

GENETICS, PHILOSOPHY

THE EPIGENETIC LANDSCAPE

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What I always feared, but couldn't believe, is now confirmed by renowned experts in a new [Cell](#) editorial

Historically, the word "epigenetics" was used to describe events that could not be explained by genetic principles.

It goes back to Conrad Waddington - and describes now such bizarre and inexplicable features like paramutation in maize, position effect variegation in *Drosophila* and methylation in humans. There is a nice analogy of the classical 1957 epigenetic landscape figure of Waddington where the course of the ball is influenced by hills and valleys where it finally arrives - the [Pinball](#) arcade game

known factors that may regulate epigenetic phenomena are shown directing the complex movements of pinballs (cells) across the elegant landscape ... no specific order of molecular events is implied; as such a sequence remains unknown. Effector proteins recognize specific histone modifications...

[MEDIA=19]

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