Philosophy of Science // Fall 2016

Handout 20

Reductionism revived: Wilson; Morality: Ruse and Wilson

Reciprocity between biology and culture. Darwinism attributed biological change to natural selection. Is culture similarly influenced by natural selection—not among cultures, but among biological organisms? There is no straight answer to this question. The first thing to notice is the reciprocal influence of biological (genetic) change and cultural change.

That culture influences biological change is almost a dogma. Cultural environment, including education, influences mental and physical powers of individuals. Oddly, the reverse relation is much less widely accepted, or at least much less popular. But we say that the development of individual minds follows rules determined by genes. Fully determined? More cautiously, we say that genetic rules bias development in particular ways.

The role of epigenetic rules. Can cognition follow any path whatever? Or is it constrained by biological input? Wilson's answer invokes epigenetic rules. Cognition and cultural behaviour generally are constrained, or biased, by our biology and biological history.

One example is phobias. People have developed phobias, strong aversions to certain kinds of objects, due to the situations in their ancestral environments.

Another example is incest. There is a universal aversion to incest, but the explanation of that aversion cannot be cultural. It must be at least partially, or even predominantly, biological.

Postulating epigenetic rules allow us to defend an indirect biological influence on culture. Individual organisms are assembled by a process governed by epigenetic rules. Some of these rules will increase biological fitness (survival and reproduction) in the given cultural and physical environment. Hence, through a natural selection process, they would spread more widely in the population than other rules.

Example 1 (Incest). Some organisms (A-organisms) will develop an innate aversion to incestual relationships, others (B-organisms) will not. A-organisms will create cultural norms adapted to prohibit incest. B-organisms will have norms permitting incest. A-organisms will be biologically more successful, and hence, will be able to dominate B-organisms. In due course, the cultural norms prohibiting incest will spread through the population.

Plasticity. It is wrong to think of our behaviour as being strictly determined by genes: genetic determinism is false. Similarly, it is wrong to think of our behaviour as being strictly determined by culture: cultural determinism is false too. It is better to think of behaviour as constrained by genes, but sensitive to cultural variations. The level of this sensitivity (plasticity) differs in particular cases. Some forms of behaviour display extreme diversity. Clothing fashion, for instance, varies from culture to culture. Sexual mores vary too. Yet in these very forms there is also a universal element. Every culture seems to have adopted the norm of wearing *some* clothes. Similarly, every culture has *a* norm of sexual mores. The existence of such cultural universals signals genetic, rather than merely cultural, influence.

Two sources of morality. Ruse and Wilson begin by contrasting two possible sources of ethical norms. One is *extrasomatic*. In this situation, moral norms are either delivered to humanity by some agent not subject the usual evolutionary processes; or else they are universal rules, discovered by humanity, favouring the survival of species in every physically possible circumstance.

Another possible source is *internal*. In this case, moral norms are epigenetic rules that themselves were formed in the course of evolution of human species. They track the immensely complex causal link between genes through physiological processes to thought and action (561).

Once again, there is no claim of genetic determinism. Human behaviour is plastic in that it can be responsive to cultural and other environmental inputs. Nevertheless there are genetic constraints on moral norms.

The illusion of objectivity. Moral norms are characterised by normative vocabulary. Killing is not merely unwise—it is *prohibited*. This is a contrast between is-statements and ought-statements. Evolutionary ethics and other forms of naturalistic ethics were often accused of naturalistic fallacy. Even if all the facts of the natural world are specified, including now the facts of evolution, there is still this question:

> *Open question.* What actions *ought to* be permitted and what actions *ought to* be prohibited?

Ruse and Wilson maintain that the contrast is illusory. This is because there is no real objectivity in moral statements. There is only a feeling of objectivity with which moral statements are endowed. This objectivity itself carries it an evolutionary advantage.

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