SOME literature on theory in evolutionary biology; in particular from devo-evo perspective.

Multivariate response to selection, Mutational matrix (is mutation structured at arrival?)

Additivity vs nonadditivity
No epistatic variance does not mean no epistasis:

Epistasis as constraint:

It is not about single interactions: Directional epistasis contributes to response

Development matters for distribution of mutational variance and hence evolution
(experiment: Alberch)


Problems of evolvability
Cost of complexity / curse of dimensionality
Fisher’s geometric model (assuming universal pleiotropy): “mutations must be small!”

complex adaptation (also: variation vs. variability)

Measuring constraints/ distribution of genetic variation
Dimensionality of genetic variation / Conditional evolvability

**Structural properties of GP map contributing to evolvability**

**General:**

**Modularity**

**But:**

**Canalization/Robustness**


**GxE**

**The many levels between G and P:**

**General**

**Regulatory level of GP map**

RNA level of G-P map

Evolution of GP map structure (Evolution of evolvability/pleiotropy)

Long-term consequences of “constraints”: individualization of variation

Historical views of the role of development in evolutionary biology

General stuff