New framework highlights dual role of genetics and culture in inheritance
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The authors note that when culture overlaps with genes, the impact of genetics on a trait can become masked, unmasked or reversed and the effects of a gene can mistakenly be attributed to the environment or vice versa.

This integrated approach challenges the simple nature/nurture debate and helps resolve controversies in topics such as IQ by revealing that behavioral and cognitive characteristics are reliant on a whole host of evolving interacting factors—both genetic and cultural.

The cultural evolutionary approach also helps explain how factors such as rates of innovation impact heritability across different social contexts, helping resolve issues that arise from a disproportionately WEIRD (western, educated, industrialized, rich and democratic) literature.

Commenting on the new framework, paper co-author Ryutaro Uchiyama from the Department of Psychological and Behavioral Science at LSE says that "since its founding, the field of behavioral genetics has quantified the influence of genes by contrasting it with influence from the environment, but it has relied on an impoverished conception of the environment. Human environments are dynamically structured by cultural evolution, and this understanding forces us to reassess the statistical and practical meaning of genetic indices like heritability."

Paper co-author Dr. Michael Muthukrishna added that "biological differences don't imply genetic differences—culture is also biological. This new framework allows us to better understand how genes and culture interact to create us. As the paper reveals, high heritability does not mean schools and other aspects of the environment don't matter or that there is anything inevitable about who we are and what we become."

The paper, "Cultural Evolution of Genetic
Heritability," has been accepted by the journal *Behavioral and Brain Sciences*. The journal is currently soliciting reactive commentary on the target article from other researchers. The authors will respond to these commentaries in a follow-up article later in the year.


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