News & Comment

Street-Wise Crack Research

Like earlier students of tribal culture, modern ethnographers live and work with "crack families" in the toughest neighborhoods of New York, collecting unique behavioral data



A TYPICAL DAY for Philippe Bourgois, a 33-year-old Stanfordbred anthropologist, begins like that of many homemakers: he drops his 2-year-

old son off at a day-care center in the neighborhood and then proceeds on to do errands and chat with neighbors. But around dusk, Bourgois's routine dramatically departs from the norm. That's when he migrates to one or another of numerous youth hangout places—"copping corners" where kids go looking for drugs. Bourgois, on leave from the University of California at San Francisco, now lives in Spanish Harlem. There, he often completes his day by sitting around in a crack house, watching the action and interviewing the clientele. He gets home around 2 a.m., although sometimes he stays out all night.

Bourgois is a basic researcher—one of a small cadre of individuals known as street ethnographers who immerse their lives in the bewildering and dangerous world of urban crack addicts. Like the anthropologists who act as "participant-observers" in isolated foreign cultures, they are pioneers in uncharted territory. And like basic biologists or physicists, they rely heavily on seren-

dipity to shape the course of their investigations.

But ethnography, like other social sciences, has not been very popular with funding agencies because of the complexity of its subject and its nonquantitative orientation. Now that the drug war is a top national priority, however, the street ethnographers are getting a lot of publicity and are being sought after by government officials for inside information on drug use patterns.

Why and how do people get drawn to crack? How is the market structured? How does crack use affect the social and economic life of the community? What is its role in crime and violence? The answers may be crucial to breaking the destructive and seemingly intractable patterns of urban life that aggravate, and are aggravated by, drugs. But they cannot be supplied through traditional surveys.

This puts ethnographers in a key spot, because such matters are likely only to be illuminated by intimate exposure, over time, to the lives of the people affected and the development of trusting relationships.

This personal involvement makes a street ethnographer's task all the more difficult. Some very special characteristics are required—a bottomless interest in people, a high tolerance for seamy surroundings, guts, patience, and a willingness to work nights. As Terry Williams, a black sociologist from the City University of New York, points out, the subject under study is basically a "nocturnal culture."

Bourgois's extra challenge is his inherent visibility. He lives in a crack-ridden East Harlem neighborhood whose residents are about 65% Hispanic, mainly Puerto Rican; the rest are black. As a white man he is noticeable—particularly by police who often question him during sweeps in heavy crackdealing areas. He acknowledges that his is a dangerous calling—he once was nearly hit by a bullet ricocheting off a curb—but says he is generally well treated and not in any more danger than anyone else who chooses to lurk in drug-ridden areas at night.

Still, the rigors of their existence don't exempt street ethnographers from the standards of the conventional anthropologist or sociologist. They use the participant-observer method, pioneered by anthropologists Bronislav Malinowski and Franz Boas in the early years of the century. Conventional researchers, even those administering questionnaires to addicts on park benches, impose their own structure and interpretations on what's being studied, says sociologist Bruce Johnson of the Manhattan-based Narcotic and Drug Research Inc. (NDRI). But none of the assumptions prevailing in mainstream society are taken for granted in ethnography, where, says Johnson, researchers want instead to find out what meaning the subjects themselves ascribe to the events in their lives.

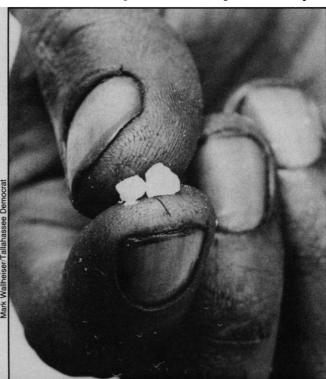
The roots of ethnographic studies in the United States go back to the years between the wars, particularly at the University of Chicago, when anthropologists and sociologists—in the days before they split off into separate departments—worked together to explore a variety of urban subcultures. By the 1950s, the results of ethnographic research on alcoholism and drug abuse had started to appear.

Crack ethnography has emerged with the rapid spread of the drug that began in 1985.

That was when soaring Latin American cocaine production caused prices to drop precipitously and the perilous process of cooking "freebase" was being replaced by the ready-to-use product, crack—little rock-like pellets of cocaine in its most intense form. Cheap-a day's use can now be financed for \$10 to \$20-and rapidly addictive, and producing an intense high, crack has spawned record levels of crime and violence and has dramatically eroded the social controls and rituals usually attendant on cocaine use. It is drawing an ever-younger clientele, and is particularly attractive to women. This has ravaged the last

Crack "rocks." Good for a high that lasts about a half-hour.

SCIENCE, VOL. 246



vestige of stability from one-parent families, filling the newspapers with tales of children living in crack houses, crack-addicted babies, and women whose mothering instincts have been obliterated by drugs.

Ethnographers are first-hand witnesses to the tragedies wrought by crack. Anthropologist Ansley Hamid of the John Jay College of Criminal Justice, for instance, has watched the deterioration of Sonya, a woman he has known since she was a 13-year-old involved in marijuana and alcohol. Now 22, she started experimenting with freebase 5 years ago. She has had two children, one of whom lives with her mother and the other in an orphanage. Now a confirmed crack addict, she lives in a shelter. Hamid has helped her get into several rehabilitation programs, but she always drops out.

A career among such lives sounds depressing. But researchers emphasize that, unlike other drug researchers, they are interested not only in deviance and pathology but also in the normal aspects of the community. Says Bourgois, "People forget that the majority of people living in the neighborhood are healthy people." Williams says, "There are elements that would depress anybody. But to me it's all about people finding a way to survive. People do get out of it. . .that gives me hope."

Bourgois, who is repeatedly hailed by locals as he walks around the neighborhood, spends much of his time talking with individuals—in small Spanish-owned coffee houses, in apartments, on stoops or park benches. "I spend a lot of time shivering in the winter," he says. He will hold conversations with a person over a period of days, weeks, even months, asking questions about the person's life, jobs, family, health, social relationships, and drug involvement. Contacts often call him to tell him what's been happening.

Sometimes he tape records conversations; sometimes, if contacts are skittish, he stores up as much as he can to add to the several hundred typed pages of notes and about 50 hours of tapes he has accrued. "In the early phases you write up absolutely everything because you're not sure what's important."

Ethnographic researchers do not start out with a particular hypothesis, but rely on inductive methods to coax theories out of their observations. Anthropologist Lambrose Comitas of Columbia University says traditional anthropologists might regard drug ethnography as applied anthropology, since it is focused on a problem rather than a particular culture. But, he says, it also falls in the tradition of "community study" developed by Conrad Arensberg of Columbia University. Arensberg, formerly at the University of Chicago, applied anthropological methods to modern societies, using communities as microcosms of the larger culture. In his case, the community is that of drug users.

Findings from such observations can have direct relevance for public policy, as illustrated by two AIDS-related findings cited by Bourgois. One discovery, in which he participated, is about cracked lips. It seems that sometimes users will inhale the flame when lighting their crack pipes, which leads to burns on the lips. Since oral sex is the preferred mode for hurried and less-thanprivate sexual transactions, the AIDS virus is probably being transmitted to users through their lip lesions.

The other finding was made by University of Colorado researcher Stephen Koester from sitting in a heroin "shooting gallery" in San Francisco. Needle users were using a common dish of water to rinse their needles and to dilute the drug before shooting it. So, even though they were cleaning their needles with Clorox, they were shooting "pink water" into their veins. Koester says the Centers for Disease Control has been broadcasting this finding and a number of communities have revised their needle ex-

Past and Present Cocaine Epidemics



In the late 1950s, when Yale University psychiatrist and drug historian David Musto was in medical school, there were only about 50,000 cocaine users in the United States. Musto says his professors would cite cocaine "as an example of a problem we used to have and has now been almost completely eliminated." The old chestnut by George Santayana—about those who

LAUDL forget history being condemned to repeat it—seems particularly apt with regard to today's cocaine epidemic. Even in the mid-1970s, when cocaine use had begun a sharp climb, the Carter White House took a tolerant view. Jimmy Carter's drug adviser, psychiatrist Peter Bourne, went so far as to write that cocaine "is probably the most benign of illicit drugs currently in widespread use."*

Musto says Bourne and others had forgotten what happened around the country's first cocaine epidemic in the early years of this century. Cocaine (like opiates) used to be completely legal and widely available in a variety of products. But over the years prices fell and the sniffing, swallowing, and injecting of cocaine became widespread.

The year 1910 signalled the peak of the epidemic. In 20 years, says Musto, cocaine had been transformed from "a miracle drug to the most dangerous drug in America." In his annual message to Congress, President William Howard Taft said, "Cocaine is more appalling in its effects than any other habit-forming drug used in the United States."

Public fears eventually found expression in the passage of the first federal antinarcotics law, the Harrison Act of 1915. Although physicians were still allowed to dispense dangerous drugs, this loophole was tightened in Supreme Court rulings.

"Nothing is a better example of forgetting history," says Musto. And the forgetting was "intentional." During the 1930s and '40s, everyone thought the policy was working and mandatory drug education in the schools faded away, so "all the information from the first epidemic was not transmitted."

Despite the heroin epidemic of the late 1960s, the national mood was still one of relative toleration toward illicit drugs, marked by calls for legalization or decriminalization of marijuana, until the advent of the Reagan years.

Since then the tide has turned with a vengeance. Once again calls are being sounded for legalization—but this time against a background of increasing public intolerance of drugs. Musto, who calls legalization "a fad born of frustration," thinks its advocates are also guilty of forgetting history when they try to make analogies with Prohibition. For one thing, a great many Americans have always believed that alcohol is harmless in moderation. A more apt comparison would be to the laws against cocaine, but "you never read an article about how cocaine prohibition didn't work, because it was completely successful."

The reason for its success was the strong public consensus, which is far more crucial than any legal measures, says Musto. He sees a similar consensus building now, catalyzed by crack. But public fervor is a two-edged sword, says Musto, who fears that it could lead people to writing off the problems of inner cities as beyond redemption. **C.H.**

* The American Disease: Origins of Narcotic Control by David F. Musto (Oxford Univ. Press, New York, 1987).

change programs as a result.

Sociologist Terry Williams says street research also offers a clear message about how authorities should be trying to communicate with inner city minority people. Although TV is ubiquitous, he says it doesn't get through to them. "Who gets respect? Not Oprah. TV is a joke." But they have radios going on all the time, including in crack houses, and they do relate to local disc jockeys—so "radio, not TV, is the medium to reach minority folk" with messages about drugs. Best of all, though, are person-toperson connections. "We are looking at an interactive culture," says Williams. Street ethnographers like these are the only investigators who see drug use in a holistic context, says Comitas. Some say the dean of drug ethnography was anthropologist Edward Preble, formerly with NDRI. Preble, for example, found that heroin users, contrary to the stereotype held in the 1950s, were not a passive, lethargic breed but "active hustling persons," according to Johnson. Similarly, says sociologist Patricia Adler of the University of Colorado, ethnography has debunked the Mafia-based image of the social organization of criminals as being a mirror of legitimate enterprises. But they have their own kinds of organization: For example, members of criminal groups use violence or the threat of it as a way of asserting status and control in the absence of conventional values such as trust and commitment. Thus, violence in the drug trade is not as random as it may be perceived by outsiders.

Researchers living in the neighborhoods they study have no difficulty making initial contacts. "This neighborhood is swarming with crack," says Bourgois. "You can buy it on virtually any street corner." People love to talk about themselves and crack users are no exception. Indeed, when Bourgois took a reporter for a walk on a notorious crack

Flipping the Main Switch in the Central Reward System?



Cocaine, says Michael Kuhar of the government's Addiction Research Center in Baltimore, "is the most powerful reinforcer known."

That's animal researcher talk for the fact that a variety of species from mice to monkeys will learn to self-administer cocaine faster than any other drug and will do it until they die. In human terms it implies

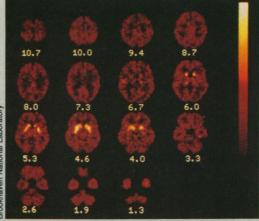
what has become self-evident in the inner cities—people get addicted to cocaine faster than they do to opiates, and much faster to crack, which produces a vapor when burned that floods the brain indiscriminately in a matter of seconds. Says psychiatrist Charles O'Brien of the University of Pennsylvania: "The average heroin addict takes 10 years to come in for treatment. We see people with cocaine, especially crack addiction, coming in after 2 or 3 years, sometimes 6 months."

While researchers have not yet found an effective pharmacological treatment for cocaine craving, they have made enormous strides in understanding how cocaine acts once it arrives in the brain. They have identified what appears to be the "cocaine receptor." They are zeroing in on just which brain sites are implicated in cocaine's euphoria-producing action in animals. In humans, they are using new scanning techniques to track the drug as it activates and is metabolized in various brain areas. And they have identified a number of chemicals that may relieve aspects of addiction by blocking the craving for drugs, flattening the high, reducing seizures from chronic use, and blunting post-high agitation and depression.

Cocaine—like amphetamines—produces

its "high" by causing the brain to be flooded with the neurotransmitter dopamine. According to Kuhar of the National Institute on Drug Abuse, it blocks the reuptake of dopamine into the cell that releases it, thus making more dopamine available to be taken up by other neurons. Cocaine attaches to and plugs the dopamine transporter, so that it cannot signal for dopamine release to be terminated.

On the molecular level, therefore, says Kuhar, one of the primary aims of research



Pictures of cocaine high. Cocaine binds to brain areas richest in dopamine receptors, as shown by PET scans of a brain 15 minutes after injection.

is to further define the dopamine transporter by cloning it. Among those attempting to do this is George Uhl, also at the Addiction Research Center. Uhl is taking RNA from dopamine-containing cells and injecting it into frog eggs where it directs manufacture of the transporter. Uhl says successful cloning would open up a big new field of exploration. It would "give us a first look at the molecular basis for cocaine action." And it might make it possible to identify areas where drugs work selectively at cocaine sites without affecting normal dopamine activity.

There are many areas of the brain rich in dopamine neurons, and they have different functions in different places. Addiction research focuses on certain structures in the limbic system (the emotional brain) where cocaine is reinforcing in animals. A major goal is to characterize the anatomy and chemistry of the dopamine circuit by studying cocaine self-administration in rats.

George F. Koob of the Scripps Clinic research institute looks at how disabling

dopamine neurons of selected brain areas affects intravenous self-administration of cocaine. He finds that such "denervation" in the nucleus accumbens results in "dramatic" decreases in cocaine self-administration, which suggests to him that "the nucleus accumbens seems to be the hot spot."

But not everyone agrees. James Smith at Bowman-Grey Medical School in Winston-Salem, North Carolina, has found that when rats self-administer cocaine directly into their brains, the drug is not reinforcing when aimed at the nucleus accumbens. Yet when it goes to the prefrontal cortex, it is reinforcing.

Once this apparent conflict is resolved, says Koob, the next "big question" concerns what long-term changes are effected in the brain by chronic cocaine use. Al-

though prolonged use reduces the amount of dopamine functionally available, researchers have yet to show that dopamine is actually depleted. No gross long-term changes have been identified, says psychiatrist Frank Gawin of Yale University. For this reason people used to think snorting cocaine was "just a psychological addiction." But Gawin has found that the state of anhedonia, or inability to feel pleasure, can last weeks or months in humans after they stop taking the drug, which qualifies as a withdrawal syndrome block, there was a man leaning against the hood of a car smoking, who—after being assured the strangers were not police—cordially showed off his crack pipe, a simple glass tube with a screen to hold in the rocks. Across the street was a cluster of people who were obviously lining up to buy crack. One man hollered out an offer to sell a wellknown brand of heroin. Bourgois said the police regularly make sweeps of such blocks, rounding up anyone who doesn't have justification for being there—but the minute they depart, business resumes as usual. The life of a daily crack user is a very busy one. Since the high from one pipe lasts only

even though it does not fit into the definition of physiological withdrawal.

Researchers now suspect that chronic cocaine use does indeed produce a variety of subtle changes in the brain. For one thing, the slightest environmental cue can trigger acute craving in an addict, even after years of abstinence. Gawin says this phenomenon may be based on neuroadaptation, which makes for decreased sensitivity to pleasureproducing substances.

In other ways, scientists say cocaine produces a long-term increase in sensitization, otherwise known as "reverse tolerance." Robert Post of the National Institute of Mental Health says chronic use increases the brain's sensitivity to the non-"euphorogenic" effects of the drug, to the point that very small doses are required to trigger them. This applies to two other functions of a drug that are not related to its highproducing (dopamine-mediated) properties. One is as a psychomotor stimulant which causes the hyperactivity seen in cocaine users. The other is as an anesthetic which, says Post, is responsible for the fact that repeated use produces epilepsy-like seizures in the limbic system. These potentially fatal seizures can be triggered by very low doses in chronic users, the "kindling effect."

Although researchers are keenly interested in learning the specific effects of cocaine, the key to counteracting its effects may lie in the commonalities it shares with other drugs of abuse in activating what is called the "central reward mechanism." Although every drug affects a particular group of brain receptors, some researchers speculate that the results all feed into the same central mechanism. But so far there is no consensus on the degree to which dopamine circuits are involved in other addictions.

Certainly, the commonalities are extensive, as shown by the extent of multiple addictions and cross-addiction (when abuse of one substance automatically creates vulabout half an hour there is no time to waste in finding the next fix.

Bourgois monitors a half dozen crack houses, but he says there are basically only two types. The safest is the "buy and fly" operation where buyers are not allowed to smoke on the premises. These can range from a "walk-in" operation to a "hole in the wall" where buyer and seller do not even see each other, to a copping corner where the exchange takes place outdoors. The other type is the "crack bar" where customers buy drugs, rent paraphernalia, and sit around smoking and listening to music. ("Rap music is to crack what reggae is to marijuana,"

nerability to another). Other research, showing that a wide variety of therapeutic drugs can also influence addictive behavior, also suggests a common link among addictions. Gawin warns, however, that even if a drug were found to block the high this would not be sufficient. "Therapies accepted by addicts are those that work on craving."

Some drugs under investigation include:

■ The pain-killer **buprenorphine**, currently the number one candidate. A mixed opiate agonist-antagonist (meaning it both mimics endogenous opioids and blocks their receptors), buprenorphine seems to act like methadone when given to heroin addicts. There is evidence that it also works with cocaine addiction. It has been shown to suppress cocaine self-administration by monkeys in a trial recently reported by a team headed by Nancy K. Mello and Jack H. Mendelson of Harvard Medical School.

■ The antidepressant desipramine. This has helped people in a trial at Yale abstain from cocaine significantly longer than those on a placebo or lithium. Sixty percent of the subjects taking desipramine for 6 weeks were able to abstain for at least 3 weeks compared with about 20% of the two control groups. Researchers at the University of Minnesota have found that another antidepressant, fluoxetine, which affects serotonin rather than dopamine, reduces cocaine self-administration in rats.

■ Flupenthixol, an antipsychotic drug used in Europe, acts as an antidepressant when administered in low doses. Gawin says the virtue of this drug is that, unlike tricyclics, it can be administered as a slow-release injection. "The problem with crack abusers is they go 30 steps out of the clinic and run into a seller," he says. "The conditioned cues are overwhelming." But with flupenthixol in their blood, he says addicts in a trial in the Bahamas were able to stay abstinent for an average of 24 weeks—as opposed to 8 weeks at most without it. says anthropologist Hamid.) There is usually sexual activity going on in the periphery, behind a curtain, in the bathroom, or in the hall. Crack bars, says Bourgois, are becoming less common, having been hard hit by the drug war.

Williams, now on leave at New York's Russell Sage Foundation, has been tracking the crack culture for the past 3 years by focusing on a particular group—he calls them a "family"— whose existence revolves around seeking, finding, consuming, and trading crack. He soon plans to publish a book, "The Crack House," which is in effect a sequel to his recent book, *The Cocaine Kids*,

■ Carbamazapine, an antiseizure drug, may help reduce cocaine craving and stem seizures from chronic use. The Addiction Research Center, in cooperation with O'Brien of the University of Pennsylvania, is planning a double blind clinical trial.

■ Buspirone, an antianxiety drug. Bristol-Myers Co. has found that it can help relieve the anxiety and depression attending alcohol withdrawal. The drug, which partially blocks serotonin receptors, is now being tested on cocaine users.

Bromocriptine, a dopamine antagonist that relieves the effects of Parkinson's disease. This has shown some promise in clinical studies for relieving agitation and the "crash" effects from cocaine. However, Roy Wise of Concordia University says animal studies indicate bromocriptine may itself be addictive.

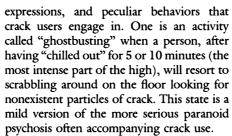
■ Mazindol, a dopamine blocker used to suppress compulsive eating. It may be useful in stemming cocaine craving according to Robert Balster of the Medical School of Virginia. Balster is testing the effect of that and other drugs on monkeys' self-administration of cocaine.

The treatment picture is complicated by the fact that the pure cocaine addict is becoming an increasingly rare bird. Cocaine users develop multiple addictions as they are always experimenting with other drugs to mellow out their highs and alleviate the ensuing jitters and depression.

The insidious and pervasive nature of addiction is such that pharmacological therapies can never be expected to be more than an adjunct to treatment and long-term behavior change. Nonetheless, Gawin, for one, thinks the commonalities among addictions, rather than making the picture hopelessly complex, actually "could mean that there is a potential single pharmaceutical solution for euphoria." "Disordered pleasure systems," he concludes, are "an area with substantial gold to be mined."

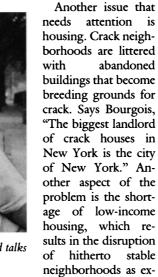
the fruit of 3 years of hanging out with a teen-aged gang of Dominican cocaine dealers. The kids went out of business around 1985 when the scene started getting too rough.

Williams says his core interest lies in the socialization of small groups, rituals, and play. In many ways, he says, the nine members of the crack family he is now following represent a regression to a more primitive society-a hunting-and-gathering "tribe" oriented to nothing more than day-to-day survival. It comprises an unlikely combination of people, most of them females, most teen-aged, and most Dominicans. They float from crack house to crack house, following their leader, a middle-class Jewish man who used to own property in the area. Because men dominate the crack trade, Williams says the setup gives the girls opportunities to get the drugs without money-usually through sex. Members sometimes get money by acting as runners delivering drugs to middleclass buyers. Taking much of their lexicon from "Star Trek," their lives are centered on the "mission" of finding drugs. "Scottie"



Williams, says Johnson of NDRI, has laid much of the foundation for current investigations in New York. For one thing, "he has demonstrated he can make connections and affiliations with dealers and get them to cooperate. A lot of people out there don't believe you can study crack dealers."

Ethnographic research often paints a picture that differs from common public perceptions. For example, from where Bourgois sits, the problem of pregnant addicts is even greater than policy-makers believe and is "an absolutely urgent, urgent, urgent avenue for research." While epidemiologists know how to count the crack-addicted babies, Bourgois says ethnographers are needed to identify long-term problems.



Angel Franco/NYT Picture

Researcher on the drug front. Anthropologist Ansley Hamid talks with a young woman crack addict in a Harlem neighborhood.

refers to the drug; a "beamer" is a smoker; and an "interplanetary mission" is when you go from one crack house to another.

Williams says he is always up front with his subjects about what he is doing. Whenever he went to one of the 38 crack houses he visited for the book, he explained what he was up to and asked people what name they want to go under in the book. When *The Cocaine Kids* came out, he says the proprietors of one crack house cleaned the place up and held a book party for him.

He never uses a tape recorder and says he learned to memorize situations in detail to write up when he got home in the early morning hours. Sometimes he would spend a week or so using one of the methods he developed himself: ignoring the dialogue and just recording physical gestures, facial isting residents are pushed out to make room for renovated condos and co-ops. The situation also breeds further suspicion of the law, because the police are regarded as "agents of gentrification."

Hamid of John Jay College is currently getting a street's eye view of the effects of law enforcement efforts. A Trinidadian of East Indian descent, he lives in a West Harlem apartment that looks out on one side to a Jamaican eatery where drugs are sold and on the other to an abandoned building used as a crack house. With funding from the Vera Institute of Criminal Justice, he is currently gathering baseline information on the crack trade in order to gauge the effects of New York's new antidrug initiatives.

Hamid and many others believe that the

heavy involvement of children in the cocaine business is a direct result of the "Rockefeller laws" imposing stern penalties on offenders over age 18. He now contends that police activity is making the problem even worse. He says crack houses are going out of style in favor of mobile and less vulnerable outdoor operations. This, he says, is making the scene more volatile and dangerous, breaking down even the minimal social controls and rituals in crack houses. And "busting established dealers opens doors for anyone to come in and deal."

Street researchers are clearly partisans of the people they study, regarding them as victims rather than perpetrators. But as sociologist Adler points out, the whole point of the research is that it is subjective, representing attempts to get inside the feelings and motivations of the people and see the world as they see it.

But that is part of why it is so hard to get government support. "I couldn't begin to describe how difficult it is to get money for scientific research using qualitative research methods," says Johnson of NDRI. Johnson says the government turned down a proposal he and Williams submitted in 1985, therefore losing a golden opportunity to obtain "major documentation of the crack phenomenon which was just emerging."

Williams now bypasses such hurdles altogether. He gets his money from private foundations and publishes his stark portrayals of the crack culture in journalistic form to get it read fast by as many people as possible.

Bourgois, on the other hand, spent 2 years in bureaucratic hassles before finally obtaining a 6-month \$25,000 grant from the National Institute on Drug Abuse (he now has grants from several private foundations). But since drug czar William Bennett began work early this year, his office has been calling researchers such as Bourgois to get the answers to questions only they can answer, like: How much does a regular crack user smoke daily? (Answer: As much as he can get; maybe five to eight pipes daily; much, much more if he is on a binge.)

Most of New York's small cadre of crack researchers collaborate or interact at some point. But Johnson and another colleague, criminologist Jeffrey Fagan of John Jay College, have a somewhat more theoretical orientation than the lone souls who haunt crack locales.

Fagan has recently completed a survey of convicted offenders to explore whether violence is essentially created by the nature of the crack business or whether the business attracts violence-prone individuals. He found that crack offenders tended to be convicted for more serious offenses, which seems to support the latter hypothesis. John-

Kleber Offers Expert and Blunt Opinions on Addiction



Yale University psychiatrist Herbert Kleber seems to be made to order for the job of deputy to drug chief William Bennett. Widely respected in his field, he has 25 years of experience in research and the administration of treatment programs. His own pioneering research focused on drugs

to block addictive craving. He is also a registered Republican—a rarity for a Yale professor, much less a psychiatrist.

Kleber took an indefinite leave from Yale to be Bennett's "deputy for demand reduction" in the President's drug war, which is much sniped at by other academics for being wrongheaded and underfunded. However, a Yale colleague, psychiatrist David Musto, says Kleber knows "what it takes to make things work."

Kleber is not shy about his accomplishments. "I am considered one of the leading experts on treatment and policy aspects of substance abuse." Like his boss, Kleber has a sizable portfolio of blunt opinions. Of needle exchange programs, he says, "Morality aside, it won't work." He cites data from England showing that

only 60% of clients came back after the first visit and 20% after the tenth, indicating "impulsive" addicts are unlikely to comply. As for the supposed futility of criminal punishment, he responds, "Criminologists say deterrence *does* work if applied swiftly and surely," but the present system offers little deterrence because so few suspects end up in jail. On pregnant women addicts, Kleber says those already in trouble with the law could be compelled to stay in a treatment facility for the duration of the pregnancy. The others pose a "much harder" question.

Kleber is unequivocal on the subject of drug legalization. Most advocates of the policy, he says, waffle when asked whether they would permit cocaine sales, which Kleber says would be an unqualified disaster. Government-regulated prices would not drive out drug crime, he argues, because if prices were kept up, illegal trade would continue to flourish, and if they were kept down, cocaine would be put "in the reach of every third grader." He believes crime would become more widespread and there would be more drug-associated violence because crack, in particular, causes "paranoia, irritability, and the need for action." Furthermore, he thinks legalization would result in rampant cocaine addiction, maybe even approaching alcoholism in scope.

Kleber's job centers on drug abuse treatment, prevention, and research. One of his major tasks will be prodding states to formulate systematic plans. Although many people have called for radical increases in funding for treatment, Kleber says the system is going to have to be improved first. One immediate need, he says, is for more "accountability." Quality reviews may be handled by a new branch of the Alcohol, Drug Abuse and Mental Health Administration, the Office of Treatment Improvement, which will administer demonstration programs and grants to states.

Many think that treatment should be provided for all addicts. But Kleber points out that there are many who don't want help and many others who will fail to benefit even if offered it. Of the 4 million estimated heavy drug users, Kleber thinks about 1 million fall in this category. Another 1 million are sufficiently

> motivated to stop on their own. The drug strategy is aimed at the remaining 2 million who might benefit from treatment.

> Another big issue in treatment is "co-morbidity," the fact that recent studies show a high proportion of drug abusers also suffer from some psychopathology such as depression or schizophrenia. "Most programs don't have the capacity or sophistication" to treat such problems, says Kleber, who thinks treatment centers should be better coordinated with mental health providers.



Herbert Kleber

Furthermore, "most of the treatment money out there now is for heroin," but the big problem now is cocaine, which is being regularly used by close to 3 million people. Despite the special challenges posed by crack addiction, Kleber says the main reason it is so difficult to treat is "because of who's using it." There is not much leverage available from "competing reinforcers"—that is, inner city crack addicts are less likely to have jobs, families, and reputations at stake. **C.H.**

son says this suggests that when it comes to incarceration, priority should be given to crack offenders even if they have committed fewer crimes than other chronic offenders.

A larger question relates to whether the crack epidemic is a brand new type of phenomenon, different from earlier drug epidemics. It looks different in some ways, such as in the increased violence and the rapidity with which people lose control over their use. In contrast to the relative stability and centralization that characterizes the retail trade in heroin, cocaine, and particularly crack dealing is a dangerous and constantly shifting free-for-all. A crack seller who manages to stay in business for 3 months is a senior crack seller, says Johnson. But in some ways, such as the growing organization and entrenchment of some local dealers, it resembles the usual course of a new drug. If that is the case, the researchers say we can assume that it will level off and stabilize—much the way heroin use has done. If crack does represent a departure from historical patterns, there is no telling what will happen.

In hopes of illuminating this question NDRI has recently obtained \$200,000 from NIDA, an unusually large grant, which will be used over the next 2 years to support research on "the natural history of crack" by four or five trained ethnographers. They will be hired to amass information from about 140 subjects on the crack business and individual careers of those involved.

As Johnson points out, the actual role of drugs and the drug trade in the larger picture is difficult to tease out because the crack explosion has occurred at a time when inner city infrastructures are rapidly decaying, crime is growing, AIDS is spreading, minority populations are increasing, education is in crisis, and teen pregnancies and family breakups are on the rise. Micro-social investigations such as are being conducted by these researchers may be the only way society can sort out causes from effects in the relationship of drugs to people, neighborhoods, crime, and the economy.

Whether policy-makers will listen to the answers is another story. In Johnson's opinion, the interpretations of the drug scene that ethnographic researchers come up with don't fit with prevailing policies that are based "primarily on moral rhetoric." Says he: "The reality of what's happening in the inner city rarely gets through to policymakers." **CONSTANCE HOLDEN**