
The agricultural demographic transition in North America and in the Levant.

Stephan Naji*¹

¹Departement of Anthropology, New York University [New York] – États-Unis

Résumé

Was the "Neolithic Revolution" in Europe also characterized by a Neolithic Demographic Transition?

From two seemingly simple variables: the 5P15 ratio (an updated version of the Juvenility Index published with Claude Masset in 1977), and *dt*, a chronological framework relative to the local Neolithic transition, Jean-Pierre decided to tackle the question of the origin and cause of the European pre-industrial demographic regime. Even though the arrival of the first farmers in Europe has been identified since the 1920s, the demographic consequences of the adoption of a new subsistence strategy based on agriculture were never directly quantified. After having methodically developed the tools to renew our approach to paleodemography, Jean-Pierre started the agricultural demographic transition (ADT) project at the global scale, by analyzing the evolution of the ratio 5P15 estimated from 68 cemeteries in Europe and in North Africa.

The observed signal indicated an abrupt increase in the birth rate coinciding with the Mesolithic-Neolithic transition. Results suggested that Neolithic populations were, on average, defining a low mortality and low fertility demographic regime. Jean-Pierre tested this hypothesis in other major centers of agriculture invention. It is within this project that I had the opportunity to help identify a comparable transition in North America and in the Levant. To interpret the signal and define the variables influencing fertility, Jean-Pierre used an interpretive framework from Human Behavioral Ecology and argued that the transition to a sedentary lifestyle and the availability of a predictable dietary surplus allowed for a decrease in maternal energetics through the reduction of breastfeeding and weaning age. The consequence for these populations with "natural fertility rates" was a mechanical reduction in the interbirth interval and consequent increase in fertility.

Always keen to share his reasoning with the international community, Jean-Pierre co-organized with Ofer Bar Yosef, a conference on the ADT in Harvard University bringing together about two dozens of international speakers. Their contribution was formalized in an edited volume published in 2008 synthesizing the vast influence of Jean-Pierre on this major episode of our (pre)history.

*Intervenant