The Netherlands, like many other West-European countries witnessed a rapid increase of the illicit use of cannabis products and some other drugs, in the middle of the 'sixties. In the densely populated area situated in the closest vicinity of some world’s biggest ports, cases of marihuana use as reported by the police redoubled in frequency in each consequent year since 1965 through to 1968. Alarmed by these reports (and similar reports from abroad), the Dutch authorities decided to sponsor research into the imminent mass-use (or: abuse) of drugs. Operating from the Institute of Social Medicine in Amsterdam (Director: Professor Dr. A. Querido), Mr. H. Cohen penetrated the drugscenes in the Netherlands' big cities and succeeded in collecting data from over 950 illicit drug-users. A work-report of this study (that serves as a doctor’s dissertation for the psychologist Cohen, to be published soon) appeared in September, 1969, and contained a real treasure of information on drug-use in 1968.

A large majority of the 958 persons from whom Mr. Cohen obtained his data, namely 92 per cent, used hashish in the three months preceding the interview; 73 per cent referred to marihuana; 42 per cent used amphetamines; 24 per cent L.S.D., and 20 per cent opium or its derivates. Less frequent were the references to such drugs as mescaline (27 persons), „morning glory” (36 persons), „baby-wood-rose” (13 persons) and D.M.T. (12 persons) (1). Sniffing drugs (ether, trichlorethylene, amyl nitrite) were reported in 41 cases, cocaine in ten cases. There also were references to tranquillizers (32 in number) and to sleeping pills used distinctly for other purpose than medication (about 56 cases) and some 44 cases of diverse drugs or pseudo-drugs that could not be classified under the foregoing headings.
As far as the frequency of use is concerned, Cohen found that 21 per cent of 884 persons who referred to hashish, mentioned the daily use of the drug (40 per cent used it several times a week, 24 per cent several times a month, nine per cent about once a month, seven per cent twice a month on average). The daily use was reported by 14 per cent of 699 marihuana users (29 per cent used the drug several times a week, 31 per cent several times a month, 11 per cent used it about once a month). Other drugs were used less frequently; opium: 10% daily, 15% several times a week; amphetamines: 8% daily, 18% several times a week. L.S.D.-users (229 in the sample) „tripped” even less frequently: 2 per cent admitted trips several times a week, 11 per cent tripped more than once and 18 per cent about once a month, 69 per cent had trips about once in two months or less frequently.

With the exception of amphetamines, social use of „drugs” predominates. Only 44 marihuana users smoked when alone, as compared with 573 who referred to a company-use of the drug (22 mentioned alternate use), that is approximately a ratio of 1/11; for hashish users this ratio amounted to 1/9, for L.S.D. users 1/5, opium-users 1/2, and amphetamines about 1/1. Cohen mentions that cannabis products resemble alcohol in this respect, since the alcohol users also used to drink in company (the ratio was 1/11) and many users were daily drinkers (23 per cent).

As the figures on drug use suggest, the multiple use of „drugs” was rather a rule than an exception in the sample that was studied by Cohen. The Table 9 in his report brings the following interesting information: Out of the 184 daily users of marihuana 55 per cent are frequent (daily or several times a week) alcohol users, 31 per cent are frequent users of opiates and 37 per cent frequent users of amphetamines (52 per cent of this group used L.S.D. at one time or another).

Out of 32 daily amphetamine-users, 93 per cent used frequently alcohol, 90 per cent hashish, and 50 per cent opiates. (Because hashish and marihuana are used interchangeably, no distinction between them is made in Cohen’s later tables). The average number of various drugs used by individual frequent users surpassed three for hashish smokers and those frequently taking amphetamines and was highest for the users of opiates (4.5 various drugs according to Table 8 in Cohen’s work-report).

In spite of this findings Cohen rejects the current „steppingstone theory” in his attempt to explain the drug use. He points out the vague nature of this theory that, at its best, tries to explain opium addiction out of preceding use of cannabis products. Yet, as was pointed out above, it is not the joint use of opium and hashish, but rather the multi-drugs use that is typical of the
present situation. There exists, according to Cohen, a subculture in our society in which the use of drugs in general is being accepted and freely marketed, in which non-medical drug use is embedded in the total pattern of values and forms a new way-of-life.

Cohen's work has been accepted in a critical way; some of its shortcomings and gaps have been filled by the subsequent research. Dr. Buikhuisen, a criminologist at the Groningen University, launched an extensive survey of drug-use among the school youth, in order to obtain more reliable estimates for the cross-section of general population of lower age-brackets (Cohen drew his sample exclusively out of drug-users and was thus not able to critically estimate the incidence of the phenomena under study in the general population). Together with his co-workers, Buikhuisen collected questionnaires from 11,659 pupils of 156 schools (in no less than 21 cities). According to his findings, at the time of his research (1970), some eleven per cent of all pupils in the highest classes of the secondary schools (the survey covered the whole range of schools for boys and girls between 12 and some 17 years of age) got personally acquainted with drugs (2). The thirteen hundred pupils who admitted to have used "drugs", at one time or another, mostly referred to cannabis products (1,148 persons); there were 178 persons who mentioned amphetamines, 160 mentioning L.S.D., and 94 who referred to one of the opiates (barbiturates, cocaine and other drugs also have been mentioned by a few pupils). The authors publish an interesting table (op. cit. p. 178) in which the frequency of use is cross-tabulated by the use-pattern: those using exclusively "hard", those using "soft" and those who have taken both kinds of drugs (to "soft drugs" products of cannabis are reckoned; "hard drugs" are in this context L.S.D. and amphetamines). Only some eight per cent of 843 pupils who referred to cannabis products (and to these alone) have used the drug twenty times or more; of the 152 pupils who only mentioned hard drugs five used them at least twenty times; of the 305 persons who mentioned combined use, no less than 167 (some 13 per cent of the total number of users) proved to be more regular users (having enjoyed drugs twenty times or more).

While the figures of Buikhuisen c.s. are probably the best estimate of non-medical use of drugs by the groups that are most liable to accept them, the data which were collected by the Netherlands' Foundation for the Statistics (a commercial survey centre) help us to estimate the extent to which "drugs" were known to the general public and the attitude of this public to them, in 1969 (3). In a sample of 1,156 persons of sixteen years and older, that the Foundation judges representative for the total Netherlands' population, the
survey-workers first examined the semantic aspects of the term „drugs” (see our note 2). Only about a half of the interviewees heard of „drugs” in this first survey, though the corresponding percentages rapidly changed within the period of two years (48 per cent in 1969 as compared with 91 per cent in 1970 who acknowledged to have heard of „drugs”). Under „drugs” the following items were spontaneously mentioned (in the decreasing frequency of response): marihuana, L.S.D., hashish, opium, morphine, heroin, other stimulantia or sleeping pills (10 per cent); 27 per cent mentioned alcohol and 25 per cent of the total sample referred to tobacco when interpreting the popular term „drugs”. A great majority of the population perceived „drugs” as noxious (almost 60 per cent) about a third would not pass a general judgment (mainly because they distinguished between the drugs used or the groups that were involved) while some eight per cent considered the assumed noxious effect exaggerated and saw no lasting harm in the use of drugs. Similarly, a majority advocated the idea that drug use for non-medical purposes „should be punished”, 45 per cent were protagonists of „severe punishment”, five per cent would not punish but advocated measures to „cure” the drug users, while about four per cent would leave the drug users quite free to decide how to act and what to do.

This summary of the research-situation with regard to „drugs” as they were spreading in the Netherlands in the late ‘sixties, contains, of course, only a selection of features which we judge necessary for the reader to grasp our considerations in planning the research-project of our own.

Main theoretical issues

As the foregoing data suggest and as was explicitly put by Mr. H. Cohen, „the sub-culture theory” of non-medical (or: deviant) drug use deserves the foremost attention. As we mentioned above, Cohen prefers this theory to its alternative, „the stepping-stone theory”. Vaguely, this would imply that the mass drug use, as we witness it in this country, flourishes in the group of people whose values, norms and attitudes are distinguished from those of the „established society” to the extent that we are entitled to speak of a distinct sub-culture. Moreover, the use of hard drugs does not develop out of the use of soft drugs (especially: the cannabis products) but from the very beginning every new member of this sub-culture is confronted with multiple drug use (4). In spite of its yet vague formulations, we found in the first part of the theory a good starting point to study the issue at hand: the possible causes
of the contemporary mass-propagation of non-medical drug use among the
Dutch population. We thought it possible that a new way-of-life was spread­
ing in the Netherlands (either on indigenous or external grounds), in several
respects different from, or even opposed to, the established pattern of culture.
The use and the approbation of drugs for non-medical purposes would be
incorporated in the new way-of-life together with a changed attitude towards
the main relevant societal issues: work, religion, sex. If spread among the
larger parts of the population, this new way-of-life would rightly be seen as
a sub-culture, competing for dominance with the „established” (existent)
culture. The possible latent conflict between the two could be assessed and
the likely outcomes of it formulated: whether the two cultural patterns would
merge into one new pattern (for instance, by incorporating drugs and reject­
ing a negative value to work, or some other combination of values), or virtu­
ally replace each other.

Alternative hypotheses could be formulated with respect to this theoretical
background. Drug-users could be seen as either the „drop-outs” i.e. persons
who cut the ties with society, participate less in its institutions and normal
group-life than average inhabitants. Yet another possibility to explain the
mass drug use was by reference to the theory of anomie, general normless­
ness spreading among the population. Drug-users would then be seen as not
adhering to an alternative pattern of cultural values but shying any norms
and values at all, out of pure hedonism.

Finally, one could assume that illicit drug-use is only a variant of general
drug-use (tranquillizers, barbiturates, etc. taken on the prescription of physi­
cians) and, eventually, generated by increasing neuroticism in the population
or by the stress emanating out of the ongoing differentiation of the society
and its conflicting demands on the individual.

Common to all these hypotheses is the fact that we seek the causes or the
conditions of the present mass-use of drugs in the society that might be
divided against itself. The focus of the study would be not on the individual
drug users but on a cross-section of this society; we might study how the
values and norms are spread over the various categories of the population
(the agegroups, the social strata, the religious-groups, men and women, etc.).

Research Strategy and Research Design

While thus the national trends of shifting habits and cultural values became
the main focus of our research interest, the crossnational survey seemed the
most suitable instrument for the collection of relevant data. Because of the high costs and organizational effort which a national survey implies, and because we learnt in former study (on smoking and drinking habits) that it is advisable not to put the question on hazardous health habits in isolation but to combine them with a more general battery of questions, we were looking for a possibility to combine our own research-objective with a survey of conduct and attitudes in a related field of interest. A suitable opportunity was found in the request of the Health Insurance Funds in Enschede, to study the patterns of medication and the consumption of medical drugs in the Netherlands. This made it possible to put the questions on drug-use and on attitudes to non-medical drug-use together with the questions on use of medicines, either prescribed by physicians or procured through other means (self-medication) and to put all these questions in a general frame of a health inventory together with numerous items on existential backgrounds that made a multivariate analysis of data possible. The economic advantage of this combined project would result in a larger sample of the Dutch population and the better chance to secure its representative nature within the reasonable confidence limits.

The disadvantages of a similar combined extensive project, are more or less evident: 1) the limitation of items bestowed upon each cluster of dependent variables; 2) a similar limitation in the selection of explanatory hypotheses (and operationalized variables) to be included in the survey (thus: loss of specificity); 3) insufficient insight into the dynamic factors owing to the static nature of data which the extensive surveys provide.

On carefully weighting the pros and the contras, we decided to study the attitudes to the non-medical drugs in a probabilistic sample of the total Dutch population of sixteen years and older together with a total pattern of its medical consumption and a number of attitudinal and existential items. By means of multivariate analysis we hoped to extricate some relevant information of the vast matrix of data that might cast decisive light on at least some hypotheses that were formulated above.

**Sampling Technique and Its Evaluation (5)**

In order to secure the information from a truly representative sample of the Dutch population, we decided for personal interviews at the homes of the respondents (as we judged the risks of nonresponse by mail questionnaire too high) and for appropriate selection of the respondents. Thanks to a good
registration of all inhabitants by the Registrars ("Burgerlijke Stand") of the
communities in the Netherlands, we were able to draw cluster-sample in two
phases: (a) a sample of communities, and (b) a systematic selection of persons
over 15 years of age from the community registers. The sampling plan was
devised by a mathematical statistician, the late Charles A. G. Nass, for our
earlier study (6). It was based on a probability principle that guaranteed
every Dutch inhabitant the same chance (1 : 5,000) to be drawn in our sample.
All large communities (with at least 150,000 inhabitants) were included in the
sample. In the alphabetical list of all remaining communities, the numbers of
inhabitants were progressively summed; after randomly selecting a number
of the first community (falling under the cumulative total of 150,000 inhabi­tants),
we progressively added the intervals of 150,000 and chose the
community in which the corresponding cumulative total fell and from which
a quota of 30 persons was drawn (since 30 * 5,000 = 150,000). If, for instance,
a community was chosen which corresponded to the cumulative total of
20,000, the next chosen community corresponded to 170,000, the third to
320,000, the fourth to 470,000 inhabitants etc., until the total number of
inhabitants in the smaller communities was exhausted. The large cities
delivered quotas proportional to their number of inhabitants (the number of
inhabitants/5,000).

In the second phase we drew the number of cards from the registers corres­pond­ing to the quotas; cards denoting children (under 16 years of age) were
put back, without replacement. From other cards, addresses and personal
data were registered for the interviewers.

All potential respondents received a written introduction and were visited
in their homes; if not attained, other attempts to reach them were made at a
later date. (The interview campaign launched by the staff-members of the
Sociological Department and about 100 students who helped to draw the
questionnaire and to plan the whole project, was held between April, 1970,
and the end of that year; the last months were reserved for visits of „refusals”
by teams of skilled interviewers. Since all interviews were planned from a,
geographically, rather excentric place — Groningen University — the inter­view costs were considerably high. No pains were saved to secure the infor­mation needed, yet no practice of forced or overcharged persuasion was
resorted to; once the respondent clearly denied cooperation, he was reckoned
to „refusals”).

In order to give an impression of the quantitative aspects of the survey, we
may mention that there were 1,905 persons of sixteen years and older in the
73 communities that have been drawn for the sample. Of these 1,622 have
been interviewed by our co-workers, thus we secured the valid information from about 85 per cent of the original sample. Of those whom we did not reach 190 persons (about 10 per cent) refused cooperation, 36 persons were simply not at home, even when visited for the second or third times (some 2 per cent), 57 persons either deceased before we reached them or were institutionalized and hospitalized, were foreign workers temporarily living in the country (this group amounted to 3.0 per cent); finally there were some 22 interview sheets eliminated in the first phase of the evaluation (about one per cent), on which this paper is based.

The refusals and those „not at home” were evenly distributed over the communities; there are no reasons known to us to suspect a bias (i.e. a systematic distortion of the sample due to the non-response of a certain category of the population), the comparisons with the parameters as known to us on the ground of the Census-data brought no substantial distortions to the light. Somewhat more doubtful is the application of the simple statistical tests (as based on random statistics) to the data as drawn from a clustersample. In absence of suitable multivariable tests for clustersamples, we proceeded along the traditional way; a previous study (on smoking and drinking habits) gave us confidence that correlations of clustering are low, in the areas under study.

Scales and Variables Used

In order to canvass the attitudes in our sample, we drew some 26 items of Likert's type that were presented, on a separate sheet, to each respondent. He read the statement in sequence and checked for each whether he agreed or disagreed, on a five points scale. The items were intended to measure the following dimensions:

(a) the permissive-proscribing attitude to drugs (seven items);
(b) attitude to pain and one's disturbed health (seven items);
(c) attitude and opinions about illness (five items);
(d) attitude toward sex (two items);
(e) attitude to work (one item);
(f) attitude to church (one item);
(g) attitude to education of children (one item);
(h) assessment of inner rôle-conflict (one item);
(i) attitude to medication (one item).
The double purpose of the survey is clearly reflected in the nature of subjective (attitudinal) items: the study of non-medical use of drugs laid claims on the half of the available items (a, d, e, f, g, and h), while the other half was designed to measure the subjective aspects of illness and medication. As far as the present subject is concerned, only the main dependent variable (the normative attitude towards the "drugs") was based on a sufficient number of items to allow for the construction of a scaling instrument.

To that purpose all 26 items were intercorrelated (N = 1,600) and factor-analyzed (principle component analysis). As expected, the "drugs"-items all showed high loadings on one factor, after the Varimax rotation had been applied. This factor accounted for 11.1 per cent of the variance; the second factor was characterized by high loadings on four items which were designed to measure the attitude to pain (it accounted for 6.6 per cent of the total variance), yet another factor, clearly identified as measuring the attitude to sex, explained 5.8 per cent of the variance; the eight factors which we extracted accounted together for over 50 per cent of the variance.

While realizing that factors often denote other forms of relationship than the functional unity characterizing items in a scale, we used five of the seven items on Factor I to construct a unidimensional scale of the Guttman type. After a few trials, a scale was found with a fairly high reproducibility coefficient R = .94 and a sufficiently high chance-reproducibility. Its coefficient of consistency (according to Green's formula) amounted to I = .41. Though Green advocates the idea that "I" should exceed the values of .50 in case of unidimensionality, R. J. Mokken in his recent publication argues that this criterium is largely exaggerated; (7) already in cases where "I" attains values between .30 and .40 we are justified to speak of scales. In order that the reader might himself check the semantic dimension of the scale, we here present the items (in translation) with the corresponding popularities for the contracted, dichotomized, answer categories:

<table>
<thead>
<tr>
<th>Positive categories</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) It should be made easier to get &quot;drugs&quot;</td>
<td>18%</td>
</tr>
<tr>
<td>Quite disagree, disagree: 82%</td>
<td></td>
</tr>
<tr>
<td>(b) When you use &quot;drugs&quot; you corrupt your spirit and your body</td>
<td>22%</td>
</tr>
<tr>
<td>Quite agree, agree: 78%</td>
<td></td>
</tr>
<tr>
<td>(c) It is not as bad to use the &quot;drugs&quot; for once</td>
<td>42%</td>
</tr>
<tr>
<td>Quite disagree, disagree: 58%</td>
<td></td>
</tr>
</tbody>
</table>
I can understand it quite well that people use "drugs" to forget worries and troubles 62%
Quite disagree, disagree: 38%

The use of "drugs" is worse than theft 84%
Quite agree: 16%

N = 1,600

Simple scoring was used when assigning the 1,600 respondents values on this scale of acceptance of drugs: for each respondent the number of positively answered items was summed (the range thus being delineatedly 0 and 5 points of "tolerance" towards drugs).

Similar additive scores were used to measure attitudes to sex, to pain and other variables consisting of more than one item. One-item scales also were used; we simply punched the scores of Likert-type, giving 1 for "quite agree" and 5 for "quite disagree" or the other way round (if the item was worded in the negative way).

These were, by no means, the only "subjective" variables that were used. Thanks to the work of Dutch psychologists, scales of neuroticism and of the psycho-somatic syndrome have been developed and tested out in cross-national samples (8). We took over nine items of the neuroticism scale and 16 items of the psycho-somatic scale; their respective ranges were 6-44 points and 10-45 points. The more "factual" information with regard to "drugs" was tapped by simple, open-end questions: "Do you know the names of some sorts of narcotic or mood-changing stuff (9) ("the drugs")? Which "drugs"? Which do you consider as harmful? Did you ever use one of these? Which was (were) it? . . . ."

Only the questions concerning the knowledge of "drugs" and that on actual use were utilized in the final quantitative analysis of data. This was done in spite of the extremely skewed distribution of the latter (there being only 67 persons who admitted ever to have resorted to "drugs"). For "knowledge" we used a simple dichotomy: those who knew the names of some "drugs" (591 persons in our sample) and those who did not (1,009 persons).

The final matrix (on which this paper is based; additional analysis will be carried out to extricate the problems of medical consumption in a general population) comprised no less than 41 variables, the description of which would lead us too far, here. We mention them only in the short-hand of the survey research, to delineate the scope of the multi-variable analysis that was applied: sex; age; migration index; marital status; church-affiliation 1:
Roman Catholic vs. Protestant differential; Church affiliation II: without or loose ties vs. intensive ties; incomes level; satisfaction with incomes; health satisfaction; use of sleeping pills or tranquilizers; visits to general practitioner; attachment to a certain medicine; addiction to a certain medicine; knowledge of „drugs”; use of „drugs”; frequency of visits; visits to concerts or theatre; visits to cafés or restaurants; car-driving; satisfaction with one's leisure; the size of parental family; evaluation of one's youth; loneliness; fatigue; worries; inner rôle-conflict; eating sweets; measuring-one's-weight habit; smoking habits; change in one's smoking habits; attitude to smoking; drinking of alcoholic beverages; attitude to alcoholic beverages; attitude to work; attitude to „drugs”; attitude to pain; attitude to sex; general satisfaction index; educational level; neuro-somaticism (psycho-somatic syndrome); neuroticism.

This is, at a first glance, quite a gamut of heterogenous variables; yet no variable was included without a theoretical or practical ground: it was assumed to be connected with one of the dependent variables in our study. It was suggested to us either by literature or by students who did some creative thinking on the subjects when preparing the interview-schedules to be used in the study.

Finally, a word of caution with regard to the use of correlations in analysis. Their only function was to signal possible relationships. As dichotomies or politomies were used, the postulate of continuous nature of data was, obviously, violated. On the other hand, only ordered data (monotonously increasing or decreasing in intensity of the dimension studied) were employed in the matrix. Moreover, the distribution form of the variables was taken into consideration by examining a large number of cross-tabulations; Chi-square tests were applied to the cross-tabulated data parallel to the application of the parametric statistics (correlations and partial correlations) (10).

Some Descriptive Findings of the Survey

The distributions of answers to the 26 attitudinal items suggest that Holland, as a whole, is still a puritanistic country: the use of drugs is censored, free sexual outlet is rejected, work is placed definitely above the leisure in the pattern of values by the majority of the population. Since it is impossible to obtain objective measures of these attitudinal dimensions (the wording of each item elicits a different percentage of positive answers), we shall present
the text of the items (in as exact a translation as possible) with the corresponding popularities (percentages of those endorsing or rejecting the items) and the corresponding means and standard deviations. A selection will be made, to save space. As some items were combined into scales, the distributions of the scores of some of them also will be presented wherever this seems to be relevant to the subject matter treated.

Table 1. Distribution of answers and scores to attitudinal items and their corresponding means and standard deviations

<table>
<thead>
<tr>
<th>Items:</th>
<th>quite agree</th>
<th>agree</th>
<th>neutral</th>
<th>disagree</th>
<th>quite disagree</th>
<th>means</th>
<th>standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) &quot;A person who finds his work more important than his leisure has learnt by life&quot;.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2.3</td>
<td>1.3</td>
</tr>
<tr>
<td>2) &quot;People must be left free in the manner how they wish to satisfy their sexual desires&quot;.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1.2</td>
<td>1.4</td>
</tr>
<tr>
<td>3) &quot;One bestows too much time upon sex, in our time&quot;.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2.6</td>
<td>1.2</td>
</tr>
<tr>
<td>4) &quot;The church offers far too little support to people, nowadays&quot;.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2.4</td>
<td>1.15</td>
</tr>
<tr>
<td>5) &quot;Parents have too little to say about their children, nowadays&quot;.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2.1</td>
<td>1.2</td>
</tr>
<tr>
<td>6) &quot;Drug-addiction is worse than an accident or an infectious disease&quot;.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2.5</td>
<td>1.2</td>
</tr>
<tr>
<td>7) &quot;There is even less reason to punish drug-use than there is for punishing smoking (or alcohol) drinking&quot;.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2.5</td>
<td>1.2</td>
</tr>
<tr>
<td>8) &quot;When you use drugs you corrupt both your spirit and your body&quot;.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>3.15</td>
<td>1.0</td>
</tr>
<tr>
<td>9) &quot;It is, in our busy times, a good thing that there are tranquillizers&quot;.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1.5</td>
<td>1.1</td>
</tr>
</tbody>
</table>

As the reader may have witnessed, all items were scored in the direction of a puritan (censoring) attitude. With the exception of the second and the last items, all means are above the modal value (2), which confirms our statement about the general puritan outlooks of the Dutch population. The two exceptions are worth commenting: The second item, on sex, refers to another value, that of freedom, which is of course, in high esteem and which thus
countervails the negative attitude to sex. We notice, namely, that item 3
does not amount to a mean score of 2.6, pointing in the "calvinist" (puritan) direction.
Items 8 and 9 form a strange contrast. While there is a very sharp rejection of
"drugs" (i.e. non-medical, mood-changing drugs), the prescribed drugs
(exact wording was: soothing, tranquillizing drugs (kalmerende middelen
in Dutch) or drugs bought in a store without illicit means are approved of by
the majority of the population.

It is good to note for the further discussion that only two per cent of the
total population decisively disagree with the notion that "drugs" are harm­
ful. One would, naturally, object against this statement that the stimulus used
was inappropriate as no differentiation was made between the soft and the
hard drugs in the attitudinal items used.

We decided to use a general term on purpose, since we expected limited
knowledge of the subject in the general population. As mentioned in the first
paragraph, only about a half of the Dutch population ever heard of "drugs" in
the year preceding our own investigation. On the other hand, those who
did, interpreted the term "drug" in the connotation it is used in this study:
marihuana, L.S.D., hashish, opium, morphium, etc. chiefly used for non-
medical purposes.

In our interview, the semantic question also was put: "Do you know the
names of palliative or mood-changing means, the so called 'drugs'?". No less
than 63 per cent gave positive answers to this question, more than a third
denied knowledge in this field. The interviewers noted hereafter the names
of drugs the respondents knew. A majority thought of hashish, am­
phetamines and L.S.D.; less frequently opiates were named, while a part of
the population also mentioned barbiturates and tranquillizers.

These latter groups were the cause of a minor trouble with the assessment
of the non-medical drug-users in our sample. The respective question ("Did
you ever use such a stuff (middel)?") was, namely, positively answered by 67
persons. This would mean that 4.2 per cent ever used drugs - an unbelievably
high percentage in our eyes. We sorted all respective interview-sheets and
were able to eliminate 25 of the pile on account of the semantic confusion:
the 25 respondents either referred to morphine or other medical drugs used
in hospitals, after an operation and in other similar situations, or (about two
or three cases), only took one single draw from a marihuana cigarette. This
leaves us with a group of 42 persons referring chiefly to cannabis products,
L.S.D., and amphetamines. This is 2.6 per cent of the sample. Yet even this
percentage should not be interpreted as denoting regular users or even
addicts. A number of youthful persons who fall into this group probably
merely experimented with the drug or used it at social occasions, under
group pressure.

On the other hand, the estimate of those who ever got acquainted with the
"drugs" is perhaps not so bad, after all. Our confidence is partly based on the
percentage found, since we realize that the sampling error amounts to
0,0035%. This means that the 95 per cent confidence limits are 1.9% - 3.4%.
In other words we can conclude on the basis of our sample that there were
between 1.9% and 3.4% persons in the general population of sixteen years
of age and older in 1970 who personally go involved in non-medical drug
use. And there is a chance of 19 : 1 that this estimate would hold if we took
another sample of the same size.

As a matter of fact, there was another sample drawn in the same year.
The Netherlands' Foundation for the Statistics made a replication of its
study in 1969, yet, this time, adding a question on drug-use (11). In Novem-
ber, 1970, they found in a sample of 1,058 persons of 15 years of age or older
2 per cent referring to own drug use. This percentage is almost identical with
that of our study (difference 0.2 per cent). Of those who referred to "drugs"
about a half acknowledge still to use "drugs" at the time of the interview,
that is about one per cent in the general population according to this study.

In order to give an impression of the social composition of the group of
"users" we refer to some variables significantly deviating from the statistics
in our total sample. Men were decidedly overrepresented, as there were 31
men to 11 women in the group of "drugusers". The latter was almost
exclusively drawn from the younger age-brackets: 15 persons aged 16-20
years; 19 persons aged 21-30 years; 6 persons aged 31-40 years and 2 persons
between 41 and 50 years of age. Some 83 per cent of all "users" were thus
persons under 30 years of age. In this light, it is less astonishing that a
majority were unmarried persons (30 out of 42 "users"). Somewhat more
striking was the finding that the group of "users" belongs to a very sociable
group among the population: they visit each other much more frequently
than expected; even more striking is the high frequency of visits to
restaurants, cafés and dancings, in his group: 29 "users" say to visit them
regularly, 10 now and then, while only 3 say never to visit inns or cafés (the
corresponding figures with the non-users were: 341 regular visitors, 617
occasional visitors and 610 who report never to frequent inns and cafés).
The users also are suggested to belong to the persons with a high index of
general dissatisfaction, feel somewhat more lonely and worry more about
life-problems than the group of non-users. They are, naturally more leisure-
than work-oriented, more permissive of sex than the general population.
Moreover, they prevalently stem from groups with more schooleducation.

Suggestive, as they are, these findings should be interpreted with care. They are, to begin with, based on a comparatively small fraction of the sample which in itself makes a generalization a somewhat doubtful enterprise. (Though the tests of significance take the size of the sub-sample examined into account). Even more intriguing is the question of intercorrelation. Suppose, we wish to draw the causel conclusion of the fact that drug-users are predominantly unmarried persons. We know, of course, that they are of lower than average age, and that young men and women are the single persons, upon the whole. The need for a multivariate statistical test, is then quite obvious: does marital status influence drug use, when age is being kept constant? These are the matters we want to deal with at somewhat more detail in the following section.

Results of correlational Analysis

The two shortcomings signalled in the foregoing section can be circumvened by: (a) taking more evenly distributed dependent variables as the basis of our analysis; (b) using measures of association that would allow for at least rough control of testvariables.

As to the first possibility: the variable „knowledge of drugs” was a dichotomy that split up our sample into 1,002 who could name some „drugs” and 589 persons who did not (with nine persons who gave evasive answers or no answer at all). Thus we get a 63 to about 37 per cent, which is a more substantial part of the sample than the 2 per cent (of the drug users) to base an evidence on. Even better in this respect proved to be the „normative attitude to drugs” which divided the sample in the six sub-categories as follows:

<table>
<thead>
<tr>
<th>score</th>
<th>number of respondents*</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 repressive</td>
<td>229</td>
<td>14.3</td>
</tr>
<tr>
<td>1</td>
<td>400</td>
<td>25.0</td>
</tr>
<tr>
<td>2</td>
<td>426</td>
<td>26.7</td>
</tr>
<tr>
<td>3</td>
<td>259</td>
<td>16.2</td>
</tr>
<tr>
<td>4</td>
<td>158</td>
<td>9.9</td>
</tr>
<tr>
<td>5 permissive</td>
<td>125</td>
<td>7.8</td>
</tr>
</tbody>
</table>

*Three sheets were, by mistake, not used by the tabulation of these data.
Table 2. Some correlations with the three main dependent variables

\( N = 1.590 \text{ to } 1.600^* \)

Significance: vs. = \( P (\alpha) < .001 \); s. = \( P (\alpha) < .05 \); (s) = \( P < .05 \)

Negative correlations: these denote associations in opposite direction; thus 'addiction' correlates with poor knowledge of drugs.

<table>
<thead>
<tr>
<th>Variable positively correlated with permissive attitude, more knowledge or actual use</th>
<th>attitude to &quot;drugs&quot;</th>
<th>knowledge of &quot;drugs&quot;</th>
<th>use of &quot;drugs&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( r )</td>
<td>significance</td>
<td>( r )</td>
</tr>
<tr>
<td>Sex: men</td>
<td>.040</td>
<td>n.s.</td>
<td>.137</td>
</tr>
<tr>
<td>Age: younger</td>
<td>.184</td>
<td>v.s.</td>
<td>.318</td>
</tr>
<tr>
<td>Marital status: single</td>
<td>.153</td>
<td>v.s.</td>
<td>.108</td>
</tr>
<tr>
<td>Incomes: higher</td>
<td>.060</td>
<td>s.</td>
<td>.111</td>
</tr>
<tr>
<td>Church-ties: no or low</td>
<td>.054</td>
<td>s.</td>
<td>.017</td>
</tr>
<tr>
<td>Visiting: frequent</td>
<td>.000</td>
<td>n.s.</td>
<td>.112</td>
</tr>
<tr>
<td>Visits to concert etc.: frequent</td>
<td>.174</td>
<td>v.s.</td>
<td>.239</td>
</tr>
<tr>
<td>Visits to inns, cafés: frequent</td>
<td>.187</td>
<td>v.s.</td>
<td>.211</td>
</tr>
<tr>
<td>Addiction to medicine</td>
<td>.010</td>
<td>n.s.</td>
<td>-.056</td>
</tr>
<tr>
<td>Loneliness: feeling lonely</td>
<td>.121</td>
<td>v.s.</td>
<td>.061</td>
</tr>
<tr>
<td>General satisfaction: negative</td>
<td>.088</td>
<td>s.</td>
<td>-.009</td>
</tr>
<tr>
<td>Worries: many</td>
<td>.005</td>
<td>n.s.</td>
<td>.113</td>
</tr>
<tr>
<td>Inner rôle-conflict: symptoms of</td>
<td>.007</td>
<td>n.s.</td>
<td>.157</td>
</tr>
<tr>
<td>Size parental family: small</td>
<td>.078</td>
<td>s.</td>
<td>.115</td>
</tr>
<tr>
<td>Work orientation: leisure-oriented</td>
<td>.200</td>
<td>v.s.</td>
<td>.258</td>
</tr>
<tr>
<td>Attitude to sex: permissive</td>
<td>.190</td>
<td>v.s.</td>
<td>.136</td>
</tr>
<tr>
<td>Smoking habits: smokers</td>
<td>.029</td>
<td>n.s.</td>
<td>.140</td>
</tr>
<tr>
<td>Drinking habits: drinkers</td>
<td>.117</td>
<td>s.</td>
<td>.182</td>
</tr>
<tr>
<td>Attit. drinking: unhealthy</td>
<td>.063</td>
<td>s.</td>
<td>.075</td>
</tr>
<tr>
<td>Educational level: high</td>
<td>.214</td>
<td>v.s.</td>
<td>.339</td>
</tr>
<tr>
<td>Attit. to pain: &quot;soft&quot;</td>
<td>.121</td>
<td>v.s.</td>
<td>.092</td>
</tr>
<tr>
<td>Neuroticism: high scores</td>
<td>.060</td>
<td>s.</td>
<td>.025</td>
</tr>
</tbody>
</table>

*Evasive answers or "no answers" were ascribed to modal categories, except for a few variables where they were eliminated, thus decreasing the N.
This is a fairly even distribution, with the median falling close to the modal category, thus approaching approximately the normal distribution. We decided to use this scale as the main analytical tool; yet owing to the fact that factual (though reported) conduct is of higher predictive value than attitudes, we also computed the correlations for the uncorrected data on drug-use and the phi-coefficients for the dichotomized data of the corrected sheets (containing 42 users of non-medical drugs, after the 25 sheets of morphium-users and other users on medication had been removed from the group of 67 persons giving a positive answer to our question). These three dependent variables were correlated with 38 other variables that have been mentioned in the foregoing section. To save the reader the pains of searching the entire correlation-matrix (the variables themselves were intercorrelated), we present here only the segments of it, that seem of relevance for our discussion.

Before going into the interpretation of the correlations found, let us mention some correlations that we expected but that are significant by their absence. No correlation, whatsoever, was found with the evaluation the respondent gave of his own youth: drug-users or drug-minded persons are not recruited from the groups of unhappy youth. No correlation was found either with one of the main cultural differentials, the protestant — Roman Catholic subcultures: Calvinists do not reject drugs significantly more often or more intensively than Roman Catholics do. Visits to a physician, self-medication, eating sweets these also have shown no significant correlations with our dependent variables.

The fact that there are so few negative correlations in Table 2 is not difficult to explain: the three dependent variables are intercorrelated in the congruent direction. Moreover, they form a congruent cluster with the two other dependent variables (the attitudes to sex and towards work) and with the two principal predictor variables, education and age, as the following Table 3 clearly shows.

We see that knowledge of „drugs” positively correlates with the attitude as well as the actual drug-use. The latter correlation is, in fact, flattened by the uneven distribution of the sub-categories (drug-users formed only two percent of the sample); if Q-coefficient was used instead of phi, the correlation would be equal to one, since all 42 drug-users could name some drug (there appeared an empty cell in a 2 x 2 table).
Table 3. Matrix of correlations of the five dependent variables and the three principal predictor variables.
(With „Drug Use” phi-coefficients are used as equivalent for the r-coefficients)

<table>
<thead>
<tr>
<th>No. of Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Knowledge of drugs: positive</td>
<td>-</td>
<td>.10</td>
<td>.13</td>
<td>.14</td>
<td>.26</td>
<td>.32</td>
<td>.34</td>
<td>.14</td>
</tr>
<tr>
<td>2) Attitude to drugs: permissive</td>
<td>-</td>
<td>.12</td>
<td>.19</td>
<td>.20</td>
<td>.18</td>
<td>.21</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>3) Drug use: users</td>
<td>-</td>
<td>.08</td>
<td>.12</td>
<td>.20</td>
<td>.14</td>
<td>.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Attitude to sex: permissive</td>
<td>-</td>
<td>.17</td>
<td>.31</td>
<td>.09</td>
<td>.08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) Attitude to work: negative</td>
<td>-</td>
<td>.32</td>
<td>.265</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6) Age: low</td>
<td>-</td>
<td>.30</td>
<td>.065</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7) Education: higher (more)</td>
<td>-</td>
<td></td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8) Sex: men</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The appearance of only positive correlations in the matrix deserves an explanation and interpretation. In our view, the principal hypothesis finds here a substantial evidence: positive attitude towards the „drugs” does not stand alone, but is accompanied by positive attitude towards sex and a greater importance ascribed to leisure than to work. All these attitudes are, moreover, characterized by a similar pattern of relationships: younger persons, of male sex, with more formal education, single, exceedingly sociable (visiting each other at homes and frequenting innes and cafés — these seem to be the principle bearers of the deviant way-of-live. If under „sub-culture” we should understand a population sub-group which has a way-of-life of its own that deviates from the majority, from the dominant culture, then we can maintain that the present propagation of „drugs” is borne out by a specific sub-culture and that the sub-culture theory holds.

Some additional correlations pointing in the same direction were found in the matrix of the 26 subjective (attitudinal) items. There was, for instance, the item: „Parents have by far too little to say about their children, today”. This, if endorsed by the interviewee, was supposed to register his or her attitude towards the parental authority and the parents’ rôle in the educational process. The item (scored in five points) correlated with the items on sex (r = .28), with the item on „drugs” (r = .14), the attitude to work (r = .17) — in the same direction. The protagonists of the weakened parental authority are permissive to sex, to „drugs”, are more leisure- than work-oriented.

We also wish to point to the significant correlations of drug-use with
theatres and concert-visits; they definitely contradict the stereotype image of a drug-user as the drop-out, a person who avoids the social and cultural life of his community. The drug-user, as he appears in the focus of our questionnaire, is a more-educated, sociable being with more developed cultural habits than country-average.

For the theory of propagation of drug-taking habits, the above mentioned correlations are of special significance. Located with the lower age groups, the more educated persons (thus evidently: higher status groups), these habits bear all characteristics of other social innovations, fads or fashion, that also are either invented or taken over by the higher layers of the society (as a rule also situated in the large urban centres) to be passed down the social hierarchy to the lower and peripheral strata, later on.

Several other correlations do fit into this picture. We found more permissive attitudes to „drugs”, more factual knowledge of „drugs” and more actual drug use with persons from small parental families. We need not, perhaps, argue that both higher incomes and more education are situated just in these families. Both women and married persons are less involved in „drugs”; since the two groups are usually associated with the transfer of traditional culture to the younger generation, one expects the resistance to change to be located in them.

While launching these interpretations, we should evade a possible pitfall: do the correlations denote genuine relationships or are they of spurious nature? What might appear as causal of functional relationship vanishes after the introduction of a test-factor and considering the partial instead of the zero (product-moment) correlations. Several of these tests have been carried out.

The fear that the associations with the marital status are the by-products of „age” as test-factor, appeared non-founded: even in the roughly equal categories of age, single persons are more inclined to experiment with „drugs” and display more knowledge and positive attitudes. The independent influence of the two principal predictors, age and educational level, also was assessed: significant partial correlations were found by keeping either of them constant.

We also questioned the intriguing nature of such associations as that with the visits to concerts and theatres: education did not account for all variation; thus even persons of the same educational level are more frequently drug-users if visiting theatres and concerts (or the other way round). Similarly, the association between the visits to cafés and inns also holds when keeping age constant.
We also applied the technique to uncover some "hidden" associations yet, without much success, in this case: as the knowledge and the use of "drugs" are tied up with low age, and addiction to medication is somewhat more likely with older persons (more occurrence of aching disablements and pains), we kept the age constant. No increase of the partial correlation between drug-use (and knowledge) and addiction to medicine or pills was found. Neither were we able to raise the relatively low correlation between the incomes and drug-use by keeping age constant (probably, owing to the curvilinear relationship of incomes with age, no correlation appeared, in our matrix, of age with the income-level).

As is suggested by the foregoing report of negative correlations, the negative findings, i.e. associations that we expected but that failed to appear, are as important as the positive findings, in our eyes. They definitely deserve an interpretation. Though already suggested above, it is perhaps not superfluos to emphasize, that the usual drop-out theory of drug use hardly can account for the evidence of our data. The potential or actual drug users have not cut the thies with the society: their high participation in cultural affairs, high sociability, high social status (as indicated by both the incomes and the educational level), account for the opposite. Neither does the theory of sharpened generation-conflict find evidence in our data; if by the latter is assumed that conflict between parents and children result in family-relations that are characterized by tensions and negative evaluation of family-life, the theory simply does not hold. No association was found either between the attitude or the actual knowledge or conduct with regard to "drugs" and the evaluation of one's youth.

The theory of common basis of all kinds of "addiction" or compulsive harmful habits deserves a special consideration. We could reason that oral fixation accounts for any of these forms of "intake": smoking, drinking of alcoholic beverages, eating of sweets, excessive use of medicine or taking of drugs for non-medical purposes. If all of these simply were manifestations of a (hidden) impulse such as oral fixation (in the psychoanalytical theory), they would be resorted to interchangeably: if "drugs" were not available, alcohol might be used, or tobacco, or sweets. The same individuals would thus develop complex oral habits. This definitely is not the case in the sample under the study. Taking of illicit drugs hardly correlates with the feeling of being addicted to a particular medicine, it does not correlate at all with the need to have a particular (medical)drug at hand. Correlation of drugtaking with eating sweets is equally missing. Quite perplexing, in this respect, is the relationship of drinking habits to "drugs". Those with a higher consumption
of alcoholic beverages know the „drugs” better than the average population, though they approve of their use (the respective correlations being $r = .182$ and $r = .117$; see Table 2), they definitely are underrepresented among the actual drug users ($r = -.084$). This means that with regard to alcohol „drugs” function rather as a substitute than a prolongation of the habit. Thus only smoking habits do correlate consistently with all three aspects of „drugs” that we examined, which is not very astonishing, considering the way the „drugs” (especially the cannabis products) are consumed: by inhaling, smoking.

Even if, in spite of all this, we accept psychoanalytic predisposition to drug-taking (the oral fixation) as a starting point of explanation, it is evidently not a sufficient cause. Additional causes have to be brought into the picture to show why some categories of the population take to drugs, others to alcohol, and yet others, for instance, to tranquillizers.

Another hypothesis connects drug-addiction with a neurotic predisposition. As we witness by inspecting the last variable in Table 3, there is some evidence for this hypothesis: though uncorrelated with the attitude, the neuroticism shows a slight but still significant correlation with the actual use of „drugs” and the knowledge of „drugs”. A similar pattern of association also is shown when inspecting the variable „loneliness” which is actually an item that often forms a part of neuroticism-scales (Chi-square for a $2 \times 2$ table amounted to 16.12, which implies $P < .001$; phi = 0.100). Yet we should not exaggerate the impact of neuroticism; it „explains” much less variance than such simple predictors as e.g. age, marital status, educational level, or even visits to concerts and theatres.

Discussion and Evaluation

(a) Some Dynamic Aspects of „Drugs”
By interpreting the findings of this study, we should keep in mind the inherent shortcomings of the survey-method: it presents a static picture of what actually may be a dynamic process. For months we were analyzing data that, in fact, have been collected at one relatively short period of time, the second half of 1970. Yet, attitudes to „drugs”, the knowledge of „drugs” and the drug-use itself, were undergoing a rapid change, in the Netherlands. We pointed already out the theory of diffusion of innovations. The correlations seem to suggest that „drugs” are incorporated in a new way-of-life, and as such are spreading from the younger, single, more educated, male
groups to the general population. Evidently, this "new way-of-life" was not invented in the Netherlands; as several other fads and fashions, it originated somewhere in (the West of) the United States under the social conditions that only can be guessed: the long and cruel war in Vietnam uprooting thousands of American male youths out of unheard of luxury and sending them to the jungles and muds of Asia in full knowledge that their friends, lovers or siblings go on living in wealth and unprecedented technological boom (colour television, boating, motoring, etc.); the growing aversion to and mistrust of all major creeds and issues in the name of which wars are being fought; the close contacts of white and coloured under arms and the mutual exchange of habits and customs; yet, first of all: the flight from duress and reality that is almost too hard to bear — these and possibly other causes might have accounted for propagation of hashish and mood-changing drugs in the country where their mass-use first was noted. To Holland, mass-use of cannabis products was imported in a similar way through which we got rock-and-roll, hippies, flower-parade, the scientific innovations in the fields of simulation, psycholinguistics, and technological improvements or urbanistics changes: from California to New York and from there to London and Amsterdam. At the period at which our study was conducted, the process began to "hit", to catch up with, the large masses of population outside the sphere of "megalopolis" in West Holland (the area of Amsterdam — the Hague — Rotterdam forming a functional unity in the eyes of some planologists: the Randstad Holland).

We have a possibility to surpass the field of more assumptions by referring to the possibility which survey-research also offers: the comparison of subsequent surveys. As we mentioned in the foregoing sections, there have been two surveys held by the National Foundation for Statistics, respectively in 1969 and in 1970. Together with our own investigation, we dispose of three sources of data. It is interesting to compare the two subsequent surveys that utilized identical questions and thus made a comparison of shifts and trends in the distribution of answers possible and meaningful (12).

The interviewers of the Foundation worked with two questions to measure the knowledge of "drugs" among the population: (a) an open-end question simply demanding from the respondent the names of "drugs" he knew; (b) a more structured question in which the respondent was confronted with eight names of "drugs" and was asked to check which of them were quite unknown to him. To begin with the latter, the eight "drugs" mentioned (two of them were: alcohol, tobacco; no mention was made of amphetamines) were all known to 68 per cent of the cross-national sample, in 1969, and to
80 per cent, in 1970. This suggests that knowledge of drugs (which was seen to correlate with the use in our synchronic data) has considerably increased, by 12 per cent. This increase is less definite with regard to the specific „drugs“: L.S.D., opium, morphium were each mentioned by four per cent less people in 1970 than in 1969; this is probably on account of the interview-technique: hashish was mentioned by 45 per cent in 1969, and by 57 per cent in 1970; people probably associate „drugs“ much more with cannabis in recent times and do not search their minds for names of more „curious“ drugs.

While the knowledge of drugs may be said to have increased, the perception of their noxious nature changed but slightly. Scored on an eight point-scale of harmfulness, the eight drugs selected for the purpose by the researchers, preserved their rank-order, though the scores shifted to both extremes. We present the results (from Table 16 in Drugs in Nederland 2) in the order of decreasing „harmfulness“ by presenting the mean score in 1969 and in 1970, in brackets: (1) opium (2.8; 2.5), (2) morphine (3.5; 2.9), (3) heroine (3.5; 3.2), (4) L.S.D. (3.9; 3.8), (5) marihuana (3.9; 4.2), (6) hashish (4.0; 4.7), (7) alcohol (5.8; 6.5), (8) tobacco (6.6, 7.0).

There is a trend towards a polarization in the perception of „harmfulness“; this is especially strong with the perception of hashish. It is strange that in neither year L.S.D. was perceived as an especially noxious drug; it was judged as noxious as marihuana, in 1969; in 1970 a slight differentiation can be noticed. It also is clear from these data, that „drugs“ are viewed as quite distinct from tobacco and alcohol, the „drugs“ for centuries incorporated in the social system.

A further evidence that the trend towards polarization is due to the growing distinction between the „hard“ and the „soft drugs“ can be found in another table (op. cit., Table 36) of the report. The respondents were confronted with a statement that ran as follows: „There is a great difference between the various „drugs“. Some of them are more harmful than the others“. In 1969, 69 per cent agreed and 8 per cent explicitly disagreed with this statement; in 1970, the corresponding percentages were 75%, and 3% (there being 23% and 22% in the two subsequent years who declared not to have formed an opinion on the subject).

Shifts in normative aspects of „drugs“ are of no less interest. To begin with the perception of normative conduct, we may mention a trend towards a dissociation of drug-use and crime. A statement „The drug-use often leads to criminal behaviour“ was endorsed by 60 per cent of the sample in 1960, and by 58 per cent in 1970; yet the percentage of those who explicitly declared to disagree with the statement rose from 19% to 26%.

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There is a slow trend to a more lenient attitude, though a large majority still wishes penal measures against all kinds of "drugs". The statement, "In my opinion all 'drugs' should be forbidden in the Netherlands", was endorsed by 69% and rejected by 20% in 1969, while the corresponding percentages were 68% and 22% in the first half of 1970. Our own survey, held in the second half of that year, brought to light that 60 per cent rejected the statement that "use of 'drugs' should not be punishable" while 23 per cent endorsed this statement.

Drugs in Nederland 2 (Table 36) also presents the distribution of answers to the interesting item: "If I were offered a marihuana cigarette, I would try this once". Seven per cent endorsed this, in 1969, as compared with 11 per cent endorsing the item, in 1970 (the item was rejected by 87 per cent in 1969 and by 84 per cent, in 1970). All these data are thus consistent and hardly can be ascribed to change fluctuation.

There is yet another source of data, referring to the hard normative facts: the statistics of those trespassing the opium-act in the Netherlands, under which falls the use of cannabis products as well as other "drugs". We draw on the report of Tulkens and Gerner who analyze the official data of the Central Bureau of Statistics (The Netherlands Bureau of Census) (13).

Table 4. The yearly numbers of cases of certified violation of the opium act in the Netherlands

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Certified Cases Brought before Court (Convictions)</th>
<th>No. of Certified Cases Non-Prosecuted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>18</td>
<td>9</td>
</tr>
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<td>1970</td>
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It is not difficult to learn from Table 4 about the onset of the present "drug-contagion": until 1965, the amount of convictions was almost stationary; after a slow acceleration of the rate in 1966 we witness a sudden leap upwards, in 1967. Since that year, the number of all cases of violation almost redoubles each year. Very interesting is the proportion of the prosecuted to the non-prosecuted cases, a distinction made in the Netherlands, where the public prosecutor is entitled to abstain from prosecution when he does not find the latter opportune. This "opportunity-principle" implies that he decides whether the trial would be in the public interest or not. If we examine the two columns in Table 4, we notice that with the onset of "hash-invasion" in 1965, a more severe policy was coined: while until that year the number of non-prosecuted cases amounted to over 50 per cent of convictions, since 1965 through to 1969, convictions made out about two-thirds of all cases each year. In 1969, all of a sudden, the policy was changed and the numbers of non-prosecuted cases exceed those of convictions. As Tulkens and Gerner show, a similar change can be traced with regard to the verdicts: less severe punishments are meted out, after 1968, for the same transgressions — the purchase or mass-use of cannabis products or other illicit drugs.

Sociologically it is interesting to note that a community protects itself against the oncoming invasion of noxious and illicit habits by taking a hard line, of severe legal measures; after the habits reach a stage that they affect all circles of the population (and it becomes obvious that they cannot be stopped by legal measures alone) a more lenient policy ensues.

Even now, there is a paradoxical situation in this field. As we learn from the recently published governmental statistics, the total number of persons who have been identified as drug-abusers by the police in 1970, amounted to about eleven hundred. On the basis of consistent evidence of two of three samples (drawn independently of each other), we may estimate the number of drug-users at about 2 per cent of the total population of over 16 years of age. Even if we take the lower value of the confidence-intervals, (1.5%), we arrive at the estimate of some 140,000 persons who used drugs, in 1970, and were trespassers in the sense of law. This implies that in case of "drugs" the police and the jurisdiction trace down only a very small fraction of all law-breakers, that only one in over 140 cases gets caught in the maze of the organs of justice.

No wonder, that the sense of the present penal measures is questioned in the country; what is the sense of the law when it is not or cannot be enforced? As the report of the Netherlands Foundation for the Statistics shows, there is a trend towards the less punitive and a more curative or preventive approach to drug-users: 5 per cent, in 1969, and 15 per cent of the respondents,
in 1970, were of opinion that drug-users should not be punished but admitted for a cure in an institution; another trend differentiates between the users and the dealers and reserves the punishment for the latter (5 per cent in 1970; there were no respondents falling into this categories in 1969; see op. cit., Table 29). Yet another group agitates to get cannabis products quite free, arguing that neither tobacco nor alcohol are subdued to a similar severe legal control as hashish or marihuana, while their function is about the same. This brings us already to the topic of the next section. Before engaging in it, we wish to mention yet another interesting information that we distil out of these official statistics: the proportion of cases of drug (ab)users from the big cities (Amsterdam, Rotterdam, the Hague) among the total number of cases is, since about 1966, constantly dwindling down. It amounted to over 70 per cent then, was 69 per cent, in 1968, and is reported to be only 38 per cent, in 1970. The meaning of this is obvious: small places account for the large number of hashish and marihuana users, in the recent years. Thus we have here an additional (diachronic) confirmation of the diffusion theory, that views the drugs as a social innovation, spreading from cities to the country, from the higher to the lower strata of the society.

(b) Functional Aspects of Drugs

In the light of findings of our own project, the analogy between the habitual smoking and alcoholic drinking on the one hand, and the use of the „drugs” on the other, is less far stretched than it might seem. All these habits are acquired because of the soothing and relaxing effect they are assumed to exercise upon the nervous system of the users. Their latent function is different; as was found and argued in an earlier study (see footnote 6), both smoking and drinking are acquired in early adolescence by a large majority of users. They help to make the emancipation of the users manifest and known in their social environment: the independence of youthful males from their parental families, both in economic and social respects (they manifest their rôle of adults — or, better to say, would-be adults — by smoking, by buying their drinks or cigarettes for their own money). While smoking is progressive and continuous, there is a sudden break or interruption in the drinking-habits: instead of in cafés or pubs, the recently married males temper their drinking habits at first, and develop social drinking habits (in their homes, in the Netherlands), later on.

The almost exclusive drug-use by youthful persons, the most of whom of male sex, suggest that a similar social function is served by hash or marihuana as it is by the more ancient drugs. Without doubts, „drugs” also help the
youthful adepts to assert themselves, to solve the rôle-conflict of adolescence by manifesting their adulthood. Hashish and marihuana are inhaled; thus becoming a drug-user coincides with becoming a smoker. Yet there is more: the element of inherent risk is stronger with „drugs” than with tobacco or alcohol; there also is the illicit nature of the habit, that accentuates the „manly” rôle (the revolt against the majority); finally, there is the element of innovation: parents did not experience hashish and other „drugs”, sons and daughters have thus created a world really of their own, where admonitions and advices of parents and other members of older generation are senseless: they literally do not know what they are talking about. These three elements add, in our eyes, gravely to the appeal the drugs exercise upon the adolescents of our time.

One could ask the question: if the considerably harmless cannabis products help adolescents to assert themselves, if they serve thus a positive social function of rôle-manifestation and group-identification (even if they, in some cases will aggravate the generation conflict in families), why bother about them?

There are two reasons to worry, in our opinion: (a) the dysfunctional aspects of social drug-use; (b) the lack of moral regulations and protective norms.

It may be considered a general knowledge that alcoholism represents a toll we pay for our social drinking habits and for the adolescent drinking. With alcoholists, alcohol has a distinct dysfunctional aspect; it serves them badly since, instead of sociability, vitality, fullness of life it brings them social isolation, it sags their vital and financial resources and brings them down to a level of subsistance that makes some social workers compare alcoholism with a slow process of suicide.

Analogy between smoking of hashish and marihuana and the social drinking habits on the one side, and the fatal reversal of the habits to hard drug addiction and alcoholism, on the other side, is quite striking. Hashish smokers and social drinkers seek company and are sure to confirm their social status by the habit; opiate-addicts, amphetamine-users or users of many other „hard” drugs, often end in isolation and are deprived of any social status being often reduced to wretched beings. Yet too little is known, in our view, of the factors (physiological, psychological and social) that cause this fatal „reversal”; the questions of predisposition to a specific drug or a common dependence syndrome, all these and several others are tackled by experts of the present addiction research. They surpass the scope of this study that mainly deals with the mass-aspects of all these hazardous habits,
without which, probably addiction hardly would flourish as it does today.

The difference with, for instance, the drinking habits is striking, too. While "drugs" as well as alcohol are "socially prescribed" in certain circles and situations (i.e. people are expected to drink or to smoke marihuana or hashish), the society did not, as far we know, develop as yet the protective unwritten rules prohibiting drug-use in situations where it may cause direct harm. There are countless "don'ts" with regard to alcohol: drivers, pregnant women, small children, men on duty, etc., are expected not to take alcohol. Several of these, by origin unwritten rules, have been converted into laws. Though the situation is very dynamic with regard to drugs, a sharp differentiation between the kinds of drugs used, between the situation amenable and the situation dangerous to drug-use is not yet made by the general population. This lack of informal social control strikes any law reformer, earnestly considering to uplift the present ban on drugs, existing in most western countries: how to prevent or regulate the purchase to children, how about accidents under the influence of "drugs", how about the exploitation of various "drugs" by tobacco manufacturers for commercial purposes?

There is still another difference between the use of older drugs (nicotine and alcohol) and the new "drugs". The use of older drugs does not disappear with adulthood; tobacco use, as a rule, is intensified or remains stationary throughout the life-span. Alcohol use in the Netherlands, as known, undergoes a modification: a shift from adolescent week-end beer-drinking in the pubs, to adult, social drinking of wines or distilled beverages at homes. How about hashish and marihuana? If their use is incorporated in the entire new pattern-of-live, as the sub-culture theory implicitly maintains, we would expect institutionalized use of the new drugs throughout the society. It is probably still too early to try to answer the puzzling question, whether drug-use is merely a passing habit or whether it will stay with the users through their adult lives (14). H. Cohen gives, once more close attention to this subject in his report (see note 1) and presents some very relevant data. Out of the 958 drug-users he studied in the first five months of 1968, 21 per cent were young persons under 20 years of age, 49 per cent were persons between 20 and 24 years, 20 per cent between 25 and 29 years, while only 10 per cent were 30 years or older. A great majority of the users of cannabis products in his sample (892 persons), namely 71 per cent started with the drug-use in the period of five years preceding the interview, 85 per cent started within seven years, 95 per cent within the period of 10 years preceding the interrogation. This still leaves us with some 5 per cent who (assert) to use the drug for longer than ten years. Yet we should bear in mind, that Cohen studied the habits
of drug taking "from within the scene", where one vested his (or hers) status in taking "drugs" and probably boasted with his own experience. In Part II of his study Cohen mentions the substantial decrease in frequency of drug use (Op. cit. I, p. 60), with the persons over 30 years of age.

Since, as we learn from the criminal statistics, the onset of mass-use of hashish and marihuana dates back to about 1965, it is still too early to draw a far stretched conclusion on the subject. Our (sperse) data seem to conform the statement of Cohen that drug use flourishes until about thirty years of age. Unwittingly, the influence of one's own family-forming suggests itself to a sociologist, as a possible factor counteracting drug-use in a later stage of life. We noted the influence of marital status, that points in the same direction (see Table 2).

(c) The Sub-Culture Theory of Drug Use Revisited
The question of the foregoing paragraph may be rephrased in more general terms: If the drug-use is incorporated in an entire pattern of values, norms and attitudes, what is the actual nature of this subculture; and is it destined for all, to replace the present dominant culture-pattern or is it, by its very conception, designed for one of the sub-groups — the youth?

We have seen that the correlations bring the attitudes and the use of drugs into connection with a cluster of other attitudes: the attitude to sex, the attitude to work, the attitude to education (or, in any case: the educational rôle of parents). Thus far evidence seems to confirm the sub-culture theory of ,,drugs". But the conclusion will be somewhat different if instead of purely formal associations, the directions of the associations will be taken into account. If we examine the contents of this assumed sub-culture in more detail, we are struck by the relative absence of positive values and norms. We can interprete the drug users' attitude to ,,drugs" as an attitude against the majority-censorship of ,,drugs"; similarly their attitude towards the work is an attitude against the majority's worship of work; and they also show less need for the parental authority in educational process. There is, in our eyes, no general pattern of values or norms, unless one takes sensual satisfaction and the pleasurable state of mind as achieved by ,,drugs" for a value and norm. The question then arises: can a culture be built on hedonism, and hedonism alone? The question is not wrongly put, for in spite of various kinds of mystical creeds that accompanied its origin (especially L.S.D. formed an ample occasion to propagation of Eastern mystical experience), none of the underlying currents dominated the scene, none of them outlived a period of a few years. Ripped of its original positive creed, ,,drugs invasion"
presents itself distinctly as a protest-movement, a movement "against" (the established society).

This protest goes further than the older trend towards secularization, against the moral philosophy of Christian churches that still prevails in western societies. There is, to mention one element, the flight from reality, a new escapist mentality, thereby a strong irrational feature that was unknown to anti-clerical humanists and rationalists in the past.

Without engaging in this rather social-philosophical discussion, we only wish to point to the facts mentioned in the foregoing paragraph, in this connection. No wonder people abandon or do not acquire drug-taking habits when over thirty years of age: an age when to teach and educate one's own children. What cultural values are to be passed by the protagonists of the new sub-culture to the generation of their children? It seems that the "drugs invasion" comes to its natural end, there.

(d) Future for "Drugs"?
Forecasting social phenomena has, of old, been considered a risky enterprise. With regard to the fads, changes in artistic or literary style, in fashion, with regard to religious or revival movements — they border on impossibility. Sociologists have not foreseen the onset of "drugs"; can they foresee their future development or end?

Fully aware of the gravity of the question, we limit ourselves to the consequences of the theories spelled out in this paper. If, as we maintain, "drugs" must be seen in the perspective of the social diffusion theory, embedded in what we might call the contemporary "protest movement" with its chiefly negative cultural values, what is the consequence of this for the nearest future?

The diffusion knows its physical and its socio-cultural dimensions, both of which coincide to a large extent. The new habits are likely to spread geographically from the urban and metropolitan areas to the very forgotten corners of the country. Similarly, they probably will cease to be a privilege of better educated, more cultural children of wealthy families and will filtrate downward the social hierarchy.

It can hardly be expected that the "sub-culture" survives as a cultural manifestation in this process. The basically a-cultural features which we signalled above are likely to be intensified by the fact that less educated persons are going to become involved with "drugs", by now. Moreover, they are likely to be persons without membership-ties with voluntary organizations and without developed and cultivated habits of visiting theatres, concerts.
and other cultural manifestations. While for the present "generation" of hashish-users, "drugs" form only an exiting supplement to the enjoyable various things life has to offer (prevailingy in its material and cultural spheres), the second "generation" might easily seek in them legitimation of their own social failure, an escape from demanding social claims (of building a career), a substitute for the total (established) culture which they reject.

If this gloomy perspective comes out (15), we are likely to be confronted with high frequency of addiction to hard drugs, for it is in the situation of isolation and rejection that the hard drugs-use flourishes. Though thus the drugs-movement may come slowly to its end, it will leave a larger number of human victims as its aftermath.

(e) A Few Conclusions and Practical Suggestions
In the preceding pages we gave an analysis, at one moment, of what appears a dramatic process. Thanks to the work of others, the repeated survey-research and other forms of social investigation, we obtained a picture of the invasion of the Dutch society by a mass-propagation of illicit drugs-taking habits. We have seen that the society defended itself by reinforcing its repressive measures, at first. We also witnessed that these measures have utterly failed to stop the propagation of the new harmful, hazardous habits (even though we would probably witness an even more rapid and confusing drugs-contagion, if no measures, especially those affecting the dealers and peddlars, were taken).

In the second phase, the Dutch authorities bestowed many resources on organizing research into "drugs", the rescue-centres for the addicts, and, on public instruction, especially for the school-children.

One of the evident recommendations would of course be: to merge the two kinds of measures. Since threat of repressive measures is not efficient to stop the drugs-contagion from spreading, the pragmatic function of the law should be emphasized: legal and curative measures should be combined, as in the case of alcoholic drivers, in many European countries. In this respect we bring no news, since interdepartmental committees study the question, in the Netherlands (a combined effort of the ministries of health, justice and social work).

As sociologists, we are more concerned with the prevention of the addiction than with the cure of its awkward effects. Even more, it is the mass-propagation of the new hazardous habits that should be our prime concern. It is astonishing to note, in this respect, the cultural lag existing in dealing with similar phenomena, as described in this study: the drugs-invasion from
abroad. The Dutch society, facing the danger, applied measures that all stem from the nineteenth century's political system and philosophy: (a) penal, repressive means; (b) individual social work to assist the "victims"; (c) rational public-instruction. This sole ressort to old liberal means in a post-socialist period is not likely to be an effectual policy how to deal with the modern mass-phenomena.

Of the three, the public instruction had yet the greatest chance to avert some of the most hazardous aspects of drug-use. Yet, as this and similar investigations show, the correlations of factual knowledge with attitudes are not too high. Irrational social (and also, religious, political, ideological) movements cannot be dealt with rational means alone. Is it astonishing that the campaigns against smoking of schoolchildren are so ineffectual, as a rule? The present generation of parents and teachers takes much pains to explain to children that smoking will cut down their life-expectations by a few years (some fifty years ahead), while boasting at the same time of their own heroic deed or attitudes during the last war, or pointing out to the duress they lived through at that time (often the "instructors" do not abandon the habits themselves, "the word of mouth contradicting their deeds of mouth" and creating a sphere of ambivalence which seems to stimulate both smoking and drinking).

Rather than to ressort to rational instruction alone, it seems more expedient to analyze the social roots of the mass-habits or mass-movements and try to strike at them. By knowing the social functions the drugs-taking habits fulfill in the society, we might try to look for equally appealing, yet less noxious substitutes.

Stated in these terms, the question boils down to the following. What to offer to the youths in the western countries to give them a feeling of the fulfilment of life, of a historic message assigned to their generation, the status of adulthood and independence making them (in their own eyes) equal, if not better, in comparison with the older generations? A puzzling question, perhaps more suitable for a preacher, than a man of science to ask. It still is tied with the results of our analysis that decidedly has shown the drug-problem to be a problem of youth. Unwittingly we think of H. G. Wells who saw here one of the greatest unsolved problems of any peace-period: how to keep the youth busy and give them thrill of life without a war. He proposed to make the youth acquainted with dangerous and risky occupations to show their prowess, courage and adulthood (16).

Only to suggest what a wide range proposed measures against the "drugs" take, we mention the "solution" of "liberal minded" parents who remark
to prefer their children to be „turned on sex“ rather than to run the risk of drugs (and of arrestations, we are inclined to add).

It is obvious that where such contrasting views and solutions are offered, hardly any panacea can be suggested. More research, and research more directed on the problem at hand would be required if sociology is to play an active rôle of guardian of social well-being. Similar to the „rumor-clinics“ of Postman in the second World War, experiments could be arranged how to channelize the explosive movements of mass-contagion by ridding them of their harmful elements without making them loose their emotional appeal.

This will not say, that scientists monopolize a solution to the present problem. In fact what is needed is: social inventions rather than pure knowledge. It is striking that in contradistinction to natural science, social technology is so slow to develop.

Thus workers and experts of all walks of life are welcome to help to seek a solution for this major problem of our time: to find a harmless but appealing conduct and way-of-life for the younger generation that would make their adulthood manifest to all and that would give them the feeling of belonging and group identity they often are lacking today. It would be a nice surprise if the youth found the solution by themselves. For only after the solution is found, will the youth be free of all forms of tutorship that now threaten their movement in the form of police-officers, social workers, psychiatrists, psychological consultants and other experts, all offering a helping hand. Is it not the time that those most abounding in energy to help the others do get rid of this little inspiring rôle of „children in need of help” and take their fates in their own hands? We wish them inspiration and strength for this form of protest.

Notes

*This report is mainly based on a broader research-project that was carried out by the Department of Sociology of Groningen University, in 1970. It was aimed to canvass the general health-habits and the pattern of medication in a probability sample of the Dutch population. For completeness and because of general interest, questions on illicit drug-use were added to the questionnaire. We are indebted to the students and the staff of the Department of Sociology who helped to collect the data. Mr. G. W. Meynen, a research associate, helped to design and supervise the interview-campaign. Mr. H. F. Walta, Mr. L. J. M. Middel and Miss C. S. M. Kaufmann assisted us with the processing of data; Mr. M. H. Sanders wrote the programs for cross-classifications and constructed the Guttman-scale. Mr. J. Haan helped to draw the final correlation matrix in cooperation with the Computer Centre of the Groningen University. Miss H. F. Huizing retyped this text. All of them have our thanks; none of them is responsible for the
interpretations and opinions expressed in this paper. The combined project (into the use of the prescribed and the proscribed drugs) was made possible thanks to the grants which the Department of Sociology received from the Ziekenfondsraad (the Health Insurance Funds Council), the Health Insurance Funds in Enschede, and the Ministry of Social Affairs and Public Health.


2. W. Buikhuizen, H. Timmerman, „Druggebruik onder 'middelbare' scholieren” (Drug use among the secondary school pupils) in Nederl. Tijdschrift voor Criminologie, 1970, pp. 175-186. It should be noted that the English word „drugs” has been taken over by the Dutch to denote hashish, opium and other drugs taken for non-medical use. It is in this sense we use it here. It will be used with inverted commas to distinguish it from its more general counterpart throughout this report.

3. Nederlandse Stichting voor Statistiek, Drugs in Nederland, oktober 1970. There has been a replication of the study by the same Foundation, the findings of which have been published in 1971: Drugs in Nederland II. We refer to this second report in the final sections of this paper where we try to trace the contemporary trends.

4. Mr Cohen is likely to elaborate this point in his doctor’s thesis (i.e. in the final draft of the book he is writing on the subject). In his present formulations we notice a certain conceptual vagueness; in his contribution to the book Drugs in Nederland that appeared under the editorship of W. K. Dijk and L. H. C. Hulsman in Bussum, 1970, Mr. Cohen is inclined to identify the concept of sub-culture with that of „drug-scene”, drawing on M. Silberman, Aspects of Drug Addiction, London, 1967: the total of social possibilities and cultural influences stimulating the non-medical use of drugs. The vagueness is not only in the interchangeable use of „drug-scene” and „sub-culture” but in Cohen’s statement that people of different cultural background are united by their drug use in a drug-scene (op. cit. p. 31-32). Thus a single habit is being generalized to an entire sub-culture, the way-of-life.

5. Only a rough sketch of the methods followed and the results obtained will be given here; for an exact evaluation and a more elaborate treatment, the reader is kindly referred to the final report on the combined project, likely to appear soon.


9. We have a difficulty to find a suitable English translation; the Dutch word used was less colloquial, „the means”: „Kent u namen van verdovende of geestbeinvloedende middelen (drugs)?”.

10. For years, the Department of Sociology in Groningen examines large matrices of data both by parametric and non-parametric techniques. Results are encouraging for standardized use of correlations for the sake of testing of significance of associations. Our experience coincides with that described by Sanford Labovitz, „Some observations on measurement and statistics”, in Social Forces, Vol. 46, no. 2, 1967 pp. 151-160, and his „The assignment of numbers to rank order categories” in Am. Sociological Review, 33 (June, 1970) pp. 515-524;
when assigning numbers at random to ranks (by preserving the order), Labowitz obtained correlations that differed only slightly.


12. It is a pity that two different samples were used. Re-interviewing of the panel would have made a mathematical analysis of the switchers possible, thus improving our insights in the dynamics of „drugs”.

13. J. J. Tulkens, M. S. A. Gerner, Overtreding van de Opiumwet. Een beschrijvend statistisch onderzoek. (Violation of the Opium-Act), Ministerie van Justitie, The Hague, May, 1971. We are grateful to the members of the Working Group on „Drugs” (Chairman: Dr. P. Baan, the Secretary: Mrs. R. E. van Galen-Herrmann) for the many stimulating remarks on the subject exchanged in common discussions. The above mentioned report was forwarded to us, together with a real stream of relevant literature by the good care of the Secretary.

14. This problem was suggested to us by Mr. W. G. Mulder, the psychiatrist, in the Working Group on „Drugs” (chairman: Dr. P. Baan, the Inspector of the Mental Health).

15. The conversation with Mr. J. Hamel, a sociology-student in Groningen who spent months as a „Release”worker in the local rescue-centre he helped to organize, confirmed us in the opinion that the above mentioned hypotheses and speculations are not entirely void of reality. In Groningen, drug-use is spreading in the direction suggested. Moreover, the relatively more simple youth from the villages seem easier become prey of dealers in „drugs” than the more sophisticated upper and middle-class urban youth.