

BRIDGES CONNECT...



GULIZAR OZYURT
TCCE

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“the human being is the connecting creature who must always separate and can not connect without separating...first conceive intellectually of the merely indifferent existence of the two river banks as something separated in order to connect them by means of a bridge.”
Georg Simmel



- Death and Bridge
- Building Bridges, Burning Bridges
- Intercultural cooperation as a Bridge

- Bridge connecting opposite political parties: coalition
- In a dream: to make peace with others for mutual benefits
- Soccer: a bridge that only men shall cross*

Physically...

- As a potent historical and cultural icon.
- As visual proxies in popular culture and a variety of commercial media for their respective cities
- Bridges inspire ...paintings, songs and films and creative writings...

BOSPHORUS BRIDGE

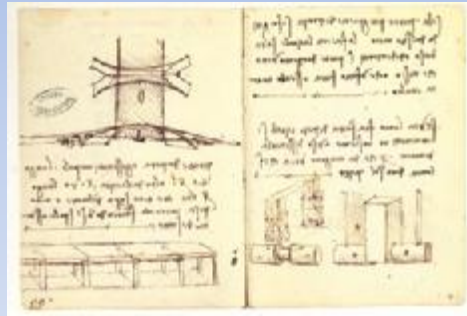


First Pontoon Bridge

- Constructed by architect Mandrocles from Greek island Samos by the order of Persian emperor Darius I around 500BC.
- First pontoon bridge of history over 1 km long with some 200 ships supporting roadway
- Army of 70000 crossed over Europe when campaigning against Scythia.

Leonardo's Bridge

- In 1502 Leonardo da Vinci did a simple drawing of a graceful bridge with a single span of approximately 240-meters. Da Vinci designed the bridge as part of a civil engineering project for Sultan Bajazet II. The bridge was to span the Golden Horn, an inlet at the mouth of the Bosphorus River in what is now Turkey. **The Bridge was never built.**



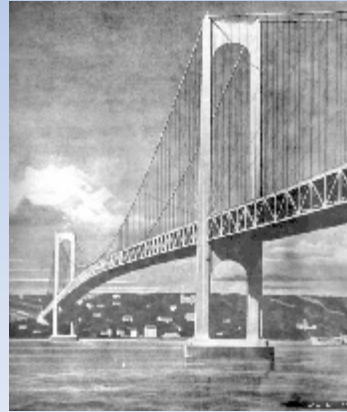
- A project submitted to Sultan Abdulhamit on November, 1900.
- The idea first came up before the Ottoman-Russian war in 1877-1878 and gained significance after the concessions granted to Germany for the Baghdad railway.
- A railway would run over the bridge which would be built as three suspension bridges adorned with minarets and domes between the stone footings of the piers.
- The project was not implemented.



Tension band bridge project proposed by Dykerhoff Widmann on 1958.

The project proposed by D.B.Steinmann which was accepted on May 16, 1960.

The project was not implemented.



Thus the idea of constructing a bridge on Bosphorus had to wait to take steps of implementation until the end of 1960s.



Istanbul had got into a rapid and apparent economical, cultural and social process of growth causing a regional upsurge in population and hence increasing traffic density within that period.

The government encountered opposition from many institutions and NGOs including Turkish Chamber of Civil Engineers from 1968 until 1970.

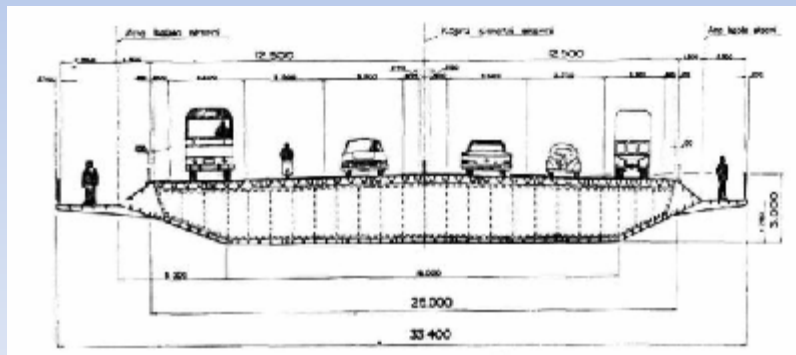
One bridge on the seaway would form a 'trap of bridges' since more bridges would be needed to solve the problems such as unplanned settlements, higher traffic density, migration and population increase by accelerated growth rates which would be initiated by the construction of first bridge.



The symbol for different socio-economic and political views between governing parties and opposing institutions.

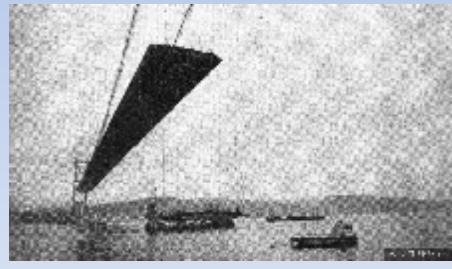
Despite all the oppositions, the construction started in February 1970 and completed in 39 months; 1973.

- Designer: Structural Design : Freeman-Fox and Partners
- Realization price: 155,000,000 US Dollar
- The bridge was designed to bear 6-lane highway traffic.
- Total length of the bridge is 1,560 m. with a mid-span of 1,074 m.
- The width is 33.40 m. and height above the sea level is 64 m.



Bosphorus Bridge was the longest suspended bridge in Europe and fourth longest one in the world at the date of completion, i.e., 1973.

The bridge was designed to resist any seismic movement of the base rock that may subject to 0.1 g horizontal and 0.05 g vertical earthquake accelerations.



After completion of bridge, some of the industry moved to the east side thus a rapid development took place causing migration and new settlements which in turn increased the amount of traffic between both sides.

Bosphorus Bridge could not meet the increasing demand and within a couple of years, a second bridge was proposed and constructed.



Thank You!