

Essay Review

Medieval Demographic Thought

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Peter Biller, *The measure of multitude: population in medieval thought*, Oxford University Press, 2000, pp. xxi, 476, illus., £35.00 (hardback 0-19-820632-1).

A book on demography without statistics, graphs or charts: is this possible? Peter Biller has masterfully shown not only that it is possible, but that a textual approach to demographic questions in Latin Christendom before the Black Death (especially around 1300) enormously enriches our understanding of demographic trends in a period which lacks systematic statistical data, in which statistical calculations can at best give us rough estimates, and in which the concept, the name, and the discipline of demography were non-existent (the name and the discipline emerged in the second half of the nineteenth century). This is not only a solid scholarly enterprise on the highest level, it is also a pedagogic manifesto of how one can and perhaps should handle historical sources.

The sheer scope of the book defies any generalizing summary in a brief review. The core of the book is a meticulous analysis of what a group of scholastic thinkers of the thirteenth and fourteenth centuries, philosophers and theologians alike, thought and wrote about fertility in Western Christian marriages, avoidance of offspring, sterility among prostitutes, sex-ratio, marriage rates, population densities in Christian and non-Christian regions, and so forth.

In fourteen dense but elegantly written chapters (followed by an extremely useful

analytical index) Biller takes the reader on a grand tour of sources and themes, all of which serve his purpose: to show that thirteenth- and fourteenth-century people, clerics as well as learned laity, were aware of and showed increasing interest in population questions. He links the fact that Western society around 1300 was demographically self-conscious, and the changing demographic thought of this society, to the demographic reality in the thirteenth and fourteenth centuries. During this period Europe reached the zenith of long and sustained demographic growth and was beginning to feel its repercussions and its reversal. His comparative look allows him to hammer home the notion that, as regards demographic thought and interests, significant differences existed between southern European (mainly Italy) and north-western European views (northern France and England). Biller does not start with theories (modern and often anachronistic) but with the medieval texts. There is no jargon in his book. He sensitively lets these texts speak, contextualizes them, and occasionally offers informed conjectures whenever the text does not provide a clear-cut proof. He then checks in what way the texts confirm the recent research of historical demographers. All along, Biller shares with the reader his methodological doubts, and this enriches the reading even further.

The first part of the book (chapters 2–8), entitled ‘The Church and Generation’,

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discusses the demographic themes in the Church's marriage-texts. Here Biller shows that learned medicine and physicians became increasingly present in commentaries on Peter the Lombard's *Sentences* (the basic text of theological learning and thought from c. 1200 onwards). Commentators of the 1250s like Bonaventure were grounded in knowledge of the complexional make-up of bodies, and they made occasional reference to medical authors. After 1300 the commentators' own medical knowledge seems more technical, and the *medici* appear more often. Biller describes how the concept of a "sex ratio" evolved in the 1220s and early 1230s in the Paris of William of Auxerre, Roland of Cremona, Hugh of St Cher, and William of Auvergne. At first there was a cumbersome but usable phrase ("an equal or unequal multiplication of men and women" in Bonaventure's words). Then emerged an elaborate, extensive, and formal discussion, which included medical and biological data on sex determination. Giovanni Villani's description from 1338 of a parish priest in Florence who regularly at baptism attempted to measure the ratio numerically by placing a black bean for each male infant he baptised and a white bean for each female completed the process by adding numbers to the abstract idea. Here too the style and content of the debate were largely affected by the great expansion in the stock of learned medicine and natural philosophy acquired by Latin Christendom through translations from Greek and Arabic between the second half of the eleventh century and the first half of the fourteenth.

In chapters 6–8 Biller offers a new account of medieval birth control. This includes a detailed summary of the medical context (both practical and theoretical) and of the legal and theological debates on the topic. The medical evidence shows a marked interest taken by fourteenth-century Italian learned medicine in the ethics of providing help in procuring abortion and avoiding

conception. The diverse sources overlap around 1300 to bring the historian rich and varied evidence for the actual practices of preventing offspring and the attitude to these practices. Withdrawal, or *coitus interruptus*, emerges as the main cause of worry in the ecclesiastical texts. The convergence of the concerns of theology and learned medicine is well attested by a *quodlibet* of John of Naples (regent master in theology in Paris, 1315–17) asking: "Whether a *medicus* ought to give to a pregnant woman medicine from which would follow the death of [her] child, and if he did not give it the death of both would follow". Commentaries on *Sentences* provide evidence that couples tried to avoid conception by having sex in what they regarded as a safe period (during menstruation). Penitentials and other pastoral literature show how after 1300 prevention of conception was given extraordinary prominence. The condemnation of all sex outside marriage continued, but now there was also a surveillance of sex within marriage, and some priests' manuals (for example, William of Pagula's *Oculus sacerdotis*) ordered that a priest should issue public warnings about prevention of conception, principally within marriage.

The second part of the book deals with the picture of the habitable world and the character of its inhabitation as received in the West between the 1230s and the 1330s, mainly via encyclopaedias and missionaries' reports about Mongolia (large and very thinly populated) and China with its enormous population. It shows how the category "populous" (*populosus*) became a standard way of describing regions and cities and reflects the rising awareness of density of population. The writings about the recovery of the Holy Land were also saturated with demographic thought, and reflect the preoccupation of the Christian writers with the depressing demographic reality there. Some even toyed with the extreme idea of giving papal dispensation to

polygamy in order to enhance multiplication in Outremer, something the theologian Peter of la Palud vehemently opposed. The combination of demographic thought about the Holy Land, thought about the Tartars, and more academic thought directed towards the limits of the habitable world finally brought about a remarkable development in demographic thinking, namely the creation of an elementary world “population-geography”. Theologians made a precise calculation of the maximal number of humans the habitable parts of the earth could contain (according to Richard Fishacre 33,099,000,000) and were preoccupied with the number of Christians and the size of Christendom, and the dwarfing of Christian numbers and size by all the other faiths in the world.

The third part of the book treats the impact of Aristotle’s works on demographic thoughts and themes (for example, the differences between men’s and women’s life-spans and generative power). Here one chapter is devoted to the reception of Aristotle’s natural philosophy which stimulated demographic thought about life-span and substituted old knowledge borrowed from Isidore’s *Etymologies* with dense, detailed biological and medical accounts of the animal world and of the human body.

The other three chapters are devoted to a detailed analysis of the reception of Aristotle’s *Politics* from the 1260s onwards (William of Moerbeke’s translation). This text (in particular book 7) encouraged speculation about the optimal population in a city, and about interference with population (for example the legislator’s eugenic intervention in marriage ages and patterns, or determining the number of children), and exposed the medieval reader to a much greater range of data and systematized thought about population than any other previously available text. The fact that its readership included cultivated laymen extended its influence even farther. And indeed, the commentaries (such as the

one by Nicole Oresme) attest the recognition of the need to regulate the city-population and create what Biller calls the “first systematic history of population control”. Biller shows how concepts of over-population (*excessum multitudinis*) emerged, and how commentators like Peter of Auvergne attacked early marriage and promoted late marriage for the “common good” or “common utility” (late marriage produces stronger offspring and is better for civil actions, virtuous actions, and military activity). Biller thus confirms a major variable in the “European” pattern of north-western Europe identified by historical demographers, namely a higher average age of first marriage for women.

As for the debates about the optimal size of a population, the medieval commentators reflected a reading loyal to the Aristotelian source (that the city needs to have a sufficient multitude for the necessities of life, but it should not be too big, and that the most peaceful cities are those where middling men (*media*) between the poor and the rich are more numerous, as normally is the case in larger cities). But they also added new arguments, for example, the need to control the multitude to avoid a situation in which parents cannot feed their children (i.e. poverty), or to control the generative age so that people will not produce weak offspring (according to Walter Burley seventeen to fifty years was the generative range for women and thirty-seven to seventy years for men). All the commentators were lenient about early abortion and they all added new techniques or strategies to Aristotle’s possible techniques of keeping numbers down. Awareness of the significance of the number of people in the city extended to a growing awareness of the number of aliens (Jews, for example) in it, and the danger that this number constituted.

Finally, Biller examines one place, Florence, around 1300 for the role and impact of ideas about population. Preachers used statistics to prove Christianity’s victory

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and the heretics' negligent position. *Multitudo populi*, according to the Dominican Remigio dei Girolami, was the third of seven good things granted to Florence by God and leading to illustriousness or glory. Others (the Franciscan Servasanto da Faenza or Dante) were critical of the situation in which girls were being given in marriage at a very early age, thus producing weak offspring. They looked with envy at the alternative north-western European ideal (in Frisia, for example), where girls married late.

This book has made a substantial contribution to narrowing the conceptual gap between the "medieval" and the "modern mind". It shows how quantity entered to some degree even into the more primitive demographic thought of the thirteenth and fourteenth centuries well before 1348. "Demographic thought" is anachronistic, but the gap between the modern phrase and the medieval thought was narrowing markedly around 1300. A passion for numbers and statistics emerged,

as ever more people started applying numbers to their abstract ideas, sometimes plucking numbers from the air (Peter of Abano comparing the quantity and quality of diseases of the winter and of the summer—more diseases in the summer, but a higher proportion of mortality from winter illnesses), but sometimes making a real effort at accurate calculation by actually measuring the reality.

Other people may now add more information and try to produce other explanations, for example for the marked differences between southern European and north-western European demographic thought, which clearly emerge from this research. But Peter Biller has produced a trail-blazing book, packed with intellectual fireworks. It fuses diverse sources and scraps of information to detonate an explosion of insights. It is not an easy book to read, but anyone interested in pre-modern medicine must read it. It will stimulate and satisfy the curiosity of students and researchers alike.