

Aleksander JAKOŠ

The demographic threshold

1. Introduction

The number of inhabitants in Slovenia was increasing from the first population census in 1867, when there were 1.1 million inhabitants living on what is today Slovenian territory, until 1991 when the population count neared 2 million. The characteristic feature of Slovenian demography until the late sixties was that more inhabitants immigrated than emigrated. The birth rate was however large enough to maintain a steady growth of population. In 1980 the birth rate began to drop and still hasn't stopped, while the positive migration count, typical for at least thirty years, also began to diminish. Following 1991 the migration count wavered from slightly positive to negative, with an incessant drop in birth rate. Since 1997 Slovenia is experiencing a negative natural growth, in 2001 there were 17.474 births and 18.508 deaths. The total number of inhabitants of Slovenia has started to diminish.

Such lowering of the total number of inhabitants and above all, alarming figures concerning the incessantly smaller number of births, have pushed demographic issues to the forefront of interest of professional and other publics. In such circumstances Slovenia is not alone, since practically all the European countries (and a major part of the developed World) are experiencing the same problem.

After the Second World War the birth rate in Europe grew then consistently began to drop, thus increasing numbers of countries started to experience negative natural population growth. Constant and strong immigration to more developed countries masked the issue for quite some time, but with its cessation (limitations by immigration countries), demographic issues stepped forward. The population figures started to drop. This process is inadequately coined »ageing population«, which has a very negative connotation. Even in Slovenia we uncritically accepted this term and are presenting it as a major problem, although in fact, it is a positive process.

2. The ageing population

The word ageing implies consistent growth of the elderly inhabitants, who on average reach a much higher age. This is great, beautiful, good and not a bad course of events. We can only hope that ageing will continue, aided by developments in medicine and also increasing care by individuals for their health. What is worrying is that some medications or care for the elderly population is »too expensive« (which is officially never spoken out loudly). Amongst other it is slightly clumsy that the ageing process has such a bad aftertaste, since it is a sign of true human progress.

In 1931 life expectancy at birth in Slovenia was more than 50 years and more than 54 for women. Until 1959 life expectancy grew to almost 66 years for men and almost 71 years for women. Forty years later, in 1999, life expectancy for men at birth was more than 72 years for men and al-

most 79 years for women, thus there are increasingly more elderly inhabitants around, they are living longer.

Economics and politics (money) see the number of elderly (retired people) as a problem because of the ration employed / retired. In 1931, 19,1 % of Slovenian inhabitants was 50 years old or older. Until 2002 their share grew to 32,8 % and in 2010 it will significantly exceed 35 %. The share of inhabitants older than 65 years doubled from 7,3 % in 1931 to 14,7 % in 2002 and is expected to exceed 15 % by 2010. Longevity is therefore a very positive process, from the population's point of view, but from the economic point of view is a problem, because of the growing share of supported population. However this is not a reason to claim that ageing is bad!

3. Demographic threshold

When we state that ageing is bad, it means that there are consistently less young inhabitants and that is why the share of elderly inhabitants is growing. Therefore the problem is the lack of younger inhabitants and not the number of the elderly. However this is a new problem in all developed societies. Inadequacy of the term itself, i.e. ageing population, is that we are in fact trying to convey the problem of less births, rather than the problem of later deaths (at least I hope, since Abraham and I have already met).

This is why the better term would be population or demographic threshold (the term demographic threshold is partially already in use in Slovenia).

The condition when in one year the number of deaths equals the number of births is called DEMOGRAPHIC THRESHOLD.

It conveys a certain age and gender structure of the population and certain birth- and death rate coefficients, whereby the number of births and deaths is equal. The problem ensues when the number of deaths exceeds the number of births and the population of a given area finds itself below the demographic threshold. The demographic issues in Slovenia are increasingly alarming, not because of ageing, but because Slovenia is already below the demographic threshold.

I am aware that the wider public (in Slovenia) would prefer to use the original expression, i.e. demographic threshold, it sounds more impressive, but it means the same thing as population threshold in Slovenian. Therefore I am proposing the use of the Slovenian expression in Slovenia and the generally used one in English elsewhere.

4. Slovenia and the demographic threshold

Slovenia has been below the demographic threshold since 1997. The present demographic image of Slovenia is clearly seen in the age pyramid for the year 2000. (*turn to page 61*)

The age pyramid is only one of the graphic methods of presenting the population structure by age and gender. On the left side are population counts of men of defined ages and on the right side are women. The age pyramid therefore

shows the age-gender structure of the population of a given area at a precisely determined date. The age pyramid (the word pyramid says everything already) should be widest at the bottom, where the youngest age groups are. Because the death rate at younger ages is very low the pyramid should taper upwards very slowly and gain in speed at higher ages. Such an age pyramid would describe a population with constant high birth rates (at least a surplus of births over deaths), without oscillations in the death rate and above all, without significant immigration from other areas.

Concerning the Slovenian age pyramid in year 2000, the first observation is, that it doesn't have the shape of a pyramid. The base is too narrow (lower number of births), while the middle is too wide (a large population of middle aged and elderly people). The age pyramid of Slovenia is predicting continuing diminishment of the population. Rather than depicting a pyramid, its shape resembles an urn.

From the age pyramid we can discern all the major demographic events from the past and simultaneously, even without true demographic projections, assess the characteristics of future demographic development. In the middle we stated particular ages of the population in Slovenia, on the right are the year of birth of groups shown in the pyramid, the number of births and deaths for the given year and the natural increase (difference between the number of births and deaths in the given year).

The shape of the age pyramid resembles an urn rather than a pyramid, mainly because of its narrow base. This is a consequence of decreasing numbers of births in the last 20 years. The last time the number of births per year was higher than 30.000 was in 1979. Since then, and still is, it has been constantly falling. Between 1980-1990 Slovenia still had a positive migration count, which was however significantly lower than between 1970-1980. In 1980, 29.902 children were born in Slovenia. In year 2000 these children were 20 years old (some of them of course died), while the total number of inhabitants aged 20 was 30.114. We can notice, that this population group increased by more than 200 individuals because of immigration. Since 1991 the Slovenian population relies almost solely on natural growth.

Just from the data presented by the age pyramid we can conclude, that the number of births will continue to diminish. Since population growth in Slovenia after the Second World War and until 1980 was fairly constant (constant higher growth because of relatively high natural growth and immigration) we didn't focus enough attention to certain specific demographic indicators, which already pointed out a lower birth rate. Total child-bearing, i.e. average number of live children born to a single woman in her whole child-bearing period (15-49) in a calendar year, began to drop fairly rapidly and is still hasn't stopped (also seen by the annual number of births). Even if the fall of total childbearing stops or even begins to grow again, the number of births in Slovenia will still keep diminishing. The reason is more than simple. Childbearing is highest in the 20-30 year age group of women (in 1990 the average age of mothers at childbirth was 26,5 and 28 in 2000), who give birth to 70 % of all children. In year 2000 there were 94.339 ten-year old girls, 127.787 women aged ten to twenty and 143.637 aged 20 to 30. Amongst the almost 144.000 women aged 20 to 30 in year 2000 there were 18.000 births, how many will there be in 10 years, when this age group will number only 94.000 women, we can only guess. Probably less than to-

day, since there will be almost 50.000 less women in this age group than today. The difference cannot be compensated by any quantity of immigration or even by increased child bearing. Therefore in Slovenia it is essential to stop the decrease in total child bearing immediately and that the continuing diminishment of births would continue only because of the diminishing number of already born women. When the number of women at a childbearing age would stabilise (in twenty or more years) the drop in child births in Slovenia could also stop. Because the number of elderly inhabitants is at present much higher, than the number of young inhabitants, Slovenia will have a negative natural growth for a long time and the population will decrease. By stopping the fall of total childbearing, the Slovenian demographic image could improve and ensure (at least) renewal of own population (so called »0« growth), however with a much lower total population number, than today.

Differences in population numbers by particular ages between 20 and 59 aren't very pronounced. In year 2000 in Slovenia there were 296.475 inhabitants aged 20 to 30 years, 304.474 aged 30 to 40 years and 316.396 aged 40 to 50 years. Amongst these three groups the eldest is actually the most numerous. As a point of interest I have to mention that in year 2000 the age of the most numerous age group was 44 (almost 33.000 people), 15.000 more than one-year old children. There are two reasons for such a numerous age group. Even in Slovenia the number of births after the Second World War boomed (baby boom). The annual number of births between 1949 and 1953 heavily exceeded 33.000 per year. In 1950 almost 36.000 children were born (the most after 1932 and double the number in 2000). Slovenia had the largest positive migration total between 1975 and 1980. That was a time when mainly young people born after the Second World War immigrated. Today's age group of 40 to 50 years represents a combination of highest childbearing and strongest immigration. Because of this age group's size, twenty years ago there were more births and between 1970 and 1980 the number of births in Slovenia actually grew.

The number of births was relatively low even around 1970. Reasons can be found 25 years earlier. Because of the war, the number of births between 1944-1946 was very low. The lowest figure was in 1945, when only 20.000 were born (which is 2000 more, than in year 2000, when Slovenia had a population of 2 million, as compared to 1.4 million in 1945). The consequence was logical. Because there were less births 25 years earlier, the number of women at childbearing age was also lower, therefore the number of births in 1970, couldn't be higher.

The age pyramid for groups aged 55 years old or more (up till 100) has a fairly regular shape. This regularity is slightly bothered by the group aged 80-85, which is smaller than the next one (ages 85-90). The former were born between 1915 and 1920. That was approximately the time of the First World War (1914-1918) and the number of births was lower, than before the war. During the Second World War these individuals were 25 to 30 years old and amongst them were many casualties of war.

The present age-gender population structure of Slovenia is the result of previous demographic events. The difference between the number of men and women is not significant. Only the eldest age groups stand out, where women with a life expectancy of 79 years prevail over men and their 71

years. Although we have at our disposal population figures for 2001, we chose 2000 for easier understanding and even summarised most important demographic events to ten and five year periods.

The age structure of Slovenian inhabitants predicts further decrease of births because of the smaller number of women at childbearing age and increase of elderly inhabitants, because very numerous post-war generations are coming up in age. Because of the increasing number of elderly inhabitants and smaller number of births, the number of deaths will continue to exceed the number of births, making Slovenia a classical example of a country below the demographic threshold.

5. Planning, cities and the demographic threshold

In this article immigration is not the issue, although besides natural growth it can significantly affect changes in population growth. Despite eventual Slovenian access to the European Union and practically unlimited possibilities for movement, I believe that the migration count of Slovenia will remain balanced, i.e. approximately equal immigration and emigration. What is worrying is the higher expected emigration than immigration of better-educated individuals. Immigration shouldn't significantly compensate for negative natural growth even, or above all, because of the aspect of nationality

Slovenia is below the demographic threshold and as pointed out in various population projections (Urban planning institute, Statistical Office etc.) the population count is dropping. Such estimates of population changes have to be met by adaptations to planning. We cannot expect from planners routine calculations of quantities of needs for new kindergartens, schools, employment, roads, housing etc., after they receive written forecasts concerning growth from other experts. It is becoming clear that planning has to be based on qualitative development rather than imaginary growth indexes.

Quality demographic expertise for planning, have to provide a realistic picture of future population numbers and their age-gender structure. In the future we can expect, for quite some time, to have less pre-school children. However the number of kindergartens doesn't depend only on the number of children, but also the share of children included. If we want to have kindergartens at a walking distance, smaller groups of children, larger common playgrounds etc., and above all to raise the standard at all levels, we can easily see the magnitude of the task at hand. The same applies to education institutions, since the share of complete inclusion of certain age groups is moving from primary to secondary schools and even universities. Despite generations applying for universities are already smaller in numbers, the data on numbers of students per professor or numbers of seats in lecture theatres are more than alarming. In the future Slovenia will have to apply increased efforts to near the life standards in the developed West. If we only survey housing for example, our self-consciousness is immediately shattered by the simple fact that the living room in Western countries isn't seen as »one of the rooms«, but a necessary part of any apartment. This means that we can immediately re-categorise our two-room apartments into single-room apartments, three-room apartments into two-room

apartments etc. If we add Western norms for necessary housing needs (surfaces) per occupant, we can state that the housing stock in Slovenia should be doubled. This fact is not just about housing quality, but also housing quantity, since housing provision is still a major existential problem, while many are even hidden. As an example I can mention that in Slovenia there are many »forced« common households with four or more members, where some of the »children« are already nearing their forties.

Slovenia has to provide an adequate standard for its population, not only in the provision of basic goods (sustenance, housing, education, employment etc.), but much more – all that can bring about a new quality of life, which will surpass boring and toilsome survival. When we speak about the elderly population we have to be aware that it will grow in absolute figures. According to the findings of a demographic projection I did for the project Housing needs of retired people and the elderly population, between 2002 and 2010 the number of inhabitants of Slovenia aged 50 or more will increase by 47.000. Here I have to emphasise that this is a very reliable figure, because most of this individuals live in Slovenia and will probably stay here. We are therefore already subject to serious efforts in providing appropriate housing for the elderly and universities for the third age.

Through history cities have often been initiators of development. Today it is not always so. Many cities have already lost their historic mission and are barely surviving (e.g. cities tied to mining, iron and steel industries or other collapsing disciplines) if they haven't started to develop new functions. Cities can maintain their qualities only with newly gained qualities. From the perspective of development city size (number of inhabitants) can be seen as a weakness, since costs of city-building activities often already surpass their profits.

In Slovenia the idea that city growth is tied to population growth is still very alive. The opposite idea is: small is beautiful. However one has to be aware that small is often expensive and large isn't always bad. The population image of Slovenia shows that we cannot expect further growth of city population if we want to achieve goals of balanced sustainable, global or any other contemporary or modern type of development. In Slovenia we cannot speak about only particular demographically endangered local communities, countryside or hilly areas, because the whole country is below the demographic threshold. The same applies to cities.

Slovenian cities experienced faster growth, than other areas, even from the population growth aspect. Because of immigration cities grew very quickly, but the age structure of the population was seriously changed. Immigration implies complementing of younger age groups, but when this population begins to age, the share of the elderly becomes much higher, than in areas with balanced population growth. A typical example of conscious rapid development is Nova Gorica, a town developed to counteract Gorizia on the Italian side of the national border. Rapid development had very positive effects because it stopped the relative emptying of Western Slovenia. In thirty years the number of inhabitants in Nova Gorica quadrupled (from 5.000 in 1948 to 20.000 in 1981). We all spoke about a city of youth, which Nova Gorica in fact was, since most immigrants were in the 20–30 age group. Once development stopped, the very numerous new immigrant populations began to age and the demographic image became rather sad. In the early eighties the number of births in Nova Gorica began to

drop significantly and today the town is an old town, significantly below the demographic threshold. Nova Gorica is much more threatened than any other officially declared demographically threatened zone.

Most Slovenian cities are below the demographic threshold, which in view of their size (absolute number of inhabitants) doesn't necessarily imply a developmental obstacle when compared to less densely populated demographically threatened areas. Cities will have to pay more attention to qualitative development, but also become aware that they have, or will have very soon, a significant share of elderly population. Immigrants who came to cities after the Second World War in masses and participated in their development have aged. In particular periods the number of elderly inhabitants is very high, especially in those areas, which flourished in relatively short time periods. The share of elderly population in cities is still higher because of the loss of younger age groups moving to the city suburbs where life is cheaper and the environment generally much more pleasant. In some cities the wealthiest groups are moving back to the cities, to the most attractive neighbourhoods, a phenomenon, which is beneficial from the aspect of city development, but demographically speaking so far doesn't mean anything. In Slovenia cities, villages, countryside and hills are below the demographic threshold, i.e. the entire country. The demand put before us is to devise such demographic policies, which will stop the diminishing number of births, and thus a demographic national suicide, but also to adopt new approaches to regional development planning, as well as planning the development of cities and the countryside.

Aleksander Jakoš, geographer, Urban planning institute of the Republic of Slovenia
E-mail: aleksander.jakos@urbinstitut.si

For sources and literature turn to page 66.

Illustration:

Picture 1: Age pyramid of Slovenia in 2000

Mojca GOLOBIČ

Martin Prominski: There is too much land!

Martin Prominski teaches studio classes as well as a course in landscape theory at the Department of Landscape Architecture and Environmental Planning at the Technical University of Berlin since 1998. Parallel, he is working on a Ph.D. thesis about »complex landscape making« which will be completed in 2003. He holds a diploma with distinction in landscape planning from TU Berlin and an MLA from Harvard University, sponsored by a scholarship from the German Academic Exchange Service (DAAD). Prior to his teaching position, he worked for Atelier Loidl in Berlin and Hargreaves Associates in Cambridge/MA. In 2002, he established »KP landschaften« together with Friedrich Kuhlmann.

The title of the paper that you presented at the Globalscape conference »Too much land« is a rare statement at least in the European context. What do you refer to?

We are currently experiencing a spatial phenomenon, which is quite irritating for a society that is used to progression and growth: our demand for spatial usage is shrinking – we have too much space! This is, of course, true only for specific regions, but shrinkage is growing. And it concerns cities as well as countryside. In eastern German cities, for example, there are more than one million vacant dwelling units. Thus, the biggest amount of money from the federal ministry of building is now spend for demolishing unnecessary buildings in former East Germany, including prefabricated, 19th century and medieval housing.

In terms of agricultural land, the issue of shrinking is serious on a European level. With the reduction of subsidies after 2006 due to the expansion of the EC, agricultural land with poor soils cannot be cultivated economically anymore and will become fallow. In the case of Germany, about half of all agricultural land might be superfluous.

These problems of shrinking are very hard to tackle for the planning professions. In my own work at the university, we have recently tried to develop alternatives, but it is very difficult when there is no demand or program at all.

Would you agree that there is a prevailing retro-movement in favour of the traditional agricultural – »pastoral« landscapes. What could be the reason for these strong aspirations to protect and retain landscapes that developed as a result of production technologies, which are from today's perspective obsolete? Are there any viable arguments to defend such position?

Indeed, the pre-industrial, pastoral landscape is the adored image in the landscape planning profession to guide future development. For example, I have not yet seen a German

landscape plan without the phrase »qualification of the landscape through linear elements like hedges or rows of trees«. It is almost a reflex. Of course the pastoral ideal could be supported by some aesthetic and biodiversity arguments and it could be right for some places, but the way it is used is too static and too prevailing. My hypothesis for this dominance is the analytical orientation of landscape planners. An analytical scientist is interested in generalization and searches for true, objective solutions. It seems that in a need for an objective goal for the visual assessment, landscape planning adopted the »pastoral landscape« as the solution.

Urban sprawl is a very probable spontaneous alternative to the preservation of the traditional cultural landscapes especially close to urban centres and transport corridors. Is it possible to recognize urban sprawl as an opportunity to contribute to the quality of the landscape?

Urban sprawl is usually seen as cancer, dangerous, bad... But we are not in a situation to think about avoiding it – there is already an abundance of it, and the planning professions have very little power to work against it. Embracing it uncritically is not an alternative, but we need to develop a new understanding of the urban sprawl which stands for the general notion of a »town-country-continuum«. The planning policies are still very much influenced by the paradigm of the »built« town inside and the »natural« landscape outside. But in spatial reality, the distinction between culture and nature is blurred, if not to say useless at all. Concepts like »SCAPE« by Rem Koolhaas, »Total Landscape« by Rolf Peter Sieferle or »Territorium« by Andre Corboz express this shift. Once we are able to say goodbye to the old, sharp contrast of town and country, we will be in a position to create new structures or images for these new landscapes with smoother contrast, and they could very well be functional, sustainable and beautiful.

A shift towards creative solutions, fit for the problem in question means more emphasis on design and less on analysis. This implies more implicit, intuitive, heuristic approach. On the other hand there is a growing opinion that today's spatial planning needs to become more transparent, communicative and socially responsive. How to bring these two requirements together?

In recent years, we have seen a very positive development in terms of participation. Especially the Internet offers an important addition to the classical public meetings, which have their shortcomings. In Germany, the landscape planning profession is concentrating a lot on this topic after experiencing the failure of traditional landscape plans. Very few landscape plans were realised, usually they just went into the drawer because they were not flexible enough. They followed standardized methods and emphasized only ecological issues. After this disaster, I see the swing now moving from the extreme of defining too much (landscape plan) towards defining too little (participation). After losing the belief in an objective, true solution, the planning profession seems to be afraid of offering proposals. Currently, there is a great vacuum in terms of creativity. Strengthening the Design approach is an alternative. Instead of using general methods, Design is about specificity, hybridity and possibilities. There are many different ways to »fit for the problem«, so it could be very interesting to use the design competition for what usually would be covered by a landscape plan. If this would happen, the investigation of new

ways to involve the public into the competition process would be necessary.

The current revival of the scenario approach expresses this wish for developing different visions for the future. But they already become redundant, we usually see the same range of »sustainability« vs. »linear progression« vs. »wilderness« etc. Real designs are better because they are hybrid. They include differences. They fit better. One final remark about your question »design vs. analysis«: They are not opponents. Design is no artsy endeavour – proposals, which only concentrate on form, are usually weak designs. In my opinion, good design is a synthesis of analytical precision and intuition.

The problem, related to agriculture in Slovenia is also the one of subsidy requirements. The typical Slovenian farm is very small with the ownership dispersed across several non- or semi farmers. Also the natural conditions are often very harsh. Under such conditions, Slovenian agriculture cannot be competitive and the problem will aggravate after the Slovenia becomes a EU member. It is a common belief that the shift towards so-called organic farming could be a solution. What is your opinion?

Organic farming will be an alternative for some very flexible farmers who have to use intelligent marketing. Everybody in the EU would be happy if organic farming could reach a 20% share of the agricultural market, in Germany it is currently below 5%. Thus, organic farming will be like some glittering pearls, but the general influence will probably be rather low. Another question would be if organic farming would »look« different, if it would help to give us some pastoralism. I am sceptical because organic farming has not a lot to do with aesthetics. After re-unification, for example, some organic farmers bought and transformed those huge industrialized GDR-farms. Of course, their agriculture is more sustainable, but the effects are mostly invisible – they still prefer huge fields, which can be cultivated economically. Finally, organic farming can hardly serve as a solution for the large agricultural areas with poor soils soon to fall fallow. Growing crops economically on these soils is impossible without subsidies, and organic farming would probably need even more subsidies than conventional farming using cheap fertilizers.

What is your vision of the future European landscapes in or close to the urbanized areas? Should they retain their (agri) cultural character? Will they develop in the direction of »close to nature«, green refuge from the nuisances of urban life? Or will they transform in the new urbanized landscapes of shopping malls and similar structures?

Again, the era of »Either-Or« has switched towards an era of »And«, which is intellectually less spectacular and at the same time more difficult to handle. The town-country-continuum, which for me is simply »landscape«, is an ocean of fragments. The most challenging task for me as a landscape architect is to organize the relations between these fragments of wilderness, industry, agriculture, housing, infrastructure etc. There are millions of possibilities, but very few which combine function, sustainability and beauty for a specific place. To design these relations is a real adventure.

Dr. Mojca Golobič, Ph.D, landscape architect, Urban planning institute of the Republic of Slovenia, Ljubljana
E-mail: mojca.golobic@urbinstitut.si