EMOTIONAL TAPESTRY OF SMALL CITIES: EMOTIONAL PERCEPTION OF URBAN ENVIRONMENTS BY SWEDISH AND FINNISH SENIOR CITIZENS

ABSTRACT
The paper investigates the emotional foundation of sense of place in small urban environments. The study was based on an anonymous questionnaire exploring various emotions in relation to urban environments in two small northern cities Haparanda (Sweden) and Tornio (Finland). The study revealed that senior citizens mentioned emotions connected to the past (sorrow), active living (interest, joy), and solitude (ease) more frequently than any other emotions, and attributed these to such places as historical buildings, churches, cemeteries, swimming pools, etc. The border between the two cities was marked by mixed emotions, both positive and negative. To visualize emotions and places of emotions in Tornio and Haparanda, as well as for insight into the boundaries of emotional urban environments, the author created emotion maps of these cities. The maps visually resemble multi-colored tapestries with emotions as nodes, which inspired the title of this paper. This study allowed expanding the scope of the anthropology of emotions by the inclusion of territorial focus in the study of small urban environments. In the context of world-wide population ageing tendency, we need to study places of emotions to come up with a comprehensive and integral approach to city planning policies, and to create more adaptable and age-friendly urban environments.

Keywords: Anthropology of emotions, emotional perception, emotional geography, urban environment, mapping, places, senior citizens.

INTRODUCTION
Scientific interest to the problem of human emotions arose after Charles Darwin’s (1872) work ‘The Expression of Emotions in Man and Animals’, which initiated a discussion about the biological or cultural nature of emotions in humans. In the 1960s, Paul Ekman set out to refute Charles Darwin’s hypothesis about the biological nature of emotions and to confirm that facial expressions of emotions and gestures were the result of social learning, and changed from culture to culture (Ekman 2010: 6–7). However, in the course of experiments among

In the 20th century, anthropologists of emotions gradually divided into two camps: those who argued that emotions were evolutionary and ethological, and those who primarily focused on the social and cultural (developmental) construction of emotions (Lutz and White 1986: 406). For example, according to some, culturally conditioned (moral) emotions included ‘honor’ and ‘shame’ (Herzfeld 1980; Turner and Stets 2006). The list of basic emotions has been constantly expanding to include ‘acceptance’, ‘anticipation’ (Plutchik 1980), ‘interest’, ‘relief’, ‘love’ (Levenson 2011), and others (Kowalska and Wrobel 2017). In this study, emotions are divided into universal and culturally conditioned (moral). Universal emotions included, positive: joy, interest, ease, and, negative: anxiety, disgust, sorrow. Culturally conditioned emotions included pride (positive) and shame (negative). However, Turner and Stets (2006) argued that one cannot ignore the biological basis and the evolutionary forces of emotions and ‘there is a neurological basis for shame, guilt, jealousy, vengeance, pride, sympathy, and other emotions that are built from a few primary emotions’ (Turner and Stets 2006: 46).

Humans experience emotions not only in relation to fellow humans but the surrounding environment as a whole: ‘The “others” in emotional encounters are not only other human beings, but might also include animals, landscapes, material objects, images, or events that affect people emotionally’ (Svašek 2012: 4).

Of particular interest for this study are emotions that a person experiences towards places. The emotional connection between a person and a place is described in such terms as ‘place attachment’, ‘sense of belonging’, ‘sense of place’, ‘spirit of place’, ‘place setting’, ‘topophilia’, etc. (Cross 2001: 1–2). Certain places may evoke love, passion, reverence, and other emotions (Ellard 2016).

Often researchers have focused on exploring emotions in the context of larger urban environments and argued that living in large cities evokes negative emotions among its residents: ‘not to mention the frustrations of incessant traffic jams or occasional power outages, the anger over the cruel displacements on which so much urban development has been and continues to be predicated, or the fears of violence and criminality that have long lurked in many urban centers’ (Kenny 2014: 5). It is assumed that the very fact of living in a large city is stressful for an individual: ‘the effectiveness of anxiety production in a modern city lies in its interweaving into the structures of everyday experience of citizens: routine practices associated with certain spaces — non-places are supported by a set of rules and restrictions’ (Zaporozhets and Lavrinets 2009: 65). Stress can be triggered by the changing appearance of the city, speeding up of the regular flow of life, increasing number of vehicles in the streets, and other factors. Besides stress, citizens of large cities experience fear, resulting from ‘an indefinite threat posed by dangerous “others” and things without definitive properties’ (Zaporozhets and Lavrinets 2008: 83). Unconsciously, citizens of large cities tend to avoid eye contact with other people in the streets or in the metro, since ‘reading [books in the metro – T.Zh.] is safer than interaction, and visual contact with people can be a source of trouble’ (Zaporozhets
K. Radina (2012) identified the following places of fear for the citizens of Nizhniy Novgorod, a major Russian city with the population of 1.2 million people: dark places, tunnels and underground passages, markets, places of movement and change, places of destruction and death, deserted places, areas of traffic, forests and parks, places of drug sale, places of entertainment, public transport, yard areas, entrances, areas with cheap housing, ‘points’ of control of law enforcement agencies, zones of environmental disasters, ‘non-city’ structures (garages, non-residential buildings) (Radina 2012: 128–135).

For city dwellers constant background fear is mundane; ignoring this emotion can lead to outbursts of aggression, apathy, and depression. Some scientists also connect life in a large city with a lingering feeling of loneliness; and as Auge (1999) argued, the problem of individual loneliness is doomed to remain unsettled.

Stress, fear, loneliness – have they always accompanied citizens of large cities, or are these phenomena of the present day? Researchers note that it was our time that gave rise to these emotions, since modern urban environments were undergoing the process of ‘elimination of places’ resulting from globalization processes and increased migration: ‘…places are degenerating into ‘non-places’ under the signs of late modernity…’ (Clayton 2009: 540). If in pre-industrial societies there existed ‘a variety of places and landscapes’, in modern ones we see ‘a flatscape, lacking intentional depth and providing possibilities only for commonplace and mediocre experience’ (Relph 2012 [1976]: 383–384). This elimination of places was the result of the overarching influence of ‘technique, efficiency, interchangeability, and replicability — all features of modern day architectural designs’ (Clayton 2009: 542).

It is implied that the disappearance of places that are able to ‘embed’ into the emotional environment leads to weakening of the attachment to place. Furthermore, these non-places cause a sharper divide between city centers and peripheries that becomes ‘an example of anti-urbanism’, because ‘it is on the periphery that so-called non-places are concentrated today - transport communications, large commercial and service centers, airports, road junctions, warehouses, especially aggressive advertising billboards, etc.’ (Auge 1999).

Of course, the city cannot be the source of negative emotions only. A. Bolotova and F. Stammler revealed that people can also feel attached to monotonous city-scapes (Bolotova and Stammler 2010). However, it would be too straightforward to expect that a person would experience only positive or only negative emotions towards the urban environment. The same place can trigger both positive and negative emotions in different people (Zhigaltsova 2020: 20), that is why it is important to study places of mixed emotions as well.

A person is tied to a place with all sorts of ‘threads’: ‘The tapestry that describes the nature of one’s relationship to a place is unique for each individual’ (Scannell and Gifford 2010: 5).

Therefore, from the point of view of various emotions, one can compare the urban environment to a multi-colored tapestry, with its threads representing emotional perception—the emotions of the citizens, and its nodes representing specific places charged with positive, negative, or mixed emotions.

Quite often, studies in the sphere of emotional attachment in the Northern territories focus on stressful situations and people’s memories of them.

A spectacular example is the relocation of the Swedish mining city Kiruna (Sandberg
The analysis of emotions, reactions, and positions of Kiruna’s inhabitants in such a critical stressful moment, based on interviews and analysis of public discourse, gives us a lot for a better understanding of emotional connection of people to their places of residence. In the mentioned study, such emotional reactions as optimism/hope, ambivalence, resignation, and anger/fear/loss were identified (Sandberg and Ronnblom 2016).

In another study, the researchers looked into the human-place relationships in two locations in Finland (the Vuoksi River Valley and Talvivaara). In both the Vuoksi River Valley and Talvivaara narratives, strong emotional bonds, perceptions, dreams, and bodily feelings were found to penetrate the human-place relationships, with people being attached to specific places, as well as to specific material objects such as paintings, photographs, and flowers. This demonstrated in-depth and diverse meanings of place and effects of involuntary place loss (Korjonen-Kuusipuro and Meriläinen-Hyvärinen 2016: 33).

Like the rest of the world, the northern territories have been affected by population ageing processes. For example, in Finland the most significant demographic change is ageing of the demographic structure, where the proportion of people of retirement age increases simultaneously with the decline in the population of economically productive age. The proportion of people over 65 years old is constantly increasing. According to some estimates, the ageing populations of the Northern territories will in the future be like elsewhere in the world: ‘the relative percentage of the elderly and retired are projected to grow in all the Northern regions’ (Skrupskaya 2020: 32).

Population ageing has changed the role of small cities, and there is an obvious need for shaping age-friendly and adaptable environments for senior citizens (Global age-friendly cities: a guide 2007), just like age-friendly ‘childhood places’ (Moore and Young 1978: 83). Creating such urban environments ‘cannot be left to chance’ and ‘must be deliberately fostered by planning, design, and management to satisfy basic human needs around the world’ (Moore and Young 1978: 83). Maintaining the emotional health of senior citizens should be a priority task for social policy-makers in today’s cities because the surrounding environment creates positive prerequisites for this.

Research devoted to small localities is scarce compared to a vast number of studies dealing with emotional connection in large cities. In this study, I have decided to look into the emotional perception of small northern cities with a population of less than 22,000 people and explore whether these cities are more convenient for senior citizens in terms of accessibility, proximity of natural environments, friendliness, lack of the hustle and bustle of big cities, and lower levels of negative emotions towards specific locations.

This research deals with the study of the emotional perception of two small urban environments – Haparanda (Sweden) and Tornio (Finland). Of particular research interest was the emotional perception of these urban environments by senior citizens. It was hypothesized that in the emotional environments of senior citizens living in small cities, positive emotions prevail over negative ones.

To investigate the hypothesis, the following tasks were formulated:
1. To identify places of emotions for senior citizens aged 65–90 of Haparanda and Tornio, via anonymous questionnaires with open-ended questions;
2. To re-create emotions associated with certain places with the help of direct
quotations, collected via anonymous questionnaires;
3. To plot the identified places on the physical map of the area and create interactive emotion maps of Haparanda and Tornio.

The importance of the study lies in the novelty of the method, which offers specific research steps to investigate this hard-to-grasp emotional perception of citizens with their place of residence, as well as visualize findings by means of creating interactive emotion maps.

MATERIALS AND METHODS

The scientific area that can link anthropology of emotions and studies of urban environments is the relatively new area of 'emotional geography', which broadens the scope of anthropology of emotions by including a territorial focus. Originally, the scientific area of emotional geography did not make up a separate scientific discipline. The disciplinary status and the semantic content of the term 'emotional geography' were discussed in a number of works in the early 2000s (Anderson and Smith 2001; Bondi 2005; Pile 2010). Nowadays, emotional geography is usually referred to as human geography (Gregory et al. 2009).

The closest to our understanding of this scientific area is Anderson’s debate (2009) that 'emotional geography' should be ‘dealing with the ways of considering how emotions, together with the related concepts of feeling, mood, or affect, constitute space–time composition, and examining emotional intersections between people and places’ (Anderson 2009: 189). Most often, the methods of emotional geography can be applied to places associated with strong emotional reactions of the users.

In this study of small Swedish and Finnish cities, using the tapestry metaphor, I posed the following questions: What color is the emotional urban environment? What are its boundaries? The first question is about the emotional perception (positive or negative) of the urban environment. In order to evaluate the emotional perception, qualitative methods such as interviews, observations, focus group discussions, questionnaires, etc., are needed. The second question deals with the forms and sizes of the emotional environment (the tapestry), and hence requires quantitative data.

To develop the field of emotional geography further, it is important to expand its conceptual base and utilize new methods of visualizing the findings. In the present study, the term 'emotional geography' is used in the sense of the citizen's emotional perception of their places of residence. The employed mapping methodology allows plotting emotionally charged places on a physical map.

Emotion mapping has been gaining popularity in various modern day digital, humanitarian, and interdisciplinary studies. The earliest examples of 'emotional cartography' of Paris, San-Francisco and other cities are presented by Nold (2009). With the help of a biometric sensor, Christian Nold (2018) analyzed the emotional state of the citizens during their walks and visits to public places in the city. A research team at the Western Sydney University developed another way of city mapping. The project was piloted with young people of different ages living in Sydney. It resulted in the development of an online interactive emotion-mapping platform ‘invisiblecity’, which analyzes the way people feel about the city (Dietz, Norløy, Catanzaro, Sandbach and Third 2018). Yet another example of emotional mapping is the interactive platform ‘Imprecity’ developed for Saint Petersburg by the Institute for Design and Urban Studies at ITMO University (Nenko and Petrova 2018).
One of the tasks in this study was to collect data on emotional perception of various places in the cities of Haparanda and Tornio and develop emotion maps of these two cities.

The cities share geographical and historical backgrounds. Both Haparanda and Tornio have a rich history and traditions dating back to the beginning of the 17th century. They share an open border, as both are situated on the banks of the Tornio River flowing into the Gulf of Bothnia. Tornio was founded by the Swedish king Gustav II Adolf in 1621. Because of the Finnish war of 1809, Sweden gave up Finland to Russia, and the city of Tornio remained a part of the Russian Empire up to 1917. The new border was drawn along the Tornio River, and the village of Haparanda, which acquired the city status in 1827, became a part of Sweden (HaparandaTornio Travel Guide 2022). These cities have different architectural and planning designs and differ fundamentally, despite their geographical proximity. Haparanda has a clearly pronounced city center and periphery, while Tornio is less centralized. The total population is over 30 000 people: 9 685 people in Haparanda and 21 602 (Statistics Finland 2021) in Tornio. The proportion of people over 65 years old is 29.3% (2 842 people, see Regionfakta 2022) and 23.5% (5 077 people, see Kuntaliitto 2019), respectively.

In February 2020, I administered a questionnaire to 200 citizens of Haparanda and Tornio. There were 85 senior citizens who returned the questionnaire. For this article, I analyzed only the answers of senior citizens who have lived in their respective city for more than 30 years. After sorting out there remained 69 such questionnaires: 32 from Haparanda and 37 from Tornio. The results of the questionnaire for other age groups will be discussed in other articles of the author (Zhigaltsova 2021).

The questionnaires were distributed in community organizations with the permission of administrations. The respondents were informed about the aims of the anonymous study. It took about twenty minutes to fill out the questionnaire. No personal data allowing identification of respondents were collected. The results of the questionnaire were used in the most generalized way. In order to preserve anonymity and gender neutrality, this paper does not specify the respondents’ gender. For the questionnaire in English and Finnish, see Appendix 1.

In the questionnaire, I used open-ended questions so as to combine qualitative and quantitative methodology. The questionnaire did not mention any specific places (e.g. landmarks or touristy spots), so the respondents were free to describe their emotional perception of any places in the cities. This helped me to collect information about unofficial (‘folk’) names of certain places. Questionnaires with open-ended questions allowed me to analyze citizens’ comments about the places in the city that they associate with positive, negative, and mixed emotions, and capture how senior citizens perceive their city. In such studies, it is the understanding of the phenomenon that comes to the foreground, not the explanation of reasons and contributing factors. On the other hand, the questionnaire made it easier for me to record and count personal places of emotions mentioned by the respondents.

The next step was to plot the identified places of positive, negative, and mixed emotions on the physical maps of Tornio and Haparanda (Fig. 1–2). In order to answer the question about the color of emotional urban environments (tapestries) of Tornio and Haparanda, each emotion was assigned a certain color. Positive emotions were colored in greens and blues,
while negative emotions were colored in reds and browns: joy: green, interest: lettuce green, ease: cyan, pride: turquoise blue, anxiety: red, disgust: terracotta, sorrow: orange, and shame: brown. The correlation between emotions and certain colors was revealed by researchers D’Andrade and Egan (1974) based on a cross-cultural study between two cultural groups – the Tzeltal-speaking Mexicans and the English-speaking American college students. In a test of color and emotional associations, the authors found out that the respondents associated emotions having negative connotations (such as «sadness», «fear», «anger»), with red, yellow and brown colors, while emotions with positive connotations («happiness») corresponded to green and blue colors (D’Andrade and Egan 1974: 61). Therefore, for this study I chose to use similar color denominations.

The resulting interactive emotion maps were posted at Emotional Geography of the Northern Cities and Settlements website. The emotion maps show only those places that were mentioned by at least three different respondents. Some places, mentioned only once or twice, are not shown on the map. Among such places were the railway bridge, the stadium, bicycle lanes, the gym, the art gallery, the nursing home, and others (associated with positive emotions), and the police station, some alcohol-selling bars, tobacco shops, the parking lot near the old customs building, and others (associated with negative emotions).

**FINDINGS**

The emotional perception of urban environments was studied based on the analysis of quotations from the respondents’ and their identification of places of strong emotions. Table 1 summarizes all the places mentioned by more than ten different respondents, and groups them into three categories such as the places of strong positive, strong negative, or strong mixed emotions. (Table 1).

**Table 1: Places associated with strong emotions for Haparanda and Tornio senior citizens, number of mentions.**

<table>
<thead>
<tr>
<th>Haparanda</th>
<th>Tornio</th>
</tr>
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<tbody>
<tr>
<td><strong>Places of strong positive emotions</strong></td>
<td></td>
</tr>
<tr>
<td>The city hotel</td>
<td>The river</td>
</tr>
<tr>
<td>• Mentioned 13 times.</td>
<td>• Mentioned 13 times.</td>
</tr>
<tr>
<td>The beach</td>
<td>Shopping malls</td>
</tr>
<tr>
<td>• Mentioned 12 times.</td>
<td>• Mentioned 10 times.</td>
</tr>
<tr>
<td>The embankment</td>
<td>The museum</td>
</tr>
<tr>
<td>• Mentioned 10 times.</td>
<td>• Mentioned 10 times.</td>
</tr>
<tr>
<td><strong>Places of strong mixed emotions</strong></td>
<td></td>
</tr>
<tr>
<td>The square</td>
<td>Churches</td>
</tr>
<tr>
<td>• Mentioned 17 times.</td>
<td>• Mentioned 16 times.</td>
</tr>
<tr>
<td>The church</td>
<td>The cemetery</td>
</tr>
<tr>
<td>• Mentioned 13 times.</td>
<td>• Mentioned 10 times.</td>
</tr>
<tr>
<td><strong>Places of strong negative emotions</strong></td>
<td></td>
</tr>
<tr>
<td>The foundation pit</td>
<td>No such places were identified.</td>
</tr>
<tr>
<td>• Mentioned 25 times.</td>
<td></td>
</tr>
</tbody>
</table>
All of the places mentioned in Table 1 were situated within a walking distance, and since the respondents visited them very often, experiencing them in different seasons of the year and different parts of the day, their emotional perception of these places had been built throughout the years. It did not depend on momentary attitudes or external circumstances: ‘The beach. It is beautiful all year round’ (aged 76, has lived in Haparanda for more than 40 years, expressed emotion: interest).

The study revealed that senior citizens mentioned emotions connected to the past (sorrow), active living (interest, joy), and solitude (ease) more frequently than other emotions, and associated these with certain places in the city.

PLACES OF EMOTIONAL PERCEPTION OF URBAN ENVIRONMENTS

The most obvious difference between the emotional perception of urban environments by senior citizens and other age groups was that the former perceived the city through the prism of time: ‘in the city, history and memory are rooted in one another: every citizen establishes their own specific relations with the monuments, bearing deep and collective historical evidence’ (Augé 1999).

It turned out that common history and nostalgia for the past connect Haparanda and Tornio. One 70-year-old respondent, living in Haparanda for over 60 years, when answering the question about what Tornio (the neighboring city) meant for them, said ‘[c]hildhood memories’ (’[b]arnomssminnen’), and mentioned their favorite place—‘Tornio Church. A lot of flashbacks’.

The respondents’ answers now and then went back to the time when they and their city were younger: ‘Empty city center. You can see the depopulation. Empty business premises’ (aged 67, has lived in Tornio for more than 30 years, expressed emotion: sorrow); ‘deserted villages—concentration of schools in the center’ (aged 76, has lived in Tornio for more than 50 years, expressed emotion: sorrow). These responses described the present condition of the urban environments in comparison with the past.

The responses connected with the past were all colored with one emotion: sorrow. Sorrow is one of the most lasting emotions (Ekman 2010: 76). One can say with full confidence that sorrow was the most often mentioned out of all negative emotions experienced by the senior citizens of Haparanda and Tornio.

Sorrow was also mentioned when the citizens described their visits to the Cemetery (expressed emotions: sorrow—100% by the Swedish and 86% by the Finnish respondents, ease—14% by the Finnish respondents). Some of the respondents specifically mentioned that the time spent with their relatives and friends was gone forever: ‘The cemetery. Your near and dear, your old friends come to mind’ (aged 67, has been resident of Haparanda for all their life); ‘There lie our deceased heroes and relatives’ (aged 70, has lived in Haparanda for 50 years). The cemetery is a typical example of heterotopia in Michel Foucault’s classification, based on two major principles: juxtaposition in a single real place of several spaces and a system of opening and closing ‘that both isolates spaces and makes them penetrable’ (Foucault 2006 [1986]: 196). Judging by the respondents’ answers, the cemetery was able to accumulate memories, combining the past and the present.

The senior citizens experienced past-related sorrow towards the city of their childhood and youth, which they recall so clearly. Both Swedish and Finnish respondents called it ‘the old city’. However, this sorrow towards the old
city was intertwined with positive emotions: the Old Tornio evoked feelings of interest (50%), pride (17%), ease (16%), and sorrow (17%) in the respondents; the Old Haparanda evoked feelings of pride (67%) and sorrow (33%). The old city was a place of mixed emotions.

The study revealed a large proportion of pride—67% among Swedish respondents. They took great pride in the history of their city and its historic buildings. Most of the historic buildings are situated on the Central Square, which was identified as a place of strong emotional attachment—the square was mentioned by seventeen respondents: ‘The square with its rich history’ (aged 82, has been resident of Haparanda for all their life, expressed emotions: interest and pride). The respondents described such emotions as interest (53%), pride (29%), ease, joy, and sorrow (6% each). Sorrow was explained by the neglect of the place: ‘The square is very often littered’ (aged 90, has lived in Haparanda for 60 years).

Among other historic buildings, Swedish respondents particularly mentioned the Ancient City Hotel built in the 19th century: ‘The city hotel, the square, the beach, where everything old and beautiful was preserved. The river terminal’ (aged 70, has lived in Haparanda for 60 years, expressed emotion: pride); ‘The city hotel is in many ways a solid, beautiful place’ (aged 76, has lived in Haparanda for 40 years, expressed emotion: pride). The city hotel was mentioned in 61% of the responses in connection with the emotion of pride, 31% in connection with joy, and 8% in connection with interest.

Historical buildings as places of very intense positive emotions are the key to the emotional health of senior citizens.

The respondents were proud of the preserved historical buildings and places because their appearance created a unique city feel and satisfied aesthetic needs of the people. Preserving the historical architectural environment of the city could help to fill emptiness and reduce sorrow among older citizens: ‘renovation of old valuable buildings is needed’ (aged 72, has lived in Tornio for more than 30 years, expressed emotion: sorrow). Standard high-rise buildings, impersonal forms, identical designs caused boredom and despondency: ‘the Square with SveFi and the town hall is good. Renovate all of the old buildings and stop popping up boring ‘boxes’ everywhere!’ (aged 62, lives in Seskarö, expressed emotions: interest, ease).

Therefore, for senior citizens, sorrow was mainly associated with places that caused nostalgia for the past, keeping memories of other people once living in the city, and preserving the city architectural history.

Senior Finnish respondents often associated positive emotions with Physical Activity on the outskirts of the city and in the countryside: ‘moving around’ (aged 76, has lived in Tornio for over 35 years, expressed emotion: joy); ‘Picking berries in Haparanda forests and marshes’ (80, has lived in Tornio for 40 years, expressed emotion: ease); ‘nature trail, orienteering in the forest, skiing/fitness’ (aged 70, has lived in Tornio for 50 years, expressed emotion: ease). The respondents preferred to move around the city and in the countryside on foot. We found that for them movement was not just getting from one location to another, but a meaningful experience, something that they were happy to leave the house for. Travelling in a car or any other vehicle usually blurs perception of the environment: ‘many urban dwellers switch into absent-mindedness when travelling through complex urban landscapes’ (Latham, McCormack, McNamara and McNeill 2009: 11). The respondents of this study derived pleasure and positive emotions from the movement process itself, so walking was much more preferable to driving as it offered them...
a deeper merging with the environment and a more profound experience of the emotional landscape. The very process of movement, of being physically active, brought pleasure and positive emotions.

The places of physical activity mentioned included, for instance, places of outdoor activities, such as ‘The Beach’, which was associated with the following emotions: 50% of interest, 25% of joy, 17% of ease, and 8% of pride among the Swedish respondents, and 43% of interest, 43% of ease and 14% of joy among the Finnish respondents.

The emotions of joy, interest, and ease were evoked not only by, or rather, not so much by specific places, but the roads and the pathways that connected these places into a single urban environment. The Swedish respondents mentioned ‘The River Bank’, which evoked joy in 30%, and ease in 20% of cases. Simple walking along the street in the city was associated with positive emotions and aesthetic pleasure: ‘pedestrian routes in the city (flowers, nature, animals)’ (aged 68, has lived in Tornio for 55 years, expressed emotions: joy, ease). In order to maintain this positive emotional perception, pedestrian roads must possess such qualities as familiarity, convenience, and safety.

Accordingly, anything that prevented free movement and quality physical activity caused negative emotions. First, these were Poor Road Conditions (67% of shame and 33% of sorrow among the Swedish respondents; 67% of anxiety and 33% of disgust among the Finnish respondents): ‘The streets of Haparanda are overgrown with high weeds in summer, and in winter time it is extremely dangerous to run errands on foot. The roads are neglected, and the urban planners do not think about pedestrians, everything is planned for motor vehicles’ (older than 62, lives in Seskarö, expressed emotion: shame); ‘Poorly maintained streets in the city center’ (aged 65, has lived in Haparanda for more than 30 years, expressed emotion: shame).

Thus, the cultivation of nature trails, the creation of ‘health trails’, safe pedestrian routes, good street maintenance and adequate road conditions are the key to creating age-friendly urban environments and emotional well-being for senior citizens. ‘Feeling secure in one’s living environment strongly affects people’s willingness to move about in the local community, which in turn affects their independence, physical health, social integration, and emotional well-being’ (Global age-friendly cities: a guide 2007: 15).

In addition to physical activity, the senior citizens of Haparanda and Tornio laid great emphasis on their intellectual and social activity: ‘art exhibitions; paintings bring joy, and music halls, and the theatre in general’ (aged 68, has lived in Tornio for 55 years, expressed emotion: joy). Public Places for socializing were yet another type of social and intellectual activity: ‘Places, where you meet other people, different meeting venues. For example, when we are celebrating the New Year on the border’ (aged 70, has lived in Haparanda for more than 60 years, expressed emotion: interest); ‘Nature, when you are taking a walk, meeting your acquaintances’ (aged 75, has lived in Haparanda for more than 40 years, expressed emotion: ease).

In Tornio, a number of respondents mentioned the Local Museum as a place of intellectual and social activity, with 60% of the responses associating it with the emotion of interest, 32% with the emotion of joy, and 10% with ease and pride each. The museum was a place of strong emotional perception not only for the senior citizens, but also for other age groups.

In Haparanda, an example of a place of intellectual and social activity was the Adult Learning Center, where senior citizens engaged themselves in different kinds of handiwork, like sewing, knitting, and weaving. The respondents
experienced joy and ease in relation to this place in 75% and 25% of cases, respectively.

Senior citizens in this study also expressed the need for peace and comfort, and these feelings were often associated with *Solitary (Non-Public) Places*. Understandably, *One’s Own Home* was primarily associated with the emotions of ease and comfort: ‘my house, my own plot of land with my cottage on it’ (aged 70, has lived in Haparanda for 38 years, expressed emotion: *ease*). The response ‘my home’ was associated with ease and joy in 75% and 25% of cases by the Swedish respondents, and joy and interest in 67% and 33% by the Finnish respondents.

Places of ease in public urban environments are very important in today’s world, given the changing appearance of the city, accelerated flow of life, congested traffic in the streets, overabundance of information and other stress factors. The urban environments of Haparanda and Tornio are inextricably linked and intertwined with the natural environment. The Finnish respondents unanimously nominated *Nature Trails* as a source of ease (100% of responses), and the forest as a source of ease (80% of the responses) and joy (20% of the responses).

The proximity and access to natural environments did not only shape the feeling of ease among the senior citizens, but also made them experience philosophical and existential feelings: ‘Water makes me think about the beauty of our world’ (aged 70, lives in Haparanda for more than 60 years, expressed emotion: *interest*).

Haparanda and Tornio are located on the banks of the Tornio River serving as a natural boundary and a constitutive element of the emotional landscape. Among the Finnish respondents, the *River* was not only a place of ease (32% of responses), but also a place associated with interest (15%), joy, and pride (31% each): ‘the biggest amount of salmon hatchlings in Europe’ (aged 74, has lived in Tornio for 20 years, expressed emotion: *pride*). The natural water environment was found to be one of the emotional nodes, forming a strong positive perception of urban environments in senior citizens.

Another example of places of ease in Tornio was an *Indoor Swimming Pool*, associated with ease (50% of the responses), joy (25%), and interest (25%) among senior citizens. Despite a large number of people around, a person is at a sufficient distance from other people in the swimming lane. People can concentrate on listening to their emotions. This is an interesting phenomenon when senior citizens feel at ease in a public place as if they were in a solitary (non-public) place.

The places of religious experiences such as the *Church* were, in my opinion, another example of a place of ease. For the Swedish respondents, it was associated with the emotion of ease: ‘The church with its tranquility’ (aged 70, has lived in Haparanda for more than 60 years, expressed emotion: *ease*); ‘The church. It is safe. A place of peace and quiet’ (aged 68, has lived in Haparanda for 50 years, expressed emotion: *ease*). In Haparanda, the church was associated with ease (31%), pride and sorrow (23% each), joy (15%), and interest (8%).

The churches in Tornio were more often associated with the emotion of interest, rather than the emotion of ease: 62.5% for interest, 18.5% for pride, 6% for ease, joy, and anxiety each. Here are some commentaries from our respondents in relation to Tornio churches: ‘because this is where you baptize the newborns and bury the deceased’ (aged 68, has lived in Tornio for 55 years, expressed emotion: *joy*); ‘the fires’ (aged 65, has lived in Tornio for 40 years, expressed emotion: *anxiety*).
Hence, places of ease are mostly solitary places in the public urban environment, acting as resting places for body and soul. Maintenance and support of such places lead to reduction of anxiety levels among the citizens and contribute to creating a more adaptable and age-friendly environment. On the other hand, working with natural environments in order to combine the urban and the natural into one space can also be a prerequisite for harmonious development of the city: ‘The key point here is that planning and designing cities is a process involving the production and reproduction of particular kinds of imaginative geographies about the relation between nature and city’ (Latham, McCormack, McNamara and McNeill 2009: 57).

COLOR AND BOUNDARIES OF THE EMOTIONAL URBAN ENVIRONMENT

I found that in small urban communities, like Haparanda and Tornio, the emotional space of the citizens reached out far beyond the physical boundaries of the city: ‘For me, the city is the whole municipality, Korpikylä, Kukkola, Seskarö’ (aged 60, has lived in Haparanda for more than 30 years, question about the emotions associated with the whole city).

In our case, the emotional space of the studied cities was not the sum of specific places. The emotional space included the city’s close vicinity, the bridges, the nearby forest, places for picking berries, the creeks, the sea, the islands, and even the archipelago as a whole: ‘The river flowing into the sea. I love the sea and the islands of our archipelago’ (Swedish, aged 60). Therefore, the contours of the emotional space were blurred and could arbitrarily include an area dozens of kilometers beyond the physical boundary of the cities. This was typical for the emotional perception of the native citizens or those who had lived in the city for many years.

The Border between Haparanda and Tornio was found to be a prominent place of the emotional environment for senior citizens. For the Swedish respondents, the border between the two cities was a place of positive emotions, as it was mentioned nine times (interest 50%, joy and pride 17%, ease 16%), and for the Finnish respondents, it was a place of mixed emotions with seven mentions (anxiety 43%, sorrow 29%, interest and shame 14%). For example: ‘The border, good collaboration with Tornio’ (aged 65, lived in Tornio for more than 30 years, expressed emotion: pride), ‘the city without borders’ (aged 80, has lived in Tornio for more than 40 years, expressed emotion: interest).

The Shopping Mall on the Finnish side of the border was associated with interest in 80% and anxiety in 30% of the responses, while the Shopping Mall on the Swedish side was associated with interest in 43%, and joy and pride in 28.5% of the responses. The Finnish respondents did not specify why this place was associated with anxiety. At that, the respondents mentioned these shopping malls as their favorite places in the neighboring city.

The place that ruined the overall positive emotional environments of the two cities was the Foundation Pit remaining after an unfinished construction project, that evoked extremely negative emotions in the Swedish respondents: shame (44%), sorrow (24%) anxiety and disgust (16% each): ‘The pit between Haparanda and Tornio. A failure project from the beginning till the end. The nature was destroyed’ (aged 81, has lived in Haparanda for more than 55 years, expressed emotion: shame); ‘The pit that destroys the beautiful border with Tornio’ (aged 68, has lived in Haparanda for 50 years, expressed emotion: sorrow).
The presence of negative emotions towards the urban environments is natural. In some cases, places charged with negative emotions may even play a positive role of a ‘scapegoat’: when all negative emotions are concentrated around a certain place, the remaining urban environment is perceived by the citizens as positive or neutral, despite the obvious social, economic, city planning, and other problems. Earlier I came across this phenomenon in the city of Velsk, Arkhangelsk Region, Russia, where there was an abandoned boiler house situated not far from one of the Velsk schools. I defined such places as ‘sacrificial heterotopias’ (Zhigaltsova 2016). The schoolchildren in Nikel, Murmansk Region, were also emotionally indifferent towards a large number of abandoned houses standing along the central streets (Zhigaltsova 2018). Ignoring abandoned, dilapidated buildings, the debris and the rubbish is a mechanism for protecting one’s emotional health, when individuals realize that they cannot exert any influence upon the urban environment. It would seem that the foundation pit on the border between the cities fits the description of a ‘sacrificial heterotopia’, but it was not the case. Based on the respondents’ answers, they had not come to terms with the presence of this pit, and they had not ‘sacrificed’ this place for the sake of their emotional well-being. The citizens themselves made suggestions for the area improvement, for example, turning the pit into a beautiful green spot. It might be because the border is the face of the cities, the façade by which tourists and visitors make judgments about them.

Thus, if we consider the entire situation, the objects located on the border were places of mixed emotions for senior citizens. This is evidenced by the created interactive maps of places of positive and negative emotions (See Fig. 1–2).

In comparing these two interactive emotion maps, one can see how densely they are filled with emotionally charged places.

One of the achievements of this study was the possibility to visualize the number of place mentions with the use of rotating charts. The speed of chart rotation shows a high, medium, or low number of mentions of a certain place. That is, one can visually see not only the colors of the emotional tapestry, but also its emotional nodes. If a certain place received a minimum number of mentions (three to ten times), then the chart rotates slowly; if over 15 respondents mentioned it, the chart has a high rotation speed. The diagrams are also supplemented with photographs of places and the proportion of emotion distribution (See Fig. 3).

Using the map, one can analyze the age distribution of respondents mentioning the same place, as shown in Fig. 3.
Figure 1. Interactive emotion map of Haparanda, based on the questionnaire distributed among the senior citizens of the city (2020). Author: Tatiana Zhigaltsova, consultant: Kenneth Mikko, design: Sergey Zhigaltsov, translation: Anna Kondakova. Source: Emotional Geography of the Northern Cities and Settlements website.
Figure 2. Interactive emotion map of Tornio, based on the questionnaire distributed among the senior citizens of the city (2020). Author: Tatiana Zhigaltsova, consultant: Kenneth Mikko, design: Sergey Zhigaltsov, translation: Anna Kondakova. Source: Emotional Geography of the Northern Cities and Settlements website
Figure 3. The pit, a place of negative emotions for the senior citizens of Haparanda, 2020. Project author: Tatiana Zhigaltsova, photo: Kenneth Mikko, design: Sergey Zhigaltsov. Source: Emotional Geography of the Northern Cities and Settlements website
DISCUSSION

In this study, I looked into the emotional perception of small cities (Haparanda and Tornio) by senior citizens. The analysis of the questionnaires showed that for senior citizens, places connected with the memories of the past, places of physical, social, and intellectual activity, places of solitude, and some objects at the border between the two cities were charged with positive, negative, or mixed emotions. At that, one and the same locality in the city could be charged with mixed emotions (for example, the churches, the city bay, the shopping mall on the border between the two cities, and others).

Another interesting finding of this study was that the emotional environment of these two small cities was not limited to the physical city boundaries but stretched out far beyond the borders. The periphery of small urban environments evoke positive emotions such as comfort in their residents, unlike large cities, in which the outskirts and the periphery, on the contrary, are perceived as a source of danger (Radina 2012). The natural environment of small towns is woven into the daily life and emotions of citizens, since the area is less densely populated and the natural environment is more accessible. Besides, the Northern environment with its special light (long days in summer, and polar night in winter) and nature escapes often has special meaning for those who experience it.

In the emotional perception of the respondents, the whole was stronger than its particulars, that is, the emotional associations regarding the whole city were stronger than emotions towards specific places inside the city. Even if the respondents demonstrated negative emotions towards certain locations in the city, their perception of the city as a whole was positive.

Returning to the tapestry metaphor to describe the emotional urban environment, it is possible to conclude that the Swedish tapestry was colored with positive ‘green’ and ‘blue’ emotions, mostly joy, interest and pride, with minor inclusions of shame and sorrow. The only serious bald patch in this tapestry is the foundation pit at the very edge, but it does not affect the general positive perception of the urban environment.

The Finnish tapestry was also colored with positive ‘green’ and ‘blue’ emotions, with a greater predominance of ease and sorrow in some spots. Comparing emotional tapestries of Haparanda and Tornio, one can assume that the Finnish tapestry was thinner, because there were places of anxiety marked in red. While places of positive emotions, like knots in a canvas, firmly hold the emotional environment together, negatively colored places loosen it. In further research, it might be useful to obtain personal stories and conduct in-depth interviews to reveal the depth of the respondents’ attachment to their place of residence and answer the question: Is the emotional tapestry of this place strong or worn-out?

A. Terje (2021) studied identity and the connection of individuals with their place of residence in a small island settlement and found ‘a deep sense of belonging to Västö, rooted in history and traditions, and expressed in everyday interactions’ (Terje 2021: 5). It is the recollections of the past, rich history, and traditions that form this connection: ‘Examining the relationship islanders today have with this past history reveals the significance of traditions, rituals, and the shared vocabulary of the island that their sense of identification and belonging is rooted in’ (Terje 2021: 23). Additional research might expand the understanding of the emotional attachment
of senior citizens to their urban environments by comparing present day emotions with those of the past that were relevant in their youth. Every social, age, or other group is a carrier of emotional memory, since a local community or group is a sum total of individuals connected by common practices. It is a task for future research to include the context of historical memory of the age group of senior citizens and compare it to the present day emotional perceptions, since ‘memories are not only retrievals from the past; they are always new creations of the past in the present’ (Korjonen–Kuusipuro and Meriläinen-Hyvärinen 2016: 28).

This study did not take into consideration gender differences in the perceptions of the city due to the small number of analyzed questionnaires. Another limitation of the study might be that the correlation between the respondents’ emotional associations and the season of year or time of day were not looked into, except for the few remarks about insufficient street lighting. The responses about the beach and the river as the sources of positive emotions might imply summer time but I cannot verify or refute this. Therefore, for the sake of further studies, the utilized questionnaire needs to be reworked and elaborated based on the results obtained in the present study.

The study confirmed the hypothesis that for senior citizens, emotional environments of Haparanda and Tornio are mostly colored with positive emotions.

CONCLUDING THOUGHTS

This study was part of an art and science project, and its findings and emotion maps were demonstrated during a photo exhibition ‘Our city’ in ‘Jala Studio’ in Haparanda (February 2021) and in the Rajala shopping center in Tornio (February–March 2021). The executors of the project were Swedish photographer and editor Kenneth Mikko, video artist Sergey Zhigaltsov, and translators Pia Suonvieri and Anna Kondakova. The photo exhibition was funded by the Municipalities of Haparanda and Tornio.

The study revealed that in the urban environments of the two cities, Haparanda (Sweden) and Tornio (Finland), there prevailed places marked with positive emotions: interest, joy, ease, and pride.

The results of the study provide an understanding of the necessary social policies aimed at maintaining emotional well-being not only for senior citizens, but also for other population groups who wish to keep living in the small urban environments in the coming years and keep generational traditions alive, including young people (Zhigaltsova 2021). In order to sustain emotional stability, emotional health, and age-friendly environments for different age groups, the following recommendations can be given:

- creation, cultivation, and maintenance of various nature trails and walking paths in the countryside, outside of the physical city boundaries;
- renovation and recultivation of abandoned places;
- preservation of architectural monuments and architectural history of the cities;
- opening additional activity centers to satisfy people’s needs for creativity;
- Increasing efforts to lower anxiety levels among citizens.

To summarize, this study highlighted the need to see the city not only as an economic, political, social, or cultural environment, but also as an emotional environment. There is a demand for a comprehensive approach to city planning policies, which should serve the basis for shaping age-friendly and adaptable urban...
environments, friendly to all age groups of the population, including senior citizens.

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