Pharma's market

Our national antifuturist and premier biologist warn of the dangers of tampering with our genes. BY MARK WILLIAMS

The Biotech Century: Harnessing the Gene and Remaking the World Jeremy Rifkin 271 pages, \$24.95 Tarcher/Putnam

Consilience: The Unity of Knowledge Edward O. Wilson 332 pages, \$26 Alfred A. Knopf

base pairs just to hang some pretty charts on the walls. It's about time that this news is finally entering the mainstream of journalism. To his

credit, Jeremy Rifkin was telling us how important genomics would be 20 years ago in his book Who Should Play God? And he's at it again in The Biotech Century. Well, critics of Mr. Rifkin will say, even a broken clock is right twice a day. One book reviewer, for instance, has complained

that Mr. Rifkin's outrage at corporations that profit from bioengineering is as ingenuous as anger at sharks that nibble at swimmers.

That critic misses the point. Like sharks and corporations, Mr. Rifkin fulfills his role—you and I should perform our functions in life as competently. Mr. Rifkin has made himself our national antifuturist. If he's often given us absurdly wrong agit-prop—as, perhaps, he did in *The End of Work*—well, so have futurists and management theorists. He's something the marketplace needs: a corrective.

SOPHOMORIC YEARS

Still, it's a predictable kind of porridge he serves. I flipped through The Biotech Century's index, saw "Huxley, Aldous (Brave New World)," and opened to the appropriate page: "When Huxley wrote his dystopian novel in 1932, neither he nor his contemporaries could have imagined that by the end of the twentieth century

the scientific insights and technological knowhow would be in
place to make
real his vision
of a eugenic civilization." Et
cetera. This is
all journalistic
boilerplate, of

course, and it's wrong besides. Mr. Rifkin's comparison of the race to patent our planetary gene pool to the enclosures of land in Europe at the end of the Middle Ages is no better. It's a nice idea, containing a little truth, but

he bludgeons on, in his paint-by-numbers style, trying to color feudal peasants' preënclosure life as some communitarian golden age.

Mr. Rifkin proceeds, mixing warnings that show some acuity—for example, we should be worried about monoculturing and the erosion of genetic diversity—with a style that, even after all these years, is in no way distinguishable from that of a very bright sophomore journalism major.

Perhaps it remains only to note that his conclusion is not too hard to swallow: "Consumers create markets as much as much as markets create consumers...these very personal technologies deserve to be debated by the public at large before they become part of our daily lives."

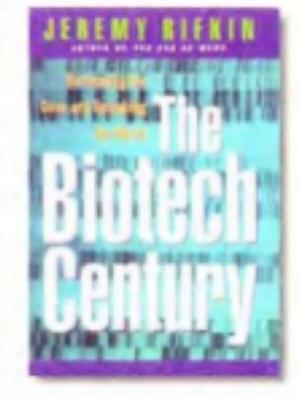
CONSILIENCY THEORY

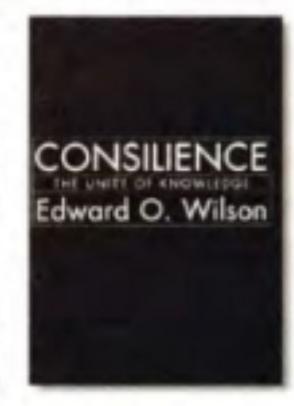
Edward O. Wilson, Harvard's most famous biologist, also has a new book out, called Consilience. The title, Mr. Wilson says, means something like co-herence: "a 'jumping together' of knowledge by the linking of facts and fact-based

theory across disciplines to create a common groundwork of explanation."

Mr. Wilson, a twotime Pulitzer Prize winner, can write like an angel about insects. Yet this book's initial chapters had me struggling through what threatened to be one of those vastly worthy,

boring summings-up with which notable scientists like to hymn the scientific adventure late in their careers. Cover blurbs promised "nothing less than a daring challenge to the prevailing world view." Only if the prevailing





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world view were that of Galileo's time. Consilience seemed like something best given to a smart 12-year-old considering a scientific career.

Then, starting on insects, Mr. Wilson proved he'd been just clearing his throat for 65 pages. Essentially, he's written a sociobiologist's plea for the social sciences to be grounded in the natural ones—specifically, biology: as we're about to modify our DNA, we need to understand why we've been programmed by millions of years' worth of evolution to act and want as we do.

Among much else, Consilience considers epigenetic rules: the inherited propensities to invent, transmit, and receive certain cultural elements in preference to others. Notable genetically installed human traits include our infantile language-learning abilities and the tendency to resist copulation with anyone with whom we've shared our first 30 months of life (thereby reducing incest). Altogether, 67 items ex-

ist on anthropologists' lists of universal social behaviors: things like cooking and cosmology, domestic and religious rituals, personal names and propitia-

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tions of supernatural entities. That religious myths have arisen everywhere, Mr. Wilson thinks, derives from our mammalian propensity to create dominance hierarchies, which the symbolforming human mind—"never satisfied with raw apish feeling"—has extended into abstract realms: our deities, he concludes, are merely "hyperdominant if invisible members of the human group."

But Mr. Wilson says it would be a tragic mistake if our culture discontinued oaths taken with one hand on the Bible or expunged "under God" from the Pledge of Allegiance. Elsewhere, he argues for conservatism both toward the environment and in using biotechnology for volitional evolution toward posthuman conditions. He's being absolutely consistent. Because Mr. Wilson is carefully polite about not connecting the last dots, I'll do so here: it's quite clear he believes that our religious impulses have a purely genetic basis-a genetic basis he believes we'll possess the technology to alter in the coming century.

Mark Williams is a science writer living in Oakland. Write to markred@aol.com.