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CONCEPT OF LEARNING SPACE ACCORDING TO PEDAGOGICAL PARADIGMS IN TERMS OF ANALYSIS OF PHOTOGRAPHS

Introduction

The learning space changes over time. The conceptualization of the learning space is also related to different conceptions of education, the role of teachers and pupils. It could be said that each period, more precisely, the pedagogical direction or paradigm is characterized by an appropriate learning space, but otherwise, that the concept of education depends on the space.

In this text, we will discuss the conceptualization of the learning space according to basic pedagogical paradigms, from the 19th century to the present, namely herbartian, humanistic/cultural, reform and socially-critical pedagogical paradigm. We will not interpret them; for the reader it should be sufficient to have insight into the extensive work of Zdenko Medveš (2000, 2007, 2015), which is essentially dealing with them; for pedagogy, they are so important that we cannot understand education without their knowledge. On their theoretical basis, through existing photographs (pictures) of the learning space, we will determine the connection between the individual pedagogical direction and the conceptualization of the learning space. We have not seen in pedagogy that this subject would be dealt with through analysing the photographs (see also Vogrinc 2008, p. 132). We consider that this method of study is one of the priorities for the chosen issue. It also enables us to obtain data that would otherwise be more difficult to achieve (see Fraenkel, Wallen and Hyun 2012, pp. 426-427, 542). We also try to point out the importance and usefulness of photography in pedagogical research. According to the chronology we will therefore essentially analyze the photographs of the classrooms for each pedagogical paradigm and the analysis of the photographs will be tied to the definition of the paradigm itself.

Herbartianism (the 19th century – the end of the First World War)

We see an example of a classroom from the period of Herbartianism in Figure 1. As we can see, it was divided into two frontal parts; one part for the teacher, and the other part for the pupils. Thus, the space created a virtual separation between the above mentioned sub-spaces or the imaginary axis, through which the pupils could identify themselves with the teacher, and as a projection they took upon themselves his behavior, thinking, feeling, empathy, etc. On the other hand, the classroom was also divided vertically into two parts, because the teacher took a standing position (stance) while the pupils took a seated position (see Figures 1–4). Thus, the teacher's greatness caught the attention of the pupils and he could be seen as an authority.



Figure 1: Teaching presentation at Realgymnasium in Austro-Hungary, 1900 (Pedagoški programi v šolskem letu 2017/18, 2017, p. 16).



Figure 2: Schoolgirls of the town girls' primary school Mladika in Ptuj, with the teacher and headmaster, 1910 (Kamra 2017). On the wall, behind the teacher, there is a poster of the city in the past.

Therefore, the learning content (subject matter) has also been planned for the projection. As can be seen from Figure 1, the teacher used direct verbal communication, and also Herbart (1903, p. 148) wrote that teaching transmitted information in words only. Considering that knowledge was perceived as accordance with facts or reality, respectively (Ule 2004, p. 43), we assume that teaching also aimed at verbal reproduction of the teaching content.

Moreover, the classroom walls were filled with pictorial images, such as, for example, a picture of a city from the past for history lessons (Figure 2), a map of Austria-Hungary for geography lessons (Figure 3), and an image of the human body for the study of natural sciences (Figure 4). In all cases, this is a visual style of learning tools (see also Osemdesetletnica slovenskega šolskega muzeja, 1978). This, however, coincides with the then established assumption of a knowledge process, according to which we think, sympathize, feel, and so forth in pictures, images (Herbart 1903, p. 148).



Figure 3: Pupils at primary school in Šentjur, 1909/10 (OŠ Frana Malgaja 2017). The biggest pictorial image on the wall is supposedly the map of Austro-Hungary.



Figure 4: Pupils at primary school in Globoko in Styria, 1914 (SŠM, photo library). On the wall behind the teacher there are images of the human body.

The humanistic/cultural pedagogy (the transition from the 19th to the 20th century – the end of the Second World War)

Figures 5 and 6 show classrooms from the national classical gymnasium in Ljubljana (Figure 5) and private classical gymnasium in Šentvid (Figure 6) and they both represent an example of a learning space for humanistic/cultural pedagogical paradigm. We can see that the classroom was arranged as a frontal teaching space, but this does not indicate that already a one-way frontal communication took place. As we can see in Figure 5, pupils are experiencing content that gives them an intense moment. Therefore, we assume that the content, not the teacher, is the subject of attention and value. However, according to the humanistic / cultural pedagogical paradigm, one presupposes that educational effects are attained in the pupil's own experiencing of the content of culture (Medveš 2000, p. 90).



Figure 5: Pupils of the II. class and the teacher, state classical gymnasium in Ljubljana, 1956/57 (Stolet Zavoda ... 1999, p. 174).



Figure 6: One of the classrooms at private classical gymnasium in Šentvid between the World Wars (Stolet Zavoda ... 2005, p. 378).

As can be seen in Figures 5 and 6 the classroom walls are not covered by pictorial images. We thus conclude that the teacher had a key role in the process of learning, and it was assumed that, as a cultivated and intellectual individual, could awaken attention and experiences of the pupils better with his own expressive power than a picture itself could do. Education should have actually been carried out through direct contact between the teacher and the pupils. That's why we think that, in comparison with the previously presented paradigm, in this paradigm there is a change in conceptualization of learning and knowledge. If the previously presented learning (knowledge) was sensually defined, both by perception of images and words, it is presented in this paradigm by a personal dimension of learning, understanding. However, it is also typical for this paradigm that educational effects are also attained in pupil's own learning (knowledge) of cultural creations and messages (Medveš 2007, p. 52).

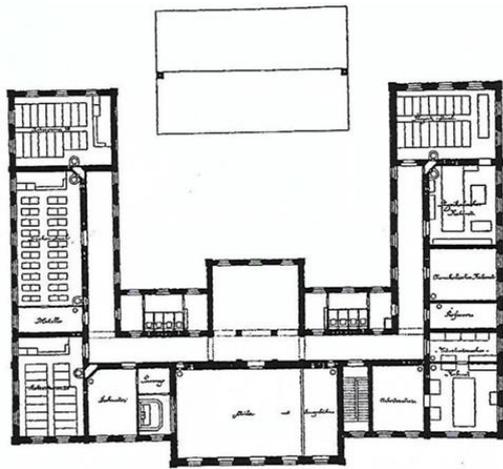


Figure 7: The second floor layout of the national classical gymnasium in Ljubljana, founded in 1899 (Jahresbericht ... 1900, p. 14). Designated spaces on the left tract show examples of classical classroom designs.

Reform pedagogy and pedagogy Montessori (transition from the 19th to 20th century –)

Figures 8–11 show classrooms of the first development period (i.e., up to and including six years) with a clear circular space and the center (see also Marchetti 1996). As we can see, the teacher is at the side and less visible than on the pictures shown before; the pupils are in the foreground. Thus we can conclude that the understanding of education has changed in comparison to the concept of education according to the paradigms outlined above, and this is confirmed by one of the assumptions of the reform pedagogical paradigm that the essence of education lies in the childrens' self-education. This is probably the reason for the teacher's position, which is not "ex cathedra" but at the side.



Figure 8: At one of Maria Montessori schools (Boucher 2015).



Figure 9: In the classroom, where the Montessori method of education is used (Boucher 2015).



Figure 10: An example of the classroom according to Montessori pedagogy (Pollard 1997, p. 48).



Figure 11: An example of another classroom according to Montessori (Pollard 1997, pp. 56-57).

Figures 8–11 show the classroom equipment: single seater desks, bright colors; on the floor there are carpets, and at the sides there are various sub-spaces (see Figure 11) for diverse activities with didactic materials (see also Montessori 1964). As we can see, each pupil does something for himself/ herself within the group, which corresponds to the Montessori's (ibid.) assumption that everyone selects what and which material, respectively, he/she will deal with.

It is evident that child-height furniture, mobile cabinets, boards and shelves are there (see Figures 8 and 10), which is one of the conditions of this pedagogy for the development of pupils' independency (ibid.). Underlining the work or learning, respectively, with didactic material also matches with the thesis that the teacher's role is taken over by the didactic material that is supposed to teach, give feedback, and educate the pupil (ibid.). We can also conclude this because there is no direct personal communication between the teacher and the pupils, this kind of working method, with pre-prepared material (with foreseen solutions), also limits the student in the way of acquiring knowledge. Moreover, this assumption also coincides with the Montessori's one (in Marchetta 1996, pp. 48-53), since the author (ibid.) says that the role of material is in the limitation of the pupils' imagination and preparation for the exact understanding of reality.

Regarding the equipment of the classrooms, we can also see the emphasis on decorations, posters, pictures of children (see Figures 8, 9 and 11), flowers (see Figures 10 and 12) and armchair (see Figure 11).



Figure 12: The Montessori pedagogy is characterized by the exactness in performing the activities. Children in the picture walk on the line on the floor. This is one of the exercises, which is supposed to contribute to an orderly and precise movement. (Pollard 1997, p. 34)

Socially-critical pedagogy (20th century –)

At the end of the Second World War and in the 1950s, the classroom was (see Figures 13–16) similar regarding its arrangement to the classroom shown in pictures for the pedagogy of herbartism. Therefore, we assume that it had a similar role in forming the personality of the pupils, while it differed from the classroom of herbartism by equipment. As shown in Figure 13, some classrooms still had the image of the Christian cross in 1945, while from Figures 14 onwards we cannot see it anymore. In Figure 13 we also see pictures of the national heroes, Stalin and Tito, while we saw the picture of Emperor Franz Joseph on the picture of the classroom according to the herbartian paradigm, also with the image of the cross (see Figure 1).



Figure 13: The classroom with Christian cross and pictures of Stalin and Tito, 1945, Preloka by Kolpa (SŠM, photo library).

During the very first years after 1945, the equipment of the classroom was changed from the perspective of religious and national symbolism; on the walls there were pictures of the then-established national hero (see Figure 14), national emblems (see Figure 15) and various slogans (see Figure 16), which strengthened national consciousness.

We can see that classrooms were similarly or less filled with visual illustrations, as in the case of herbartism, and therefore national symbols had, supposedly, a greater effect on pupils and, according to the assumption of socially-critical pedagogy, the school is a socially collective educational factor as well, where in fact the teacher with his conscious effort does not have any function to form a pupil (Medveš 2007, pp. 53-55). So, it is understood that he does not educate, as it was presumed in herbartism, but also that a subject matter does not educate, in terms of culture, which was the case with the humanistic/ cultural pedagogy, and again not the pupil's own activity, as was presumed by reform pedagogy. According to the socially-critical pedagogical paradigm, the ratio of relationships in the classroom, school, the climate and the entire social network in general should educate both in the narrower and broader sense.

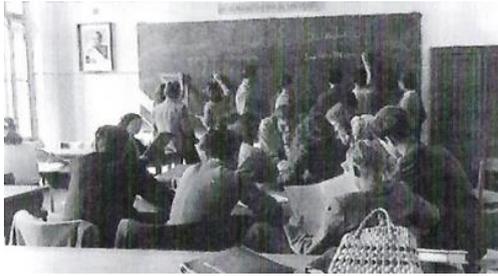


Figure 14: One of the classrooms of the night school for adults, Ljubljana, 1952 (SŠM, photo library). On the left side of the blackboard there is a picture that was in all classrooms in that time.



Figure 15: Pupils with a teacher at the primary school Jarše, 1955 (Osnovna šola Rodica 2018). The emblem of the Socialist Federal Republic of Yugoslavia and the Socialist Federal Republic of Slovenia is visible on the poster behind the teacher.



Figure 16: Pupils at Primary school Slivnica by Maribor, 1948 (SŠM, photo library). On the right and the left side of the door we see the established slogans at that time.

Over time, there was more equipment in the classroom including decorations such as flowers (see Figure 15). If we look at Figures 17 and 18 showing the example of current classrooms, we can see in comparison to the classrooms presented after the war, the essential difference in the space arrangement, since the space in Figures 17 and 18 fulfills the conditions of indirect communication between teachers and pupils, which is evident through table groups (Blažič et al. 2003, pp. 381-392). Regarding the exhibited equipment according to the previous paradigms, this is also generally significantly different. We do not see state symbols or symbols that represent the essential elements of the state (eg. pictures of the state president); we assume that in the background it is to ensure the principles of objectivity, criticalness and plurality as a value framework of the so called neutral, public primary school that is open to all (Krek and Merljak 2011).

The role of the teacher, according to Figures 17 and 18, is not an "ex cathedra", which corresponds to the assumption of the changed role of the teacher in the class as a democratic leader (Kroflič 1997), who directs the pupils and discusses with them as partners certain ideas and solutions. In this we see one of the reasons for the display of various images, such as posters, pictures of pupils, etc. Along with others as with teachers or parents (various

workshops at school, intergenerational cooperation), they shape the learning process and the whole climate, which is also one of the key points of social critical pedagogy (see also Hoare and Nowell Smith 1999, pp. 165-190).



Figure 17: Pupils of the 2nd class at primary school France Prešeren, Črenšovci, 2017 (Glavač 2017).



Figure 18: One of the classrooms, 2017 (5ra 2017).

Conclusion

The analysis of existing photographs shows how the learning space has changed over time. We analyzed the content of photographs related to pedagogical paradigms of herbartism, humanistic/ cultural, reform and socially-critical pedagogical paradigms. The analysis identified the connection between them. We have found a match between the content of photographs and the characteristics of pedagogical paradigms. Following the paradigm of herbartism, the classroom was arranged in such a way that the frontal arrangement enabled the teacher's projection on pupils and as such it corresponded to verbal direct communication. On the walls there were pictorial images, since it was the condition of herbartism to learn through visual presentations or images. According to the humanistic or cultural pedagogical paradigm, learning was not determined by the visualization of images. The classical, conventional classroom was not filled with wall pictures or decorations, as it has been accepted that the importance of content is that it educates through experiencing. We noticed in the selected photographs of the reform pedagogical paradigm the pupils' learning space adapted with the equipment, so we saw the teacher "at the side" of the classroom. After the socially-critical pedagogical paradigm, we noticed that from its beginnings with the frontal arrangement of space and equipment, which was similar to the equipment in the classroom of herbartism, it's development went in the direction of indirect communication and the design of space that is taught and educated in various ways; through cooperation between pupils and teachers, through teachers, posters and aids, climate at school and broadly defined relationships in society.

We also recognized the learning space through the analysis of photographs as an environment of change according to the established pedagogical paradigm.

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