2.1 AGE STRUCTURE IN PRAGUE
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HISTORICKÁ DATA V GIS
PROJEKT V RÁMCI APLIKOVANÉHO VÝZKUMU A VÝVOJE NÁRODNÍ A KULTURNÍ IDENTITY
1921 | 1930 | 1946 | 1950 | 1961 | 1970 | 1980 | 1991 | 2001 | 2011

Age structure of the population is one of the key characteristics of an area. Besides demographic structure, it also provides information on social and economic structures and as such, it serves as a basis to analyse the population development. Other area characteristics are closely connected with age distribution (marital status, level of education, economic structure), and so is the importance of demographic processes (death rate, birth rate, migration). In Czechia and in the Euro-American context, demographic aging[1] is a significant feature of the modern development of age structure (Rabušic 1995, Rychtaříková 2002). In some European countries, the beginnings of this phenomenon date back to the early 20th century (Kalibová 1997); in Czechia, it first occurred around the 1950s[2] (Rabušic 1995). The early 21st century is marked by a rapid aging and political discussions about the effects of low birth rate and growing life expectancy on economy. Besides the demographic and migration behaviour of our population (see also map sheet section B 3.2 Migration in Prague 2000–2013), foreign migration is also important for the development of age structure of Czechia and Prague, even though its importance during the Communist rule was limited. However, since 1989 immigration has been increasing again and nowadays, foreigners represent a high share of the economically active population (Drbohlav et al. 2010), whereby their highest concentration is in Prague (Čermák, Janská 2011).

The purpose of this thematic map is to assess the evolution of spatial differentiation of Prague's population age structure in 1930–2011. This is achieved through cartograms, representing a typology of Prague cadastral territories (or more precisely urbanistic districts in 2011 [hereinafter "UDs"]) based on the share of four main age groups (0–14, 15–44, 45–64, 65 and more), as compared to their share in Prague as a whole. The typology is based on two levels. The first (basic) one divides the cadastral territories into 14 types based on different combinations of below-average and above-average shares (shares lower or higher than those in Prague as a whole) of four main age groups. For example, cadastral territories / UDs marked "higher share of the elderly" have a higher share of people aged 65 and more than it is the case for Prague as a whole, and a lower share of all other age groups. The second (main) level of typology combines two basic types (first level types) into one superordinate type. Seven types created in this way describe cadastral territories / UDs based on the age of the population. Proportional symbols then compare the age structure in individual years (i. e. not with regard to the age structure of Prague).

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[1] Increasing number and share of older people in the population.
[2] In the 1950s, the share of people aged 60 and more exceeded 8% (Rabušic 1995). Between 1970 and 1990, the aging phenomenon was offset by the 1970s baby boom and a decline in neonatal and infant mortality (Rabušic 1995).

The age limits defining the individual groups were determined taking into account the availability of data in the particular census years. The elderly population is defined as people aged 65 years and over (Rychtaříková 2002), even though a 60-year limit sometimes occurs as well, mainly in older studies (Boháč 1921). There are different limits used for the differentiation of young and older adults based on the purposes of the study; however, usually the limit is 45 or 50 years. All data comes from censuses. In 1930, the results refer to actual population, in 1980–2001 to resident population and in 2011 to usually resident population. All analyses are only based on the amount of people who stated their age in the census form. However, the share of those who didn't state it never exceeded 0.5%.
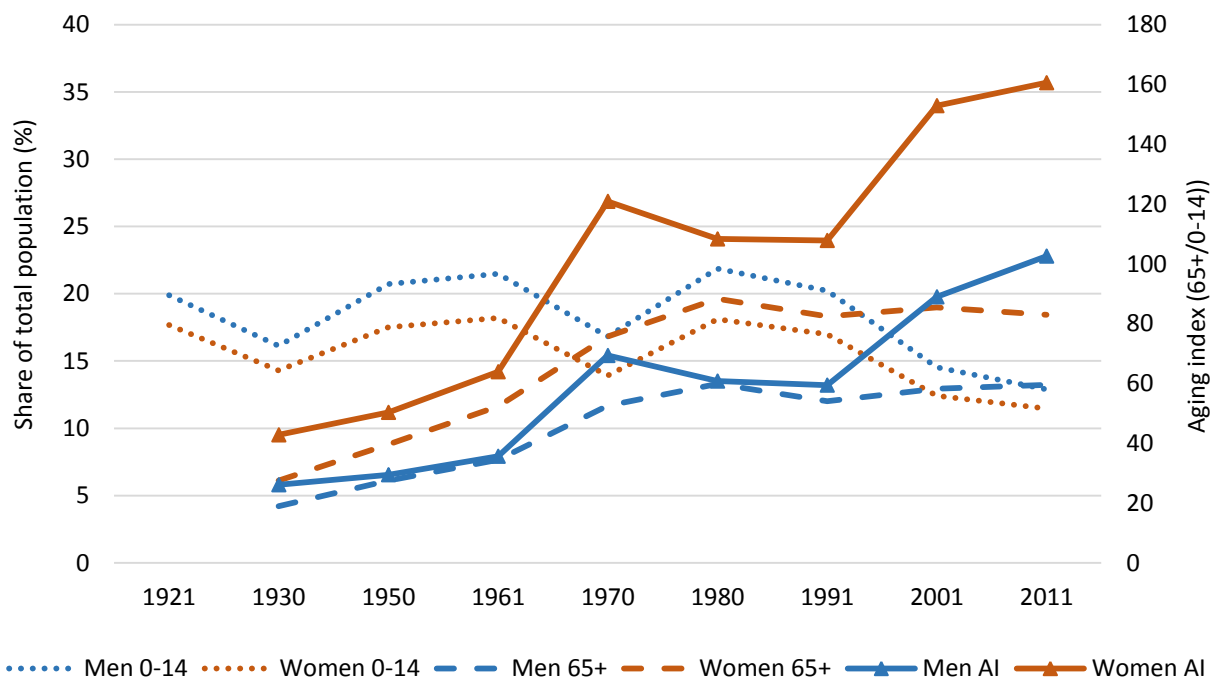

Figure 2.1.1: *The evolution of the age structure and aging index in Prague in 1920–2011*
Source: *Boháč, 1923; SÚS, 1934, 1958; Vitouš et al. 1963; ČSÚ, 1970, 1980, 1991, 2001, 2011*

Note: AI = Aging Index. In 1921, the data for the elderly is only available for those aged 60+, and therefore it is not included in the graph. In 1950, also people who didn't state their age are part of the 65+ category.

Like the rest of Czechia (see map sheet section A 2.1 Age structure in Czechia), Prague population has grown older in the 20th and 21st centuries. The share of people aged 65 and more increased from 5% in 1930 to 16% in 2011. The share of the elderly increased in all decades with the exception of 1980–1991 (see Figure 2.1.1), when the less numerous generation born during the First World War entered the old age and the impact of the 1970s pro-population measures fully manifested itself. In the 1980s, the evolution of the age structure was influenced by people moving to the new housing estates from outside of Prague (see also map sheet section B 3.1. Historical aspects of migration in Prague). The slight drop in the share of the elderly between 2001 and 2011

was only caused by the change in the data collection methods (permanently resident versus usually resident population). The evolution of the share of children in the Prague population is not so straightforward, since it is based on the evolution of the birth rate, which was fluctuating during the 20th century. The general trend marked by a drop in natality, initiated during the demographic transition, was disturbed on several occasions during the 20th century: (1) two postwar compensatory waves of births; (2) increased natality during the Protectorate of Bohemia and Moravia, which is attributed to the numerous generation born after the First World War entering the fertile period, a low number of men leaving for war and the attempts to avoid forced labour; and (3) increased natality in the 1970s, again related to the numerous postwar generation entering the fertile period and the pro-population measures of the communist government.

1930				1980				2011			
Cadastral territories	0–14	Cadastral territories	65 and more	Cadastral territories	0–14	Cadastral territories	65 and more	Cadastral territories	0–14	Cadastral territories	65 and more
Jinonice	26.2	Krč	16.7	Háje	34.8	Nusle	24.3	Lipany	26.4	Malešice	26.3
Hloubětín	24.0	Josefov	7.8	Bohnice	32.5	Vyšehrad	24.0	Kolovraty	22.5	Vokovice	25.3
Malešice	23.5	Malá Strana	7.3	Troja	32.3	Hrdlořezy	23.5	Miškovice	22.0	Zadní Kopanina	25.3
Hrdlořezy	23.4	Střížkov	7.3	Chodov	31.7	Holyně	23.4	Hájek	20.6	Veleslavín	25.2
Prosek	23.2	Staré Město	6.9	Čimice	30.7	Jinonice	23.2	Pitkovice	20.3	Braník	24.6
Hostivař	22.8	Vyšehrad	6.8	Letňany	30.7	Holešovice	23.1	Třebora-dice	19.8	Střížkov	24.3
Radlice	22.6	Nové Město	6.6	Lhotka	29.7	Vysočany	22.6	Nebušice	19.7	Kobylisy	24.3
Vokovice	22.4	Smíchov	6.4	Hostivař	28.4	Žižkov	22.4	Újezd	19.3	Záběhlice	24.1
Hodko-vičky	22.1	Vinohrady	6.3	Prosek	28.1	Libeň	22.3	Ďáblice	18.8	Krč	23.1
Střížkov	22.0	Troja	6.2	Střížkov	27.0	Vinohrady	22.1	Křeslice	18.6	Strašnice	21.8
Prague	**15.2**	**Prague**	**5.2**	**Prague**	**19.9**	**Prague**	**16.7**	**Prague**	**12.2**	**Prague**	**16.0**

Table 2.1.1: *Cadastral territories with the greatest share of children and people aged 65 and more*
Source: *SÚS, 1934; ČSÚ, 1980, 2011*

In terms of age structure of the population, the Prague area is differentiated. The increase in the share of children directed from the city centre towards its outskirts was described already by Antonín Boháč (1923) and Julie Moschelesová (1937) and can be observed both in the socialist and modern Prague. This phenomenon is related to the gradual concentric building up of the Prague area and its surroundings, taking place from the beginning. The positive net migration in the new neighbourhoods positively correlates with the natural increase rate (Ouředníček 2012), both resulting in a young age structure of the population. According to Boháč (1923), the age structure in Prague in the interwar period was also marked by the influence of the working-class and rural character of the individual municipalities. The greatest share of children could be

observed in the developing neighbourhoods on the outskirts of Greater Prague, such as Jinonice, Hloubětín, Malešice or Hostivař (see Table 2.1.1). On the other hand, the age structure of the central city neighbourhoods, which were slowly losing people, was rather old. Whereas Moschelesová (1937) suggested that the number of children correlated with the number of young people in the population, this assumption was later disproved by Musil (1960). He recorded a high number of young people not only on the outskirts of Prague, but also in the central neighbourhoods; however, these were young childless people with a different life style (Musil 1960).

During the socialist era, the area with an older age structure was gradually spreading from the centre towards the outskirts, and the formerly young neighbourhoods, such as Jinonice, Košíře, Dejvice and Žižkov, were getting older. Neighbourhoods that were above the average only in terms of the number of children almost disappeared; the newly built housing estates were marked by a young age structure with a high share of not only children, but mainly also young people – their parents (aged mostly 20–34, see Musil 1985). Other age groups were represented minimally. An uneven age structure is typical for housing estates with a lower migration rate to this day. In the map showing the age structure of Prague cadastral territories in 1980, a significant impact of the construction of Severní město and Jižní město in the 1970s and 1980s can be observed. The post-1989 development was mainly shaped by the construction of new housing estates as a part of the suburbanization process (Ouředníček 2003), thanks to which peripheral neighbourhoods with family houses (such as Kolovraty, Lipany or Miškovice) became younger. Nowadays, the cadastral territories of Prague 4 and Prague 10 have the oldest age structure. Also Střížkov or Kobylisy have a great share of the elderly. On the other hand, even though the share of the elderly in the population of the central parts of Prague is still significant, they cannot be described as older thanks to their attractiveness for migrants and the inflow of young people (including foreigners). The detailed UD map shows the differentiated development within cadastral territories, which can be attributed to the (un)attractiveness of the particular locations.

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