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Contemporary studies about fertility changes: common trends or contextual variations?

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1. Grand theories, disciplinary approaches and local models

Population studies date back a long time; however, only around the end of the 17th century did quantitative methods and new model life tables allow this demographic science to statistically analyze the urban population and family dynamics (Coale and Trussell, 1996). The first and best known systematic study about the *rules* of population changes – related to a country's available resources – dates from 1798, when Thomas Malthus published his *Essay on the Principle of Population*. Since then, studies have proliferated, involving all social subjects and focusing on two opposing fertility trends coupled with the decrease in mortality: over-population and lack of generation replacement.

Over the last sixty years, descriptive and causal approaches have analyzed fertility trends from many viewpoints and have identified several factors and processes, with a varying ability to provide more in-depth or broader understanding of the issues. In fact, fertility analyses can be performed not only at *micro* or *macro* level – looking at individual behaviors or at aggregate trends (de Bruijn, 2006) – and based on theoretical or empirical research, but also focused on various *time ranges* – millennia, centuries, decades or cross-sectional (Mason, 1997) – and *geographical viewpoints* – common trends or cross-country studies (Morgan and Taylor, 2006) – leading to results that can be transferred and/or generalized with varying levels of success.

The dissimilarities between the various approaches have been well demonstrated by some contemporary theoretical and systematic reviews (van de Kaa, 1996; Mason, 1997; Caldwell and Schindlmayr, 2003; de Bruijn, 2006); however, these comparisons also highlight the links with some events that challenge the main findings and require the adoption of a broader perspective. The first critical issue was raised by two unexpected fertility fluctuations that occurred between the Fifties and the Sixties, namely the *baby boom* and the *baby bust*, contrasting with the old idea of a *natural population equilibrium* (Westoff, 1983; Morgan and Taylor, 2006; Caldwell, 2004a). The second issue arose from international fertility surveys – in many cases simply designed to empirically verify the Demographic Transition Theory, like the Princeton European Fertility Project (Coale and Watkins, 1986) –, which were unable to confirm the previous hypothesis (Hirschman, 1994; van de Kaa, 1996; Cleland, 2001; Caldwell and Schindlmayr, 2003) and drew attention to some unforeseen phenomena such as fertility decline without the preconditions believed necessary or, conversely, the failure to reduce fertility under the so-called 'right' conditions (Bryant, 2007).

The search for common theoretical frameworks, whenever and wherever effective, has led to more specific studies, often performed on the field and often using qualitative methods. Instead of looking for uniformity and regularity in the phenomena, they try to find and to analyze the various factors that affect contextual variability, all other conditions being equal (de Bruijn, 2006). In the meantime, the attention initially devoted to fertility determinants has shifted from biological and demographical antecedents and from modernization narratives (par. 2) to empirical models designed to explain fertility through economic evaluations (par. 3) or psychological traits (par. 4),

to sociological analyses focused on ideational changes and institutional characteristics (par. 5 and 6), up to the more recent gender approaches based on the culture factor (par. 7).

Therefore, despite unavoidable overlaps and cross-contamination between the various approaches, the following review tries to adopt a disciplinary framework to present some of the main contemporary theoretical works on fertility changes, clustering them both by the factors and by the mechanisms placed at the centre of the approaches (Hirschman, 1994; van de Kaa, 1996; Bulatao, 2001; de Bruijn, 2006).

2. The demographic approach

The demographic-oriented works deal with two different but connected issues: *demographic transition* and the *determinants of fertility*. Both the proposed explanations involve the idea that a significant shift has occurred – from the old to the modern regime and from natural to controlled fertility – and they focus on a comparison between situations, behaviors and results before and after this shift. However, whereas the demographic transition idea leads to a grand theory, arguing in favor of a universal power to explain phenomena, the analysis of determinants aims to identify a deterministic model containing a specific set of variables that can be empirically verified.

The term *transition* – formerly *revolution* – when talking about demographic trends sums up the idea of a shift in population balance related to the modernization process: from a pre-modern regime with high mortality and high fertility, the equilibrium has shifted to a post-modern regime, characterized by low mortality and low fertility (Kirk, 1996). The first and best-known theoretical explanation of the link between the modernization process and fertility decline was given by Notestein (1953 cited in Kirk, 1996: 364). According to the *Demographic Transition Theory* (DTT), economic development lowers mortality, but because of the connected urbanization and industrialization processes, the new lifestyle requires more education and more skills to allow people to access material resources forcing families to reduce the number of children they have and thus decreasing fertility rates.

However, it is precisely the main argument – that each country finds itself at a precise stage both of modernization and of fertility transition, according to a unique and universal pattern – that makes this theory weak and at risk of being challenged by the empirical data provided by international surveys (Hirschman, 1994; de Bruijn, 2006). For this reason, starting from the UN's comparative data on fertility rates and focusing on the factors determining birth rates, Davis (1963) tries to explain the different downtrends observed worldwide using a multiphase model. In his view, the non-homogeneity of cross-country patterns can be traced back to different speeds of adoption of new behaviors regarding birth control, abortion, delay of marriage and celibacy during the initial stage of the modernization process, even though in the long term they tend to converge. Nonetheless, the data provided by the Princeton European Fertility Project (Coale and Watkins, 1986), the World Fertility Survey Program (Cleland and Wilson, 1987) and other recent international surveys (Bongaarts and Watkins, 1996) cast doubt on fertility rate predictions and on the rate of mortality decline, and question the relationship between the two phenomena and with certain socio-economic variables.

Moreover, two further issues challenge the DTT: the arbitrariness of the threshold for starting the transition and the failure to stop the decline after an equilibrium has been reached. Coale deals with the first issue (1973), identifying three preconditions essential to lowering the fertility rate connected to the country's level of modernization, but not dependent on any specific timing: public consensus for the family planning option; the availability of information about useful means to control births; the acknowledgement of an economic advantage to reducing fertility. Caldwell (*et al.*, 1997), in turn addresses the second issue, broadening the scope of the demographic transition: for him the contemporary lowest-low fertility rates, so far from reaching generation replacement, is just a temporary blip in a macro-theory able to merge divergent trends into a common picture.

The search for *Fertility Determinants*, on the other hand, does not claim to be able to define an historical and universal process, but attempts to make an analytical and comparative study that will

lead to deeper understanding of the specific factors involved in fertility processes, starting from social and biological characteristics. Davis and Blake (1956) identify eleven behavioral and biological factors, labeled *intermediate*, through which social, cultural, economic and environmental variables affect fertility trends. Among these determinants there are the aspects closely related to the formation/dissolution of unions, exposure to intercourse, the use of contraceptives and both voluntary and involuntary termination of pregnancies. According to this model, childbirth apparently represents the outcome of a chain of events which affect the chances of going through a pregnancy, but are in turn affected by cultural and contextual conditions.

Bongaarts (1976) cuts the determinants from eleven to eight (then seven), clustering them into three main categories – exposure factors, deliberate marital control and natural marital control – and developing a formal model to quantify their effects on fertility rates. Empirical analyses show that the most effective are the proportion of married people, the degree of contraception, the abortion rate and the levels of post-partum infecundability, labeled *proximate* (Bongaarts, 1978): all other conditions being equal, a change in one of these factors has an immediate and direct impact on fecundity.

More recently, scholars' attention has moved onto *parity* and *tempo effect* concepts (Bongaarts and Feeney, 1998; Kohler and Philipov, 2001). A delay in fertility, in fact, decreases childbearing in three ways: postponement of motherhood leaves less time for unwanted pregnancies, it increases the risk of infertility and it allows women and couples to adjust their fertility intentions, usually downscaling them. Therefore, the main issues today are to understand whether a decline in fertility – in a specific place and time – reflects only a postponement of motherhood (change in *timing*) or a true drop in the number of births (change in *quantum*) and to assess whether it is possible for the contemporary women's cohort to eventually go through with their delayed pregnancies (Lesthaeghe and Willems, 1999; Frejka and Calot, 2001; Sobotka, 2004).

3. The economic approach

The DTT shows some interest in the material side of human life, but its attention is mostly devoted to macro-dynamics: a territory's resources establish mortality and fertility levels almost mechanically, guaranteeing equilibrium in population growth, and economic development is accused with having built a social organization incompatible with the traditional large family (Davis, 1963).

It was only in the Sixties that the *Consumer Choice Theory*, also known as *New Home Economics* (Becker, 1988), took the analysis to a micro level – namely to households– identifying three key factors at the root of fertility decisions: the cost of children, parents' income and their preferences in allocating resources. Becker revises the classical economic theory by creating a *demand-oriented* model so that the number of desired children depends on the utility each one has. Household decisions, therefore, come from a rational costs-benefits evaluation based on fixed preferences and aimed at increasing the quality of children, leading to the best possible trade-off between *quality* and *quantity*. Children are treated as a kind of durable commodity, requiring a long-term economic and time investment: if parents limit the number of children, they can devote more resources to each of them, thus improving their future opportunities (Schultz, 1973). The *opportunity cost* concept, including both the wages lost and the time diverted from other activities due to childbearing, can account for some paradoxical phenomena like the low fertility of high-income households and the inequality of gender roles in dual-earner couples (Becker, 1991). Since in general men earn more than women, it is more advantageous for the family budget to diversify the partners' time investments: the man increases his market working hours, further reducing his share of domestic tasks, whereas the woman increases her household working hours, diminishing her participation in the labor force (with predictable results for her personal career and economic autonomy).

The New Home Theory, however, being entirely based on economic principles, presumes an informed and rational style of decision-making in allocating the family's resources, a style that fails to deal with the partners' power balance, the changes in preferences over time, the social,

institutional and contextual conditions and, obviously, the fact that children cannot be thought of as goods equivalent to other consumer commodities (Blake, 1968; de Bruijn, 2006; Lee and Bulatao 1983).

For these reasons, several scholars have tried to extend the micro-economic approach to also include social, cultural and demographic aspects. In 1975, Easterlin propounded an analytical framework where the core factors are the *demand for children* – that is the number of surviving children wanted by parents if fertility control were costless – the *supply for children* – that is the total number of children born without any fertility control – and the *cost of fertility regulation* – which includes physical, social, economic and time costs. The actual number of children is the result of a trade-off between the cost of fertility regulation and parents' motivation to bear just the desired children rather than all the possible ones. Since this evaluation is affected both by the socio-cultural context as well as biological and individual factors, the *supply-demand* model is able to also account for differences in couples' preferences and behaviors within similar contexts and vice versa (Easterlin and Crimmins, 1985). However, explanations of the contemporary fertility decline using this model require us to take for granted that there is a contrast between the modern controlled fertility and the pre-modern natural fertility, an assumption challenged first and foremost by demographers and historians (Schultz, 1986; Easterlin, 1986).

A further contribution from Easterlin (1976) deals more with social context, namely with the size of cohorts, employment levels and interiorized expectancies. The focus is on the *relative deprivation* concept: the costs-benefits evaluation is not equal for everybody, but rests on individuals' expectancies for an expected lifestyle, molded during family socialization time. People, when they decide to have a (another) child, experience a conflict between their future expectancies and their present resources, thus fertility outcomes appear related to cohort size. In fact, fertility preferences and behaviors adapt to labor-market or income-earning opportunities: the members of larger cohorts, with less employment opportunities, reduce the number of their children, while the members of smaller cohorts, with more chance of getting good jobs and higher incomes, will be less concerned about fertility control, as happened during the baby boom. Despite its ability to transcend the individualistic view, the 'relative deprivation' approach has been challenged about many of its aspects (*i.e.* the complexity of evaluating the respective size of cohorts, the overemphasis on the male partner's earnings, the lack of attention paid to socialization agents other than the family) and, above all, has received very little empirical confirmation.

As a side issue, in international statistical comparisons the role of economic factors has often been restricted to just the opportunity cost equation in order to test the hypothesis of a negative correlation between fertility and female employment rates. Since the Nineties, however, OECD data have been posing questions about the direction of this link between mothers' work and childbearing, prompting several contemporary scholars to investigate a potential change status of this relationship and to investigate more closely the influence of various intermediate variables (Brewster e Rindfuss, 2000; Koegel, 2004; Engelhardt and Prskawetz, 2004; McDonald, 2006a; Aa.Vv., 2006; Sobotka, Skirbekk and Philipov, 2010).

4. The psychological approach

The main characteristic of the psychological approach is the focus on subjective dimensions and individual choice processes rather than on the general socio-economic context or long-term demographic trends. Unlike the other approaches, in fact, psychological explanations assume that people do not act/react to life's strains in a single mechanical way, nor make all their decisions using an economic evaluation model. Therefore, in trying to get beyond the inability of the micro-economic approach to account for the different fertility choices of same-income couples, psychologically-oriented studies deal with personality configurations, the preferences system and partners' motivations concerning childbearing on the one hand (Miller, 1992; Hakim, 2003) and with the non-economic expected value of children on the other (Fawcett and Arnold, 1973).

At the beginning of the Seventies, a large comparative survey was carried out in several countries at different levels of socioeconomic development in order to test the hypothesis that a

transition in the value of children was occurring. While in the past parents were expecting primarily material and economic rewards from their offspring, today fathers and mothers expect mostly emotional and psychological satisfaction (Fawcett and Arnold, 1973; Moors and Palomba, 1995). The framework created for the 'value of children' project, based on nine indicators related to ideal aspects and parents' perceptions about family and social life, was applied to few other surveys and at the beginning of the Eighties was totally dismissed because of its failure to account for the influence of contextual variables on parents' perceptions (de Brujin, 2006).

A more comprehensive socio-psychological approach is represented by Fishbein-Ajzen's (1975) *Theory of Planned Behavior* – formerly *reasoned action* – first proposed in the Seventies and recently taken up again to explain contemporary fertility trends (Micheli, 2006; Vikat *et al.* 2007; Billari, Philipov and Testa, 2009; Klobas, 2010). The value placed on childbearing remains the key element for fertility choices, but the decision process seems less and less grounded in actors' rationality and more and more influenced by general social and cultural conditions. In the Fishbein-Ajzen model, fertility intentions are viewed as a reliable behavior predictor, shaped by the interaction of three intermediate factors: individuals' attitudes, evaluations and perceptions of costs and benefits related to childbearing; subjective norms and perceptions of social norms; perception of their own ability to control that specific behavior. Such a framework can account not only for differences in people's evaluations, but also for the power of context, seen both as a set of material opportunities/constraints and as a regulated/social environment.

The link between intentions and behaviors and the separation of motivations, desires and intentions are clarified by Miller's sequential model: motivations can transform into desires, desires into intentions and the latter, in turn, into changes in behavior, under certain conditions (Miller, 1992). Theoretically, childbearing motivations have their antecedents in the past experiences of individuals, starting with the mother-child relationship, and in some personality traits. To be more specific, motivations show a positive correlation with *affiliation* and *nurturance* (both orienting towards affection and care-giving), and a negative one with *autonomy* and any association with *achievement*. Empirically, surveying childbearing intentions – whether to have a (another) child, how many children to have, when to have a (another) child – is a good way to study fertility, as they are among the more effective predictors of future reproductive behaviors, albeit with some differences in terms of parity (Miller and Pasta, 1994). Moreover, comparative analyses of intentions enable us not only to gather data about the gap between desired and achieved fertility, but also to paint a picture of expected future fertility trends (Bongaarts, 2001; Goldstein, Lutz and Testa, 2003).

A different point of view comes from Hakim (1998; 2000): her focus is not on the emergence of fertility intentions and decisions among theoretical individuals, but on women's actual preferences for different lifestyles. In this case, only the female perspective is to be taken into account because the main idea is that only the woman's preferences can really affect fertility outcomes. Starting from the analysis of US National Longitudinal Survey data, then broadening to an English sample, Hakim (2003) suggests three models of female life: *family-centered*, *work-centered* and *adaptive*, that is, willing to balance the two sides. The main value of Hakim's work is that she focused on a female heterogeneity that had never been recognized until then: women plan childbearing according to their lifestyle preferences and each group shares different values, attitudes and interests. Those who organize welfare should take note of this heterogeneity, because the women in each group will respond to policies in a different way: the adaptive will be very sensitive to reconciliation measures; the work-centered (concerned mainly about the public and professional domain) will be the least reactive and will likely remain childless; the family-centered will focus mostly on the home and the private domain, will be interested in some policies (like financial support) but not in others (like maternity leave) and they will often have large families.

The *Preferences model* received much criticism primarily due to the method used to divide women between the categories. The preference scheme, in fact, works *a posteriori*, looking just at the present woman's lifestyle, so it cannot account for why a certain woman chose a career over family and vice versa. Moreover, it assumes that the present lifestyle comes from an intrinsic and natural female preference, ignoring any kind of social influences and taking the male's career preference for granted (Crompton and Harris, 1998). Nonetheless, preferences studies have recently tried to expand their horizons, adding to the mix the plurality of the values commonly found in

post-modern society (Bachrach, 2001) and drawing the attention also to male preferences about childbearing (Voas, 2003).

5. The sociological approach

Unlike the others, the sociological approach doesn't rely on a core set of shared variables included in different theoretical models but analyzed with common methods. The aspects focused on range from social organization to production modes, from family to values, from the idea of society to institutions, mostly processed in their interactions and/or combined with variables from other social sciences (de Bruijn, 2006). However, the core idea is the joint analysis of society change – from traditional to modern, then post-modern – and population dynamics. Sociologists either try to add to the DTT or to establish a different point of view, which consists of claiming that the most significant demographic changes occur at the same time as the main social changes – industrialization, urbanization, secularization, individualization – and therefore ask for explanations able to cover parallel phenomena that cannot be accidental.

An additional issue for the sociological perspective, raised by the failure of demographic and economic variables to account for local fertility variations, is the role of culture (Cleland and Wilson, 1987; Lesthaeghe and Surkyn, 1988; Hammel, 1990). However, to improve their knowledge about cultural factors, scholars have to cope with several difficulties in operationalizing such a concept. The assessment of cultural context, indeed, often risks turning into the mere insertion of variables (like geographical region, ethnicity, language and religion among others) or into the addition of a residual concept – a sort of error term – useful when all the other variables fail or, lastly, into the reading of cultural features in a structural-functionalist and deterministic way (Caldwell, 1997). Thanks to the cross-contamination with anthropology (Greenhalgh, 1994; 1995; Kertzer and Fricke, 1997), the socio-cultural perspective has now moved towards more dynamic approaches, where individuals actively manipulate norms and cultural representations, and has implemented mixed analysis techniques, both quantitative and qualitative (Bernardi and Hutter, 2007).

Caldwell's (1976; 1982) revisiting of the DTT focuses on cultural factors in order to account for economic rationality in pre-transitional fertility and for dissimilarities between countries in the timing and pace of birth-rate decline. The *Intergenerational Wealth Flows* theory correlates the decrease in fertility with the change in direction of resource exchanges between parents and children. While in traditional societies children, as early workers, contributed to the family income and were an asset for their parents, in modern societies the wealth flow transfer has reversed and now it is the parents who have to invest more and more economic and temporal resources in caring for and educating their offspring, with little hope of future returns. What caused such a reversal was *westernization*, a process marked by the global spread of the capitalistic production mode and mass education, which, by requiring an adjustment of family organization, made a smaller household more profitable and effective than a larger one (Caldwell, 1981). However, despite its theoretical consistency and the comparative studies carried out (again by Caldwell) in several primitive, traditional and transitional societies, the difficulties in operationalizing the flow concept made subsequent application of the model rare (Hirschman, 1994; van de Kaa, 1996; Caldwell, 2004b; de Bruijn, 2006).

Undoubtedly, the *Theory of the Second Demographic Transition* – SDT – (Lesthaeghe, 1983; van de Kaa, 1987) is better known. Its creators' starting point is the previous work by Ariès (1980) which, by identifying two successive motivations behind fertility reduction, suggests the idea of a split within the demographic transition process that occurred around the Sixties. Initially, during the first stage of the transition, family size decreases since modernity raises the economic, temporal and emotional investment necessary to ensure children's wellbeing and success; it is the time of the bourgeois family and the *child-king*: Anyone who desires a child must be driven by an altruistic feeling and ready to give them the best. During the second stage of the transition, on the other hand, newly formed values – liberal, individualistic and secular – put the individual and his fulfillment at center stage; the idea of family declines as well as that of marriage, and childbearing

becomes just one option among many others, and easily replaced with other equally satisfying experiences.

The link between ideational variables and fertility decline passes mainly through the de-institutionalization of life paths: a partnership, grounded on mutual attraction, can be sealed and unsealed according to the partners' desires and the birth of children, frequently postponed until its physiological limit, is no longer needed either for self-realization or for social climbing (Lesthaeghe and Willems, 1999). Fertility decline is therefore an intrinsic feature of a transition process which does not necessarily tend toward demographic equilibrium but is marked more by a progressive ageing of the population, a growth in the instability of families and an increase in international migration (Lesthaeghe, 2010).

Although consistent and well structured, even the SDT has not been totally spared from criticism. Among the most controversial issues, the first concerns its main assumption: are there two different transitions or, on the contrary, are they just different phases belonging to a single process? (Cliquet, 1992; Caldwell, 2004a; Coleman, 2004). The second objection is related to the SDT's risk of relying on a circular rationalization because the behavioral change is explained by the change in values. Thirdly, the empirical efforts to verify the link between post-modern/post-materialist values and fertility trends have not always been successful (van de Kaa, 2001; Kertzer *et al.*, 2006) and, finally, the SDT has failed to foresee the different paces, ways and places in which the reduction in births has occurred (Caldwell and Schindlmayr, 2003; Kohler *et al.*, 2002; Dalla Zuanna and Micheli, 2004). Since the late Nineties, in fact, the links between the indicators of secularization and fertility rates have confounded expectations: in Southern European countries, characterized by the most traditional family models, the fertility rate has ended up sinking far below the replacement level, while in Northern countries, the ones with the highest levels of secularization and individualization, the birth rate has seen a tremendous upturn, almost reaching the two-children threshold.

The most recent studies about such an apparent paradox update Hajnal's historical divide and stress the role of family structure – whether strong or weak (Reher, 1998; Bettio and Villa, 1998; Dalla Zuanna and Micheli, 2004) – in shaping reproductive choices: persisting close intergenerational ties would hinder both the younger generation's attainment of autonomy – shifting forward all the transitional passages to adulthood and making parenting more demanding too (Livi Bacci, 2001; Micheli, 2006) – and the spread of secular and post-modern behaviors – like early mating, informal partnerships and births outside marriage – all phenomena which seem related to a post-transitional upturn in fertility (van de Kaa, 2001).

Varying a little from this is a further Caldwell work (2004a;2004b). Disagreeing with the SDT idea and considering the ideational change just one of the elements involved, he interpreted the contemporary family models as the outcome of a long-term structural transformation that began with the industrialization process. Because of the current Southern European socioeconomic context – high unemployment, gender asymmetry, conservative morality, low social sensitivity for parenthood – women today find themselves caught between social and family obligations inherited from the past and their own personal and professional aspirations for growth: in order to succeed in balancing domestic and extra-domestic commitments, they postpone and reduce motherhood. Therefore, according to Caldwell, demographic transition would depend on economic trends and material conditions much more than the STD implies, and he traces a single fertility decline process not necessarily destined to end soon (Caldwell *et al.*, 1997).

Structural aspects – the evolution of capitalism and economic deregulation – are central in McDonald's explanation too (2006a), with the main focus on contemporary labor market changes. The end of the classic steady job, the rise of flexibility and the increase in unemployment and inequalities undermine young people's trust in the future. Men and women experience an unprecedented sense of risk which, coupled with growing economic aspirations, leads them to focus greater efforts on the educational and professional spheres in order to achieve a good placement in the labor market. Under these conditions, postponing starting a family and childbearing today looks like the best choice, a totally rational response to the socioeconomic situation experienced by today's generations (Kohler *et al.*, 2002).

6. The institutional approach

The core of the institutional approach is the idea that the timescales of demographic changes and the ways in which they occur are affected by each society's institutional apparatus, understood as a specific set of rules built socially in order to solve its members' problems (McNicoll, 1980). This view detaches itself totally from the previous ones as it stands on a different level: fertility decisions are studied in terms of their dynamic interactions with a political and institutional environment that is able to modify the role and the weight of any other factors, supporting or, conversely, making more difficult the decision to bear children. Unlike demographic transition theories (de Bruijn, 2006), proximate determinants and micro-economic approaches (McNicoll, 2001), the institution-oriented explanations take into account how societies are structured and how governments implement policies, programs and action plans – some more and some less conscious and direct – aimed at affecting fertility trends.

Although the debate on the legitimacy and effectiveness of pro/anti-natalist programs is still open, there is in fact no question at least about the indirect role of social and family policies in defining (all other conditions being equal) a greater or lesser level of incentives to fertility. A number of contributions accounting for the divergent fertility trends observed in countries with similar socio-economical characteristics (Bradshaw *et al.*, 1993; Chesnais, 1996; Brewster and Rindfuss, 2000; Gauthier, 2002; 2007; McDonald, 2006b) have made the institutional approach one of the most promising today. In any case, the risk of rationalizing *ex post* policy models and collective behaviors cannot be overlooked (McNicoll, 1992). Institutional analyses, in fact, are used to identify a relationship between the labor-market configuration, family structure and policies, looking for their ability to support/reduce fertility. However, it must be remembered that this is a two-way and non-deterministic process: on one side, institutional apparatus can affect people's behaviors, while on the other side, policies represent the solidification of social issues arising from the same people. Moreover, the inadequacy of any oversimplified reading of the relationship between social systems and fertility requires particular attention to be paid to both *path dependency* in developing institutional solutions and *personal freedom* in choosing reproductive behaviors (van de Kaa, 1996). Indeed, the existence of institutional paths dependent on historical context casts doubts over the hypothesis of a future convergence in international patterns, while the level of individual agency is a decisive point in governments' evaluations regarding investments and the effectiveness of policies (McNicoll, 2001; Gauthier, 2002).

Looking at fertility trends, institutional actions can address two main targets: a decrease in birth rates – as in developing countries, commonly afflicted by overpopulation and lack of resources – or, on the contrary, support for childbearing – as in industrialized countries, marked by low and lowest-low fertility rates. Despite the success generally attributed to family planning policies, the decline in births that has recently taken place in several developing countries seems due more to a favorable combination of fertility determinants than to any intrinsic features of the programs put in place (McNicoll, 1992; Hirschman, 1994; Tsui, 2001). In developed countries, however, assessing the role of institutions in modifying fertility seems even more controversial as it requires analyses – including counterfactual ones – aimed at better understanding both the rationale behind state intervention and its ability to fill the gap between desired and achieved fertility (McIntosh, 1986; Chesnais, 1998; Gauthier and Philipov, 2008).

As far as European welfare systems are concerned, a well-known taxonomy devoting specific attention to fertility policies has been proposed by Gauthier (1996). She identifies four models: in the first one (France and Belgium), defined as *pro-family/pro-natalist*, policies are designed specifically to encourage all families to have children, mainly by helping women to reconcile work and family; the second, *pro-traditional* (typical of Southern Europe) aims to support primarily traditional families, but its uncoordinated and inconsistent policies usually have only a limited effect on fertility; in the third, *pro-egalitarian* (shared by several Northern countries), the main concern is to promote gender equality in every field and to support childbearing with a broad-ranging care services network, while the fourth (the United Kingdom), termed *non-interventionist*, is characterized by an underdeveloped policies system and by a state non-interference rule in private lives, so all choices and responsibilities are left to individuals.

In order to better understand the effectiveness of investments in different forms of fertility support – above all in such a time of decreasing resources – several recent studies have tried to compare the various measures that have been implemented, while keeping in mind people's reasons for failing to fulfill their childbearing intentions (Demeny, 1986; Brewster and Rindfuss, 2000; McNicoll, 2001; McDonald, 2006b; Gauthier, 2007; Gauthier and Philipov, 2008). Empirical results suggest that even if financial aid – provided to help with the direct costs of having children – is the most widespread provision, it is also the least effective in increasing fertility, especially in the short term. Indeed, in childbearing decisions a key role seems to be played by the indirect costs related to parenting, *i.e.* the opportunity costs resulting from giving up or reducing parents' (primarily mothers') work commitments. Therefore, the measures that would best promote births today – especially second and third offspring – would be facilities supporting a better balance between family and work, like maternity and paternity leave, part-time work and childcare services.

Although somewhat outdated and never actually implemented, nonetheless an unusual proposal for government intervention deserves to be remembered at this point – one that indirectly recalls Caldwell's *Intergenerational wealth flow transfer* theory –, expounded by Demeny (1986; 1987). He claims that the drop in fertility is mainly due to the breaking of the link between generations caused by national social welfare schemes. Parents who no longer have to depend on their offspring to survive into old age are less motivated to bear children; on the contrary, in modern society a large number of children negatively affects the resource accumulation process their families require to ensure a good retirement. The only way to reverse contemporary fertility trends, therefore, would be for institutions to restore the link between parents' welfare and their offspring's contributions, meaning that intergenerational wealth transfers would no longer be anonymous.

Criticized by Simon (1988; Demeny, 1988) primarily for the risk of weakening and distorting the whole social insurance system, Demeny's proposal today looks more unreliable than it did in the past, thanks precisely to the fewer work opportunities and the lower wages of the young generations compared with those of their parents. In any case, all the contemporary welfare scholars agree with the statement that the state's role can never be totally neutral and that any social policies – whether they regard employment, income support, housing and so on – have some effect on people's fertility decisions, especially when they involve the individual's economic security and stability (McDonald, 2006a).

7. The gender approach

When looking at the most recent and ground-breaking contributions, the gender approach certainly deserves more than a mention (McDonald, 2000a; 2000b). Unlike explanations related to specific subject areas or, like the institutional viewpoint, to specific social set-ups, the gender approach moves the focus onto relationship dynamics between men and women, regarded as a basic component that can modify the weight and the role of all the other elements affecting fertility choices (Mason, 2001). This perspective spans all the previous ones: the structure of gender relations and the social expectations about the right way to be a man and a woman are an overall frame which make the outcomes – sometimes unexpected and inconsistent – of the contemporary fertility decision process easily understandable.

Most traditional approaches totally neglected gender differences, subjecting women's preferences, interests and issues to those of men and mostly confining women to a mechanical and subsidiary role dependent on the male partner's choices (Easterlin, 1976; Becker, 1991). Then when, as the female emancipation process progressed, scholars began to assign women a leading role in making fertility decisions, they at first attributed sole responsibility to them for the reduction in births. A woman's commitment to paid work diverts her from her natural and traditional duties, and despite the acknowledgment of the link between the high fertility rates of the past and the institutionalized discrimination of half of society (Ryder, 1979), almost everyone looks at female emancipation with at least a little suspicion.

The data collected through the comparative analyses carried out in the Seventies corroborate the hypothesis of a negative relationship between women's employment and fertility: births started

their decline precisely in the most advanced countries in terms of female emancipation, while they fell more slowly where gender relations were still more traditional. Having a family continues to be a priority for most women, although the attainment of an education and a good professional position are essential achievements for them just as they are for men, even if it means a delay in marriage and motherhood (Caldwell, 1982; Westoff, 1983; Goldin, 2006). A return to the past – to traditional gender relations, patterns and roles – seems unlikely to say the least: the contemporary unwanted outcomes of gender equality are the byproducts of a change still in progress, but new and *multiple equilibria* can – and must – be found (Esping-Andersen, 2009).

Some years after his first study, Chesnais (1998) showed more sensitivity in understanding women's aspirations to be not just wives and mothers. The change in gender roles is viewed as a key factor in reducing fertility, but he puts more stress on men's – mainly Mediterranean males' – inability to allow equality between the sexes and to rearrange family structures. Consequently, it is the persistence of unbalanced and asymmetrical gender relations which leads women to escape from motherhood or at least to limit births in order to avoid to find themselves stuck in traditional roles once more. Chesnais, in addition, advances McDonald's more detailed study, drawing attention to the ambiguous association between women's emancipation and fertility rates, labeling it the *feminist paradox*: after an initial decline in births, the growth of gender equity and the improvement of female status bring with them a substantial recovery in fertility rates, drawing a characteristic U-shaped curve in the relationship between the two variables.

McDonald (2000a; 2000b) refines the analysis of the same relationship by drawing a distinction between an anti-natalist *gender equity* effect within the context marked by the highest fertility levels and the opposite pro-natalist effect within the context marked by the lowest fertility levels. The decline in births is not merely linked to a society's overall gender equity, but depends more specifically on the male-female relationships embedded within each social domain, labor market, family or institution. A gender system's progress towards equity, in fact, is faster in individual-oriented institutions – such as schools, labor markets and politics – and slower in family-oriented institutions – such as taxation systems, industrial relations, social services and, naturally, families. The core of the approach – able also to account for the variations in fertility trends between countries – therefore, is not only the overall equity level achieved by each society in terms of gender roles and stratification, but also and principally the coexistence of different degrees of equality within the different institutions of the same society. In many countries, women have attained educational and employment levels similar to those of men; however, at home, household task-sharing between partners remains mostly traditional and remarkably unbalanced. Many hold that this inconsistency is at the root of the contemporary fertility decline (Mason, 1997; McDonald, 2000a; 2006a). Trying to fulfill their professional aims and to take advantage of their new life opportunities but lacking adequate support from institutions and their partners, the only option open to women would be to limit childbearing.

A similar point of view is also supported by Mason (1997; 2001). Her work deals with the *gender system* concept, meaning by this both *gender stratification* – *i.e.* the institutionalized system of inequality between male and female members of the same society – and *gender roles* – *i.e.* the overall division of labor between men and women. The gender system is a multidimensional and manifold concept which acts differently according to the society, the individual's socio-economic characteristics, the institutional domain and the individual's stage in life. Consequently, the gender system plays a role as a cross-variable affecting all the others when women and men have to decide on their reproductive behaviors. For instance, although economists don't include the gender system in their equations, women's higher professional positions – achieved thanks to a long-term education investment – make the opportunity cost of childbearing greater for females.

Despite showing an equivalent awareness of gender's multidimensional and manifold character, Presser's contribution (2001) focuses on an unusual aspect, often neglected in fertility research: women's right to enjoy their free time. Her main point is the growing female ability to control the timing of all their life course events except free time. In fact, the possibility to regulate fertility, timing childbearing in accordance with professional or personal needs, has improved the overall status of woman in contemporary society. However, when a child is born, the biggest commitment is still on the woman's shoulders: she must always be ready to respond to all the baby's requests, whereas her male partner feels less compelled to give up his free time to take care of the newborn.

According to Presser, women don't turn down the chance to become mothers, but as they consider themselves entitled to have leisure just as their male counterparts do, they tend to limit childbearing in order to avoid overwhelming care duties.

Except for a few brief mentions – usually about the lack of sharing household tasks – the gender approach has devoted little attention to the male side of the gender system. However, some studies, using both quantitative and qualitative international data, have recently started to deal with this second side, trying to reach a better understanding of the link between the male tendency towards egalitarian roles and the desire for children (Bernhardt and Goldscheider, 2006; Puur *et al.*, 2008; Jamieson *et al.*, 2010).

8. Final remarks: towards a common framework?

Despite, or perhaps precisely because of, the broad range of disciplinary approaches, fertility research today does not rely on any grand theories, but is able to explore virtually all aspects of human life. This huge variety of single insights, however, carries with it the twofold risk of fragmentation and ecological fallacy in accounting for reproductive behaviors. Moreover, even if all contemporary scholars disagree with any deterministic perspective, they agree with the basic idea that fertility trends cannot be accidental. Thus, after the challenge to the universal demographic transition theories, a need for consolidation renewed the search for a common framework to combine different explanations. The aim is to draw a shared reference pattern into which a country's particular features and historical aspects can be inserted and used as intermediate factors shaping the various worldwide fertility trends.

An interesting example of these recent attempts to take a transversal reading of the various studies in search for a common framework comes from Bulatao (2001). His first step is to draw attention to some basic explanations detected in all the main approaches to studying fertility, although they are stressed and mixed differently by each one. The explanations are: the reduction in mortality and tendency to homeostasis; the reduced economic contribution from children and increase in their cost; the opportunity costs of childbearing; the transformation of the family and changing values; the disappearance of cultural props encouraging childbearing and the weakening of institutional control; improved access to effective methods of fertility regulation; delayed marriages; the spread of ideas and practices leading to lower fertility (*ivi*, 2-3).

After a concise overview of the main disciplinary approaches to fertility, Bulatao then highlights some common assumptions about which all the above-mentioned approaches agree and which can be used to draw up a common reference pattern to frame the previous elements. Even though the basic explanations can be arranged in many different ways, it is in fact possible to summarize their theoretical statement as follows: fertility decline is mostly viewed as a rational process, based on individuals' evaluations; hence, there must be both motivations – desire for a smaller family – and means – effective methods to control fertility; being the outcome of a rational process, fertility trends involve a multitude of individual decisions; the framework of these decisions is built by the socio-structural and economic factors characterizing each society; people make their choices by rationally evaluating these factors, but referring to goals, preferences and values that are not necessarily as rational (*ivi*, 11-12).

The debate on fertility trend determinants is today still open and lively and some of the broader historical narratives have been challenged by empirical data or overturned by events. However, the basic explanations so clearly reviewed by Bulatao are still at the root of people's behaviors, although they may need a new systematic and inclusive framework.

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