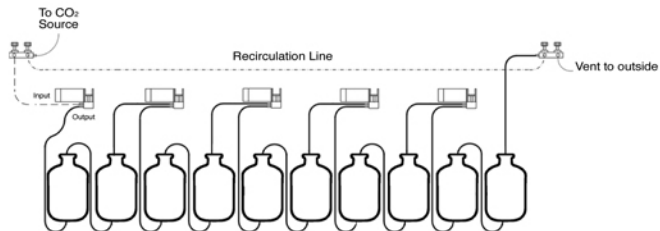
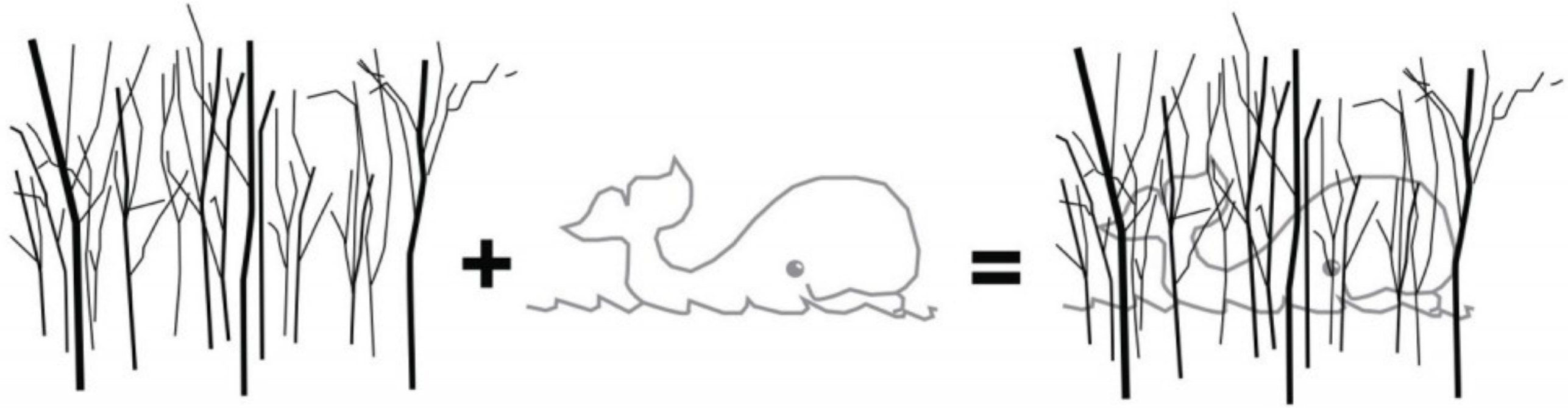


**exploded perspective bioreactor**

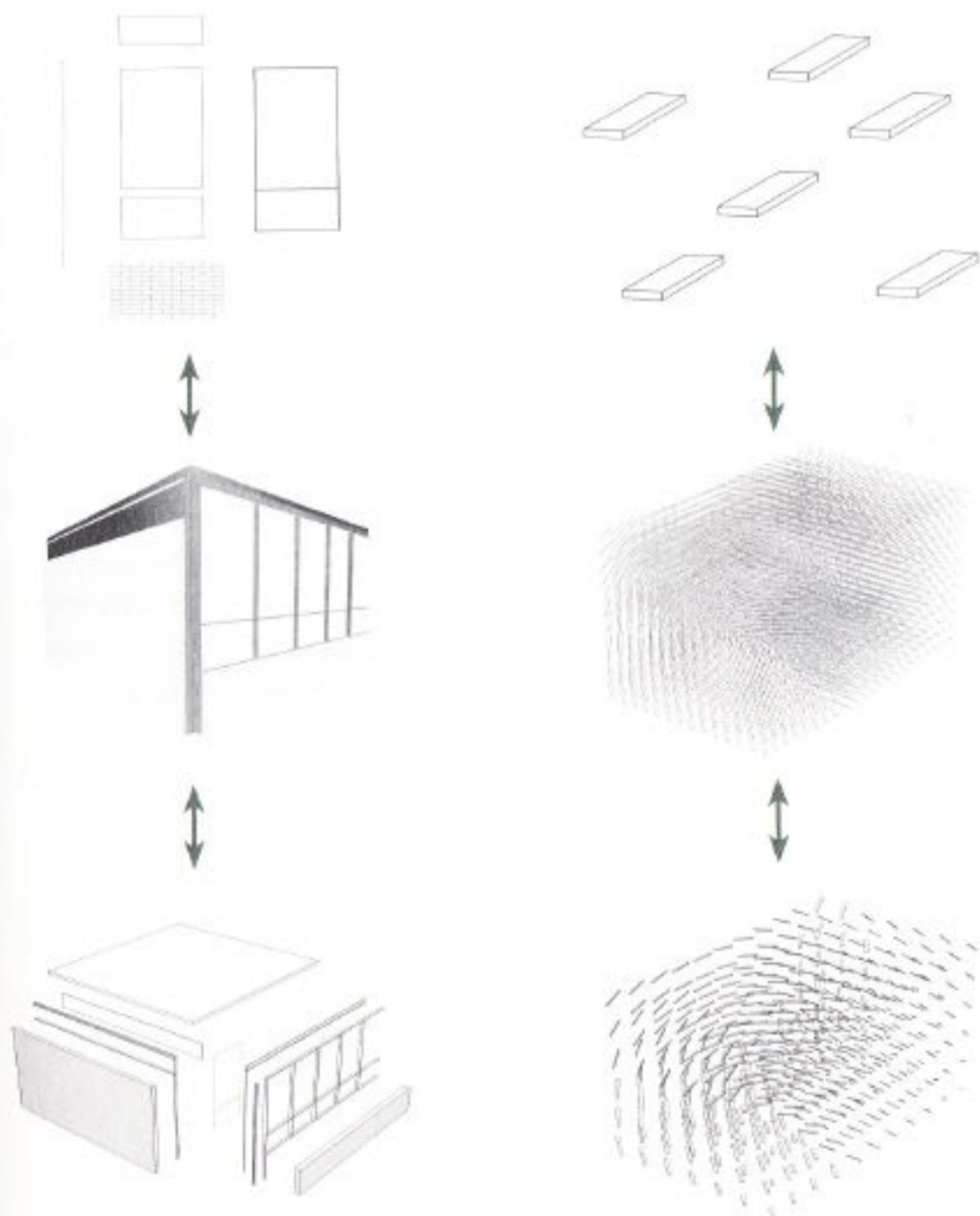
**bioreactor pump system**



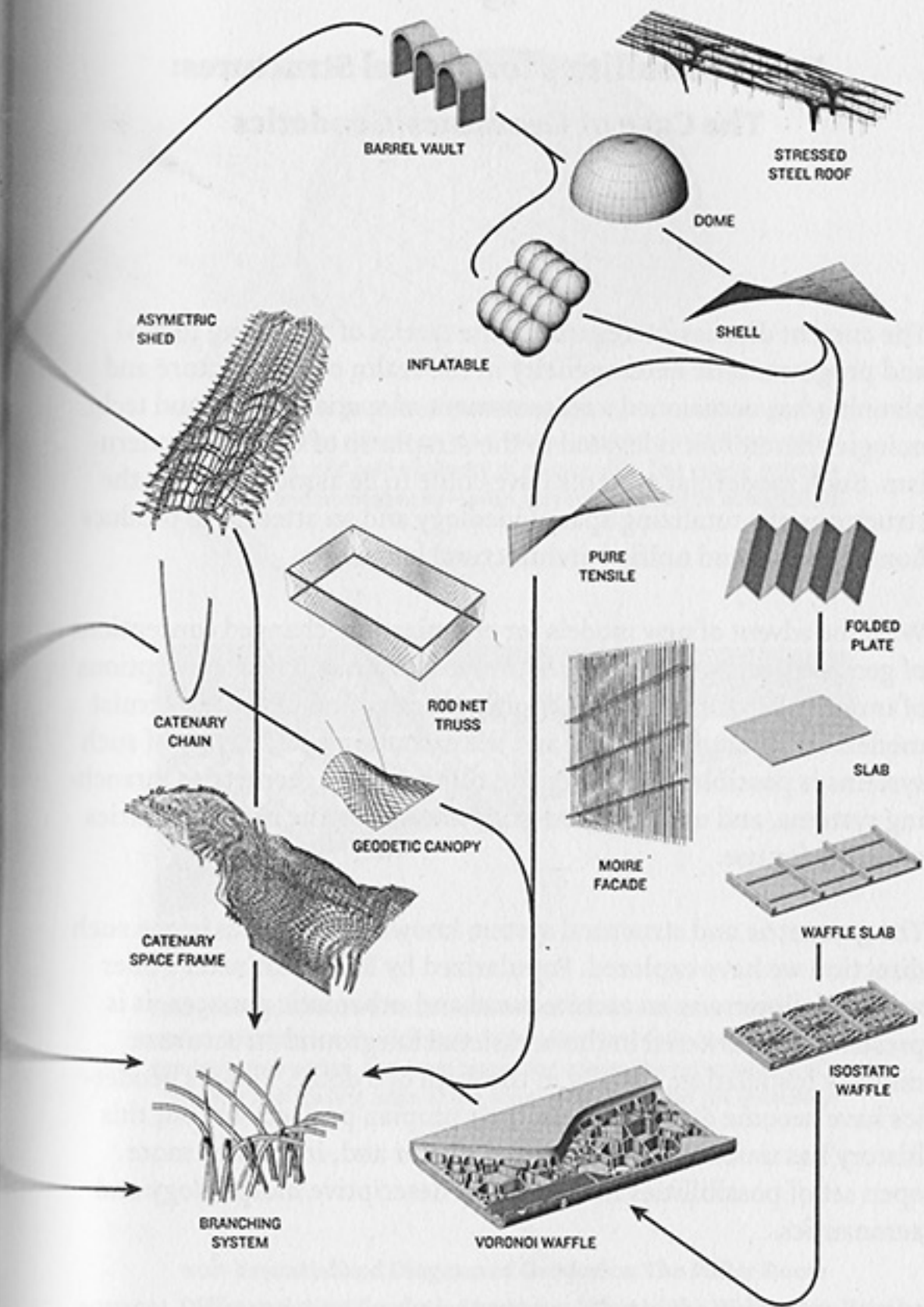
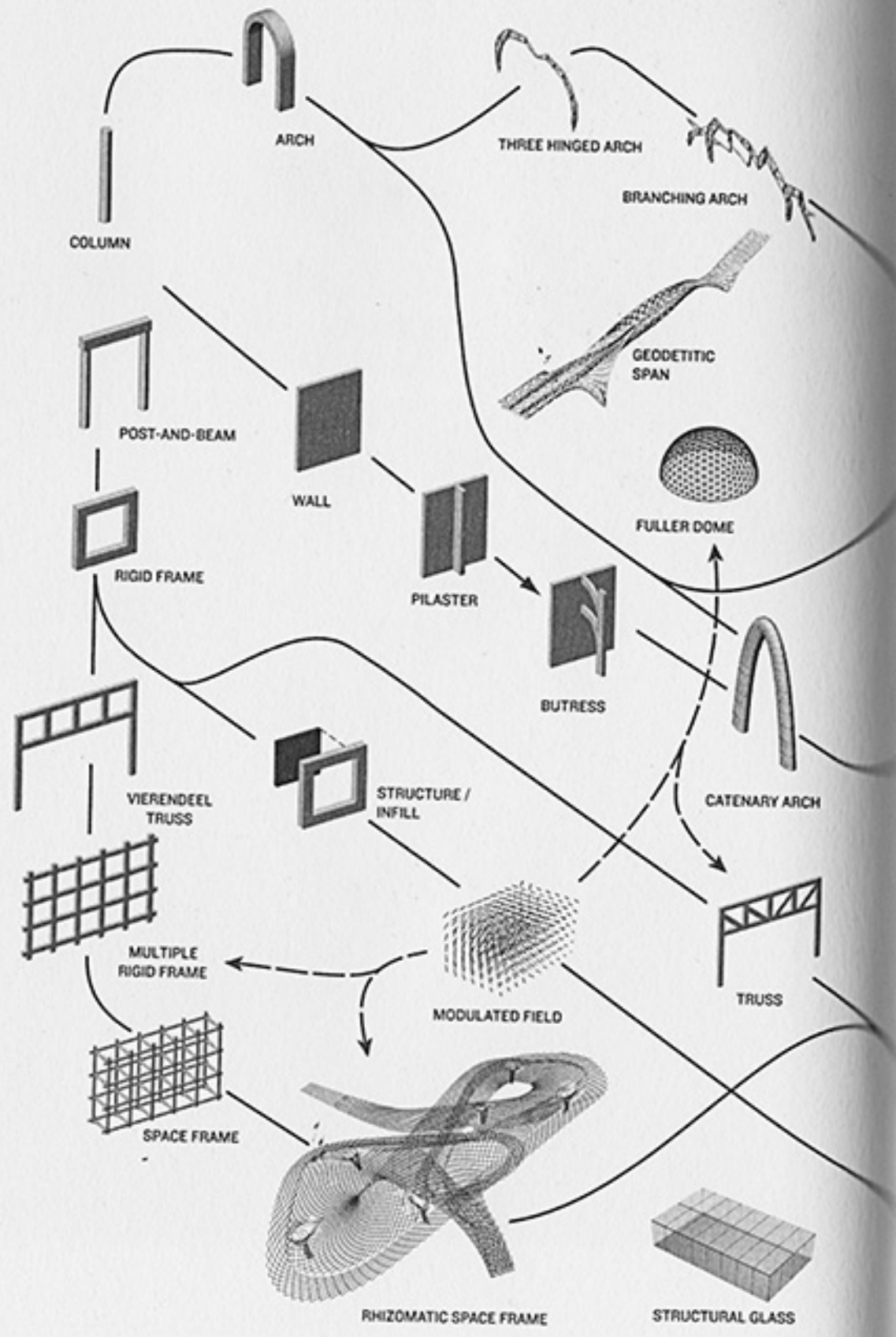


PROGRAMA:



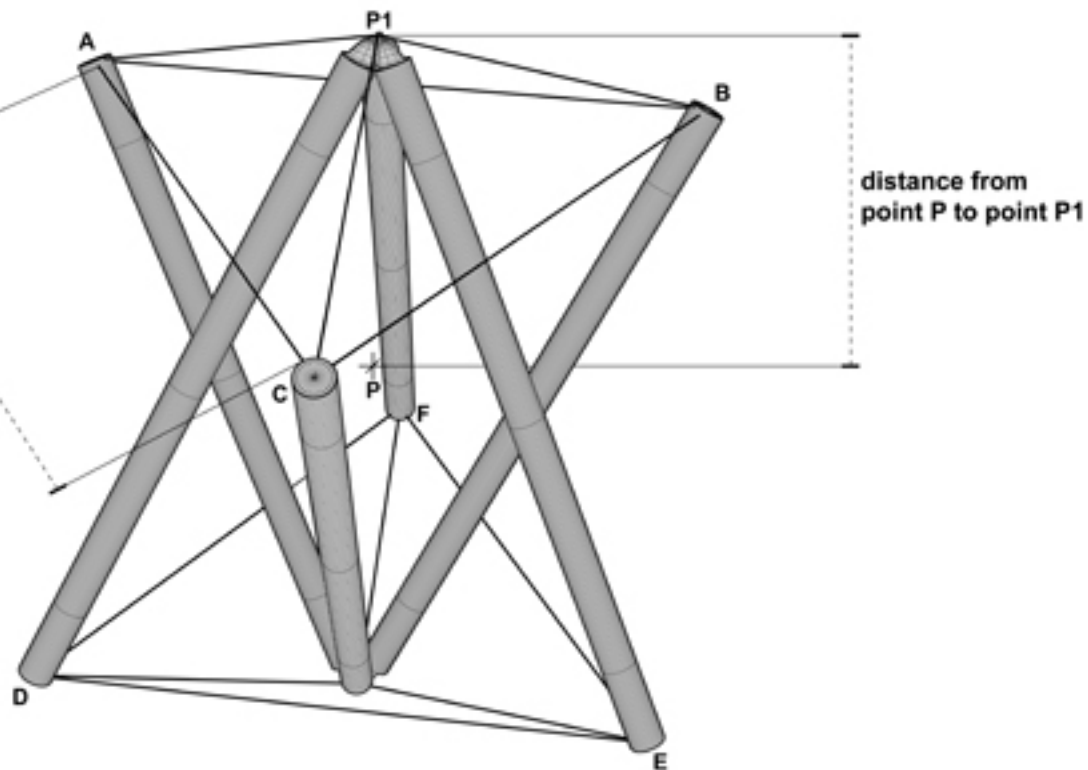


**LEFT Simple Nested Hierarchy: Whole Reducible to its Parts**  
**RIGHT Complex Hierarchy: Whole More than the Sum of its Parts**



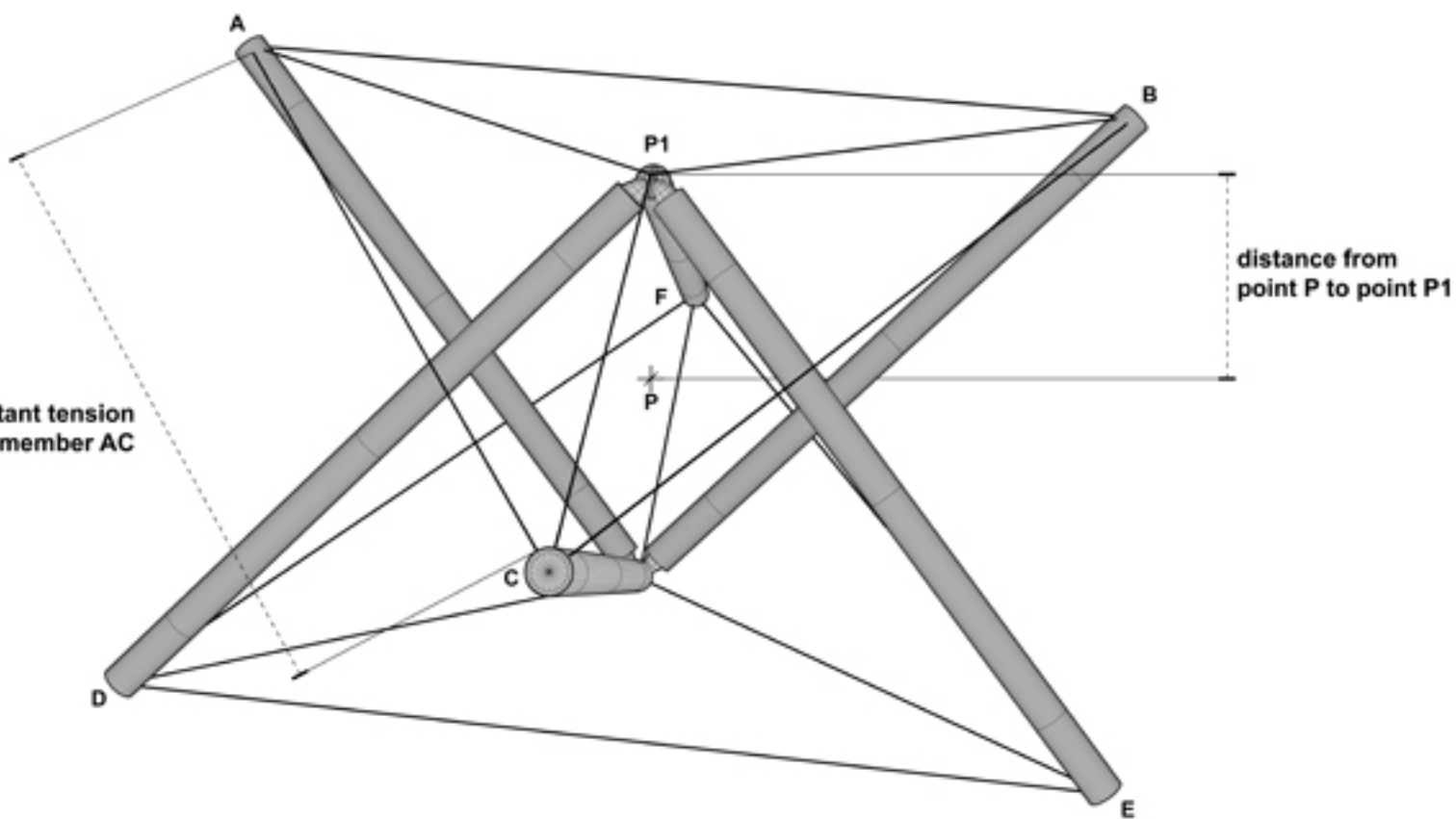
# Tensegrity Diagram

resultant tension  
in member AC



distance from  
point P to point P1

resultant tension  
in member AC

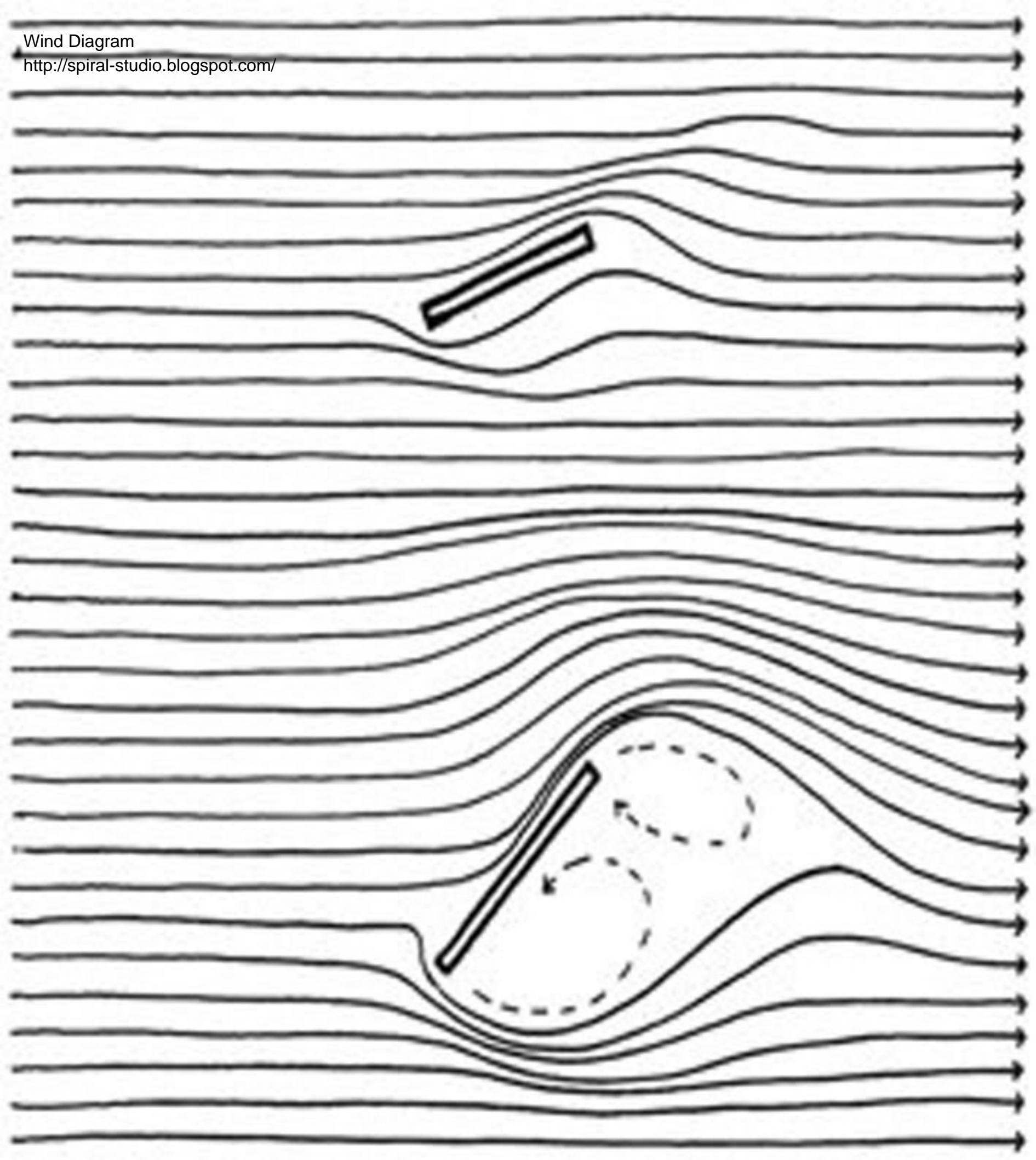


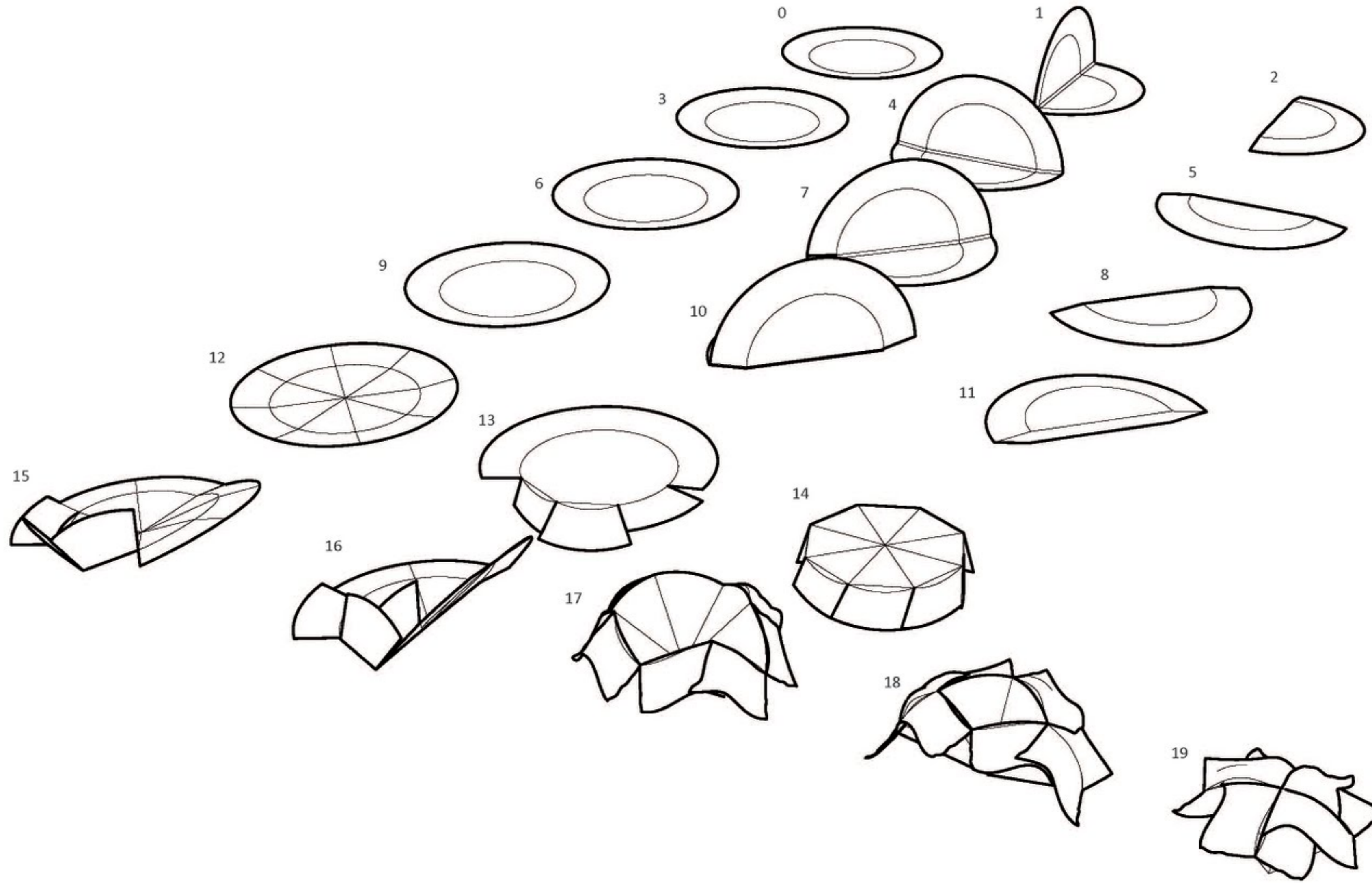
distance from  
point P to point P1



Wind Diagram

<http://spiral-studio.blogspot.com/>

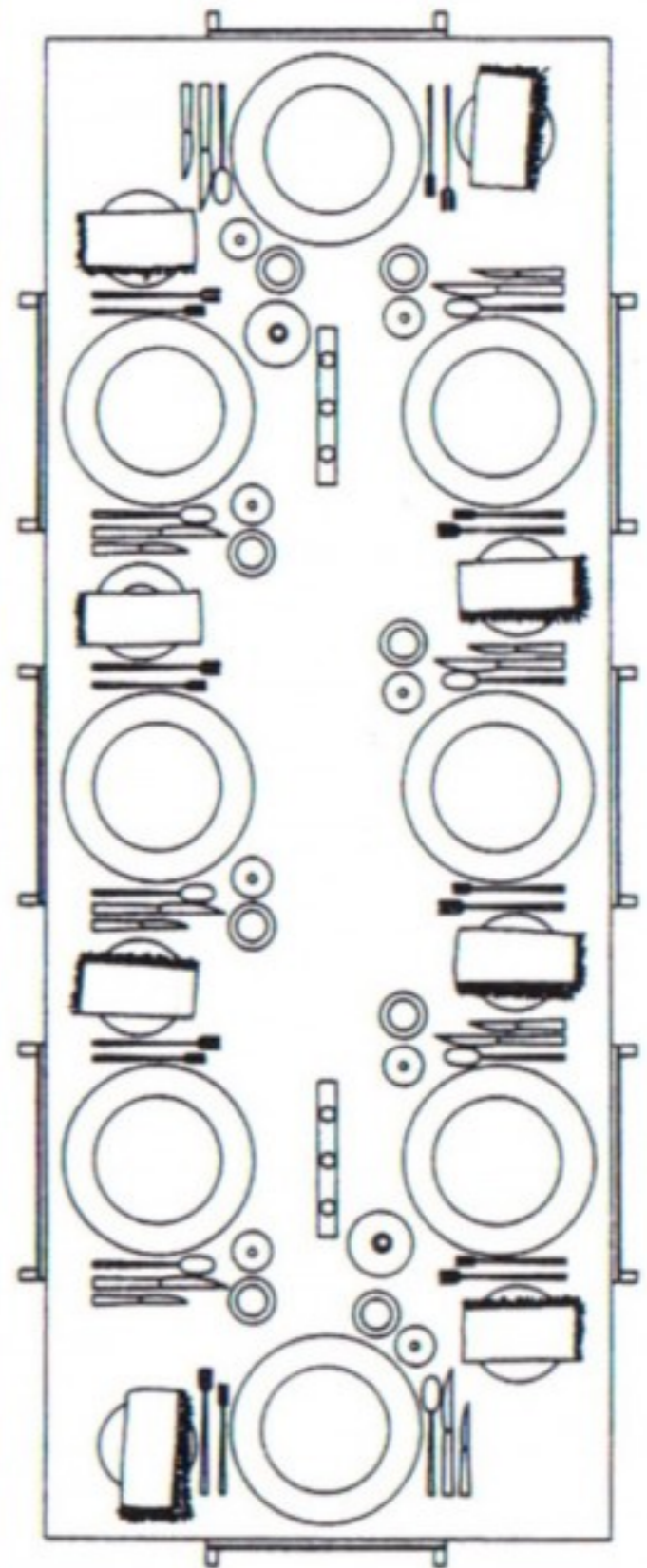
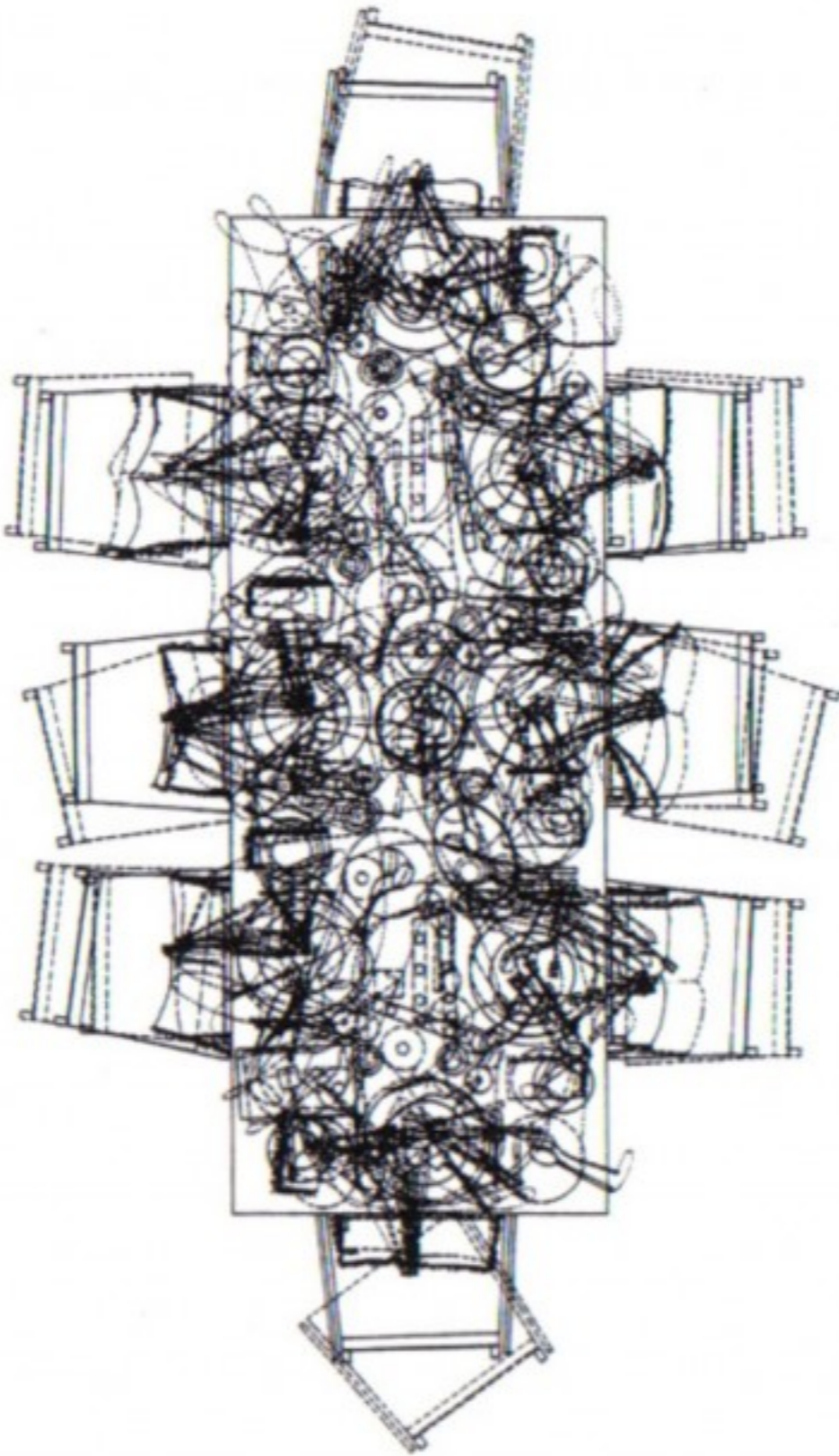
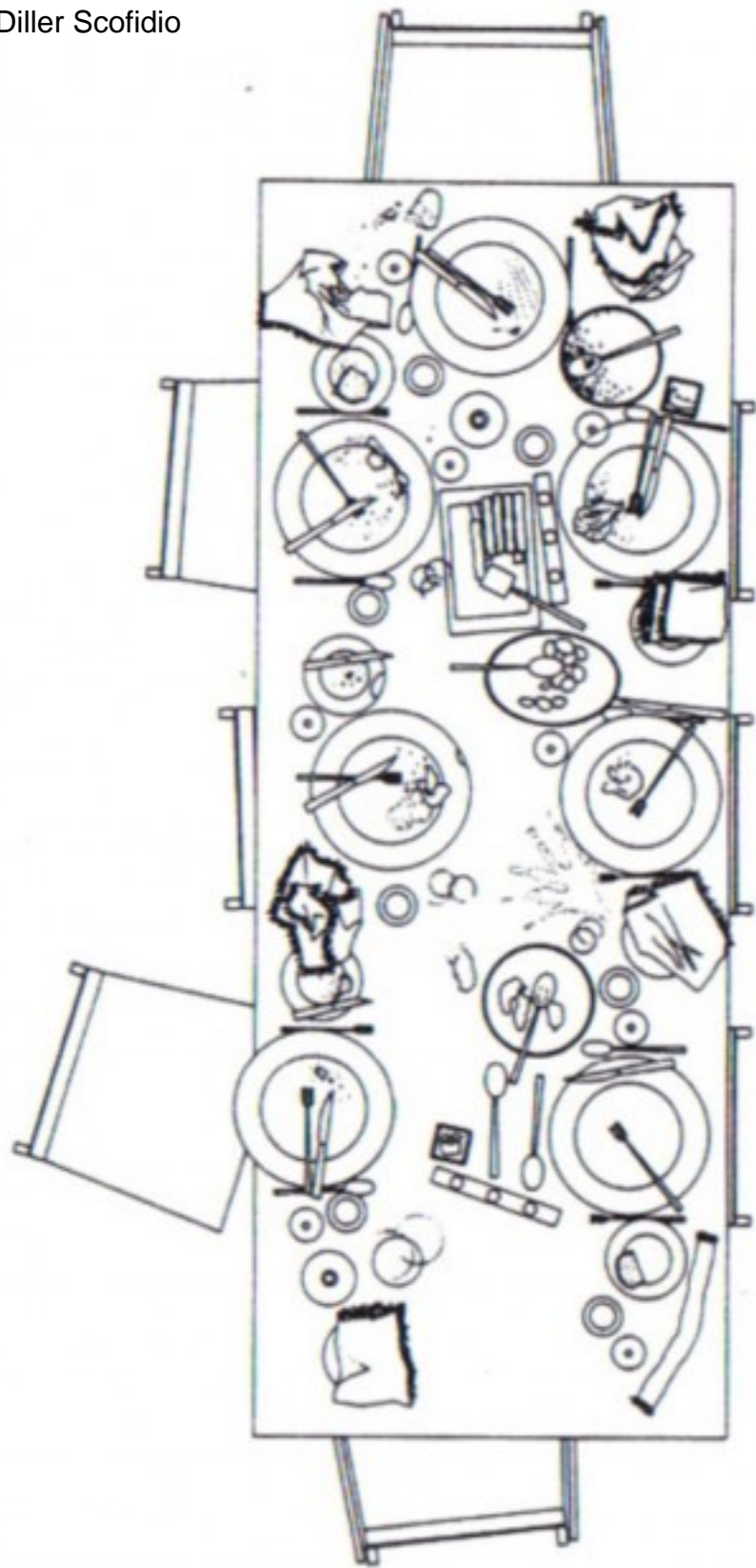




### plate\_1: process

1. fold plate in half vertically
2. crease
3. unfold plate
4. fold plate in half horizontally
5. crease
6. unfold plate
7. fold in half at  $45^\circ$
8. crease
9. unfold
10. fold in half at  $125^\circ$
11. crease
12. unfold, cut 1.5" along each crease
13. fold tabs down
14. crease
- 15-16. flip upside down, fold tabs in towards each other in groups of two
17. fasten tabs with bobby pin
18. pinch two opposite corners together, secure with bobby pins
19. pinch remaining corners together, secure also with bobby pin.





# Edward Tufte "Visual Explanations"

## FIGURE DE LA GRIEL, CONTREDANSE .

1<sup>er</sup> Mouvement.

2<sup>e</sup> M<sup>te</sup>.

3<sup>e</sup> M<sup>te</sup>.

4<sup>e</sup> M<sup>te</sup>.

5<sup>e</sup> M<sup>te</sup>.

6<sup>e</sup> M<sup>te</sup>.

7<sup>e</sup> M<sup>te</sup>.

8<sup>e</sup> M<sup>te</sup>.

Quatre en avant par deux coupés et Rigaudon en arrière.

Les mêmes changent de places avec ceux de vis-à-vis

La Petite Chaise sur les côtés . puis les 4 autres figurans font à leur tour la même figure que ceux-cy viennent de faire aux 1<sup>er</sup> 2<sup>e</sup> et 3<sup>e</sup> Mouvem<sup>ts</sup>.

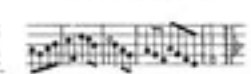
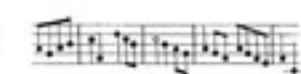
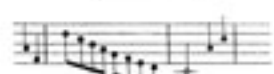
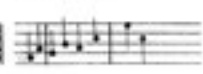
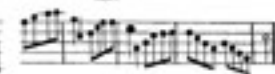
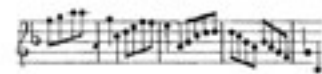
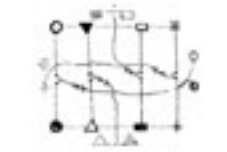
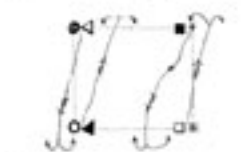
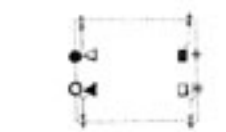
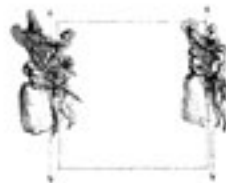
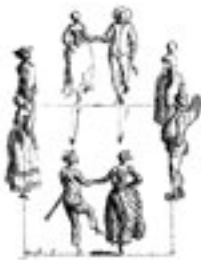
Les 4 qui ont agi les premiers vont figurer vis-à-vis ceux de leur droite .

L'on prend la Dame qui se trouve vis-à-vis de soy et l'on chasse auvert avec elle .

Et sans la quitter on recharge .

Puis tous huit se faisant face, figurent en avant et en arrière sans Rigaudon.

Et reprenant la Dame qui est vis-à-vis de vous, et qui est la vôtre, vous reprenez vot<sup>re</sup> place en faisant un tour avec elle .  
La Main.

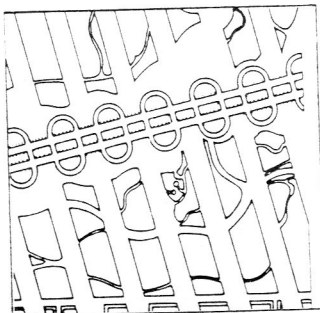




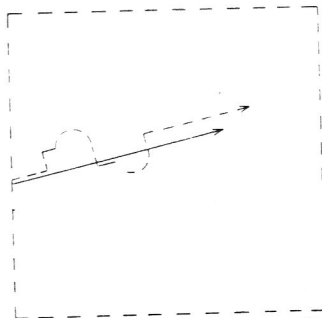
Bernard Tschumi  
The Manhattan Transcripts



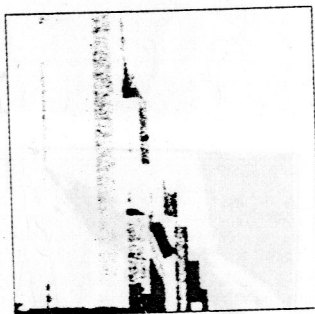
1



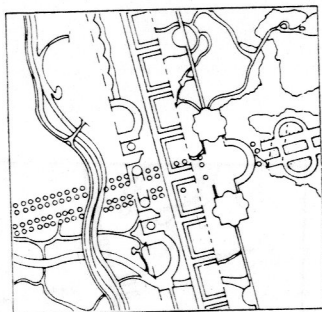
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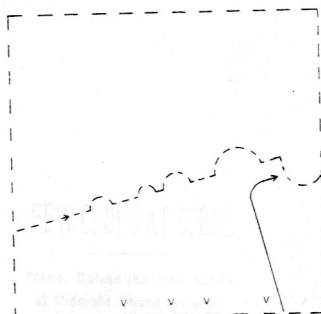
3



↑ First 1



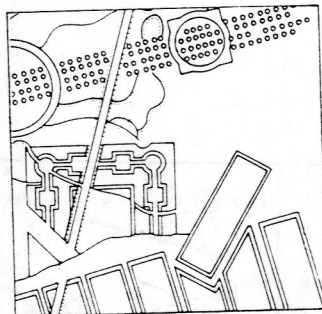
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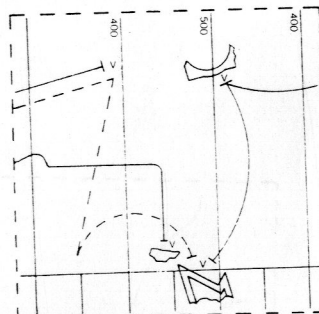
3



1



2



3