Galen's physiological system was "completely lacking any scientific basis", and was in fact a "highly fanciful concept of bodily function". For Persaud, "Galen's death heralded a long era with a predictable outcome. Medicine, and the study of human anatomy in particular, languished in passive moribundity only to reach a climactic end in 1543 with the publication of *De corporis humani fabrica*." Persaud's story ends with an account of the progress of anatomy from Mondino, the "restorer of anatomy", through Leonardo da Vinci to Andreas Vesalius, "the first man of modern science".

Persaud's interpretation will probably be passed over by scholars in the field as being too whiggish. The book may, however, prove to be popular among students new to the field, especially among medical students. Indeed, this is probably precisely the audience at which Persaud (himself an eminent medical doctor if the list of qualifications after his name on the title-page is anything to go by) is targeting his book.

It is this aspect of Persaud's book which is probably the most interesting. Far from being particularly revealing about the *history* of anatomy, this work is more of an insight into the concerns and interests of modern anatomists and how they perceive their own discipline today.

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JUDITH LEAVITT, Brought to bed. Childbearing in America, 1750-1950, New York and Oxford, Oxford University Press, 1986, 8vo, pp. ix, 284, illus., £19.50.

Feminist historians are amongst the leaders in presenting medical history from the patient's point of view. Leavitt, whose previous contributions to the history of women and health in America are well known, provides us here with a vivid and moving account of the experience of childbirth in America. The impulse that led to this book was the birth of her own children; this, she says, gave her profound appreciation of the importance of the old ideal of childbirth as a social occasion in which women banded together to provide mutual support. Through such support, "childbirth customs and rituals formed a cornerstone of women's group identity. By attending confinements, women strengthened their life-long mutual bonds". This is a constantly reiterated theme, which forms the background against which she explores the consequences of the invasion of childbirth by the male physician ("physician" in the American sense), and, above all, by the move of childbirth to hospital. These are seen as events which not only destroyed the much-needed support of women in labour by other women, but made matters worse by the clumsy or unnecessary interventions of physicians and their tendency to transmit infection. It is suggested that modern women may have lost more than they have gained by the impact of "impersonal science" on obstetric care. Curiously, very little is said about the presence of fathers in the delivery room and the importance of this in bonding the family closely together. Was this because it is seen as a battle that has been won and is taken for granted; or is it regarded as unimportant; or is it perhaps that the presence of fathers is something that disrupts supportive groups of women?

Today, parents of both sexes will tell you that childbirth is not only an intensely emotional event, it is also for most people by far their most important contact with the medical and nursing professions. The subjective and emotional nature of discussions of childbirth is also found in histories of the subject—partly because here, more than anywhere, history is felt to be so closely connected to present practices. Indeed, many histories of obstetric care fall clearly into one of two categories: the older sort, which were written to stress the "wonderful advances" of medical science and the consequent saving of lives; and the more recent, which so often attack the medical profession for authoritarianism, insensitivity, and for robbing women today of the "wonderful experience of having a baby". So copious are the records of obstetric care that it is easy to write either version and give it spurious authority by numerous references. Faced with such polarization of attitudes, the unpolemical historian of obstetric care must work with a cool and balanced approach. In the first four-fifths of this book, the author walks this tightrope with

admirable skill. Her presentation of the struggle for the control of childbirth between physicians and birthing women, and "the extent to which birthing women contributed to changing childbirth patterns in this country" is the book's greatest strength.

For example, the traditional story has it that women's control over childbirth disappeared when male physicians first attended routinely at normal labours; and this began, roughly speaking, in late-seventeenth-century France, early-eighteenth-century Britain, and mideighteenth-century America. Leavitt exposes this fallacy by showing that, until the 1920s, middle- and upper-class women in America sought the best of both worlds by retaining physicians but keeping them under control. In 1890, Anita McCormick Blaine of Chicago delivered at home with the support of two women, the husband outside the door and a doctor to administer chloroform while he delivered the child. "She wanted and got the traditional home birth experience accompanied by the most that medicine had to offer." The physician was an invited guest at a home delivery whose decisions had to be sanctioned by the group of attendant women. For the well-to-do at any rate, late-nineteenth-century America is presented almost as the golden age of childbirth, when women had the benefit of support groups, delivery at home, and obstetricians largely under their control. Yet, the dominant attitudes of most nineteenthcentury women to childbirth were coloured by desperate fears of pain, disablement, and death. The presence of physicians and increasing intervention represented the joint response of women and physicians to such fears. Both groups justified medical intervention in terms of the popular belief that civilization and inter-breeding had so weakened modern women that they neither could, nor should, be expected to endure labour without medical aid. In Britain, the same belief was largely responsible for a twenty-fold increase in forceps delivery in general practice in the early years of this century. Such were the energy effects of civilization, it was said, that only "savage" tribes had easy uncomplicated labours. Englemann's influential Labour among primitive peoples, published in the 1880s, appeared to provide scientific confirmation of such

The perception of childbirth as a terrifying event, from which recovery would be slow and probably incomplete, must be seen in the context of attitudes, held by patients and their physicians, about the delicacy of civilized women. Such attitudes justified demands for drug regimes such as twilight sleep which opened the way to hospital care. When hospital care was provided for the majority, women got what they demanded but not what they expected.

In retrospect, one can say that the expectations were unrealistic. Home deliveries and midwife deliveries were condemned as the anachronistic equivalent of kitchen-table surgery. In the 1920s and 1930s the failure of specialized hospital care to guarantee an invariable safe and pain-free delivery led to an inevitable reaction to the other extreme by the proponents of "natural childbirth"—Grantley Dick Read and his successors. It is not surprising that orthodox obstetrics has been attacked by a number of recent historians. If the practice of physicians has had a bad press, the lying-in hospitals have had an appalling one. Both are condemned for encouraging the excessive use of drugs, anaesthetics, episiotomies, forceps deliveries, and Caesarean section, combined with insensitive management sometimes amounting to cruelty. They are blamed above all for breaking their promise to reduce, if not abolish, maternal mortality.

The picture of hospital care that is presented here is, in keeping with contemporary historical wisdom, almost totally black. Unfortunately, however, the section dealing with childbirth from the 1920s to 1950 and the role of the hospitals is, in comparison with the previous chapters, compressed, selective, and lacking in balance. This was the period in which major changes and genuine advances occurred. Yet there is no real attempt to explain the rationale for the excesses in obstetric care which disfigured the '20s and '30s, and are typified by DeLee's famous paper on the prophylactic forceps operation. Nor, surprisingly, is one told that this was the period in which American obstetricians were bitterly ashamed that the USA had the unenviable distinction of the highest recorded maternal mortality rate in the Western world. It is admittedly a complex period in the history of obstetric care, but it verges on caricature to describe childbirth in America in such over-simplified terms as: 'Two images of birthing women in America—one "brought to bed" in her own home by the women she called together and the other drugged and

"alone amongst strangers" in an impersonal hospital—frame the American obstetric experience.' Here the key word is "impersonal". It crops up repeatedly, especially in the context of "impersonal science". This, it has to be said, is dangerous nonsense. A birth attendant, whether a physician or midwife, can carry out a scientific procedure unnecessarily, or do so in an impersonal and insensitive manner. To do either is reprehensible. But science itself cannot be impersonal. This is no quibble. The equating of "science" with "impersonal" is one of the primary reasons for the gulf of misunderstanding between women who seek to reform childbirth and the medical profession. The false association which suggests that what is scientific is necessarily uncaring and impersonal is itself an unscientific belief with unfortunate consequences. It may explain why studies of the history of obstetric care tend to be either social or political histories, or statistical and clinical, but seldom both. In practical terms, such beliefs can lead the anxious and uninformed mother to reject orthodox medical help when such help is urgently needed.

To say all this is not to deny the existence of excessive and dangerous intervention in normal labours or the many insensitivities of medical care either past or present. Such excesses were sometimes motivated by greed, or by power-struggles in the changing world of obstetric care. Often they were part of the ethos of a new and growing speciality intent on abolishing the general practitioner obstetrician and the midwife. But certain practices and procedures, later condemned, were introduced fifty or sixty years ago as honest and reasonable attempts, in the light of knowledge then prevailing, to reduce the appalling level of maternal mortality and morbidity.

In this study, when the sins of the hospitals are dealt with at such length, one wonders why the most remarkable change in the history of childbirth—the dramatic fall in maternal mortality dating from the mid-1930s—is barely mentioned, and the measures which produced such an improvement are ignored. The profound change in the risks of childbirth is clear, even from a glance at the graph on page 184; but it gets no more than a passing mention in one brief paragraph, almost as if it was something that concerned doctors but not women. Yet it was a transformation of obstetric care which made it possible to divert attention from maternal survival to maternal satisfaction. A reader, new to the subject, would have little idea from this study that such a transformation had occurred.

In the final chapter, the epilogue, the link between the history of childbirth and the present concerns of American women becomes clear. Leavitt tells us that in America today "there are three forms of women's responses to medicalized and hospitalized childbirth, the birth experience of most Americans in the 1980s". The first response, represented by most women, accepts the present system either out of economic necessity, or because they want nothing more than to submit to medical authority and experience as little as possible of the process of childbirth. Then there are the responses of two reforming groups, both essentially middle- and upper-class. They provide evidence of the variety of attitudes amongst the many contemporary organizations concerned with the reform of maternal care—organizations that provide the connoisseur of acronyms with such gems as NAPSAC ("National Association of Parents and Professionals for Safe Alternatives in Childbirth") and VBACs ("vaginal births after caesarean sections"). The first, most radical, and in many ways the loudest group, reject medical authority, believing that "childbirth should return to its roots altogether". They seem to favour home deliveries attended by lay (unlicensed) midwives. Whether such care includes, or cares about, the recognition of such conditions as hypertensive disease of pregnancy, placenta praevia, accidental haemorrhage, or transverse lie is not stated. The second group resembles in many ways Mrs Anita McCormick Blaine, mentioned above, in seeking the best of both worlds. "They seek to use medicine within a more female- and family-oriented context, but they want to continue to have medical help for women whose labour and deliveries put them in danger for their lives and health. . . . They prefer decision-making to occur in a negotiation between physicians, birthing women and family members." In this group, the modern mother is seen as needing both sensitivity towards her particular needs in childbirth and the expertise of modern obstetrics. These are in no way incompatible, nor unobtainable. Three things, however, stand between the expression and the realization of such reasonable demands. First, the complexity of

dealing in the busy and practical world with such a wide range of opinions; and second, the closing of the gulf of misunderstanding between the reforming organizations and orthodox medicine. Neither of these is insuperable; but the third, the increasing spectre of malpractice, may be.

At all events, it is clear that histories of childbirth such as this one are not only motivated by, but essential ammunition for the reformers in both of the last two groups—although I would not be surprised if the most radical feminists find this book too balanced, too kind to the medical profession, in short, too scholarly for their liking. None of the above criticisms detracts from the fact that this study is a major and most valuable additition to our understanding of the complex factors which have affected decision-making in obstetric care over the past two hundred years.

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ANN G. CARMICHAEL, *Plague and the poor in Renaissance Florence*, Cambridge University Press, 1986, 8vo, pp. xv, 180, £22.50.

In this brief monograph, Dr Carmichael elaborates on her 1978 thesis, summarized in the Bulletin of the History of Medicine for 1983 (57: 508-525). Her purpose is to explain the plague legislation that Florence, like other Italian cities, promulgated in the second half of the fifteenth century. That legislation, she argues, should not simply be seen as part of a gradual evolution in plague control beginning in 1348. Nor can it be related to developments in "professional" medical thinking. Rather, it was a direct and justifiable response to the changed character of fifteenth-century epidemics, particularly the "minor plagues". These seemed to be concentrated in the poorer areas of the city. They encouraged the notion that plague was spread by contagion, not miasma. They also confirmed the association of disease with poverty and disorder. Hence isolation hospitals, quarantine and health boards: plague control was social control. Stated so baldly, the theory is hardly novel. What is new is the subtle epidemiology adduced in its support. Dr Carmichael analyses the causes of death listed during epidemics by the Florentine Grain Office and the Physicians' Guild in their Books of the Dead. She extracts more detail from these than did Herlihy and Klapisch-Zuber when studying the 1427 catasto (1978), and she marries the results to an array of modern medical research. Full weight is thus given to the range of infectious diseases that accompanied plague, with some of which it might easily have been confused. The suspicion remains, however, that much of this work is of more use to the general historian of disease than to the student of plague control. Even with the help of comparative Mantuan evidence, it is not clear how often genuine "diseases of the poor" were misdiagnosed as plague. Nor is it obvious that these diseases were all demographically significant. The Books of the Dead and the chronicles contain few references to them; while the clustering of deaths can be explained in terms of the normal ecology of plague more readily than Dr Carmichael supposes. She may, in any case, have overemphasized that clustering. It was not, of course, evident in major epidemics. And further study is needed to establish its extent during minor ones. To map epidemic mortality, Dr Carmichael uses the places of death recorded by the Grain Office uniquely in 1430, but she does so for only one quarter of the city, Santo Spirito. She ignores the quarter of San Giovanni where, on the evidence of her own statistics, both population and mortality were often higher. And she oddly refuses to draw on the 1427 catasto to enlarge the topographical evidence of the 1430 epidemic, and to provide information about the wealth and status of the sufferers. All this weakens Dr Carmichael's argument that the plague legislation was empirically based on the pattern of the fifteenth-century epidemics. So it is a pity that her otherwise convincing description of the legislation itself explicitly leaves aside an "alternate explanation" [sic], which would attribute less significance to epidemics than to the changing configuration of urban poverty. A valuable, provocative, uneven book, then, which nicely complements other recent work on Renaissance Florence, such as Katherine Park's study of the medical profession (1985) and the epidemic mortality statistics derived from the records of the Dowry fund by Alan S. Morison et al. (American Journal of Public Health 1985, 75: 528-35).

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