The adaptive landscape as a unificatory tool

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Abstract

The adaptive landscape, as pioneered by Sewell Wright, forms a conceptual framework consisting of three elements: *a diagram, a formal mathematical model and a metaphoric dictionary.* The latter relates the formal model to the graphic, which is thus interpreted in terms of adaptive peaks, peak shifts and changes in the relief.
The adaptive landscape played a key role during the 20th century evolutionary synthesis documented in the writings of Wright, Dobzhansky and Simpson. The uses of the metaphor, however, are viewed today as methodologically problematic. The critics have pointed to some inconsistencies in the construction of the diagrams and to the vagueness of the metaphoric vocabulary, concluding that the metaphor and the graphical representations could be abandoned completely in favor of rigid mathematical models. The defenders of the integrity of the adaptive landscape conceptual framework usually refer to its numerous applications in evolutionary research and insist that it is an important heuristic tool.
In my paper I provide additional support for the claim that the integrity of the adaptive landscape conceptual framework should be preserved. It builds on analyses of recent research revealing that the adaptive landscape is still used as a basis for theoretical, empirical and explanatory unification. The flexibility of the graphics and the metaphoric dictionary is not a sign of inherited inaccuracy, it rather makes the conceptual framework suited to encompass a wide range of evolutionary studies, facilitating thus the goal of reaching a more unified view of evolution.

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