strengthening of its ethical subjectivity" (Cagol, 2022, p. 253, auth. trans). The subject is not dissolved, but decentred; it does not lose consistency, but becomes more capable of responding to alterity. Biesta enables us to understand this transformation. The educational task consists in "arousing in another human being the desire to exist in and with the world in an adult way, that is, as a subject" (Biesta, 2022, p. 15). The education of the ecological self cannot be reduced to learning, performance, or competence; it concerns ecological subjectification, that is, the maturation of a responsible, situated, and relational way of being in the world.

The ecopedagogy of the ecological self therefore works on the deeper conditions of motivation. If nature remains external to the self, environmental responsibility risks appearing as an abstract norm or an imposed duty; if, instead, the subject develops an ecological identification, care becomes the expression of its expanded identity. Expanded identity thus represents the formative outcome of ecopedagogy: an identity that does not close itself within the self-sufficiency of the ego, but opens itself to co-belonging, shared vulnerability, and responsibility toward the living world. From this follows a redefinition of inclusion: not only the access of human subjects to educational contexts, but also the expansion of the field of care to the more-than-human world. Educating the ecological self ultimately means forming modes of belonging: making the subject capable of inhabiting the world not

as an owner or external observer, but as a participant in a web of life upon which its well-being, freedom, and self-realisation depend.

4. Ecopedagogy for Inclusion

From an ecopedagogical perspective, inclusion is a structural property of learning ecosystems. As Pascucci and Gentilozzi (2025) state, “in ecopedagogy, inclusion represents the principle that makes it possible to realise unity in diversity” (p. 95, auth. trans). Such unity does not coincide with uniformity, but with a dynamic configuration in which differences are recognised as generative conditions of the educational community.

This perspective entails a redefinition of the environment. The environment is not a neutral container for learning, but a cognitive, affective, and identity-forming mediator. It directs attention, engages the body, modulates emotions, and makes certain forms of participation possible or impossible (Dewey, 1938; Montessori, 1949). For this reason, in ecopedagogy for inclusion, educational design cannot be limited to providing compensatory tools for individual needs; rather, it must construct flexible, plural, and relational contexts capable of supporting different ways of learning, perceiving, moving, and participating (Pascucci & Gentilozzi, 2025).

Educating for inclusion also means educating subjects to recognise the reciprocal dependence between human well-being, the quality of environments, the health of places, and the vitality of ecosystems. In this direction, Pascucci and Gentilozzi (2025) specify that “inclusion is not an adjustment made after the fact, but the central property of contexts that promote interdependence and ecological relations” (p. 96, auth. trans).

Studies on outdoor education show that natural environments may serve as privileged contexts for cooperative, personalised, and inclusive learning (Bortolotti, Schenetti, & Telese, 2020; Natalini, 2024). Güdelhöfer (2016), in a case study of a German primary school, also shows that outdoor activities foster the participation of pupils with special needs, increasing motivation, concentration, and a sense of achievement. Direct and embodied experience thus becomes decisive. Ecopedagogical learning passes through perceptions, gestures, rhythms, contacts, and situated practices. Learning ecosystems must therefore be relational, embodied, and situated: capable of integrating head, hands, and heart; knowledge and affectivity; observation and care. Ecodidactic practices in nature acquire a specific value. Immersive experiences in nature are not simply outdoor activities, but experiences of slowing down, attention, and reconnection, through which the subject may perceive itself as part of a living network.

Ecopedagogy for inclusion therefore implies a different way of conceiving learning. To educate means to design conditions in which diversity is not merely tolerated, but recognised as a principle of life within the community. In this sense, inclusion becomes the very mode of ecological education: a practice of co-belonging that connects well-being, participation, care, and self-realisation within learning ecosystems.

5. Conclusions

The path developed in this article has proposed expanded identity as a pedagogical category capable of connecting extended mind, ecological self, and inclusion. Expanded identity indicates a relational configuration of the self in which the subject recognises that its own formation and self-realisation cannot be separated from relationships with other human beings, places, living beings, and ecosystems. It does not imply the dissolution of the ego, but rather its decentring: the subject learns to distinguish itself without separating itself, and to recognise its own boundaries without closing them to alterity. In this sense, the ecological self also becomes an inclusive category, because it expands the field of care, responsibility, and participation.

Future perspectives concern the design of ecodidactic practices capable of integrating direct experience, critical reflection, and care for places. Outdoor education, nature immersion, slow observation, cooperative practices, and activities of ecological maintenance may become educational devices for promoting well-being, participation, and a sense of belonging. Pedagogical research will need to further investigate how such experiences affect identity processes, ecological motivations, and the inclusion of students with diverse needs. In this direction, ecopedagogy can contribute to rethinking the school as a formative ecosystem, in which learning means learning to live with the world, and not simply in the world.

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