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What do children's maps tell us? Topical messages from the years 2005–2021

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Abstract:

Even at a very early age, children's drawings reflect the qualities and realities of their surroundings. Four-year-olds are already able to represent phenomena on a spatial scale by drawing map-like sketches. Children's mapmaking skills are boosted by an amazing initiative of the International Cartographic Association (ICA, www.icaci.org) – the biennial Barbara Petchenik Children's Map Contest. The aims of the competition are to promote children's creative representation of the world, to enhance their cartographic awareness and to make them more conscious of their environment. The competition is organised by the ICA Commission on Cartography and Children in two stages. The national stage involves the collection and evaluation of cartographic drawings produced by children under 16 years of age within individual countries. Up to six entries are selected by national jury and sent to the international co-ordinator for participation in the international contest. Lithuania has participated in all children map contests between 2005 and 2021. Naturally, we wanted to explore this phenomenon further, to see what was behind this first impression. We considered the works as mental maps (Panek, 2016) that have a potential of revealing how the authors perceive their geographic environment, what they emphasize and what connotations they add.

There have been several studies on how children draw maps and the developmental stages that they go through as they learn to represent spatial information graphically. Children's drawings are often an effective visual tool to help them convey what they can't otherwise express (Farokhi and Hashemi, 2011). Children often use symbols and labels to represent different types of features on their maps, such as houses, schools, and parks (Valachová, 2014). With age, their maps become more detailed and more accurate in their representation of geographical features and their spatial relationships to one another (Uttal and Sheehan, 2014). At the age of 12–15, children are already capable of communicating complex, multi-layered insights, even political, ironic messages (Fig. 1). Many authors seem to be of the opinion that that children's map-drawing can be a useful way to understand their thematic knowledge about the world, and how they perceive and organize spatial information (Papandreou, 2014). Now, when the children's maps have been collected for almost 20 years, we can say with confidence that that the ideas expressed in children's maps change in response to important national and global events and developments (Fig. 1).

The research question we have been trying to answer over the last few years has been: Is it possible to generalise the ideas communicated by children's maps; if so, what are the predominant messages and how have they changed since 2005?. We have studied 3045 maps drawn by children of Lithuania between 2005 and 2021, focusing on the use of preliminary identified symbols and the conveyance of ideas and emotions in these maps. The main results of our research are: a list of the most frequent symbols (96 symbols and objects), and a list of socio-political messages and their means of expression (31 message). Elements of conceptual content – conveyed messages, opinions and emotions – were found to be clearly expressed in ca. 20% of the works. The ideas, emotions and symbols used in the children's maps vary somewhat according to the age and gender of the authors, but no significant differences were observed. The tentative insight that girls depict more beautiful, stable, static things, while boys depict more dynamic plots and technical objects, may sound a bold assumption, but on the other hand, it rather fits the stereotype. Children under 6 years of age are more likely than other age groups to convey strong (positive) emotions. There has been an increase in the number of national symbols (e.g., flags, coats of arms) since the 2015 competition, so significant that we can identified it as the beginning of a strong inclination towards nationalism. The emergence of maps reflecting ecological issues was noticed. Recently we focused the study on assessment of changes related with themes, emotions, spatial extent and use of colours compared to the map drawings of the previous contests, focusing in particular on the possible impact of the Covid-19 pandemic. Distribution of recurring messages found in children's maps is shown in Figure 2. It can be noted that while several very important dates for Lithuania were celebrated in the first period, a wave of

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patriotism has been only observed since 2015. One can only speculate to what extent it was triggered by the annexation of Crimea in 2014. Interestingly, during the quarantine period, not only did the Covid-19 theme emerge, but also the number of works related to global environmental issues skyrocketed. There has also been a much greater number of works expressing unusual moods and themes in this last period, some of which are related to life outside the Earth, detachment and nostalgia.

Figure 1. War and peace theme. On the left: a combined message of peace and patriotism, also a typical example of Lithuania highlighted in a wider geographical context. "I love my country Lithuania" by Augustė Krikščiūnaitė, 9 years (2013). On the right: a response to annexation of the Crimea in 2014 and support to Ukraine. “I'm a volunteer in the Lithuanian Armed Forces” by Arija Luneckaitė, 12 years (2015).

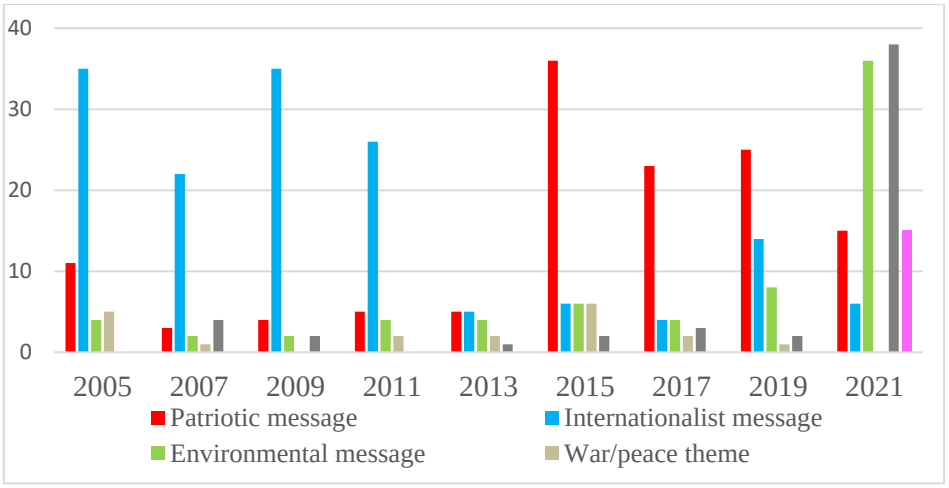

Figure 2. Number of children's maps with the main recurring messages in 2005–2021

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