Citation for Anatole Romaniuk, recipient of the 2008 Canadian Population Society Lifetime Contribution Award

Over the past forty years, Dr. Anatole Romaniuk has been a distinguished researcher, professor, civil servant, and manager/administrator. He is past Vice-President (1978-80) and President (1980-82) of the Canadian Population Society and President of the Federation of Canadian Demographers (1993-96). He has made significant contributions to Canadian and international demography in its various fields — substantive, methodological and theoretical. In 2003, a special issue of *Canadian Studies in Population* 30(1) was published in honour of "his many contributions to international and Canadian demography".

See: https://ejournals.library.ualberta.ca/index.php/csp/issue/view/1169

Having completed M.A degrees in Social and Political Sciences and in Pure Economics at University of Louvain in 1951 and 1952, Anatole started his career as a young demographer in the Democratic Republic of Congo in 1953, where he carried out the first census of population. He then moved to the Office of Population Research, Princeton University as Research Associate, working on the African Demographic Project and obtaining a Certificate in Demography at Princeton University in 1962. In 1967 he defended his doctoral thesis, obtaining a PhD in Economics at University of Louvain.

In 1964, he came to Canada, first as Professor of Demography at the University of Ottawa, then at the University of Montreal, eventually becoming founder Director of Demography Division at Statistics Canada. In this position, which he held for 25 years, Dr. Romaniuk created two strong research Sections in the sensitive areas of population estimates and projections. As Director, he also brought the Division's methodological capabilities to new heights from those left by his famous predecessors, Nathan Keyfitz, Norman Ryder and Karol Krotki. When he retired from Statistics Canada in 1993, Anatole was invited to serve as Adjunct Professor, Department of Sociology at the University of Alberta and continues in this position.

Contributions to African demography

Anatole Romaniuk has extensively written on the demography of tropical Africa and on the Congo in particular. He is author of *La fécondité des populations congolaises* (Mouton, 1968), which is still a classic in the African demographic literature. He is the co-author (with William Brass and Ansley Coale) of a major book published by Princeton University Press in 1968, *The Demography of Tropical Africa*. He still remains faithful to his early vocation in African demography as evidenced by his recent book, *La demographie congolaise au milieu du XXe siecle* (Louvain University Press, 2006).

Using techniques for demographic analysis based on inadequate data, Romaniuk produced reliable measurement of the level of fertility, its regional and ethnic variations, and explored the underlying cultural and epidemiological factors. His studies, based on anthropological and medical data on sterility and infertility among certain tribes in Africa

earned him wide recognition. In particular, he placed the problem of infertility in the framework of procreative behaviour and reproductive health.

Contributions to Canadian and Aboriginal Peoples' demography

Making his home in Canada, as of 1964, Anatole Romaniuk, was attracted by the demography of Aboriginal Peoples, as he felt that his experience with African demography, in terms of subject matter and methodology, was applicable to Aboriginal Peoples' demography. His survey among the James Bay Indians and research in aboriginal demography generally, gave rise to a series of articles and conference papers which shed new light on the demographic history of Aboriginal Peoples in Canada. His contention is that the particularities of this demographic itinerary, with distinct waves of demographic collapse and recovery, and the tardiness of demographic transition, need to be understood in the context of the encounter with European civilization (see Aboriginal Population of Canada: Growth Dynamics under Conditions of Encounter of Civilizations, *Canadian Journal of Native Studies*, vol. 20(1), 2000).

At the national level, particularly noteworthy is his publication by Statistics Canada, *From Baby-boom to Baby-bust* (1984). This publication clearly demonstrated that *subreplacement fertility* was here to stay, having major implications with regard to population growth.

Contributions to population projections

In the field of *population projections*, his contributions were methodological, epistemological and administrative. As of the 1971 Census, he re-established Statistics Canada as the agency of the federal government responsible for population projections. His "Population Projection as Prediction, Simulation and Prospective Analysis," was published in *Population Bulletin* (UN Population Division, 1990). This, along with other subsequent articles established his reputation in the area of population projections. In addition to introducing innovative techniques, he contributed to the reappraisal of the way forecasting and projections are perceived. In a nutshell, his emphasis in projections is on *prospective analysis* rather than *prediction*; *analytical credibility* rather than *predictability*; *impact* rather than *accuracy* as projection validation criteria; projection as a tool of *creating* rather than *discovering* the future (see Population Forecasting: Epistemological Considerations, presented at the British Society Population 2006).

Tom Burch encapsulated the nature of Anatole's contribution to forecasting: "Romaniuk transcends the restrictive methodological view of most demographers to highlight the multifaceted character of population projections, including its role as substantive model of population dynamics, that is, as theory" (see The Cohort Component Projection Algorithm: Technique, Model and Theory, *Canadian Studies in Population*, 30 (1), 2003: 30).

Methodological contributions

Anatole Romaniuk's creative spirit manifested itself in three particular methodological areas:

First, he undertook innovative application of non-conventional demographic techniques, such as those based on the Coale - Demeny stable population models and Brass techniques of estimating fertility and mortality from data on children-ever-born, to estimate fertility and mortality of populations with imperfect data. He was thus able to significantly improve the estimates of basic demographic parameters for the Congo and the Aboriginal Peoples in Canada.

Second, he made important contributions to the methodology of forecasting fertility. This includes two articles co-authored with Professor Mitra: "Pearsonian Type I Curve and Its Fertility Projection Potentials" (*Demography*, 10 (3), 1973), and "Three Parameter Model for Birth Projection" (*Population Studies*, 27 (3), 1973). The virtue of this model is that it minimizes the inputs needed while maximizing the output, while also enhancing analytical capabilities of the associated parameters.

Third, as director of the Demography Division, jointly with his colleagues, considerable methodological enhancements were made in order to improve the accuracy and timeliness of the post-centsal estimates of population and households (see *Population Estimation Methods*, Statistics Canada, 1987).

Theoretical contributions

Anatole Romaniuk's significant theoretical contributions are in two particular areas — demographic transition theory and demographic history of Aboriginal Peoples. In the first case, he was able to conceptualize and empirically demonstrate the upward pattern of natural fertility in the earlier stages of modernization. The underlying idea is that modernization removes or weakens some of the traditional fertility-inhibiting factors, such as prolonged postnatal abstinence and breastfeeding, by shortening their duration, before birth control comes into practice. Two of his articles are significant in this regard: "Increase in Natural Fertility during Earlier Stages of Modernization: Evidence form African Case Study, Zaire" (Population Studies, 34(2), 1980); and "Increase in Natural Fertility during Earlier Stages of Modernization: Canadian Indians Case Study" (Demography, 11(4), 1981).

With regard to Aboriginal People's demography, his *History-based Explanatory Framework for Procreative Behavior of Aboriginal People of Canada* is a significant milestone in understanding their fertility over the historical span, since the first contacts with Europeans. The two fundamental pillars of the paradigm are ethnocentrism and dependency status.

Currently, Anatole Romaniuk is belaboring on two important concepts, *demographic maturity and stationary population*, both having theoretical and policy implications.

Data collection and management

Anatole Romaniuk is not just an armchair researcher. He also has been involved in large scale statistical operations of data collection and management. The national census of population, based on a probabilistic sample, in the Democratic Republic of Congo was an outstanding achievement for a young demographer under the difficult conditions of an underdeveloped country at that time (1950s). It was a resounding success, recognized by an "Etoile de service" from the Demographic Republic of Congo. At Statistics Canada, he was involved in the 1971 to 1996 censuses, at the level of content determination and analytical studies. He also acted as Canadian government advisor in the preparation and execution of the 2001 Census of Population in Ukraine, and earned that country's President Award in recognition of his outstanding contribution.

Dated: 7 July 2015

Edited by Roderic Beaujot based on the nomination document (05/02/2008) of Dr. M.V. George, Adjunct Professor, Emory University and former Senior Advisor, Demography, Statistics Canada

See also: https://en.wikipedia.org/wiki/Anatole_Romaniuk