



Seismic Rehabilitation Strategy

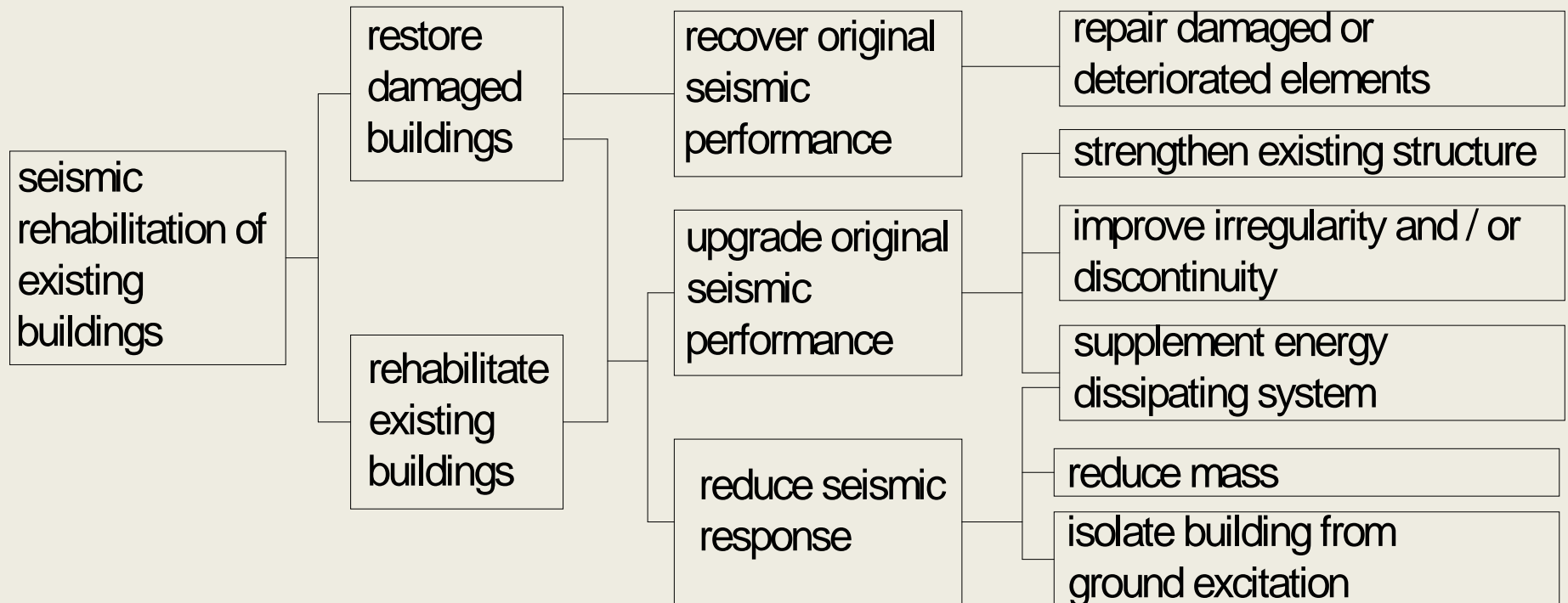
Adrian Dogariu



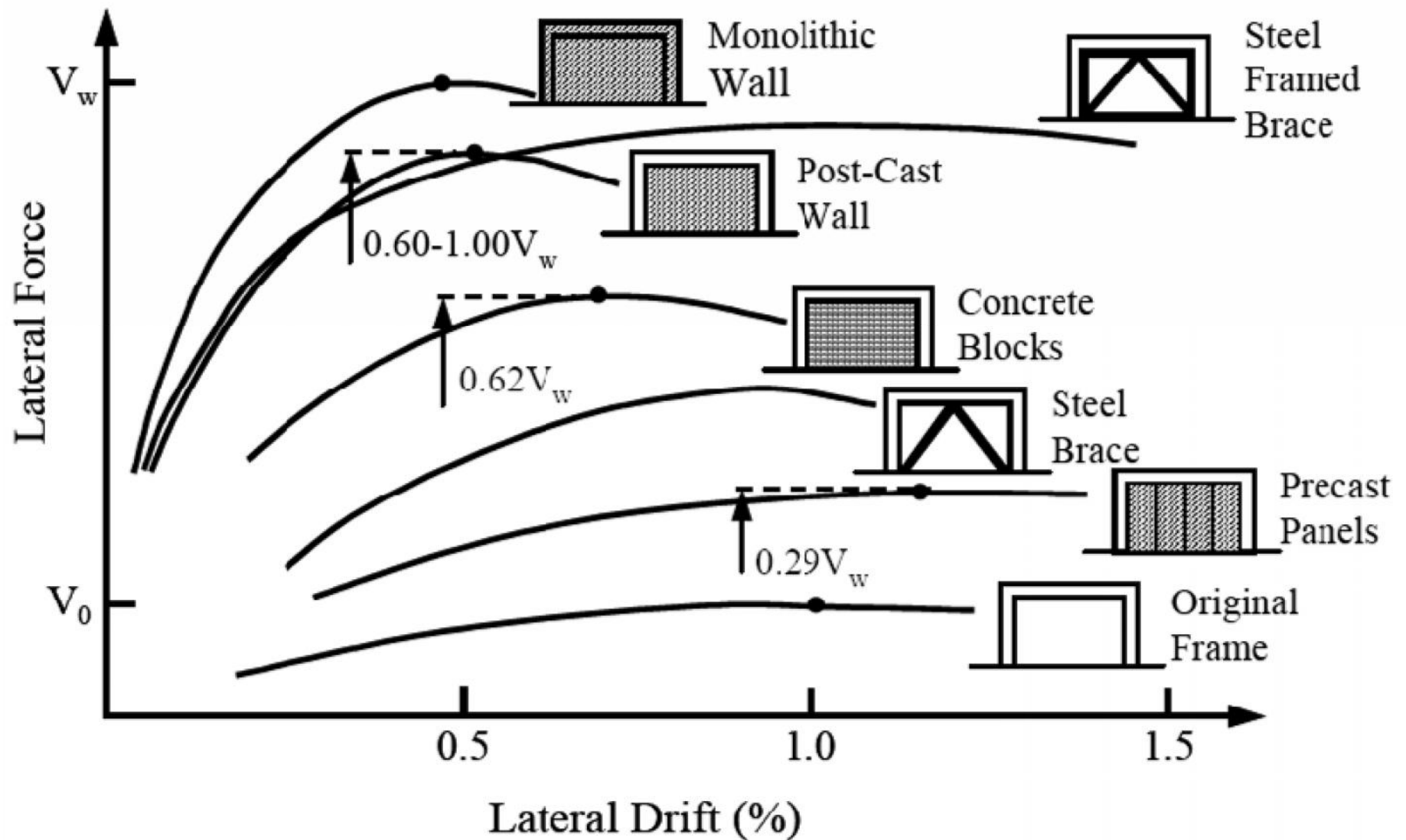
**European Erasmus Mundus Master Course
Sustainable Constructions under Natural Hazards
and Catastrophic Events**

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Seismic Rehabilitation Strategy



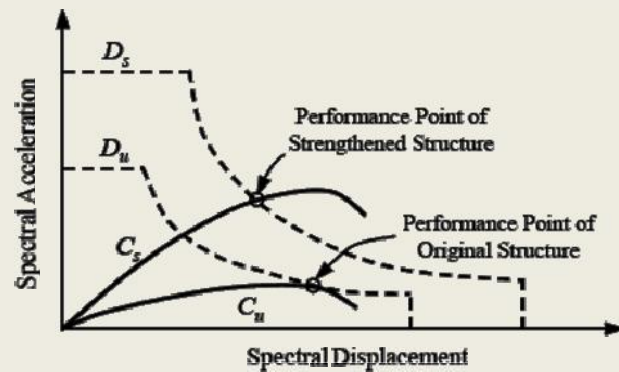
Strengthening solutions for a RC Frame



Concept of Seismic Rehabilitation of Buildings

C_s = Capacity curve for strengthened structure

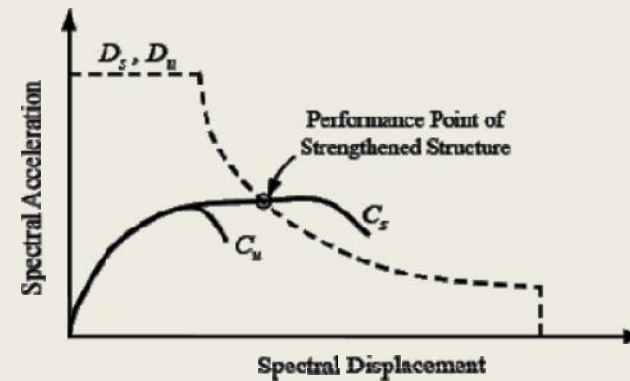
C_u = Capacity curve for unstrengthened structure



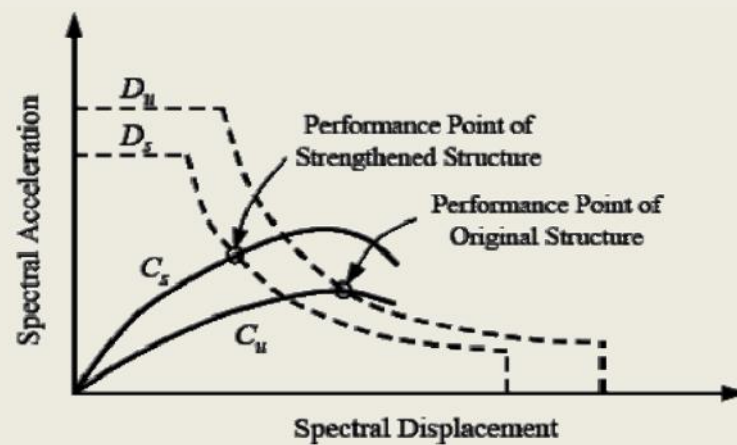
Effect of structural strengthening

D_s = Demand curve for strengthened structure

D_u = Demand curve for unstrengthened structure

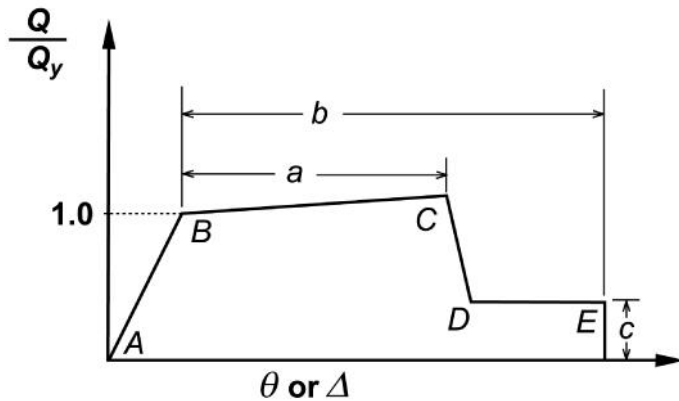


Effect of deformation enhancement

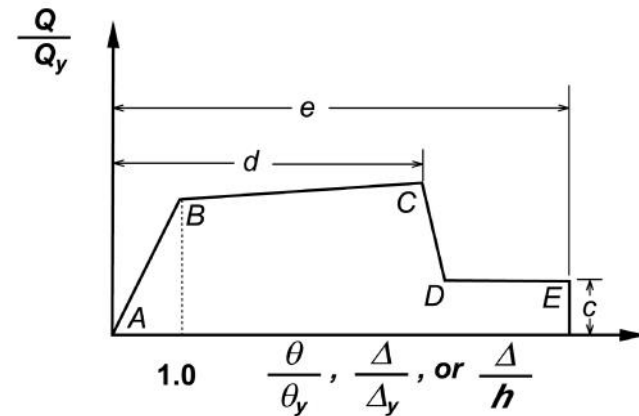


Effect of enhanced energy dissipation

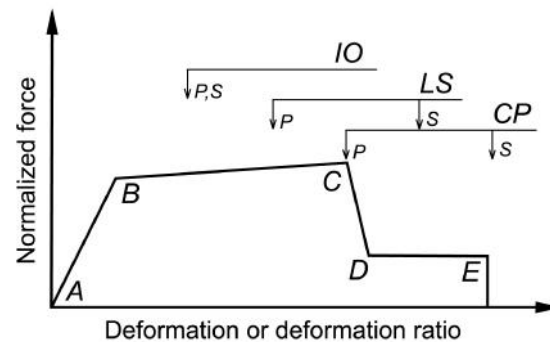
Modeling and acceptance criteria



(a) Deformation



(b) Deformation ratio



(c) Component or element deformation acceptance criteria

Generalized Component Force-Deformation Relations for Depicting Modeling and Acceptance Criteria presented in FEMA 356