The beginnings of arched mechanics

Dedicated to Kenneth Snelson, whose bold and very conscientious searches, although they were respectfully considered, did not find support among the eminent luminaries of modern physical science.

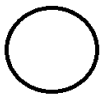
Meanwhile, things touched by Snelson, who is an outstanding inventor and sculptor, as well as a recognized leader in the panoramic photography genre and perhaps the most famous and dramatic student of Buckminster Fuller, suggest a very important assumption that in modern communication searches macro- and microworlds the “meso world” was thrown out in a “strange way”, the inhabitants of which we are and from the inside of which we are trying to discern the very “micro” and “macro” ones. Since other effects are precisely in our "meso world" manifestations of the other two. The last topic, however, is not disclosed in the appendix, but it presents a different, in my opinion, no less important thing: an attempt to draw a parallel on three grounds, the mechano-geometric intuition of which lies “before” Heron’s ideas, is even more primitive and reveals a way thinking of mechanical phenomena and entities in the Bronze Age. It seems that in those days, the main types of mechanisms were thought a little differently than in the era of Alexandria and subsequent eras, including the Renaissance and the New Time. So, the “atlas of machines” (in other words, the basic primitives of the "logic of mechanisms") of those people, reflecting the corresponding intuitions and universals, was different. In connection with all this, a number of very interesting circumstances are also revealed that are still not captured in both the artistic and scientific environments. By me they are partly indicated in other places.

The beginnings of arched mechanics and the general foundations of non-point combinatorial geometry

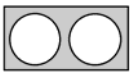
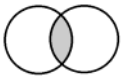
An attempt to draw a single parallel on three grounds.

<table>
<tr><td colspan="3">Basic physical intuition</td></tr>
<tr><td>String

Tension.
Axial-in-itself (ax-i).
Maximum
(in the limit - infinite)
radius according to Fuller.
"Ocean of Stretching".
Length order.</td><td>Quantum

Mesomir.
Axial-by-Fuller (ax-f).
Axial asymmetry – the tension of the sphere according to Fuller.
Local (sectoral) radius.
(1/2 marginal.)</td><td>Corpuscle
 
Compression.
Equatorial (eq).
Equatorial asymmetry – compression of a sphere according to Fuller (projection of a sphere).
Minimum
(in the limit - zero)
radius according to Fuller.
"Compression Islands".
Substance order.</td></tr>
<tr><td colspan="3">Curvature spiral</td></tr>
<tr><td colspan="2">Screw (bending and supertwisting screw).

Single arc, "ax-i".</td><td>Radial (carabiner).

Single arc, "eq".</td></tr>
<tr><td colspan="3">Arc combination
In the case of an arch, duality can be a condition for the stability of the system, in contrast to the monad forming a mobile connection. This is the difference from the platonic exegetics of the monad and duad.</td></tr>
<tr><td>")("
No closure of the inner space.
Handling by external (convex) sides.
The ends are not connected.
The combination of touch arcs.
One touch point of arcs.
No circuit.</td><td>"()"
The closure of the internal (negative) space.
Handling the inside (concave) sides.
The ends are connected (closed).
Two points of tangency of arcs.
Symmetrical closure.</td><td>"))"
The closure of the internal (negative) space.
The circulation of the inner (concave) and outer (convex) sides.
The ends are connected (closed).
Two points of tangency of arcs.
Asymmetric closure.</td></tr>
<tr><td colspan="3">Euler-Boole-Venn</td></tr>
<tr><td> 
No intersection.
Everyone has their own.</td><td> 
There is an intersection.
Everyone has their own.</td><td>
Absorption.
One has his own
another doesn't.</td></tr>
<tr><td colspan="3">The geometric intersection of arcs at an angle of less than 90 degrees mechanically forms a wedge.
This intersection (as well as arcs and lines) forms the basis of the combinatorial geometry of the arch.</td></tr>
<tr><td colspan="3">Wedges (corners) of arc combinations</td></tr>
<tr><td>Handle (grip, helve, rein) order.
Also concave blade (sickle) order.</td><td>Dagger/stylet order.</td><td>Knife/axe order.</td></tr>
<tr><td>
Equatorial on axial.
Resistance in deflection
or lateral compression.</td><td> </td><td> </td></tr>
</table>

Wedges (corners) of combinations of lines and curves The basis of similarity is the structure of the line intersection node.		
 Straight concave Like a biconcave (Handle order.)	 Double straight Like a biconvex (Dagger/stylet order.)	 Straight convex Like a convex concave (Knife/axe order.)
The main types of arc working ends		
Vajra		
 "Antlers", vietnamese vajra.	 Yavara.	 Labrys.
Plane bending of one arc		
External 	Internal 	
Guy's beginning Connection of arcs by internal (concave) sides without end participation.		
Screw (rope). The ends do not close.	Ring (chain). There are no ends to close.	
Bow triad		
 "Ax."	 "Ax."-"Eq." (1/2 marginal.)	 "Eq."

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