Contribution Title:	INVARIANT VARIATIONAL PROBLEMS AND BUNDLES OF CARTAN CONNECTIONS
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A reductive structure is associated with Lagrangian canonically defined conserved quantities on gauge-natural bundles. The gauge-natural lift of infinitesimal principal automorphisms induce a variational sequence such that the generalized Jacobi morphism is naturally self-adjoint. As a consequence, its kernel defines a reductive split structure on the relevant underlying principal bundle and a bundle of Cartan connections is consequently canonically associated with invariant variational problems.

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