

THE DEMOGRAPHIC TRANSITION THEORY

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Summary

The demographic transition is the unique paradigm with a universal value in the field of population studies. This theory was formulated by different authors between the 1930s and the 1950s ; it is largely based on the European experience. It encompasses two faces : a descriptive or historical one, showing the successive stages of the phenomenon ; an analytical one which aims at explaining both the mortality decline and the fertility decline. Mortality decline is clearly a precondition for fertility decline and is often accompanied by a process of adaptation through marriage limitation. The influence of the context of modernization on the onset of fertility decline take various paths, depending on the local context.

1. Introduction

Demography is a science in which general theories are rare. Aside from Malthus's theory which emphasizes constraints of subsistence on population as a principal body of thought -and which have proven to be inexact since its formulation in 1798 : population does not follow an exponential but a "logistic" path as expected ; food production is

elastic and subject to tremendous gains of productivity- there is only what is called by convention the theory of demographic transition. The most important point of comparison between these two explanatory systems lies in supposed effect of economic development on fertility. In the Malthusian view, economic development stimulates fertility, the increase in demand for work encouraging marriage and family formation ; that is exactly what was happening under Malthus's eyes in early industrialised Britain : there was a marriage boom and hence an increase in total fertility rates. In the transitional view, the relation between industrialization and fertility is inverse : industrial revolution raises the standard of living and stimulates, especially, a general aspiration towards an always greater degree of comfort, which, in turn, promotes the limitation of child-bearing ; this applies mainly to the XXth century reality.

2. Harsh criticisms, at times unwarranted

Malthus' theory has been criticized as ceasing to be true for Europe at the very time of its conception, two centuries ago (1798) ; a more or less similar charge has arisen against demographic transition theory, since the 1950's. Discussing the latter, however, is not easy, since it is one of those rare theses having multiple authorship (Landry, Notestein, Davis, Thompson : see bibliography at the end of this paper), and scientific discussion has never specified entirely which texts should be included in its brief.

Not infrequently one or another of these authors (Landry, especially outside Europe, namely in America) is excluded from the argument ; however, he was the first not only to imagine the concept of "demographic revolution", but also to announce that the post-transitional fertility regime would be a below replacement fertility regime. And, apart from the sometimes lengthy exegesis devoted to analysis of demographic trends, consideration of transition theory itself are confined to a few laconic passages, strongly inspired by pre-war European experience, and often without claim to generality. The common aim is to explain why a society passing from a timeless state of quasi-stagnation to modern economic growth (in its broadest sense as, for example, understood by Simon Kuznets and its followers : rise in real income, progress in female literacy, urbanisation, industrialization, etc) registers a decline in mortality followed by a decline in fertility, that is a two-phase demographic modernization process. In other words, these texts offer global, liberal, non interventionist interpretation of demographic changes assumed to have occurred of their own accord in the course of structural change in societies.

This view has been the subject of heated controversies ; the World Population Conference in Bucharest (1974) marked the culmination of conflict between doctrines of development (whose ethic is summed up in the formula "the most effective contraceptive is development") and neo-malthusians, who encourage specific interventions to speed up fertility decline ; despite a considerable decline in mortality, the fertility decline in poor countries was then non existent (or unknown), a fact which called the whole theory of transition into question. Many criticisms often lack validity, as they misinterpret and even ignore the original texts. It is useful to review the main tenets, confining ourselves to the original theory which, by convention, focuses on Notestein's synthesis of 1953.

3. The main ingredients

It is possible to distinguish two approaches in these texts, the one purely descriptive, the other explanatory, which vary widely in application from one author to the other. Some confine themselves entirely to established facts, from which the claim of empirism and the reluctance to admit the theoretical status of new interpretations arose.

3.1 The evidence

The demographic transition consists of a logical succession of historical phases through which every population passes in the movement towards modernity. Depending on the degree of detail in the presentation, authors distinguish three or five successive stages ; with three, one is dealing with phases of pre-transition (long-standing equilibrium of high mortality and high fertility), transition (destabilization due to mortality decline), and post-transition (modern equilibrium, characterized by low mortality and low fertility). In Landry (1909, 1934), these stages are named respectively : (1) primitive regime (2) intermediate regime and (3) contemporary regime ; and the pioneering view of Landry is to assume explicitly contrary to all other authors that there is no final equilibrium, but a "permanent disequilibrium", linked to a sustained below-fertility regime. In Notestein (1945), who emphasizes the influence of age structure on population growth, the three stages are defined as : (1) high growth potential, (2) transitional growth, (3) potential decline. Blacker (1949) subdivides the transitional phases into two stages, the first characterized by consistently high fertility and high but declining mortality (thus greatly expanding the rate of natural increase), and the second by a decline both in fertility and mortality, fertility being the faster of the two (the latter being a reaction to the rapid natural increase of the preceding stage). The stage conventionally called post-transitional, is also subdivided by Blacker into two stages, the first defined by an equilibrium between low fertility and low mortality, and the second by a decline in which deaths begin to outnumber births.

This fivefold distinction is repeated by Davis (1950) who differs only in his definition of the final phase in which fertility, while relatively low and stable, remains higher than mortality, thus maintaining a certain growth. Of course, by this time, the first three phases were a thing of the past (at least in the most advanced countries), and apparently only the last stages of the transition were open to discussion.

Thompson's threefold definition (1929, 1946) referring to "pre-industrial", "expanding" and "stationary" countries is close to Landry's classification.

In other words, this first approach describes an internal dynamics of populations, drawing our attention to the influence of mortality on fertility. This relationship had been seen much earlier, for example, by Guillard, inventor of the word : "demography" (1855). Using international statistics, he called attention to the close correspondence between levels (and trends) of mortality and fertility. The idea of the mechanism of the transition was thus already germinating. A few decades later, the statistical link between infant mortality and fertility was clearly perceived by Geissler (1885) as a replacement effect. And before the First World War authors such as Wolf (1912) analysing possible

causes of the decline in German fertility focused, in the first place, on improved trends in mortality.

3.2 Interpretation

Explaining the mortality decline is inevitably easier than that of fertility, although what proportion to assign to the principal contributing factors (medical discoveries, water control and sewage, health, hygiene and public administration improvements, higher standards of living, better housing and diet conditions, etc) is far from unanimously agreed upon. For the development of fertility, which claims prime attention amongst these authors (fertility is seen as a condition of survival), the factors appear more numerous and complex. Nevertheless, our two great precursors (Landry and Notestein) shared the view that fertility declines chiefly as a response, and adjustment to structural changes of economy and society. The preponderant influence of socio-economic development, considered as the very essence of transition theory, has been frequently called into question, and the primary of the economy at times fiercely contested. Because traditional socio-economic indicators have failed to account for the diversity of demographic experience recorded in Europe social theories based on cultural (language barriers), socio-political (conservative versus progressive lines of thought) or anthropological reasoning (family structures, ethnic legacy) have been put forward in opposition.

4. A false dichotomy

Such critiques may well be questioned, to the extent that Landry's original formulation is often deliberately ignored in favour of Notestein's schematized and almost caricatural account. To begin with, in Landry, no such dichotomy between the economic and the mental or "cultural" exist. Like most social thinkers of this time (namely Sombart or Weber), he places the history of ideas above that of social (or familial) organization. He advances a "new conception of life", the principal cause of fertility decline being the "massive movement of the liberation of minds".

And he recalls that the phenomenon in France started "at the same time as the beginnings of the Revolution". To sum up the essence of this new and hedonistic philosophy, Landry uses the phrase "rationalization of life" ; he perceives the manifestation of this in all spheres of daily life : political, familial, industrial, etc. It is in the post-war American account, and in the increasingly condensed extracts derived from it and empirically applied, that the approach becomes reductionist, drifting gradually into economism (see, for example, Coale and Hoover 1958) ; whereas the European tradition perceives at the root of these phenomena a network of complex causes, among which the systems of values (culture, religion, morality) play a determining role. The connection between fertility and "civilization" (a rather imprecise term then favoured) is none the less explicitly analysed by Bertillon père (1874) who anticipates the later argument of "social capillarity" (Dumont 1890) : the desire for social ascent in an open society where traditional class structure, with its fixed attributes, is overthrown, and child-bearing is limited because of the family's concern for its immediate way of life, as much as by an ambition for future generations. Leroy-Beaulieu's formula "democratic civilization lowers fertility" best sums up the thought of these writers on demographic

transition. Dumont's remark that "a society's fertility is not that of the class to which it belongs, but that of the class to which it would like to belong" anticipates more recent view on the role of discrepancies between aspirations and experience.

In practice, most empirical studies intended to test the foundations of transition theory either leave to one side cultural variables (norms, traditions, family structure), thereby blatantly ignoring history and social structure, or incorporate them only in opposition to economic (or socio-economic) variables. The "theory of thresholds" (UN 1963) is a clear illustration of this reductive tendency, since it assumes that fertility declines are due to the combined action of different socio-economic factors representative of a general level of development (life expectation at birth, infant mortality, per capita income, proportion of literate female adults, etc). In certain authors, however, cultural heritage is taken into account and the historical perspective re-established by means of long time series ; prior to their work, tests were for the most part applied only to comparative trends in material indicators, between countries over an average period-with little real significance for the development of mentalities.

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Biographical Sketch

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