World Population Growth vs. Reproductive Rights
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Abstract

Conflict between concern over global population growth (still rising precipitously, even though growth rates have slowed) and concern for reproductive rights is intense. Neo-Malthusians, on the one hand, point to the dire consequences of overpopulation; feminist defenders of reproductive rights and religious opponents of population control, on the other, point to abuses population programs have involved. In this paper I explore how developments in reproductive technology, present and future, may provide a solution to this conflict—one which promises both a significant drop in population growth and the fullest protection of reproductive rights and preferences. Drawing on the distinction between two principal types of contraception, short-acting or “time-of-need” technologies and long-term or “automatic” contraception, it poses a thought-experiment: What if everybody—all fertile females, and when the technology becomes available, all fertile males—were to use “automatic,” “reversible contraception? The effect of this circumstance would be to reverse the default mode, so to speak, in human reproduction, so that having a child would require a deliberate choice, followed by the action of removing or neutralizing one’s form of contraception. Under the assumption that people would choose to have fewer children than they would accept having when unplanned conception occurs, we can predict a dramatic decrease in population growth—indeed, the greatest possible decrease consistent with the full protection of reproductive rights for both females and males. Such a prospect would be morally acceptable only under two conditions, 1) universality, to avoid the targeting of groups perceived as at higher risk. And 2) guaranteed reversibility, so that people can always attempt to have the children they want. If these conditions are met, it is possible to resolve much of the conflict between neo-Malthusian concerns over population growth, on the one hand, and feminist and at least some religious concerns about reproductive rights and population control on the other.

In this short paper, I shall address two grave problems: global population growth and reproductive rights. It might seem impossible to address these two problems at once, so much at odds the solutions may seem. After all, those worried about population growth insist that individual freedom to have children must be limited if the world is to survive, while those concerned with reproductive rights are adamant about protecting women’s reproductive liberty—the right to have the children one wants. I plan to step between these two opposing camps to show that, thanks to what may seem to be only a tiny, incremental development in reproductive technology, there is a way of accommodating both concerns—both limiting children and having the children one wants.

I. THE CONFLICT.

World Population Growth.

In 1798, Thomas Malthus argued in his famous “Essay on the Principle of Population” that human beings, like other species, may reproduce at a rate that outstrips the “carrying capacity” of the environment they inhabit and so doom themselves to devastation. Malthus’ central idea is an extraordinarily simple one: because one reproductive pair can
have more children than would simply replace themselves, and because each of these children, together with a reproductive mate, can also have more children than would replace themselves, population growth tends to be exponential. But humans, even if they eat other animal species that can also reproduce exponentially, are ultimately limited by the productive capacity of the land. Since arable land area is finite and since (to add modern concerns to the Malthusian argument) enhancement methods like fertilizers and hybridization of plants cannot provide indefinite expansion, cannot renew exhausted natural resources, and cannot guarantee complete disposal of pollutants and waste, if humans reproduce at a rate that exceeds the carrying capacity of their habitat—the earth—they will, literally, eat, litter, and excrete themselves out of house and home. When a species does exceed the carrying capacity of its environment, according to Malthusian theory, it dies off, either partially or completely, and either recovers slowly, adapts sufficiently to change its environmental needs, or becomes extinct. For most species that undergo rapid expansion, population growth is limited by periodic episodes of starvation, epidemics of disease exacerbated by the poor nutritional status of the population, or other similar phenomena. The rule is ironclad: excessive growth brings about dramatic, involuntary population loss.

The human population now stands at 5.8 billion; at its current rate of growth, at which it doubles every 40 years or so, it would rise to 12.5 billion by 2050. Unchecked and proceeding at the same rate of growth, it would then reach 25 billion at the end of the coming century—when our grandchildren or children are still alive—and then 50, 100, 200 billion every additional 40 years. But, of course, this would be impossible, since the food production, natural resources, and waste-disposal capacities of the earth cannot possibly support such an increase. If 200 billion seems barely possible, wait just another 40 years; the number would be 400 billion.

Malthus himself did not advocate “population control” programs; he thought moral restraint might serve as some check, but, a pessimist, he also assumed that the human population, like any overproducing animal species, would go through cycles of expansion and starvation. However, his name has been lent to a wide range of population theorists who hold that if voluntary individual restraint in reproduction cannot be counted on—as Malthus himself believed it could not—population growth controls must be imposed from the outside. These theorists are now often called the neoMalthusians.

Reproductive Rights.

Meanwhile, critics—especially the more radical feminist critics—have begun to examine the nature of the programs designed to control population growth. Controlling population growth has meant controlling people, they point out, and has in particular meant controlling women. Population control programs, they insist, are designed largely by men in the first-world, industrialized nations and have been imposed largely without input from the women who are most directly affected: the poor women of the third world. Contraceptive research has involved technologies designed by scientists, mostly male, in the well-protected northern nations, but they are almost exclusively technologies to be used by the female and are tested, often with grossly inadequate consent, on the “needy” women of the poorer southern nations. They have been imposed by using lies, bribes, pressures, and sometimes outright coercion to achieve population-reduction goals. Furthermore, these feminist critics point out, population-control programs have paid little or no attention to women's subordinate situations in patriarchal societies, their
precarious economic circumstances, their lack of education and familiarity with modern medicine, their compromised nutritional status, and their desperate need of other health care. Individual “acceptors” are identified as “targets.” To be sure, they recognize, some population-control programs have also treated men in problematic ways (the most notorious example has been India’s offer of a free transistor radio to men who would have vasectomies), but it has been women who have been the primary targets. As one feminist manifesto succinctly put it, population policy is “racist, sexist, and classist,” imposing the values of those who are privileged on those who are not. And, this critique continues, these programs have committed a conceptual injustice as well: they have blamed these women for unrestrained, “excess” fertility, as if problems of global population growth (as well as resulting problems of environmental degradation and immigration pressures on wealthy nations) were exclusively their fault.

To be sure, these are the views of the most radical of the feminist critics, and there are many more moderate voices. But I address this extreme form of the feminist objection here for three reasons: it is politically powerful; it has at least a grain of truth in it, inasmuch as there have been numerous abuses; and it will be the hardest form of the feminist argument for the conjecture I want to explore with you here to meet. If we could put this objection in a single word, it is opposition to what has been so adroitly labelled the “controlista” attitudes and programs of those attempting to control population growth. Thus, it will be crucial to discover whether what we shall be examining here does—or does not—incorporate “controlista” features too.

The continuing argument between these opposing camps, the neoMalthusians and the feminists, has, of course, been vigorous—often quite acrimonious—over the last several decades. Indeed, as Paul Harrison says, “there is no debate quite like this one for sound and fury,” and often the two sides do not really listen to each other at all. Nor are there just two sides to this debate.

Opposition to population control also comes from religious groups, particularly the Roman Catholic Church and, though for somewhat different reasons, Islam; these have added not merely to the intensity but to the emotional character of the debate. Though its doctrinal position is extremely complex, Catholicism is opposed both to what it terms “artificial” contraception (though not to “natural” family-planning methods like rhythm), and it is also opposed to population control measures in general where they reduce numbers of people rather than rectify social and economic injustices among people. Whether Islam is opposed to contraception per se is a matter of some dispute; in any case, Islam has generally been pronatalist in character, using procreation both as a good in itself and, in at least some Muslim countries, as a way of increasing both military strength and the numbers of faithful. Neither Catholicism nor Islam is generally regarded as a proponent of (women’s) reproductive rights, yet on this issue they tend to find themselves, strange bedfellows though they may all be, taking political positions not unlike those of the more radical feminists in opposing both the methods and the objectives of population control. All these groups are undergoing rapid evolution of their views, but they have been—at least until recently—resolute in opposing population control.

In the three decades since the 1960’s, when population increase came to be broadly perceived as a problem, a number of specific strategies have been employed to try to reduce the conflict between the neoMalthusians and the supporters of reproductive and religious rights. Outright denial of the Malthusian projection has been one of the these strategies. The Vatican, for example, is said to have claimed at one point that the earth
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could support 50 billion people, or eight times its current population. Veiled denial has been another strategy: Senator James Buckley, who headed the U.S. delegation to the second U.N. International Conference on Population, held in Mexico City in 1984, claimed that under some conditions rapid population growth in developing countries could be beneficial, and that rather than address population growth per se, developing countries should be encouraged to "adopt sound economic policies based on free markets and individual initiative." Still others have pointed out that there is little agreement on what the "carrying capacity" of the earth is, and there is little or no way to determine how developments in food production techniques or the exploitation of new resources, such as fisheries, might change this. Some have taken current evidence that the rate of population growth is slowing as proof that the problem has been solved, though this is, of course, by no means the case: to slow a rate of increase is not to end that increase.

Flights of fantasy have been another response: some have endorsed space migration as a means of reducing population pressures, though as Joel Cohen points out, reducing the current global population growth rate by 0.1 percent would require launching 5.7 million astronauts in the first year and increasing numbers thereafter, and still would not fully keep up with current population growth. Changing the subject has been still another tactic: beginning with the first U.N. conference in Bucharest in 1974, many have argued that it is not so much population growth that is the problem, but the inequitable distribution of goods and resources between the rich northern and the poor southern economies that is associated with vastly different patterns of consumption. For some goods, inhabitants of the rich nations consume up to 75 times as much as inhabitants of the poor nations.

Recently, emphasis on altering development and consumption patterns in trying to resolve these dilemmas has given way to more direct emphasis on improving the circumstances of women, and at the 3rd U.N. population conference, held in Cairo in 1994, the U.N. Population Fund announced a new plan intended to hold population growth to 7.27 billion in 2015 and 7.8 billion in 2050. The plan focuses not only on providing funds for family planning but on providing a much broader range of women's health care, as well as on several indirect ways of reducing population growth. Because better-educated women tend to have fewer children and to have them at later ages, the plan seeks to ensure not only universal primary education for girls as well as boys throughout the developing world, but also secondary education for 50% of girls. Because high rates of infant mortality mean that families have to have many children in order to ensure that some survive, the plan seeks to improve infant health. Development and changing consumption are no longer seen as the only solutions; it is improving the status of women by providing education, health care, and other conditions of improved circumstances.

But as this discussion continues, the population bomb – to use Paul Ehrlich's famous phrase – continues ticking. It is true that growth rates have slowed – in some places dramatically – and that, due to rate variation, it is not technically exponential, a term reserved for consistently multiplying patterns. But there is still growth – at enormous rates – even though these rates are less enormous than a decade ago. The decline in the world growth rate from 2.1% per year in the early 1960's to 1.8% in 1990, representing a decline in the average number of children per woman from 6.1 to 3.8, meant, in part due to population momentum, that the doubling time only stretched during this period from 33 years to 39 years. It's just a little longer now. But even should the U.N. plan fully succeed, there will still be almost half again as many people on the earth as there
are now by the time a child born now is middle-aged – and this is only if the plan fully succeeds. Ehrlich laments our incapacity to react to long-term processes and to comprehend the speed of growth, and points to a common error in our thinking. Imagine a pond weed, he says, taking a classic example, that doubles every 24 hours and will cover the whole pond in 30 days; how much of the pond does it cover on the 29th day? Most people will intuitively visualize a pond nearly entirely covered by the weed as the final day approaches, though the correct answer, of course, is only half. We are just like this about population: we do not intuitively grasp what it means to speak of population doubling and we do not realize that exponential growth contains the potential for “big surprises”; that is, we do not realize that if we do not experience our world as on the brink of disaster now, that does not mean that disaster is not far away.

But the neo-Malthusians are not the only ones with a doomsday scenario to play before our eyes; the religious thinkers and the feminists have one too, sharing (though for very different reasons) a concern with reproductive limitations. Whether troubled by the use of contraceptives, by the imposition of limits on family size, or by threats to reproductive freedom, there is a disturbing example already available for all: China, with its state-imposed “one-child” policy. Feminists, religious thinkers, and others have long been pointing to the abuses China’s one-child policy engenders, like female infanticide and forced abortion, but they have yet to imagine fully the possibility that China’s mandated form of population control will be adopted as a model for other population-control programs in the developing world, especially by authoritarian countries that associate China’s population control with its sudden economic success. If such China-copying population-control programs are adopted, they will be, I fear, far more draconian and much more subject to ethnic bias, favoritism, and veiled genocide in limiting reproductive freedom than China’s has been. After all, China’s policy has at least been fairly egalitarian – one per child per couple, with only a few exceptions – but then China has not been as split by ethnic tensions as many developing nations and has retained a comparatively egalitarian Marxist legacy. Yet China provides a widely noticed example, and, for countries alert to current predictions of “winners” and “losers” in the 21st century – the phrase is Paul Kennedy’s – and the surmise that being among the winners is based among other things on a nation’s capacity for population control, the model may be tempting. Some 85% of the third world’s population now lives in countries in which the government considers the fertility rate too high. China’s enforced policy could well become the model for some of these nations, but I do not think the picture would be nearly as pretty in nations where ethnic, racial, and economic tensions are much more extreme and where traditions of individual rights – especially women’s rights – are even flimsier. African-American women understand this sort of threat to reproductive freedom very well, having often been singled out as the target of nonvoluntary, race-motivated selective population-control programs, but I think most other Americans assume two dangerous things: it doesn’t matter if it happens somewhere else, and it can’t happen here.

Perhaps most treacherous in this debate is the floating assumption – without persuasive empirical basis – that population growth will “level off,” whether at 7.8 billion, or 10 billion, or 12.5 billion, sometime in the next century. This is yet another form of denial, since it suggests that the problem will somehow “go away” or resolve itself after just around one more doubling (give or take a couple of billion people) of the current population. It trades on the assumption, part of the theory of the “demographic transition,” that development, redistribution, and education will continue to send
birthrates downward, and, more specifically, that the transition of societies from their
traditional agricultural bases to modern industrialized economies will bring with it the
emulation of "western" family-size patterns. This theory, that the demographic transi­
tion is occurring or will eventually occur in all societies, often plays an unwarrantedly
lulling role, suggesting that it is merely a matter of waiting it out until population growth
ceases — indeed, just until the middle of the next century.

It is certainly true that growth rates are now declining, but there is no compelling
evidence that they will decline to the level of zero population growth, approximately two
children per woman, worldwide. In many countries there is active resistance to the
importation of western ideals. Yet even if "western" family-size ideals — two children per
woman — were universally adopted, this would not fully solve the problem, since western
lifestyles bring with them much greater rates of consumption. Furthermore, our view is
not very long: even projections of global capacities for food production rarely look beyond
a population of 10 billion, whether they think a population of this size sustainable or not,
and there is little attention to longer-term population growth, beyond 2100, as might
occur with three or four doublings, even if they occurred at longer intervals.

To be sure, even the classic Malthusian agrees that population growth will not
continue beyond a certain point — whenever the carrying capacity of the site has been
reached — but this is by no means a benign process. Rather, "leveling off" — or, more likely,
precipitous decline — occurs, in the Malthusian prediction, through means that cause
acute distress to individuals: vast starvation, increased vulnerability to diseases com­
pounded by malnutrition, collapse of transportation and energy systems due to exhaus­
tion of natural resources, subjection to killing pollution, exacerbation of tensions over
land and resources, perhaps leading to war, and a host of other causes compounded by
overpopulation. Alternatively, as one might imagine a feminist prediction, "leveling off"
could also occur through selectively or universally imposed nonvoluntary population
programs of the kind now enforced in China, or worse, where any real reproductive
freedom or opportunity for adherence to religious mandates becomes a thing of the past.
If we have enough of one, of course, we won't get the other; but neither is an outcome
we can accept.

Of course, it is also possible that "leveling off" could occur as the product of benign
processes, but it is important to be clear about what these might be. Neither education
nor changes in distribution nor development nor readjustment and curtailment of
consumption patterns nor enhancement of the status of women will produce a drop in
the growth rate in themselves; declines in population growth rates are associated with
these things, but these things do not cause drops in population growth. What causes
drops in population growth, independent of changes in the death rates, is less childbearing,
and that means that a completed pregnancy is less frequently the outcome of whatever
sexual activity may occur.

II. THE SOLUTION

I think there is a solution — at least a partial solution — to the conflict between the
neoMalthusians and the feminist and religious defenders of reproductive rights or
freedoms. This solution depends on noticing what appears to be minor increment in
modern reproductive technology, but it is actually one with major implications. It is easy
to notice; but it is difficult to decide what to make of it. I don't know whether you will
perceive what I want to discuss as a recommendation, a prediction, a utopian fantasy, a
totalitarian plot, a hypothetical conjecture, or a realistic solution; I do know that the topic of contraception often produces discomfort. But it is important to examine the facts. This will mean observing something about the way in which we use contraception, and then noticing that we have already at hand the mechanism of substantial change.

**Contraception: How we've done it in the past, how we can do it now.**

What I want to explore is the prospect of what I shall call “changing the default mode” in human reproduction. This is a big — but very simple — idea. As things now work — to get right down to the facts of life as directly as possible — unless something is done to prevent it, in about one occasion in five of sexual intercourse between a male and a female during the female’s fertile period, pregnancy results. In this sense, we can say, pregnancy is the normal or “default” outcome of sexual intercourse.

To be sure, we have many ways of preventing this outcome. Methods of female contraception, which have in the past included an enormous variety of potions, plugs, timing devices, and barriers made from roots, barks, herbs, and even arsenic and spider eggs, now include a number of sophisticated technologies, including douches, sponges, diaphragms, spermicides, pills, implants, intrauterine devices, injectibles, morning-after drugs, vaccines, timing schedules (including natural family planning), surgical sterilization, and many others. Males, in contrast, are limited to just three basic types of contraceptive: coitus interruptus, the condom, and vasectomy or other surgical sterilization. But it is possible to divide the full range of contraceptive technologies, both male and female, into two broad groups, and it is this distinction that is crucial to the solution I want to explore.

Most of these technologies share a common cluster of characteristics; they are short-acting, user-controlled, and exposure-sensitive or, more plainly, sex-related. They are addressed to preventing the current episode of possible conception, and must be employed at or near the time of sexual contact in order to prevent it. We can call them “time-of-need” contraceptives. In contrast, a few of the contemporary technologies, plus just one historical example, are long-acting, user-independent, and exposure-insensitive (or “coitus-independent”) — they work over an extended period of time, require no effort or attention of the part of the user to be effective, and, most important, require no activation, application, ingestion, or insertion at the time of sex. They do not interfere with sexual activity, and sexual activity does not alter or interfere with them. They are, in a word, “automatic.” There are two principal contemporary technologies which not only have all these characteristics, but are immediately reversible — the intrauterine device, such as the Copper T380A, which is safe and effective in multiparous monogamous women for 8 or more years, and the subdermal implant Norplant, which is placed under the skin of a woman’s forearm and, in its current 6-rod formulation, provides contraception for 5 years. There are many other contemporary long-acting contraceptive technologies as well, including oral contraceptives, Depo-Provera, hCG vaccines, and laparascopic sterilization, but because the former require daily self-dosing and the latter are not immediately reversible or not reversible at all, they do not exhibit all the features of the true “automatic” contraceptive.

These two true automatic technologies, the intrauterine device and the subdermal implant, are both associated with side effects, spotting and bleeding. But both exhibit high efficacy and safety — up to 200 times the contraceptive efficacy of the condom.
Indeed, of the modern contraceptive technologies now on the market, all are safer than pregnancy – that is, fewer women will die from using them than would die of pregnancy related causes, a risk which is quite low in this country but in some developing countries is as high as 1:20. There have been no fatalities at all caused by subdermal implants. In terms of risk to life, a woman is almost always safer contracepting than not doing so.

Now notice the difference between the traditional short-acting, “time-of-need” methods and the two truly automatic ones: with the traditional methods pregnancy remains the normal outcome of sexual intercourse, and one must employ the device at or near the time of sexual exposure to prevent it; with the automatic methods, however, the user need do nothing to prevent pregnancy but must do something to make it possible to become pregnant – namely, have the device removed or neutralized. This is what informs the metaphor of “reversing the default mode”: it changes what happens if one does nothing to interfere. Just as the word processing program I use in my computer has a default setting for single space, and thus will single space unless I direct it to do something else, so human biology’s default is set so that – given fertility and an active sex drive – pregnancy is likely to occur unless one takes steps to have it do something else. But just as I can reset my word processing program to double rather than single space, so these “automatic” forms of contraception in effect reset human biology not to result in pregnancy unless steps are taken to change it. And it does so in a specific way: it inserts an extra level of choice-making, to be followed by the action of having the device removed, into the reproductive process. With these technologies, it becomes the normal state of affairs that sexual intercourse does not result in pregnancy. For it to do so requires an additional, positive act.

We now think of the long-acting methods, including the IUD and Norplant, as just two among the various types of contraceptives from which a woman can choose. (Men currently have no such choice; the only nonpermanent contraceptive methods available for men, withdrawal and the condom, are both quintessentially exposure-sensitive, “time-of-need” methods that one has to attend to while engaged in sex.) Some women will choose the diaphragm, others rely on their partner’s use of a condom, others take the Pill or get an IUD. But this cafeteria array of options, as it is sometimes called, disguises the watershed difference between “time-of-need”: and “automatic” methods and their potential for addressing the conflict with which we began: that between global population growth and reproductive rights.

True automatic contraceptives are not yet available for men. But there are several technologies under development which would also be long-acting, user-independent, exposure-insensitive, non-interfering with sexual activity, and immediately reversible: these include the so-called Chinese “cork” device, a small silicon plug inserted in the vas deferens, and its double version, the Shug; a male pill utilizing a testosterone ester; a pizoelectric cell implanted in the vas which fires at the time of ejaculation, killing sperm; and, perhaps, most promising, SMA, a polymer, styrene maleic anhydride, injected into the vas which lowers the pH of the environment just enough to kill sperm passing through. This latter has been tested for 10 years in rats and monkeys and is now in human trials in India; it has been said to show excellent effectiveness and reversibility, with no toxicity or teratogenicity. None of these male methods really works yet, and you can’t buy them yet. But they are under development and, I believe, of incalculable significance in addressing the problems which confront us.

Since we are thinking ahead about the prospects for the world, let us look just ahead to the point where these true automatic contraceptive technologies are fully developed,
tested, available and free from side effects, both for women and for men. Let me ask the artless question that so directly addresses the conflict between concerns over world population growth and respect for reproductive rights. It is a remarkably simple question: What if everybody did it? — that is, what if everybody used “automatic,” background contraception?

The Effects of Universal Automatic Contraceptive Use.

What if everybody did it? Remember, after all, the state of the world as we ask this question: population growth, while declining in rate, is still relentlessly increasing; we can expect world population to double within the next 40 years; and the solutions proposed — development, redistribution, the enhancement of the status of women — are comparatively slow processes, especially in cultures in which traditional values are most firmly entrenched. The population bomb keeps ticking. But suppose everybody were to use “automatic,” background contraception. Even in the United States, where about 78% of women use some form of contraception, nonuse, erratic use, and contraceptive failures mean that about 50% of all pregnancies are unplanned. And of these, approximately 50% are terminated in abortion. To be sure, many of the pregnancies which were unplanned would have been planned at a later date, and certainly many of the children born of unplanned pregnancies become welcome and loved, but it is reasonable to estimate that somewhere between 1/2 and 1/4 of the pregnancies now occurring (that is, somewhere between the rate of unplanned and aborted pregnancies) would not occur were the “default mode” reversed and the making of a positive choice were required for pregnancy to occur.

The central assumption here is that women — and parents generally — would choose to have fewer children than they would accept having if pregnancy occurred. As things now stand, half of all unplanned pregnancies are carried to term — about a third of the total births in the United States. If the default mode were reversed, so that an extra level of choice were inserted into the natural biological process, many of these pregnancies would not be initiated in the first place. If this is so, the result of reversing the default mode on population growth could be dramatic — even in a country, like the U.S., in which the birthrate is already comparatively low and the use of contraception widespread. Presumably, the effect of “reversing the default” would be still greater in the many countries with very high birthrates, where access to contraception is erratic or nonexistent.

It is also important to see that the effect on the birthrate of the universal use of automatic contraception would be greater than if, for instance, RU-486 — the so-called French abortion pill — were universally available. Even aside from scruples many women have about abortion, reliance on such technologies to control fertility still requires women to do something to stop pregnancy, rather than do something to start it; and if I am right that they will choose to have fewer children than they would accept having if pregnancy occurs, universal availability of RU-486 would not have nearly the impact on the birthrate that universal use of “automatic” contraception would, even though it would seem to give a woman equally great control over her own reproductive life.

The universal use of automatic contraception would have an equally dramatic effect, I think, on reproductive self-determination. If a woman can become pregnant only when she has made a choice to do so, a choice followed by removal or neutralization of her “automatic” contraceptive device, she is far less vulnerable to being pressured, coerced,
or overcome by passion in compromising sexual situations and hence risk pregnancy when that has not been her previously considered choice. She cannot become pregnant because she forgot or misused her birth control methods. She cannot become pregnant as the result of rape or involuntary incest, at least unless she is also coerced into requesting removal of her device. Once she has an automatic contraceptive, she cannot be denied access to birth control methods by lack of funds, by pressure from her husband or partner, or by the disapproval of the church or village elders. What reversing the default with "automatic" background contraception does is to alter her decision-making options from a range of negative choices — not to get pregnant now, not to get pregnant tomorrow, not to get pregnant the next day — to a positive one: choosing when to invite pregnancy. She can still reach the same outcome — as many children as she wants, for whatever personal or religious reasons — but she gets there by a different decisional course. Because she cannot become pregnant for a variety of reasons she did not predict or elect, the gain in reproductive freedom is enormous — even if she were always free to abort a pregnancy already in progress.

Furthermore, the universal use of automatic contraceptives by women would also produce a gain in reproductive freedom for men. To be sure, this gain will be still greater where there are automatic contraceptive technologies available for men as well, but even without these future developments there is still a gain in reproductive freedom for men if women routinely, universally, use background methods. Although a man would still be hostage to some degree to the reproductive choices of his female partner, and although he could for instance still be tricked into siring a child by a woman who has her device removed without his knowledge, he is no longer likely to contribute to conception in a nonvoluntary way for a large range of currently fairly frequent reasons: e.g., because his partner made technical errors in contraception — forgot a pill, misused a diaphragm, etc., or because in the heat of passion or to avoid interfering with spontaneity and sexual pleasure she or he decided on the spur of the moment to ignore precautions against pregnancy, or because erotic activity which was not intended to be consummatory ended up being that way. Because his female partner can only expose herself to pregnancy as the result of a considered choice followed by a deliberate act, namely having the device removed, a man is protected from the effects of any impulsive or careless decisions or actions on her part that might affect his own reproductive freedom. (Needless to say, reversing the default mode in this way could have substantial impact on paternity issues.)

After all, in matters of initiating pregnancy within a sexual relationship, males currently have far less reproductive freedom than females, since the only contraceptive device under male control — the condom — is some 200 times less effective in preventing pregnancy than the most effective technologies under female control. Of course both parties can say no; but once they've said yes, it is the female who retains the greater degree of control over the reproductive outcome of their intercourse.

For the greatest degree of reproductive freedom, of course, both men and women would be users of similarly long-term, user-independent contraceptive technologies, and the achievement of pregnancy would require considered choices and deliberate acts on the part of both parties. It would take two to tango, so to speak, and conception could not occur without the voluntary, deliberate participation of both male and female. We have the female part of the technology for such a world now; we can see the male part on the horizon. And we can see how the universal use of these technologies would produce both a dramatic drop in the birth rate and a concomitant gain in reproductive freedom. Neither effect might be complete — the drop in the birthrate might not reduce
population growth rates to zero, and reproductive freedom could still be violated when one partner coerced the other into requesting removal of the device. But compared to present circumstances, gains both in limiting population growth and in enhancing reproductive freedom would be enormous. This is the central idea I have wanted to bring to you.

III. PROBLEMS WITH THE SOLUTION?

What if everybody did it? But in asking this question, we have skipped over what may seem to be a crucial element, especially if reproductive liberty is an issue: how might it come to be the case that everybody did it? Doesn't this have a coercive, almost fascist ring to it, suggesting state control, involuntary imposition, the insertion of contraceptive devices into people with or without their consent? Wouldn't this be just another legacy of colonialism in the third world, just another manifestation of racist policies in American urban ghettos, just another expression of "controlista" attitudes on the part of population-controllers? Wouldn't this be the end of religious freedom? Isn't it important to know just how it might come to be the case that "everybody" did it?

When I said at the outset that I was uncertain whether you would perceive what I am discussing here as a recommendation, a prediction, a utopian fantasy, a totalitarian plot, a hypothetical conjecture, or a realistic solution, it was this point that I had in mind: what reaction there would be to the prospect I've been exploring about "everybody" doing it. After all, at least if current experience is much indication, a simple open market is not likely to result in universal use; not only is there a widespread perception that, if contraception is to be used, any reasonable item from the cafeteria of contraceptive options will do, but the automatic technologies tend to seem quite expensive, with purchase and installation costs all up front, and there is widespread misinformation about their effects. Then there is the ubiquitous assumption "that can't happen to me" among people who perceive themselves as at low risk of unwanted pregnancy, coupled with the assumption that contraceptive use is appropriate only when sexual exposure is actually likely, not as a broad, background precaution. For these reasons, I think an open market would be unlikely to result in sufficiently widespread use of automatic contraception to allow us to speak of the default mechanism as having been reversed, or to produce the predicted effects on either population growth or reproductive freedom.

To engender universal use, then, something more would be required - but this is the point that gives us pause. One can imagine various mechanisms: state control and enforced use is one (not altogether impossible, I imagine, under the doomsday population-control scenarios I described at the outset, either in other countries or eventually even in this one), widespread encouragement by public-advertising and media campaign is another; public bribe (like the transistor-radio program for vasectomies in India) is another; employer or insurer requirement is yet another; and still another - the one I think most probable - is that use of these technologies might become a medical norm, the standard course of gynecological treatment for all adolescent and adult women, and eventually the medical norm for men as well - a health measure much like immunization, to which consent is perhaps superficially solicited but in practice assumed. One can even imagine such technologies - much like routine immunization - required for school entrance, at the junior high or high school level, for both girls and boys. "This is just what I do for all my patients," we can imagine the adolescent medicine or ob/gyn physician of the future saying, "I'm just helping them - especially the teenagers - protect themselves
from pregnancy or siring pregnancy if they don't want it yet. I vaccinate them against typhoid and diphtheria and polio, and I immunize them against pregnancy—until they want it—too."

These ways in which it might come to be the case that “everybody does it” clearly differ in the degree of pressure applied to the user. Some involve persuasion; some involve manipulation or pressure, and some might involve outright coercion. It is these fears that are central to the feminist critique of “controlista” population-limitation programs, and the prospect of eurocentric, racist interference both in other cultures and in minority groups within the United States. After all, it is a frequent observation of population-control enthusiasts that, at current rates of growth, some 80% of the world’s population in 2050 will be in the developing nations, and that minority growth rates in the U.S.—especially among Latinos and blacks—are higher than those of whites; these projections fuel concerns about the forcible imposition of biased, targeted anti-minority population-control programs both at home and abroad. There have indeed been aggressive population-control programs, usually involving involuntary sterilization or sterilization with inadequate consent, disproportionately imposed on minority women in the U.S. and Puerto Rico in the past, and we cannot ignore such abuses and the fears they fuel in considering the “solution” examined here.

Thus we want to ask again, just exactly how would it come to be the case that everybody used automatic, background contraception? But it is at this very point in assessing the prospect of universal automatic contraceptive use that we make, I think, a substantial conceptual error. For we focus, I think, on the wrong issue. Assuming, as we have been, that we are speaking of future technologies which are safe, effective, and have no substantial side effects, what is central is not so much how it comes to be the case that they are in universal use, but what would be the conditions under which such use would operate when it is universal.

The Moral Conditions of Universal Automatic Contraceptive Use.

I’ve already argued that reversing the default mode would not only result in potentially dramatic decreases in population growth, but that it would substantially enhance both male and female reproductive freedom. We cannot, I believe, welcome one of these consequences without the other. But the latter—enhanced reproductive freedom—would be the case, I believe, only if two conditions were rigorously met, for instance by being incorporated in law (say, as civil rights or as constitutional guarantees) or in whatever social policies are in effect. Provided these two guarantees are rigorously met, the universal use of background contraceptives can, I think, remain ethically defensible independently of the means it is actually brought about:

a) universality.

If any pressures are to be permitted to secure more widespread use beyond what would be the product of individual, voluntary choice, it must be the case that they are expected or required of everyone—not just those groups perceived to be at the highest risk of unwanted pregnancy. This is true for two principal reasons. For one thing, the requirements of universality are essential to prevent the kind of inequitable treatment and potential genocide that develops as specific racial, ethnic, or behavioral groups are targeted for birth control while others are not. In particular, this precludes the kind of computation of risk, often highly infected with prejudice, that perpetuates stereotypes of group behavior often inapplicable to individuals—for example, the claim that black
inner-city teenagers “need” Norplant because their rates of illegitimacy are higher while white suburban teenagers do not, or that third-world populations “ought” to have the IUD because they are incapable of disciplined economic growth. To be sure, everyone means everyone – or rather, every fertile woman and, as the technology becomes available, every fertile man, without reference to past, current, or anticipated sexual activity. Universality is crucial, especially in any program involving pressure of any sort, because it is what guarantees the right not to have oneself either as an individual or as a member of group singled out for the imposition of any contraceptive technology which is not similarly imposed on all other fertile women – and eventually, men – across the board. It is a guarantee of fairness. Thus the quite legitimate specific fears of minority groups that they will be the special targets of population-control projects – as they often have been in the past – are put to rest by this first condition.

b) guaranteed reversibility.

As a second criterion of morally permissible universal use, it must also be a matter of political, legal, and social guarantee that any woman (and, eventually, any man) can have the device removed or neutralized upon request, without restrictive conditions, though it is to be replaced at the completion of pregnancy. To do otherwise is to undermine the gain in reproductive freedom that the technology introduces in the first place. This means that there must be no stipulation concerning the maximum number of children a woman or couple may have, the type of child care, the physical or mental health of the mother or father, their income or marital status, their criminal status, or any expected genetic defect in the child. To be sure, guaranteed reversibility will result in some pregnancies which conscientious observers believe ought not occur, but this is not to introduce a new problem; such pregnancies can and do now already occur. Guaranteed removal imposes an obligation upon providers of medical services to make removal available upon demand, without financial disincentives, undue waiting periods, or requirements like a minimum use period before removal. Guaranteed removal would answer some of the objections from population-control programs in the third world – for example, women’s frequent experience of finding physicians trained and available to implant devices, but unavailable, untrained, or unwilling to remove them. It would preclude insurance companies or other cost managers from insisting that in order to obtain “full value” from an expensive device, it must remain in place for the full term of its effective period, or something close to it.

Like the first requirement, universality, there are two principal reasons for this second one, reversibility, as well. First, and obviously, the requirement of reversibility is intended to protect reproductive liberty and to thwart external control: even if a woman can be pressured, manipulated, or coerced into accepting “automatic” contraception in the first place, the brunt of this invasion is mitigated if she is guaranteed removal for any reason, at any time, until after the delivery of a child. Thus she is still guaranteed the basic choice about whether to have a child – the quintessence of reproductive freedom. This answers the complaint of many critics that the background methods of contraception are “provider-controlled”: true, they must be emplaced and removed by a provider, but the provider does not retain control over whether or when it shall be removed, the user does. Of course, if reversibility cannot be guaranteed in a chaotic or unjust society, the only defensible expected use of automatic contraceptives would be if technologies were developed that were self-removable or self-neutralizable, but this would guarantee users far less protection against their own impulses and against abuse by their partners. In any case, such technologies are not yet available.
There is a second, conceptual reason as well here for the criterion of guaranteed reversibility: what is crucial, in changing the default mode in reproduction, is that reproduction remain a normal, natural process of human biology— one which one can always have happen. It does not make childbearing a privilege for some; it merely makes childbearing a matter of deliberate choice for all. This means that not only women who wish to have one or two children can do so, but those who wish to have a dozen or so can do so as well. The only change is to introduce one additional step— the making of a considered choice, followed by a minor medical procedure— into the traditional biological process.

Thus, as we survey our future and our concerns both about exploding population growth and authoritarian threats to reproductive and religious rights, I think there is some cause for hope. If we can see that the difference between time-of-need and automatic contraception is not just a little increment in technological progress, but represents a watershed difference, we will be well on our way to resolving both problems at once. The solution may not be perfect. And there will be some losses: no "surprise" babies, no leaving reproductive choice to fate, no heady atmosphere of "taking a chance." It will also mean the duplication of protection, where barrier methods are used to prevent the transmission of AIDS and other sexually-transmitted diseases, while the background technologies provide contraception. But there will be gains as well, affecting some of our currently most intractable social issues: except in cases of fetal defect or threat to maternal health, there would be no longer any issue about abortion; there would be no pregnancy resulting from rape or nonvoluntary incest; there would be no nonvoluntary teen pregnancy, no accidental perimenopausal pregnancy, no need for permanent surgical sterilization, and fewer paternity issues. It would even permit much better timing of pregnancy for women with chronic health problems, since pregnancy could be elected at easier points in an ongoing illness rather than coped with when it occurs unexpectedly. Indeed, our ways of thinking about pregnancy and childbearing would undergo radical change— from something one accepts or rejects when it happens to something one chooses to begin.

Now it may seem that this is not such a radical proposal after all. If it does not sound so strange, it is worth remembering that in the developed countries, life is already somewhat like this. Women already have access to contraception, and in many regions, especially Scandinavia and the Netherlands, the use of "automatic" forms and related methods like the Pill is quite widespread. The duplication of protection is also increasingly common, as condoms are used for disease prevention while the far more reliable background modalities are used for contraception. The timing of pregnancies is routine, as couples try to pick patterns of childbearing that will enhance their careers, their family lives, and their duties to other family members, and will not unduly strain their physical well-being or their financial resources. And all these things are encouraged by many of their social, governmental, and religious institutions. Furthermore, access to contraception has been increasing in the developing world and, among educated women, childbearing choices tend to follow the same patterns: fewer children, later in life, spaced at greater intervals. So if the picture I've been painting seems in the end oddly familiar, this is just a way of saying that— at least in the privileged parts of the privileged parts of the world, we are almost there, and we can already begin to see the extraordinary significance of the technological developments now occurring. But it is far from completely the case here— after all, half of all pregnancies in the U.S. are unplanned— and it is certainly not that way at all yet in much of the rest of the world.
NOTES

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11. The one long-acting, user-independent, exposure-insensitive contraceptive technology recorded from historical times is the fruit pits Arab traders are said to have placed in the uteruses of their camels on long desert trips; this is an early form of the modern intrauterine device.


14. Of course, some women are infertile for various medical or other reasons. My own view is that the same society that expects or imposes automatic contraception for fertile women ought to provide medical help, including in vitro fertilization and other high-tech modalities, for infertile women who wish it to enable them to increase their own range of reproductive choices; but that is a separate issue.