THE "PLACE MEANING" CONCEPT IN EDUCATION: A CASE STUDY FROM THE BOHEMIAN PARADISE PROTECTED LANDSCAPE AREA, CZECHIA

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Abstract

The local landscape is a part of the space that surrounds people from childhood and offers them opportunities for cognitive, emotional, and psychomotor development. Students grow up within this landscape, forming a relationship with it, that can extend over large areas throughout their lives. This relationship can be influenced by the meanings that students attribute to the given territory. There is limited research focusing on the concept of "place meaning" in education. The presented study aims to fill this research gap. The respondents are 257 fifth-grade students from primary schools located in the Bohemian Paradise Protected Landscape Area and its immediate vicinity (44% of all fifth-grade students). Data was collected through field research using questionnaires and supplemented by interviews with students in focus groups. Responses were evaluated through content analysis, descriptive statistics, and statistical analysis. The results indicate that, with regard to specific places, students most commonly associate the term Bohemian Paradise with Trosky and Turnov. Additionally, students most commonly recognized these places in photographs. Students most commonly associate the Bohemian Paradise with adjectives such as "beautiful", "nice", and "protected". Boys recognized a greater number of important places in the Bohemian Paradise than girls, and overall, knowledge of these places significantly increases with the time children spend in nature. The results contribute to research on sense of place – an important theme of environmental education.

Keywords: environmental education, children, sense of place, landscape protection

Introduction

In primary education in Czechia, the local landscape (local region) of students should be utilized. In the Framework Educational Programme for Basic Education, in the description of the educational area "Humans and Their World", it is explicitly stated that "Pupils, based on familiarising themselves with their immediate surroundings, learn about (...) Emphasis is placed on practical knowledge of local and regional reality and on developing pupils' personal experience. Diverse activities and tasks should naturally encourage pupils to form a positive relationship with the place where they live..." (MEYS 2021, p. 47).

The concepts of "local landscape" and "local region" are perceived differently by students in Czechia. The term "local landscape" is most commonly associated with the immediate surroundings or possibly the municipality in which they live. Conversely, the term "local region" is typically understood as encompassing the whole region or district (Tomčíková, Rubáš 2023).

In academic literature, there is limited research examining the meaning of the local landscape (local region) for primary school students, or how well students are familiar with this area. Therefore, we conducted a study in one of the most valuable landscapes in Czechia (Bohemian Paradise Protected Landscape Area), aiming to address two research questions: 1) What is the place meaning of the Bohemian Paradise?; 2) How well do children know places in the Bohemian Paradise?

Theoretical Background

The conceptual frameworks of our research is the concept of "sense of place" (SOP), specifically its component sub-concept "place meaning". According to Relph (1976), SOP is a relationship that was constructed by living and attaching meanings to surrounding environments. Foote, Azaryahu (2009, pp. 96–100) further elaborate that "SOP is used to describe the distinctiveness or unique character of particular localities and regions." According to Stedman (2002), SOP encompasses the overall relationship of a person to a place as a set of cognitions, attitudes, and identities based on meanings

created by humans. Some authors (Kudryavtsev et al. 2012; Harris 2021) consider SOP to be a combination of "place attachment" and "place meaning" (see Figure 1).

Authors understand "place attachment" as an emotional bond between individuals and places (Davenport, Anderson 2005). They perceive it as a sense of belonging that gives meaning to life (Proshansky et al. 1983). Authors who deconstruct "place attachment" into individual sub-concepts delineate "place identity", which expresses an individual's emotions, and "place dependence", which is a certain potential that a place offers to satisfy an individual's needs (Williams, Vaske 2003).

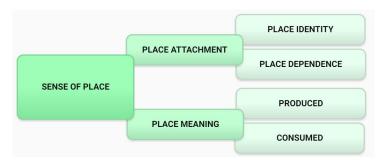


Fig. 1: Concept SOP and its individual sub-concepts (edited according to Kudryavtsev et al. (2012); Semken, Freeman (2008).

In the literature, "place meaning" is understood as the symbolic meaning attributed to a place by individuals (Kudryavtsev et al. 2012). Different people assign different meanings to different places. According to Young (1999), these meanings are socially constructed and negotiated between those who "produce" and those who "consume" (hold or construct) meanings. Semken, Freeman (2008) suggest that in the context of education, teachers might be considered "producers" and students "consumers". Among the "producers", educational materials (such as textbooks) that convey the meanings of places to students can be also included.

Stedman (2003) states that quantitative research on SOP has focused on "place attachment" and neglected "place meaning". "Researchers ought to examine not just how much the place means... but what does it mean?" (p. 826). Semken, Freeman (2008) attribute the lag in "place meaning" research to the fact that "place meaning" is more localized than "place attachment", and further, that potential sources of meaning for a given place may be too numerous and diverse. From the above, there arises a need for research on "place meaning", both within the realm of education and beyond.

Methods

Study populations

The data was collected in February 2024 through field research using a questionnaire, which was filled out by fifth-grade students from 17 primary schools located within or in close proximity (within 2 km from the boundary) to the Bohemian Paradise Protected Landscape Area. The questionnaire was completed by 257 students, representing 44% of all fifth-grade students who attended schools in the study area during this period. In terms of sex, 51.8% were female and 48.2% were male. 63% of the students attended schools located in urban areas, 37% attended schools located outside urban areas.

Data collection and analysis

A content analysis of textbooks8 was conducted before creating the questionnaire. In this analysis all mentioned locations located in the Bohemian Paradise Protected Landscape Area or in its vicinity were identified, along with all the meanings attributed to the Bohemian Paradise by the authors. A total of 21 specific places were identified. Subsequently, their photographic documentation was carried out for use in the questionnaire. The questionnaire consisted of several parts, and before its use, a pilot study was conducted with fifth-grade students outside the study area. To address the first research question, the question "What do you imagine when you hear the term Bohemian Paradise?" was used, which was evaluated through inductive qualitative content analysis. The answer to the second research question was obtained using photographs of all 21 locations mentioned in the textbooks. The task of the students was to name these locations. Evaluation was performed using descriptive

All textbooks in the educational area "Humans and Their World" for the 4th and 5th grades of primary schools in Czechia were analysed, which had a valid approval certificate from the MEYS as of September 6, 2023. A total of 50 textbooks were included in the analysis.

statistics methods, with t-tests, ANOVA, and the Scheffeho post-hoc test utilized to determine significance. Data obtained from the questionnaire was supplemented by interviews with students in focus groups.

Results

"Produced" place meaning, which refers to the meaning of the Bohemian Paradise derived from content analysis of textbooks, and "consumed" place meaning, attributed to the Bohemian Paradise by fifth-grade students of local schools, are presented in Table 1. Specific meanings categorized are listed within the table. The results indicate that both "produced" and "consumed" place meaning fall into the categories of cultural, natural, institutional, economic sectors, and aesthetic (landscape). In addition, students associate the Bohemian Paradise with home, with emotions and feelings, and with family, friends, and other people.

Furthermore, inspired by Young (1999), we focused on the general meanings of the landscape. These meanings are expressed through adjectives. Students most commonly associate the Bohemian Paradise with terms such as "beautiful", "nice", and "protected", whereas textbook authors associate it with terms like "rock", "sandstone", and "protected" (see Figures 2, 3).

Tab. 1: "Produced" and "consumed" place meaning of the Bohemian Paradise.

Categories of meanings		"Produced" place meaning (referenced in textbooks)	"Consumed" place meaning (written by students)
Cultural	tangible	castles; folk architecture; chateaux; monuments; ruins; towns	buildings; castles; folk architecture; chateaux; monuments; ruins; sacred architecture; towns; villages
	intangible	fairy tale of Rumcajs	art; fairy tales (Rumcajs); history; local legends; our homeland; speak Czech; state symbols
Natural	natural environment	hills; nature	arboretum; fields; forests; gardens; hills; lakes; meadows, nature, orchards; parks; pastures; ponds; rivers; sea; springs; streams; water; waterfalls
	animate nature		animal home; coexistence of humans and animals; fauna; flora
	inanimate nature	bottom of ancient seas; igneous (volcanic) hills (rocks); rocks; rock formations; rock towns; sandstone rocks	air; caves; gemstones; chasms; natural elements; rock towns; rocks, sand; sandstone; sandstone rocks; stones; sun; weather
Institution al		border of Liberec Region, Hradec Králové Region and Central Bohemian Region; geopark; specially protected areas	Czechia or its part; Central Bohemian Region; Hradec Králové Region; Liberec Region; specially protected areas
Economic sectors	primary sector	gemstone deposit; mineral extraction (glass sand); sandstone quarry	crop; feeders; soil
	secondary sector	glass and jewellery production	cars; Czech garnet; honey; industry; machines
	tertiary sector	campsite; climbing; tourism	camps; campsites; climbing; cycling (cycle paths); holiday; hospital; hotels; motorways; museums; pools; pubs; restaurants; roads; schools; shops; slope; spa; sport; tourism (hiking trails; lookout towers; trips, walks); zoo
			•

(landscap e)		
Home		home; place where I live
Emotions and feelings		adventure; beauty; calm; colourfulness; experiences; fun; joy; paradise; passion; peace; pride; purity; safety; silence; smell of nature; well-being
Social		family; friends; happy children; people
Others		a lot of waste, no waste

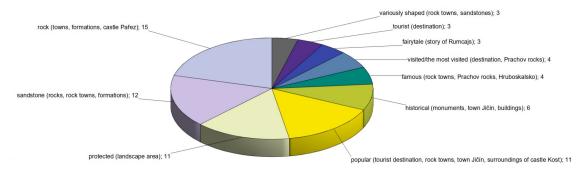


Fig. 2: "Produced" place meaning (referenced in textbooks 3 or more times).

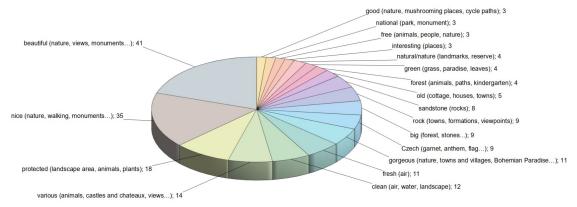


Fig. 3: "Consumed" place meaning (written by students 3 or more times).

Figure 4 presents specific places that come to students' minds when they hear the term "Bohemian Paradise". The most commonly mentioned places were Trosky, Turnov, Kost, Valdštejn, and Prachov rocks.

The response to the second research question is summarized in Figure 5. It depicts how students recognize significant places in the Bohemian Paradise which are mentioned in the textbooks. It is evident that students most commonly recognized Trosky, Turnov, and Kozákov. Boys recognized more places than girls, although this difference was not significant. Conversely, there were significant differences (p < 0.05) in the number of recognized places between students who go to nature least frequently (average of 18.6% recognized places) and those who go most frequently (average of 31.0% recognized places).

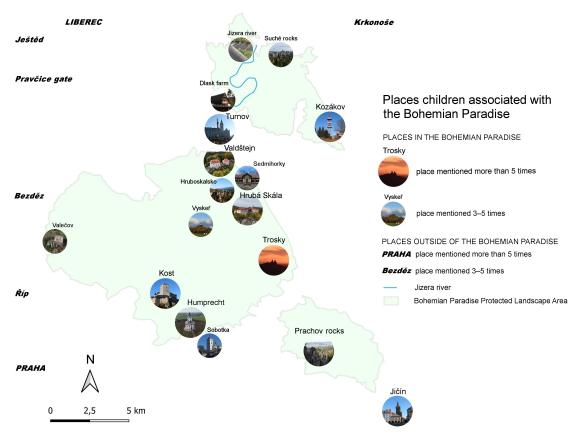


Fig. 4: Places children associated with the Bohemian Paradise. Photos by A. Nejedlová.

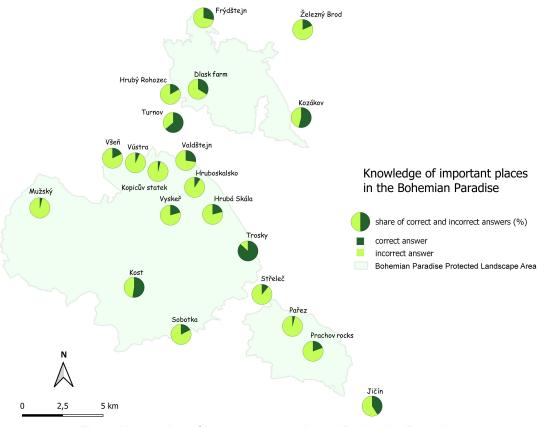


Fig. 5: Knowledge of important places in the Bohemian Paradise.

Discussion and conclusion

The results suggest that students most frequently associate the Bohemian Paradise with castles (Trosky, Kost, Valdštejn), the town of Turnov, and the Prachov Rocks. According to Chromý et al. (2014), who examined the main symbols of the Bohemian Paradise from the perspective of adult respondents, Trosky and rock formations are pan-regional symbols. When identifying the meanings expressed by the most frequently used adjectives (whether from the perspective of textbook authors or the students themselves), we drew inspiration from Young (1999). This author empirically derived a place meaning survey for a tropical World Heritage parkland region in Australia, creating a list of 30 place meaning items, which consisted of adjectives (e.g., beautiful; unique...).

The place most commonly recognized by students is Trosky. Chromý et al. (2014) state that it is likely the most depicted symbol of the Bohemian Paradise. The results suggest that there is a significant relationship between students' knowledge of significant places in the Bohemian Paradise and how often they spend time in nature. This relationship between the frequency of outdoor experiences and students' knowledge supports the implementation of the conception of place-based education, in which students learn, among other things, based on real experiences in the local landscape (Sobel 2004). Studies demonstrate the positive impact of this educational conception on fifth-grade students' SOP (Lee, Chiang 2016).

Overall, this article presents research findings in an area that has not been overly emphasized in research. Therefore, we suggest that greater attention be given to research on the concept of "place meaning" (or the concept of SOP) in education, as the SOP concept is one of the effective tools for the development of environmentally responsible behaviour of children, thus contributing to sustainable development as one of the main goals of contemporary education (UNESCO 2015).

References

Davenport, M. A., & Anderson, D. H. (2005). Getting from sense of place to place-based management: An interpretive investigation of place meanings and perceptions of landscape change. Society & Natural Resources, 18(7), 625–641. https://doi.org/10.1080/08941920590959613

Foote, K. E., & Azaryahu, M. (2009). Sense of place. In: Kitchin, R., Thrift, N., (eds.). International Encyclopedia of Human Geography. Elsevier, pp. 96–100. https://doi.org/10.1016/B978-008044910-4.00998-6

Harris, F. (2021). Developing a relationship with nature and place: the potential role of forest school. Environmental Education Research, 27(8), 1214–1228. https://doi.org/10.1080/13504622.2021.1896679

Chromý, P., Semian, M., & Kučera, Z. (2014). Regionální vědomí a regionální identita v Česku: případová studie Českého ráje. Geografie, 119(3), 259-277. https://doi.org/10.37040/geografie2014119030259

Kudryavtsev, A., Stedman, R. C., & Krasny, M. E. (2012). Sense of place in environmental education. Environmental education research, 18(2), 229–250. https://doi.org/10.1080/13504622.2011.609615

Lee, H., & Chiang, C.-L. (2016). Sense of place and science achievement in the place-based science curriculum. International Journal of Information and Education Technology, 6, 700–704.

MEYS (2021). Framework Educational Programme for Basic Education. Ministry of Education, Youth and Sports, Czech Republic, Prague.

Proshansky, H. M., Fabian, A. K., & Kaminoff, R. (1983). Place-identity: Physical world socialization of the self. Journal of Environmental Psychology, 3(1), 57–83. https://doi.org/10.1016/S0272-4944(83)80021-8

Relph, E. (1976). Place and placelessness. London: Pion.

Semken, S., & Freeman, C. B. (2008). Sense of place in the practice and assessment of place-based science teaching. Science Education, 92(6), 1042–1057. https://doi.org/10.1002/sce.20279

Sobel, D. (2004). Place-based Education: Connecting Classrooms & Communities. The Orion Society. Stedman, R. C. (2002). Toward a social psychology of place: Predicting behavior from place-based cognitions, attitude, and identity. Environment and behavior, 34(5), 561-581. https://doi.org/10.1177/0013916502034005001

Stedman, R. C. (2003). Sense of place and forest science: Toward a program of quantitative research. Forest Science, 49(6), 822–829. 10.1093/FORESTSCIENCE/49.6.822

Tomčíková, I., & Rubáš, D. (2023). Vnímanie pojmov miestna krajina a miestny región žiakmi základných škôl. Geografické štúdie, 16, 58–69. https://doi.org/10.24040/2023.9788055720494

UNESCO (2015). SDG4-Education 2030, Incheon Declaration and Framework for Action. For the Implementation of Sustainable Development Goal 4, Ensure Inclusive and Equitable Quality Education and Promote Lifelong Learning Opportunities for All.

Williams, D. R., & Vaske, J. J. (2003). The measurement of place attachment: Validity and generalizability of a psychometric approach. Forest Science, 49(6), 830–840. 10.1093/FORESTSCIENCE/49.6.830

Young, M. (1999). The social construction of tourist places. Australian Geographer, 30, 373-389. https://doi.org/10.1080/00049189993648

Souhrn

Místní krajina je část prostoru, která člověka obklopuje od jeho dětství a nabízí mu možnosti kognitivního, emocionálního i psychomotorického rozvoje. Žáci v ní vyrůstají a vytvářejí si k ní vztah, který se může v průběhu života rozšířit i na větší prostorová měřítka. Tento vztah může být ovlivněn významy, které žáci danému území přidělují. Existuje ovšem jen málo výzkumů, které by se zabývaly konceptem "place meaning" ve vzdělávání. Předkládaný výzkum se snaží tuto mezeru ve výzkumu vyplnit. Respondenty jsou žáci 5. ročníků základních škol, nacházejících se v oblasti CHKO Český ráj či v její těsné blízkosti. Výzkumu se zúčastnilo 257 žáků, tedy 44 % z jejich celkového počtu. Data byla shromážděna pomocí terénního výzkumu s využitím dotazníku. Doplněna byla rozhovory s žáky ve focus group. Odpovědi byly vyhodnoceny pomocí obsahové analýzy, deskriptivní statistiky a statistické analýzy. Výsledky ukazují, že z konkrétních míst si žáci pod pojmem Český ráj představí nejčastěji Trosky a Turnov. Zároveň byla tato místa žáky nejčastěji rozpoznána na fotografiích. Žáci nejčastěji spojují Český ráj s přídavnými jmény "krásný", "hezký" a "chráněný". Chlapci poznali více významných míst než dívky a celkově znalost těchto míst signifikantně roste s časem, který děti tráví v přírodě. Výsledky přispívají k výzkumu vztahu k místu – důležité oblasti environmentálního vzdělávání.

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