initially the hard determinist denial of moral responsibility seems distinctive and full-blooded: no one deserves blame, credit, special treatment; punishment and reward are basically unfair, since one's character and behaviour result from forces beyond one's control. Such strong assertions herald a radically new approach to problems of reward and punishment and just distribution. But gradually the radical edge is dulled down by social policy considerations: no one deserves punishment, but we must protect society from criminals, and thus offenders may have to be isolated from society (imprisoned) and (regretfully) perhaps punished to improve them and deter others; and no one deserves reward, but reward is an effective motivator, so those who work hard and deliver the goods must continue to be rewarded. The policies proposed by hard determinists become practically indistinguishable from the policies advocated by those (compatibilists and libertarians) who champion moral responsibility. The fervent denial of moral responsibility apparently degenerates into petulant insistence on a difference that makes no difference.

But in fact the denial of moral responsibility is a significant moral assertion, with important practical implications. Its significance has been blunted by inadequate knowledge of the causes and control of human behaviour. The hard determinist denial of moral responsibility is a case of ethical insight ('all are equal in deserts') outstripping scientific development, of ethical advances awaiting improvements in psychology. No matter what view is held of moral responsibility and the desert of punishment and reward, so long as rewarding virtue and punishing vice are the most effective means of shaping behaviour then such practices remain in effect. Those who regard moral responsibility as genuine and those who think it a necessary fiction wind up advocating...
similar measures. But with the development of a science of behaviour, the full significance — both moral and practical — of the denial of moral responsibility can now be seen.

When behavioural science (with its improved account of how behaviour is shaped by patterns of contingencies and schedules of reinforcement) is wed to hard determinism (with its elimination of moral responsibility) they beget new possibilities for shaping and controlling behaviour: possibilities quite different from the responsibility-based practices of rewarding virtue and punishing vice. When moral responsibility guides rewards, those who perform good acts receive (deserve) greater reward than those who act lethargically or badly. But the contemporary behavioural hard determinist — rather than acquiescing in that reward pattern, with a twinge of bad conscience — will dispense rewards in the opposite manner. If an individual has been conditioned to act virtuously then very infrequent positive reinforcement (reward/praise) will suffice to sustain that behavioural pattern. In contrast, an individual who is lethargic or vicious will require quite substantial work if his/her behaviour is to be reshaped into better patterns. The behavioural hard determinist will attempt to reshape the reprobate's undesirable behaviour through applying the appropriate schedules of positive reinforcement (reward), in the process frequently rewarding (positively reinforcing) the reprobate for improving behaviour which still falls far short of the virtuous individual's exemplary (and minimally rewarded) behaviour. As a result, the vicious individual will be more generously rewarded (positively reinforced) than the virtuous.

For a clear view of the chasm that behavioural science opens between the hard determinist and the believer in moral responsibility, consider details of the behaviour therapy which hard determinists might employ to reshape bad behaviour. Early in the process, the scoundrel's behaviour will be positively reinforced (rewarded) when it remotely resembles the desired good behaviour. As the behaviour gradually improves positive reinforcement will be given only for closer approximations to the ideal. Thus less virtuous behaviour (occurring early in the shaping process) will be rewarded more than better (later) behaviour. Indeed, under a stretched interval schedule of reinforcement, the individual's good behaviour may be strongly sustained by increasingly infrequent positive reinforcement/reward. As the reinforcement becomes increasingly infrequent (on the stretched interval schedule) the individual's behaviour becomes more strongly entrenched: the more virtuous the individual (on this schedule) the less the reward/reinforcement.

Ultimately the desired virtuous behaviour will become itself a secondary conditioned positive reinforcer. At that point the individual will do good of his/her own volition, will act virtuously purely from a love of virtue. Some ethical traditions (such as the
Aristotelian) regard that as the highest moral attainment. On this view an individual who does good strictly for the love of the good (for example, because he/she delights in — is positively reinforced by — the joy of others) is the paradigm of a virtuous individual. But such a paragon of virtue requires no (or minimum) external reward/reinforcement in order to sustain his/her virtuous behaviour; and thus on the behavioural hard determinist view, this most virtuous of individuals will receive the least (external) reward/reinforcement. This story has a moral. When hard determinism is considered along with contemporary behavioural learning theory the contrast between denial of moral responsibility and belief in moral responsibility is quite clear: those who deny moral responsibility will assign praise/reward/positive reinforcement in a manner that is exactly opposite of the way reward is assigned by proponents of moral responsibility. Behavioural hard determinism rejects moral desert claims, and the schedule of rewards (positive reinforcement) it proposes is fundamentally incompatible with those based on moral desert/responsibility.

The hard determinist may indeed believe that positive reinforcement (reward) and perhaps even aversive conditioning (punishment) are sometimes justified. But it does not follow that hard determinists must therefore admit moral responsibility and moral desert. Not only will the hard determinist practices of positive/aversive reinforcement commonly be the opposite of the responsibility-based practices of reward/punishment (as described above); also, the hard determinist justification of positive and aversive conditioning will be the opposite of the justification given for reward/punishment by believers in moral responsibility. Advocates of moral responsibility justify reward/punishment on the grounds that the person's actions deserve reward or punishment: that giving such reward/punishment is right in those circumstances, and that withholding it would be at least prima facie unjust. The hard determinist approaches the question from the opposite perspective. Everyone is exactly equal in deserts (or alternatively, no one ever deserves anything): the prima facie right result is always exactly egalitarian. But hard determinists might — depending on what other value beliefs they hold — decide that on some occasions egalitarian principles should be overridden by other goods. If praise is used judiciously as a positive reinforcer it shapes good behaviour, the good of which might outweigh the prima facie wrong of departing from strictly egalitarian treatment. But no one will be given praise because he/she deserves it; instead, praise (and all positive reinforcement) will be dispensed despite the fact that no one deserves it, on the grounds that such praise will promote some other good.

Moral responsibility claims are impediments to the most effective and humane treatment of malefactors and the most effective shaping of self-motivated virtuous individuals; but when moral
DENYING RESPONSIBILITY

responsibility is removed serious moral questions remain. For example, what justification is there for imposing treatment on an individual? What restrictions should be placed on coercive measures? Which virtues should be promoted? How much deviation from such norms should be tolerated? What justification is there for departing from an egalitarian distribution of benefits and detriments? However such questions are answered, the denial of moral responsibility creates a new framework for examining them. Behavioural science gives substance to the moral claims of hard determinists, while the hard determinist denial of moral responsibility opens the way for effective social deployment of behavioural technologies. Denial of moral responsibility — when joined with a better grasp of behavioural science — is a denial that makes a difference.¹

Elon College,
Elon College, NC 27244, U.S.A.

¹ Thanks to John G. Sullivan, Jan Boxill, and Mary Newell Waller for helpful discussions of this topic.

IDLE COLOURS AND BUSY SPECTRA

By C. L. Hardin

In the midst of taking to task some common views about primary and secondary qualities, P. M. S. Hacker asserts that

...secondary qualities are not explanatorily idle. We correctly explain why my hut is cool in the summer while yours is hot by reference to the fact that yours is black and mine is white. For black objects absorb light and warm up in the sun to a far greater degree than white ones. That this fact is further explained in terms of the molecular or sub-atomic structures of the white and black surfaces does not in any way show that the fact that a surface is black does not explain why it warms up (heats water effectively in a sunheater, etc.) . . .¹

A little attention to elementary physics is in order here. The visible spectrum has comparatively little to do with the radiant heating of bodies. Instead, a body is heated by absorbing electromagnetic energy in the infra-red region of the spectrum, which, as