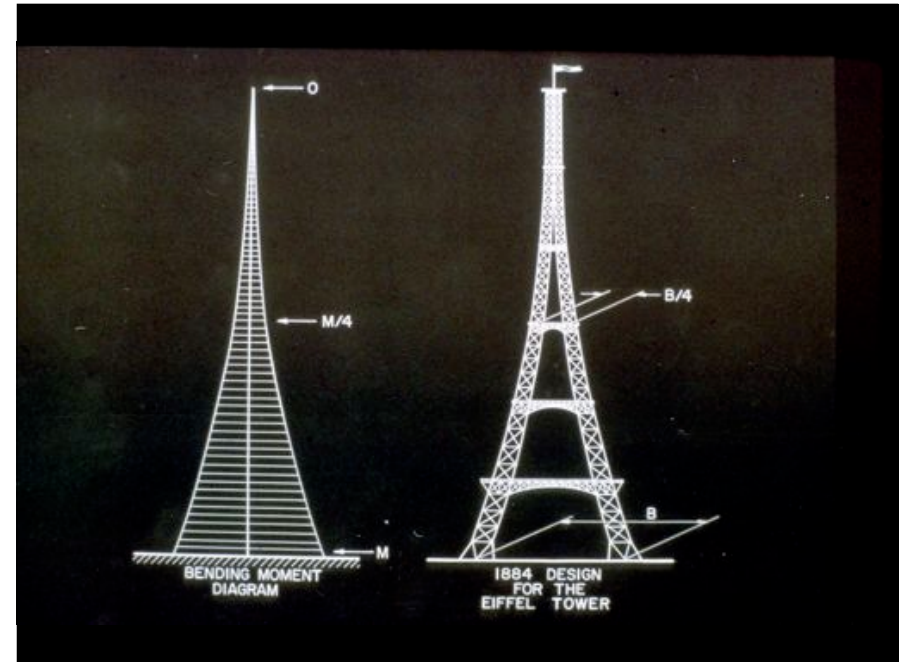
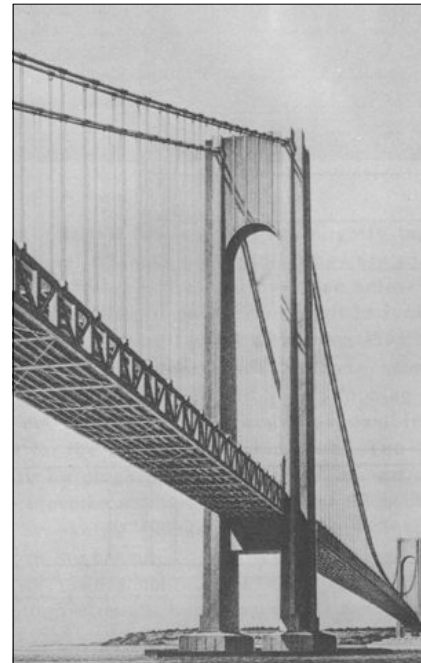
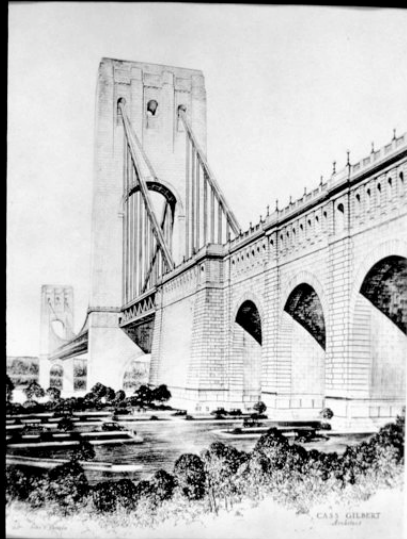
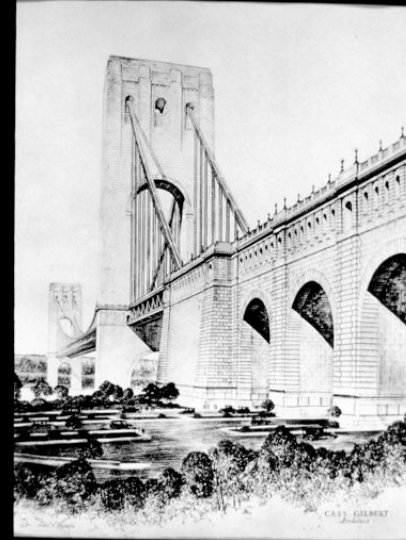
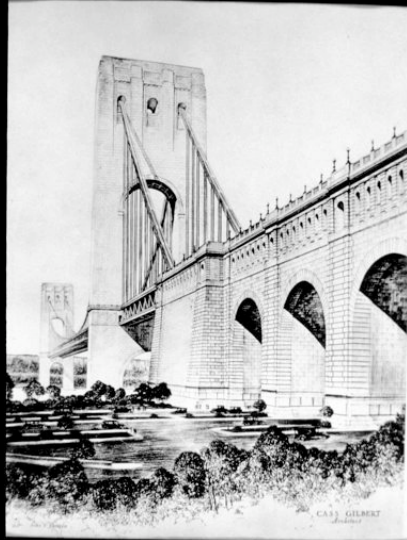


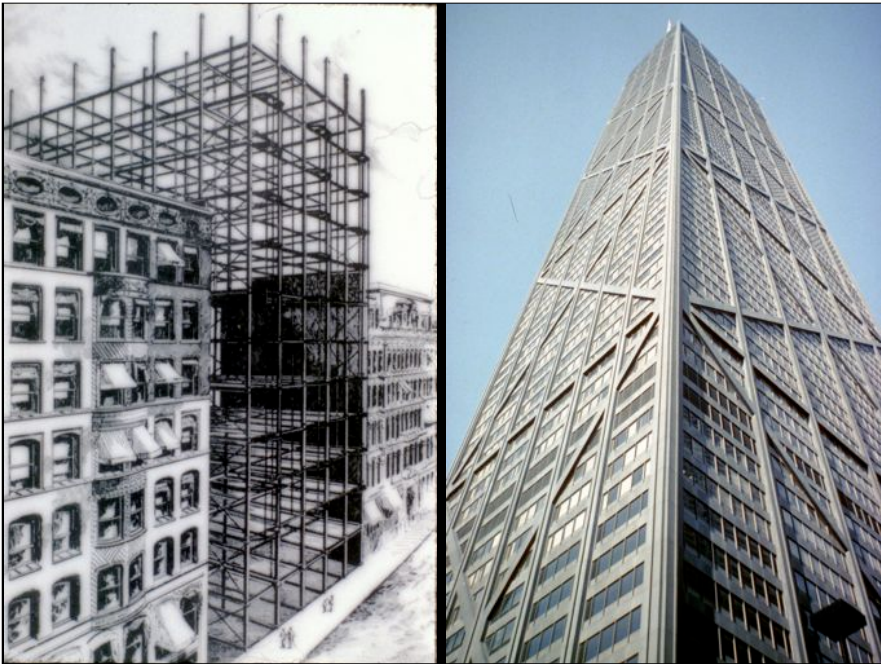
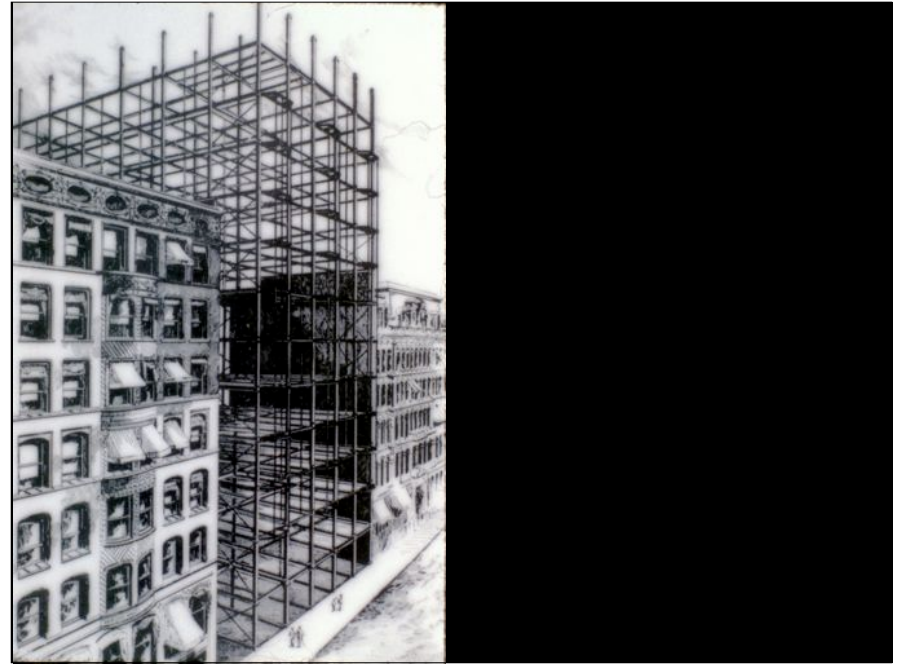
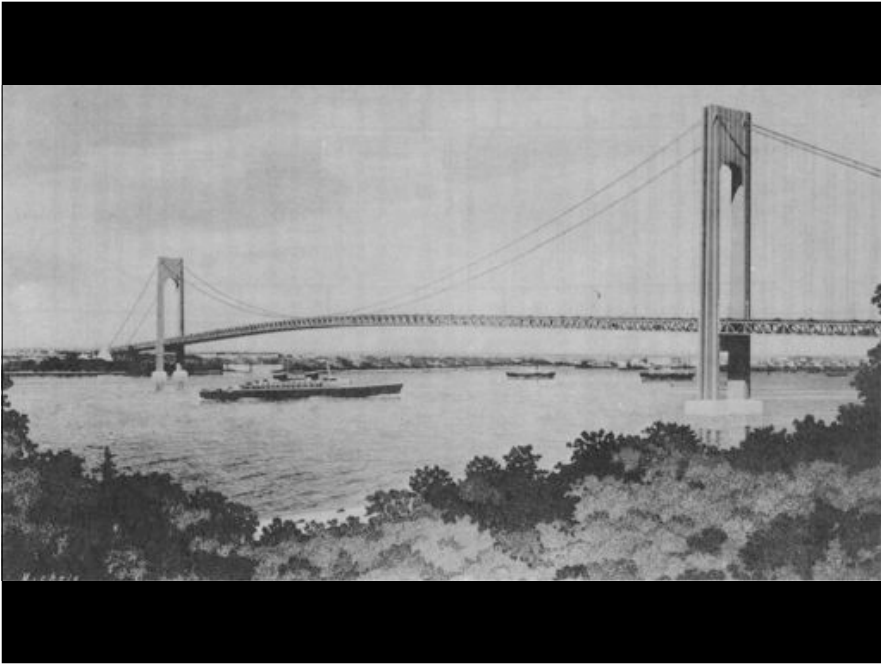
Robert Maillart and the Origins of Reinforced Concrete

New materials and new structural forms
The scientific function of reinforced concrete
The scientific function of the 3-hinged arch
Evolution of form in the concrete hollow box arches of Robert Maillart
Bending moments and the form of the Salginatobel Bridge



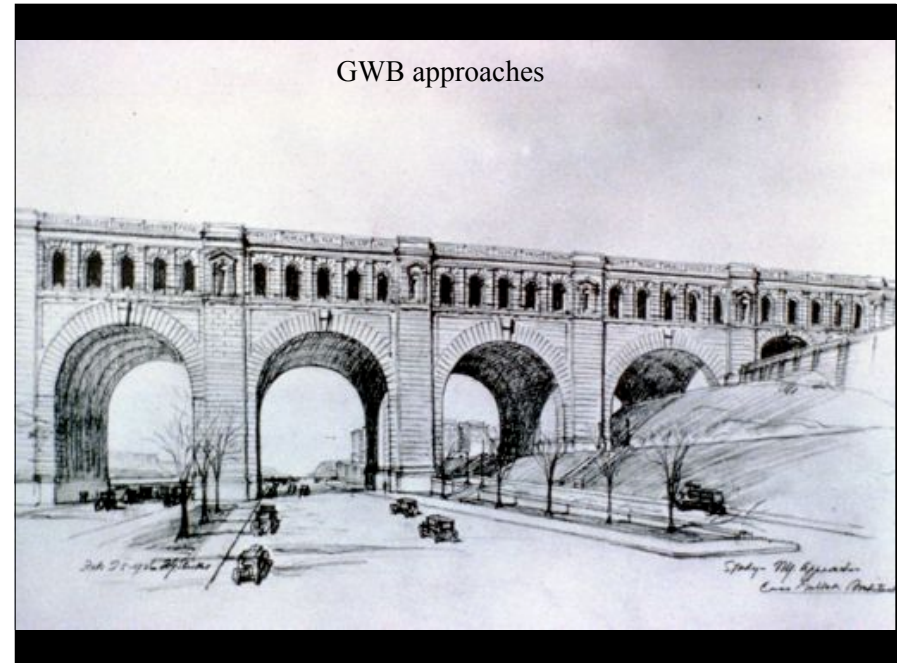
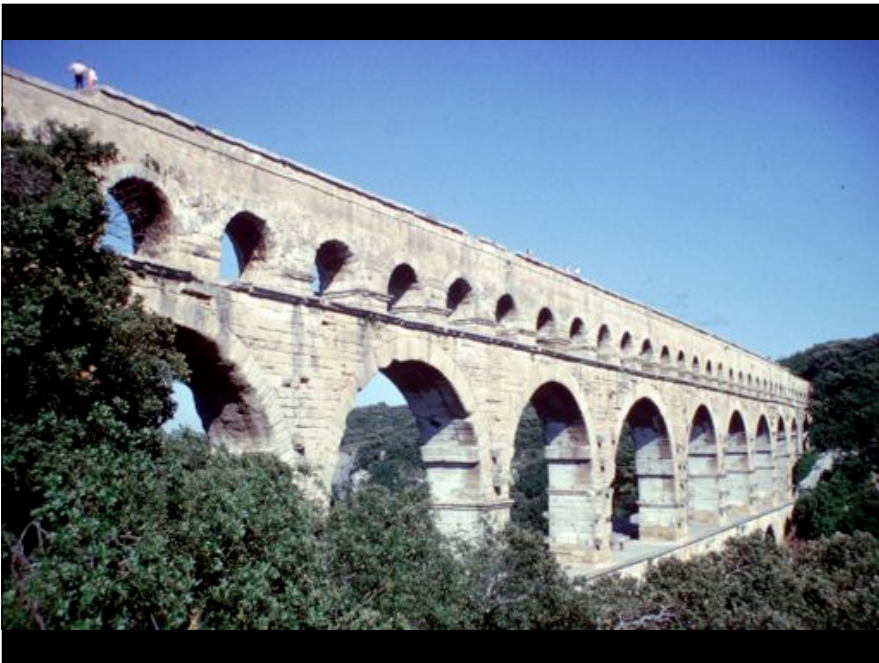
steel





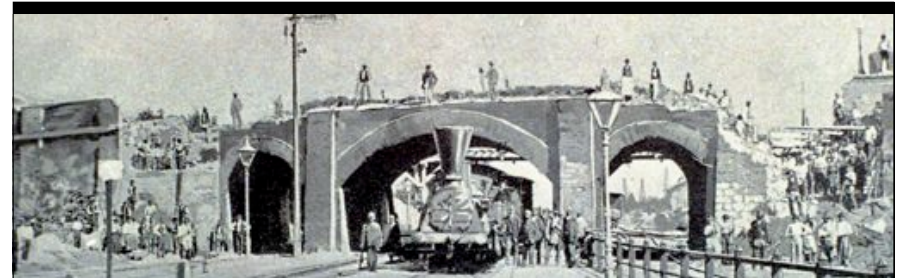


iron structures
steel structures
...
understanding the origins of reinforced concrete...





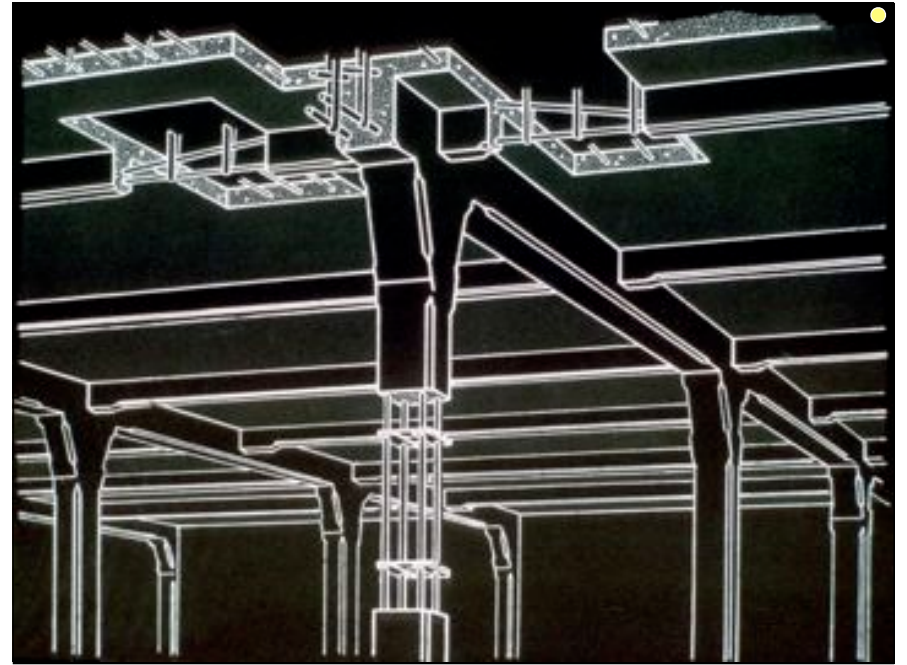
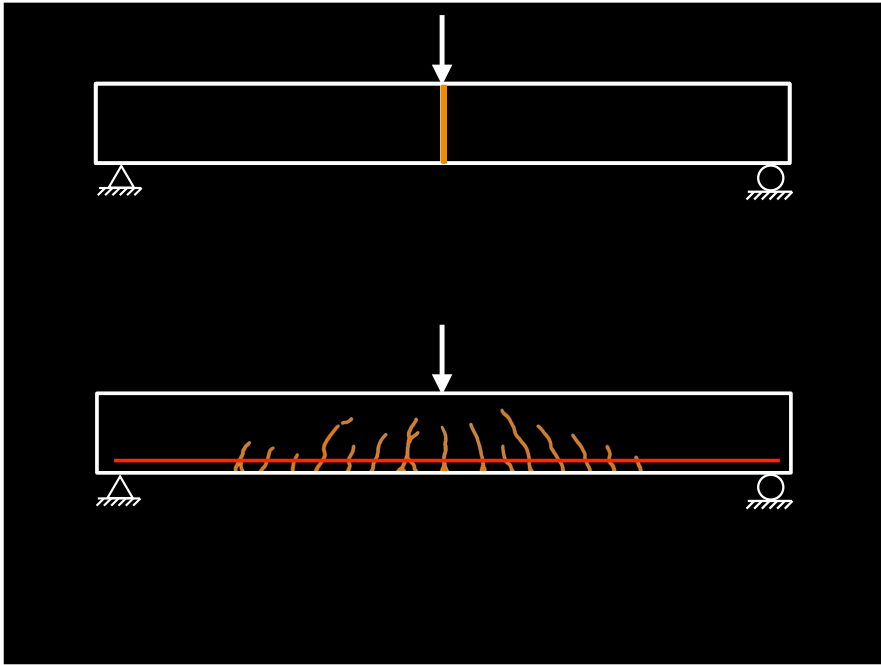
stone-like ↑

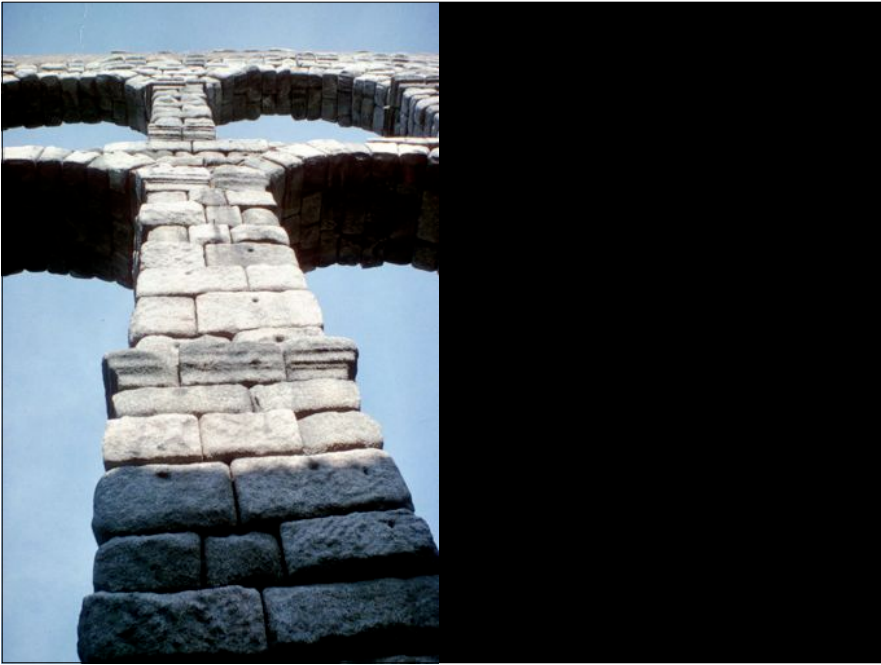


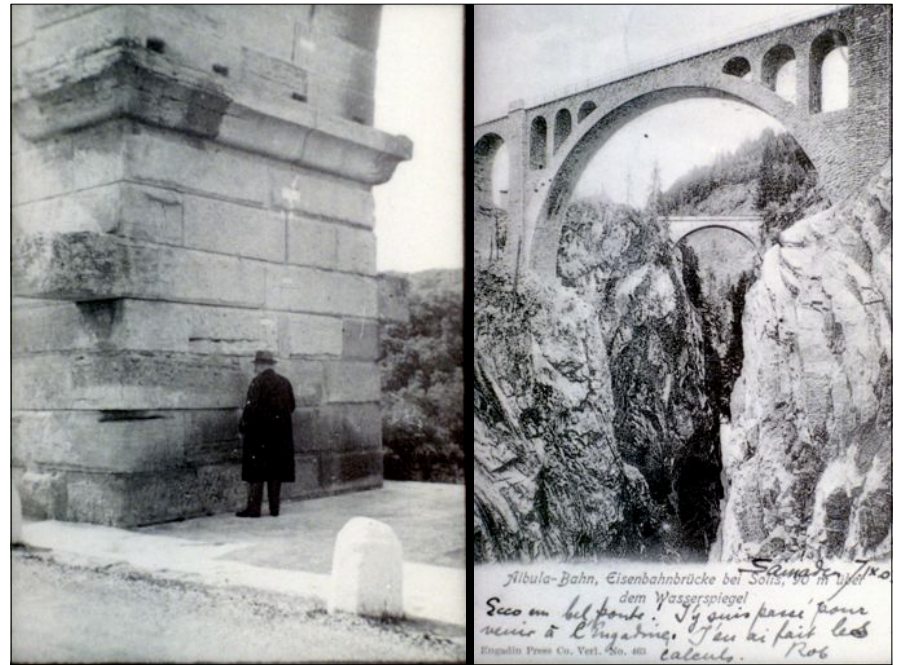
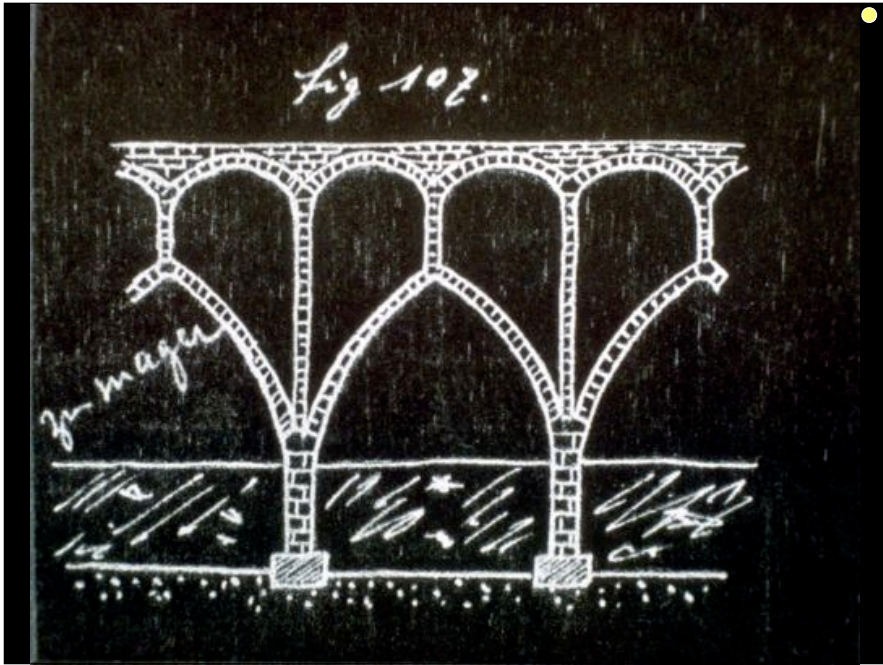
stone-like ↑

↓ reinforced concrete

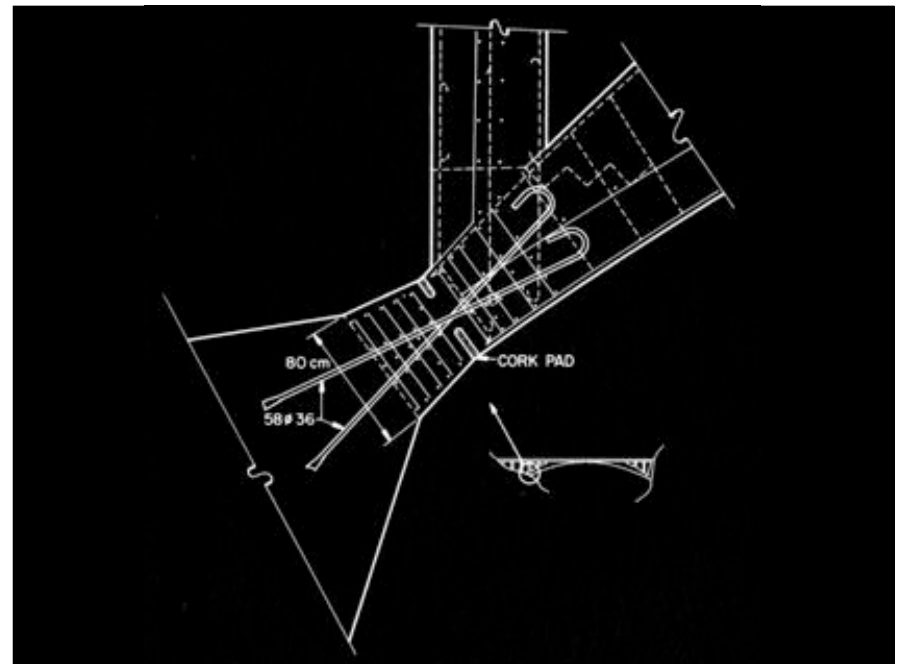
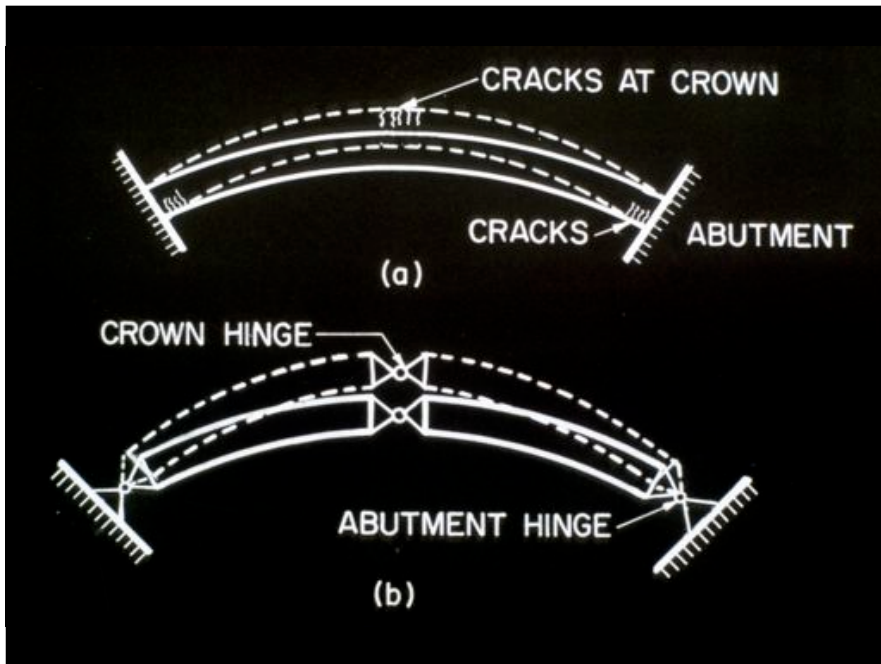


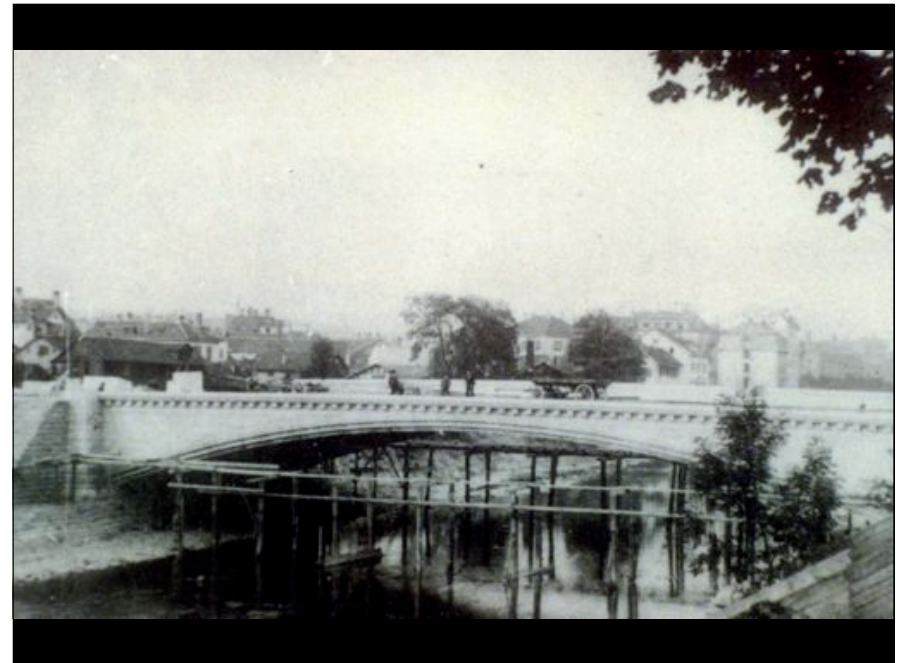
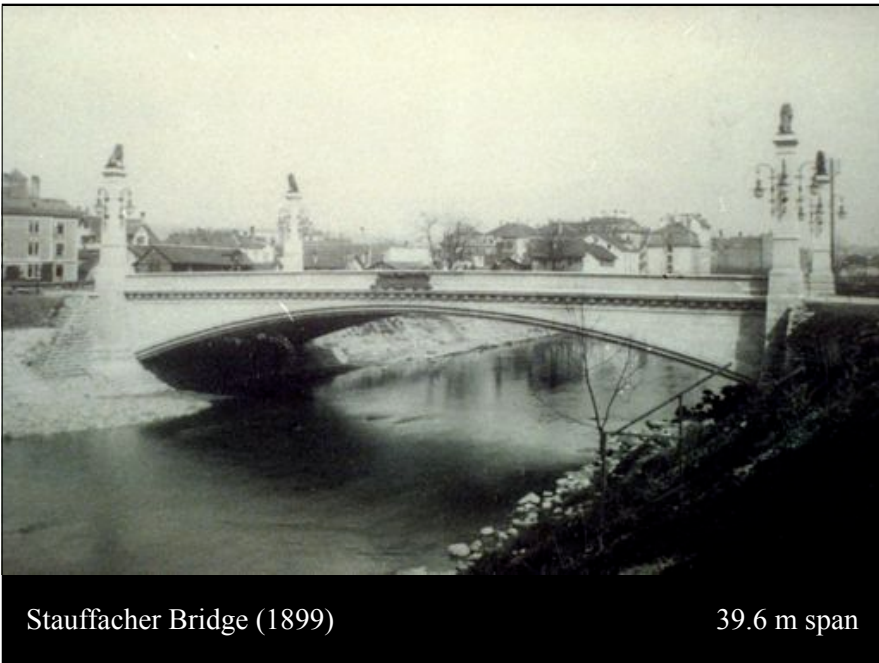
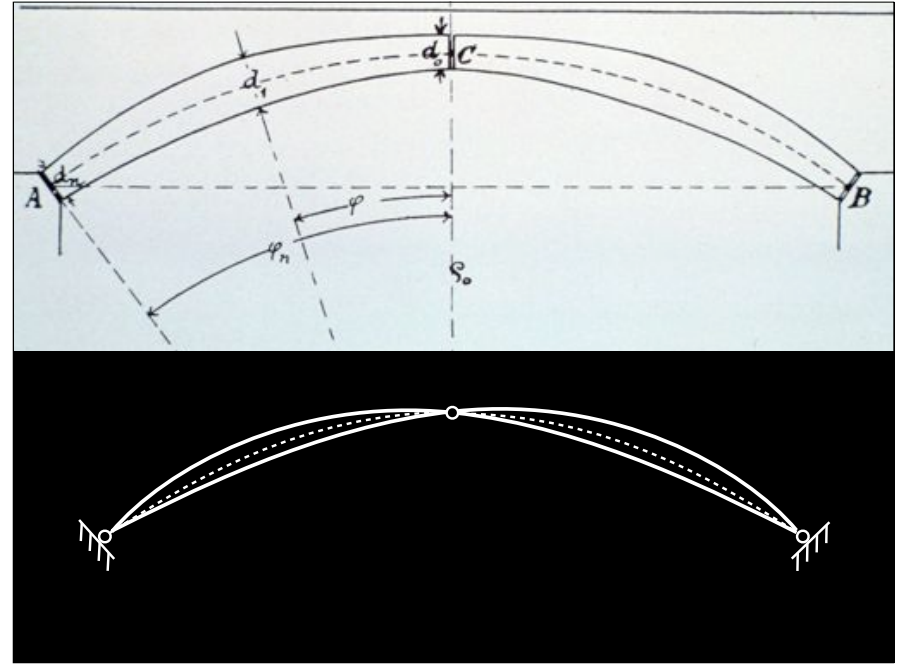
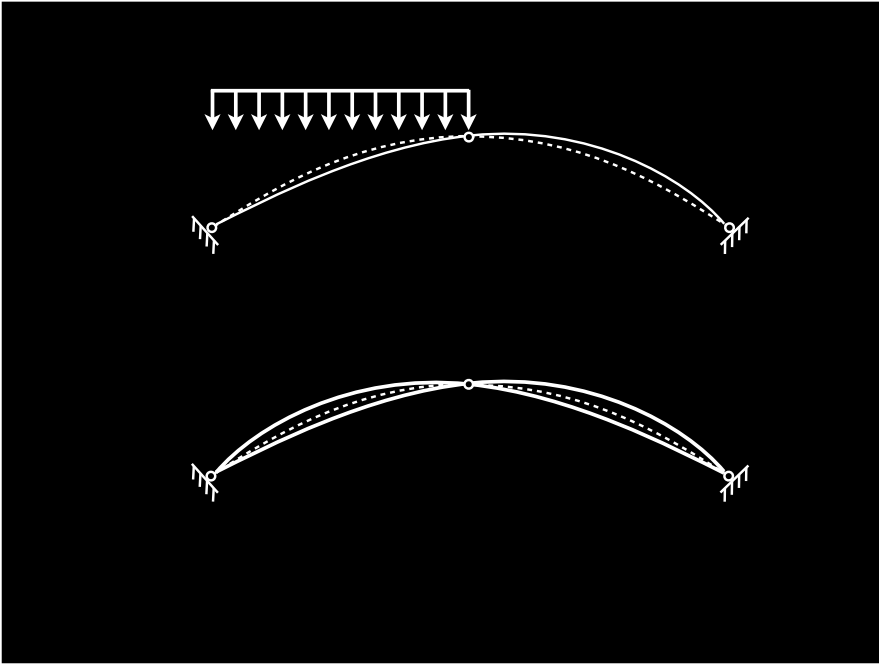






Why can forms be made of reinforced concrete that cannot be made of plain masonry?

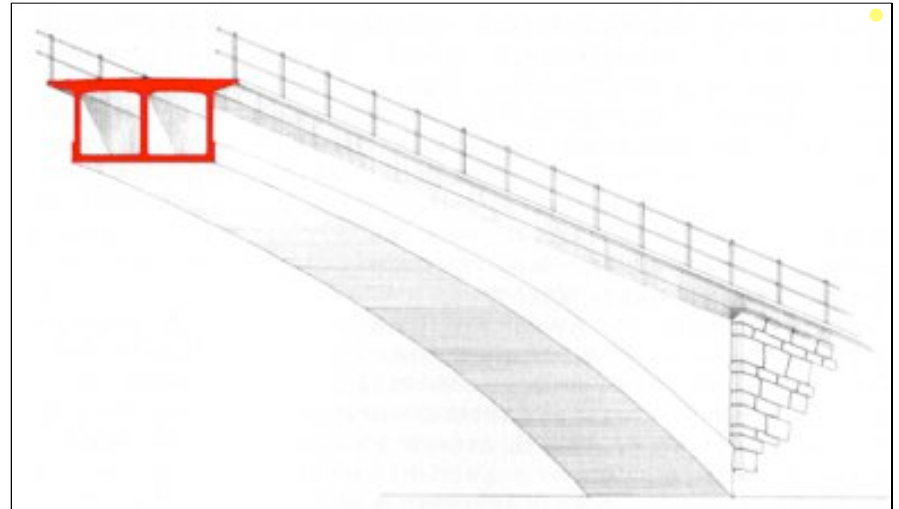


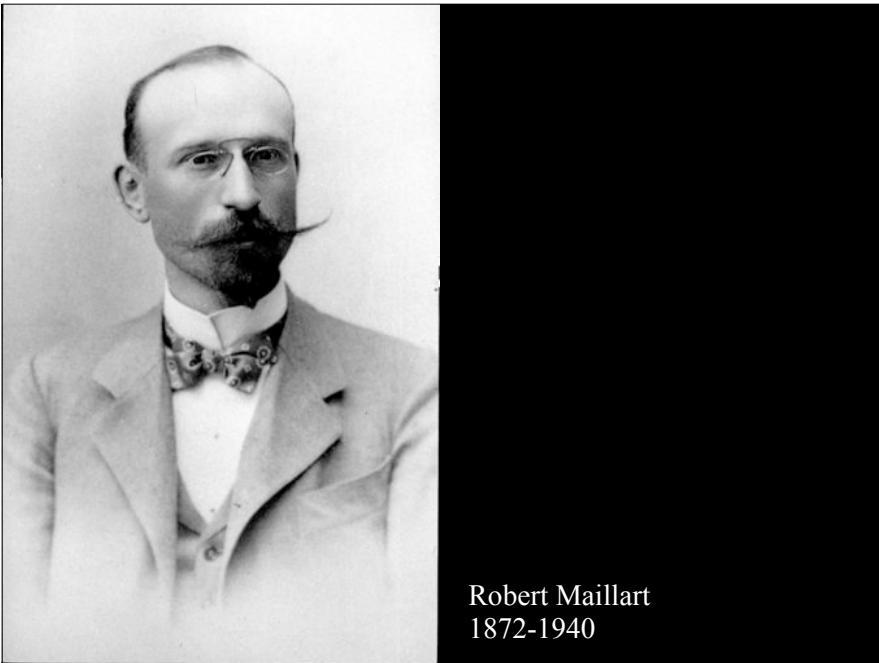
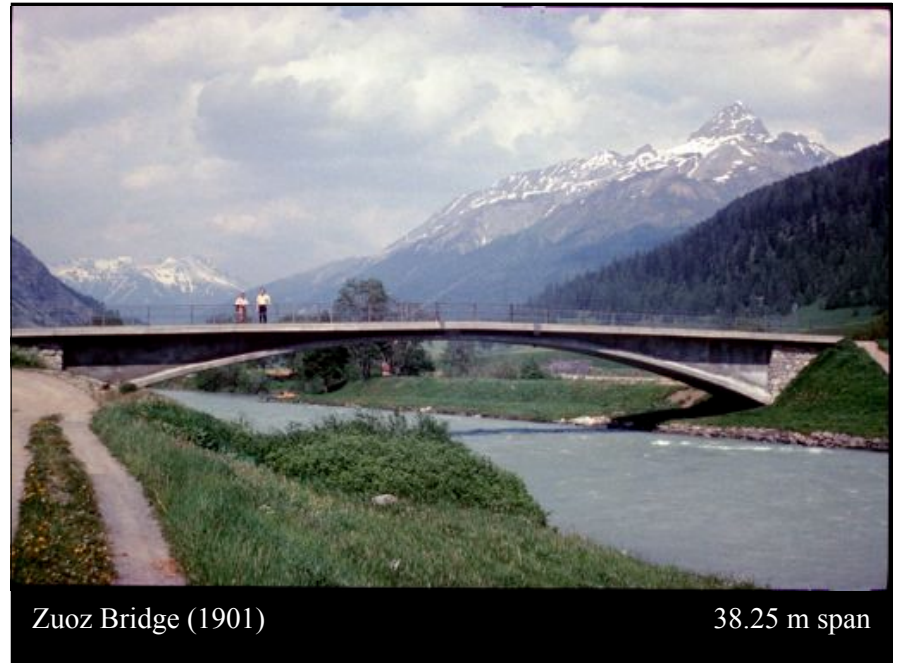
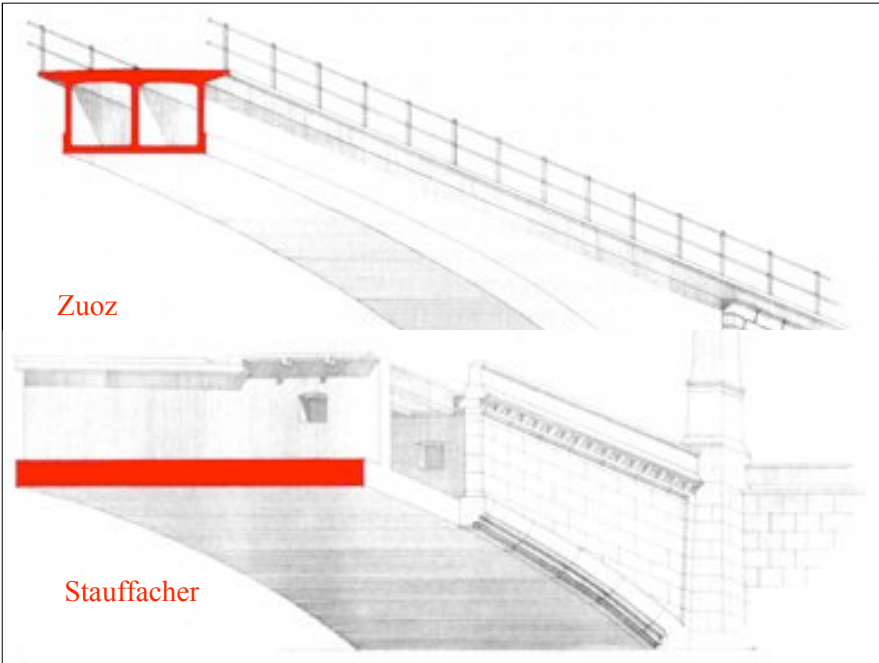


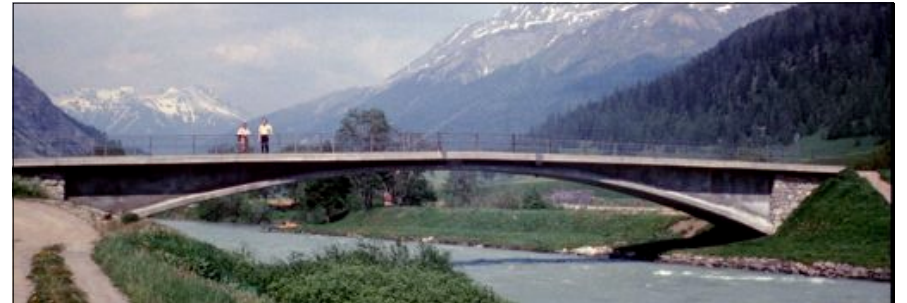
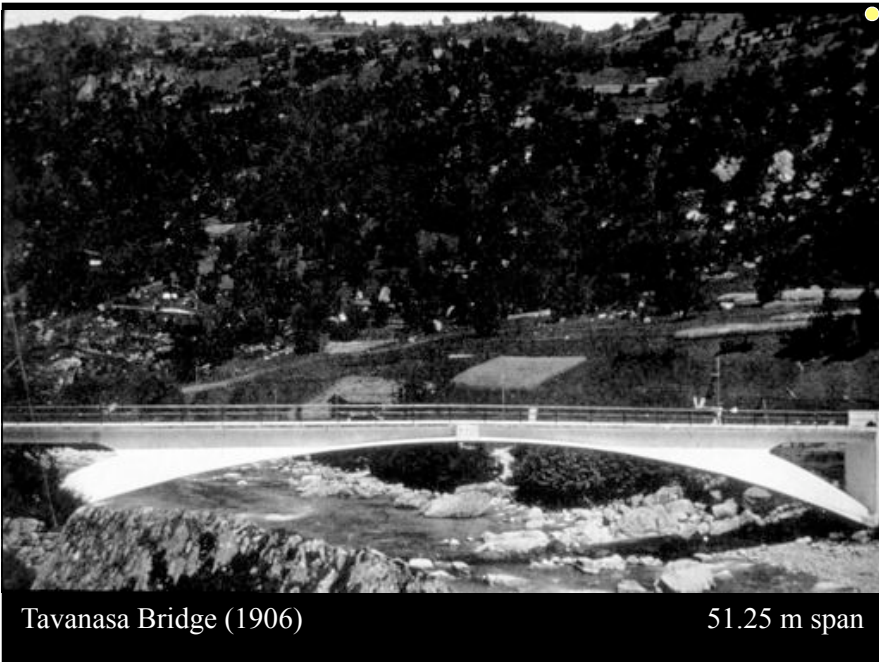
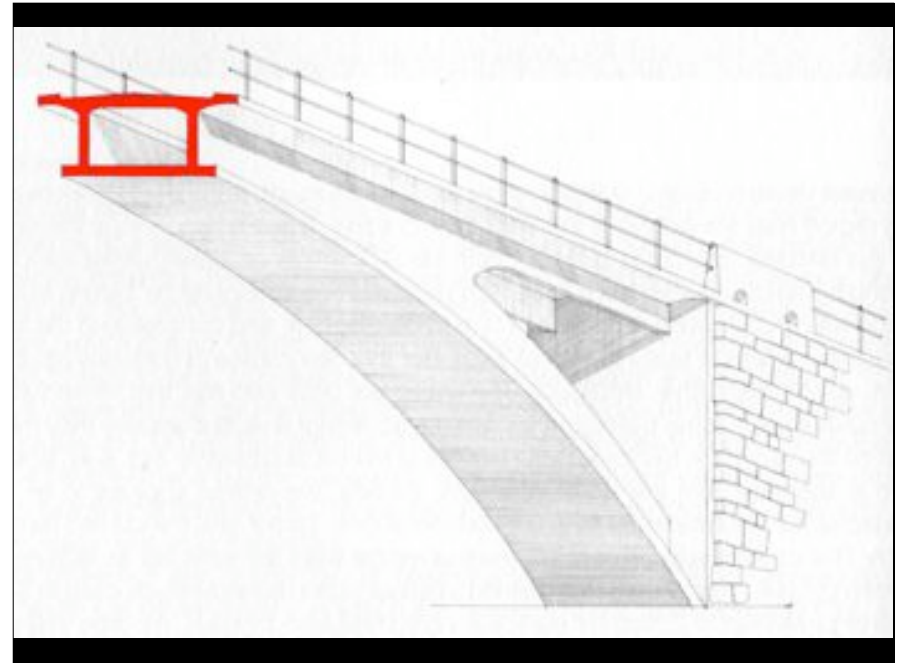
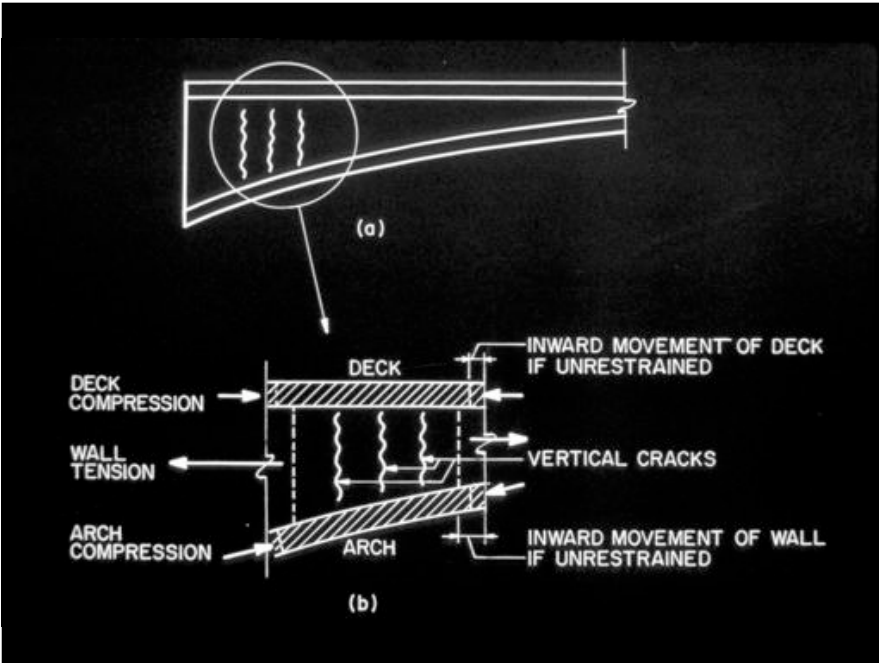
Stauffacher Bridge (1899)

39.6 m span

Efficient?





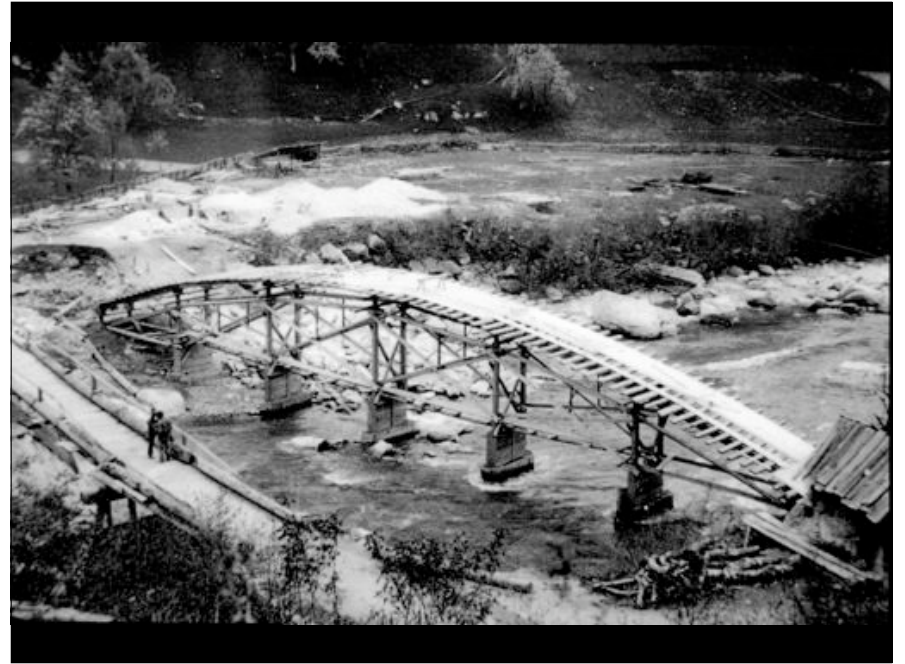


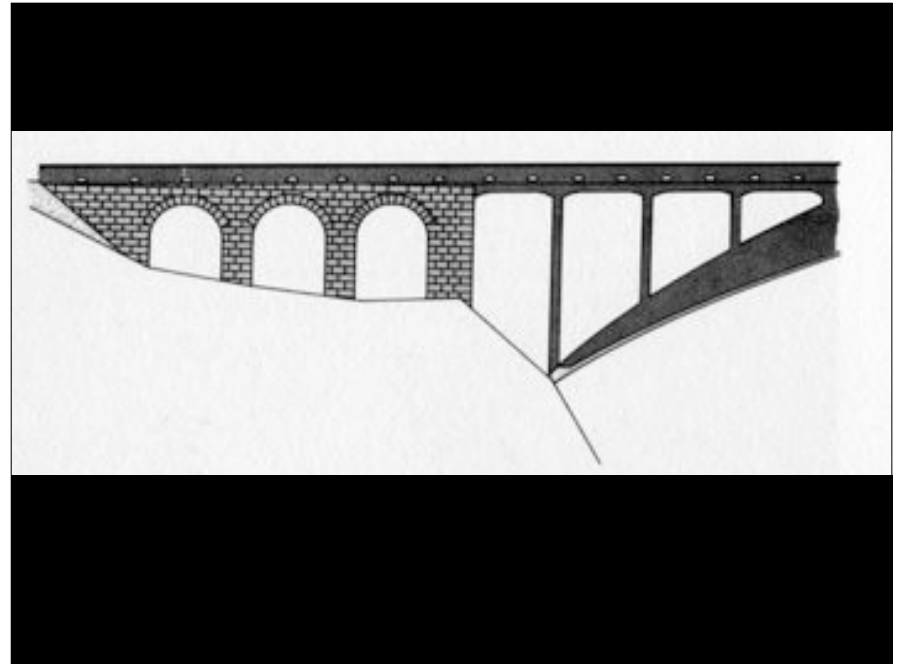
Do these bridges function structurally in different ways?

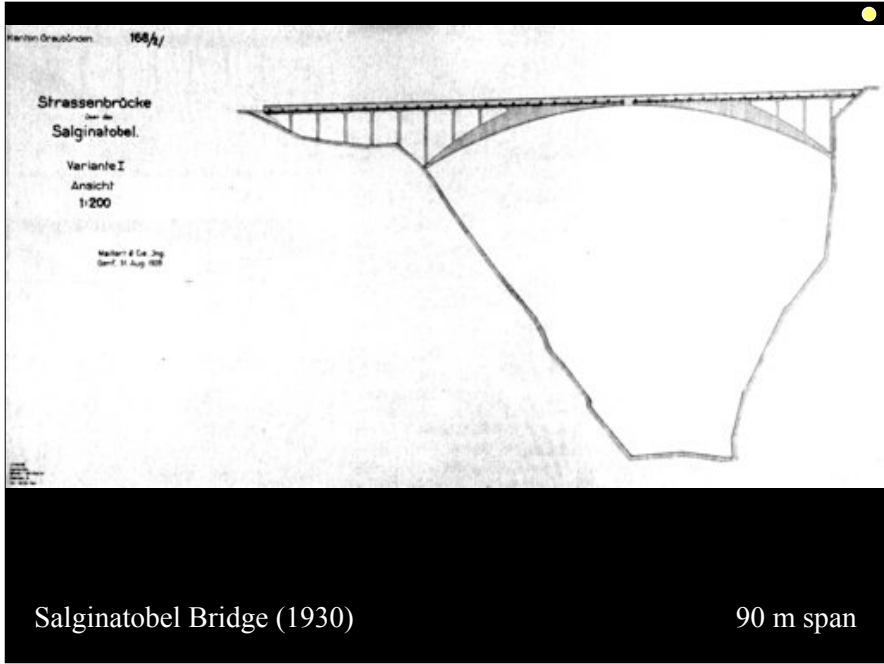
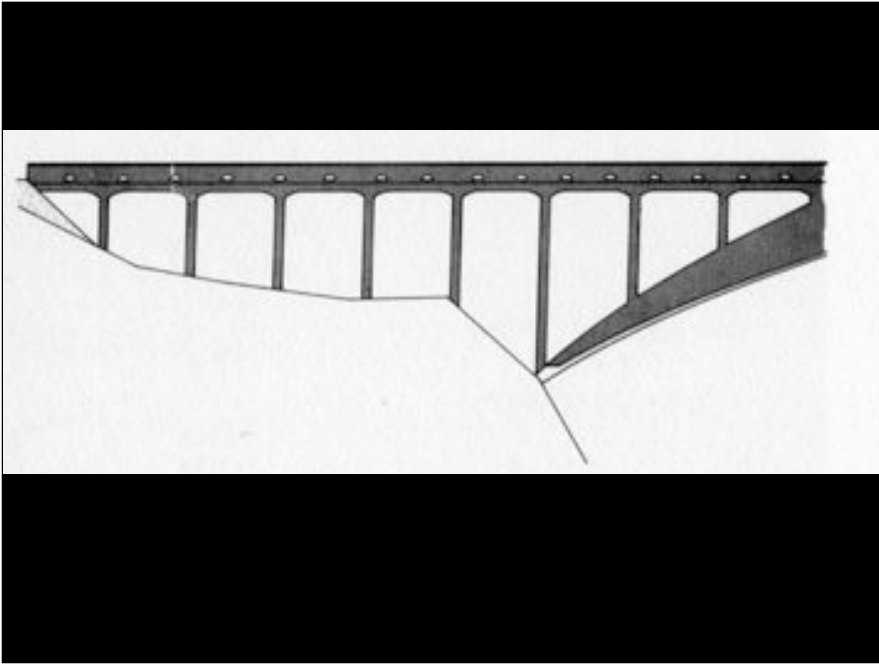




Do these bridges express their function in different ways?



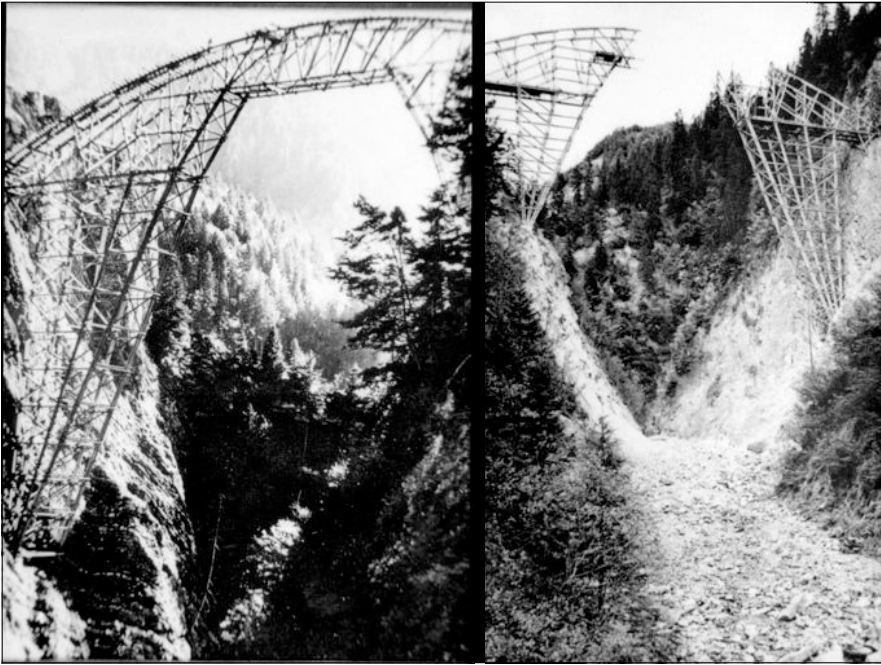


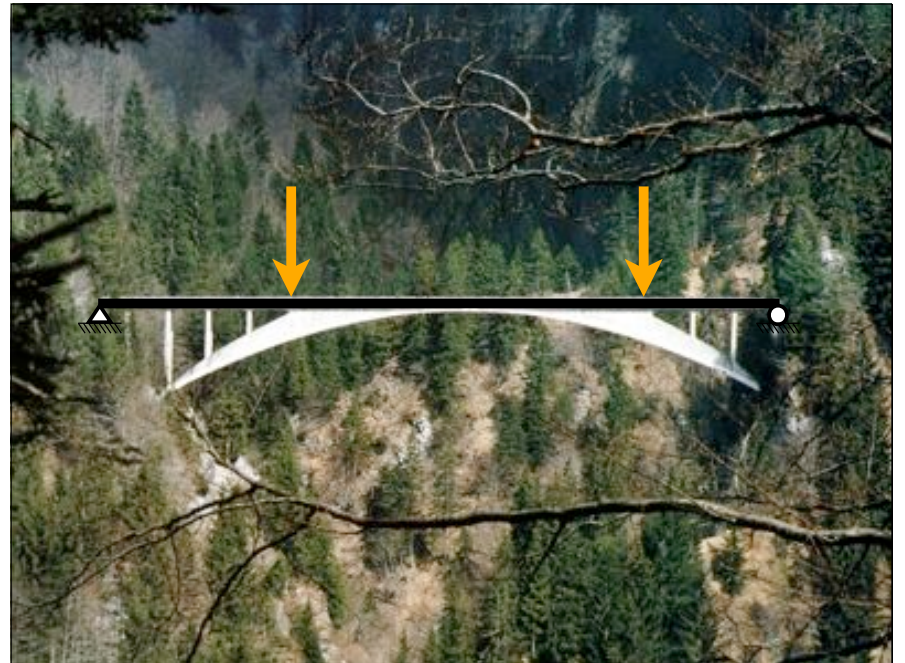
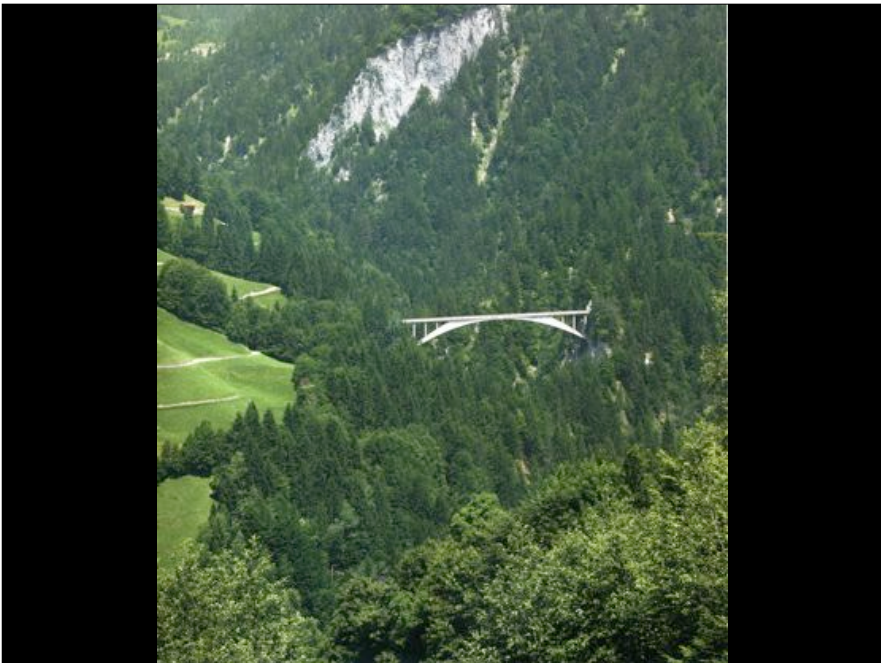


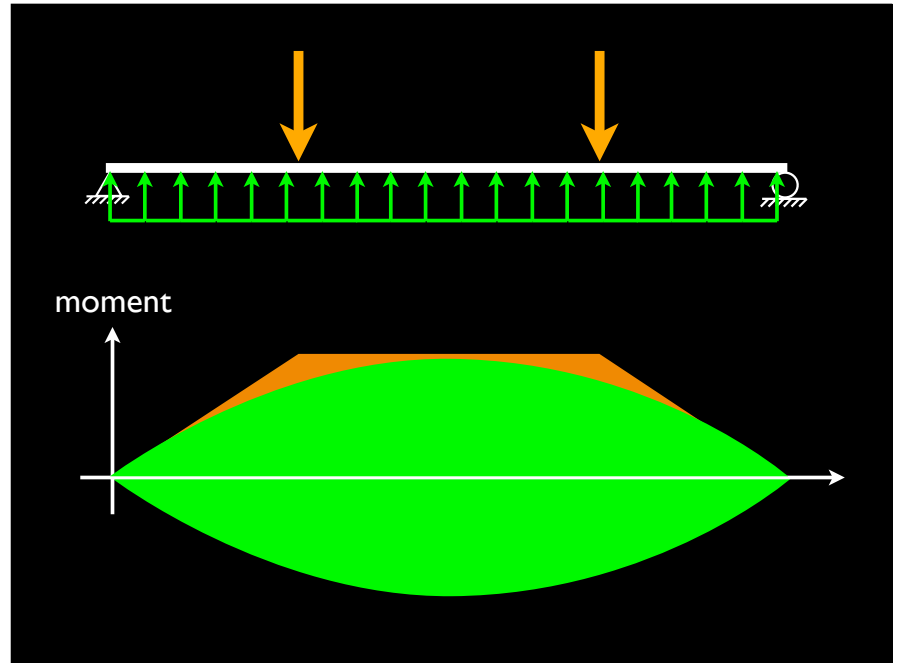
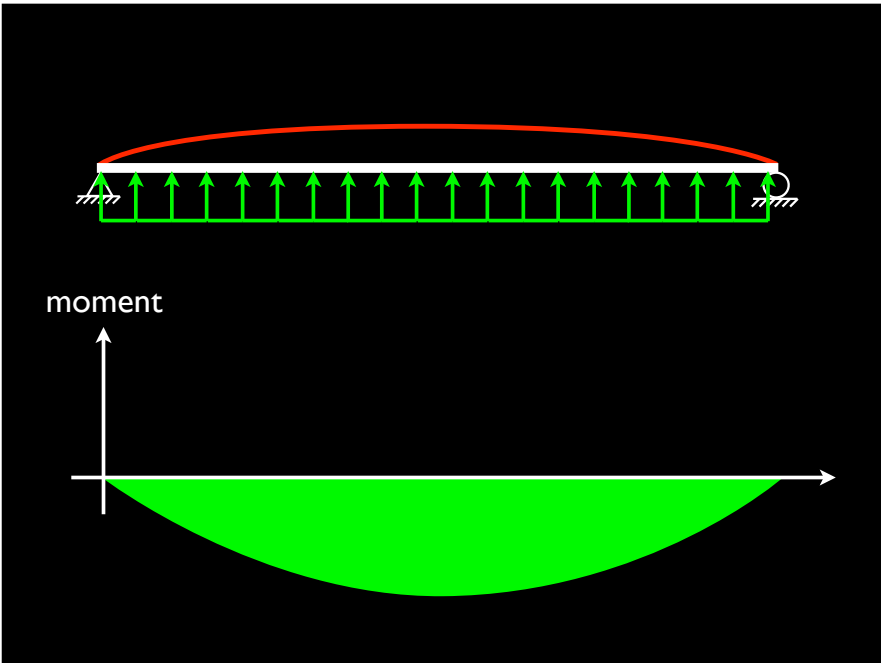
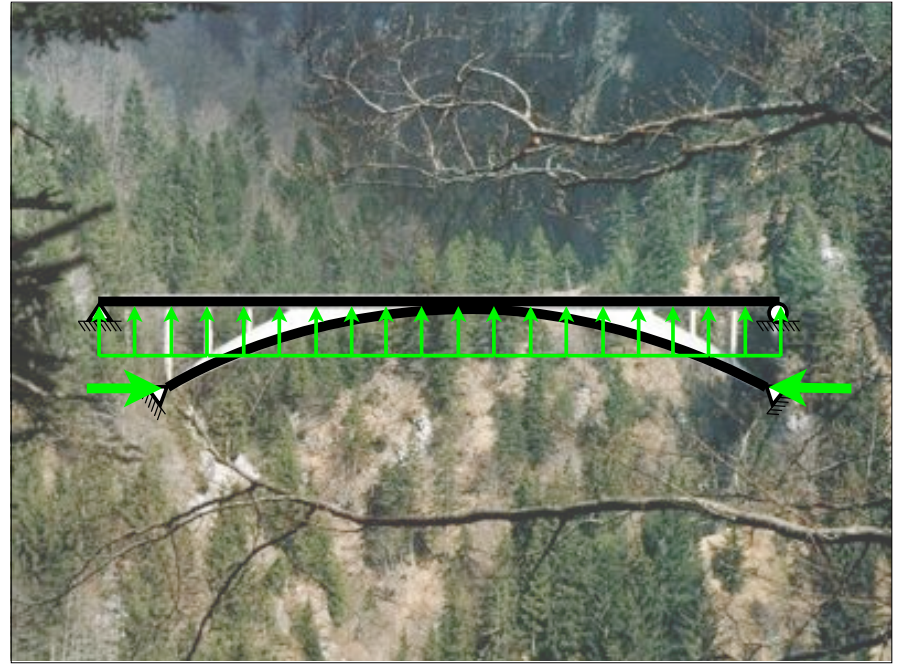
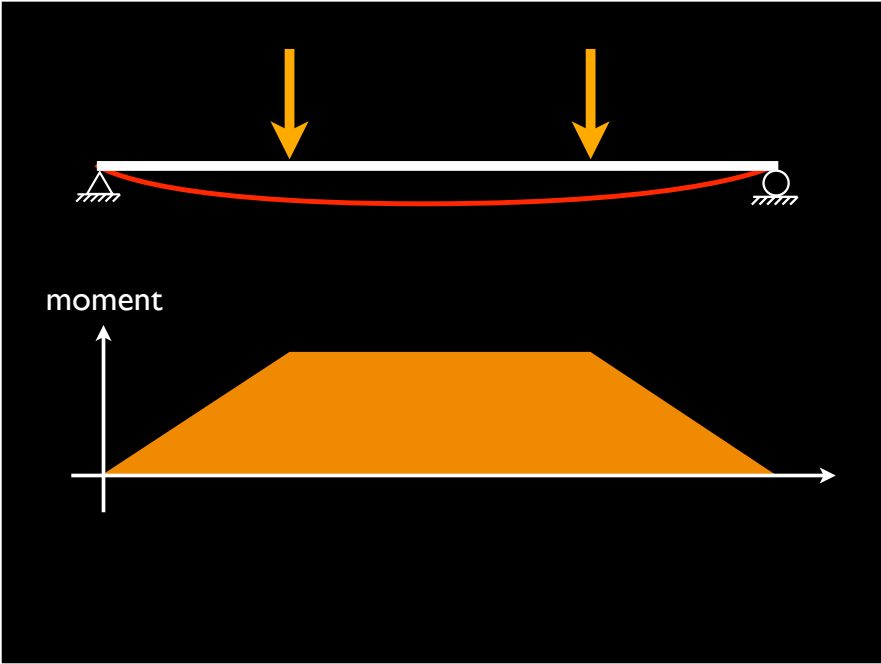
Salginatobel Bridge (1930)

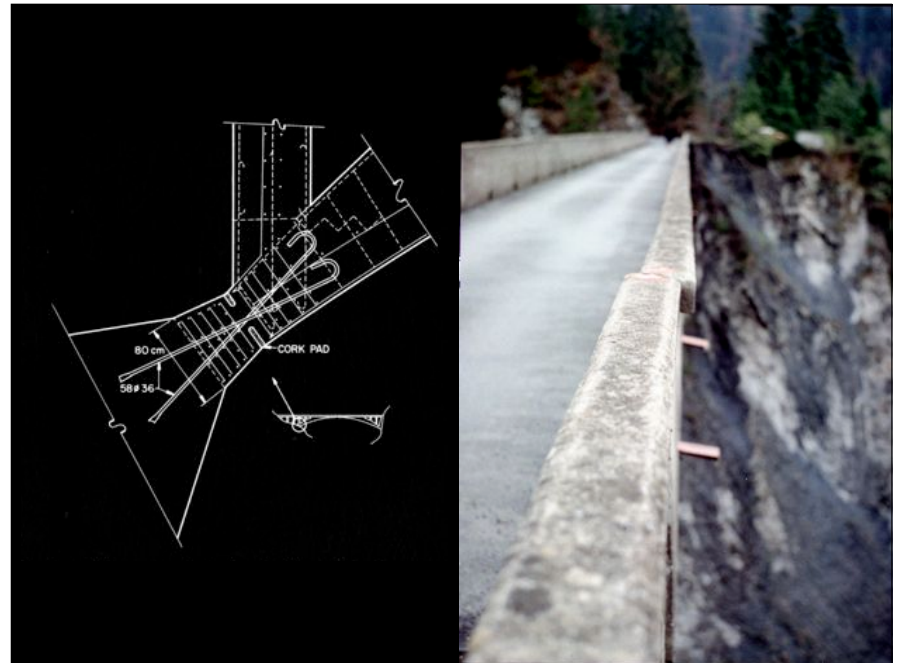
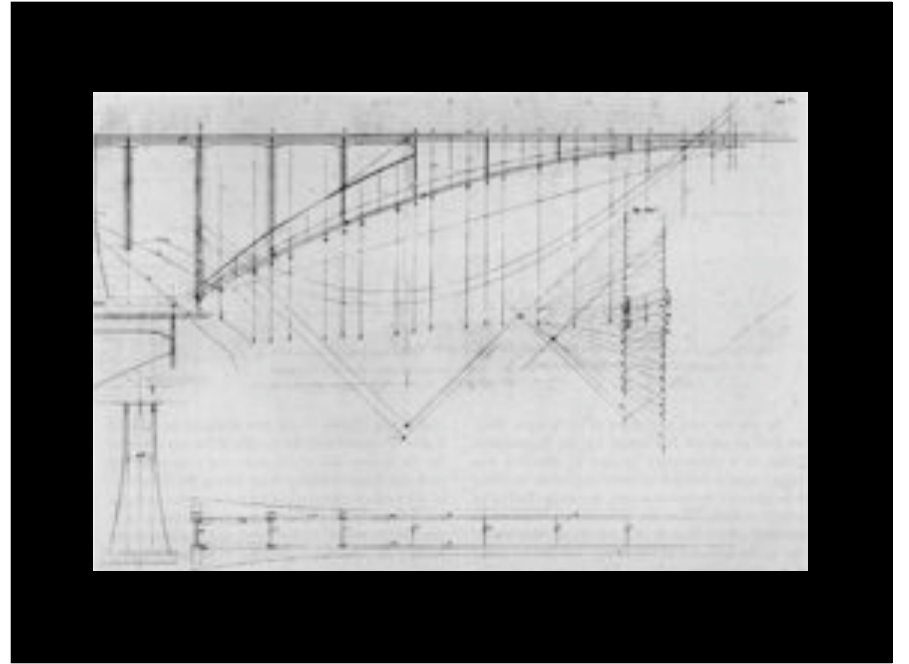
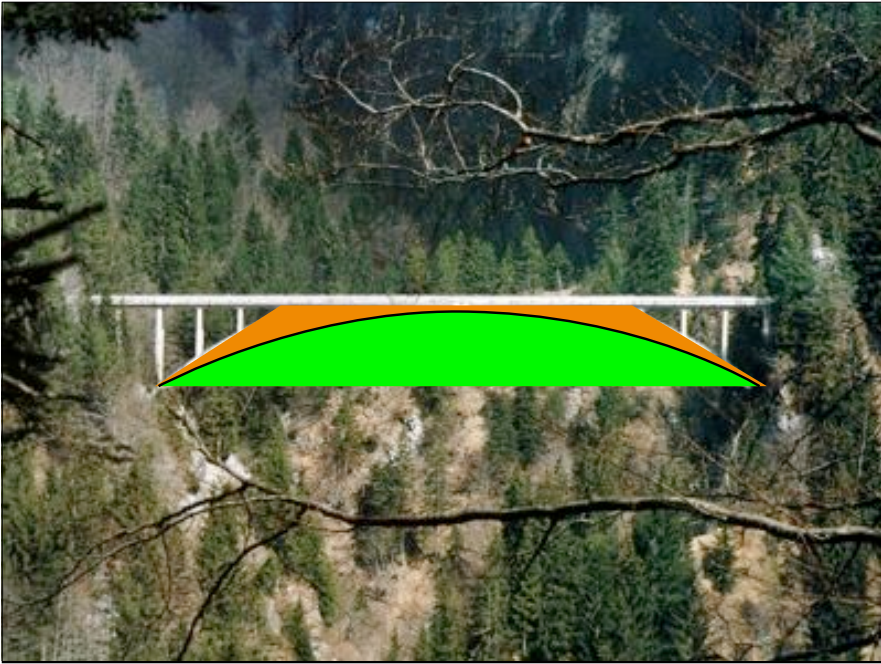
90 m span













Salginatobel Bridge (1930)

90 m span

