STUDIA HISTORYCZNE
R. LVI 2013, Z. 4 (224)
PL ISSN 0025-1429

Bartosz Karol Ogórek

FROM A DEMOGRAPHIC *ANCIEN RÉGIME* TO MODERNITY IN FIFTY YEARS? THE RAPID DEMOGRAPHIC TRANSITION OF KRAKÓW'S POPULATION AS COMPARED TO OTHER CENTRAL EUROPEAN CITIES*

A b s t r a c t

The paper aims to describe the population changes that took place in the city of Kraków at the turn of the twentieth century using the demographic transition model. First, it briefly covers demographic transition theory and explains how it is understood in the research presented in the paper. Second, the paper traces the indicators of this process among Kraków's inhabitants and compares them to the population dynamics in Lwów, Poznań and Prague.

Key Words: Demographic transition, population dynamics, urban population, Kraków.

Słowa kluczowe: transformacja demograficzna, dynamika zmian ludności, ludność miejska, Kraków.

Introduction

This paper aims to describe the population changes that took place in the city of Kraków at the turn of the twentieth century using the demographic transition model. First, it briefly covers demographic transition theory and explains how it is understood in the research presented here. Second, the paper traces the indicators of this process among Kraków's inhabitants and compares them to the population dynamics in Lwów, Poznań and Prague. After showing the remarkable similarities between the basic demographic rates of these cities, I subsequently try to capture a more detailed picture of population change by examining the

* This paper is a part of the project "The impact of World War I on Cracow's population. Historical demographic study of war-population dynamics relation" funded by National Science Centre (Poland), based on decision number DEC-2012/07/N/HS3/00876.

synthetic demographic measures of mortality (life expectancy) and fertility (total fertility rate). Finally, I discuss the results of my analyses by translating the demographic indices into the life cycle of a city inhabitant. While the study is based on aggregate data, it tries to link demographic outcomes with changes in human behaviour during the period of modernization. Due to the limitations of the data, this connection is rather speculative. Despite that fact, this paper fills a void in the research field and serves as preparation for more detailed studies, preferably individual level data micro-analyses.

The Demographic Transition Theory

"In traditional societies, fertility and mortality are high. In modern societies, fertility and mortality are low. In between, there is demographic transition. These propositions connecting basic demographic phenomena with the degree of modernity are neither subtle nor precise. […] Yet, with all their ambiguities, these three sentences unquestionably describe the central preoccupation of modern demography."[1] This extremely ascetic definition of demographic transition, given by the Hungarian demographer Paul Demeny in the late 1960s, shows the level of generality on which this 'population theory' operates. Even today, after more than forty years of intense scholarly work in the field of demography, most researchers would agree that we cannot add much to these words.[2] The Demographic Transition Theory (DTT) in its classical form was created during the late 1940s at the Office of Population Research at Princeton University.[3] The reception of this 'new' population law was enthusiastic. However, this enthusiasm had more to do with the geo-political situation after World War II than with the theory's innovative approach to understanding demographic history or with its ability to predict future population development.[4] DTT, developed by the American demographer Frank Notestein, stated that each and every country undergoing modernization (understood as a transition from a traditional agricultural society to an urbanised and industrialized one) will pass through three stages of demographic development. In the first phase ("high growth potential"), mortality and fertility are still high and balanced. This reflects the situation before the demographic

---

[1] P. Demeny, *Early Fertility Decline in Austria-Hungary: A Lesson in Demographic Transition*, "Daedalus", Vol. 97, Nr 2, *Historical Population Studies* (Spring, 1968), p. 502.

[2] See D. Kirk, *Demographic Transition Theory,* "Population Studies", 50 (1996), p. 361––387.

[3] The paper that is considered to be the first publication introducing the classical form of DTT is: F.W. Notestein, "Population – the long view", [in:] *Food for the world*, ed. T.W. Schultz, Chicago 1945, pp. 37–57. Although the concept of 'demographic transition' or 'demographic revolution' has much longer history. See: D. Hodgson, *Demography as Social Science and Policy Science*, *Population and Development Review* 9, nr 1, march 1983, pp. 1–34

[4] S. Szreter, "The idea of demographic transition and the study of fertility change: a critical intellectual history", *Population and Development Review* 19(4): 1993, pp. 659–701.

transition. The second phase – "transitional growth" – forms the essence of the demographic transition. During this phase, mortality starts to fall at some point before the decline of fertility. This creates the substantial natural increase that boosts population numbers to unprecedented levels. After fertility trends start to follow mortality trends and catch up with low mortality, societies enter the phase of "incipient decline."[5] Subject to scholarly debate and controversies, this classic form of DTT underwent several changes and modifications. Today, researchers have at least three attitudes towards DTT. Some scholars completely refuse to acknowledge the role of DTT, calling it an "unproven generalization unworthy of much discussion."[6] Others still see its potential in explaining the processes of demographic change of the last two centuries, and attribute to demographic transition a "central role […] in the creation of the modern world."[7] Finally, a third group (probably the majority of scholars) rejects DTT as a scientific the theory, because of its "limited explanatory value"[8] while at the same time appreciating its descriptive usefulness.

In this article, I will utilise DTT as an empirical model useful to describe and interpret demographic change. DTT provides a simple manner to put long-term processes into a chronological sequence. Rather than its classical form, I shall use a four-stage DTT model in which phase one is called the demographic *ancien régime*. This phase is characterised by high values and unstable levels of mortality and fertility, as well as by recurring subsistence crises. The beginning of the second phase is associated with the start of a decline in mortality and the third with the onset of fertility decline. The final, fourth, phase can be referred to as demographic modernity and is defined by low and balanced levels of both mortality and fertility, which result in an almost negligible value of natural increase. These theoretical assumptions lead us to the main aim of the paper, which is to show the course and timing of the demographic transition in an Eastern European urban setting. Taking into account all of the controversies surrounding the causes of demographic transition and its relations with the broader processes of modernization, this paper argues only that the two phenomena are closely connected and occur at similar moments in time, while the extent to which there were direct effects of these mutual relations remains unclear. It is worth emphasizing that the descriptive rather than explanatory nature of this study reflects the initial stage of my research and will be followed up with more precise and in-depth analyses in the future.

---

[5] F.W. Notestein, *op. cit.*, pp. 42–52.

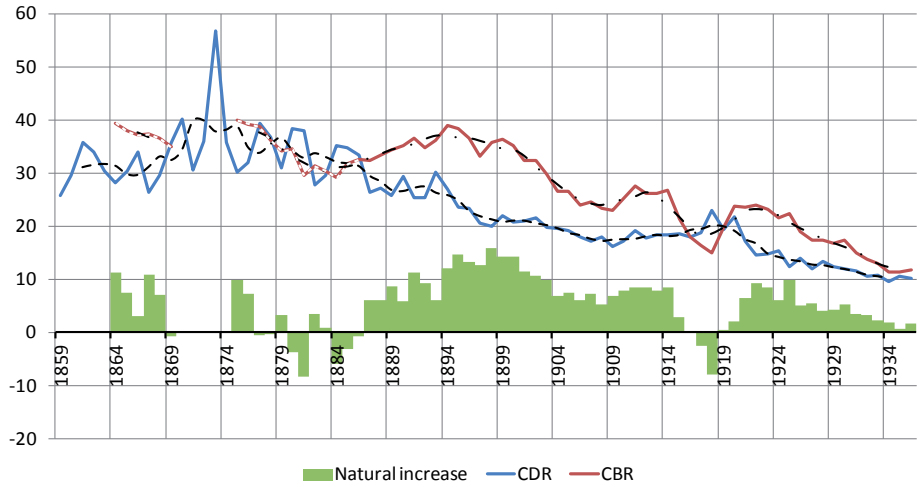
[6] D. Coleman, R. Schofield, "Introduction", [in:] *The State of Population Theory: Forward from Malthus*, Oxford 1986.

[7] T. Dyson, *Population and Development: The Demographic Transition*, London–New York: Zed Books, 2010, p. viii.

[8] T. Bengtsson, R. Ohlsson, "The Demographic Transition Revised", [in:] *Population, Economy and Welfare in Sweden*, ed. T. Bengtsson, Berlin: Springer, 1994, pp. 13–36.

Demographic Transition in Kraków and other cities in the region

As we have seen above, the crucial change in the demographic transition concerns levels of mortality and fertility. These two aspects of human biology can be measured in a most basic way by crude rates, i.e. annual numbers of births and deaths per 1,000 of an investigated population. The difference between both shows the magnitude of natural increase per 1,000 inhabitants and informs us whether the population has grown or declined in a particular year. Figure 1 shows these basic indicators of population development for our main period of interest. Bearing in mind the essential features of the demographic transition model, we can clearly distinguish between its four consecutive phases.



SOURCES: own calculations based on *Krakau. Statistischer Bericht über die wiehtigsten demographischen Verhälatnisse. Verfasst von Bürgermeisteramte von Krakau*, Carl Gerold's Sohn, Wien 1887, p. 1; K. B a k o w s k i, *Dyaryusz życia krakowskiego w czasie wojny europejskiej 1914 i 1915, zeszyt IV od dnia 29 grudnia 1914 do 25 lutego 1915*, wpis z 23 stycznia 1915, sobota; "Miesięczne sprawozdanie statystyczne", MBS, styczeń 1910–grudzień 1931; *Statystyka miasta Krakowa 1936*, Kraków 1998, p. 9, 22. *Gmina Krakowska, Sprawozdanie urzędowe za rok 1867*, Kraków 1868, tab. I i II; *Gmina Krakowska, Sprawozdanie urzędowe za rok 1868*, Kraków 1869, tab. I i II; "Statystyka miasta Krakowa":, z. 1–12, rękopis *Kraków w cyfrach 1918–1928* (Zestawienie Miejskiego Biura Statystycznego na Powszechną Wystawę Krajową w Poznaniu); *Statystyka miasta Krakowa 1936*, p. 44; "Rocznik Statystyki Galicji": Vol. 2, p. 21 i 25, Vol. 4, p. 156; "Ruch ludności miasta Krakowa", 1884, kw. I–IV; J. Majer, *Trwanie życia w Krakowie na zasadzie wykazu zmarłych w latach 1859–1868 obliczone co do ludności chrześcijańskiej*, "Zbiór wiadomości do antropologii krajowej", Vol. V. 1881, dział II, pp. 3–32; J. B u s z e k, *Porównanie trwania życia ludności chrześcijańskiej i żydowskiej zmarłej w Krakowie od r. 1859 do 1880*, "Zbiór wiadomości do antropologii krajowej", Vol. VI., 1882, dział II, pp. 24–101; J. T a m b o r, *Trwanie życia ludzkiego w Krakowie w okresie od r. 1881–1925*, "Prace Komisji Antropologji i prehistorji", nr 4, Kraków 1930; *Sprawozdanie fizyka stoł. Król. Miasta Krakowa za 1885 rok*, ułożył Jan Buszek, Nakładem Gminy Miasta Krakowa, Kraków 1888, pp. 265–267. NOTE: dashed and dotted black lines show the 5-year moving average; dotted red line represents the outcomes of 'reverse survival' projection[9]

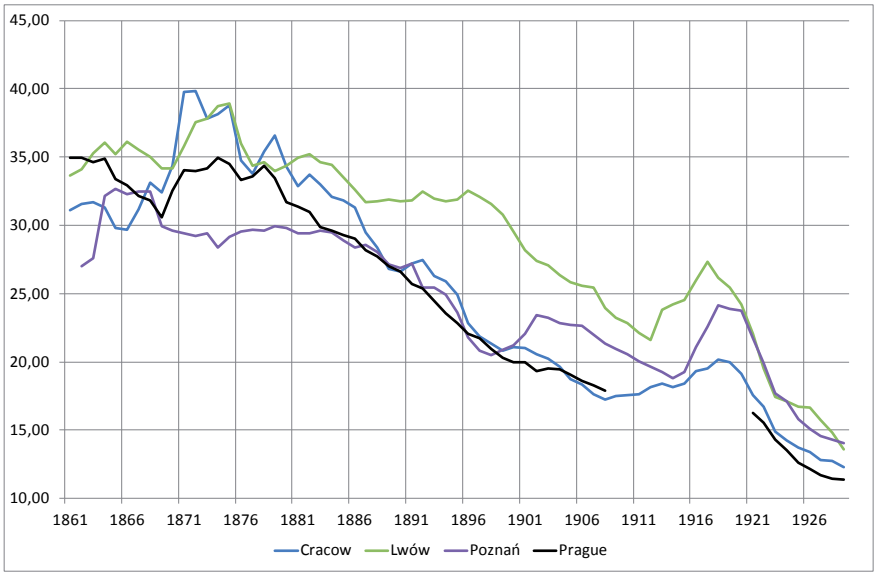
Fig. 1: Crude Death and Birth Rates and the rate of natural increase in population of Kraków between 1859 and 1936

[9] See *Manual X*, *Indirect techniques for demographic estimation*, New York: United Nations, 1983, pp. 179–181.

Until the end of 1870s, mortality levels were very high and unstable. The same holds true for birth rates. Moreover, we can identify at least one subsistence crisis – in 1873, when there was a cholera epidemic. This situation resulted in very unsteady values of natural increase before the second half of the 1880s. According to our interpretation of these findings, the demographic *ancien régime* lasted until the late 1870s in our population of interest. After that date, we can see the development of a clear negative trend in mortality. This signals the entering of phase two of the model and the beginning of a proper demographic transition. Phase three, associated with the fall of natality, is preceded by massive gains in natural increase. After the onset of a decline in birth rates during the late 1890s, natural increase starts to diminish as well. As becomes clear from Figure 1, during the Interwar Period, both series were getting close to each other, ending up at the level of 10 deaths and births per 1,000 inhabitants during the 1930s. The convergence of the natality and mortality curves, which coincides with very modest natural increase, suggests that the population of Kraków entered phase four, namely demographic modernity, some years before World War II. If our suppositions are true, this would imply that it took only around fifty years for Kraków's population to transform completely from the demographic *ancien régime* to modernity. But, before addressing this question directly, we should first compare the case of Kraków with some other cities in the region. We do this not only to investigate the possibility that our data is biased, but also to see whether such a rapid change was an ordinary or exceptional phenomenon.

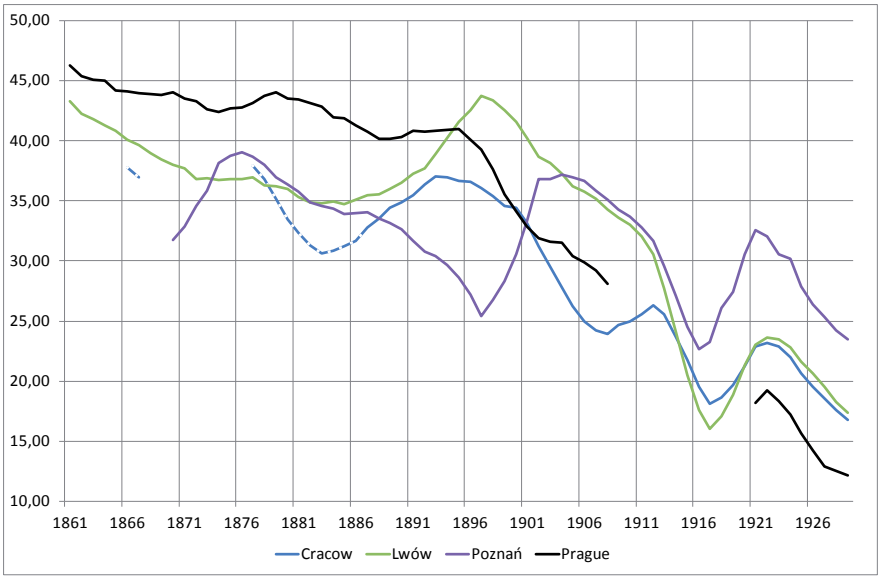
A quick glance at Figure 2 shows the prevailing change in mortality patterns in the central European cities under consideration. However, the Crude Death Rate can be a misleading measure for direct comparisons. In this case, however, it is legitimate to assume similarity of population structures between the populations compared. We can see that the four cities differ slightly in pre-transitional levels of mortality, but once the demographic transition sets in the resemblances between their experiences are striking. Kraków, Poznań and Prague's populations enter the second phase of transition around the same time, at the turn of the 1870s and the 1880s, with Lwów lagging behind by approximately one decade. The minor observable differences can be attributed to differences in the social, economic and religious composition of the populations, as well as to different timing of pre-transitional subsistence crises (e.g. the last cholera epidemics occurred in 1873 in the Austro-Hungarian Empire, but in 1866 in Poznań). The surprising universality of demographic patterns visible in Figure 2 contrasts markedly with the diversity of patterns observed in the case of natality (Figure 3).

Here, the discrepancies across the entire investigated period are much more pronounced than in the case of mortality. Again, however, all lines tend to converge after the onset of fertility decline. We can observe the characteristic cyclical changes in fertility levels during the pre-transitional period, but their intensity depends on the size of the population and so they are much more pronounced



SOURCES: see Figure 1 and K. W n ę k, L. Z y b l i k i e w i c z, E. C a l l a h a n, *Ludność nowoczesnego Lwowa w latach 1857–1938*, Kraków 2006; "Rocznik statystyczny stoł. miasta Poznania" (1925–1927); *Dzieje Poznania*, red. J. Topolski, L. Trzeciakowski, Vol. 2, *1793–1918*, cz. 1, PWN, Warszawa–Poznań 1994, p. 241; "Österreichisches Städtebuch" 1887–1914; *Obyvatelstvo v Praze 1918–2011* (http://www.praha.czso.cz/xa/redakce.nsf/i/casove_rady_lide__time_series_people), [accessed on 03.06.2013].

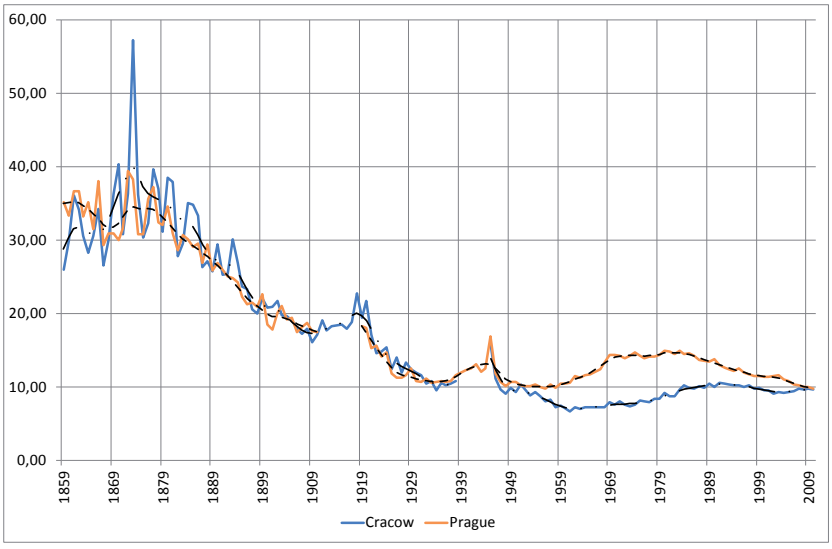
Fig. 2: Five-year moving averages of Crude Death Rates in the populations of Kraków (1861–1929), Lwów (1861–1929), Poznań (1862–1929) and Prague (1872–1929)



SOURCES: see Figure 2.

Fig. 3: Five-year moving averages of Crude Birth Rates in the populations of Kraków (1861–1929), Lwów (1861–1929), Poznań (1862–1929) and Prague (1872–1929)

in the cases of smaller cities (Kraków and Poznań) than in cases of Prague and Lwów. Moreover, fertility decline could start at any given moment within the cycle (while natality was increasing, decreasing or stagnated), and that fact makes it difficult to point out the exact moment of its onset. For example, we can consider the early 1890s as a moment of breakthrough in the case of the population of Kraków because after this date natality tended to fall continuously. On the contrary, the initial dip in natality can be interpreted as a continuation of a pre-transitional cycle (similar to one in the early 1880s). In the latter case, we would have to postpone the timing of the onset of the fertility transition to the first decade of the twentieth century. This is similar to the case of Lwów, and the probable migration mechanisms ongoing in both cities at that time can be another hindrance in the interpretation of this process. Another interesting pattern can be spotted in the data on the population of Poznań around 1900 and Kraków around 1910. We can clearly see a sudden rise in natality curves that is connected to changes in the cities' boundaries. The incorporation of suburban and rural areas resulted in a short interruption of the 'natural' pathway of demographic transition. Nevertheless, after the first decade of the twentieth century, the birth rates of all four populations tended to fall at similar paces, reaching intermediate-low values in the early 1930s.



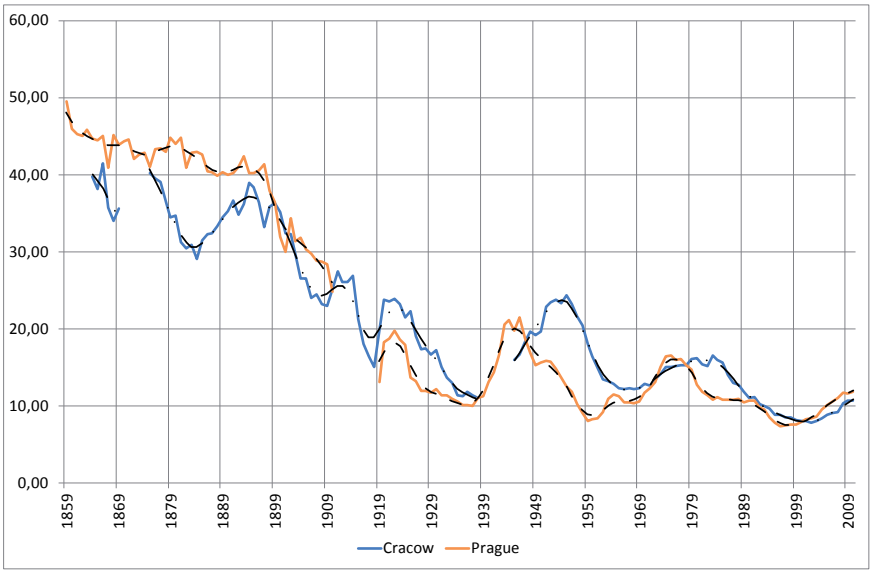
SOURCES: see Figure 2 and „Rocznik statystyczny miasta Krakowa", z. 1–19, Kraków 1963–2011; "Rocznik statystyczny województwa krakowskiego" 1969–1988; "Rocznik Demograficzny" 1965–201; "Österreichisches Städtebuch" 1887–1914; *Obyvatelstvo v Praze 1918–2011* (http://www.praha.czso.cz/xa/redakce.nsf/i/casove_rady_lide__time_series_people), [accessed on 03.06.2013]. NOTE: black dashed/dotted lines represent long-term trend smoothed by Hodrick-Prescott filter ($\lambda = 6.25$)[10].

Fig. 4: Crude Death Rates in the populations of Kraków and Prague 1859–2010

[10] M. R a v n, H. U h l i g, "On adjusting the Hodrick–Prescott filter for the frequency of observations", *The Review of Economics and Statistics*, 2002: 84 (2), pp. 371–375.

The conclusions of this short comparative analysis are strong and obvious. First of all, relative differences in the patterns of mortality and fertility declines are rather small. This fact can be treated as a sign of universality in the processes of demographic transition in Central European urban settings on the one hand, and as a proof of comparability in the quality of the gathered vital statistics data on the other.

Bearing in mind the similarities demonstrated above, we shall now turn to the problem highlighted in the title of the paper and answer the question whether values of natural population movement during the Interwar Period were really modern in a DTT sense. To do so, we present demographic rates (see Figure 4 and Figure 5) for a longer period of time (until 2010) for Kraków and Prague only to increase the visual clarity of the data. Once again, the great resemblance between these cities is striking especially when looking at smoothed series. The figures also allows us to easily compare the interwar period with recent years.



SOURCES: see Figure 4.

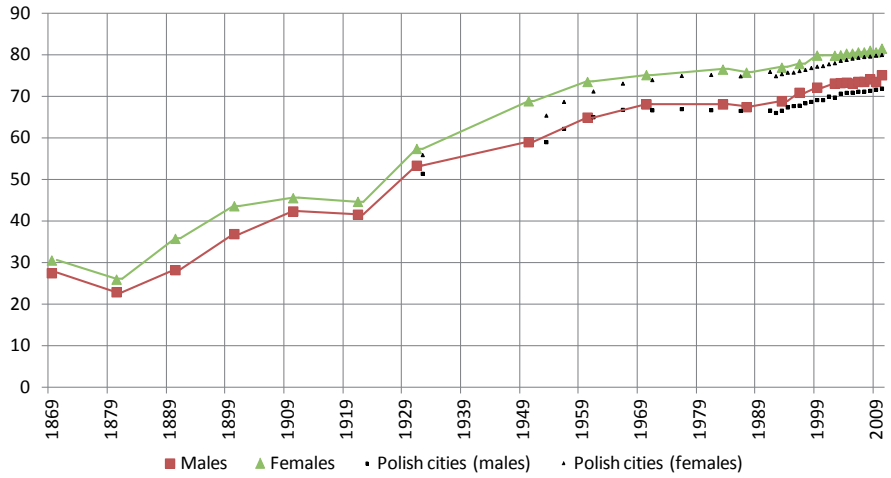
Fig. 5: Crude Birth Rates in the populations of Kraków and Prague 1859–2010

Although mortality rates in the post-war years undergo slight changes (see Figure 4), mainly due to intensive migration processes and population aging (which seriously altered the age structure of both populations), during the 1980s they level off, reaching values of around 10 deaths per 1,000 inhabitants in both cities. Almost identical death rates were observed for Kraków and Prague in the 1930s. Not surprisingly, the case of natality (see Figure 5) confirms the 'modernity' of the interwar demographic rates. Again, the pattern of change between the two cities' populations is virtually identical, with some discrepancies caused by the different timings and intensities of postwar baby booms. In the city of

Kraków, the baby boom was strongly amplified by the incorporation of Nowa Huta into the urban population. It is worth noting that during the Interwar Period, both the Crude Death and Birth rates reached levels characteristic of modern populations.

Demographic change measured by synthetic indices

Although it would be enough to point out that from the viewpoint of classic demographic transition theory the investigated urban populations entered the fourth and last stage of transition in the 1930s, it is hard to believe that at that time, these populations displayed completely 'modern' demographic behavior. Hence, we explore their transformation process in more depth with the help of synthetic demographic measures that can give us more insight into the nature of the ongoing processes.



SOURCES: see Figure 4 and "Trwanie życia" 1998–2011. NOTE: only markers indicate real data, solid lines indicate moving averages.

Fig. 6: Development of life expectancy at birth (e_0) by sex for population of Kraków (1869–2012) and aggregated population of all Polish cities (1932–2012)

Because crude rates are rough indices of population change and are extremely sensitive to rapid variation in population structure, we instead concentrate now on life expectancy at birth (e_0) as a measure of mortality and total fertility rate (TFR) as a measure of fertility. Both measures are similar in that they translate period observations into a cohort interpretation. E_0 tells us how many years a person born in a given year would on average live if the age-specific mortality pattern did not change during his or her entire life course.[11] Likewise, TFR counts

[11] C. N e w e l l, *Methods and Models in Demography*, Nowy Jork 1988, pp. 63–79.

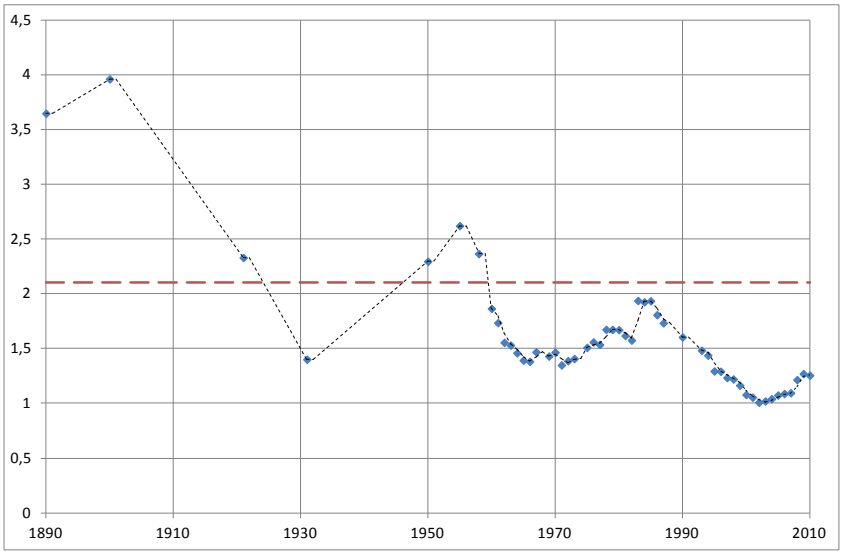
how many children an average woman would have if she entered her fertile age in a given year and survived her whole reproductive period (from age 15 to 49), and if the fertility pattern remained unaltered during her entire life course.[12] Tracing the long-term development of these measures from the mid-nineteenth century until today (Figure 6) for the average inhabitant of Kraków confirms that the mortality transition between 1880 and 1931 was exceptionally rapid. During these fifty years e_0 for both sexes more than doubled (from 22.9 to 53.33 for men, and from 25.94 to 57.38 for women). At that stage in time, the process of lengthening life was far from complete. The post-WWII period brought continued increases in life expectancy, but the pace of increase has been much slower, with life expectancy reaching 75.1 for men and 81.5 for women in recent years.

This difference in life expectancy at birth between the 1930s and the 2000s can occur despite the above stated similarity of CDR because the age composition of deaths and population structure in the Interwar Period differed markedly from those of today. In 1880, Infant Mortality Rate was as high as 257.96 infant deaths per thousand, in 1931 – 103.04%, while in 2012 it was only 4.04%. This made a huge difference to life expectancy at birth, which is extremely susceptible to changes in infant mortality. Substantial changes have also taken place in the main causes of death. The process usually referred to as the "epidemiological transition" brought an end to many infectious diseases, but at the same time the share of degenerative or civilization diseases rose.[13] Finally, it is interesting to note that Kraków's citizens on average enjoy slightly higher values of life expectancy at birth than inhabitants of other Polish cities. While gains in life expectancy caused by mortality decline are always perceived as a positive process, falls in fertility usually bring many fears. The main reason behind those concerns is that population dynamics depend heavily on fertility: longer periods characterised by a TFR below 2.1 cause population decline. We can tell from Figure 7 whether these kinds of alarming values are new in the case of our population of interest. First of all, it is clear that the drop from pre-transitional levels (around 4 children per woman of fertile age) to contemporary ones (below 2.1) has happened extremely fast. The Interwar Period displayed TFRs as low as 1.4, which corresponds to the values noted in the 1960s and 1970s as well as nowadays. This secular decline has only been interrupted by the post-WWII baby boom and a short rise in the 1980s that was caused by a favourable population structure (that is, the baby boomers reaching their most fertile ages). The occurrence of low values such as those observed for interwar Kraków is possible only in populations that are effectively controlling their fertility. The observed phenomenon,

---

[12] *Ibidem*, pp. 41–42.

[13] A.R. O m r a n, "The Epidemiologic Transition: A Theory of the Epidemiology of Population Change", *The Milbank Memorial Fund Quarterly* , Vol. 49, No. 4, Part 1 (Oct., 1971), pp. 509–538, S. H o r i u c h i, "Epidemiological Transitions In Human History", [in:] *Health and Mortality Issues of Global Concern*, New York: United Nations, 1999, pp. 54–71.



SOURCES: see Figure 4. NOTE: dashed black line represents moving average, dashed line indicates fertility replacement level (2.1).

Fig. 7: Development of Total Fertility Rate in Kraków, 1890–2010

therefore, can be seen both as a proof of tremendously rapid adoption of 'modern' values and attitudes towards fertility, and as evidence for a fast spread of contraceptive techniques among the inhabitants of Kraków. Somewhere between 1900 and 1910 Kraków's inhabitants met Ansley Coale's famous pre-conditions for fertility decline: they were "ready, willing and able" to limit their reproduction.[14] In other words, family size regulation was the effect of conscious choices, it was perceived as economically and socially advantageous, and there were adequate means that allowed people to implement this new behaviour.

Conclusions

This short analysis covers an important part of human experience in the past, namely the phenomenon of demographic transition in the urban Central European setting. Although the numerical measures presented in Table 1 could be enough to demonstrate this transition to those who are familiar with basic demographic indices, it is worth taking effort to translate the numbers into a description of the effects these changes had on the average human life course. We can imagine that a woman born in Kraków just before the onset of the demographic transition could expect to live only 26 years at birth. However, if she survived the most

[14] A.J. Coale, "The demographic transition", [in:] *Proceedings of the International Population Conference*, vol. 1, Liege 1973, p. 65.

deadly period of infancy (she had a less than 75% chance to do so), her chances of living until the end of her reproductive age (15–49) increased sharply. If she was lucky enough to live longer than 50 years, she would have given birth to four children (the death of at least one of them was certain). Despite this dramatic statistic, the city was literally full of children (almost 32% of the population was below age 15). If we now imagine the life course of her granddaughter, born in the 1930s, we can see that she could expect to live on average more than two times longer than her grandmother. During this time, she would give birth to less than two children. The risk of dying during infancy was still very high (more than 10%), but now children comprised around 20% of society. The population of Kraków during the lifetime of the granddaughter can already be perceived as one on the eve of population aging, with more than 16% of people over the age of 50. While our imagined grandmother was quite likely to die of an infectious disease (especially tuberculosis), this risk was significantly reduced for her descendant. During the lifetime of our granddaughter, increasing numbers of people died from heart failure and cancers.

Table 1

Comparison of basic demographic characteristics of Kraków's population before and during the demographic transition

Measure	Initial stage of transition	Interwar Period
e0 (female)	25.94 years	57.38 years
TFR	3.96	1.40
IMR	257.96%	103.04%
% of infectious diseases among COD	33.20	22.49
% degenerative diseases among COD	57.72	66.03
% of children (0–14)	31.98	20.82
% of elderly (50+)	12.75	16.55

SOURCE: own calculations. NOTE: 'initial stage of transition' corresponds to years 1880–1900, 'Interwar Period' corresponds to years 1921–1931.

This stylized example is illustrative enough to realize the enormous change in the rudimentary aspects of human life that took place within less than two generations. Our findings allow us to positively answer the question stated in this paper's title, and to confirm the occurrence of an extremely rapid demographic transition in the Central European urban setting. Moreover, we revealed that, despite various social, economic and religious differences, similar patterns of change occurred among the selected cities. This ensures us that the case of Kraków was far from exceptional. It is clear that the pronounced decline in mortality was

achieved mainly through a reduction of infant mortality and through an epidemiological transition. The reduction of the share of infectious diseases among the causes of deaths had the most pronounced impact on mortality rates in urban settings because of their high population density and unhealthy environments. On the other hand, factors spurring fertility decline lie more within human agency. It deserves emphasis, however, that the observed extent of fertility decline was possible only through conscious use of efficient contraceptive practices. Both the mortality and the fertility decline can be perceived as substantial changes in the rudimentary biological characteristics of the population of Kraków. Their potential social consequences are easy to predict, but need much more actual research from social historians of the city and region.

Bartosz Karol Ogórek

OD DEMOGRAFICZNEGO ANCIEN RÉGIME'U DO WSPÓŁCZESNOŚCI W CIĄGU PIĘĆDZIESIĘCIU LAT? SZYBKIE ZMIANY DEMOGRAFICZNE LUDNOŚCI KRAKOWA W KONTEKŚCIE INNYCH MIAST EUROPY ŚRODKOWEJ

Streszczenie

Artykuł przedstawia kwantytatywny wymiar zasadniczych przemian demograficznych, określanych mianem transformacji demograficznej, zachodzących w populacji miasta Krakowa na przełomie XIX i XX wieku. Statystyczna i graficzna analiza podstawowych oraz syntetycznych (e_0 i TFR) współczynników demograficznych opisujących umieralność i rodność mieszkańców miasta oraz szereg porównań z populacjami Lwowa, Pragi i Poznania pozwala prześledzić rytm i głębokość tychże zmian oraz dokładniej umiejscowić je w czasie. Duża zbieżność serii współczynników urodzeń i zgonów dla poszczególnych miast każe zastanawiać się nad uniwersalnym charakterem przejścia demograficznego miast w Europie Środkowej. Co więcej analiza pozwala na tezę, że zasadnicza część transformacji dokonała się niezwykle szybko, bo w około 50 lat i zakończyła się jeszcze przed II wojną światową. Zmiany natężenia rodności i umieralności skutkują bardzo gwałtownym wydłużaniem się życia ludzkiego w badanym okresie oraz drastycznym spadkiem płodności. Stwierdzona w artykule intensywność przemian kluczowych, z punktu widzenia życia ludzkiego, charakterystyk biologicznych społeczności miejskich w badanym okresie powinna stać się przyczynkiem do dalszych badań nad przebiegiem gospodarczych, społecznych i technicznych procesów modernizacyjnych.