

Another volume will take account of individual, inherited differences in learning ability. The introduction of individual differences, for instance in capacity to learn, requires a quantification of some classical genetic concepts, such as “norm of reaction,” and allows us to make predictions about that elusive entity, genotype-environment covariance. Cultural and genetic evolution can be directly compared and their extremely complex interactions studied. Inevitably this involves reference to some controversial issues, such as the determination of IQ, and the recently expanding field of sociobiology.

When we commenced our work some ten years ago the topic of cultural transmission was clearly far from the mainstream. This is no longer the case: scholarly work on quantitative theories of cultural inheritance, transmission, and evolution are now increasingly common. There remains a need for accurate empirical observation, without which theories may prove to be frustrating exercises. But at least in the discipline of linguistics and in certain aspects of sociology and anthropology it is possible to make quantitative observations that can be used to test theory.

Our hope is that quantitative studies of modes of cultural transmission and their long-term consequences will stimulate discussion on the theoretical interpretation of cultural phenomena and present a conceptual framework for their understanding. Mathematical models may eventually be expanded and refined and in turn lead to new empirical studies of cultural phenomena.

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