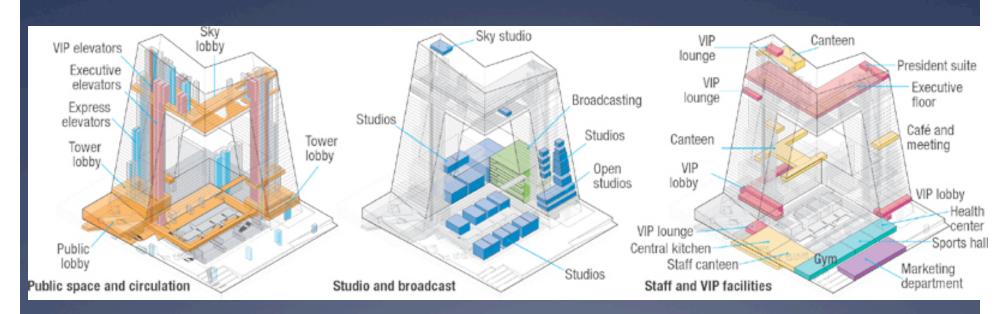
Chinese Television Building CCTV



The answer to the anonymity of Bejing's hi-rise skyline... torqued tube

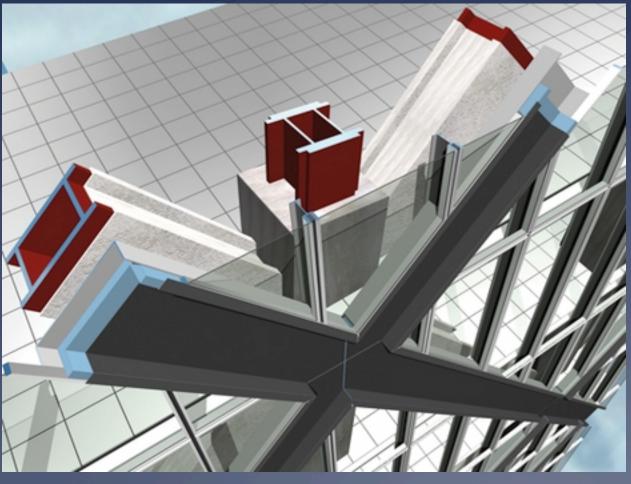
5 million square feet of functions in a 700 foot tall (52 floors) pair of exoskeletal tubes and an overhang



36 floors up, make a two-way cantilever...229 feet



Ask more of the skin...promote it from fashion to exoskeleton



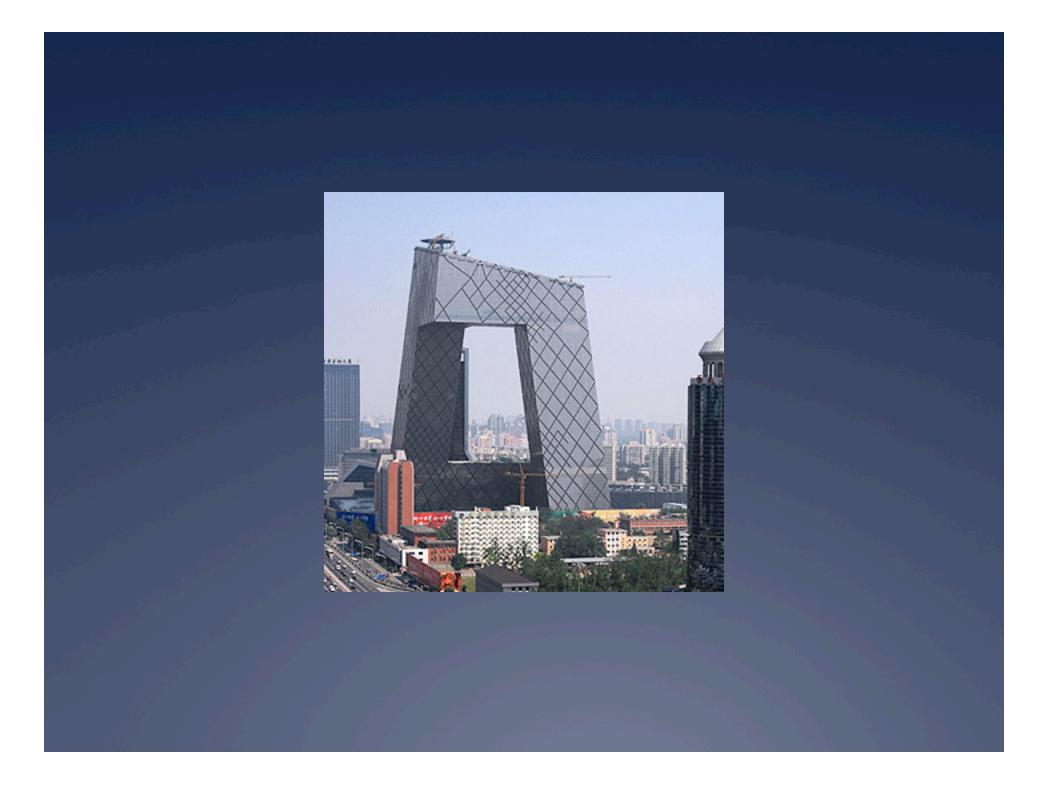
Instead of increasing the weight of each steel diagonal...add more where needed, take away where not... pattern informed by principle

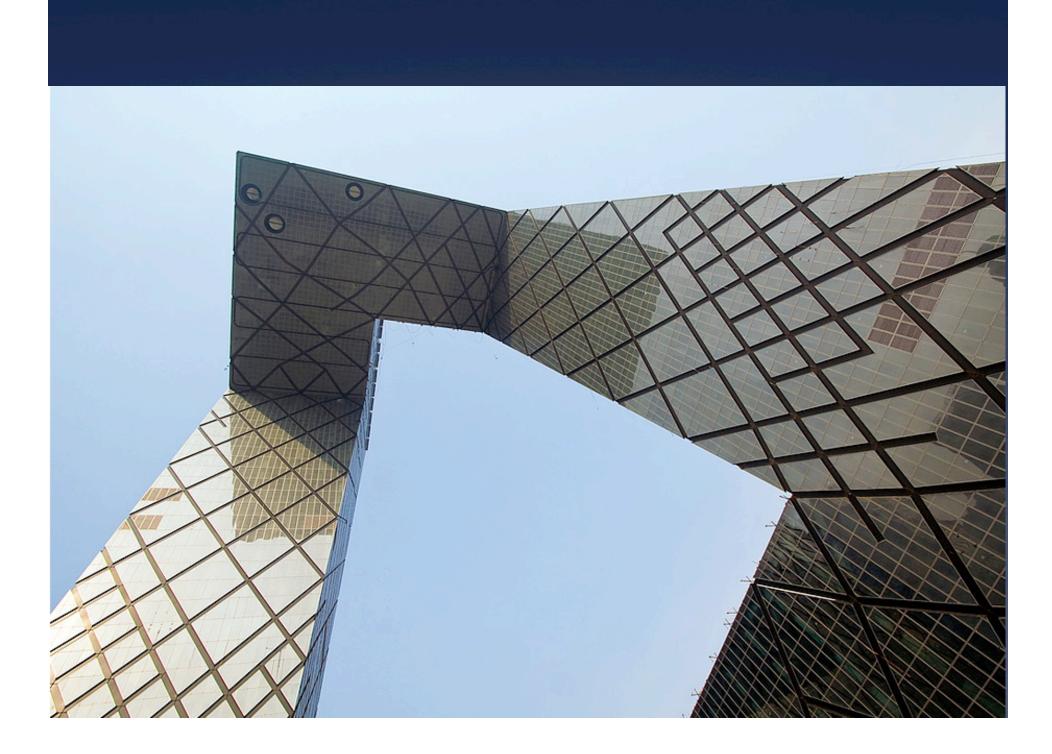


Instead of increasing the weight of each steel diagonal...add more where needed, take away where not... pattern informed by principle

More stress, more grids, more façade lines









Reduces steel tonnage to about 55 pounds per square foot

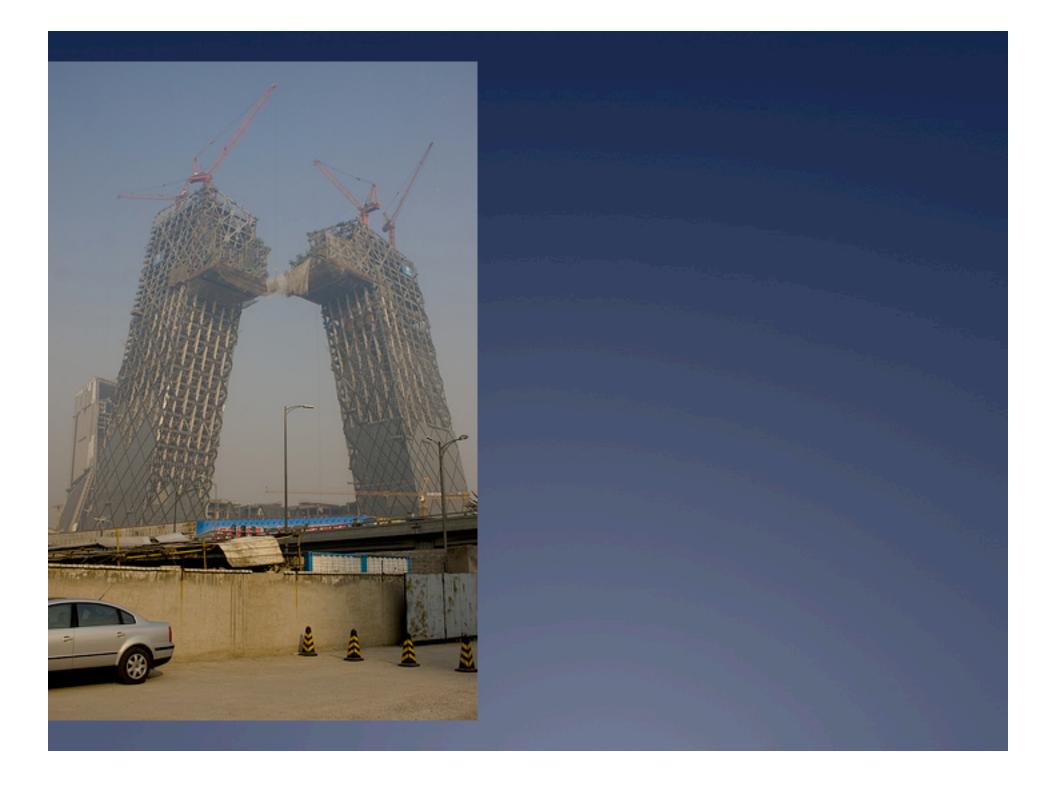








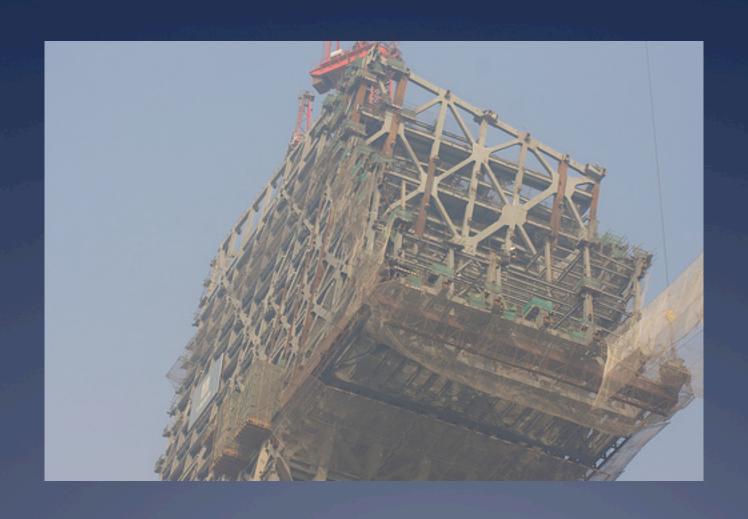
Counterbalanced with a mat foundation weigh 364,000 tons





"Soft" connection at first, made at night when steel was uniformly cool, stress monitors

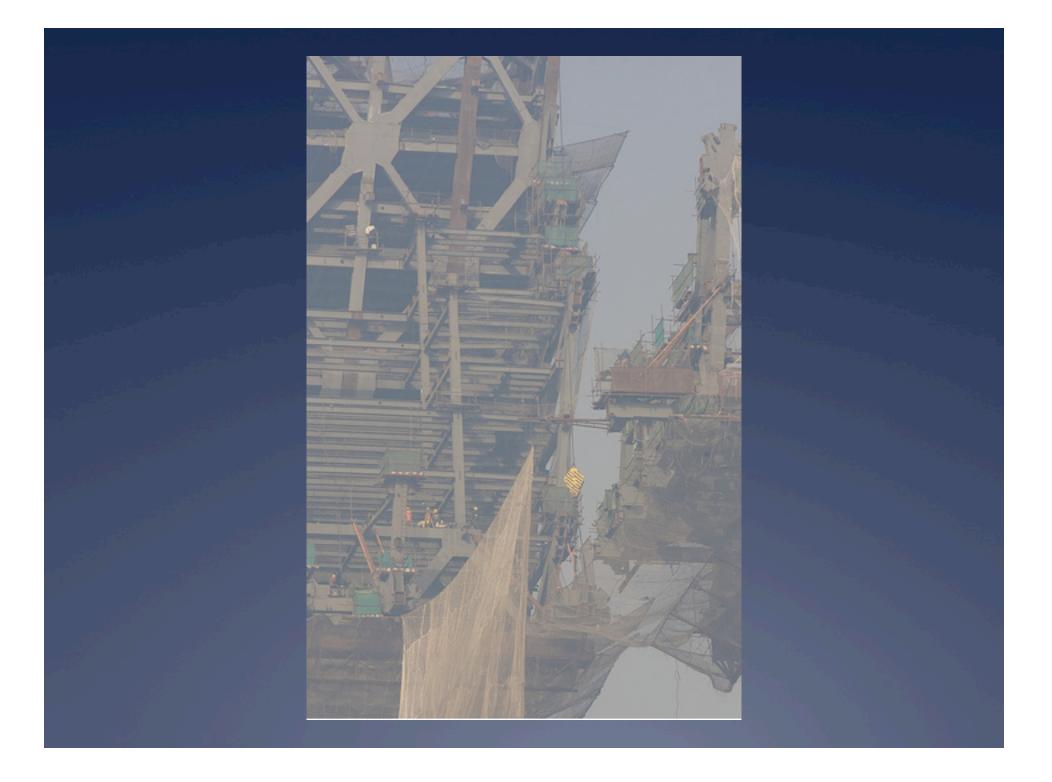
Were then placed, monitored for magnitude of thermal and wind stress, compared to simulation, they matched, so permanent connections were made and construction proceeded.



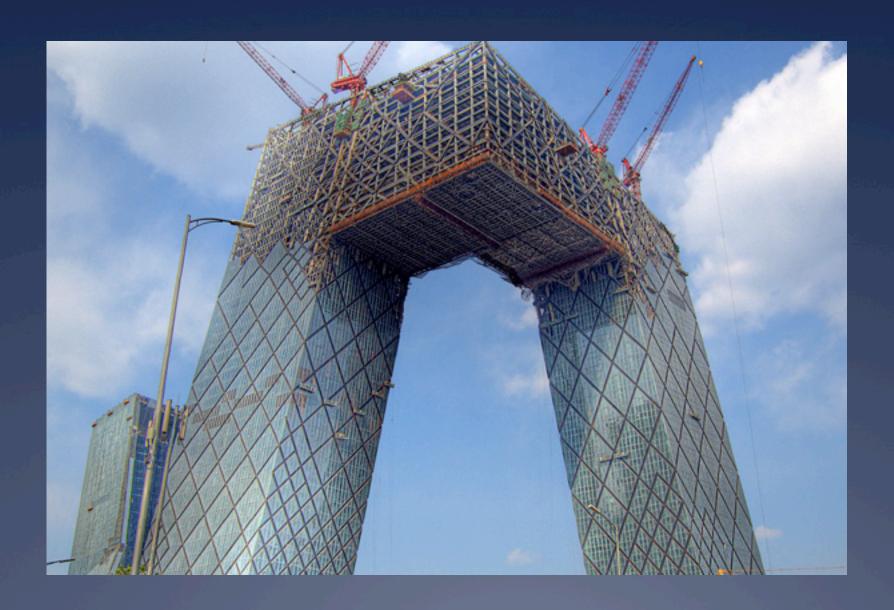


Simple principle, put more material where there are higher loads.



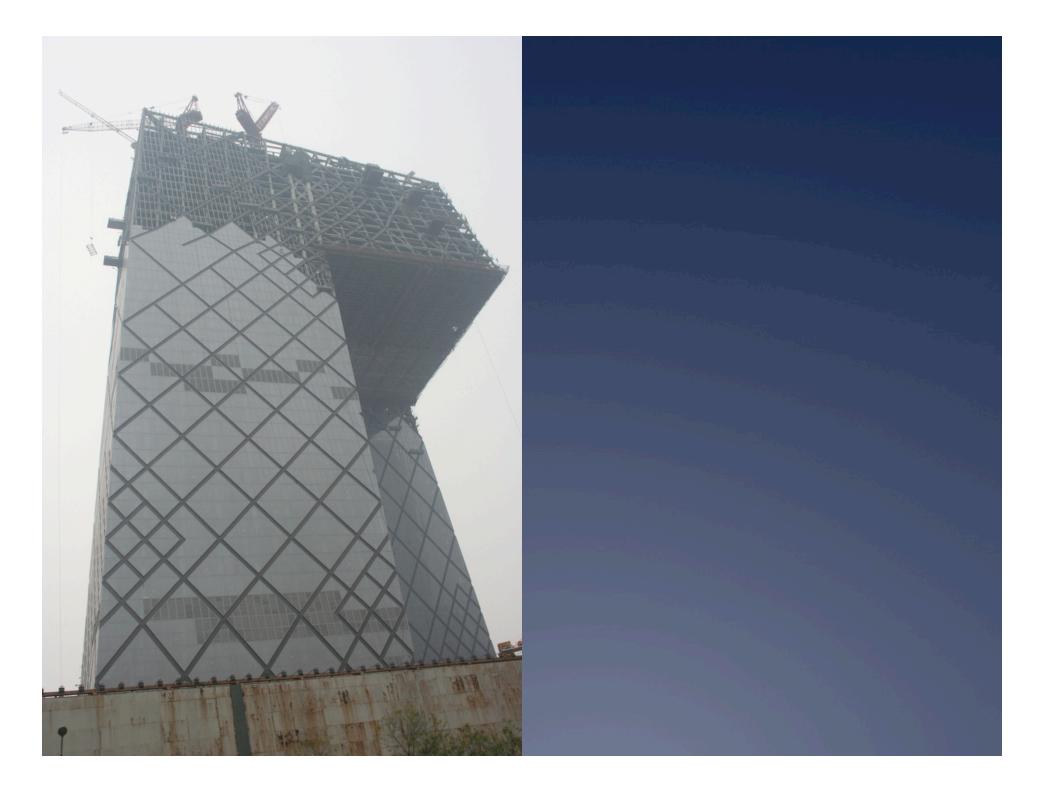


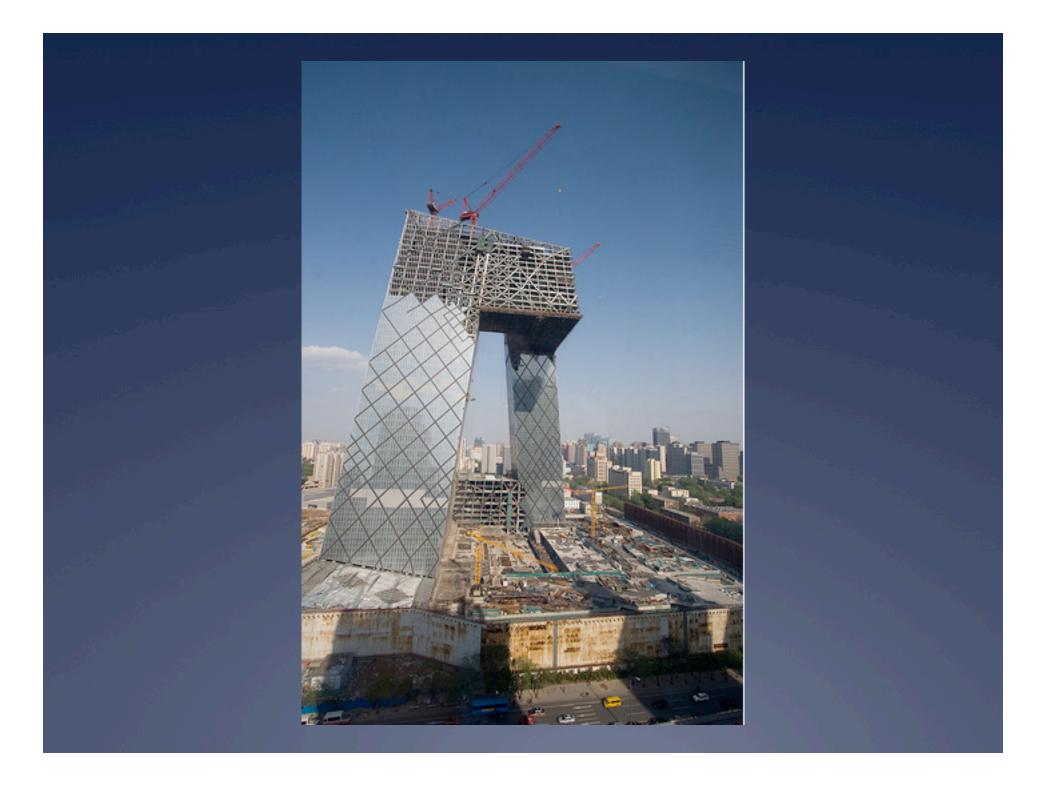




Circles to become windows in the floor















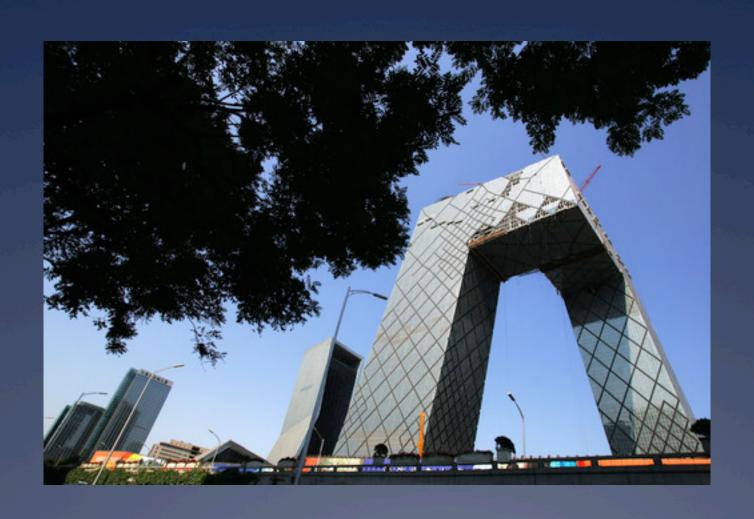


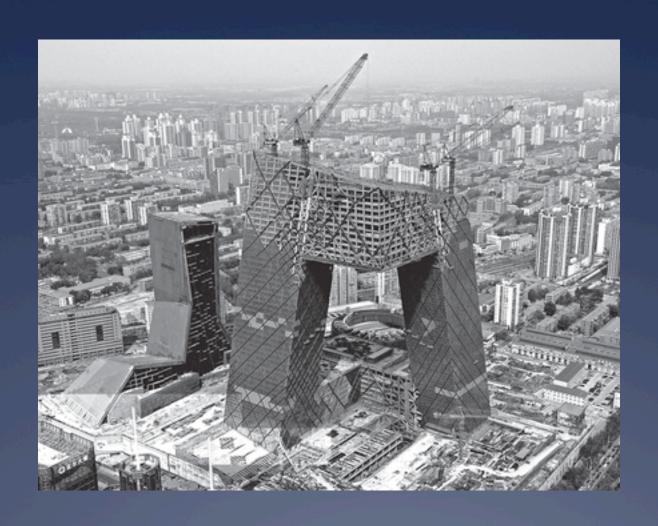


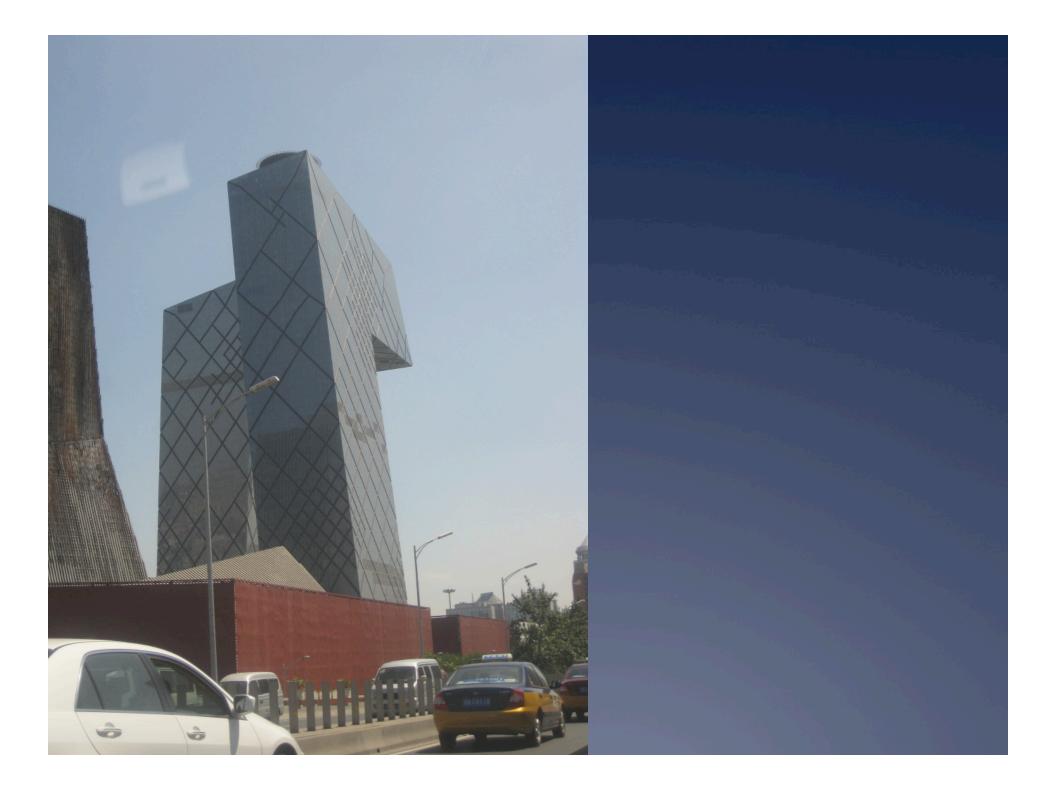


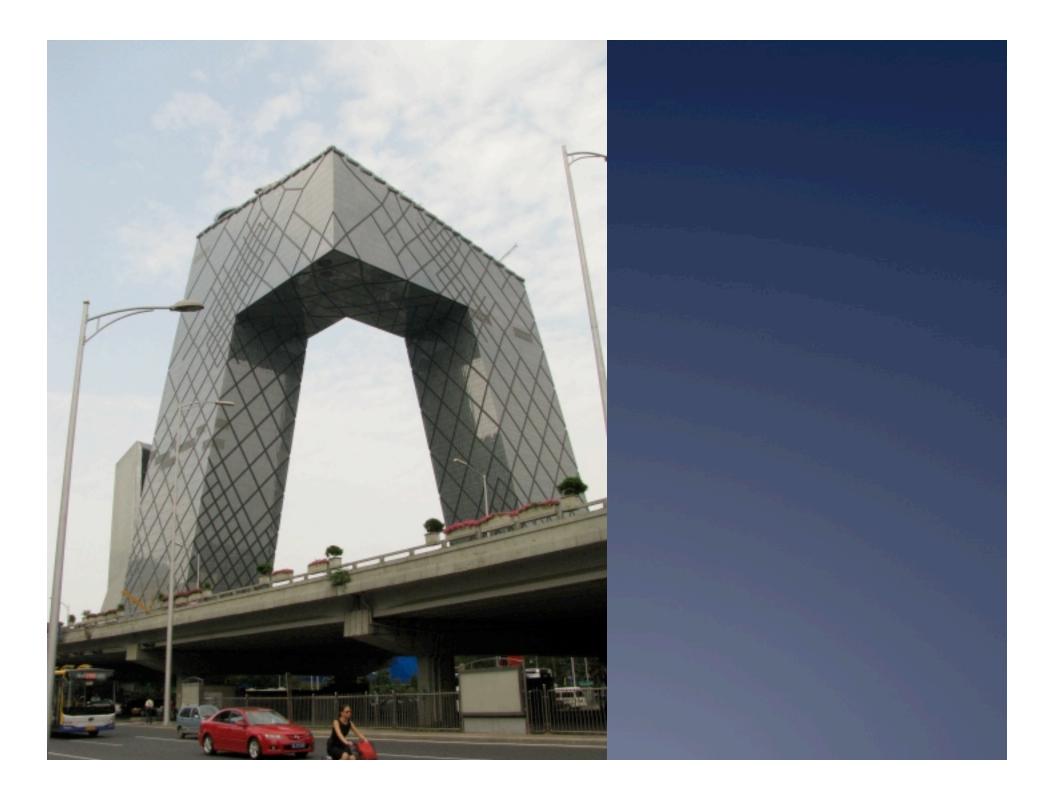


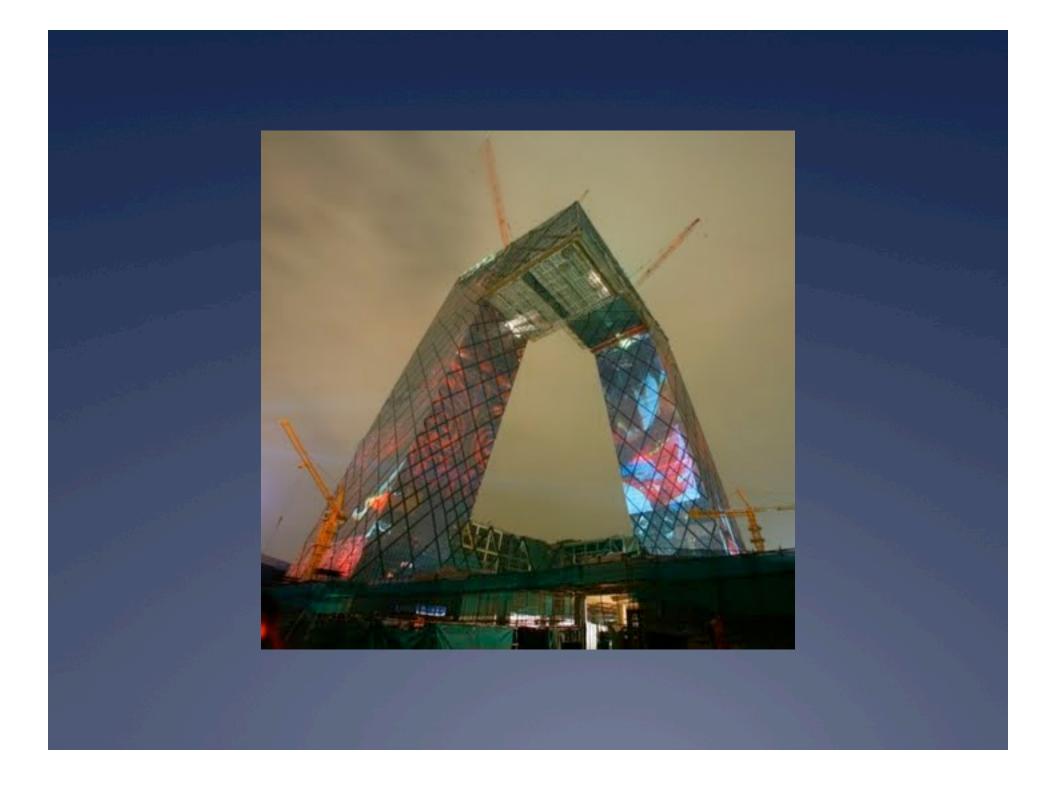




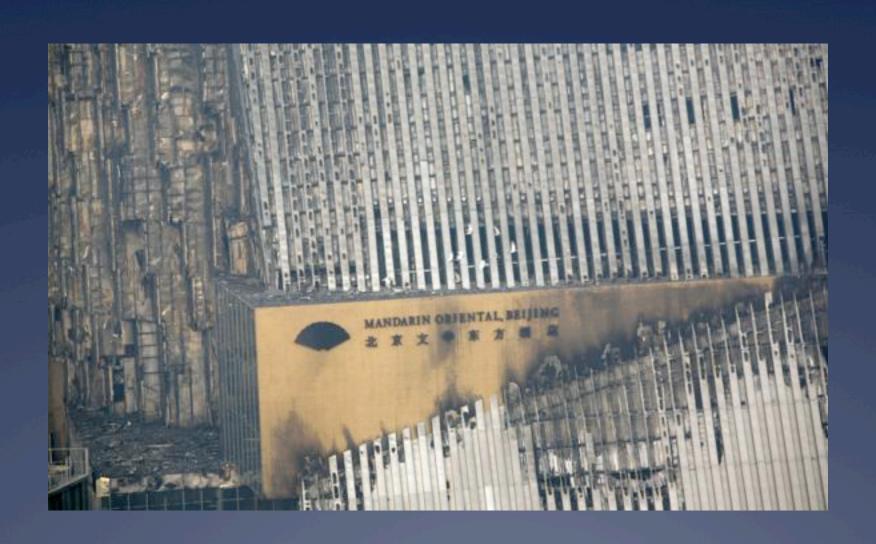


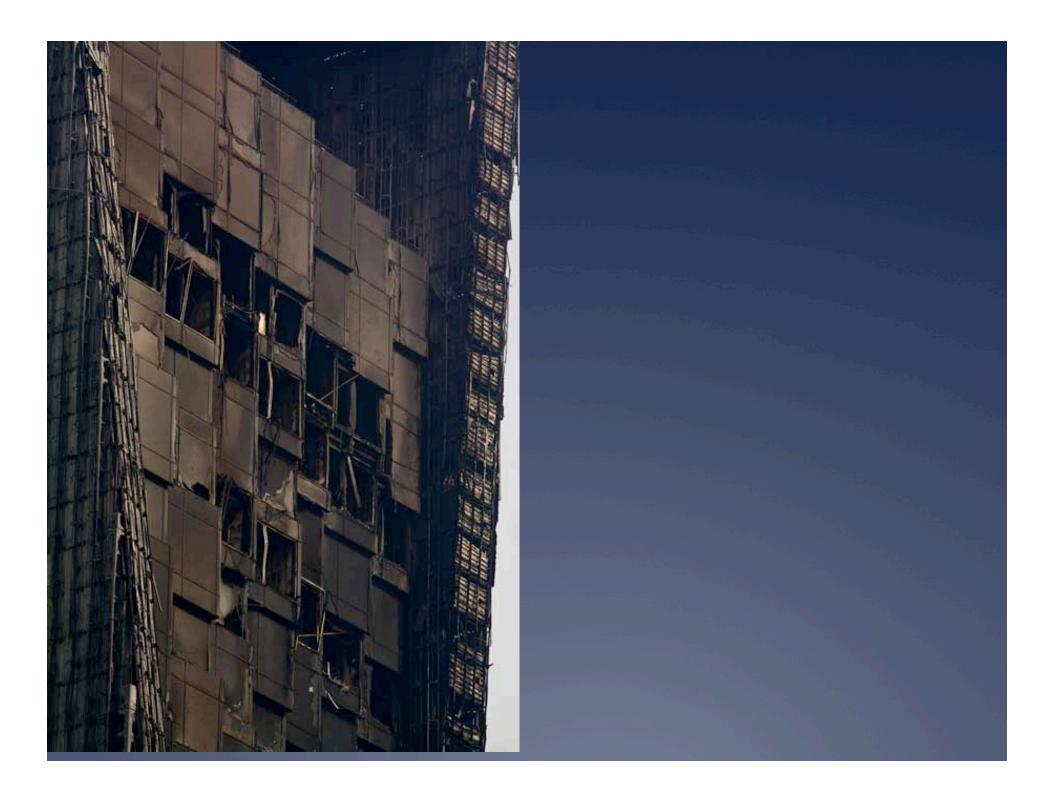


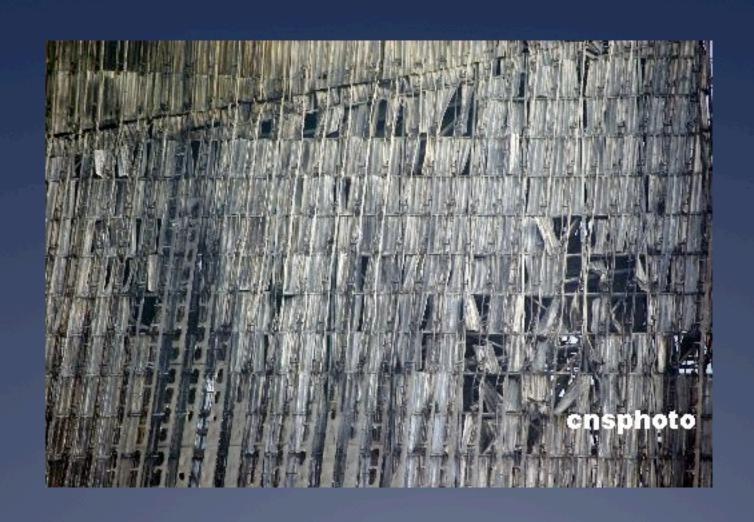












- Project: CCTV Television Station and Headquarters
- •Status: Competition 2002, 1st Prize. Completion 2008
- Client: China Central Television (CCTV)
- •Budget: €600m
- Location: Beijing, China
- •Site: 18ha in new central business district
- •Program: Total 575,000 m2: CCTV building 400,000m2; TVCC building 75,000m2; service building 15,000m2; parking 85,000m2
- •CCTV: administration 75,000m2; program offices 65,000m2; news production 70,000m2; broadcasting 40,000m2; program production 120,000m2; staff facilities 30,000m2; parking 65,000m2.
- •TVCC: hotel 52,000m2; public facilities 23,000m2 including 1500 seat theatre; parking 20,000m2

