Liz Catalan lives in a nice house in Miami. She does marketing for a cruise line. She's been married to a wonderful guy for five years. She is, in short, an ordinary woman of 41. Except that Catalan, who suffers from an untreatable form of infertility, has an extraordinary craving to be cloned.

"I'm not crazy," says Catalan, whose ovaries went into premature failure years ago. "I just want to have a child of my own." Not a child made from a donor egg provided by someone she doesn't know. Not one adopted from halfway around the globe. She wants a baby genetically related to her. And if that means one who's genetically identical, then so be it.

Catalan is part of a small but serious cadre of would-be clonees, people who have studied the science, considered the issues and concluded that their pursuit of happiness might best be fulfilled by having themselves or a loved one cloned. Their perspective is not countenanced on Capitol Hill, where Congress -- though vigorously debating whether to allow the cloning of human embryos for research -- is unified in its opposition to the creation of cloned babies. Nor is human cloning widely favored by the public. In a poll of Americans conducted last summer, almost 90 percent said scientists should not be allowed to use cloning to try to create children for infertile couples.

Yet many of those who wish to be cloned are not easily dismissed as kooks or cranks. And by bucking the majority view, they are pushing policymakers and the public to contemplate human futures unthinkable even a few years ago. In fact, say ethicists and constitutional scholars, the cloning debate is important not because it will settle the question of whether cloning is "right" or "wrong" -- it will not -- but because it is forcing people to think more deeply about who we are and what we want to become, as individuals and as a species. In our reflexive dismissal of human cloning, these experts say, there may be a missed opportunity to clarify what the issues really are and why they carry such emotional power. [WE ALREADY KNOW THAT PSYCHOLOGY TRUMPS ETHICS]
Such soul-searching is one of the unanticipated but more immediate byproducts of a genetic revolution that is rewriting the rules of biology and society. It's an incremental revolution, without clear milestones that might make it easier to comprehend. And it is still largely confined to the laboratory. Yet it is being shaped not only by scientists but also by the basic longings that define the lives of ordinary people -- *people like Liz Catalan -- who claim nothing less than a democratic right to be pioneers on the biomedical frontier.* [A RIGHT!!]*"I'm willing and ready for whatever it takes," she said.*

’No Need for Men’

Human reproductive rights were far from Ian Wilmut's mind when he and his colleagues in Scotland took a skin cell from a 6-year-old ewe's udder, placed it in a laboratory dish, and -- with a tiny bolt of electricity -- fused it to an egg cell whose own genetic material had been removed. The result of that fusion was an embryo, which the Scottish team transferred to the womb of a surrogate mother sheep that, five months later, gave birth to a lamb named Dolly.

Dolly offered the first living proof that mammals could be created from a single cell and without any contribution from a father. *Centuries of scientific thinking collapsed in a heartbeat, and the social implications left people reeling.* The day after Dolly's birth was announced, in February 1997, Washington University biologist Ursula Goodenough said pointedly that with human cloning, “there'd be no need for men.” [IRONY, GALL, HUTSPA, ........]

President Bill Clinton responded immediately, ordering the National Bioethics Advisory Commission to study the topic and report back to him within 90 days. The commission's 120-page report, which remains the definitive critique of the technology, concluded that there was a lot to worry about.

Among the commission's concerns was that *a clone might find it oppressive to know that his or her genetic life had already been lived, and feel robbed of the "open-ended future" that human rights advocates generally agree should be the birthright of every child. Moreover, *a clone's "parent" might have onerous expectations as to how the clone should behave. Why else would someone be cloned, except to get a known quantity? "Cloning is a kind of Rorschach test for some of the worst excesses of parental hyper-expectations," said Thomas*
Murray, president of the Hastings Center, a bioethics think tank in Garrison, N.Y., who served on Clinton's bioethics commission.

The commission also warned that cloning "could "undermine important social values by opening the door to a form of eugenics," genetic engineering. Sen. Sam Brownback (R-Kan.), chief sponsor of a Senate bill to ban all cloning, echoes that thought. "Efforts to create human beings by cloning mark a new and decisive step toward turning human reproduction into a manufacturing process in which children are made in laboratories to preordained specifications," he said in February.

But perhaps more than anything, what disturbs some ethicists is the literal self-promotionalism of it all. Cloning, after all, is about the ascendancy of the individual, the chance to propel one's genetic self into the future undiluted by another. Such "blatant narcissism," Murray said, can only undermine society. Of course, some people want to clone others rather than themselves, most commonly a loved one, such as a child who met an untimely death. But ethicists foresee problems there, too. "This encourages all of us to view children as interchangeable commodities," said George Annas, a professor of health law at Boston University. "The death of a child thus need no longer be a singular human tragedy, but rather an opportunity to try to duplicate the no longer priceless deceased child."

Despite these and other concerns, Clinton's commission was not convinced that cloning posed unique or insurmountable social harms. It did recommend that Congress impose a moratorium on human cloning, but not on ethical or moral grounds. Rather, the commission was concerned about safety. And recognizing that research would likely overcome the miscarriages and deformities of early attempts, the commission recommended that any congressional ban automatically expire in five years.

Now five years have elapsed and, although the House has passed a ban, a divided Senate is only now considering similar bills. In the meantime, animal cloners have become increasingly adept. And a small number of doctors are compiling waiting lists of people who want to be cloned. Liz Catalan is on one of them.

'Happens All the Time'

She was a legal secretary for 15 years, during which she became well informed about a lot in medicine. She has thought about the possible problems, including the idea that clones might feel that their lives were already being lived, or had been lived, by another. "I really, honestly think that clones could feel unique, depending on how you bring them up," Catalan said. "It happens all the time with identical twins." Catalan's observation reflects a truth often overlooked in the age of the genome. With discoveries of genetic links to disease and
personality announced every week, one could easily misbelieve that identity is written in the language of DNA. It is not. Our physical, cultural and social environments all influence what we become. Even Wilmut, who strongly opposes human cloning, has said he can easily tell his cloned sheep apart by their individual quirks, though all are genetic replicas.

"Having the same genome as another individual is no threat to the fact of human uniqueness or individuality," Brown University philosopher Dan Brock wrote in the April 12 issue of Science, "because the full identity, individuality or self of a person is determined by much more than the person's genome."

In fact, some have noted, clones might be expected to have less difficulty defining their own identities than twins typically have. Twins generally have to share both their genes and their environment. By contrast, a clone would likely be a generation younger than his or her parental twin.

As for the safety issues, Catalan and other cloning advocates cite the precedent of in-vitro fertilization, or IVF. Study after study has confirmed that babies conceived through IVF have significantly heightened odds of being born with medical and developmental problems (mostly due to IVF's higher prevalence of twins and triplets), yet no one demanded those data before the practice became widespread. And parents today are given the freedom to assess those risks and take them if they choose.

Similarly, some Jewish couples have 25 percent odds of giving birth to a baby with Tay-Sachs disease, a genetic condition that typically kills its victims by age 5. The federal government has not tried to stop them from having children. Why, advocates ask, is human cloning different?

Using safety concerns to set legal criteria for reproduction could have unintended consequences, said University of Alabama philosopher Gregory Pence. "If cloning one day becomes safer than sexual reproduction, will cloning then be the only [legal] way to have children -- based on the good of future children?" Pence asked at a House subcommittee hearing last year. "To me, the essential moral question is whether human cloning is intrinsically wrong. But how can a new way of creating a family be intrinsically wrong?"

A family is all Liz Catalan wants. "I know it's not right for everyone," she said. "But I do personally believe that it should be up to each person. And if the only way a person can have a child of their own is to do this, and if they are willing to take a chance, then they should be able to."

At least a few doctors and scientists agree, and Catalan has been communicating with one of them: Kentucky fertility researcher Panos Zavos, who announced a year ago his intention to collaborate in an offshore human cloning effort. Catalan is one of more than 2,200 adults Zavos says are on his waiting list.

Zavos, who has been invited to testify before a House subcommittee on Wednesday, isn't the only one claiming to have begun a cloning effort. Italian fertility doctor Severino Antinori has said he intends to produce a human clone as soon as he can. Last Wednesday he claimed to have three pregnancies underway, but others in the field were skeptical.
Meanwhile, leaders of the obscure Raelian religion, who believe that cloning can bring people closer to enlightenment and who say they've heard from 3,000 volunteers, announced in London earlier this year that they had begun a project to clone a terminally ill man. According to the Raelians, the unidentified man plans to stop taking his medications if the effort succeeds and die peacefully in the knowledge that he -- or a reasonable facsimile of himself -- may enjoy a second chance at life.

The Raelians don't stop with the dying, either; they are willing to clone the dead. Unlike Zavos and Antinori, who have said they will offer cloning only to infertile couples, the Raelians are offering their services to grieving relatives who want to see their loved ones again.

That offer could appeal to an especially motivated, distraught and vulnerable subset of potential clients, people like Kathy Gordon, whose tireless efforts to have her dead daughter cloned testify to the lengths to which some will go to heal a broken heart.

'I'd Trade Everything'

Gordon's eldest daughter, Emily, was 16 years old in 1997, when the news about Dolly the sheep came out. At the time, Gordon said, Emily spoke enthusiastically about the prospect of human cloning. Six months later she was killed by a drunk driver.

Devastated by the sudden loss, Kathy Gordon became obsessed with the idea of cloning a girl from some of Emily's cells. She spoke to the coroner soon after the accident and tried to have some tissues frozen in liquid nitrogen, but to no avail. She contacted many of the top scientists in the world of cloning, but those who replied, she said, simply "offered condolences." The few tubes of Emily's blood that remain today have been stored in refrigerators not cold enough to ensure proper preservation of her cells for cloning. But Gordon still harbors some hope that the technology will improve, allowing their use someday.

"I don't understand people who want to clone themselves," says Gordon, 42, a lab technician who lives in central Montana and has a doctorate in ethics. But cloning one's dead daughter is different, she said. "I'd trade everything I have today just to have Emily back." !!!!!!!!

Gordon rejects the idea that she would try to mold her new child into some preconceived persona. Don't all parents struggle with the dueling urges to shape a child and let that child become its own person? It's a struggle, Gordon said, that she'd be having with Emily if not for the accident that took her away.

And besides, she asked, since when does the government engage in the business of distinguishing between good and bad reasons for having a child?

Surely, Gordon said, her freedom to reproduce is at least as compelling as a clone's right to be unique.
She has some case law on her side. The Supreme Court has recognized that "procreation" and the right to "have offspring" are fundamental rights, which means the government cannot restrict them without overwhelmingly good reason. "If the right of privacy means anything," the court said 30 years ago in *Eisenstadt v. Baird*, "it is the right of the individual . . . to be free from unwarranted governmental intrusion into matters so fundamentally affecting a person as the decision whether to bear or beget a child." Other cases offer similar language.

Of course, even cloning won't bring Gordon's daughter back, but Gordon knows that. She knows that cloning replicates nature, not nurture. But that's part of her inspiration.

Emily grew up in difficult circumstances during Gordon's previous marriage, Gordon said, declining to go into details. "But in the end, she turned out wonderfully," Gordon said. "If I could have a child with her predisposition to life, her humor, but have her grow up in this new life I've created for myself, which is much better now. I'm married to an attorney. I have all kinds of things now. . . ." Her voice trails off.

'It Wouldn't Be Me'

Any parent would want something better for his or her child. But what about people who want to better themselves -- or make better versions of themselves -- through the alchemy of cloning? What about Jonathan Colvin? Colvin, who is 34 and holds degrees in physics and philosophy, was a science fiction buff as a kid and remembers reading tales about human cloning long before it became scientifically plausible. Now he's a technical writer for a computer company in Vancouver.

He was born with cystic fibrosis, an inherited lung disease that could easily kill him within the next decade. There is no cure, but by adding a healthy version of the gene that's defective in CF, scientists have been able to "cure" individual cells taken from patients with the disease. **Now Colvin wants scientists to do just that, and a little bit more:** Take one of the trillions of cells in his body, fix the tiny molecular mutation that causes the disease, and then clone that single repaired cell to grow a new and literally improved copy of himself -- a newborn Jonathan Colvin who would be free of the disease.

"In some respect, it would give me a second chance at life without CF," Colvin said. "It wouldn't be me, but it would be very similar to me."

To opponents, of course, Colvin's vision just feeds their worst fears that cloning will lead to a new eugenics. "Human nature itself lies on the operating table, ready for alteration," the University of Chicago's Leon Kass warned in the New Republic last spring. "We can see all too clearly where the train is headed, and
we do not like the destination," wrote Kass, who is now chief of President Bush's Bioethics Council.

But Colvin does not see his situation in that light. He's not interested in building a superior human. He doesn't want a kid with Michael Jordan's jumping genes or Georgia O'Keeffe's artistic vision. He just wants to make a normal, healthy boy. Colvin is not the only one who sees the specter of eugenics as an argument for, rather than against, *laissez-faire* human cloning. Think about the Nazi era, when the state "knew" what was best, said Nick Bostrom, a philosopher at Yale University. Think about Scandinavia through the 1970s, when mentally handicapped people were "encouraged" to be sterilized.

In Bostrom's view, eugenics movements of decades past were problematic precisely because governments got involved in decisions about reproduction. "The best way to avoid these scenarios," he said, "is for people to make their own reproductive choices."

Recently Colvin has been getting some legal advice as to whether he might have a good case under the Canadian constitution favoring his right to clone a healthy version of himself. "Most of the objections I've heard so far are for religious reasons, which I believe should not be imposed on me, or because people are just plain scared," Colvin says. "They're afraid of science fiction, like 'The Attack of the Clones.' "

What Colvin fears is the possibility that his offspring would suffer as he has. Does the government really feel compelled to stop him from having a child with healthy, pink lungs? A child who need not think about every breath? "If anything," he says, "it would be socially irresponsible for me to clone myself and *not* knock out the CF."

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