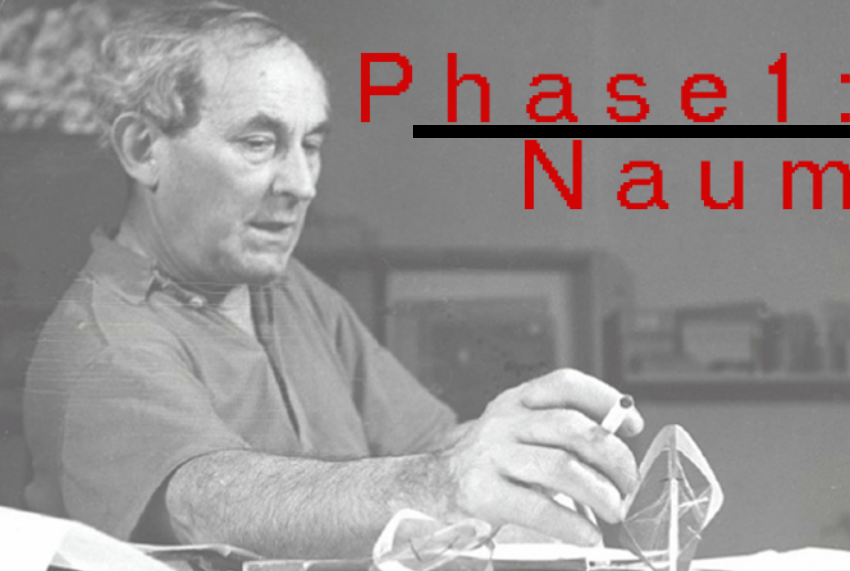


Phase 1: Research

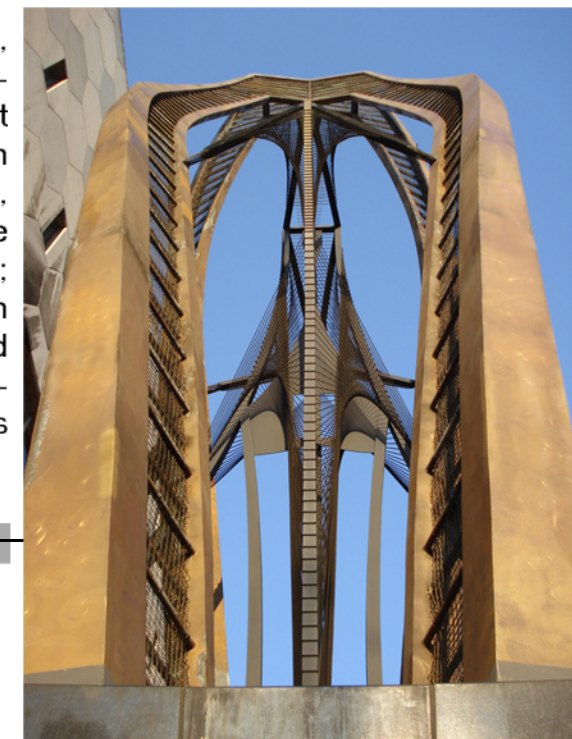
Naum Gabo: A Study of Spatial Curvature



Constructie, Rotterdam 1956-7

Pre-stressed concrete, steel ribs, stainless steel, bronze wire, and marble

For the Bijenkorf Construction sculpture in Rotterdam, Gabo's intent was to make a strong connection demonstrating the vital role of sculpture as an integrated part of architecture and the public. The sculpture fits in with the surroundings and contains a message of rebirth, progress, and invention which also helped stimulate the city after the war. The tensile sculpture rises 85' high; consisting of two pairs of curving steel shafts, coated in golden bronze, resting into two bases of reinforced concrete sheathed with black granite. The inner structure is made of bronze wire formed over a stainless steel skeleton.

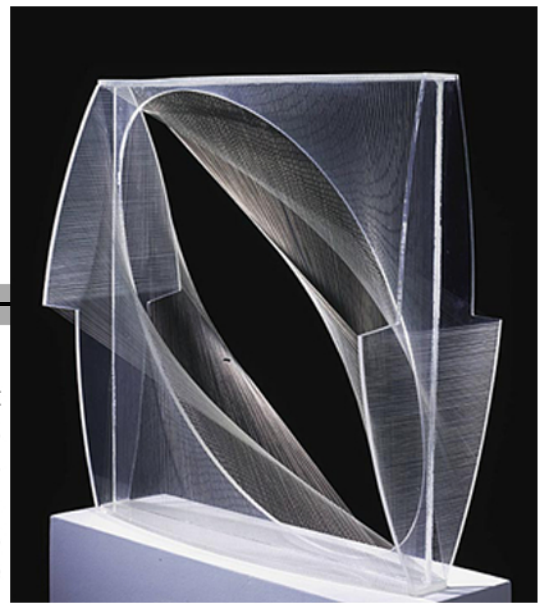


Linear Construction in Space No. 1 (Variation)

Perspex with nylon monofilament, 62.9 x 62.9 x 24.2



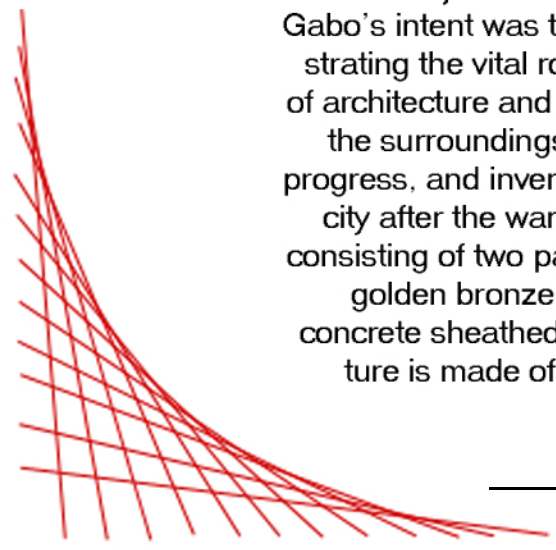
Slightly different version from the first prototype (1941-2). This was Gabo's first sculpture to incorporate the technique of stringing by the notches on the plastic framing structure. This generates a much broader and more active pattern.



Linear Construction in Space No. 2

Perspex with nylon monofilament, 92 h

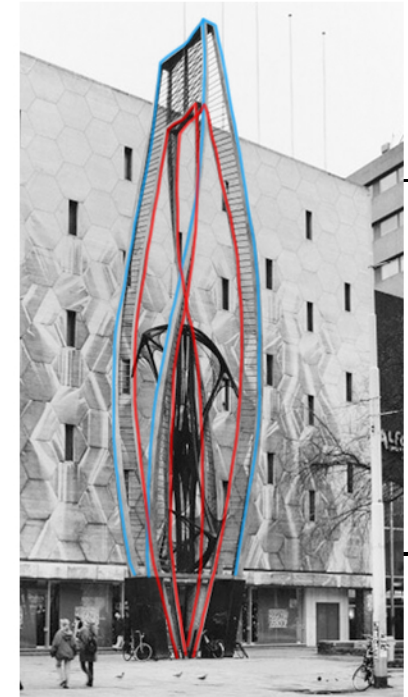
With this sculpture Gabo generates a more three dimensionally engaging piece. Two intersecting curved plastic pieces generate the structure the nylon filament is strung to. Similar to No.1, the filament rest in notches on the edge of the structure.



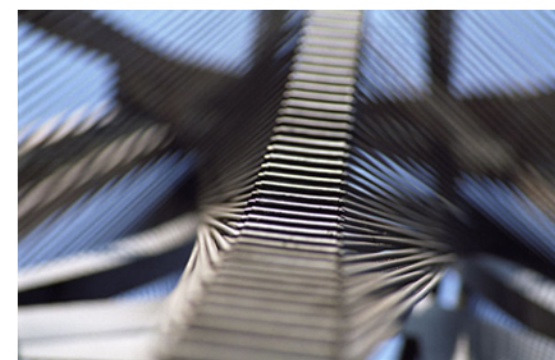
Mathematical Diagram

Linear Construction in Space No.1 resembles this even axis parabolic line diagram. However, the way in which he manipulates the axis produces sensuous effects of movement and radiant light is achieved by the luminous nylon filament.

Compression/ Tension Diagram



In the diagram above it shows how the sculpture structurally works. In blue are the members in **compression** which distribute the weight through the reinforced concrete and in red are the members acting in **tension**.



Linear Construction in Space No. 3

Perspex and stainless steel, with stainless steel spring-wire and red paint, on aluminum and wood base, 152 h



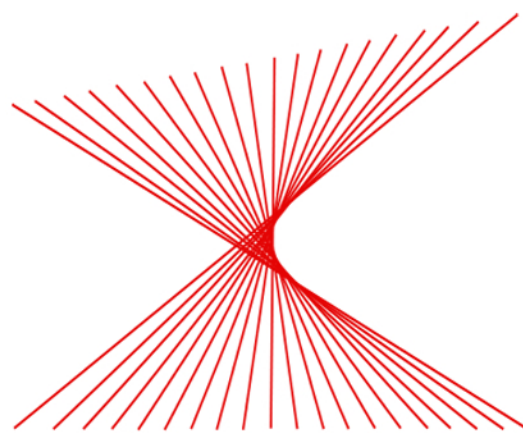
Gabo began to explore with color and different materials with this sculpture. He also introduces a dialog between the interior and exterior, with the spring-wire revolving around a center steel piece unifying the importance of the whole.



Linear Construction in Space No. 4

Anodized aluminum with stainless steel spring-wire, 96.5 h

In the final piece of this series, Gabo masters the technique of stringing arrangements which generate motion and complexity. This piece offers an endless variety of views, moments, and exploration thus generating a fourth dimension, time.



Basic Parabolic Line Diagram

Linear Construction in Space No. 2- 4 all incorporate this basic line diagram. However, Gabo has mastered this technique and displays it in three different configurations.

Each is unique and inspires motion, beauty, light and time.