The vitality of mythical numbers

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T is generally assumed that heroin addicts in New York City steal some two to five billion dollars worth of property a year, and commit approximately half of all the property crimes. Such estimates of addict crime are used by an organization like RAND, by a political figure like Howard Samuels, and even by the Attorney General of the United States.¹ The estimate that half the property crimes are committed by addicts was originally attributed to a police official and has been used so often that it is now part of the common wisdom.

The amount of property stolen by addicts is usually estimated in something like the following manner:

There are 100,000 addicts with an average habit of \$30.00 per day. This means addicts must have some \$1.1 billion a year to pay for their heroin $(100,000 \times 365 \times 330.00)$. Because the addict must sell the property he steals to a fence for only about a quarter of its value, or less, addicts must steal some \$4 to \$5 billion a year to pay for their heroin.

These calculations can be made with more or less sophistication.

¹New York RAND Issue Paper on Drug Addiction Control in New York, 1968; Howard Samuels, Position Paper on Narcotics, 1970; Speech by Attorney General Mitchell, October 6, 1969.

One can allow for the fact that the kind of addicts who make their living illegally typically spend upwards of a quarter of their time in jail, which would reduce the amount of crime by a quarter. (The New York Times recently reported on the death of William "Donkey" Reilly. A 74 year old ex-addict who had been addicted for 54 years, he had spent 30 of those years in prison.) Some of what the addict steals is cash, none of which has to go to a fence. A large part of the cost of heroin is paid for by dealing in the heroin business, rather than stealing from society, and another large part by prostitution, including male addicts living off prostitutes. But no matter how carefully you slice it, if one tries to estimate the value of property stolen by addicts by assuming that there are 100,000 addicts and estimating what is the minimum amount they would have to steal to support themselves and their habits (after making generous estimates for legal income), one comes up with a number in the neighborhood of \$1 billion a year for New York City.

But what happens if you approach the question from the other side? Suppose we ask, "How much property is stolen-by addicts or anyone else?" Addict theft must be less than total theft. What is the value of property stolen in New York City in any year? Somewhat surprisingly to me when I first asked, this turned out to be a difficult question to answer, even approximately. No one had any estimates that they had even the faintest confidence in, and the question doesn't seem to have been much asked. The amount of officially reported theft in New York City is approximately \$300 million a year, of which about \$100 million is the value of automobile theft (a crime that is rarely committed by addicts). But it is clear that there is a very large volume of crime that is not reported; for example, shoplifting is not normally reported to the police. (Much property loss to thieves is not reported to insurance companies either, and the insurance industry had no good estimate for total theft.)

It turns out, however, that if one is only asking a question like, "Is it possible that addicts stole \$1 billion worth of property in New York City last year?" it is relatively simple to estimate the amount of property stolen. It is clear that the two biggest components of addict theft are shoplifting and burglary. What *could* the value of property shoplifted by addicts be? All retail sales in New York City are on the order of \$15 billion a year. This includes automobiles, carpets, diamond rings, and other items not usually available to shoplifters. A reasonable number for inventory loss to retail establishments is 2 per cent. This number includes management embezzlements, stealing by clerks, shipping departments, truckers, etc. (Department stores, particularly, have reported a large increase in shoplifting in recent years, but they are among the most vulnerable of retail establishments and not important enough to bring the overall rate much above 2 per cent.) It is generally agreed that substantially more than half of the property missing from retail establishments is taken by employees, the remainder being lost to outside shoplifters. But let us credit shoplifters with stealing one per cent of all the property sold at retail in New York City—this would be about \$150 million a year.

What about burglary? There are something like two and one-half million households in New York City. Suppose that on the average one out of five of them is robbed or burglarized every year. This takes into account that in some areas burglary is even more commonplace, and that some households are burglarized more than once a year. This would mean 500,000 burglaries a year. The average value of property taken in a burglary might be on the order of \$200. In some burglaries, of course, much larger amounts of property are taken, but these higher value burglaries are much rarer, and often are committed by non-addict professional thieves. If we use the number of \$200 x 500,000 burglaries, we get \$100 million of property stolen from people's homes in a year in New York City.

Obviously, none of these estimated values is either sacred or substantiated. You can make your own estimate. The estimates here have the character that it would be very surprising if they were wrong by a factor of 10, and not very important for the conclusion if they were wrong by a factor of two. (This is a good position for an estimator to be in.)

Obviously not all addict theft is property taken from stores or from people's home. One of the most feared types of addict crime is property taken from the persons of New Yorkers in muggings, and other forms of robbery. We can estimate this, too. Suppose that on the average, one person in 10 has property taken from his person by muggers or robbers each year. That would be 800,000 such robberies, and if the average one produced \$100 (which it is very unlikely to do), \$8 million a year would be taken in this form of theft.

So we can see that if we credit addicts with *all* of the shoplifting, *all* of the theft from homes, and *all* of the theft from persons, total property stolen by addicts in a year in New York City amounts to some \$330 million. You can throw in all the "fudge factors" you want, add all the other miscellaneous crimes that addicts commit, but no matter what you do, it is difficult to find a basis for estimating that

addicts steal over a half billion dollars a year, and a quarter billion looks like a better estimate, although perhaps on the high side. After all, there must be some thieves who are not addicts.

Thus, I believe we have shown that whereas it is widely assumed that addicts steal from \$2-\$5 billion a year in New York City, the actual number is *ten* times smaller, and that this can be demonstrated by five minutes of thought.² So what? A quarter billion dollars' worth of property is still a lot of property. It exceeds the amount of money spent annually on addict rehabilitation and other programs to prevent and control addiction. Furthermore, the value of the property stolen by addicts is a small part of the total cost to society of addict theft. A much larger cost is paid in fear, changed neighborhood atmosphere, the cost of precautions, and other echoing and re-echoing reactions to theft and its danger.

One point in this exercise in estimating the value of property stolen by addicts is to shed some light on people's attitudes toward numbers. People feel that there is a lot of addict crime, and that \$2 billion is a large number, so they are inclined to believe that there is \$2 billion worth of addict theft. But \$250 million is a large number, too, and if our sense of perspective were not distorted by daily consciousness of federal expenditures, most people would be quite content to accept \$250 million a year as a lot of theft.

Along the same lines, this exercise is another reminder that even responsible officials, responsible newspapers, and responsible research groups pick up and pass on as gospel numbers that have no real basis in fact. We are reminded by this experience that because an estimate has been used widely by a variety of people who should know what they are talking about, one cannot assume that the estimate is even approximately correct.

But there is a much more important implication of the fact that there cannot be nearly so much addict theft as people believe. This implication is that there probably cannot be as many addicts as many

 $^{^2}$ Mythical numbers may be more mythical and have more vitality in the area of crime than in most areas. In the early 1950's the Kefauver Committee published a \$20 billion estimate for the annual "take" of gambling in the United States. The figure actually was "picked from a hat." One staff member said: "We had no real idea of the money spent. The California Crime Commission said \$12 billion. Virgil Petersen of Chicago said \$30 billion. We picked \$20 billion as the balance of the two."

An unusual example of a mythical number that had a vigorous life-the assertion that 28 Black Panthers had been murdered by police-is given a careful biography by Edward Jay Epstein in the February 13, 1971, *New Yorker*. (It turned out that there were 19 Panthers killed, ten of them by the police, and eight of these in situations where it seems likely that the Panthers took the initiative.)

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people believe. Most of the money paid for heroin bought at retail comes from stealing, and most addicts buy at retail. Therefore, the number of addicts is basically—although imprecisely—limited by the amount of theft. (The estimate developed in a Hudson Institute study was that close to half of the volume of heroin consumed is used by people in the heroin distribution system who do not buy at retail, and do not pay with stolen property but with their "services" in the distribution system.³) But while the people in the business (at lower levels) consume close to half the heroin, they are only some one-sixth or one-seventh of the total number of addicts. They are the ones who can afford big habits.

The most popular, informal estimate of addicts in New York City is 100,000-plus (usually with an emphasis on the "plus"). The federal register in Washington lists some 30,000 addicts in New York City, and the New York City Department of Health's register of addicts' names lists some 70,000. While all the people on those lists are not still active addicts—many of them are dead or in prison—most people believe that there are many addicts who are not on any list. It is common to regard the estimate of 100,000 addicts in New York City as a very conservative one. Dr. Judianne Densen-Gerber was widely quoted early in 1970 for her estimate that there would be over 100,000 teenage addicts by the end of the summer. And there are obviously many addicts of 20 years of age and more.⁴

In discussing the number of addicts in this article, we will be talking about the kind of person one thinks of when the term "addict" is used.⁵ A better term might be "street addict." This is a person who

³ A parallel datum was developed in a later study by St. Luke's Hospital of 81 addicts—average age 34. More than one-half of the heroin consumed by these addicts, over a year, had been paid for by the sale of heroin. Incidentally, these 81 addicts had stolen an average of \$9,000 worth of property in the previous year. ⁴ Among other recent estimators we may note a Marxist, Sol Yurick, who gives us "500,000 junkies" (*Monthly Review*, December 1970), and William R. Corson, who contends, in the December 1970 *Penthouse*, that "today at least 2,500,000 black Americans are hooked on heroin."

⁵ There is an interesting anomaly about the word "addict." Most people, if pressed for a definition of an "addict," would say he is a person who regularly takes heroin (or some such drug) and who, if he fails to get his regular dose of heroin, will have unpleasant or painful withdrawal symptoms. But this definition would not apply to a large part of what is generally recognized as the "addict population." In fact, it would not apply to most certified addicts. An addict who has been detoxified or who has been imprisoned and kept away from drugs for a week or so would not fit the normal definition of "addict." He no longer has any physical symptoms resulting from not taking heroin. "Donkey" Reilly would certainly fulfill most people's ideas of an addict, but for 30 of the 54 years he was an "addict" he was in prison, and he was certainly not actively addicted to heroin during most of the time he spent in prison, which was more than half of his "addict" career (although a certain amount of drugs are available in prison).

normally uses heroin every day. He is the kind of person who looks and acts like the normal picture of an addict. We exclude here the people in the medical profession who are frequent users of heroin or other opiates, or are addicted to them, students who use heroin occasionally, wealthy people who are addicted but do not need to steal and do not frequent the normal addict hangouts, etc. When we are addressing the "addict problem," it is much less important that we include these cases; while they are undoubtedly problems in varying degrees, they are a very different type of problem than that posed by the typical street addict.

The amount of property stolen by addicts suggests that the number of New York City street addicts may be more like 70,000 than 100,000, and almost certainly cannot be anything like the 200,000 number that is sometimes used. Several other simple ways of estimating the number of street addicts lead to a similar conclusion.

Experience with the addict population has led observers to estimate that the average street addict spends a quarter to a third of his time in prison. (Some students of the subject, such as Edward Preble and John J. Casey, Jr., believe the average to be over 40 per cent.) This would imply that at any one time, one-quarter to one-third of the addict population is in prison, and that the total addict population can be estimated by multiplying the number of addicts who are in prison by three or four. Of course the number of addicts who are in prison is not a known quantity (and, in fact, as we have indicated above, not even a very precise concept). However, one can make reasonable estimates of the number of addicts in prison (and for this purpose we can include the addicts in various involuntary treatment centers). This number is approximately 14,000-17,000 which is quite compatible with an estimate of 70,000 total New York City street addicts.

Another way of estimating the total number of street addicts in New York City is to use the demographic information that is available about the addict population. For example, we can be reasonably certain that some 25 per cent of the street addict population in New York City is Puerto Rican, and some 50 per cent are Negroes. We know that approximately five out of six street addicts are male, and that 50 per cent of the street addicts are between the ages of 16 and 25. This would mean that 20 per cent of the total number of addicts are male Negroes between the age of 16 and 25. If there were 70,000 addicts, this would mean that 14,000 Negro boys between the ages of 16 and 25 are addicts. But altogether there are only about 140,000 Negro boys between the ages of 16 and 25 in the cityperhaps half of them living in poverty areas. This means that if there are 70,000 addicts in the city, one in 10 Negro youths are addicts, and if there are 100,000 addicts, nearly one in six are, and if there are 200,000 addicts, one in three. You can decide for yourself which of these degrees of penetration of the young Negro male group is most believable, but it is rather clear that the number of 200,000 addicts would imply 7,000 young Puerto Rican males are addicted, and the total number of Puerto Rican boys between the ages of 16 and 25 in New York City is about 70,000.

None of the above calculations are meant in any way to downplay the importance of the problem of heroin addiction. Heroin is a terrible curse. When you think of the individual tragedy involved, 70,000 is an awfully large number of addicts. And if you have to work for a living, \$250 million is an awful lot of money to have stolen from the citizens of the city to be transferred through the hands of addicts and fences into the pockets of those who import and distribute heroin, and those who take bribes or perform other services for the heroin industry.

The main point of this article may well be to illustrate how far one can go in bounding a problem by taking numbers seriously, seeing what they imply, checking various implications against each other and against general knowledge (such as the number of persons or households in the city). Small efforts in this direction can go a long way to help ordinary people and responsible officials to cope with experts of various kinds.