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A SOCIOLOGICAL THEORY OF DRUG ADDICTION¹

A. R. LINDESMITH

ABSTRACT

Current theories of drug addiction tend to be moralistic rather than scientific. Any satisfactory theory must attempt to account for the fact that the repeated administration of opiates sometimes is followed by addiction and sometimes is not. The factor which accounts for this differential effect appears to be the person's knowledge or belief, supplied him by his cultural milieu, concerning the nature of the distress that accompanies the sudden cessation of the opiate. If he fails to realize the connection between this distress and the opiate he escapes addiction, whereas if he attributes the discomfort to the opiate and thereafter uses the opiate to alleviate it he invariably becomes addicted. Addiction is generated in the process of using the drug consciously to alleviate withdrawal distress. No exceptions to this theory could be found. It is confirmed by analysis of certain aspects of addict argot and by the consideration of certain types of crucial cases. The theory provides a simple means of accounting for many aspects of the habit. It is methodologically significant in that it is based upon case data and is at the same time universal in form and subject to definite verification or disproof.

The problem of drug addiction has been an important one in this country for several decades and has proved to be a difficult one to handle from a theoretical as well as from a therapeutic standpoint. In spite of more than a half-century of experimentation with "cures." the drug addict has continued to relapse and thereby aroused the wonder and ire of those who have attempted to treat him. It has frequently been said that the drug user cannot be cured "if he doesn't want to be cured"; but this appears to beg the question, for it is the very essence of addiction that the victim desires to use the drug—and also at the same time desires to be free of it. An indication of the strength of the addict's attachment to his drug is furnished by the fact that when the Japanese government in 1929 permitted unregistered opium-smokers in Formosa to register and gave them the choice of applying for either a cure or a license, only thirty out of approximately twenty-five thousand asked for the cure.2

¹ The study on which this paper is based was carried out at the University of Chicago under the direction of Dr. Herbert Blumer.

² Report to the Council of the League of Nations by the Committee of Enquiry into the Control of Opium Smoking in the Far East, II (1930), 420.

Current explanations of the drug habit appear to center about a few general conceptions and modes of approach, none of which have led to convincing results. Psychiatrists have often regarded the use of opiates as an escape from life and have viewed addicts as defective persons seeking to compensate for, or avoid, their inferiorities and mental conflicts.³ As would be expected, addicts have been labeled as "psychopaths" with the assumption that the attachment of this ambiguous label in some mysterious way explained the phenomenon. Various statements as to the percentage of defective persons among addicts have not been accompanied by any comparison with the percentage of defective persons in the general nonaddicted population. In fact, the need or desirability of this sort of comparison does not seem to have occurred to the majority of these writers.

This point of view contrasts the "psychopath," who is assumed to be susceptible to addiction, with "normal" persons who are presumed by implication to be immune, or, if they accidentally become addicted, they are said to quit and remain free. No evidence has been produced, however, which indicates that any but an exceedingly small percentage of addicts ever remain free of the drug for long periods of years,⁴ and no "normal" person has ever been shown to be immune to the subtle influence of the drug. It appears from an examination of the literature that all "normal" persons who have been foolhardy enough to imagine themselves immune and have

³ This general view is not only widespread among psychiatrists but is popularly held as well. The great majority of writers in medical journals on this subject assume it. It may be found elaborated in a typical form in the following articles by L. Kolb: "Pleasure and Deterioration from Narcotic Addiction," Jour. Ment. Hyg., Vol. IX (October, 1925); "Drug Addiction in Relation to Crime," ibid., (January, 1925); "The Struggle for Cure and the Conscious Reasons for Relapse," Jour. Nerv. and Ment. Dis., Vol. LXVI (July, 1927); and "Drug Addiction—a Study of Some Medical Cases," Arch. Neurol. and Psychiat., Vol. XX (1928). It is also developed by Dr. Schultz in "Rep. of the Comm. on Drug Addicts to Hon. R. C. Patterson, etc.," as reported in Amer. Jour. Psychiat., Vol. X (1930–31).

⁴ Dansauer and Rieth (''Über Morphinismus bei Kriegsbeshädigten,'' in Arbeit und Gesundheit- Schriftenreihe zum Reichsarbeitsblatt, Vol. XVIII [1931]), found that 96.7 per cent of 799 addicts had relapsed within five years after taking a cure. Relapse after more than ten years is sometimes mentioned. We ourselves were acquainted with an addict who stated that he had abstained for fifteen years before resuming the drug. We have never encountered or read an authentic account of any so-called cured addict who did not show by his attitudes toward the drug that the impulse to relapse was actively present.

consequently experimented upon themselves and taken the drug steadily for any length of time have become addicts, or "junkers," as they usually style themselves.⁵ The contention that any type of person can be readily cured of the drug habit in a permanent sense is without any support in terms of actual evidence. We have found that narcotic agents and others who are in close contact with the actual problem ordinarily acquire a wholesome fear of the drug and do not delude themselves concerning their own capacity to resist its influence.

A French medical student⁶ in the course of writing a thesis on morphine decided to experiment upon himself. For five consecutive days he took an injection each evening at about nine o'clock. He reported that after three or four injections he began to desire the next ones, and that it cost him a decided effort to refrain from using it the sixth night. He managed to carry out his plan, but clearly implied that if he had continued the experiment for a short time longer he believed that he would have become addicted. The addict, in his opinion, is un homme perdu who is rarely able ever again to retain his freedom. This account constitutes an interesting document for the individual who believes that he or anyone else is immune to addiction by reason of a superabundance of will-power or because of an absence of psychopathy. In 1894 Mattison advised the physician as follows:

Let him not be blinded by an under estimate of the poppy's power to ensnare. Let him not be deluded by an over-confidence in his own strength to resist; for along this line history has repeated itself with sorrowful frequency, and,—as my experience will well attest—on these two treacherous rocks hundreds of promising lives have gone awreck.?

Sir William Willcox states:

We know people who say: "I am a man, and one having a strong will. Morphine or heroin will not affect me; I can take it as long as I like without becoming an addict." I have known people—sometimes medical men—who have made that boast, and without exception they have come to grief.

- 5 It is characteristic of practically all addicts prior to their own addiction that they do not expect or intend to become addicts.
- ⁶L. Faucher, Contribution à l'étude du rêve morphinique et de la morphinomanie (Thèse de Montpellier, No. 8 [1910-11]).
 - ⁷ JAMA, Vol. XXIII. ⁸ Brit. Jour. Inebriety, XXXI, 132.

The conception of opiates as affording an escape from life also does not appear to be satisfactory or correct in view of the well-known fact that the addict invariably claims that all the drug does is to cause him to feel "normal." It is generally conceded that the euphoria associated with the use of opiates is highly transitory in character, and while it is true that during the initial few weeks of use the drug may cause pleasure in some cases and may function as a means of escape, still, when addiction is established, this no longer holds true. The drug addict who is supposed to derive some mysterious and uncanny pleasure from the drug not only fails to do so as a rule but is also keenly aware of the curse of addiction and struggles to escape it. Far from being freed from his problems, he is actually one of the most obviously worried and miserable creatures in our society.

Finally, we may call attention to the fact that the current conception of the addict as a "psychopath" escaping from his own defects by the use of the drug has the serious defect of being admittedly inapplicable to a certain percentage of cases. L. Kolb, for example, finds that 86 per cent of the addicts included in a study of his had defects antedating, and presumably explaining, the addiction. One may therefore inquire how addiction is to be explained in the other 14 per cent of the cases. Are these persons addicts because they are free from defects? The assumption is sometimes made that those in whom defects cannot be found have secret defects which explain the addiction. Such an assumption obviously places the whole matter beyond the realm of actual research. Moreover, one may ask, who among us does not have defects of one kind or another, secret or obvious?

In general, it appears that the conception of the drug addict as a defective psychopath prior to addiction is more in the nature of an attempt to place blame than it is an explanation of the matter. It is easy and cheap to designate as "inferior" or "weak" or "psychopathic" persons whose vices are different from our own and whom we consequently do not understand. Similarly, the "causes" of ad-

⁹ The aim of this paper is to present a sociological theory of opiate addiction which appears to offer possibilities for a rational and objective understanding of the problem without any element of moralization. This theory is based upon informal and intimate

diction as they are often advanced—"curiosity," "bad associates," and the "willingness to try anything once"—suffer from the same moralistic taint. Undoubtedly these same factors "cause" venereal disease, yet science has ceased to be concerned with them. In the case of drug addiction we still are more interested in proving that it is the addict's "own fault" that he is an addict than we are in understanding the mechanisms of addiction.

It was noted long ago that not all persons to whom opiate drugs were administered for sufficiently long periods of time to produce the withdrawal symptoms became addicts. It frequently occurs in medical practice that severe and chronic pain makes the regular administration of opiates a necessity. 10 Some of the persons who are so treated show no signs of the typical reactions of addicts and may even be totally ignorant of what they are being given. Others to whom the drug is administered in this way return to it when it has been withdrawn and become confirmed addicts. This fact caused German and French students of the problem to adopt distinct terms for the two conditions—those who received the drug for therapeutic reasons and who showed none of the symptoms of the typical "craving" of addicts were spoken of as cases of "chronic morphine poisoning," or "morphinism," whereas addicts in the ordinarily accepted sense of the word were called "morphinomanes" or, in German, Morphiumsüchtiger. II Attempts have been made to introduce such a usage in this country, though without success, and it is consequently awkward to try to refer to these two conditions. In this paper the term "habituated" will be used to refer to the development of the mere physiological tolerance, whereas the term "addiction" will be reserved for application to cases in which there is added to the physiological or pharmacological tolerance a psychic

contact over a long period of time with approximately fifty drug addicts. The main points of the theory have been tested in the material available in the literature of the problem, and no conclusions have been drawn from case materials collected unless these materials were clearly corroborated by case materials in the literature.

¹⁰ Dansauer and Rieth (op. cit.) cite two hundred and forty such cases. Many of these cases had used the drug for five or more years without becoming addicts.

¹¹ See e.g., Levinstein, *Die Morphiumsucht* (1877); F. McKelvey Bell, "Morphinism and Morphinomania," *N.Y. Med. Jour.*, Vol. XCIII (1911); and Daniel Jouet, *Etude sur le morphinisme chronique* (Thèse de Paris [1883]).

addiction which is marked by the appearance of an imperious desire for the drug and leads to the development of the other characteristic modes of behavior of the drug addict as he is known in our society. For persons who are merely habituated to the drug without being addicted there is no need for special conceptual treatment any more than persons who have had operations need to be set off as a distinct class. Once the drug has been removed, these persons show no craving for it or any tendency to resume its use, unless, perhaps, the disease for which the opiate was originally given reappears.

Any explanation of the causation of drug addiction must attempt to account for this fact that not all persons who are given opiates become addicts. What are the factors which cause one man to escape while the next, under what appear to be the same physiological conditions, becomes an incurable addict? Obviously the factor of the patient's knowledge of what he is being given is an important one, for clearly if he is ignorant of the name of the drug he will be unable to ask for it or consciously to desire it. The recognition of the importance of keeping the patient in ignorance of what drugs he is being given is quite general. Various devices which serve this end, such as giving the drug orally rather than hypodermically, keeping it out of the hands of the patient and permitting no selfadministration, mixing the dosage of opiates with other drugs whose effects are not so pleasant and which serve to disguise the effects of the opiate, etc., have been advocated and have become more or less routine practice. But in some cases individuals who are fully aware that they are receiving morphine (or some other opium alkaloid), may also not become addicted, even after prolonged administration.¹² Other factors besides ignorance of the drug administered must therefore operate to prevent the occurrence of addiction in such cases. What seems to account for this variability—and this is the crux of the theory being advanced—is not the knowledge of the drug administered, but the knowledge of the true significance of the withdrawal symptoms when they appear and the use of the drug thereafter for the consciously understood motive of avoiding these symptoms.¹³ As far as can be determined, there is no account

¹² The case of Dr. H., cited later in this paper, is such a case.

¹³ Withdrawal distress begins to appear after a few days of regular administration but does not ordinarily become severe until after two, three, or more weeks, when its

in the literature of anyone's ever having experienced the full severity of the withdrawal symptoms in complete knowledge of their connection with the absence of the opiate drug, who has not also become an addict. Addiction begins when the person suffering from withdrawal symptoms realizes that a dose of the drug will dissipate all his discomfort and misery. If he then tries it out and actually feels the almost magical relief that is afforded, he is on the way to confirmed addiction. The desire for the drug, and the impression that it is necessary, apparently become fixed with almost incredible rapidity once this process of using the drug to avoid the abstinence symptoms has begun. Among confirmed addicts it appears to be the general rule also that those who have the greatest difficulty in obtaining regular supplies of narcotics ("boot and shoe dope fiends") are precisely those who develop the most intense craving for it and use it to excess when the opportunity presents itself. In other words, deprivation is the essential factor both in the origin of the craving and in its growth.

In order to prove the correctness of the theory advanced it is necessary to consider, first, its applicability to the general run of cases—that is, to determine whether or not addicts become addicted in any other way than through the experience with withdrawal and whether there are nonaddicts in whom all of the conditions or causes of addiction have occurred without actually producing addiction. We do not have the space here to go into an extended analysis and explanation of any large number of cases. We can only state that from our analysis of the cases that have come to our attention, both directly and in the literature, it appears to be true without exception that addicts do, in fact, become addicted in this manner and that addiction does invariably follow whenever the drug is used for the conscious purpose of alleviating withdrawal distress. That this is the case is strikingly brought out by the addict's own argot. The term "hooked" is used by drug-users to indicate the fact that a person has used the drug long enough so that if he attempts to quit withdrawal distress will force him to want to go on using the drug. At

severity appears to increase at an accelerated rate. In its severe form it involves acute distress from persistent nausea, general weakness, aching joints and pains in the legs, diarrhea, and extreme insomnia. In isolated cases death may result from abrupt withdrawal of the drug.

the same time, "to be hooked" means to be addicted, and anyone who has ever been "hooked" is forever after classified by himself as well as by other addicts as belonging to the in-group, as an addict, a "user" or "junker," regardless of whether he is using the drug at the moment or not. ¹⁴ Similarly, a person who has not been "hooked," regardless of whether he is using the drug or not, is not classified as an addict. ¹⁵ It is a contradiction in terms of addict argot, therefore, to speak of "a junker who has never been hooked" or of an individual who has been "hooked" without becoming an addict. Addict argot admits no exceptions to this rule. We found that drug users invariably regard any query about a hypothetical addict who has not been compelled to use the drug by the withdrawal distress, or about a hypothetical nonaddict who has, as incomprehensible nonsense. To them it is self-evident that to be "hooked" and to be an addict are synonymous. ¹⁶

As we have indicated, our own experience is in entire accord with this view of the addict as it is crystallized in his vernacular. In addition we have found certain types of cases which bear more directly upon the theory and which offer conclusive, and, we may say, experimental, verification of the theory. It is upon cases of this type which we wish to concentrate our attention.

Crucial instances which strongly corroborate the hypothesis are those cases in which the same person has first become habituated to the use of the drug over a period of time and then had the drug with-

¹⁴We have checked this point with addicts who had voluntarily abstained for as long as six years. They unhesitatingly declared themselves to be addicts who happened not to be using drugs at the time—i.e., "junkers" or "users" who were "off stuff."

¹⁵ A type of individual who uses the drug without being hooked is the one who uses it, say once a week, and thus avoids the withdrawal distress. Such a person is called a "joy-popper" or "pleasure-user" and is not regarded as an addict until he has used the drug steadily for a time, experienced withdrawal distress, and become hooked. He then permanently loses his status as a "pleasure-user" and becomes a "junker." An addict who has abstained for a time and then begins to use it a little bit now and then is not a "pleasure-user"—he is just "playing around." See D. W. Maurer's article in the April, 1936, issue of American Speech.

¹⁶ As the other evidence which indicates how central and how taken for granted the role of withdrawal distress in addiction is, we may mention that the addict's word "yen" refers simultaneously to withdrawal distress and to the desire for the drug. Also, "to feel one's habit" means to feel the withdrawal distress. Addicts call cocaine non-habit-forming because it does not cause withdrawal distress when stopped.

drawn without becoming addicted; and then, later in life, under other circumstances, become a confirmed addict. Erwin Strauss¹⁷ records the case of a woman

who received morphine injections twice daily for six months, from February to July of 1907, on account of gall stones. After her operation in July the drug was removed and the patient did not become an addict¹⁸ but went about her duties as before, until 1916, nine years later, when her only son was killed at the Front. She was prostrated by her grief, and after intense anguish and thoughts of suicide, she thought of the morphine which had been administered to her nine years before. She began to use it, found it helpful, and soon was addicted. What is particularly noteworthy is that when asked if she had suffered any withdrawal symptoms when the drug was withdrawn the first time, in 1907, she stated that she could not recall any. [Italics are mine.]

Another case of the same kind was interviewed by the writer.

A man, Dr. H., was given morphine regularly for a considerable period of time when he underwent three operations for appendicitis with complications. He was not expected to live. As he recovered, the dosage of morphine was gradually reduced and completely withdrawn without any difficulty. Although the patient suffered some discomfort during the process and knew that he had been receiving morphine, he attributed this discomfort to the processes of convalescence. Dr. H. had had occasion to see drug addicts in his medical practice and had always felt a horror of addiction and had sometimes thought he would rather shoot himself than be one. This attitude of horror remained unaltered during the hospital experience just related. Several years later, Dr. H. contracted gall stone trouble and was told that an operation would be necessary. Opiates were administered, and Dr. H., who wished to avoid another operation at all costs, administered opiates to himself, hoping that the operation might not be necessary. He began to use the drug for pains of less and less significance until he found himself using it every day. He became apprehensive during this process, but reasoned with himself that there was nothing to be alarmed about, inasmuch as drug addiction was certainly not the horrible thing it was supposed to be and he was certain that he would have no difficulty in quitting. His horror of addiction disappeared. When he attempted to guit he found that it was more difficult than he had supposed. He, of course, noticed the regular

¹⁷ "Zur Pathogenese des chronischen Morphinismus," Monatschr. für Psychiat. und Neurol., Vol. XLVII (1920).

¹⁸ As defined, e.g., in the Report of the Departmental Committee on Morphin and Heroin Addiction to the British Ministry of Health: "A person who, not requiring the continued use of a drug for the relief of the symptoms of organic disease, has acquired as a result of repeated administration an overwhelming desire for its continuance, and in whom withdrawal of the drug leads to definite symptoms of mental or physical distress or disorder."

recurrence of the withdrawal illness and then realized in retrospect that he had experienced the same symptoms, without recognizing them, several years before. [Italics are mine.]

A third case of the same kind is briefly mentioned by Dansauer and Rieth, 19 and two others have come to the attention of the writer. Obviously the number of instances in which a coincidence of this kind is likely to occur is very small, but those that have been found, unequivocally and without exception, indicate that if morphine is withdrawn carefully, without the patient's recognizing or noticing the symptoms of abstinence, no craving for the drug develops. The typical phenomena which signalize addiction, such as the tendency to increase the dose inordinately, to exhibit and feel a powerful desire to obtain the drug at any cost, and to be unhappy without it—these phenomena do not put in their appearance until the patient has discovered that there are withdrawal symptoms of a persistent severe character and has used the drug for a time, solely or chiefly to prevent these symptoms from appearing. In the argot of the addict, when this has occurred the person is "hooked"; he "has a habit." If he quits before it occurs or if he resolutely refrains from using the drug to alleviate the abstinence symptoms the first time he experiences them, he may still escape. If the symptoms occur in their full intensity, however, the impulse to seek relief in the drug, when it is known that only the drug will give relief, is irresistible especially since the patient is not likely to realize that the danger of addiction is present. He thinks only of the fact that he can obtain relief from those terrible symptoms, which, to the uninitiated, may be genuinely terrifying.

As an illustration of the process of the establishment of addiction which we are attempting to isolate, another case of a man who became addicted in medical practice may be cited.

Mr. G. was severely lacerated and internally injured as the result of an accident. He spent thirteen weeks in a hospital during which time he received frequent doses of morphine, some hypodermically and some orally. He paid no attention to what it was that was being used on him and felt no effects of any unusual character except that the medicine to some extent relieved him of pain. He was discharged from the hospital, and after several hours began to develop

¹⁹ Op. cit., p. 103.

considerable discomfort and irritability and the other symptoms of morphine withdrawal. He had no idea what was the matter. In about twelve hours he was violently nauseated and during his first night at home called his family physician in at two o'clock in the morning, fearing that he was about to die. The physician also was not certain what was wrong, but gave him some mild sedatives and attempted to encourage him. The violence of the symptoms increased during the next day to such an extent that Mr. G. began to wish that he would die. During the course of the second night the family physician decided that he was perhaps suffering from withdrawal of opiates and gave Mr. G. an injection of morphine to find out. The effect was immediate; in about twenty minutes Mr. G. fell asleep and slept on in perfect comfort for many hours. He still did not know what he had been given, but when he woke up the next day the doctor told him, and said, "Now we are going to have a time getting you off!" The dosage was reduced and in a week or two the drug was entirely removed, but Mr. G., during this short time, had become addicted. After the drug had been removed for a few days, he bought himself a hypodermic syringe and began to use it by himself.20

It may seem surprising at first glance that many addicts do not know what is wrong with them the first time that the abstinence symptoms occur. This is not difficult to understand when one realizes that many persons seem to think that withdrawal symptoms are purely imaginative or hysterical in character. Even in spite of the occurrence of these symptoms in animals which have been subjected to the prolonged administration of opiates, and in spite of their occurrence in patients who have no idea what opiates are or that they have been given any, students of drug addiction have sometimes asserted that these symptoms have no physiological basis. In view of this belief among the instructed, it is easy to understand the layman who believes the same thing when he begins to experiment with the drug. Furthermore, there is nothing whatever in the initial effects of the drug to furnish the slightest clue as to what happens later. As the use of the drug is continued, in the same proportion that tolerance appears and the positive effects diminish the withdrawal symptoms increase until they obtrude themselves upon the attention of the individual and finally become dominant. In most cases of confirmed addiction the drug appears to serve almost no other function than that of preventing the appearance of these symptoms.

20 Interviewed by the writer.

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One of the most difficult features of addiction to account for by means of any explanation of the drug habit in terms of the positive effects, or euphoria, supposed to be produced by it, is the fact that during the initial period of use there takes place a gradual reversal of effect so that the effects of the drug upon an addict are not only not the same as their effects upon a nonaddicted person but they are actually, in many respects, the precise opposite.21 This is true both of the physiological and of the psychological effects. The initial dose causes one to feel other than normal, whereas in the case of the addict the usual dose causes him to feel normal when he would feel below normal without it. The euphoria initially produced by the drug has often been emphasized as a causative factor, but inasmuch as this euphoria, or "kick," disappears in addiction, the continuation of the drug habit cannot be explained in this way.22 Moreover, when administered therapeutically to allay pain, there is often absolutely no euphoria produced even in the initial period, and the patient may nevertheless become addicted. In fact it is possible for a person to be unconscious during the entire initial stage when tolerance is established and still become addicted, as a consideration of the implications of the case of Mr. G. shows. It is this reversal of effect which accounts at one and the same time for the seductive aspect of opiates as well as for their insidiousness. As they cease to produce pleasure they become a necessity and produce pain if removed. The euphoria produced by the drug at first makes it easy to become addicted but does not account for the continuance of the habit when the euphoria is gone. A theory which makes the withdrawal distress central in addiction takes account of this reversal of effects.

It follows, if one believes that the drug habit is to be accounted for on the basis of the extraordinary or uncanny state of mind it is

²¹ This has been partially emphasized by Erlenmeyer, as quoted by C. E. Terry and Mildred Pellens, *The Opium Problem* (1928), pp. 600 ff., and it has been noted in one way or another, in much of the physiological research that has been done on morphine effects

²² The English Departmental Committee in 1926 (op. cit.) stated that whatever may have been the original motive, the use of the drug is continued not so much from that original motive as "because of the craving created by the use" (quoted in Terry and Pellens, ibid., pp. 164-65).

sometimes supposed to produce, that addicts should be able to recognize such effects immediately and easily. It is a notorious fact, however, and one that baffles the addicts as well as those who study them, that under certain conditions the drug user may be completely deceived for varying periods of time into believing that he is receiving opiates when he actually is not, or that he is not receiving any when as a matter of fact he is. We shall not elaborate this point any more than to call attention to the fact that it has been put into practice as a principle in a number of gradual reduction cures wherein, without the addict's knowledge, the amount of the drug was gradually reduced and finally withdrawn entirely while injections of water or a saline solution were continued.23 Then when the addict had been free of opiates for several days, or a week, or even more, he was told that he had not been getting any of his drug for some time and usually discharged, sometimes in the vain hope that this experience might prove to him that it was only his "imagination" which led him to think he needed his drug! The fact that such a thing is possible is evidence that the direct positive effects per se are not sufficiently extraordinary to make addiction intelligible.

The tendency of the addict to relapse may be readily explained in terms of the viewpoint outlined, as arising from the impression that is made upon him when he observes the remarkable and immediate effects the drug has in dissipating unpleasant physical or mental states. What the addict misses when he is off the drug is not so much the hypothetical euphoria as the element of control. On the drug he could regulate his feeling tone; when he is not using it, it appears to him that he is the passive victim of his environment or of his changing moods. During the initial period of use the only effects of an injection to which attention is paid are ordinarily the immediate ones lasting but a few minutes or, at most, a half-hour or an hour or so. This episodic significance of injections changes into a continuous twenty-four-hour-a-day sense of dependence upon the drug only after the addict has learned from the recurrence of the beginnings of withdrawal symptoms, as the effects of each shot wore

²³ *Ibid.*, pp. 577 ff. quoting C. C. Wholey; *ibid.*, pp. 572 ff., quoting M. R. Dupouy. A number of addicts have somewhat sheepishly admitted to us that they had been deceived in this manner for as long as ten days.

off, that the drug was necessary to the continuance of his well-being. He learns to attribute effects to the "stuff" which are in part imaginary—or rather, projections of the need for it which he feels. When he is off, every vicissitude of life tends to remind him of his drug and he misses the supporting and sustaining sense of its presence. And so the ordinary pleasures of life are dulled, something seems to be amiss, and the unhappy addict eventually relapses—either deliberately or otherwise. If he does not relapse it appears that he nevertheless remains susceptible to it for long periods of years. Cases of relapse after as long as ten or more years of abstinence are recorded.²⁴

The thesis of the paper is that addiction to opiate drugs is essentially based upon the abstinence symptoms which occur when the effects of the drug are beginning to wear off rather than upon any positive effects or uncanny or extraordinarily pleasurable state of mind erroneously supposed to be produced by the drug in continued use. Addiction is established in the first instance in a process involving

- I. The interpretation of the withdrawal symptoms as being caused by the absence of opiates, 25 followed by
- 2. The use of the drug for the consciously understood purpose of alleviating these symptoms or of keeping them suppressed.

As a result of this process there is established in the addict the typical desire for the drug, a constant sense of dependence upon it, and the other attendant features of addiction. The attitudes which arise in this experience persist when the drug has been removed and predispose toward relapse. When the point is reached at which withdrawal symptoms intrude themselves upon the attention of the individual and compel him to go on using the drug, he also has forced upon him the unwelcome definition of himself as a "dope fiend." He realizes then what the craving for drugs means and, applying to his own conduct the symbols which the group applies to it, he is compelled to readjust his conception of himself to the implications of this collective viewpoint. He struggles against the habit and then

²⁴ Kolb, "Drug Addicts—a Study of Some Medical Cases," loc. cit.

²⁵ It is significant to note that this belief that withdrawal distress is caused by the absence of the opiate is not adequate or correct from the standpoint of physiological theory.

eventually accepts his fate and becomes "just another junker." Obviously when the withdrawal distress has entered into the conscious motives of the person and he realizes that he must anticipate the recurrence of these terrible symptoms if he does not assure himself of a supply of the drug, and when the definition of self as an addict has occurred, the drug user becomes ripe for assimilation into the culture of drug addiction as it exists chiefly in our underworld.

The proposed theory has advantages and implications beyond those already mentioned. It is applicable in form to all cases and, as indicated, an extensive exploration of the literature as well as many interviews with addicts has so far failed to uncover a single negative case, even of a hearsay type. Moreover, it harmonizes and rationalizes various aspects of the habit which have often been regarded as paradoxical or contradictory in character—as, for example, the fact that addicts claim they do not obtain pleasure from the drug, the initial reversal of effects, and the strange tendency of addicts to relapse when, from a medical standpoint, they appear to be cured.

A number of further implications of the point of view presented seem to have important bearings on certain theories of social psychology and of sociology. Thus students of the writings of George H. Mead will notice that the hypothesis follows the lines of his theory of the "significant symbol" and its role in human life. According to the view presented, the physiological effects of the drug do not become effective in influencing the psychic and social life of the person until he has applied to them the "significant symbols" (or, perhaps, in Durkheimian language, "collective representations") which are employed by the group to describe the nature of these effects. Addiction, in other words, appears as a process which goes on, on the level of "significant symbols"—it is, in other words, peculiar to man living in organized society in communication with his fellows.²⁶

²⁶ Very young children, the feeble-minded, and the insane would not be expected to have the necessary sophisticated conception of causality or the ability to manipulate "significant symbols" which, as we have indicated, are necessary preconditions of addiction.

Dr. Charles Schultz in a study of 318 cases found only 14 patients, or less than 5 per cent, who were "probably high-grade morons, and even these gave the impression of having their dull wits sharpened by the use of drugs" (loc. cit.). Regarding insanity—

This theory rationalizes and explains the reasons for the ordinary rules-of-thumb employed in the therapeutic administration of morphine to prevent addiction. Some of these rules and practices include (1) keeping the patient in ignorance of the drug being used, (2) mixing other drugs with different and less pleasing effects with the opiate, (3) varying the mode of administration and disguising the drug in various kinds of medicines. The significance of these practices appears to be that they prevent the patient from attributing to morphine the effects which it in fact produces—in other words, they prevent the patient from applying certain collective symbols to his own subjective states, prevent the whole experience from being associated with the patient's preconceptions of drug addiction, and so prevent addiction.

The proposed hypothesis has the further advantage of being essentially experimental in character in the sense that it is open to disproof, as, for example, by anyone who doubts it and is willing or foolhardy enough to experiment on himself with the drug. As has been indicated, the writer has been unable to find any record in the literature of an experiment of this character which, prolonged enough to be a test—that is, which lasted long enough so that the withdrawal distress upon stoppage of the drug was pronounced—did not result in addiction. This appears to constitute an exception to what is often assumed to be true of knowledge in the field of the social sciences—namely, that it confers, *ipso facto*, the ability to control. It is in accord with the well-known fact that addiction to narcotic drugs is peculiarly prevalent in those legitimate professions in which theoretical knowledge of these drugs is most general—that is, in the medical and allied professions.

it has been noted that it confers immunity to addiction and that insanity appears to occur less frequently among the blood relations of addicts than among the blood relatives of samples of the general population. O. Wuth, "Zur Erbanlage der Süchtigen," Z. für die Ges. Neur. und Psychiat., CLIII (1935), 495 ff.; Alexander Pilcz, "Zur Konstitution der Süchtigen," Jahrb. für Psychiat., LI (1935), 169 ff.; Jouet, op. cit.; Sceleth and Kuh, JAMA, LXXXII, 679; P. Wolff, Deutsche medizinische Wochenschrift, Vol. LVII, in his report on the results of a questionnaire, etc. Note the testimony by Gaupp, Bratz, and Bonhoeffer.

On the immunity of children see R. N. Chopra et al., "Administration of Opiates to Infants in India," Indian Med. Gaz., LXIX (1934), 489 ff.; "Opium Habit in India," Indian Jour. Med. Research, Vol. XV (1927); "Drug Addiction in India and Its Treatment," Indian Med. Gaz., LXX (1935), 121 ff.

A further significant implication of the viewpoint presented is that it offers a means of relating phenomena of a purely physiological variety to cultural or sociological phenomena. The interpretation of withdrawal distress, which we have emphasized as a basic factor in the beginning of addiction, is, it should be emphasized, a cultural pattern, a social interpretation present in a formulated fashion in the social milieu exactly like other knowledge or beliefs. When the organic disturbances produced by the withdrawal of the drug intrude themselves upon the attention of a person, they impede his functioning and assume the nature of a problem demanding some sort of rationalization and treatment. The culture of the group supplies this rationalization by defining the situation for the individual and in so doing introduces into the motives and conceptions which determine his conduct other factors which lead to addiction whenever the drug is continued beyond the point at which this insight occurs.

Finally, we should like to emphasize again the methodological implications of the study. A great deal of argumentation has taken place in sociology on the matter of methodology—whether universal generalizations are possible or not, concerning the role of statistical generalizations and of quantification generally, and concerning the so-called case method. Most of these arguments have tended to take place on an abstract level, whereas it would seem that in the final analysis they can be settled only in terms of actual results of research. We therefore regard it as significant that the theory advanced in this study is not quantitative in form, nor is it a purely intuitive generalization which is not subject to proof, but that it is experimental in form in spite of the fact that it is based upon the analysis of data secured largely in personal interviews. It is, moreover, stated in universal form and is therefore not dependent upon or relative to a particular culture or a particular time. As such it provides the possibility of its own continuous reconstruction and refinement in terms of more extended experience and of more elaborated instances. It other words, it provides a place for the exceptional or crucial case which George H. Mead has described as the "growing point of science."27

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²⁷ In an essay, "Scientific Method and Individual Thinker," in *Creative Intelligence* (1017).

COMMENT

The writer does not state whether his study relates to any one form of drug addiction, but it seems he is concerned chiefly, if not solely, with morphine addiction. At least he discusses addiction in which withdrawal symptoms are prominent, and so his theory does not seem to apply to types of addiction such as cocaine, hasheesh, and others in which withdrawal symptoms are absent or of a minor nature.

It is stated that "addiction begins when the person suffering from withdrawal symptoms realizes that a dose of the drug will dissipate all his discomfort and misery." And, furthermore: "If he fails to realize the connection between the distress and the opiate he escapes addiction." How often does this occur? Conceivably in some patients who have received such drugs to alleviate pain or as sedatives. But we presume that the author does not intend to suggest that many drug addicts are established in the course of medical treatment. Apart from such cases, may we not consider that an individual who persists in securing drugs and administering them to himself until he is likely to suffer withdrawal symptoms of any degree is in fact already an addict? (See the definition of addict as quoted in n. 18.) And that withdrawal symptoms are then a complication in the course of drug addiction, dependent on the fact that tolerance for the drug has been acquired? But that does not explain why the individual became an addict, although it might be offered as a reason for the difficulty in giving up the addiction, if he so desires or is requested. We would again recall the forms of drug addiction in which there are few or no withdrawal symptoms.

The cases quoted by the author as crucial for the corroboration of his hypothesis are not convincing. The case quoted from Strauss does not seem to lend any support to the hypothesis. This woman did not become an addict because of withdrawal symptoms, but in an effort to secure relief from a state of acute mental depression. As the case report states: "She began to use it, found it helpful, and soon was addicted." When it is stated that persons may relapse "after as long as ten or more years of abstinence," then surely the renewal of addiction is not due to withdrawal symptoms.

Throughout the paper there are several statements which call for comment. Thus, it is said that current theories of drug addiction tend to be moralistic rather than scientific. This does not seem a correct interpretation of the many physiological and psychiatric studies on the subject.

Again, references should be given for the statement—in regard to the nature of withdrawal symptoms—that "students of drug addiction have sometimes asserted that these symptoms have no physiological basis." It is stated that "the victim desires to use the drug—and also at the same time desires to be free of it." In what proportion of cases? Too often one has found the addict seeking a "cure" with the aim of having his tolerance cut down because of financial difficulties, or because the dosage was too high for practical purposes. The author talks of "the drug," but experience with drug addicts shows so often that they have been addicted to several drugs, depending on available supplies, and after a period of abstinence through failure of supplies would start in afresh on drugs of which they had no previous experience. What were they seeking if not some form of satisfaction or pleasure or relief from a state of emotional distress or difficulty of life?

One cannot pass over a striking statement: "This appears to constitute an exception to what is often assumed to be true of knowledge in the field of the social sciences—namely, that it confers, *ipso facto*, the ability to control." We are reminded of the musings of one, Burns, who had knowledge but had not always the ability to control—and had knowledge of that also. Thus, in the "Unco Guid, or the Rigidly Righteous":

One point must still be greatly dark,
The moving why they do it;
And just as lamely can ye mark
How far perhaps they rue it.

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REJOINDER

A considerable portion of Dr. Slight's comments are based upon an implicit conception of method which is fundamentally different from our own. We assume, and stated in our article, that a scientific explanation must be stated in terms of factors or processes which are present in all the members of the class to which the generalization is supposed to apply. There is no evidence in Dr. Slight's comments that he has taken any account of this principle, and it is for this reason that he has failed to discuss the main issues. When he asserts,

concerning the case given by Strauss, "This woman did not become an addict because of withdrawal symptoms, but in an effort to secure relief from a state of acute mental depression," he does not take into account a fact which is known to all—that many addicts begin to use the drug under circumstances which have no connection whatever with "mental distress." Some addicts, for example, first tried the drug in connection with a sex affair with a prostitute, and others first learn about the drug in medical practice. One may also ask if it would not be reasonable to suppose that the woman in this case experienced mental depression at some time during her six-month attack of disease nine years before she became an addict? Why did she not become addicted then? Dr. Slight does not touch this problem.

In the sentence beginning "Apart from such cases...." Dr. Slight appears to imply either that no addicts are created in medical practice or that, if they are, they should be excluded from the argument. Medical practice today does create new addicts—not many, but some. They are addicts in precisely the same sense as others are, and any generalization must include them. Concerning the latter part of this same sentence, we may say for a rather large percentage even of addicts on the street that the withdrawal symptoms are not at first understood. This was true in about 50 per cent of our cases. A number of them had to have the symptoms explained to them by addicts or by doctors.

The implication that knowledge of the drug being given and of the with-drawal symptoms is irrelevant, and that the sheer brute fact of having used the drug long enough to produce withdrawal symptoms in itself constitutes addiction is directly contradicted in medical practice itself. The patient who is given morphine in hospitals is kept in ignorance of what is happening to him, and this is done for the explicit purpose of preventing addiction. Medical men quite generally maintain that this practice has, in fact, been very effective. Several decades ago, when such techniques were not as widely employed, medical practice did, in fact, create many new addicts (cf. Terry and Pellens, *The Opium Problem*, chap ii).

The principle that an explanation must be applicable to *all* rather than to *some* of the cases is again ignored when he asks, "What are they [the addicts] seeking if not some form of satisfaction or pleasure or relief from a state of emotional distress or difficulty in life?" This view is simply the current commonsense misconception of the problem, and it explains nothing. It entirely ignores those cases in which addiction is a consequence of the sheer accident of disease. In terms of this view, how is one to account for continued addiction in that group of addicts for whom the major "emotional distress or difficulty in life" is the addiction itself?

The questions of fact which Dr. Slight raises cause us to wonder where he obtained the information upon which he bases his statements. He is correct when he surmises that we were concerned only with opiate addiction, but he

repeatedly refers to the use of other drugs and says that addicts shift readily from one drug to another, depending upon available supply. This is incorrect. Opiate addicts shift only from one opiate to another. Chicago addicts use mainly heroin, for which they may pay as much as two hundred dollars an ounce. As a consequence, they cannot afford to use other drugs, and very few do. If an addict is utterly unable to obtain an opiate, he does only one thing—he "kicks his habit," that is, he breaks the continuity of his addiction. During abstinence some addicts may try other drugs or drink whiskey, but that does not prove that all forms of drug-taking are alike any more than the fact that some disappointed lovers turn to drink proves that sex activity and alcoholism are alike.

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