

Psychopharmacology and the human condition

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Contemporary human life is very different from the ecological and social environment in which human beings evolved, and which shaped human psychological architecture¹. The human mind is adapted to maximize reproductive success under very different conditions from those in which it finds itself². This has profound implications for a consideration of the attainment of human happiness and fulfilment; so much so that, contrary to the views of some evolutionists³, I believe psychopharmacology has a fundamental role in enhancing the human condition.

REASONS FOR ENDEMIC PSYCHOPATHOLOGY

When an animal is living under the same ecological and social conditions as those in which it evolved, the gratification of its instincts will, on average, maximize its potential for reproduction. Whatever makes the animal 'happy' will also be reproductively adaptive. But this does not apply to contemporary humans; our instincts are no longer a good guide to what is good for us. More specifically, human instincts evolved in response to palaeolithic, nomadic, hunter-gatherer culture, and these instincts still make up the psychological architecture of the human mind since there has not been enough time to evolve new ones¹. This is one reason for human psychopathology—the mismatch between stone age brains and silicon age culture. Another reason for psychopathology is that instincts do not tend towards maximizing happiness as an end in itself; happiness is only a *means* to reproduction. So even in a natural environment, humans would not tend to be optimally happy.

Human happiness under modern conditions is neither expected nor necessarily adaptive—partly because ancient instincts are operating upon modern stimuli, partly because biological 'adaptiveness' works towards enhancing reproduction rather than personal satisfaction, and partly because humans have devised non-adaptive ways of getting happy.

CAN PSYCHOPHARMACOLOGY IMPROVE THE HUMAN CONDITION?

It may sound a tall order for anything as crude as psychopharmacology to accomplish anything so profound as improvement of the human condition. Presumably, under

natural conditions a simple chemical would not be able to improve all-round adaptive human behaviour. But our conditions are very far from natural; and what seems normal may be sick. It is probable that most humans throughout recorded history have lived in a 'sick society'—a society in which almost everyone was ill, people were physically malnourished, stunted and mentally impaired; a society in which most of the populations are potential 'patients' with the ability to benefit from appropriate treatment.

In view of the likelihood that the normal human condition is suboptimal and that psychological dissatisfaction and psychiatric 'illness' of various kinds is endemic, in principle there is enormous scope for psychopharmacology. The assertion that psychiatric illness is endemic may seem an exaggeration. However, in addition to the formal diagnoses such as major depression, schizophrenia and the anxiety states, there are a large number of common illnesses that profoundly affect psychological variables such as mood, motivation and concentration. Examples would include upper respiratory tract infections, indigestion, hayfever, backache and joint pain; the list is long. All these physical conditions have direct effects on the mind in ways that are becoming clearer as the relationship between brain and body is elucidated⁴.

On top of these physical illnesses are social problems. The pressure of long-term planning, time management and multi-tasking in a complex and changing world is responsible for a great deal of tension. There are social pressures—the threats of continually meeting or living among vast numbers of people, mostly strangers. At the same time loneliness is an ever-present reality. Even among the 'successful' and prosperous there are the never-ending torments of striving for status.

Perhaps all this explains the widespread desire for pharmacological oblivion, the desire for escape as a relief from these sources of angst and misery. But oblivion represents only a temporary answer, and one which, when deployed too frequently, destroys the possibility of appetitive gratification. A sequence of consummative 'highs' is the recipe for a meaningless life. I have never heard of a happy junkie.

TECHNOLOGIES OF GRATIFICATION

When an instinct is satisfied it 'rewards' the organism with a positive or 'gratifying' emotional state. Following Donald

Klein's nomenclature⁵, I have subdivided gratifications into the consummative and the appetitive.

Consummative gratifications create a condition of ecstasy or euphoria—a short-flood of pleasurable satisfaction that is its own justification. Biological examples include the orgasm, being praised, eating and drinking, and escape from danger. The desire for consummative gratification could be described as a craving.

Appetitive gratification by contrast, is the fulfilling of purpose, the sense of one's life being an unfolding story. Its biological basis is the highly evolved human *social* intelligence—specifically the 'theory of mind' mechanism and the ability to imagine human dispositions, motivation and intentions⁶⁻⁸. Appetitive gratification is therefore a matter of participating, intellectually and emotionally, in the unfolding of human character and relations over real time. The lack of appetitive gratification results in boredom, loneliness, anomie.

Technologies of gratification, of which psychopharmacology is an example, are human-created mechanisms that aim at the satisfaction of evolved instincts. In doing so they bypass the biological goals which the instinct evolved to satisfy. The implicit aim of technologies of gratification is to stimulate 'happiness' directly, rather than by stimulating a biologically useful behaviour. Such technologies include much of that which we value in human culture—such as art, science and religion—as well as much that is generally deplored.

The technologies of gratification also divide into consummative and appetitive. Consummative technologies seek immediate, short-lasting and subjectively pleasurable bodily states from satisfaction to extreme ecstasy. Nicotine and caffeine are mild examples; heroin and cocaine are from an extreme end of the spectrum. Other technologies could include the use of pornography to attain sexual arousal, watching a football game to attain a state of socially participatory excitement, or gorging on crisps, chocolate and ice cream to stimulate evolved human appetites for salt, sugar and fat. Or, indeed, doing all of these at the same time.

Appetitive technologies of gratification, by contrast, are meaningful activities. They seek to provide a surrogate for social life—a narrative structure which one can opt into. Appetitive technologies are designed to engage people, assuage loneliness, and give shape and direction to imaginative life. Examples include broadcast soap operas, large novels in which we can become immersed for days or weeks at a stretch, and the daily news comprising coverage of familiar 'personalities' such as royalty, film stars and politicians. It has even been argued that human language evolved in order to allow 'gossip' about social affairs—who

is doing what to whom⁶. In a tribal situation, such information is vital to reproductive success; under modern conditions the subject matter of gossip is typically remote and irrelevant since appetitive technologies have developed to supply a stimulus that is hyperstimulating to our imaginative life⁷.

The typical complaint of disaffection and dissatisfaction in the affluent contemporary world can be seen as related to the lack of satisfying appetitive gratification in a context in which there are rich technological possibilities for consummative gratification. Consummative gratification technologies are often used to attain oblivion and escape from the failure to achieve appetitive gratification. In an unnatural world, technologies of gratification are both unavoidable and fundamental to human satisfaction. The question is not whether we should use them—it is how we should use them.

PROSPECTS FOR FULFILMENT

The prospects for spontaneous and widespread appetitive gratification look slim: we do not seem to be heading towards a better world. Leaving aside the grim nature of the 'third world', trends in affluent Western society are towards perceived economic efficiency; which generally means massification, competition, regulation, inequality, squalor, instability, geographical mobility and more loneliness for many people.

Maybe things will improve, maybe they will get worse, but it seems very probable that this is the kind of world most people will continue to inhabit for the foreseeable future. Indeed, the interest in psychopharmacology has grown inversely with the decline of belief in utopian politics. Political idealism is now just a temporary teenage phase. The rest of us are starting to realize that, if we cannot change the world to suit human nature, our only option is to change human nature to suit the world.

So what can psychopharmacology do to improve the human condition? For a start it can help cure illness, relieve symptoms and enhance function; so we can get on with life. Analgesia, for instance, is one type of indirect but vital psychopharmacology. Then again, many people use drugs to fit themselves to the rhythms and demands of industrial society. Drugs may provide energy or alertness on demand by the use of stimulants such as caffeine. This may be necessary in coping with long hours of work, when we feel ill or tired, and when high efficiency is expected. And at the other end of the emotional scale, people use drugs such as alcohol for unwinding and assisting social intercourse. Indeed, anxiolysis is probably the most sought-after psychotropic drug effect, and alcohol the most popular of the powerful psychopharmacological agents.

What of the disadvantages? Well, effective drugs always have side-effects, and there is always a risk involved—as well as expense³. But if pharmacology is to be used as a fundamental technology of gratification, the moral question is, who should decide whether the risk is justified?

ANTIDEPRESSANTS AND THE HUMAN CONDITION—A TEST CASE

Peter Kramer's *Listening to Prozac* posed the question of the proper role of 'cosmetic psychopharmacology'—the use of drugs to improve mental states in non-ill 'normal' people, outside the usual disease diagnostic boundaries⁸. His case histories of patients who report feeling 'better than well' on fluoxetine are supported by many reports in the psychiatric journals of similar responses from tricyclics and monoamine oxidase inhibitors⁹. These anecdotes about 'antidepressants' have recently been given striking support by a formal double-blind, placebo-controlled trial by Knutson *et al.* which found exactly the effects Kramer had suggested—a diminution in of unpleasant emotions ('negative affects') combined with an improvement in social functioning ('affiliative behavior') in apparently normal subjects given paroxetine¹⁰. And the subsequent issue of the *American Journal of Psychiatry* described a double-blind study in which paroxetine reduced anger and suicidal behaviour even in individuals who did not fulfil criteria for a diagnosis of major depression¹¹.

The evidence is mounting that a substantial proportion of people who show no detectable sign of psychopathology can benefit in a very fundamental way from taking one or another of the 'antidepressant' drugs. The reader of this sentence may be such a person—there is no way to know without trying. This raises new moral issues, because we are not talking about drugs that make you high: these are drugs with the potential to give appetitive gratification, to give life more meaning. When they work, they are true

'happy' pills, where happiness is taken to be the legitimate goal of life.

The dilemma is that such agents are potentially dangerous, hence are available only on prescription. This puts the doctor in the position of gatekeeper to a satisfying life—an awesome responsibility. Putting aside the secondary issue of cost (these drugs are much cheaper than tobacco or alcohol), a change in the role of the physician seems indicated. I would argue that the physician has a role in informing and advising but that, so long as no actual harm is expected, prescription for antidepressants should be available *on request*. Why should a doctor hold back the keys to possible fulfilment?

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