



The Anthropocene as a Crisis of Educational Thought ***Antropocen jako kryzys myśli edukacyjnej***

ABSTRACT

RESEARCH OBJECTIVE: The article is to analyze the pedagogical responses to the Anthropocene challenges and to recognize the limits of dominant ways of incorporating ecological issues into education. The Author proposes a non-instrumental and non-anthropocentric orientation of educational instead of the only one normative concept

THE RESEARCH PROBLEM AND METHODS: The article addresses the risks connected with pedagogical “responses” to the Anthropocene and notions enabling their critical analysis. It is a theoretical and philosophical study based on critical reading of educational discourse and interpretation of the concepts of Hannah Arendt, Gert Biesta, and the concept of *scholé*.

THE PROCESS OF ARGUMENTATION: The argumentation identifies four ideal-typical pitfalls: instrumentalization of education, one-sided understandings of responsibility, denial of young people’s lived experience, and the assumption of a “happy ending.” Then, it develops an alternative understanding of education (*natality*, *subjectification*, and the *scholé*), and suggests its posthumanist revision.

RESEARCH RESULTS: The education subordinated to remedial goals tends to reproduce logics of control and efficiency. The proposed framework supports introducing “newcomers” to the world without imposing a single narrative, having considered the relational and more-than-human character of educational practices.

CONCLUSIONS, RECOMMENDATIONS AND APPLICABLE VALUE OF RESEARCH: Education in the Anthropocene is not tasked with saving the planet but with creating conditions for responsible, critical, and creative relations with the world. The article offers conceptual tools for non-anthropocentric pedagogy grounded in *subjectivity*, *attentiveness*, and *relationality*.

→ **KEYWORDS:** **ANTHROPOCENE, PHILOSOPHY OF EDUCATION, NON-ANTHROPOCENTRIC PEDAGOGY, POSTHUMANISM, SCHOLÉ**

STRESZCZENIE

CEL NAUKOWY: Celem artykułu jest analiza pedagogicznych odpowiedzi na wyzwania antropocenu oraz rozpoznanie ograniczeń dominujących sposobów włączania problematyki ekologicznej do edukacji. Autor proponuje nieinstrumentalne i nieantropocentryczne ujęcie edukacji zamiast jednej normatywnej koncepcji.

PROBLEM I METODY BADAWCZE: Artykuł dotyczy ryzyk związanych z pedagogicznymi „odpowiedziami” na antropocen oraz pojęć umożliwiających ich krytyczną analizę. Ma charakter teoretyczno-filozoficzny i opiera się na krytycznej analizie dyskursu edukacyjnego oraz interpretacji koncepcji Hannah Arendt, Gerta Biesty i idei scholé.

PROCES WYWODU: Wywód identyfikuje cztery pułapki: instrumentalizację edukacji, jednostronne ujmowanie odpowiedzialności, zaprzeczanie doświadczeniom młodych oraz założenie „szczęśliwego zakończenia”. Następnie rozwija alternatywne rozumienie edukacji (natalność, upodmiotowienie, scholé) i proponuje jego posthumanistyczną korektę.

WYNIKI ANALIZY NAUKOWEJ: Edukacja podporządkowana celom naprawczym sprzyja reprodukcji logik kontroli i efektywności. Zaproponowane ujęcie umożliwia myślenie o wprowadzaniu „nowo przybyłych” w świat bez narzucania jednej narracji, z uwzględnieniem relacyjnego i więcej-niż-ludzkiego charakteru praktyk edukacyjnych.

WNIOSKI, REKOMENDACJE I APLIKACYJNE ZNACZENIE WPŁYWU BADAŃ: Edukacja w antropocenie nie ma za zadanie ratować planety, lecz tworzyć warunki dla odpowiedzialnych, krytycznych i twórczych relacji ze światem. Artykuł proponuje narzędzia pojęciowe dla pedagogiki nieantropocentrycznej, zakorzenionej w podmiotowości, uważności i relacyjności.

→ **SŁOWA KLUCZOWE:** ANTROPOCEN, FILOZOFIA EDUKACJI, PEDAGOGIKA NIEANTROPCENTRYCZNA, POSTHUMANIZM, SCHOLÉ

Introduction

In 2000, Paul Crutzen and Eugene Stoermer proposed the term Anthropocene to describe the present geological epoch, drawing attention to the unprecedented scale of human impact on the Earth system. Since the Industrial Revolution, they argued, humanity has become a dominant geological force, reshaping the planet through urbanization, large-scale resource extraction, species extinction, and the emission of greenhouse gases. These processes have reached a geological scale, producing changes that are both durable and potentially irreversible. Contemporary life is thus marked by accelerating biodiversity loss, climate destabilization manifested in melting glaciers and extreme weather events, profound landscape transformations, and pervasive environmental pollution.

What challenges does this unsettling reality pose for education? A common response points to the need for forms of education that foster ecological awareness, critical thinking,

civic responsibility, and readiness for action. Such concerns translate into questions about the place of ecological issues within curricula, public pedagogies, cultural practices, and broader environments of socialization.

In this article, I argue that while such responses are undoubtedly important, they remain insufficient. The Anthropocene calls for a less conventional educational reaction – one that involves rethinking not only the aims, contents, and methods of education, but also the very logics through which education is expected to operate and exert influence. What is required are new, non-anthropocentric narratives of the world and of education that critically engage with the limits of humanism. Paradoxically, however, these cannot be narratives imposed upon the young.

In my earlier work, I have examined the principles underlying pedagogical anthropocentrism and their limitations, arguing for the analytical inclusion of non-human actors within educational processes (Chutorański, 2020, 2022). This article continues that line of inquiry within the field of non-anthropocentric pedagogy by asking what problems emerge when education attempts to respond pedagogically to the crises of the so-called “age of humanity.” The guiding question of the article is therefore not simply how education should respond to the Anthropocene, but how the Anthropocene challenges the very ways in which education is thought.

I first outline four ideal-typical pitfalls that shape pedagogical responses to the Anthropocene, then develop a non-instrumental account of education (Arendt, Biesta, *scholé*) and propose a posthumanist revision in light of more-than-human conditions of educational encounter.

Attempts to confront the climate crisis pedagogically, even when motivated by the best of intentions, frequently reproduce modes of thinking that are themselves part of the problem. It is to these modes of thinking – and their pedagogical implications – that the following analysis turns.

The four pitfalls discussed below are not intended as empirical classifications of educational practices, but as ideal-typical figures that make visible dominant logics shaping pedagogical responses to the Anthropocene. Their selection reflects a theoretically informed judgment about which tendencies are most consequential for contemporary educational thought.

Instrumentalization of Education

One of the most serious risks shaping pedagogical engagements with the Anthropocene is the reduction of education to a tool for achieving goals defined outside education itself – whether these are the interests of the labor market, state ideology, or, in this case, the imperative of “saving the planet.” When education becomes instrumentalized in this way, it is framed primarily as a technical means for efficiently delivering the “right” knowledge, skills, and values, assumed to lead to desired changes in individual behavior.

Such a mode of thinking privileges efficiency and control while marginalizing questions of meaning and purpose, including values such as freedom and subjectivity. Despite its declared aims, it reproduces a logic of domination over nature – both external and internal. Knowledge, competencies, and even students themselves are treated as instruments for achieving externally defined ecological objectives.

Under these conditions, education risks losing its critical and emancipatory potential and becoming a vehicle of ideological compulsion. Rather than functioning as a space of dialogue, it is transformed into a mechanism for shaping “docile bodies,” functionalizing identities and appropriating emancipatory logics in ways reminiscent of the dynamics described by Foucault (Chutorański, 2013; Starego, 2016). From this perspective, even seemingly innocent questions addressed to children – such as “Do you sort your waste?” – can be recognized as carrying an oppressive dimension (Armiero & De Angelis, 2017).

This critique does not deny the importance of education or the role it can play in times of environmental crisis. What is called into question, however, is the conviction that combating climate change can – or should – become the overarching aim organizing educational practice. When education is mobilized as an instrument in the struggle for a “more-than-human world,” it risks reproducing, at the level of its operative mechanisms (methods, logics of influence), the same instrumental relation to the world that characterizes economic systems expanding into ever new domains of planetary life.

This tendency forms part of a broader process described by scholars as *educationalization* (Bridges, 2008; Hodgson, 2008; Simons & Masschelein, 2008; Czyżewski, 2013; Marynowicz-Hetka, 2013). Educationalization refers to the attribution of a universal remedial function to educational institutions such as schools, positioning them as solutions to complex social problems. Rather than undertaking costly and politically difficult structural reforms, governments often produce the illusion of problem-solving – whether in relation to poverty, unemployment, or climate crisis – by shifting responsibility onto teachers and educational systems.

A further argument against treating education as a primary weapon against climate catastrophe lies in an exaggerated optimism about its transformative power. Educational change operates on generational timescales, and its translation into legal, organizational, and ecological effects would likely take decades, while ecological disruption is unfolding in the present. This temporal mismatch calls into question the adequacy of education as a primary response to the crisis.

A critique of instrumentalization therefore calls for a broader reflection on whether education can be understood through logics other than instrumental ones, and if so, to what extent (see Szkudlarek, 2023). It also raises the question of whether there are better and worse ways of instrumentalizing education. In this article, however, I limit myself to the claim that education should not be subordinated to the task of solving ecological problems.

One-Sidedness

The concept of the Anthropocene, originating in the natural sciences, is problematic from a humanistic and educational perspective. By speaking of “the human” as an abstract and undifferentiated whole, the term tends to obscure fundamental historical, political, and social differences. This homogenized image of “humanity” makes it difficult to recognize the asymmetrical distribution of responsibility and culpability for the current ecological crisis (Bonneuil & Fressoz, 2016; Bińczyk, 2018; Chwałczyk, 2018; Moore, 2016). As a result, concrete historical processes – such as colonialism, the expansion of capitalism, and the subordination of nature to the logic of profit – that have produced the conditions of the present crisis recede from view.

Speaking of “humanity” in general thus risks dissolving responsibility by distributing it evenly across all people, while simultaneously concealing the fact that the consequences of environmental degradation are borne most heavily by those who have contributed least to its causes. This applies in particular to populations in the Global South, Indigenous communities, and other marginalized groups (Bonneuil & Fressoz, 2016).

To illustrate this complexity, I turn briefly to a personal example. I grew up in a small town that, in the late 1980s, was connected to the nearest city by several daily bus routes. During the 1990s, these connections were gradually eliminated, leaving the town effectively cut off from public transportation. In order to reach workplaces, medical services, or schools, residents began purchasing old, highly polluting cars imported from Western Europe. For many, this was neither a cultural choice nor an expression of aspiration – it was a necessity.

This example is not evidence but a heuristic reminder that ecological responsibility is mediated by infrastructural and socio-economic conditions. Ecological problems are entangled with equality and justice; treating “humanity” as a single agent can shift responsibility onto those with the least capacity to shape environmental outcomes.

Denial of Youth Experience

Among the pathologies of educational discourse in the Anthropocene, one is particularly insidious: the practice of imposing nostalgic narratives upon younger generations. Recurrent lamentations over “real winters” or “untouched forests” construct the lived reality of the young as a space defined by permanent loss and deprivation. The world they inhabit is presented as an impoverished and inferior version of a world that has already been lost. The result is not only alienation, but also the internalization of the belief that their lives are marked by an irreversible loss of something they have never themselves experienced.

This constitutes a failure of pedagogical hermeneutics – an inability on the part of adults to make a serious attempt to understand the world from the perspective of those

who are only just arriving in it. Adult nostalgia, focused on mourning the past, produces a form of blindness to the very real forms of suffering experienced by young people, including ecological anxiety (eco-anxiety), solastalgia (Albrecht, 2005), and pervasive feelings of hopelessness. The monologue of the older generation about loss can thus drown out dialogue about present and lived suffering.

Moreover, teaching young people that their world is merely a pale shadow of former glory effectively deprives them of permission to care for it. It is difficult to take responsibility for a world one has been taught to despise or to regard with contempt. Perhaps, then, what is needed in place of a pedagogy of fear and indebtedness is an affirmative pedagogy – one that validates young people’s lived experiences and supports them in critically and creatively inhabiting the world as it is: their only home.

The Happy Ending Fallacy

The final problem I wish to address concerns a failure to take seriously the warnings that are communicated to young people. Despite the prevalence of catastrophic narratives, educational discourse often operates on the implicit assumption that catastrophe will ultimately not occur. A hopeful resolution is quietly presupposed. But what if it is already too late for effective remedial action?

This unsettling question is forcefully raised by Jem Bendell (2018) in his concept of deep adaptation. Drawing on available climate data, Bendell argues that we must confront the likelihood of profound social disruption and systemic collapse. While this position remains controversial, its significance for educational thought lies less in its predictive certainty than in the challenge it poses to pedagogical optimism and future-oriented assumptions.

The notion of deep adaptation shifts attention away from prevention toward forms of reflection that are existential as well as practical. The aim is no longer the restoration of “normality,” but a radical reevaluation of priorities and the cultivation of resilience – the capacity to adapt to radically altered conditions of life, including the development of practical skills necessary for survival. If such scenarios are taken seriously, education can no longer focus exclusively on fostering care for nature; it must also reckon with questions concerning human survival in conditions imagined as “after catastrophe.”

From this perspective, the pedagogical response to the Anthropocene only partially overlaps with questions about cultivating respect for nature. It also involves confronting the possibility that education may be called upon to prepare newcomers not for a repaired world, but for a damaged and unstable one – without recourse to reassuring narratives of inevitable recovery or happy endings.

The Anthropocene for the Newcomers

How, then, might education respond to the challenges of the Anthropocene while avoiding the pitfalls outlined above? The proposal developed here may appear paradoxical, as it draws simultaneously on the “conservative” thought of Hannah Arendt and on critical posthumanist perspectives. I argue that an adequate response does not lie in the further intensification of instrumental educational interventions, but rather in a renewed reflection on the fundamental conditions of education itself.

In *Between Past and Future*, Hannah Arendt (2006) writes that when a child enters the human world, they occupy a dual position: they are both a being in the process of becoming and someone radically new to the world. From this condition of “newness” – natality – follows a double pedagogical responsibility: responsibility for the child’s development and responsibility for the continuity of the world. The task of education is thus simultaneously to “protect the child from the world and the world from the child.” The child must be protected so that their potential can unfold; the world must be protected from the potentially disruptive force of what is new.

According to Arendt, the institution entrusted with mediating this tension is the school. The school functions as a transitional space in which teachers, as representatives of the world, responsibly introduce newcomers to an existing reality. Their authority derives not from coercion, but from their willingness to assume responsibility for the world as a whole. This Arendtian “pedagogical conservatism” is not a political stance, but an ethical one: it is a necessary condition for enabling new generations to take up the task of transforming the world creatively rather than destructively.

How, however, can this task be realized without slipping into authoritarianism or indoctrination? Here, the work of Gert Biesta (2022) offers an important orientation. Critiquing contemporary obsessions with measurable outcomes, Biesta reminds us that the purposes of education extend beyond qualification and socialization to include subjectification – the coming into presence of the individual as a subject of their own life in and with the world. Central to this view is a shift away from learner-centred models toward a perspective in which the world itself “speaks” and addresses questions to the learner. The key pedagogical gesture is not control, but pointing. The call “*You – look there!*” invites attention toward a particular aspect of the world without determining how the learner should respond. What is at stake in this gesture, as Biesta emphasizes, is freedom – not freedom as the realization of one’s desires, but freedom as the capacity to encounter the world responsibly and to respond to its call (Biesta 2022, p. 88).

This vision is further complemented by the concept of the school as *scholé*, developed by Jan Masschelein and Maarten Simons (2013). *Scholé* denotes a form of “free time” released from the imperatives of productivity and market competition. In fulfilling this function, the school performs an act of “profanation” of knowledge: it frees knowledge from its immediate utility and renders it publicly available as an object of study and fascination for its own sake. Mathematics is not taught in order to calculate loan

repayments, nor economics to draft business plans. Rather, students are enabled to form an authentic, non-instrumental relation to what is studied.

Within the context of the present argument, *scholé* offers a way of protecting education from the pedagogical colonization of crisis. Instead of burdening students with a paralyzing responsibility for “saving the planet,” the school as *scholé* suspends this imperative. It creates conditions for calm, sustained, and critical study of the complex natural, political, and economic relations that have produced the current situation. In doing so, it protects students from what might be called the “tyranny of the Anthropocene” – an overwhelming narrative of catastrophe that forecloses horizons of thought and action.

Posthumanizing Arendt

If the Anthropocene can be understood as a crisis of educational thought, it is also a crisis of “the world” into which newcomers are introduced. Hannah Arendt’s account powerfully articulates education as responsibility for the continuity of the world and for those who are newly arriving within it. Yet, her conception of worldliness largely presupposes a world that is human in its constitution and addressability. A posthumanist revision does not reject Arendt’s concern with natality and responsibility; rather, it asks what it means to educate newcomers in a world whose conditions of continuity and disruption are irreducibly more-than-human.

Posthumanist and new materialist perspectives (Barad, 2007; Bennett, 2010; Braidotti, 2013; Latour, 2010) converge on the claim that education is always embedded in material, more-than-human assemblages of practice (Fenwick & Edwards, 2010; Snaza & Weaver, 2014). Pedagogical practices are co-constituted by a heterogeneous array of actors – spaces, technologies, objects, and biological processes – rendering education “ontologically messy” and resistant to reduction to purely interpersonal relations. From this perspective, every pedagogical act is always already more-than-pedagogical: it mobilizes material actors – books, desks, digital infrastructures, and even the biological life inhabiting the bodies of teachers and students – which do not merely form a background but actively participate in the collective effort of world-making.

This insight complicates any attempt to treat education as a purely symbolic or discursive practice. Even those pedagogical projects that seek to suspend productivity and instrumental rationality – such as Gert Biesta’s emphasis on freedom or Masschelein and Simons’s conception of *scholé* – remain dependent on more-than-human conditions that exceed educational intention. Educational encounters are thus always shaped by relations that extend beyond the human, even when their explicit aim is to protect the educational space from external economic or political demands.

Posthumanist critiques of anthropocentrism further challenge the view of subjectivity as an intrinsic human property. Instead, subjectivity appears as an effect of relations emerging within multispecies and socio-material constellations (Braidotti, 2013). Rejecting an essentialist account of the subject does not require abandoning subjectivity as an

ethical or political category (Nowak 2019). Rather, it opens the possibility of understanding subjectivity as relational, processual, and contingent – without grounding pedagogy in a strict Arendtian separation between the human world and the natural realm.

Read through this lens, Biesta's pivotal pedagogical gesture – “*You, look there!*” – can be understood as an invitation to attend to the more-than-human assemblages through which the world addresses learners in the Anthropocene. The act of pointing does not merely direct a pre-given subject toward an external object; it stages an encounter in which subjectivity itself emerges through relational engagement with a world that is a contested and dynamic constellation of agencies. In this reading, the “you” addressed in pedagogical practice no longer designates a self-contained individual, but a multiplicity that achieves temporary coherence through repeated interactions.

For these reasons, while Arendt's pedagogical conservatism and the idea of *scholé* remain vital resources, they require a posthumanist correction. Such a revision foregrounds relationality and recognizes the pedagogical labor of non-human actors in a world that newcomers always already encounter as more-than-human. Rather than abandoning responsibility for the world, this approach reconfigures it – expanding responsibility beyond the human while preserving education as a unique space of openness, freedom, and beginning.

Conclusion

This article has sought to show why the Anthropocene can be understood as a crisis of educational thought as such. The pedagogical stakes of this crisis do not lie – contrary to many prevailing assumptions – in education's capacity to prevent or avert climate catastrophe. That challenge, perhaps the most consequential one facing our species, lies elsewhere: in the domains of economics, technology, and politics.

The task of education, I have argued, is not to save the planet. What education can do, however, is enable newcomers to begin again with the world. It can offer them opportunities to form their own relations with non-human beings and to develop their own ways of making sense of the world – narratives that may be realistic without being devastating. Yet in order to support young people in this way, we must first come to terms with the complexity and entanglement of our own relations with non-humans.

This, above all, is a lesson for those of us who claim responsibility for the world – a lesson that can no longer be deferred to future generations. To them, we have already incurred a debt that can never be fully repaid.

REFERENCES

- Albrecht, G. (2005). Solastalgia: A new concept in human health and identity. *Philosophy Activism Nature*, 3, 44–59.
- Arendt, H. (2006). *Between past and future: Eight exercises in political thought*. Penguin Books.
- Armiero, M., & De Angelis, M. (2017). Anthropocene: Victims, narrators, and revolutionaries. *South Atlantic Quarterly*, 116(2), 345–362. <https://doi.org/10.1215/00382876-3829445>
- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Duke University Press.
- Bendell, J. (2018). *Głęboka adaptacja: Mapa nawigacyjna katastrofy klimatycznej* (A. Wierzbka & P. Szaj, Trans.). <https://lifeworth.com/DeepAdaptation-pl.pdf>
- Bennett, J. (2010). *Vibrant matter: A political ecology of things*. Duke University Press.
- Biesta, G. (2022). *World-centred education: View for the present*. Routledge.
- Bińczyk, E. (2018). *Epoka człowieka. Retoryka i marazm antropocenu*. Wydawnictwo Naukowe PWN.
- Bonneuil, C., & Fressoz, J.-B. (2016). *The shock of the Anthropocene: The Earth, history and us*. Verso.
- Braidotti, R. (2013). *The posthuman*. Polity Press.
- Bridges, D. (2008). Educationalization: On the appropriateness of asking educational institutions to solve social and economic problems. *Educational Theory*, 58(4), 461–474. <https://doi.org/10.1111/j.1741-5446.2008.00300.x>
- Chutorański, M. (2013). *Pojęcia i konteksty wychowania w pracach Michela Foucault*. Wydawnictwo Naukowe Dolnośląskiej Szkoły Wyższej.
- Chutorański, M. (2020). *Nie(tylko)ludzkie wymiary edukacji. W stronę pedagogiki nieantropocentrycznej*. Wydawnictwo Naukowe Uniwersytetu Szczecińskiego. <https://doi.org/10.18276/978-83-7972-809-1>
- Chutorański, M. (2022). Nieantropocentryczna pedagogiczność lasu. *Forum Pedagogiczne*, 12(2), 127–139. <https://doi.org/10.21697/fp.2022.2.10>
- Chwałczyk, F. (2018). Antropocen, kapitalocen... a może urbanocen? Czyli nie tylko „kto” oraz „jak”, ale i „gdzie”. *Kultura i Historia*, 34(2), 90–121.
- Crutzen, P.J., & Stoermer, E. (2000). The “Anthropocene”. *IGBP Newsletter*, 41, 17–18.
- Czyżewski, M. (2013). W kręgu społecznej pedagogii. *Societas/Communitas*, 16(2), 43–73.
- Fenwick, T., & Edwards, R. (2010). *Actor-network theory in education*. Routledge.
- Hodgson, N. (2008). Citizenship education, policy, and the educationalization of education research. *Educational Theory*, 58(4), 417–434. <https://doi.org/10.1111/j.1741-5446.2008.00297.x>
- Latour, B. (2010). *Splatając na nowo to, co społeczne. Wprowadzenie do teorii aktora-sieci* (A. Derra & K. Abriszewski, Trans.). Universitas.
- Marynowicz-Hetka, E. (2013). Pedagogizacja życia społecznego w optyce społeczno-pedagogicznej. *Societas/Communitas*, 16(2), 75–96.
- Masschelein, J., & Simons, M. (2013). *In defence of the school: A public issue* (J. McMartin, Trans.). Education, Culture & Society Publishers.
- Moore, J.W. (Ed.). (2016). *Anthropocene or Capitalocene? Nature, history, and the crisis of capitalism*. PM Press.
- Nowak, A.W. (2019). Ja i mój cyfrowy Doppelgänger. Self-tracking jako dwuznaczne urzeczowione samowychowanie. In M. Chutorański & A. Makowska (Eds.), *Rzeczy – kultura – edukacja* (pp. 97–112). Wydawnictwo Naukowe Uniwersytetu Szczecińskiego.
- Simons, M., & Masschelein, J. (2008). The governmentalization of learning and the assemblage of a learning apparatus. *Educational Theory*, 58(4), 391–415. <https://doi.org/10.1111/j.1741-5446.2008.00296.x>

- Snaza, N., & Weaver, J.A. (2014). *Posthumanism and educational research*. Routledge. <https://doi.org/10.4324/9781315769165>
- Starego, K. (2016). Uwolnienie podmiotowości przez u-wolnienie czasu szkoły. O komodyfikacji tożsamości, kulturze kompetencji i o pewnej możliwości wyjścia z zatrzasku indywidualizacji. *Parezja*, 1, 42–65.
- Szkudlarek, T. (2023). Instrumentalizm a autonomia edukacji. In A. Cybał-Michalska & P. Kostyło (Eds.), *Budujmy lepszy świat w sobie i pomiędzy nami* (pp. 87–104). Wydawnictwo Naukowe UAM.

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