

FROM CRACK^{TO} ECSTASY

Basement chemists can duplicate almost any over-the-border drug. By Hal Straus

In an age that can produce designer cigarettes and designer toilet paper, someone was bound to come up with designer drugs. But you won't find a fashionable name on the label. Designer drugs are concocted by underground chemists who tend to move frequently, a jump ahead of the law. One thing they don't need is fame.

The drugs are designed to skirt federal drug laws, which (until recently) permitted the manufacture and use of any drug not *precisely* defined and scheduled as a controlled substance. By altering the molecular structure of an illegal drug like heroin or PCP (Angel Dust) just slightly, a basement chemist could make a substance as legal as, well, designer chocolate.

This may no longer be the case. A tough new federal drug bill passed in October 1986 bans these chemical cousins or "analogs" outright, *en masse*, even before they are invented. Such a sweeping law, however, must be vague scientifically, and thus far it remains unused and untested in the courts.

Besides slight modification of chemical structure, designer variations differ in one other important respect from the "originals": Some have proved even more dangerous than the drugs they were designed to imitate.

First was Lethal and Legal

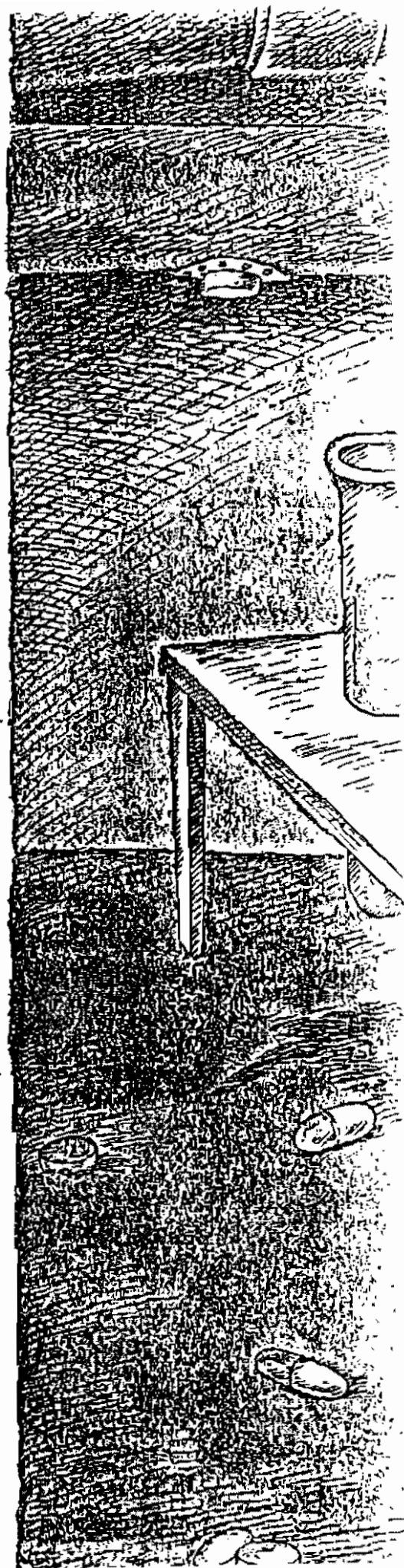
Designer drugs first hit the street in

1979 in Southern California, where a batch of "China White"—the street name for the finest Asian heroin—was actually found to be an analog of fentanyl, a narcotic painkiller.

The appearance and euphoric effects of heroin and designer-fentanyl were almost identical but there was a difference: Fentanyl packed from 20 to 2,000 times the wallop of heroin. Novice or low-grade users who unknowingly shot their normal doses soon discovered that the designer-fentanyl was completely lethal. It was also completely legal.

In 1982 another synthetic heroin appeared in Northern California. This one didn't kill; it crippled. Users arrived at a San Jose hospital paralyzed, twisted, unable to speak—victims of brain damage similar to advanced-stage Parkinson's disease. After exhaustive laboratory investigation, neurologists analyzed the culprit as MPTP, an analog of meperidine, another narcotic painkiller commonly known under the trade name Demerol. Though a clandestine chemist could not legally produce Demerol, no laws at the time prevented the synthesizing of a meperidine-like drug, which had turned seven people into living mannequins.

Law enforcement clearly had a problem. Though underground labs had been illegally producing LSD, PCP, speed and methaqualone (Quaaludes) since the 1960s, these





New drugs sprout up overnight.

designer-heroin episodes marked the first time they had made and sold legal heroin substitutes on a large scale. Up to its ears trying to control imported heroin, the Drug Enforcement Administration (DEA) now had to contend with domestic chemical entrepreneurship—without a strong legal arsenal for the job. As DEA scurried to outlaw one fentanyl analog, another fentanyl "weed" would sprout almost overnight.

100 Californians Died

In 1984, Congress handed the DEA emergency scheduling (restricting) powers as a new weapon to combat the imposing threat of designer drugs. "Before then, it took us one to three years to schedule one of these drugs because of all the red tape involved," recalls Gene Haislip, DEA deputy assistant administrator. "We just couldn't afford all the time. After the 1984 law, we could schedule a drug in three to four months."

But the "schedule lag" was still too long. Using \$500 worth of easily obtainable chemicals and lab equipment, an underground chemist could cook up and ship \$1 million worth of designer heroin in a matter of days or even hours. Says Haislip: "Millions of doses could be placed in the general drug traffic, people would die—and no crime would have been committed! So we went back to Congress for more powers."

The result is Section 1201 of the Anti-Drug Abuse Act of 1986. It bans analogs with chemical structures "substantially similar" to presently controlled substances. In other words, designer drugs are now illegal even before they are designed—at least that's the intent. Many experts be-

lieve that the law has weaknesses.

"The wording of the law is vague," says Gary Henderson, professor of pharmacology at University of California at Davis. He has studied the fentanyl drugs for a dozen years. "What is an analog? How much can you change a chemical before it becomes an entirely new entity?"

DEA's Haislip concedes that the 1986 law might run into problems, but sees no better solution. "Yes, the question (of substantial similarity) can and probably will come up. But it's an issue that can be attested to by experts in a trial, which would be the case even if the law weren't passed."

According to Haislip, "all is now quiet on the fentanyl front," but not before close to 100 Californians died from fentanyl-analog overdoses. What's more, lab tests from state methadone clinics suggest that thousands more drug-tolerant users—perhaps 20,000 addicts—may be regular, unsuspecting users of the fentanyls. And finally, fentanyl analogs have been found as far east as New York and Georgia, mixed in with heroin and cocaine.

Likewise, MPTP has not re-emerged, but 300 probable users of the contaminated 1982 batch are being closely monitored for Parkinson's symptoms. Preliminary signs of the disease have been detected in half of the subjects tested.

Too Expensive for Drug Barons

The reason that designer-heroin has not been even more prevalent has as much to do with the structure of organized crime as the structure of molecules. Drug syndicates have shown no predilection for abandoning old-world drug sources, nor allowing

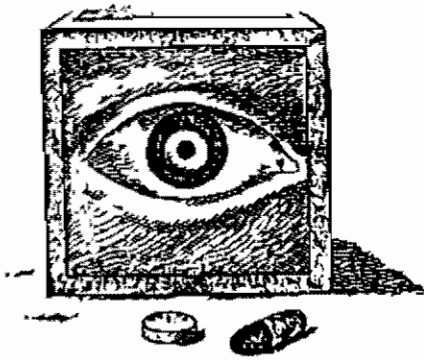
upstart domestic chemists to get in on the action.

In addition, fentanyl production is an intricate chemical process. Most likely, Dr. Henderson speculates, the fentanyl analogs were brewed by one smart "independent," who anticipated the analog game and made a dozen or more designer variations simultaneously, releasing them one at a time as each became illegal.

Though the mafia is not likely to go into wholesale synthetic production overnight, the looming menace of designer-heroin should not be underestimated. Federal drug policy has long been predicated on intercepting foreign organic heroin and persuading foreign governments to control their own agricultural output. The flood of cheap heroin on the streets suggests that the policy has not been entirely effective. However, the more successful the policy becomes, the more the stage will be set for designer analogs and the kind of poor quality control exhibited by the California designer-heroin debacles. With advances in American synthetic chemistry, foreign organic heroin may become obsolete.

There is, unfortunately, more bad news: The potential for designer or otherwise menacing drugs is not limited to heroin. Analog possibilities for other illegal drugs are virtually limitless. The same natural laws that provide the molecular backdrop for medicine create the context for thousands of drugs of medical use and for thousands of drugs of recreational abuse.

■ "Designer" Coke. Street chemistry has recently come up with a purified, highly potent, cocaine distillate known as "crack." It brought an epidemic of addiction and several deaths.



Many drugs can be cooked in kitchens.

Crack preparation is within the grasp of any cook who has a kitchen, a box of baking soda, and a kitchen stove.

But though cocaine purification is fairly simple, *imitation* is not. The underground chemist's usual method—mixing a mild stimulant like caffeine with a topical dental anesthetic such as benzocaine or lidocaine—numbs the sinuses, but falls far short of the coke "rush." While naive users (or those accustomed to lousy cocaine) may be fooled, habitual snorters can typically detect the deception in a short time.

Producing synthetic cocaine in the lab is even more problematic, requiring thousands of dollars in lab apparatus.

The potential for producing designer-cocaine, however, may mean that this drug problem won't be solved just by tightening our borders. A crackdown on imported cocaine could make the synthetic version cost-effective. As Henderson says, "If the government were able to cut off the foreign supply . . . we would have synthetic designer-coke in this country in 30 days."

■ **Black Beauties.** In the late 1970s, a rash of legal amphetamine "lookalikes" were marketed by speed pill minifactories to cash in on the drug and diet craze. Ads for some were even carried in mail-order sections of mainstream consumer magazines. Made to look just like "black beauties," "purple hearts," or other popular pill forms, they actually contained caffeine, ephedrine (a vascular constrictor), and phenylpropanolamine (PPA), an amphetamine analog that is an active ingredient in many over-the-counter diet pills and cold remedies such as Contac.

Real amphetamine production is as widespread as ever, of course.

■ **Female Marijuana.** "Designer botanists" have been able to grow especially potent strains of pot known as "sensimilla." Removing the male part of a marijuana plant before sexual maturity stimulates the female buds to exude several times the amount of cannabis resins.

The case of synthetic marijuana, however, is similar to synthetic heroin and cocaine: Underground chemists have found it difficult to match the ultimate Underground Chemist—nature.

THC, the active ingredient in marijuana, was first synthesized in the early 1970s through a complex, costly procedure far beyond the skills of most clandestine labs.

■ **Ecstasy.** It was probably inevitable that the DEA's sweeping pounce on designer drugs would trap at least one small animal along with the dangerous big game. Consider MDMA, better known by its exotic street name, Ecstasy.

A mild psychedelic, similar in effect to mescaline and LSD yet reportedly without visual hallucinations, MDMA was first synthesized in 1914 by Merck but was never marketed. It was all but forgotten until the mid-1970s when several psychiatrists—impressed with the drug's insight-enhancing benefits—began to use it as a catalyst in therapy.

In July 1985, DEA classified MDMA in Schedule I, alongside heroin, LSD, and the designer-fentanyls as a drug with "high potential for abuse and no medical usefulness." The action roused a storm of protest from psychiatrists and researchers who believe that MDMA has enormous therapeutic potential.

"It enhances trust, empathy, positive feelings, and makes people less defensive, allowing them to explore in-

ternal areas that are ordinarily unavailable to them," says Lester Grinspoon, Harvard professor of psychiatry.

Even the drug's most ardent advocates do not support de-scheduling but re-scheduling, into Schedule III, where research on MDMA would not be so severely restricted. Though DEA insists that special registration procedures will expedite legitimate MDMA research, the drug's proponents are skeptical. "Anyone who has attempted to do research on a Schedule I drug knows that one year of his professional life will be devoted to hopping over bureaucratic jump ropes," states Dr. Grinspoon. "On MDMA, we need data from the laboratory and the clinical setting, not the streets."

Safety Vs. Progress

Not all consequences of designer drugs have been bad. Besides MDMA's apparent psychotherapeutic value, other drugs like THC are used in cancer chemotherapy and glaucoma treatment, and the tragic MPTP episode has ironically led to a better understanding of Parkinson's Disease, a complex neurological disease that afflicts 350,000 Americans.

Many experts believe that some of the money now spent on enforcement would be much better applied to research on the psychological and social causes of addiction, research on the drugs themselves, and public education. The MDMA controversy is a case in point. Classifying the drug in Schedule I has effectively halted all clinical use and research but has done little to curb underground production or street abuse. ♥

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