

he falls in love (played by Uma Thurman). True to Hollywood style though, an unexpected problem arises just before his scheduled flight to Jupiter, and he is suddenly on the verge of being 'outed'. I won't reveal whether Jerome ultimately overcomes all the obstacles put in his way or not. (Take a guess!)

Throughout this film, genetics is portrayed as an evil science that has seeped into society as both an oppressive technology and a malevolent concept. Corporations confirm the identity of each worker with an automated thumbprint DNA test, completed in less than a second, as they enter the workplace each morning, and no one anywhere can hide their true identity from probing authorities. However, it's the conceptual tyranny that's deemed to be worse, with a societal belief in the absolute power of genes to determine who a person will be and what they can accomplish. This is the straw man that is set up

to be demolished by the Jerome character. It is a straw man that no geneticist that I know believes in.

Unfortunately, the makers of *GATTACA* have taken their cue from certain fringe political groups who falsely connect the acceptance of any differential role for genes in personal development and abilities—no matter how partial or contingent—with a validation of genetic discrimination. This is why they feel compelled to champion an opposite extreme where genes don't matter at all. Indeed, the most fully developed of *GATTACA*'s genetically enhanced male characters are actually weaker in body and mind than the unenhanced Jerome, and this leads to a question that remains unanswered throughout the film—what exactly was the intended outcome of the genetic enhancement (other than maintaining 20/20 vision)?

The response of the filmmakers would almost certainly be that it doesn't matter

because—as they pretend to lament in a full-page faux advertisement for the GAT-TACA corporation that ran in North American newspapers—"Unfortunately, there is no gene for the human spirit." This is a phrase that panders to a philosophy of mind-body dualism completely at odds with twentieth century scientific understanding.

The message of *GATTACA* is loud and clear and simplistic. Geneticists are false prophets. Do not heed their offers of help. True salvation will come from an inner spirit, not from science. It is a strange message indeed to come from those able to spend more money than most of us on advanced technologies that provide better lives for themselves and their children. Nevertheless, *GATTACA* is a film that all geneticists should see if for no other reason than to understand the perception of our trade held by so many members of the public-at-large.

TOUCHINGbase

● An experiment in anthropology

After German re-unification, the Max-Planck-Society, the country's biggest research foundation, made a commitment to build several new scientific institutes in the former East. And they are delivering. The latest addition will be an Institute for Evolutionary Anthropology in Leipzig. The concept is ambitious—life scientists and social scientists will be working together to understand the co-evolution of genes, culture and communication, and social systems among humans and other primates. The Institute's three centres, focusing on genetic and linguistic diversity, the development of cognition, and social and cultural evolution, respectively, are expected to attract biologists and social scientists from around the world. An active visitor and exchange programme as well as funds for extensive field research have also been promised. Each centre will be headed by two directors, and prominent scientists have been involved in negotiations with the Max-Planck-Society. Christophe Boesch (University of Basel) studies social learning in chimps; Bernhard Comrie, a linguist (University of Southern California), is interested in the concept of time in language; William Durham (Stanford University) studies the co-evolution of genomes and culture; Svante Pääbo (University of Munich) and Mark Stoneking (Pennsylvania State University) focus on molecular evolution; and Michael Tomasello (Emory University) studies primates in order to understand the cognitive basis for the development of language and culture. Given this exciting mix—and most of these scientists have actually signed on—the Institute itself will be a fascinating experiment with the interaction and co-evolution of the 'hard' and 'soft' sciences.

● Immediately important

As a regular reader or potential subscriber of *Nature Genetics*, it will not have escaped your attention that we are marketing our impact factor, which is the highest of all specialist journals, and higher even than that of more general journals such as *Science*. Impact factors are calculated by the Philadelphia-based Institute of

Scientific Information (ISI), by dividing the citations a journal has received over the past two years by the number of papers published in the journal during that time.

The latest ISI figures, released in September, are looking better than ever. *Nature Genetics* now has an impact factor of 31.3. And we are doing even better when it comes to immediacy: here *Nature Genetics* is the leading journal with an immediacy index of 10.8—not so bad when compared with *Cell* (6.6), *Nature* (6.3) and *Science* (4.8). ISI calculates the immediacy index by dividing the total number of citations by the number of articles published—that is, the average number of citations a paper received within the calendar year of its publication. Definitely a reason to celebrate and to thank our authors, reviewers and readers.

IMAGE
UNAVAILABLE
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REASONS

'Homogenic', the recently released album from popstar Björk, is "one of the boldest—and most exciting—albums of the year"

—Rolling Stone Magazine

Björk chose the title 'Homogenic' because, as she puts it, "all the dots are pink—no green or blue—just one flavor"

—Paper Magazine