

V Addiction

A COMMON OPPOSITION

Either addictive behavior is freely chosen, and addicts are free to resist and hence responsible.
Or it is the result of a pathology, and they are not free to resist and hence not responsible.

DESIDERATA OF ANY ACCOUNT

Addictive behaviour is not compelled.

Flexible; shows price elasticity of demand; responds to other incentives; can be escaped, and typically is by the addict's early 30s.

Addictive behaviour is nonetheless pathological.

Rational choice models don't accommodate the data, esp. the high risk of relapse after withdrawal, and the sensitivity of craving and relapse to cues. Not merely habitual.

MODELLING THE PATHOLOGY I: WAYWARD PLEASURE

An early view: addictive drugs hijack the pleasure system. By interfering with the dopamine system they give intense pleasure; so addicts, wanting pleasure, form instrumental desires for them.

MODELLING THE PATHOLOGY II: INCENTIVE SALIENCE

Wanting is relatively isolated from liking (separate behavioral measures for each), from anticipated liking, and, in human beings, from beliefs about what is best. Dopamine regulates (one kind of) wanting. It generates intrinsic desires: a disposition to form occurrent desires given certain cues.

FORMING DESIRES

Human beings, like rats, are opportunistic and adaptive in their eating. Dispositional desires are strengthened when foodstuffs turn out to be better (more liked, or better in some other way) than expected. The signal to achieve this perhaps uses standard reinforcement learning algorithms:

$$\text{mean}_{n+1} = \text{mean}_n + (I/(n+1)) [\text{value}_{n+1} - \text{mean}_n]$$

This sets up dispositions that are triggered when the foodstuffs are encountered, giving rise to occurrent desires.

Addictive substances artificially boost or imitate this signal, giving rise to wanting without liking. Effects on both immediate wanting and long-term wanting. Wyvell findings. Long term wanting is neither a standard disposition nor an occurrent state; it is more like a disposition to enter an occurrent state given a certain cue. And it in turn is regulated by other features of the creature's internal state e.g. level of hunger, salt deprivation.

WHAT'S THE POINT OF LIKING?

Liking as way of getting things from the stimulus response system into the goal based system.

WHY DOESN'T THIS RESULT IN COMPELLED ACTION?

In human beings wanting (craving) does not lead immediately to acting. Addictive desires are not undermined by the knowledge that they will bring no pleasure; but they may be resisted by self-control.

Hard work: Baumeister etc.

Ideal would be to ignore them (Mischel; Gollwitzer) but that isn't available (esp. if dopamine works also as a gating signal). Reconceptualization; distraction; toughing it out.

THREE OBVIOUS POSSIBILITIES

Either: the desire gets less (the long march to Parkinson's).

Or: the motivation to employ the self-control gets stronger.

Or: the self-control gets stronger.

Or some combination of these.

In any case, the interesting question isn't: Is the agent free to resist?

It is: How much hard work does it take to resist?