



ARTHUR ANDERSEN & CO. CHARTERED ACCOUNTANTS

Representatives of our Firm will be on campus to interview students, Tue. Nov. 14; Wed. Nov. 15 & Thur. Nov. 16 from the faculties of Commerce, Science, Engineering and Law who are interested in a professional public accounting career.

Offices in
VANCOUVER, CALGARY, WINNIPEG, TORONTO & MONTREAL

Further information and arrangements for interviews available through the Student Placement Office.

Ernie's STEAK PIT LTD.

Licensed Lounge
Banquets to 200
Open 10:30 a.m. to 1 a.m. Daily
Sundays 5 p.m. to 9 p.m.

reservations: 469-7149
40 Bonnie Doon Shopping Centre

CUT THIS OUT

TREND SETTERS HAIRSTYLISTS

SPECIALIZING in SHAPING
DESIGN, BODY WAVE, for
MEN & WOMEN.

CALL 434-8781 for appointment
(coupon worth \$1.00 upon presentation)

CUT THIS OUT

- JET SETTER HAIR DRYER
dries and styles your hair
\$9.95
- BENYLIN DM COUGH SYRUP
for effective relief of coughs due to colds
8 oz. size \$2.63

WE ALSO CARRY A COMPLETE LINE OF EYE DROPS
AND CONTACT LENSE CARE SOLUTIONS.

Sprague DRUG STORES
Photofinishing
Color - Black & White

11712-87Ave. 433-6636
Conveniently located near campus
STORE HOURS 9 AM TO 9 PM MONDAY - SATURDAY
12 PM TO 4 PM HOLIDAYS

PART-TIME EMPLOYMENT

REPRESENTATIVES REQUIRED

by

SECOND LOOK PROJECT

COMMISSION PAYMENT

CONTACT :

STUDENT UNION RECEPTIONIST DESK

2 nd floor SUB 432-3117

head on

In the last edition of the Gateway, E. E. Daniel, professor of pharmacology, argued in head on that "there is clearly no reason for continuing to make the possession and use of marijuana illegal." Today, K. A. Yonge, professor of psychiatry, responds that he has "come to consider the non-medical use of drugs, including cannabis, a serious impediment to personality maturation and development."

by K.A. Yonge, M.D.

What needs to be done to restrain the non-medical use of drugs depends on how serious a problem it really is - how harmful any of the drugs involved prove to be. And that is still much in dispute.

The dispute is not so much because there is not enough scientifically reliable knowledge, but rather that reasoned deductions from observable facts about the central issues have been confused by a welter of more trivial experimental data and opinion on peripheral factors. The peripheral factors studied have been those more readily measurable - neuro-muscular coordination, reflex reactivity, memory-recall of selected information, particular dimensions of visual-perception, and structural changes in brain tissue. Because these have been more readily testable in a laboratory they have been put forward and accepted as of the essence of scientific investigation. But impeccable laboratory technique is no proper substitute in science for comprehensive analytical reasoning on reliable data from any source. Focusing attention only on these peripheral data in appraising drug effects puts the issue out of perspective.

The central and crucial question has to do with the effects of the drugs on complex mental/cerebral processes of awareness, perception, emotion, reasoning and attitude. This is not the field of pharmacology. It is the field of psychopathology. This knowledge of drug effects comes necessarily from the study of subjective experience, from the study of what users have reported of their drug-induced experiences. By now that amounts to a vast collection of relevant data. Allowing for the fallibility of subjective reporting, and for the uncertainties of the composition of "street drugs", a reliable consensus has been determined and can be related to known Neuro-physiological activity of the brain.



There is no reasonable doubt, in psychopathology, that all the drugs in question alter, in some way, the state of awareness, perception, emotion, and reasoning. But in what ways? Then the crucial question is - are these effects lastingly harmful in any way?

Brain function is based on series of neural circuits with synaptic connections. The mental aspect of brain processes, correspondingly, depend on the efficiency and integrity of these connections. In the normal well integrated state, perception of the environment is reliable (though not absolutely so), emotion is appropriately associated with the given circumstances, and reasoning, relevant to the informational input, follows an orderly course. Thus mentation proceeds with a dependable regularity, systematic order and global integration.

Mental disorder occurs when the brain circuitry evidently becomes disrupted, either in any of its particular functions, or more generally. Then perception may be distorted, emotional experience and expression

inappropriate, or reasoning illogical or irrational.

All psychotropic drugs - and this goes for all the "street drugs", including cannabis - disorganize the mental processes of the brain in some of its functions, as if by disjunction of the normal flow and routing of neural impulses through the brain circuits. Although each type of drug tends to act somewhat selectively on one brain function or another, for example, one more on visual perception, another more on mood, and so on, most drugs affect more of these functions than one. The "psychedelic" drugs, better called illusinogenic, act markedly on the perceptual processes (though not with all subjects); others act more on the affective processes to alter mood. The distortion of reasoning frequently turns towards distrust and suspiciousness, even to the point of paranoia.

All of these alterations are of the same order, though not necessarily to the same degree, as psychotic disorder - and presumably through the same neuro-physiological processes. A drug "high" is essentially a psychosis - a toxic psychosis - however pleasant, or however transitory it may be.

If the brain changes are merely transitory, leaving no trace of structural damage to the brain substance - and there is no conclusive experimental evidence of this - then we might dismiss as inconsequential the habit of the non-medical use of drugs.

But there is a further consideration of much greater importance. The brain stores all its input, its perceptual and conceptual input, what is sensed and feels and the ideas that occur to it. And these memories lie by no means dormant; particularly active are the more impressive "bits". The integrity of personality, emotional stability, habits of thinking, prevailing attitude, and the whole "philosophy of life" are liable to be affected by these experiences persisting in memory.

Drug-induced experiences, particularly with "psychedelic" drugs, are often highly impressive and thereby are most liable to influence the psychological patterning. It is important, then, to recognize the quality of such impressions.

From our present knowledge of how the brain works, it is postulated that psychedelic drugs, as it is with the endogenous biochemical aberrations in schizophrenic psychoses, serve to divert the brain to its more primitive action (in an evolutionary sense) - in a mental sense, to its prelogical, chaotic state, in which thinking is more romantic than realistic and in which sensory-perceptual impressions predominate over logical deliberation.

Unlike normal nocturnal dreams, which are evidently manifestations of such a pre-logical, primitive state of brain activity, these drug-induced experiences are not as readily distinguished from reality. Instead they are liable to be mistaken for an entree to a fuller, more diversified experience of life. The primitivisation and chaos in this state of mind is liable to be regarded as progress rather than regress. And it may lead to adopting a correspondingly chaotic or nihilistic philosophy of life - a fitting ideational pathway to the "apathetic syndrome" mentioned in the preceding article by Dr. Daniels.

With the understanding of these psychological consequences of drug-induced, primitivised experiences, it could be predicted that the substantial use of any illusinogenic chemical (this includes cannabis) would hinder personality maturation, especially during its most formative stage in adolescence and early youth. And there is growing evidence that this is so.

It is on these grounds that I have come to consider the non-medical use of drugs, including cannabis, a serious impediment to personality maturation and development. And it seems likely, though not subject to proof, that the peculiar effects of the illusinogenic substances, such as cannabis, would predispose the intelligent young user to retreat into that curious mixture of hedonism and nihilism so prevalent today as a philosophy of life.