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More or Less*：Marital Fertility and Physical Management in Late Imperial China**

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ABSTRACT

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* This paper is originally intended to discuss the marital fertility, which is quantitative. Historical institution policy on value and behavior condition varied by qualitative factors is considered for this preliminary quantitative study in modern demography. Firstly, it adjusts the qualitative consideration of a quantitative measurement. Secondly, the term "more or less" is used on the conceptual intellectual value of the ambiguity of the term itself; and so it is to stress the intellectual importance of seeing the complexity of human reproductive behavior when it is measured by contemporary quantitative approach.

** This paper is originally presented in the IUSSP/IRCJS Workshop on "Abortion, Infanticide and Neglect in Population History" in Kyoto（October 17-22, 1994）. A number of scholars, such as Francesca Bray, James Z. Lee, Charlotte Furth, Feng Wang, et al., interested in the social and cultural elements in sexuality, fertility, Chinese medicine and historical demography had consulted this study in its earlier forms as they cited in these references（Bray 1997：279, 287, 291-293; Lee 1999：189, 191; Furth 1999：308）.

The main interest of this essay is to create a common ground discussion between population studies（thereby such presumably "scientific" issue such as the natural fertility regime NFR） on the one hand, and the classical humanities（such as the "qualitative" and value-related evidence of reproductive behavior）. As such, the first introduction part of the essay may appear more sweeping and generic than specialists in the Chinese studies are accustomed to, though certainly not without its own validity for comparative purposes. In way of providing useful background knowledge, the distinct historical context of the developments between Confucianism, Taoism, and Buddhism, in the early imperial as well as the later imperial period, readers are best referred to respective studies of their own for a properly nuanced understandings of their philosophical and social differences in addition to their broader common concerns that have been printed here in bigger strokes. Instead of having the human reproductive behavior considered as merely a natural behavior, the author puts it in the framework of human bodily feelings, which simultaneously involves a complex scrutiny of psychological and social elements in it. Therefore, the author, having recognized by other members of the project, intends to have this paper included in the study project of Bodily Feelings.

Likewise, as an interdisciplinary study concerned with the larger issues of the interplay between socio-cultural factors and universal physiological foundations, this essay tends to move through different dynastic periods during the later imperial, such as the Tang, Song, Yuan, Ming, and Qing, at the macro-level, seemingly paying only superficial attention to finer details. For which this author's own work in family history, gender relations, and especially childhood and youth studies may be consulted to pattern up for what is lacking here（See further for Hsiung 2005）. In the interest of engaging on basic theoretical debates arouse big disciplinary distance, we would like to refer readers to focused textual analyses and the extended implications of these tenets of empirical discoveries. See for instance, Li 2005; Wilms 2010 for medieval period and Wu 2010 for late imperial period.

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Whence or whether human reproductive behavior has ever been entirely "natural" is a topic much debated in modern demography. The presumably "natural" sex drives, and the procreation that follows, as far back as recorded history may serve as meaningful witness, hardly ever coincide with human wishes to reproduce. Added to these other socio-economic and cultural conditions, we see ample room for intervention and manipulation. The enduring wish to exert some kind of control over the purely biological reproduction generates a variety of beliefs, knowledge, and skills, which influence ways of copulation and conception, as births were accorded more or less frequently as those under "natural" conditions. Human motivation and the resultant techniques are thus at the very core of the questions to be confronted when we deal with the term natural fertility regime （NFR）.

In sex and reproduction, the Chinese, like others, never pursued simply the naturalist tendencies. Historically, they are known as preachers and practitioners of particular and well-articulated views on this biological process. The following essay examines the socio-cultural factors as well as the medical technology that may have had either a positive or a negative effect on fertility patterns in late imperial China.

The demographic concepts of NFR, and marital fertility rate（MFR）are particularly intriguing given the complexity of reproductive behavior in historical China. On the one hand, socio-cultural considerations had long come into play regarding people's notions and habits of coition, as well as their decisions in child-bearing. More importantly, dating from very early times, medical knowledge and technical devices were available for altering nature's course in the timing and the number of births.

Keywords: Fertility rate, reproductive culture, medicine, technology

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或多或少：近世中國男女的身體營攝與生殖文化

熊秉真*

摘　要

本文之目的在檢視中國生殖文化之哲理，宗教基礎，及其醫藥技術操作，與其所至成的近世中國日常身體之營攝，以之對質近代人口生理學理論上對一般社會男女於婚內有所謂「自然生育率」之概念性預設論文先略視上古厚生傳統，以對性交與生殖的雙向偏重，即一承認食邑需求之自然，與男女交歡之正當性。同時強調適時適性之掌握與平衡上的重要性。其次，則以近世之房內禁忌，與生殖趨避，說明在近代生育革命與計劃生殖之技術出現前，傳統社會如中國，早有種種人為努力，以有效（或無效）地增加或降低交媾與生殖之機率。最後，文章之末，此研究以市井招徠性材料，與民俗信仰及筆記小說之內容，展現無論在概念面，價值面，技術面，及至明清中國，其婚內男女之交媾生育，絕非當今人口學與生理學上習用之「自然生育率」一詞彙概念所能涵蓋。

關鍵詞： 生育率，生殖文化，醫藥，技術

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THE DISCOURSE OF NATURAL FERTILITY

Whence or whether human reproductive behavior has ever been entirely "natural" （that is, completely determined by animal instinct）is a topic much debated in modern demography. Historically, it is difficult to perceive a point in time when that has been the case pure and simple.[1] The presumably "natural" sex drives, and the procreation that follows, as far back as recorded history may serve as meaningful witness, hardly ever coincide with human wishes to reproduce. Added to these other socio-economic and cultural conditions, we see ample room for intervention and manipulation, however effective or ineffective they may be. The enduring wish to exert some kind of control over the purely biological reproduction generates a variety of beliefs, knowledge, and skills, which influence ways of copulation and conception, as births were accorded more or less frequently as those under "natural" conditions. Human motivation and the resultant techniques are thus at the very core of the questions to be confronted when we deal with the term natural fertility regime（NFR）.

In sex and reproduction, the Chinese, like others, never pursued simply the naturalist tendencies. Historically, they are known as preachers and practitioners of particular and well-articulated views on this biological process. The following essay examines the socio-cultural factors as well as the medical technology that may have had either a positive or a negative effect on fertility patterns in late imperial China.

The demographic concepts of NFR, and marital fertility rate（MFR）are particularly intriguing given the complexity of reproductive behavior in historical China. On the one hand, socio-cultural considerations had long come into play regarding people's notions and habits of coition, as well as their decisions in child-bearing. More importantly, dating from very early times, medical knowledge and technical devices were available for altering nature's course in the timing and the number of births.

DESIRE, CARNAL DESIRE AND THE UNDERSTANDING OF REPRODUCTION

Any proper understanding of reproductive health in historical China should begin with an appreciation of its philosophical foundations. Intellectually, the traditional

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Chinese notion of carnal desire（*yu* 慾）itself is an extension of the more general idea of desire（*yu* 欲）. This desire is often posed in contrast to such notions as the mind（*xin* 心）, the spirit（*shen* 神）, or human nature（*xing* 性）. Thus understood, it was a force to be reckoned with in order to prevent its becoming an obstacle to moral cultivation. Laozi's precaution to "think sparsely and desire less（*shaosi guayu* 少思寡欲）"（Wang 1982： 40）and Mencius' view that "nothing works better in cultivating the mind than to desire less（*yangxin moshan yu guayu* 養心莫善於寡欲）（Mencius 1985：325）" for instance, have served as binding mottos for both the moralists and believers in nurturing life（*yangsheng* 養生）. The Buddhist advocacy of quietness（*jing* 靜）over action（*dong* 動）as well as emptiness（*kong* 空）and nothingness（*wu* 無）over somethingness（*you* 有）only strengthened people's appreciation for the potentially wild and consuming nature of human desire if left unguarded.[2]

Those who concentrated on the cultivation and nurturing of life as well as those attracted by its popular form of seeking immortality（*qiuxian* 求仙, *busi* 不死） picked up the need to tame and to limit one's desires as a way to discipline mental faculties and to enhance human stamina. By about the tenth century, Neo-Confucian scholars carried this theme of controlling desire（*jieyu* 節欲）to its peak. Cheng Hao 程顥（1032–1085）told his disciples that "those made blind by human desires lose heavenly virtue （*bi yu renyu, ze wang tiande* 蔽于人欲，則亡天德）（Zhu 1985：99）." Zhu Xi 朱熹（1130–1200）once composed a poem as a self-warning that ended by exclaiming："No worldly path is as treacherous as human desires, for how many have been trapped therein and have wasted their entire lives（*shilu wuru ren yuxian, jiren daoci wu pingsheng* 世路無如人欲險，幾人到此誤平生）（Zhu 1975：juan2：13b）".[3] The influential Ming thinker Wang Yangming 王陽明（1472–1528）also believed that "cleansing the mind and saving the desires（*qingxin guayu* 清心寡欲）" was the key to success in nourishing one's self and cultivating one's virtue（Wang 1969：juan3：7a–b）. These exhortations helped to lay a common ground in the Chinese mind of human desire and, more importantly, served as a constant reminder in the handling of carnal affairs （Lü 1985：717）.

Also at stake were contemporary notions of conception and pregnancy. From

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early-imperial times, the Chinese were aware of the causal relationship between coital activity and procreation. The explanations in early texts on the physiological process of conception proclaimed that it signified the joining together of the semen from men and the blood from women（*nanjing nüxue* 男精女血）—the two material elements the perfect meeting of which marked the beginning of life. Such medical canons as the *Yellow Emperor's Inner Canon*（*Huangdi neijing* 黃帝內經）are of the idea that male fertility begins at age sixteen, when nocturnal emission is observed, and ends by the age of sixty-four, when semen becomes sparse. Female fertility, on the other hand, initiates at age fourteen, with the onset of menstruation and dwindles off after age forty-nine with menopause.[4] Within this time span, conception may ensue after occasions of sexual intercourse. Many elements were considered conducive to the congealing of the semen and the blood to form the seed of birth(*zhongzi* 種子)：the woman and the man, or the *yin* 陰（feminine）and the *yang* 陽（masculine）forces, had to join in an agreeable fashion（*yinyang jiaochang* 陰陽交暢）.[5] Some later argued that this is why passionate, illicit love often resulted in offspring, unwanted as it was, whereas in an enduring marriage there could be problems in procreating（Xu 1982：3520-3521）. Another important point in this regard is that both the male semen and the female blood were considered valuable yet scarce commodities stored in the human body. Thus either over-indulgence in carnal affairs on the part of a man or too frequent childbirth on the part of a woman involving both the blood lost at childbirth and the breast-milk considered to be transformed from blood could be depleting. Such draining could have caused difficulties in subsequent wishes to conceive（*juzi jian* 舉子艱）（Wan 2000：9-30; Yuan 1995： 527-528）. In order that semen and blood be kept in plentiful supply, in other words, men should to lead an ascetic life with few desires and infrequent intercourse（*guayu yi yangjing* 寡欲以養精）whereas women calm their minds in order that the menstruation be regular so as to nourish the blood（*pingxin yi yangxue* 平心以養血）（Wan 2000：9-30; Yuan 1995：527-528）. Old Chinese homilies insisted on selecting robust women as the key to procreational success（Chao 1985：juan3：8b–9a; Zhang 1985：juan39：48a-63a; Chen 1997：159-160）. As to how sexual intercourse may technically result in conception and pregnancy, the Taoist *yangsheng* experts and traditional Chinese medical scholars each had their views on the appropriate time,

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location, position, and other conditions conducive to it.

SEX ADVICE AND COITAL CONSIDERATIONS OF MEN AND WOMEN

In directing or regulating people's（mostly men's, but not totally discarding women's） sexual activities, Chinese have been concerned primarily with three questions：first, how best to discipline and moderate one's carnal desire; second, in what way may people place them in store for procreational needs; and third, how could people conduct such affairs so as to enhance（or at least not to harm）one's health. The former two seem relatively simple, as many other cultures speak of them in their sexual teachings. The third appears to be particular to the Chinese, as it came to nurture specific coital rules to China's reproductive behavior.

Since all three principles concern moderation and control, when it comes to sex, the Chinese value of the mean（*zhongyong* 中庸）becomes prominent. It approves of neither abstention（*jinyu* 禁欲）nor excessive indulgence（*zongyu* 縱欲）. On the inadvisability of asceticism, Tang medical authority Sun Simiao 孫思邈（581–682）asserted plainly, "Men cannot do without women, and women cannot do without men（*nan buke wu nü, nü buke wu nan* 男不可無女,女不可無男）(Sun 1985：juan83：2b–7a)." The Confuscian pronouncement that "in eating, drinking, men and women lie the greatest desires of all human beings （*yin, shi, nan, nü, ren zhi dayu cun yan* 飲食男女，人之大欲存焉)(Hu 1985：juan9：32b–33b)" and that " food and sex stand（at the core）of human nature（*shi, se, xing ye* 食、色，性也)(Mencius 1985：juan11：6a–8b)" express their basic position. Medical authorities' later approval of such approach may be summed up in Sun Simiao's saying that "Even superior men cannot bear a protracted abstention from sexual intercourse. If a man abstains too long from emitting semen, he will develop boils and ulcers.（Sun 1985：juan83-84a）"

On the other hand , stood not a philosophy advocating indulgence（*zongyu* 縱欲）but one that upheld the principle of careful moderation（*jieyu* 節欲）. Repeated failure in controlling coital activities not only quickly exhausted a man, but also drained his vital essence. Man may soon be depleted, with problems such as the lost of visions or

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eyesight. Various obstructions of the organs could also follow suit（Tanba 1972：juan 28; van Gulik 2003〔1961〕：143-144）.

"Careful moderation" is the leading principle when considering the proper handlings of carnal desires, the mindful maintaining of health, and the fruitful ways of begetting offspring, as the sex culture in pre-modern China witnessed these three interlocked to make the literature of coital advice. During the Sui-Tang period（580–906）, when the "arts of bedchamber（*fangzhongshu* 房中術）" flourished, sex instruction remained part and parcel to the practice of medicine, as medical handbooks from that period contained sections on sexual activities（van Gulik 2003〔1961〕：193-194）. These discussions on coital engagements treated the matter of health and that of reproduction as two sides of the same coin. The handbooks on "secret dalliance（*mixi* 秘戲）" tantalized their modern puritanical readers for their concern upon a beneficiary sex and good reproductive behavior as one and the same.

Within which literature a few areas appear relevant to our concern of the body culture. First of all, general advice on copulation speaks of the right age, time, and occasion for sexual intercourse（Li 1985：juan12：41b–43b）. Although in terms of social passage, men received the capping（*guan* 冠）ceremony at the age of twenty, and women had their hair pinned up（*ji* 笄）at fifteen（Dai 1985：juan6：9b–12b）. Medical authors, however, placed physical maturity for men at sixteen（based presumably on the age of ejaculation）and that of women at fourteen（with the occurrence of the first menstruation）（Hsiung n.d.a; Song 1992：384; Sun 1985：juan83：2b–6a; Wan 2000：14）. In the words of a Tang sex manual, "every man must regulate his emissions according to the conditions of his vital essence,（Tanba 1972）." An often quoted timetable of coital activities—albeit a male-oriented one—again from Sun Simiao, calls for sexual intercourse twice per month. That is, "if one may manage to have emission twenty-four times a year, he can live to two hundred years of age, with exuberant color and without disease." For most ordinary people, however, Sun calculated that：

> A man at age twenty may emit（*xie* 泄）once every four days. For one at thirty, once every eight days. One at forty, once every sixteen days. One

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> at fifty, once every twenty days. For a man at sixty,（it will be good if）he may lock up his semen and stop emission altogether（*bijing wuxie* 閉精勿泄）. If however he is still healthy and strong, he may emit once a month（Sun 1985：2b–6a）.

This basic instruction handed down by Sun Simiao circulated widely among the literati and commoners for centuries. Many Yuan and Ming dynasty handbooks of health or alchemy continued to cite the above quotation in its original form（Li 1994）. Other medical texts from medieval times had advice of a similar nature. *Bedchamber Secrets*（*Yufang mijue* 玉房秘訣）, as included in the famed medical text circulated in East Asian, *Ishinbō* 醫心方, also calculated people's copulatory timetables according to the progression of their age.[6]

A second aspect of Chinese sex teachings that may have a direct influence upon reproductive behavior has to do with the taboos assigned to traditional coital activities. These include those considered sinful or inauspicious, and those thought harmful or unfortunate for obtaining offspring. In the first category, the above cited *Bedchamber Secrets* from *Ishinbō* had the following advice on seasons, climates, times, and other situations to be avoided：

> Peng Zu 彭祖 said：“One should be careful to adapt one's sex life to the flux and influx of *yin* and *yang* in the cosmos. One should not engage in the sexual act when it is either very cold or very hot, when there is a strong wind or heavy rain, when there is a lunar or solar eclipse, during an earthquake or when there is thunder and lightning; for all these indicate taboos of Heaven（*tianji* 天忌）.”[7]
>
> Also：
>
> One should refrain from sex while drunk（*zui* 醉）, overly-full（*bao* 飽）, in great elation（*xi* 喜）or in great anger（*nu* 怒）, while apprehensive（*you* 憂）, sad（*bei* 悲）, in fear（*kong* 恐） or in terror（*ju* 懼）. For these are the taboos of Man（*renji* 人忌）[8] One should not engage in the sexual act near places sacred to the worship of the spirits of Heaven and Earth, or other sanctuaries, or near a well, or near the kitchen fire; for

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these are the taboos of Earth（*diji* 地忌）.[9]

Warnings like these represent a slice Chinese sexual culture. Similar sex taboos appeared in medical texts, Taoist *yangsheng* handbooks, and Buddhist and popular religious tracts. All considered, they covered special dates（summer and winter solstices, new year, the first and the fifteenth of every lunar month, birthdays, etc.）, unusual weather（thunder, lightning, strong wind, heavy rains etc.）, major events（ground breaking for construction, completion of a long journey, or death anniversaries）, inappropriate physical conditions（intoxication, over-eating, hair washing, bathing, urge to urinate, fatigue, menstruation, during or after an illness, within one hundred days after childbirth, etc.）.[10] Offenses were supposed to occasion ill health or bad luck to the person, the family, or both. In the words of *Bedchamber Secrets*, "such an individual will be subject to disease, and his children will be short-lived.（Ye 1989：597）"

Some sex taboos implied that an offense could also result in sterility or premature death. A medieval text warns that "a child conceived during a thunder（storm）will not grow up and will meet disaster（Tanba 1972：juan28：35a）." Another example comes from a Tang medical text *Qianjinfang* 千金方, which quotes an earlier source called *The Book of Obstretics*（*Chanjing* 產經）. It presents nine calamities（*jiuyang* 九殃）regarding conception and fertility.[11]

Moreover, there existed such traditional warnings as the five bad signs（*wuguan* 五觀） and seven taboos（*qiji* 七忌）, which advised against copulation if the parents had ulcers, while the family was in mourning（*sangfu weichu* 喪服未除）, right after urinating, during pregnancy, while nursing（*bushi* 哺時）, at dusk（*huanghun* 黃昏）, or at mid-day（*rizhong* 日中）, and so forth（Tanba 1972：juan28：30a–1a）. And finally, there existed the so-called "most auspicious days for copulation（*guisuri* 貴宿日）," or "the kingly days（for conception）（*wangxiangri* 王相日）（Tanba 1972：juan28：29b）."

A third aspect of the traditional sex culture that may have affected reproductive behavior was the idea that urged "treasuring the semen（*xijing* 惜精）," "stinting the desires（*guayu* 寡欲）" and "leading a solitary life（*duchu* 獨處）." Taken together these

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may require an ascetic existence for men. This thinking has its roots from the Wei-Jin era（220-420）when Taoist alchemist tradition converged with medical compositions. At base lies the belief that the male semen is a precious for health and vitality, and of limited supply. One such expression laments that an unmarried sixteen-year-old, before any emission, is endowed but with one liter（*sheng* 升）and six（*he* 合）of semen, which was said to amount to roughly one catty(*jin* 斤) in weight. In a person's life time, it may be nourished or depleted according to how much the man preserved, enhanced or drained this vital essence. When a man begins coital activities, each ejaculation will emit half a *he*. With careless and over-indulgent copulation, therefore, the amount of the original supply would soon be exhausted, which in turn might result in physical dissipation and a myriad of illnesses.[12]

The solution to such an unhappy situation is twofold： a man could either nourish this endowment of semen to make it increase, or use it only sparingly. Or perhaps he could do both, as most *yangsheng* and health admonishments insisted. Included in the first category were such skills as "the method of returning the essence（*huiyuanfa* 回元法）,（van Gulik 2003〔1961〕：145, 199）" or that of "nurturing the semen（*yangjingfa* 養精法）."[13] From the second grew most of the sayings about "having few desires," and "solitary living" that flourished among both the literati and commoners in the late-imperial period.

Both have ancient roots. Recently archeology has brought to light documents of the early imperial time that bear record to such approaches. Methods on maintaining life（*zhisheng* 治生）are among the celebrated Mawangdui（馬王堆）discoveries. For example, we read the following："In order that one's sex objects are strong and tardily in use, one should refrain from giving in（to sexual engagements）while aroused（*ku* 苦）, and refrain from emitting（the semen）while in great joy（*le* 樂, here probably meaning orgasm）（Wang 1991：751）." The notion anticipates Sun Simiao's famous simile comparing man's sexual life to a lamp containing oil（*gaohuo* 膏火） which extinguishes as it flares up："Every time a man restrains himself, it is as if new oil were added to a diminishing light," Sun stresses, "If a man, however, does not control himself and emits semen every time he sleeps with a woman, it is as if he were taking

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away oil from a lamp already burned out（Sun 1985：4b–5b; Song 1992; van Gulik 2003〔1961〕：195-196）.”

What is noteworthy demographically is the idea that encourages people（men, really） to “sleep by oneself（*duwo* 獨臥）” to escape from this predicament. A first mentioning of *duwo* was accorded as associated from the mythical figure Peng Zu, who supposedly said：“The superior man sleeps in a separate bed, the ordinary man sleeps with a separate quilt. Taking drugs（of longevity）a thousand times is not as good as sleeping by oneself（*fuyao qianguo, buru duwo* 服藥千裹，不如獨臥）（Li 1994：685）.” This practice, as part of a cultivation for austerity, maybe a logical extension of China’s sexual culture that deems sex not only as a manifestation of one’s health but also as an aspect directly connected to life and vitality. It had long been in vogue among the ruling elite and the literati. The devout Buddhist Emperor Wu of Liang（Liang Wudi 梁武帝）boasted of his refraining from sex and women for over three decades. Later *yangsheng* authors liked to attribute his longevity to asceticism, not to his Buddhist-Taoist religion（Long 1989： 2861-2870）. The renowned Tang naturalist poet Bai Juyi 白居易 spoke of his habit of rising night to count the stars from his stairs：“In the many moonlit nights in the past fifteen years,” Bai wrote, “which one of them did I not sleep through by myself？（Bai 1985：juan12：30b–31a）” During the Song and Yuan period, when Chinese sexual culture emphasized austerity, there were many witnesses, in literature and in historical documents, to the growing sway of the *duwo* tradition. By Ming times, the above-cited advice had appeared in quite a few self-cultivation books：“Taking medicine a thousand times cannot compare with a single night’s sleep by oneself.”[14] Similar cautions circulated in proverbial phrases as well. From roughly the same period, the old idea that a man’s sexual vitality tended to wane after the age of forty was translated into a concrete resolution that advocated maintaining a solitary existence after reaching that age. By the fifteenth century, the *yangsheng* tradition had assumed an increasingly unfriendly attitude toward sex and erotica, just as China’s mercantile economy and printing activities revived erotic culture. Thus, on the one hand, gender relations and coital encounters were put into belligerent language with reference to battlegrounds and war（Wang 1991：773-780）. Those with a reputation for *yangsheng* lifestyles uttered such words as：“the very place

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that gives you life is the place that kills you in the end（*sheng er chu nai sha er chu* 生爾處乃殺爾處）（Zheng 1996：549）.” Meanwhile, on the other hand, erotic literature and sex manuals flooded the book markets, celebrating sexual fun in its vulgar forms, oblivious to the concerns that Tang handbooks had taught.

A point worth clarifying in regard to this genre of literature on *guayu* and *yangsheng* is that, though mostly a male-oriented tradition, it was not devoid of consideration for women. *Ishinbō* quoted from the earlier Taoist alchemist text *Dongxuanzi* 洞玄子 that in sexual intercourse, the pleasurable consent of both parties was important. “If a man tosses yet the woman does not respond, or if a woman moves but the man does not follow suit, this is not only harmful for（the health of） the man, but quite detrimental for（the health of） the woman（Tanba 1972：8a）.” The same medical anthology also cited *Yufang mijue*：“The Way（*Dao* 道）of sexual intercourse（*jiaojie* 交接）has its own substance.（Performed in the right way）, a man may enhance vitality（*zhiqi* 致氣）, a woman can likewise get rid of diseases（*chubing* 除病）（Tanba 1972：9a）.” The forerunner of Chinese gynecology and obstetrics, Chen Ziming’s 陳自明（1190–1270） *Helpful Recipes for the Great Well-being of Women*（*Furen da quan liangfang* 婦人大全良方）expresses a similar notion. Over-indulgence, in Chen’s view, is utterly unagreeable. “Too frequent intercourse dries up（a man’s）fluid and exhausts the person; whereas too many births depletes（a woman’s）blood and kills the other.（Chen 1976）” Medical manuals on reproductive health and sex hygiene invariably stressed the importance of foreplay for the enjoyment of the female partner as well as the value of withholding ejaculation until the woman reaches her climax（*hou nükuai* 候女快） so that both parties could experience together（Tanba 1972：10a）. *Yufang mijue* mentioned that the secret to Xiwangmu’s 西王母 attaining the Tao（*dedao* 得道）lay in her nurturing of the *yin* force, which really means that she, allegedly, took delight in copulating with bachelor boys（*hao yu tongnan jiao* 好與童男交）（Ye 1989：595）.

A fourth aspect of Chinese coital advice that may bear a certain influence on reproduction and fertility has to do with the so-called “techniques of intercourse（*jiaojie zhi shu* 交接之術）.” Other than instructions of an erotic nature and those presented for

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their hygienic or values, two items stand out from a demographic perspective. One concerns the various methods propagated for achieving the "returning of the semen"; the other regards the proper physical depth to be achieved during intercourse. The former is no doubt founded on the concept of the preciousness of a man's semen and its value to his health, as discussed. But the concern for successful planting of the seeds（*zhongzi*）and for healthy offspring（*zisi*）also worth taking a note . The belief was, that if one were to save one's semen, not only might the original supply be preserved for appropriate occasions, but its quality could be enhanced and thus foster a healthy conception for premeditated coition. Actual techniques of making the semen return vary from text to text, but the general principle was the same in pressing upon a physical spot while exercising controls to avoid ejaculation during the sex act.[15] This method of suppressing, interrupting, or suspending ejaculation, though technically distinguished from the method of withholding（*coitus obstructus,* or *coitus reservatus,* not to be confused with partial or total withdrawal, *coitus interruptus*), is actually close in effect. In both instances, a certain degree of contraceptive result, though not its designated intention, may be expected. It may not be as reliable as some methods（such as withdrawal and external ejaculation）. Nevertheless, it had the attractive features of being a male-controlled and costless contraception with little side-effects.[16]

The perfect physical depth of conception was mentioned in many ancient Chinese medical texts. A typical instruction cited the legendary Plain Girl（*sunü* 素女） as saying that the ideal spot for ejaculation was about half an inch away from the woman's Jade Gate（*yumen* 玉門）. "For otherwise," it continues, "one would have passed the Child Palace（*zigong* 子宮 , which later was used to mean uterus both in traditional Chinese medicine and for modern Chinese translations of Western medicine） and Thousand Wings （*qianyi* 千翼）. One should never go further than the Wheat Teeth（*maichi* 麥齒） point. For once beyond that, one would not be able to enter the Child Room（*bu ru zihu* 不入子戶）." This seemingly obscure and by now largely abstruse passage indicates that concerns existed linking sexual physiology and conception.

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SOCIAL AND INSTITUTIONAL INTERVENTION

Social norms and public institutions also bear upon people's reproductive behavior, hence the fertility in late-imperial China. Chinese concept of filial piety（*xiao* 孝）, linked to patriarchal order, along with patrilinial and patrilocal organization brought an unusual nuptial pattern marked by early and nearly universal marriage for women, whereas Western Europe in the same period saw late marriage and a large unmarried population.[17] Equally significant are the social processes operating behind bio-statistics and marriage patterns. To begin with, the traditional concern for mate-selection（*zeou* 擇偶）, though not without an appraisal for feminine virtues, weighed heavily on the bride's ability to procreate. Instructions on the suitable conditions of a woman's reproductive organs are specific and blunt.[18] Medical texts explicitly eliminated women considered physically unfitful for sexual intercourse or potentially infertile.[19] Failure to bear a son constituting one of the seven sins deserving a divorce（or ousting, *chu* 出）, rendered the want of a male offspring the only official sanction for obtaining concubines.[20]

A second effect this culture of filiality had on the Chinese nuptial pattern thereby reproductive conduct was the relatively young marital age for both men and women（21 to 23 for men, and 18 to 20 for women on average） as well as the unusually high marital rate for both sexes, remarkably compared with nuptial patterns elsewhere.[21] Other than social norms, pronatal political institutions also came into play in imperial China：As early as 191 B.C., texts revealed the Han court promulgated a law imposing heavy and progressive taxes on families for their unmarried daughters according to age. By the eighth century, the legal age of marriage was established at 15 for men and 13 for women.[22] This pattern of early and nearly universal marriage more or less continued until the end of the imperial era（1911）. According to Qing-era compendium of rites, men were to marry by 16 and women by 14（Wang 1991：74）.

A third influence of filial piety was on sex-preference, namely the Chinese popular favor of boys over girls（*zhong nan qing nü* 重男輕女）, tended to produce a higher fertility rate under high infant mortality.[23]

Since a modern demographer's concern for the question of the "ideal number of

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children" remains difficult to fathom, for late-imperial China, the numbers of births varied according to class, economic conditions, and other cultural factors. Historical records from the late 19th century indicated that ordinary peasant families often wished for "five boys and two girls（*wu nan er nü* 五男二女）" or even "seven boys and two girls."[24] Such suggestive numbers, though not to be taken literally, do suggest, however, that people（especially peasant households）could desire for more male offspring than female, although these were also ample evidence for their wishing for at least one girl, best born early on to assist with domestic chores.

MEDICAL AND TECHNICAL MEDIATION

In late imperial China a variety of devices were known to have existed which might affect the chances of conception, pregnancy, and childbirth. These are the technical elements to be considered behind marital fertility. Generally speaking, the devices could be further divided into of two types：those intended to intervene before conception, and those after（which then can be sub-divided into pre-coital and post-coital measures）.

Pre-Coital Intervention：To Increase Offspring or to Avoid Pregnancy

Most Chinese medical literature on human fecundity concerned itself with the question of how best to increase, rather than to decrease or eliminate, the possibilities of conception. The specialty was referred to as *guangsi* 廣嗣, literally to enhance offspring or fertility. First appearing as separate sections or chapters in medieval medical texts, by late imperial times this subject has also included quite a few texts of its own, some of which are still extant. *Essential Notes on Enhancing Fecundity*（*Guangsi jiyao* 廣嗣紀要）by Wan Quan 萬全 early in the sixteenth century, is an example of this genre. Demographically speaking, a few points of this *guangsi* tradition worth special attention. First, there was a widely-shared notion that sex for reproduction and sex for pleasure were different in nature, and thus were to be conducted differently. Instruction for copulation aiming at reproduction stressed the nurturing of a calm and solemn mood（not gaiety）, as well as the hygienic and spiritual cleanliness of both parties. Of interest demographically, abstinence for a period of days, or tens of

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days, was always advised, in order to nourish the physical strength of man and woman and to restore their semen（*jing* 精）and blood（*xue* 血）needed for successful conception.[25]

A second aspect of the *guangsi* literature pertinent to demographic implication is that particular times were emphasized for reproductive coitus. This, according to many sex manuals, was to take place on the third day after a woman's menstruation ended—after midnight（*yeban zhi hou* 夜半之後）and before cockcrow（*jiming zhi qian* 雞鳴之前）. Of that, a child thus conceived would grow to be wise, living healthily to an advanced age（Tanba 1972：31b）. This concern over timing circulated widely in medical and folkloric literature, though, the instruction, if ever followed faithfully, would lessen rather than increase the chances of pregnancy. Late imperial medical authorities such as Zhu Zhenheng 朱震亨（1281-1358） asserted that, wanting a boy, people should have intercourse on the first or the second day after menstruation, whereas for a girl, the fourth or fifth day（Zhu 1985：20）. Here again, the instruction （if adopted by those preferring boys） actually diminished the chances of conception.

The *guangsi* tradition, more than anything else, attests to China's long pro-natal heritage. Of this heritage were the various recipes and techniques developed to help with the problem of *buyu* 不育（inability to reproduce）, or sterility. As early as the second century B.C., historiographic writing mentioned：the consort of Emperor Wu of Han（Han Wudi 漢武帝）paid ninety million in copper to obtain a cure for her infertility （*buyu zheng* 不育癥）（Gao 1993：165）. In the following centuries many such matters were recorded.[26]

Most of these examples focused on the pursuit a son; though the skills had presumably equal potential for the begetting of a daughter. By Ming times, this general *guangsi* tradition and the practices involving attempts to increase the chances of reproduction were referred to as *zhongzi* 種子（literally to plant seeds）. Special chapters appeared in medical texts and popular medicine handbooks in this period devoted to *zhongzi.* Separate booklets on such problems also found their way into the market of printed books for common consumption, assuming such titles as *Zhongzipian* 種子篇 （*Begetting of a Son*）.[27] A further development was the emergence of *nanke* 男科

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（male medicine）.[28] Like its counterpart *fuke* 婦科（medicine of woman, or gynecology）, which came in to its own at least six hundred years earlier, *nanke* aimed at some understanding of the physiology and the diseases of man. A close examination of its contents, however, quickly reveals it as much more preoccupied with the need and the art of procreation, paying only marginal attention to general knowledge of male-medicine. The fact that it should have appeared not before but well after the development of gynecology does suggest that Chinese medicine has always put women at the center of the task of reproduction.

The Avoidance of Pregnancy（*Biyun* 避孕）

Besides devices to better the chances of conception, there also existed attempts to decrease conception. In late imperial China, most of what may be broadly termed contraceptive measures involved actions taken after copulation（abortive attempts applied either right after coitus or soon after conception）. Even though there were also things people could do to prevent conception, or lessen its chances, before copulation. Medical documents attest the use of intra-uteral suppositories for contraceptive purposes（presumably with either direct or indirect spermicidal effects）. In north China, there were mentionings of the use of mechanical barriers（such as wine cups or similar objects） inside a woman's body to prevent, or to decrease, the chance of conception（Li Jing-wei, personal communication, 1993）. Many of these inventions might have originated among the prostitutes, and later found their use among ordinary women（van Gulik 2003〔1961〕：182）. By late imperial times, evidence of pre-coital contraceptive approaches can be found in both medical literature and family records. A Ming-period handbook on pregnancy and delivery, *Handan yigao* 邯鄲遺稿（*The Lost Script on Female Medicine*） mentioned, for instance, that a certain pill called *jiulongdan* 九龍丹（nine-dragons pill） may be taken by women who "have trouble with menstruation and who are afraid of child-bearing（*pachanzhe* 怕產者）." The drug was known for helping men who were weak in physique and less fertile（*jingse tiruo* 精澀體弱）. For women taking it, they would become sterile（*nüzi fu zhi ze buyun* 女子服之則不孕）. Purportedly, it might cause fat and tissue to grow in a woman's womb, thus

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rendering conception impossible（*ling zhimo shengchan man zishi, bu shouyun yi* 令脂膜生產滿子室，不受孕矣）. Moreover, the contraceptive effects were temporary thus medically reversible. For the same passage, *Handan yigao* had it that "If（such a woman） later wishes to be pregnant and bear offspring, she should take one *qian* 錢（1/10 tael） of grounded *cheqianzi* 車前子 with warm wine. After a few portions of this, she will be able to conceive again. This is indeed the best method."[29]

From roughly the same period, family records yield information on popular and folkloric attempts at contraception. The famous sixteenth-century essayist Gui Youguang 歸有光（1506–1571）once wrote about the case of his own mother. He described her as having grown tired of child-bearing in her late-twenties. By the age of twenty-seven, she had born seven children in a mere ten years. House servants and close friends, knowing about her suffering from such frequently births（*yi duozi ku* 以多子苦）, presented her with a treatment that was supposed to end such trouble. This involved the taking in of two snails（*yi er luo jin* 以二螺進）, about which Gui did not record the specific result, except by relating that unfortunately, after taking the snails, his mother soon lost her voice and died,[30] suggesting that the twin snails might have produced some potency. The story reveals a society in which contraceptive methods were in demand while a variety of quick fixes were experimented with. While demand may have been greatest among courtesans, prostitutes, and those in pursuit of illicit sex, the case of Gui's mother and similar incidents shows the same need in households. Population histories everywhere showed that in the event of a change in demographic patterns and demographic behavior, social needs and human motivation often appeared before the right mechanical means or technological inventions were there to satisfy them. Historical documents in late imperial China presented us with another such case. They indicated that by at least the 16th century, if not earlier, both the common demand and a few simple answers to some convenient, inexpensive, yet effective contraceptive methods existed side by side in the towns and cities of China. Such demand, moreover, had the power to turn each and every piece of potentially useful information and technical devices around to produce hereto unforeseen results. Namely, many early suggestions and prescriptions for enhancing fertility could be reversed or adopted so as to produce contraceptive or abortive effects. Instructions on choosing the right time,

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place, and occasion for sexual intercourse could be read in reverse by those trying to avoid, rather than to assist, pregnancy. The sex taboos that we already discussed could be similarly manipulated, some obviously more satisfactorily so than others. Most ironic was the question of timing. Since almost all the Chinese medical authorities had got the biological facts wrong（women do not have a higher chance of becoming pregnant in the first three to five days after menstruation）, those attempting to manipulate the advice in reverse would see precisely the unwanted results. Just as the original method probably disappointed those who had followed it（and the slight reduction in fertility）, it failed those who were trying to avoid pregnancy by copulating at the midpoint between a woman's menstruations.

On the subject of male-initiated contraception, we may include only the device called *yinjia* 陰甲（private shield）, which men could wear in sexual intercourse. Again, it may have been a method originally designed to avoid pregnancies in situations of illicit sex. It could also be appreciated, however, for its contraceptive value and as protection against venereal diseases（van Gulik 2003〔1961〕：311）.

Post-coital Intervention：Abortion and Fetal Destruction（*Xiatai* 下胎）

The major point to be bore in mind considering post-coital intervention in China is that unlike other cultural traditions there appeared, no philosophical or religious tenet prohibiting such attempts. To being with, conceptually, Chinese medicine has always held that life in the form of a tangible fetus（*tai* 胎） begins only after a certain period of gestation（*yun* 孕, or *shen* 娠）. Before then, in its amorphous form—it was thought to be a fluid and unfixed matter made from the woman's *xue* 血（blood） and *qi* 氣（vital force）, impregnated by the man's *jing* 精（semen）. Thus, to quote the appropriate terminology to harm（*shun* 損, *shang* 傷）, to bring down（*duo* 墮, or *luo* 落）, or to eliminate（*qu* 去）the fetus, especially in an early stage of pregnancy, would not necessarily bear upon the issue of the taking of a human life（Zhang 1985：16a-18b）. Late imperial Chinese law codes did consider the murder of a pregnant woman as the taking of two lives, but only in terms of to advanced pregnancy, when the fetus assumed a clearer human form（Zhang 1983）.

Moreover, Chinese medical experts had a long history of assisting in artificial（as

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opposed to natural） abortion out of health considerations. At least since Sui-Tang times, medical texts have carried included, instructions, and clinical cases involving pharmaceutically induced and medically intervened abortions. There existed a host of prescriptions for such purposes, and most respected physicians did not shy away from these engagements. Texts from the Sui and Tang period on both general medicine（e.g. *Waitai miyao* 外台秘要〔*The Extra Important Secret*〕, and *Ishinbō*） and on gynecology and obstructive（e.g. *Chanjing*） all contain such information, stating matter-of-factly under the topic of "recipes for pregnant women wishing to abort the fetus（*zhi renfu yu qutai fang* 治妊婦欲去胎方）（He 1984：16）." Such circumstances usually had to do with adverse health conditions that rendered the continuation of pregnancy inadvisable. Medical authors, such as Sun Simiao and Chao Yuanfang 巢元方（550?-630?）, noted instances where a sudden illness or inherent physical conditions made a woman unfit for carrying on with the pregnancy. Under such circumstances, with pressing requests from the husband or other family members, experienced physicians may agree to exercise the medical means at his disposal to help release the woman of the pregnancy as an apparent health hazard.[31] In addition to victims of feverish diseases or of progressed weakness, abortion could also be induced if a woman suffering from external wounds impeded the very existence of the fetus（*sunren* 損娠, a "harmed pregnancy"）, or was already undergoing a natural abortion（*luotai* 落胎, a "falling fetus," or *duoren* 墮娠, a "failing pregnancy"）（Ma 1991：155-166, 169-181）.

In the event that a fetus died in the womb（*sitai* 死胎, or *zi si buchu* 子死不出）, or if one of twin fetuses dies in the womb（*yi sheng yi si* 一生一死）, physicians would be compelled to help bring down the dead baby in order to save the mother, or the surviving twin（Wang 1987：268）. Recipes and techniques medical experts employed on these occasions were exactly the same as those called for in actively induced abortion.

After other medical knowledge and professional skill could be converted and made available for abortion as well. Most important examples include the drugs used to hasten delivery（*cuishengdan* 催生丹）and the pharmaceutics taboos for expectant women（*renshen yaoji* 妊娠藥忌）. For the former often contained potent ingredients for uterine contraction,[32] whereas the latter usually involved active compounds that

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could result in induced labor or artificial abortion.[33] In fact, in comparing medical therapies, for, on the one hand, abortion（*qutai* 去胎 or *xiatai* 下胎）, bringing down the afterbirth（*xia baoyi* 下胞衣, *baoyi buxia* 胞衣不下, or *xibao* 息胞）or a dead fetus（*xia sitai* 下死胎 , *tai si fuzhong* 胎死腹中）, with, on the other, those enlisted in hastening birth and protecting pregnancy, it becomes apparent that pharmaceutically all of these have a good deal in common. That is, traditional instructions for protecting the fetus（*hutai* 護胎）, stabilizing the pregnancy（*antai* 安胎）, or for safe delivery（*anchan* 安產, or *taichan* 胎產）contain information on reproductive physiology that, if needed, could be adapted and twisted around to produce an abortive effect（Ma 1991：216-220）.

The interesting point here is that Chinese medicine had long had a knowledge of medicinal compounds for "leading the blood to come down（*yin xue xia xing* 引血下行）," or for inducing labor（*yinchan* 引產）. These were stock formulas with which a trained physician was equipped. Invasive surgery or dramatic procedures were thus not required for. General practitioners or gynecological specialists to prescribe them in regulating menstruation, or to expel blockages.

The recipes most often recommended for abortion include active compounds such as *Achyranthes bidentata BI*(*niuxi* 牛膝), rabbit brain(*tunao* 兔腦), mirabilite（*poxiao* 朴硝）, *Angelica sinensis*（*oliv*）*Diels*（*danggui* 當歸）, donkey-hide gelatin（*ejiao* 阿膠）, *Dianthus superbus L*（or *Dianthus chinensis L, qumai* 瞿麥）, *Cervus nippon Temminck*（or *C elaphus L, lujiao* 鹿角）. Other ingredients such as talc（*huashi* 滑石）, alcohol（*jiu* 酒）, vinegar（*cu* 醋）, honey（*mi* 蜜）, and lard（*zhuyou* 豬油）were at times included as additional stimulants or lubrications.[34] Some of these items have been confirmed by modern Chinese researchers as clinically effective in abortions.[35] In addition to medicines taken orally to induce abortion, other methods were mentioned, including medicated suppositories（*saiji* 塞劑）, medicinal spread（*tuji* 塗劑）, topical medicines（hot salves, *refu* 熱敷）, medicinal heat pads（*yunji* 熨劑）, as well as massage（*anmo* 按摩）and acupuncture（*zhenjiu* 針灸）, all aimed at the termination of pregnancy. The task was to bring down either a dead or live fetus.[36] By the late 16th and early 19th centuries medical texts recognized different abortions for different stages

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of pregnancy, and had become generally more detailed and sophisticated. These various abortions were called： *anchan* 暗產（secret birth）for those happening within the first month after conception, *duotai* （墮胎）or *luotai* 落胎（falling fetus） for those happening between the first and the third month of pregnancy, *xiaochan* 小產（minor birth） for those happening between the third and the seventh month, and *banchan* 半產（half birth）for these happening in well advanced pregnancy（usually between seventh month and full term）（Zhang 1985：672; 1976：228）. Medicinal and mechanical attempts at abortions were usually practiced in the first and second instances, namely to initiate *anchan* or *duotai,* although under unusual circumstances （such as in the event of a pregnant woman suddenly falling ill or sustaining injury）, experienced practitioners were known to have attempted abortion at an advanced stage.[37]

Fetal Destruction （*Huitai* 毀胎）

The method that people resorted to at advanced pregnancy included the brutal destruction of the fetus inside a woman's womb, followed by induced uteral contraction to bring down the mutilated parts. Sun Simiao's procedures for diseased pregnant women（*zhi renshen bing xu qutai fang* 治妊娠病須去胎方） included a prescription that would turn "the fetus into a mash like congee （*qi zi ru mi* 其子如糜）," while "the mother remained plump, strong and without illness or pain （*ling mu feisheng wu jiku* 令母肥盛無疾苦）."[38] Early documents, such as Sun's *Qianjinfang,* suggested that the ability to destroy and abort a fetus had been a skill long in existence, as required by medical specialists for terminating pregnancies that threatened the woman's health, or in case of a traumatic delivery. By Ming and Qing times, however, these techniques for fetal destruction（*huitaishu* 毀胎術）could be cmployed by "wicked midwives" allegedly to intervene during labor, for a dear price. A number of gynecological and obstetric texts reported on such abhorrent practices. Wang Mengying's 王孟英 *Shenshi nüke jiyao* 沈氏女科輯要（*The Shen Collected Principles on Gynecology*）, for instance, recorded that："Recently there have been wicked midwives who, in order to frighten people so as to demand high fees, corrupt（the baby）and abort it（*fu er qu zhi* 腐而

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去之）. They then asked for their money and leave（Ma 1991：232–33, 53）.” Other medical records remarked that “midwives who witnessed a diminution of labor pains, and deceived them by claiming that it（the fetus） has long been dead （*sitai* 死胎）. The mid-wife would then take a hook and snag the baby’s hands or feet, carving it into pieces and bringing it down（*lingge er xia* 零割而下）. After which, they（such midwives） boasted of their great achievement and exacted a high fee（Ma 1991： 188–9）.” Either to “corrupt and abort the fetus” or to “carve it into pieces and bring it down,” the techniques these midwives used are examples of fetal destruction which were also used to end advanced pregnancy, and to deal with stillbirths. Such approaches were known for their ability to “take them（the fetuses）apart and scrape them alive, even to press and kill babies still inside the womb. They use those methods to cut and break（fetuses）, to show their merit so they can brag of spectacular accomplishments, and to solicit big profits. Frequently it resulted in seriously harming the mother, besides brutally murdering the baby. The atrocity is quite unspeakable（Wang 1752：82–4）.” These procedures reveal a cruelty and high risk to post-coital intervention in late-imperial China.

Even though devoid of any fundamental opposition against artificial abortion, still, in later imperial times Chinese writers debated on its morality. Some medical scholars were concerned that lethal drugs so used could damage the women’s health. “Certain procedures,” as Wang Jiamo 汪嘉謨 complained, “often resulted in the death of the woman （Wang 1752： 82-84）.” Strict moralists argued that the process was inhumane （*buren* 不仁）thus to be avoided. By Ming and Qing times, the better established of medical authors and the more reputable of practitioners for the most part maintained a carefulness against artificially induced abortion, or other ways of terminating a normal pregnancy. To them these represented disagreeable activities that should not be widely utilized. When Buddhism flourished as it mixed with other forms of popular religion, abortions, especially those done on a well-articulated fetus（*chengxing* 成形）, were denounced as brutal, murderous and sinful. According to the widely circulated “tables of merit and demerit（*gongguo ge* 功過格）,” that is, lists of deeds by which one calculated moral worth, abortion was considered to be a serious offense（worth 300 demerits, the same as taking another man whoring, or encouraging

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a man to sell his wife）. Although it was not nearly as grave as infanticide（worth 1000 demerits, ranking the worst, together with such crimes as causing a human death, violating a chaste woman, or offending one's parents）（van Gulik 2003〔1961〕：249-250）. These tables indicate that, first of all, for many commoners in late imperial China, abortion was not acceptable, especially by Buddhist standards. But neither was it an offense treated as seriously as homicide, as was infanticide. Moreover, these materials of popular culture suggested that such activities could be occurring in everyday life and that the gruesome abortion drugs and methods could be effective to a large extent.

Continued debates among physicians and educated elites confirmed such an appraisal. The renowned medical author Zhang Jiebin 張介賓（1563-1640）represented a majority views when he pronounced artificially induced abortion as something to be discouraged. Yet medically, Zhang concerned that it was of indispensable value. On occasion, a pregnant woman might be injured, fatigued, or suffering from drugs, careless intercourse, or inherent weakness, and thus appeared to have serious physical difficulties. "With such signs that it（the fetus）cannot be saved（*shi you nanliu zhe* 勢有難留者）," one could not but agree with earlier authorities that the best way（*zui wei tuodang* 最為妥當）was to prescribe appropriate medications（such as *juejinjian* 決津煎, or *wuwujian* 五物煎）so as "to further facilitate her blood and abort it（the fetus）（*zhu qi xue er luo zhi* 助其血而落之）（Zhang 1985：671）." Zhang's attitude was thus in line with the old t mainstream in Chinese medicine, which had always deemed abortion as acceptable only for health reasons. Even in the earliest records on the subject, abortion was usually considered as an unhappy necessity, as demanded by emergency procedures in bringing down a dead fetus or problematic afterbirth（Zhang 1976：223-224）. These not only involved a fair degree of risk, but also were considered harmful to a woman's health. Street vendors and charlatans sold recipes indeed for contraceptive purposes, but their role in assisting with artificially induced abortions for a profit never failed to raise alarm and indignation among the moral majority and reputable physicians. The seventeenth-century gynecological and obstetrical text *Taichan jicui* 胎產輯萃（*Collected Writings on Childbearing*）by Wang Jiamo emphasized that when physical problems rendered the continuation of pregnancy inadvisable, "one

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may proceed to abort it(the fetus), so as to save the pregnant woman from further harm（*ze ke xia zhi, mian hai renfu ye* 則可下之，免害妊婦也）(Wang 1752：82)." Texts of medicine and pharmaceutics debated the clinically preferable approaches to abortion. These deliberations, as with Zhang Jiebin's objection, attested to the need for assistance, as it also witnessedto a certain degree in the efficacy of such practices. [39] Other social history documents attest as well both to the relatively widespread use of these medical recipes, and to their effectiveness. Since by at least Han times, abortion drugs show up in the context of court ladies attempting to eliminate competing pregnancies, [40] literary depictions of the world of courtesans and prostitutes contain stories of contraception and abortion as a way of life(van Gulik 2003〔1961〕：182). Medieval medical scholars, such as Zhu Zhenheng and Zhang Jiebin disapproved of regular application of such procedures. They claimed that it stood at the root of certain kinds of female infertility. [41] In addition to the court and the urbane lifestyles of the elite, by Ming times abortion was rapidly becoming a widely available technique for ordinary women （married or not）, including housewives. It had a market of its own, mostly in towns and cities, but also offered by travelling vendors. Women were noted as making an occupation out of selling packets of abortion medicine or providing the surgical service. Song medical anthology *On Medicine*（*Yishuo* 醫說） by Zhang Gao 張杲 quoted an earlier reference book, *Register of Famous Physicians*（*Mingyi lu* 名醫錄）for the following account：

> In the capital Bianliang（汴梁, now Kaifeng）, there was a Woman Bai 白（white） whose appearance once was quite fair. People in town called her "White Peony（*Bai mudan* 白牡丹）". She was in the business of selling abortion drugs（*huo xiataiyao weisheng* 貨下胎藥為生）. One day she suddenly developed a headache that grew worse as time passed. None of the famed physicians could relieve her of it. Days went by, her problem worsened and she smelled foul. She wailed and cried every night, while people near and far heard her. One day, she told her family, "Those abortion recipes that I have in store, burn them all for me." Also she warned her children："Swear that you will never inherit this business." Her son responded. "You, my mother, have built your entire livelihood

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> upon this（*yinci qijia* 因此起家）, why should you now give it up?" The mother replied, "I have been dreaming every night of hundreds of little babies eating at my brain, the pain was so great that I screamed. It is all because I have been handing out lethal drugs to destroy the fetuses（*yi duyao huai tai* 以毒藥壞胎）. And this is what I received as retribution." After these words, she passed out and died（Zhang 1985：juan10：35a–b）.

The story offers human insight into the abortion business of Song times. The woman's horror shows the increasing trouble of personal conscience, in an era of widespread Buddhism. Her disturbance may perhaps also be taken as an indirect indication for the effectiveness of her trade. The poor woman would not take seriously the hundreds of revengeful babies getting back to her in her nightmares, if she knew full well that her recipes were not effective in aborting any lives.

Other evidence of the commercial market for abortion can be found as well. On his preface to *Zhongzibian* 種子編（or *Miaoyizhai yixue zhengyin zhongzibian* 妙一齋醫學正印種子編）, the late-Ming physician Yue Fujia 岳甫嘉 mentioned a merchant who was in the abortion（*datai* 打胎） and sterilization（*juechan* 絕產, termination of fertility）business in the Lower Yangtze region in the mid-seventeenth century. "I have just chanced upon posted advertisements（*biaobang* 標榜）on the busy intersections of Hangzhou（杭州）city," Yue said, "which were left there by certain vendors of abortion and sterilization recipes（*yu datai juechan zhi fang wei ye zhe* 鬻打胎絕產之方為業者）. How very inhumane（*buren*） their business is! Even with strong prohibitions, there would be no guarantee of ridding ourselves of the one or two who continue to do it secretly for a profit（*qianyu yi tu sheli zhe* 潛鬻以圖射利者）." Yue's testimony further confirms points raised earlier. First of all, by this time there existed clearly a "market" for abortion and sterilization. The context of Yue's complaint suggested that people were purchasing recipes for contraceptive needs. Thus, at least in towns and urban centers, dealers engaged in a largely underground trafficking of abortion and sterilization, which were officially denounced but openly advertised. The market, moreover, had to be sizable so as to entice sellers under social disapproval. Secondly, even though Yue's wish in printing *Zhongzibian* was to enhance fertility in order that "these

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Hangzhou people would not have got into this cruel and acrimonious business（Yue 1986：4）,” still the indirect message here is that the counter business in the decreasing of reproduction had an independent demand with at least a partially fulfilled answer to it.

Another interesting vignette related to fertility manipulation is told by the editor-in-chief of the *Siku quanshu* 四庫全書 imperial library, Ji Yun 紀昀（1724-1805）, in his *Yuewei caotang biji* 閱微草堂筆記（*Random Notes from the Yuewei Thatched Hut*）. Whose friend related to him a physician torn by requests for abortion drugs：

> There was a physician by such-and-such name, Wu Huishu 吳惠叔 said, who always had been prudent and kind. One night, an old woman approached him with a pair of gold bracelets, asking to buy abortion drugs（*duotaiyao* 墮胎藥） from him. The physician, greatly alarmed, refused to sell them to her. The next evening, she arrived again, with two additional pieces of pearl jewelry. This physician, ever more fearful, forced her out again. Half a year or more later, he suddenly dreamed of being arrested by the judge of the underworld（*zhensi* 貞司）, claiming that he was sued for murder. As he was presented, there was a woman, with her hair disheveled and a red scarf tied to her neck, who, weeping and screaming, accused him of not providing her with the drugs she requested. “Medicine is to save lives; how dare I profit by killing people. You yourself failed as your debauchery was exposed（*yi jian bai* 以奸敗）, what have I to do with it ?” the physician exclaimed. “When I sent for the drugs,” the woman replied, “the fetus had not materialized（*yun wei chengxing* 孕未成形）. If I were to be able to abort it, I myself need not have died. Thus a feelingless piece of flesh（xuekuai 血塊 ,blood lump）would have been destroyed, and a desperate life spared（*po yi wuzhi zhi xuekuai, er quan yi daijin zhi ming ye* 破一無知之血塊，而全一待盡之命也）. Since I did not get the drug from you, I was forced to deliver it. The result was that my child was smothered to death after much suffering. And I myself was also compelled to hang myself. So you ended up taking two lives for the sake of wanting to save one. If this crime is not yours,

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> whom else shall I blame?"（Hearing this）, the judge of the underworld sighed and uttered： "What you have just stated had to do with（the weighing of）circumstances, whereas what he previously insisted upon was about（the up holding of）principles. After Song times, all have been obsessed by principles while discarding the real issue of discriminating the gains versus the loses under different circumstances. How should it be that this person is held solely responsible for all these? Why not drop your case!"（At which point）the judge hit his desk with such a big noise that the physician shuddered and woke up（Ji 1956：175）.

The story shows that to the popular mind the demand and supply side of aborticents grew so much in Ming and Qing China, so that a woman could approach any medicine man for the service. It also suggests that in the midst of this growing market, the ethics of it remained controversial and under debate. Through the voice of the underworld judge, we see that some in society attributed the increasingly stern attitude toward induced abortion to the rigid teachings of Neo-Confucianism, which many thought tilted towards excessively high moral standards at the cost of sensible pragmatics.

To Terminate Reproduction（*Duanchan* 斷產）

All of the intervention devices discussed above were concerned presumably to result in a temporary intervension with human reproduction. By comparison, in traditional China long-term contraceptive methods called "fertility-terminating methods（*duanchanfang* 斷產方, *duantaifa* 斷胎法 or *juechan* 絕產） had also been attempted. The term *duanchan* itself appeared relatively early in Chinese medical texts, dating back to the Sui and Tang period. At first, mentioned as an aid to women believed to be physically unfit for child-bearing, these medical techniques intended to render these women permanently sterile. Some of the extant recipes carrying a magical tone, although acupuncture and some medical ingredients had been known to be efficacious in abortion, suggest if that they may indeed result in sterilization. The goal, as these texts revealed, was that the people may "not give birth for life（*zhongshen bu shengchan* 終

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身不生產）（Tanba 1972：juan21）,” or “be spared from pregnancy for the rest of their days（*zhongshen jueyun* 終身絕孕）（Zhu 1982： 818）.” Unlike recipes for abortion, these sterilization methods did not appear to have been adapted for modern use. Nor has their efficacy been scientifically verified. Although some of the ingredients mentioned mere have caused serious hemorrhage or permanent damage to a woman’s reproductive organs.

REPOSITIONING BODILY FEELINGS AND PHYSICAL REPRODUCTION IN LATE IMPERIAL CHINA

Human reproductive behavior, though often thought of as primarily a biological phenomenon, has always had cultural and social dimensions; bodily feeling of the sexually engaged and their concerns other than pure bio-physical matters is an important example. The medical or technical devices people employed attempting to alter natural processes show a strong conscious wish for such manipulation. Modern contraceptive methods can be seen as but the latest manifestation of this age-old cultural phenomenon. Historical demography of early-modern Europe suggests that in this regard abortion and contraception preceded before and influenced upon the development of technical solutions. Traditional Chinese sources certainly confirms the same point. Early literary, religious, and *yangsheng* texts testify to a sexual culture filled with non-biological concerns. Some of the considerations for life-nurturing, fertility-enhancing, and other guides and taboos for sex could dictate copulative behavior in ways that created direct and indirect influences upon reproduction. The power of these cultural elements should not be underestimated. Medical texts from the Sui and Tang period onward reveal further that many pharmaceutical recipes and mechanical methods existed for the purpose of fertility-intervention; the clinical efficacy of some has been scientifically confirmed.

On the other hand, traditional medical literature existed for the increasing of the possibilities of fertility. Not all such prescriptions can be scientifically tested as effective, but they promoted protective and nurturing habits, as exemplified in the instructions for fetus nurturing（*yangtai* 養胎）, fetus protecting（*hutai* 護胎）, and the

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tradition of pregnancy instruction（*taijiao* 胎教）and post-partum care（*yuenei* 月內）, which had clearly had positive gynecological and pediatric effects. Their demographic significance thus goes beyond the influence on child-bearing and fertility. The indirect influence that this culture of medical literature and techniques could have had upon infant survival（hence mortality）, as well as upon the long-term health of their parents（hence fertility） is worthy of investigation.

On the other hand, nor should late imperial Chinese recipes and techniques for contraception and abortion be taken lightly. The use of *yinjia* for male contraception might not have been widely used, but the "market" for abortion drugs in towns and cities, was certainly a sizable one. Devices either for abortion artificially induced in the earlier stages of pregnancy or mutilation of the fetus at an advanced stage were known to the populace. They were sought by upper and lower classes alike, at times for reasons of propriety（in the case of illicit assignations）, but mostly and increasingly for those of normal fertility control.

A study like the present one thus touches upon issues that await further research. Recent studies have stressed the importance of seeing women as independent agents with means and strategies of their own. In considering reproductive behavior, women's ideas about family size, the preferred number of children, and the schedule of births could certainly be at variance from those of men and other women. Various hypotheses have it that women tended to be less interested in childbearing than men, and thus more adept at fertility control, or fertility management. In the case of late-imperial China, however, history can be telling a different story. Women, for cultural, and social reasons may desire children no less, if not more, than men（Hsiung 1994）. And men were at least as anxious about restraining their sex lives as women. Medical advertisements in China past and present remind us of how apprehensive Chinese men could be, and still are, about losing their potency, and their vitality through frequent intercourse. Such problems as "male deficiency （*yangxu* 陽虛）" and "kidney depletion（*shenxu* 腎虛）" resulting from carnal indulgence are still held to be at the root of a myriad of health problems of men.[42] They may have generated as much of a anxiety in the Chinese male population as the ancient ideal of obtaining "numerous children and

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grandchildren（*duo zi duo sun* 多子多孫）.” After all, in the business of reproduction, Chinese custom used to allow the failure of one woman to be made up by the ability of another, while no such possibilities existed for men.

How much of a true statistical or difference all these ideas and techniques for manipulating reproduction could have made is a subject demanding further research But historical evidence urge us ponder for use of the term NFR（natural fertility regime）, both for reasons thus far known and unknown.

Finally, some methodological reflections seem in order at the end. There is a proverbial Chinese saying which has it that “A river can both float and sink a boat.” Suppose the culture of a society, its sex and medical culture included, is like a river, the many philosophical notions, religions beliefs, intellectual heritage and technological devices it contains can perhaps function like the water in that river：They can work, or be made to work, either in favor of or against the myriad human activities（reproduction included）under different circumstances, as this essay has tried to explain.

But reproduction, or fertility and demography, is not the only vehicle this river of culture and social behaviors floats or sinks. Our tendency of viewing fertility and the bodily culture it is part of as if it were but a numerical result of human behavior inevitably carries with it certain built-in limitations which often “technicalize” our understandings of history and society. To try to trace cultural and social elements behind demographic phenomena is then like trying to look at the boat a river sends down so as to imagine or to gauge at what kind of water it is. While the idea may not be such an unnatural one, the task is further complicated by the young character and the experimenting nature of this vehicle（namely, this discipline or subject we called demographic or bodily culture studies）. In the matter of historical demography, moreover, we have the added problem of not knowing quite fully yet about our boat（exactly, what kind of boat was it really?）. Even if we were to know our boat better, to try to identify, to depict, or to appreciate the character and the power of a river through the vehicle it is capable of carrying seems such a strenuous upstream struggle. Further thoughts about the relationship between the bodily feelings of men and women as they

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made their sexual moves may be one of the ways to imagine this paddling to be conducted from the other end down.

NOTES

1. The biological factor, or the naturalness, in people's reproductive behaviors has always been an issue of debate among the demographers. Recently, some historians have joined in to express their concerns. See, for instance, Flandrin 1979：191-202, 221-225.
2. There is a rich literature on the Buddhist notion of "the realm of desires（*yujie* 欲界）," or "the obstacles of desires（*yuzhang* 欲障）." For some of the sources, consult Wang 1991：8, ch.4 .
3. 6 The most pertinent example of this is found in the conviction that "the heavenly principles（*tianli* 天理）are the opposite of human desires（*renyu* 人欲）. If one maintains one's share of human desires, the heavenly principles will be depleted of one share. In the case that one slice of heavenly principles are preserved, that much of human desires are conquered. The moment that the human desires are let loose, the heavenly principles are exterminated on the spot（Xie 1985）."
4. The notion that "*nanjing nüxue* 男精女血（semen of man and blood of women）" was at the core of the creation of human lives was an ancient one. See Ye 1989：601–607.
5. The idea that the elation of the *ying* and *yang*（*yingyang jiaochang* 陰陽交暢）is crucial to successful conception is also an old one（Ye 1989：601–607）.
6. This part of the text, according to van Gulik's translation, reads："Strongly-built men of fifteen years can afford to emit semen twice a day; thin ones once a day and the same applies to men of twenty years. Strongly built men of thirty may ejaculate once a day, weaker men once in two days. Strong men of forty may emit semen once in three days, weaker men once in four days. Strong men of fifty can ejaculate once in five days, weaker men once in ten days. Strong men of sixty may ejaculate once in ten days, weaker men once in twenty days. Strong men of seventy may emit semen once a month, weaker ones should not ejaculate anymore at that age." van Gulik 2003〔1992〕：146. For the original text, see Tanba 1972：juan28：23b-24b.

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7. Here I have mostly followed van Gulik's translation, with mild reversion（van Gulik 2003〔1961〕：150）. For the original text, see Tanba 1972：juan28：35a.

8. Tanba 1972：juan：37a. Translation mine.

9. This is again mostly van Gulik's translation（van Gulik 2003〔1961〕：151）; also Tanba 1972：juan28：35b.

10. Other than the most famous medieval texts such as *Qianjin yaofang* 千金要方〔A Thousand Golden Recipes〕or *Ishinbō*, a large medical, religious, and self-cultivation literature had laid down their teachings on this subject. For a good sampling, see Tanba 1972：juan28：28a-33a.

11. The nine calamities are as follow： 1）A child conceived during daytime will be given to vomiting; 2）A child conceived at midnight, when the interaction of Heaven and Earth is at a standstill, it will either be mute, deaf, or blind; 3）A child conceived during a solar eclipse will be either burned or wounded; 4） A child conceived during thunder and lightning, a time when Heaven in its anger displays its might, tends to develop mental problems; 5） A child conceived during a lunar eclipse will be haunted by ill-fate as will its mother; 6） A child conceived when there is a rainbow in the sky will be exposed to ill fortune; 7）A child conceived during the summer or winter solstice will bring harm to its parents; 8） A child conceived on a night of the waxing or waning moon will be killed in war or blinded by the wind; 9） A child conceived during intoxication or after a heavy meal will suffer from epilepsy, boils and ulcers. This translation is mostly van Gulik's with minor alterations（van Gulik 2003〔1961〕：147–149）.

12. This is, a rough rendition of an interesting passage from Shen 1989：455.

13. "Yuantian zhi shou, jingqi bu hao zhe dezhi 元天之壽，精氣不耗者得之," Li 1994：683. "Shun tianshi, fa yinyang yi zi gu 順天時法陰陽以自固", Chen 1994; Wan 1994： juan1; Wang 1994： 645; Zhang 1987. Also Liu 1993： 345-368, 560-590.

14. "fuyao qianguo, buru yixiao duwo; fuyao qianchao, buru duwo yixiao 服藥千裹，不如一宵獨臥；服藥千朝，不如獨臥一宵," Yang 1936：xufu：25a; "fuyaoqianchao, buru duwo yixiao; yinjiu yihu, buru baoshi yizhou 服藥千朝，不如獨臥一宵；飲酒一斛，不如飽食一粥," Hu 1994：11b.

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15. An often cited example comes in a discussion from *Ishibō,* which claims that, according to the Classic of the Immortals, "The way to make the semen return to enforce the brain is as follows：When, during the sexual act the man feels that he is about to ejaculate, he must quickly and firmly press with fore and middle finger of the left hand the spot between scrotum and anus, simultaneously inhaling deeply and gnashing his teeth scores of times, without holding his breath. Then even if he wants to let go of the semen, the semen will not be emitted. Instead, it returns from the Jade Stalk（*yujing* 玉莖）and enters the brain." See van Gulik 2003〔1961〕：145 with minor changes, and Tanba 1972： juan28：21b–23b. Other versions of this method appears in many *yangsheng* and medical texts from the medieval and late imperial period. See *Qianjinfang*（Sun 1985：juan27）, and van Gulik 2003〔1961〕：194. The method has been practiced by some Chinese men for both *yangsheng* and contraceptive purposes.

16. After the establishment of the PRC in 1949, its clinical value in accomplishing a male-activated and virtually costless contraception had been considered such that this traditional method of suppressing ejaculation has been revitalized and appeared in many of the first round of handbooks for family planning. This same method, though as first advocated also for its supposed effect on saving, and thus enhancing the quality of, semen, did not seem to attract as many followers for that reason. Most medical records bear witnesses of people's adopting it for health reasons, and the historical or literary sources mentioned its usage for need of lessening, rather than strengthening the chances of pregnancy.

17. During the more recent centuries when there is more systematic data for demographic research, it has been observed that on the average at least 90% of Chinese women of reproductive age were married. The average age of first marriage for women ranked between 18 to 20, and the average age at first marriage for men was 21 to 23. For Western Europe in the 17th and 18th centuries, however, women on average did not get married until they reached 23 or 25. In addition, at any given time, only 30% to 40% of women of reproductive age were married. Men, too, entered marriage in their late twenties or early thirties, with a large portion of them remaining bachelors for life. For the case of China, see Barclay 1976; Eng n.d. For the case in Western Europe, consult Hajnal 1965.

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18. An early example of this advisory literature on mate-selection, for instance, described its ideal bride as a virgin, age 25 or above, "with her vagina formed high, with no hairs on her private parts, with plentiful supply of essential fluid（*jingye* 精液）." See Ye 1989： 607.

19. For a discussion of popular notions of selecting a fertile woman, see, for instance, Wan 2000. In it, Wan（2000：23-30）listed five kinds of women as unsuitable for marriage, all for their physical abnormalcy regarding sex and reproduction. For a discussion on popular notions of selecting a "fertile" woman, see Gao 1992：161-166.

20. The second legitimate cause for a man to divorce his wife（*chuqi* 出妻）was if the woman failed to bear the family a son. The Ming law （*Ming huidian* 明會典） also codified that a commoner without a son at the age 40 ought to find himself a concubine（*qie* 妾）. Those who failed to do so could be punished 40 beatings for it（Li 1968： 2285）.

21. See note 18.

22. Unmarried women aged 16 and onward were made, in the Forever Han Dynasty, to pay 240 to 600 cash, or two to five times the normal poll tax. The average peasant households at the time had an annual income of 3600 per family.

23. Although recipes for "changing girl（fetus）into boy（fetus）" appeared in both folk and medical sources, none can be demonstrated as effective. For a concise analysis on the problem, see Banister 1987：122–32.

24. See, for instance, Zhang's （1983：27） discussion of the regional demographic structure in late–19th century Hunan province. Later on, behavior scientists have also tried to investigate the question of ideal family size among the Chinese. For their discoveries, see Yang 1976a & b; Liu 1976.

25. An often cited text expressing this view is a passage quoted from *Yufang mijue* in *Ishinbō* which stated the Sunü's（plain girl 素女）saying that "there is a fixed method for obtaining children. One should purify one's heart and banish all sorrows, sit quietly in tranquil spirit, and concentrate one's thought by fastening...." Followed by Peng Zu's words that "In order to obtain children, a man must store up and nurture his semen and not ejaculate too frequently（Tanba 1972：juan28：32a–b）." See also van Gulik 2003〔1961〕：149.

26. Other than the many remedies aiming at helping the problem of infertility（"zhi buyu fang

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治不育方”), the many fertility deities in Chinese popular religion（e.g. Songzi niangniang 送子娘娘, Songzi guanyin 送子觀音, Jiuzimu 九子母 etc.）as well as the many festivals and acts of fertility cults （e.g. the custom of *tou gua mo dou* 偷瓜摸豆, *shuan wawa* 拴娃娃 etc.） are all manifestations of this in one way or another. Gao 1993.

27. See, for instance, Yue 2000.

28. See, for instance, the *Fu Qingzhu nanke* 傅青主男科〔Fu Qingzhu’s male medicine〕, by Fuo Shan 傅山. This male medicine, other than flourishing in the 16th–17th centuries, is, interestingly enough, still a recognized field in Chinese medicine today. Recently, there have appeared a series of publication from Beijing entitled *Zhongyi nanke congshu* 中醫男科叢書〔Chinese medical books on male medicine〕. Included are publications such as Cao *et al*. 1991.

29. See *Handan yigao* 邯鄲遺稿〔The Lost Script on Female Medicine〕, as quoted in Ma 1991. The *Handan yigao* manuscript that this auther has consulted from the rare book collection of the Zhongguo wenxian yanjiusuo 中國文獻研究所 in Beijing did not contain however the paragraph that Ma（1991） cited.

30. Gui 1989：491. For a more detailed analysis, see Hsiung n.d.b.

31. The reluctance of these better qualified medical experts at this period for carrying out induced abortion arose from two fronts： consideration for professional ethics（aborting a fetus was still viewed as an unfortunate procedure practiced only under the most discreet and desperate circumstances）, and concerns for the high risks involved（the pharmaceutic choices available at the time often called for “poisonous” concoctions with known strong side-effects）.

32. At least since the Sui-Tang period, recipes for “easing delivery（*yichanfang* 易產方）” appeared in medical texts such as *Chanjing* 產經, and Wang Tao’s, *Waitai miyao fang*. By the Song times and thereafter, the varieties of medicines to “hasten the delivery（*cuishengfang* 催生方 or *cuishengdan* 催生丹）” greatly increased. See, for instance, Li 1990：2a–b; Liu 1987：299–300; and Zhu：1982：752–753.

33. The food taboos for pregnant women in medical texts go as back as Zhang Ji’s 張機 *Jinkui yaolüe* 金匱要略〔Synopsis of Golden Chamber〕（Zhang 1976： 652）. But the cautions

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against acupuncture and particular drugs as potentially abortive was a post-Sui-Tang phenomenon. These warnings of particular drug taboos during pregnancy（*yunfu yaoji* 孕婦藥忌, or *renshen youji* 妊娠有忌）were what inspired those who had been in search of abortion drugs. See *Chanjing*,（He 1984：4-7）; Wang 1987：157-166; "taisha biji taiqian jianghufa 胎殺避忌胎前將護法," "yunfu yaoji 孕婦藥忌 〔Drug Taboos during Pregnancy〕," Chen 1976：655; Song 1992：329. The adoption of abortion drugs from the old pregnancy drug taboos became so obvious and threatening that by the Qing dynasty, medical authors came out in denouncing this, warning women particularly to stay away from these dangers. See Yu Chang 喻昌, "duotai zhuyao xu bi 墮胎諸藥須避〔Avoided Medication in Abortion〕,"He 1987：107. Many of these drugs to avoid appeared in rhymed verses for easier remembrance and oral transmission.

34. In the *Chanjing* 產經 from the Sui dynasty, there was already recipe intended for "pregnant women who want to abort their fetus（zhi renfu yu qutai fang 治妊婦欲去胎方）" Prescriptions for similar purposes appeared also in Tang medical texts（e.g. "liao taisi fuzhong huo mubing yu xiatai 療胎死腹中或母病欲下胎"）, in Zhang Jie 張杰, *Zimu milu* 子母祕錄〔Secret Records of Son and Mother〕, or "Qutai fang 去胎方〔Prescription for Abortion〕" in Yang Guihou's 楊歸厚 *Chanru jiyanfang* 產乳集驗方〔Tested Prescriptions on Delivery and Breast-feeding〕. These and other early abortion recipes were kept on in the Song-Yuan period as female-medicine（*fuke* 婦科 or gynaecology）came increasingly into its own. But their real proliferation was in the Ming period and thereafter as important medical authors argued for their value in the face of the Neo-Confucian moralist social norms and as venders trading such fixes created a half-underground market to meet the increasing demand.

35. Researches carried out in the Academy of Chinese Medicine in Beijing（北京中醫研究院）, for instance, have confirmed the pharmacentic efficacy of *niuxi* 牛膝, *tunao* 兔腦, and a few other items traditionally used for abortion. Publications on the basic and clinical research of traditional medicine in the PRC, as well as their early record of family planning radiated that many of those old recipes are still in use for contraceptive purposes（Zheng Jin-zhang and Fu fang（傅芳）, Personal communication）.

36. Ma 1991：116-117, 131, 177-178, 217. *Waitai miyao* 外台祕要〔The Extra Important

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Secret〕also cited an abortion recipe "luotai fang 落胎方〔Prescription for Falling Fetus〕" from *Guangji fang* 廣濟方, which called for a suppository（*saiji* 塞劑）, made from *niuxi* 牛膝, to be put into a woman's vagina（*zigongjing* 子宮頸）. *Nanshi* 南史 cited Xu Wenbo's 徐文伯 success in abortion using acupuncture while "*Xu Xiaosi zhuan* 徐孝嗣傳〔Biography of Xu Xiaosi〕" noted that Xiaosi's mother tried many attempts to terminate her pregnancy, hurting herself or taking abortion drugs but was of no avail. "The pregnancy became further fastened（tai geng jian 胎更堅）" and the baby Xiaosi was born as a result, named "the deserted slave（*yinu* 遺奴）."

37. "renbing ke xiatai duanai 妊病可下胎斷胎," Wang 1752：82–4.

38. *Wangshi yicun* 王氏醫存〔Wang's Preserved Prescriptions〕; see also Ma 1991：235.

39. "Puji shifang 普濟事方." See Ma 1991：177-178.

40. Wang Jiamo, for instance, spoke of the three abortions cases he had personally consulted in and supervised. See note 38. Drugs for abortion（*duotai* 墮胎）or attempts at terminating pregnancy（*duantai* 斷胎 or *duanchan* 斷產）had long been part of palace intrigues and insights throughout Chinese imperial history. Many incidents recorded in the official dynasties histories bear witness to their application and, to a certain extend, to the effectiveness of the recipes.（See, for instance, *Mingshi* 明史〔A History of the Ming Dynasty〕, "Xiaomu ji taihou zhuan 孝穆記太后傳 〔Biography of Xiaomu the Mother Queen〕," "Wan guifei zhuan 萬貴妃傳〔Biography of Wan Guifei the Imperial Concubine〕." Also Ma 1994：669.

41. See Zhu Zhenheng, *Danxi xiansheng zhifa xinyao*, "tailou 胎漏〔Threatened Abortion〕（Z. Zhu 1982）," *Gezhi yulun* 格致餘論, "taiduo 胎墮〔Abortion〕Z. Zhu 1985：juan38：51a–82a）;" Zhang Jiebin, *Jingyue quanshu,* "tai dong yu duo 胎動欲墮," *Furen gui,* "Xiaochan 小產〔Minor Birth〕（Zhang 1985：juan29：16a–18b）."

42. The kidney is believed in Chinese medicine to be the organ, or the force, behind carnal drives and sex potency; thus kidney depletion signals the exhaustion of such resource.

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