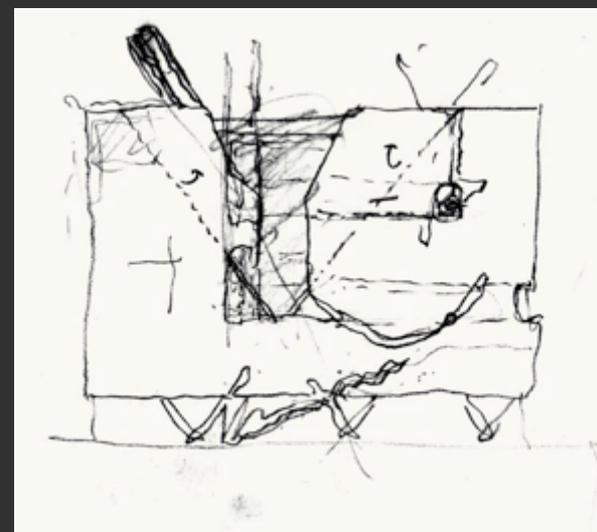


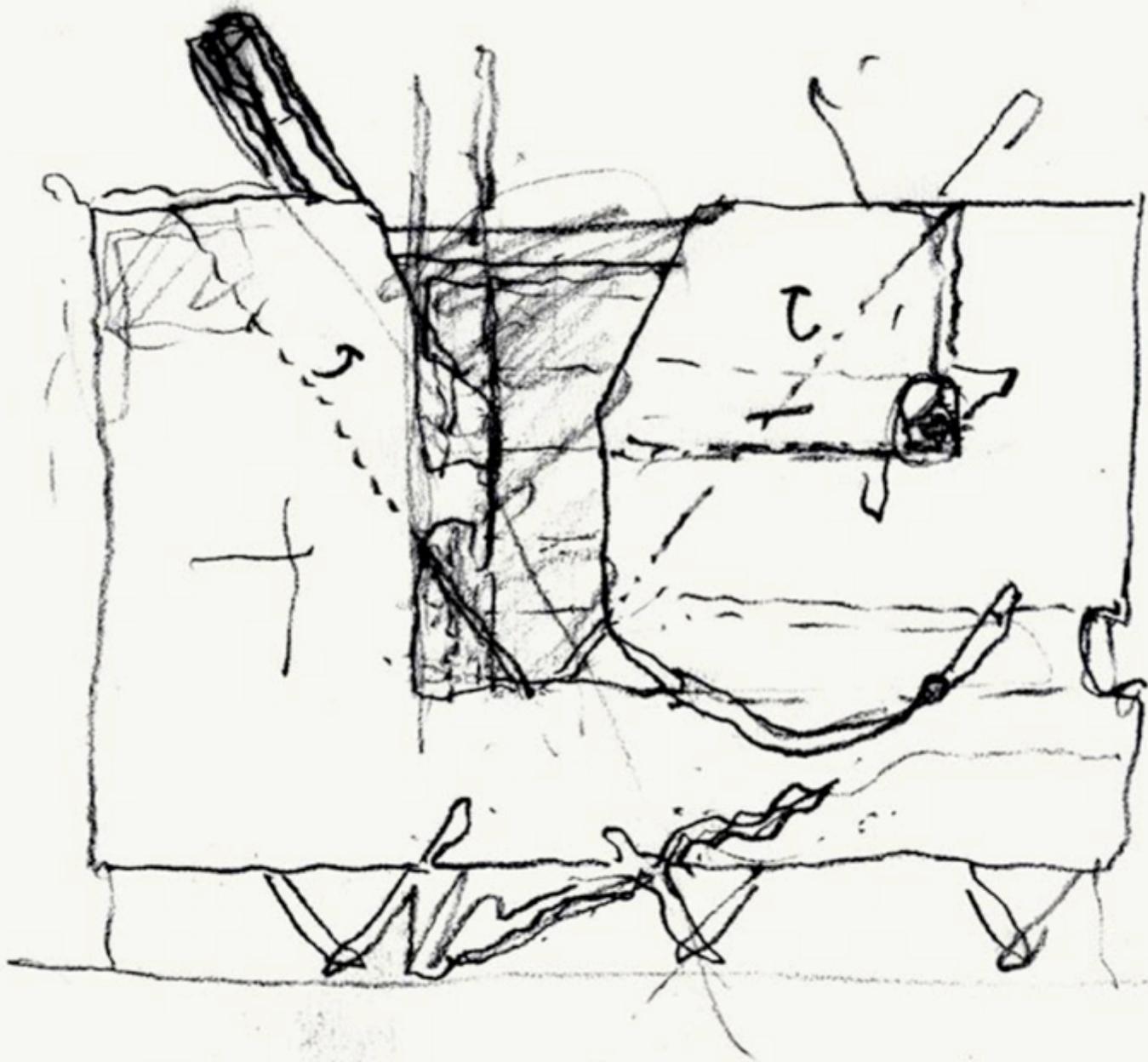
Mercoledì
15-03-2017
Doug Cooper

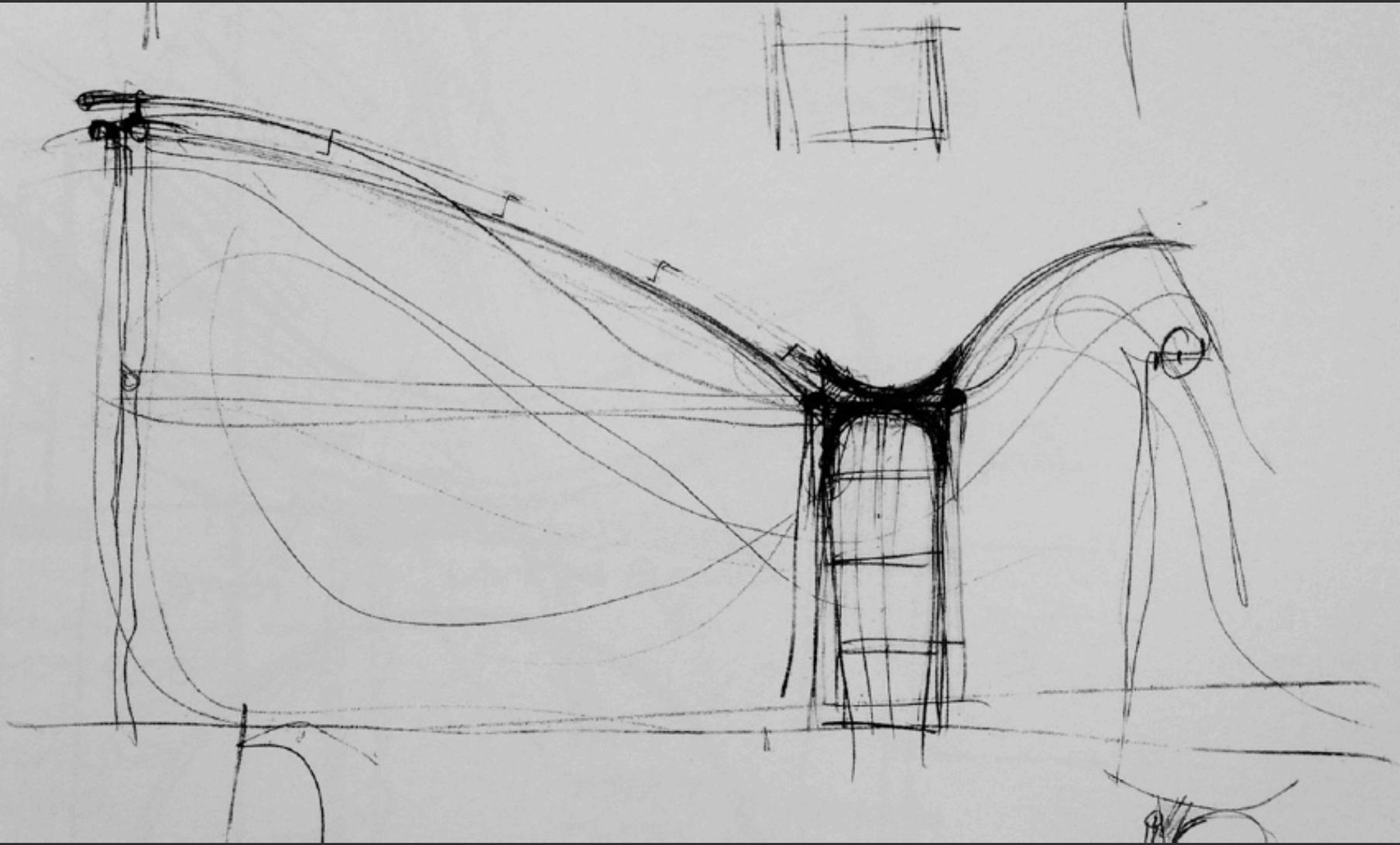
IMAGINATION'S HAND

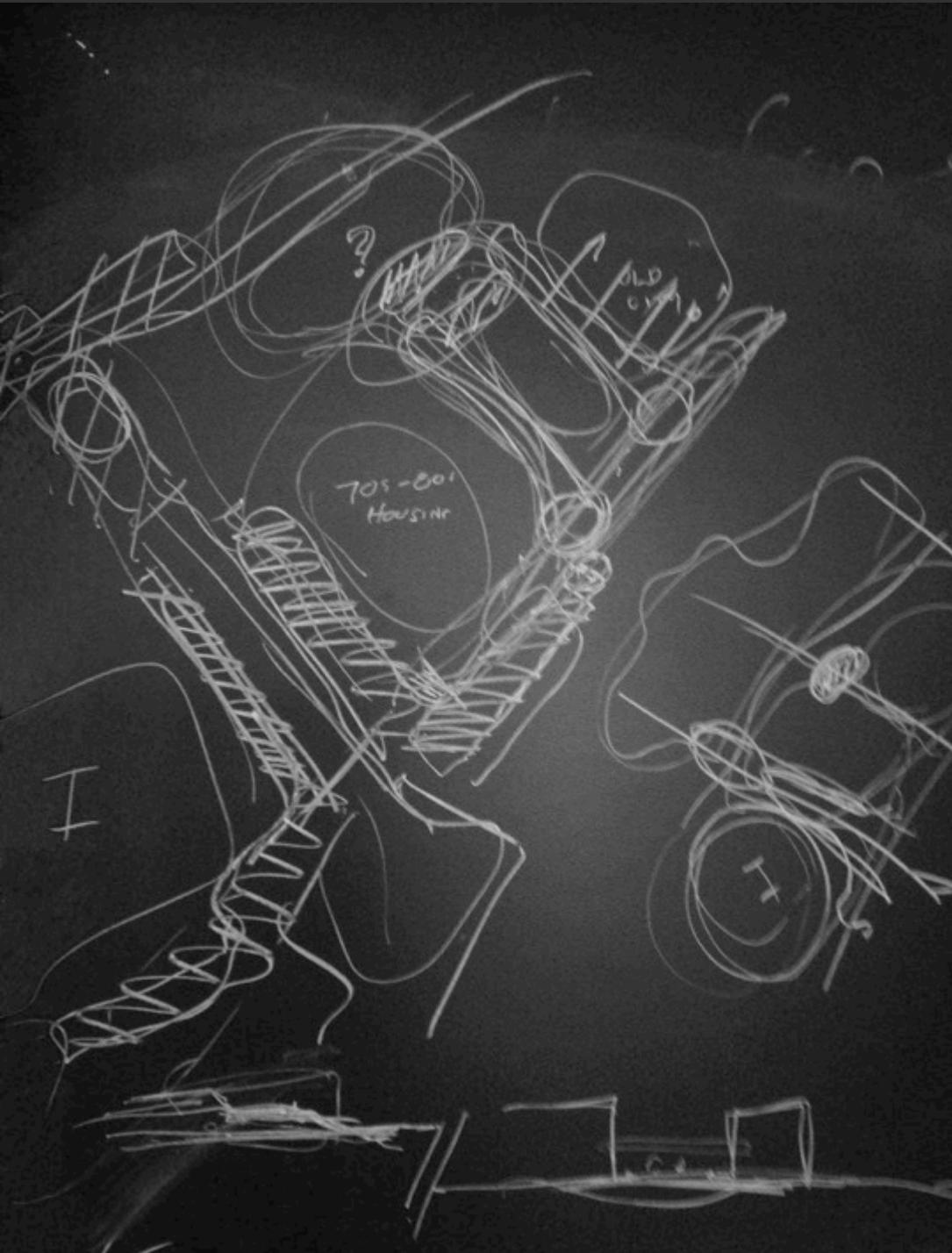
The role of a gestural mark in Design Drawing
from the perspective of Embodied Cognition











70s-80s
Housing

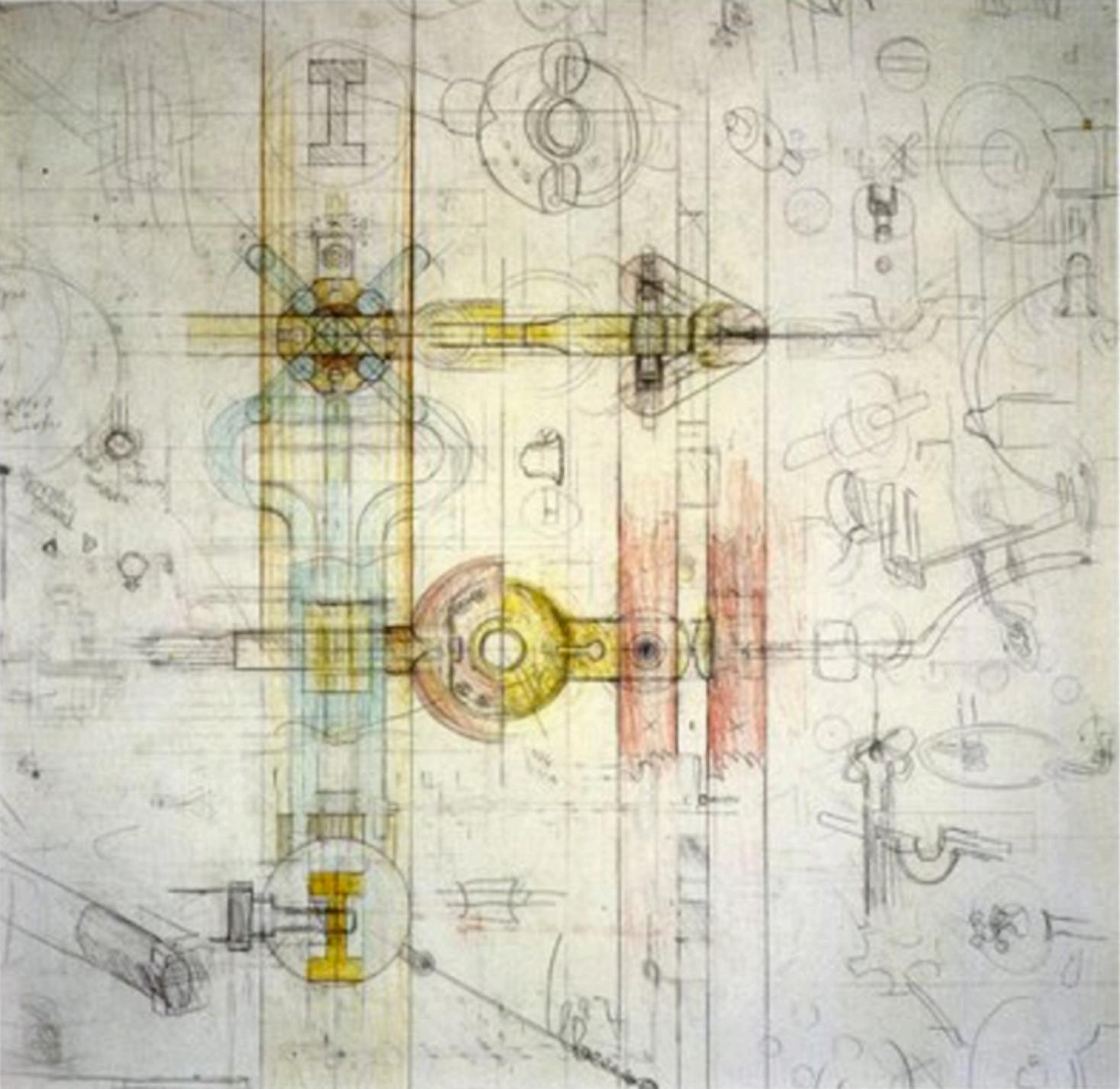
?

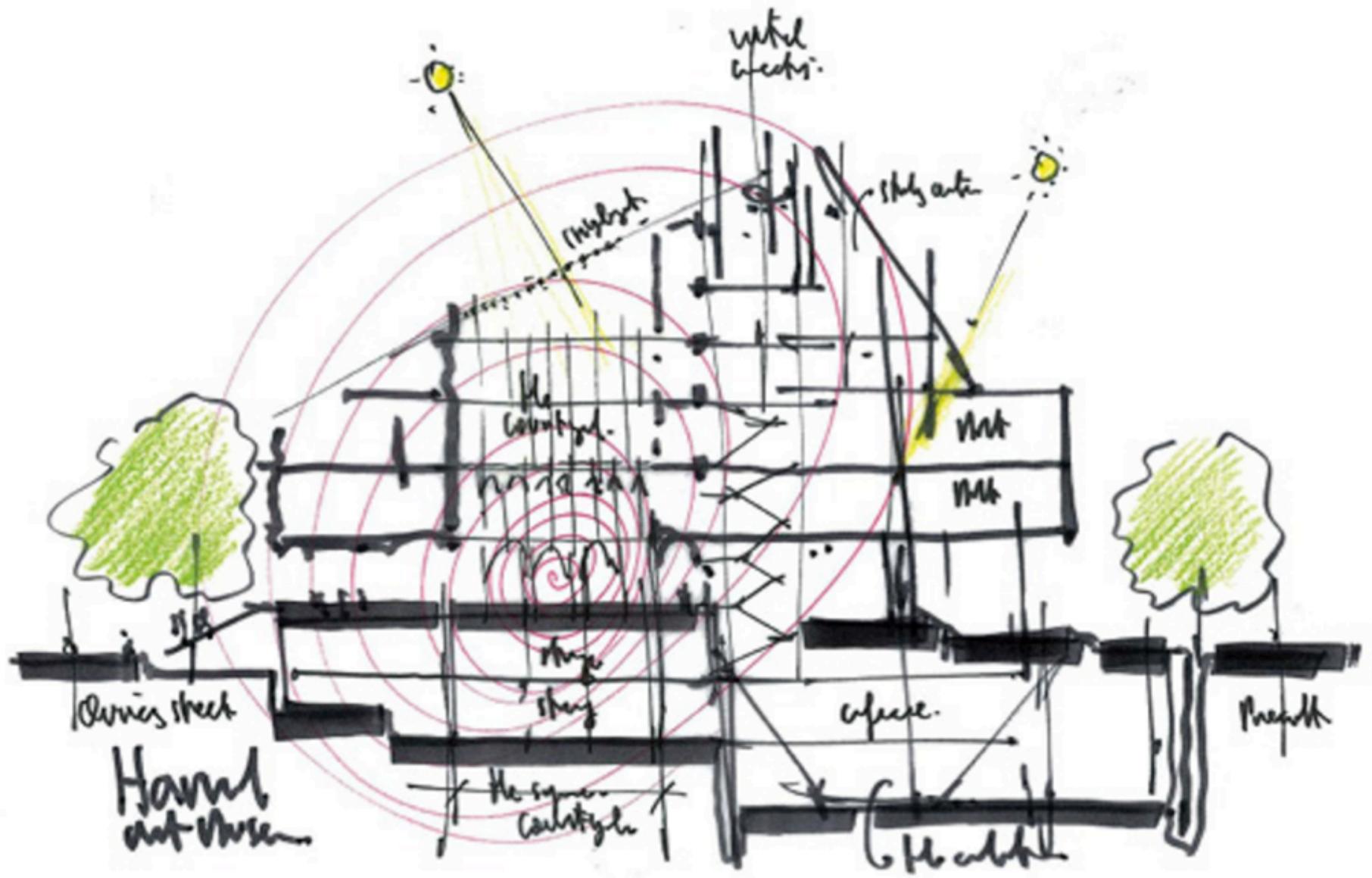
OLD
CITY

H

H

S





In my paper, I use the research of Embodied Cognition into hand gestures to examine two reasons why a gestural mark may contribute to design.

- A dynamic line character assists and sustains spatial imagination
- Variation of weight and precision bring a useful level of ambiguity into design thinking

Both imply changes to the digital workplace.

“... not only the best how-to book on drawing,
it is the best how-to book we've seen on
any subject.”—*Whole Earth Catalog*



Nicolaides

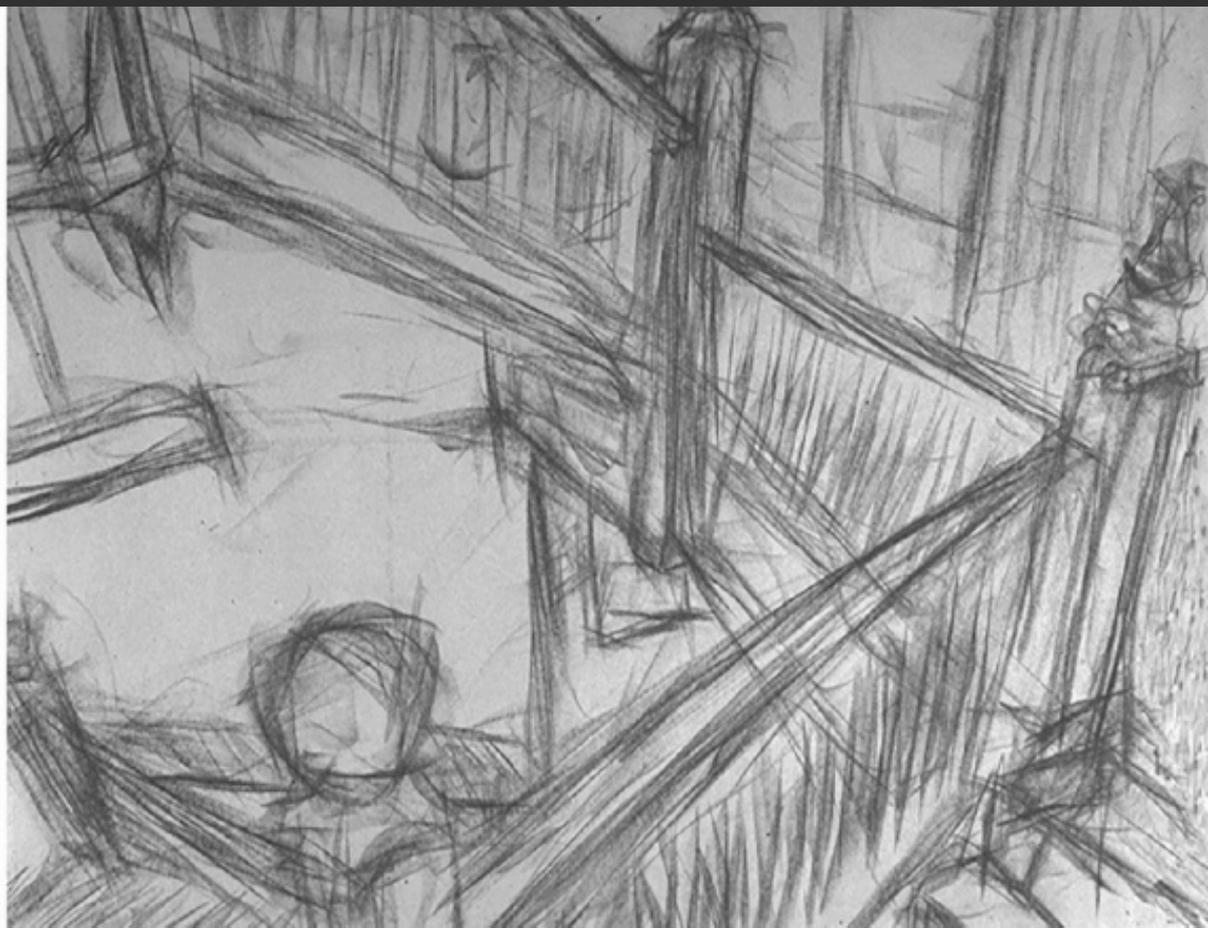
The Natural Way to Draw

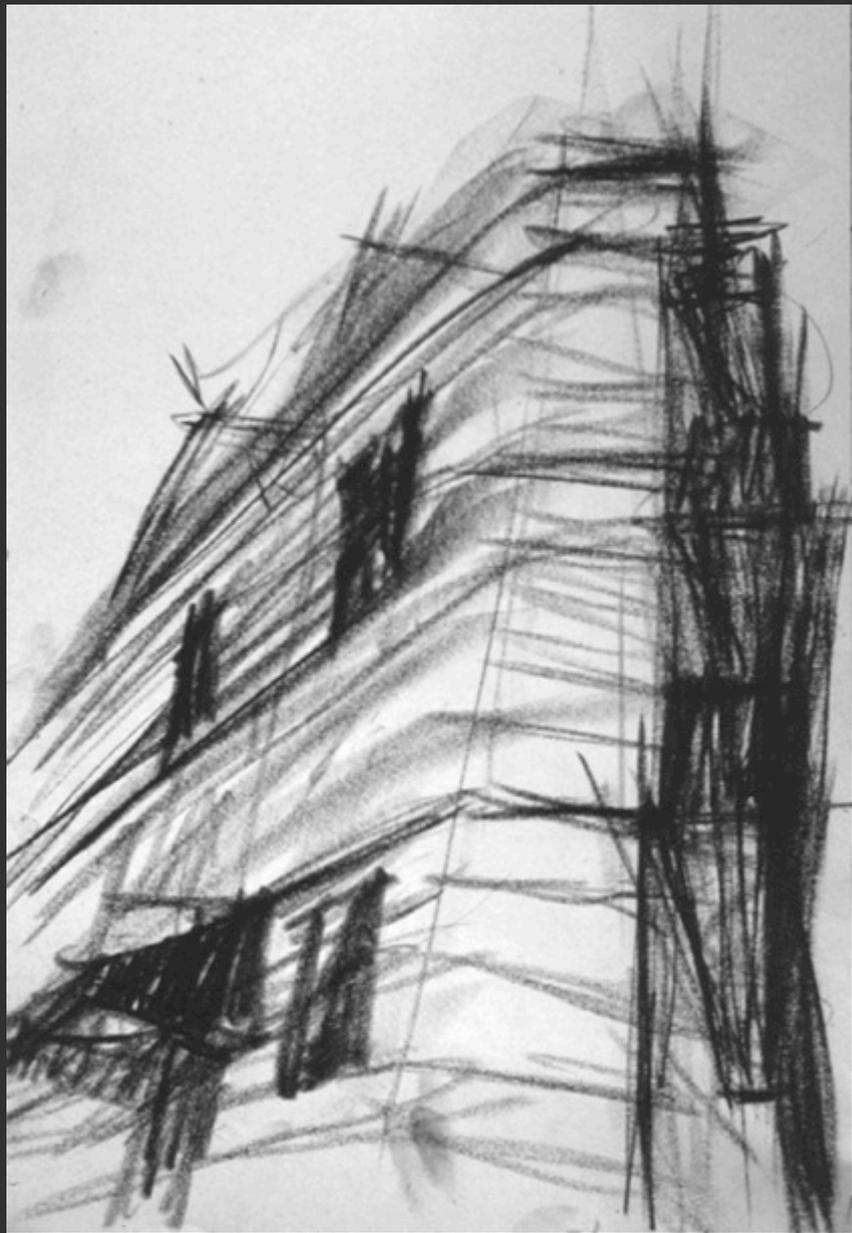
More than 250,000 hardcover copies sold

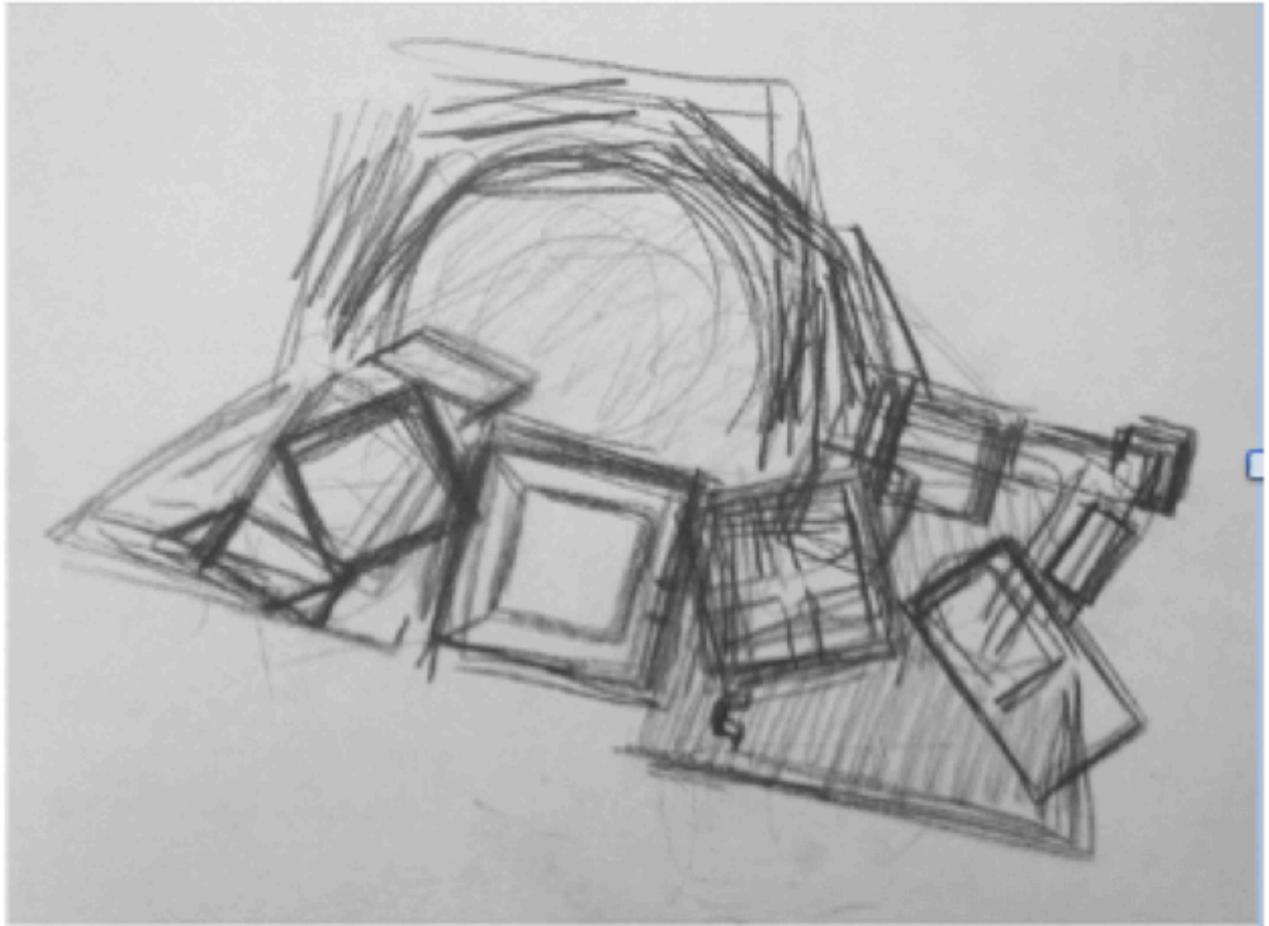
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So I tried to find out if there was anything to my hunch...

First, I gathered samples of my Freshmen students in drawing contours of statuary.

I rated the expressiveness and flow of their line work



1



2



3



4



5



6





7



8



9



10



11



12



Then, independently, I asked their then current 1st year design faculty to rate their current design skill on a 5 point grading scale



I found an 78% match either the same grade or one grade difference between the two grades, enough to assume a correlation between a gestural mark and design skill



So, what does the research say about hand gesture?

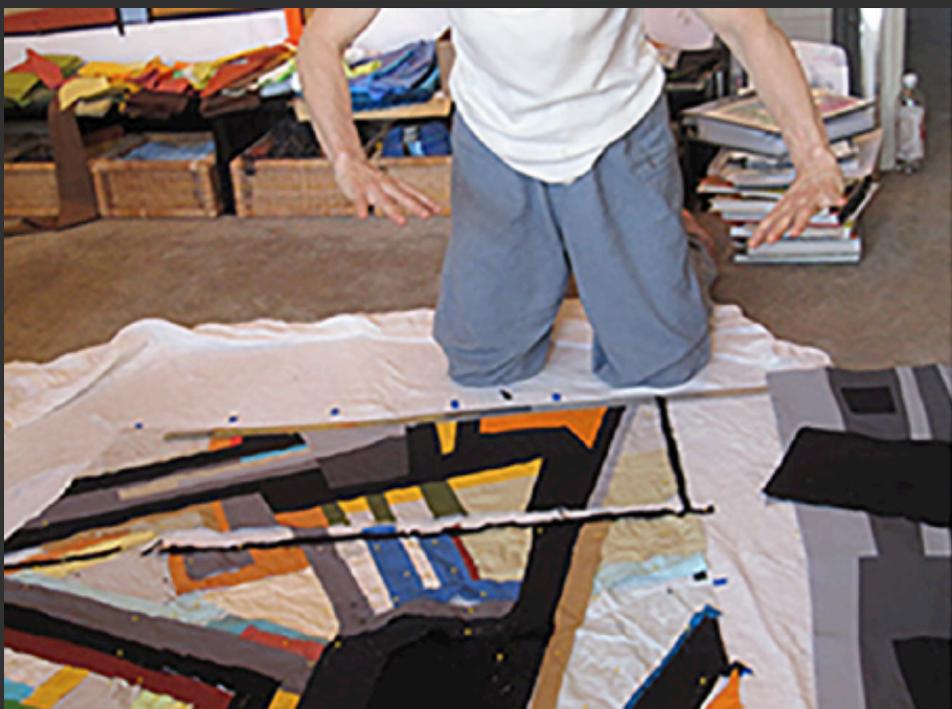
Let's start with this question...

Can there be spatial intelligence in a moving hand?

Multiple researchers in embodied cognition, Robert Krauss, Ezequiel Morsella, Frances Rausher, Richard Wesp et al among say that hand gestures we routinely use in describing spatial conditions also help our spatial imagination about those subjects.

Here are examples of what they are pointing to but from my own experience.





How might this work?

- .

Kraus and Morsella say it helps by sustaining spatial thought in working memory.

Wesp et al say it works by preventing its decay

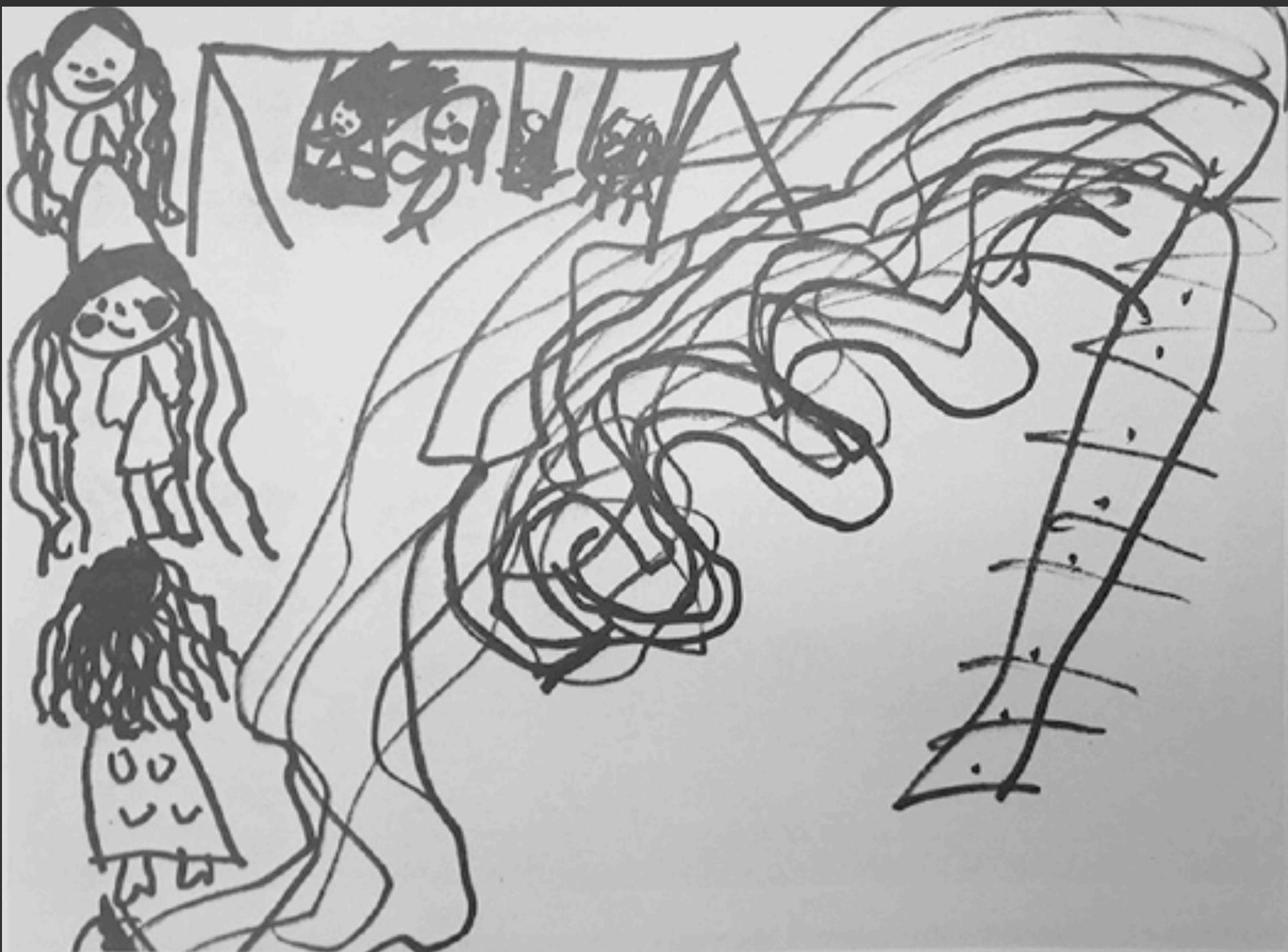
They go even so far as to see it (gesture) as the initiator of the spatial thought. (ie. Before the conceptual thought.

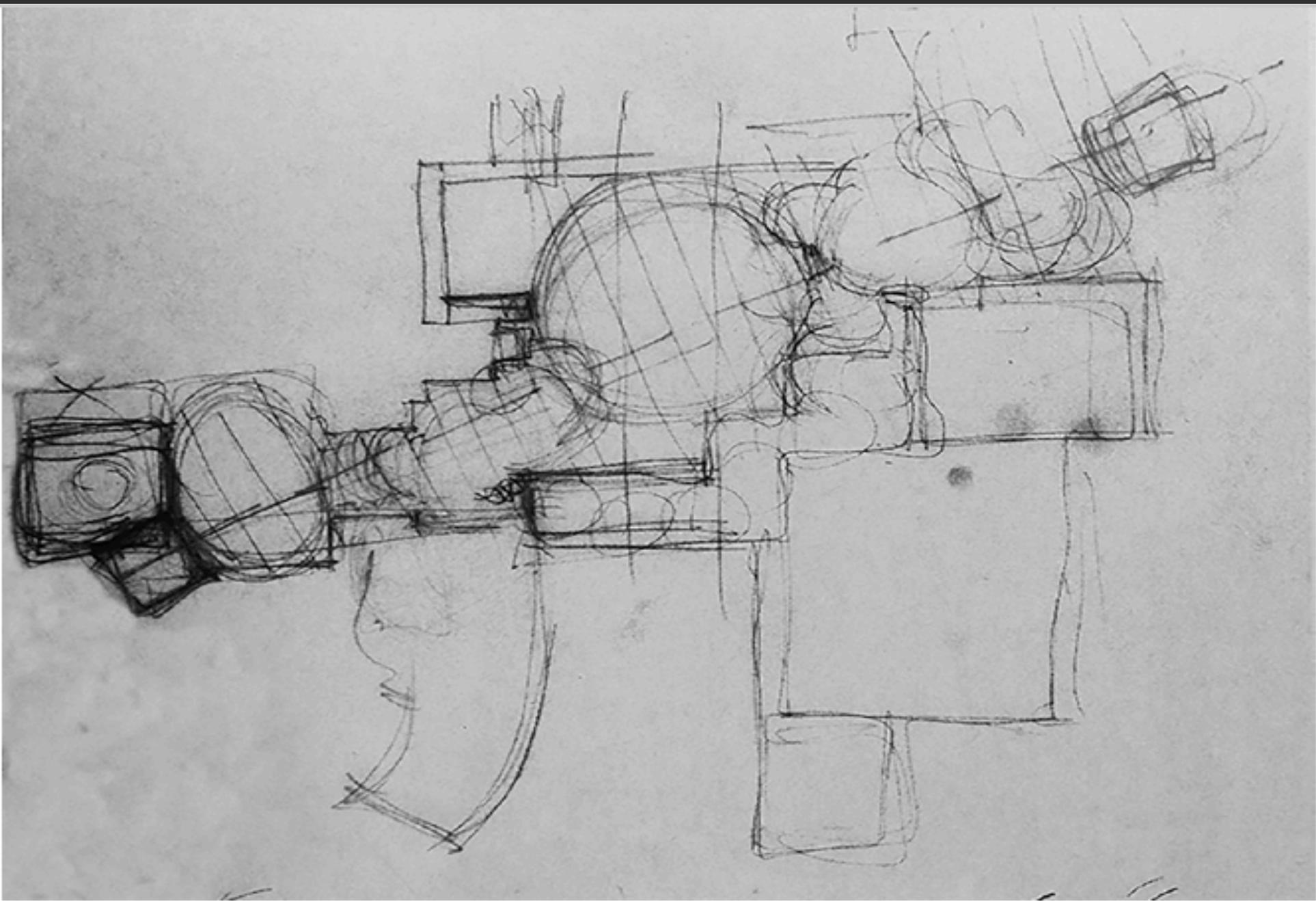
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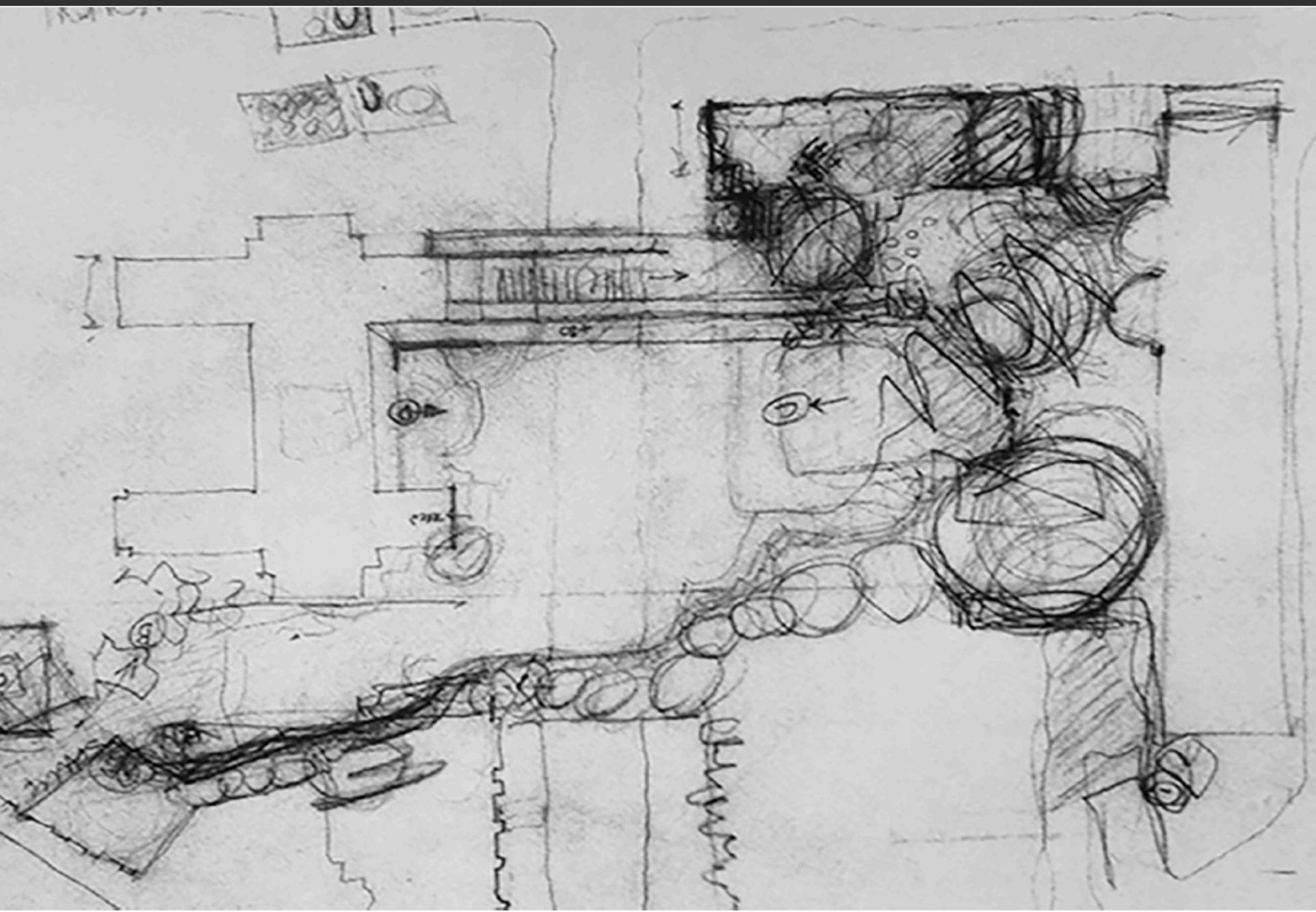
So how does a gestural mark help?

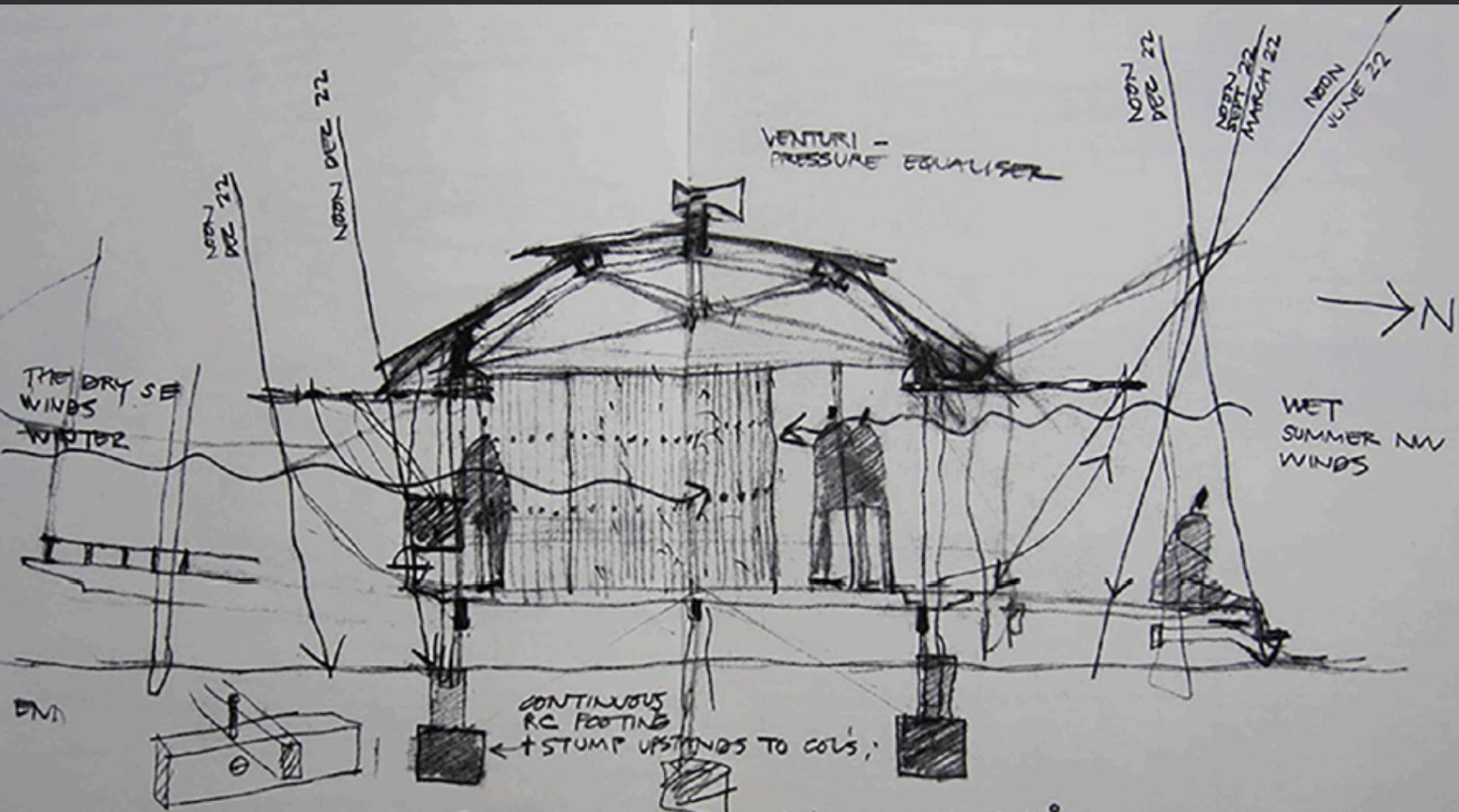
I propose two reasons...

1) It brings a sense of enactment or occupancy.









SECTION

24
11
90

LATITUDE 12 $\frac{1}{2}$ ° SOUTH, 137° LONGITUDE

Flying 39,000 ft over Ankara Turkey
 Listening to bach.
 Clear sunny day
 22:50 hr Sydney time
 Show covered mts
 cannot see if any
 trees or in fact
 trees in north
 deciduous

入られた屋根と開口部の初期断面
 圧力が上がって建物にダメージを
 与えた。解決策は、屋根部の換気塔で

cool and operable wall
 and winter sun angles as well
 heat is discharged via 'venturi'
 which equalize internal and
 zones, minimizing the danger

man
for

1200 sq ft
no floor sand

small alcove
bath room

with vanity

slab floor stairs
2' x 3' of thresholds

walking
country

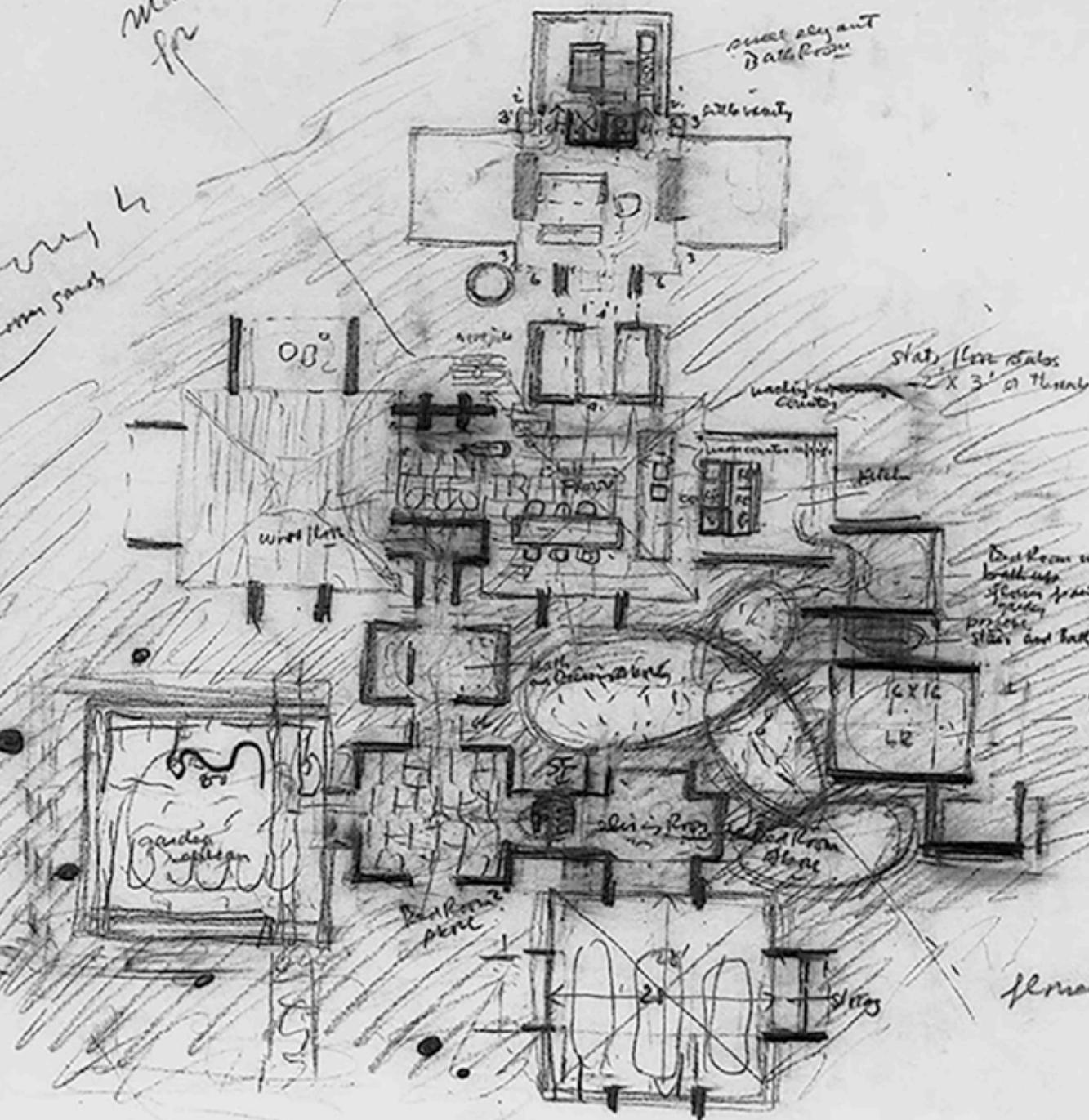
kill

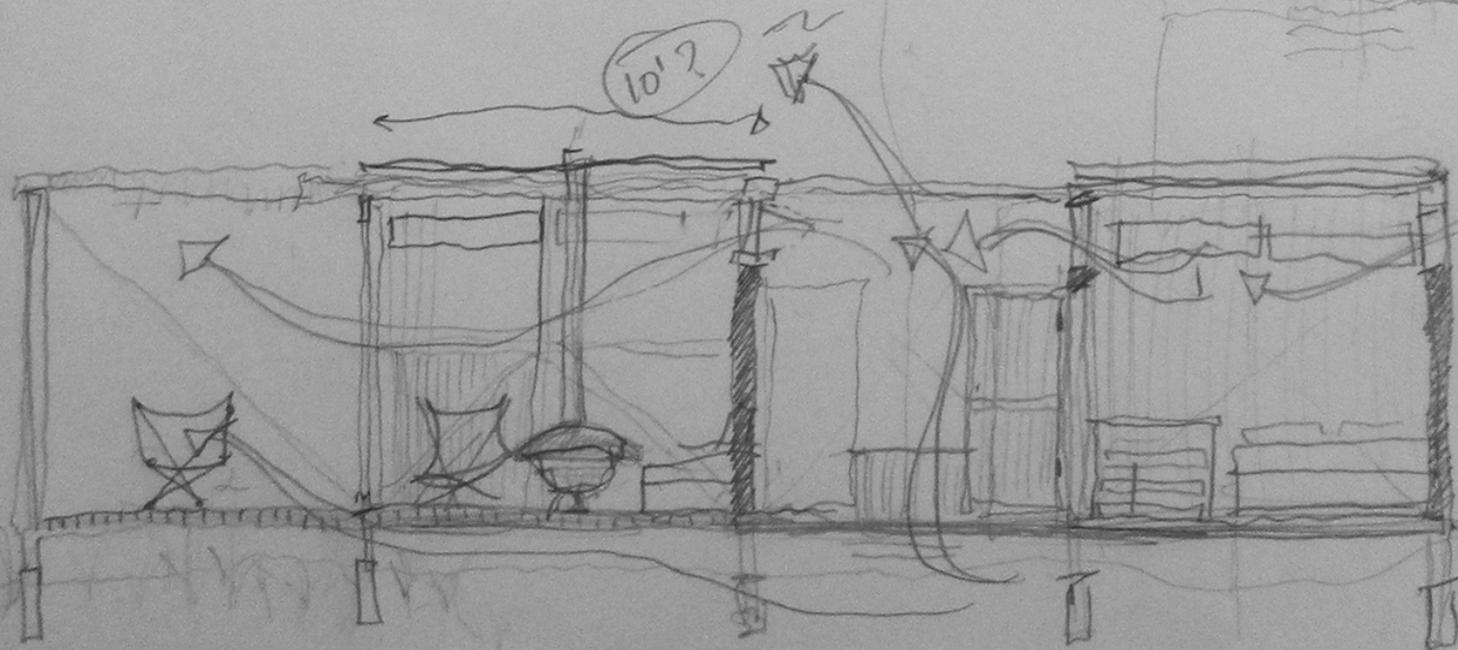
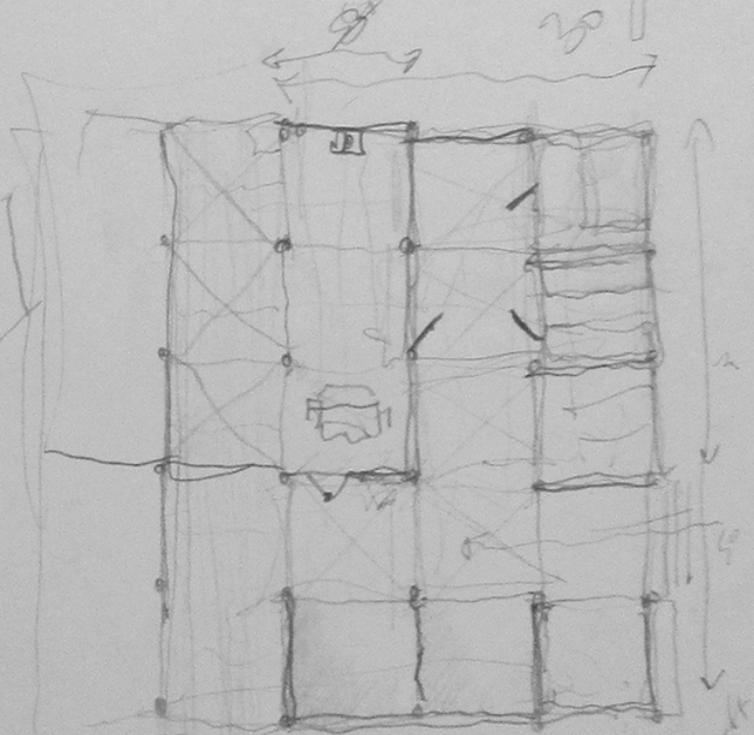
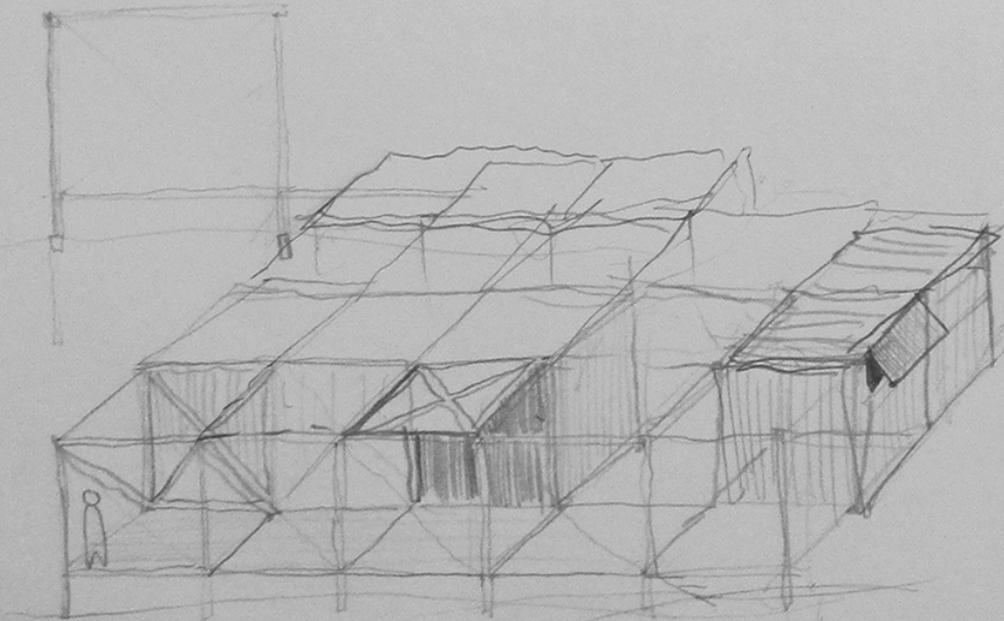
back room was
bath
stairs
stair and bath room

LR down stairs
BR up stairs

BR Room up
kill it

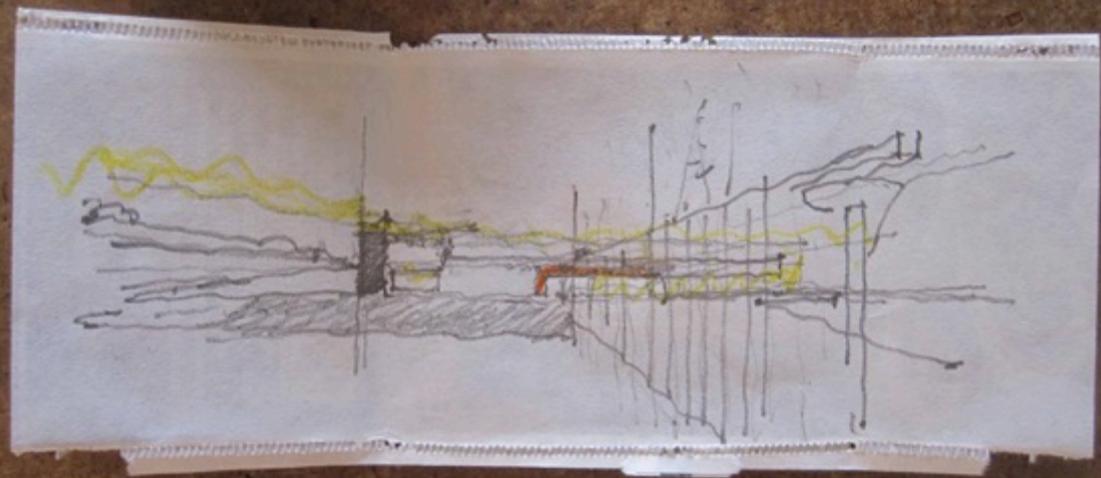
floor gardens

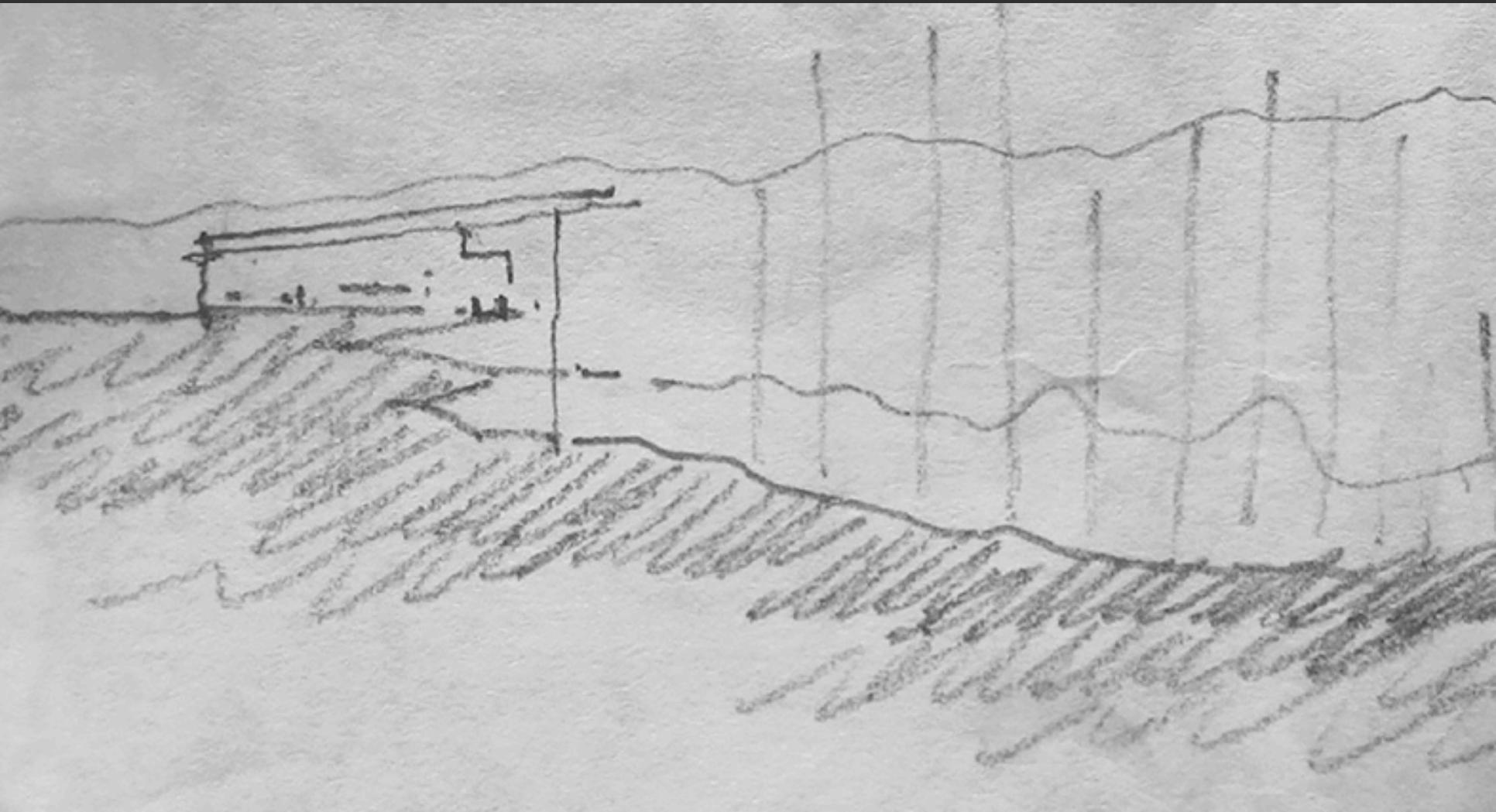




1500 sq ft
1000 sq ft
700 sq ft
1000

2) It brings a helpful level of ambiguity into the design process.





(A)



(B)





WEEP HOLES 24" O.C. TYP.

TERRAZZO COATED ST. STL.
FLASHING - CUT FLUSH
WITH FACE OF BRICK

CONC. WALL

FILL CAVITY BELOW FLASHING
WITH NON-SHINK GROUT

3/4" JOINT -
GRAUNT / BACKER ROD/
FILLER MAT'L.

CENTER
IN WALL

PLANTER
SEE DATA

#5 BAR
HORIZ. / VERT.
12" O.C.

MEMBRANE OVER MASTIC
SET IN BUTYL SEALANT

MEMBRANE FLASHING
D.O.D. HYDROTECH
MM 6125

BRICK
LEDGE VAN
(BELOW FLOOR
ADJOINING 2
TYP.)

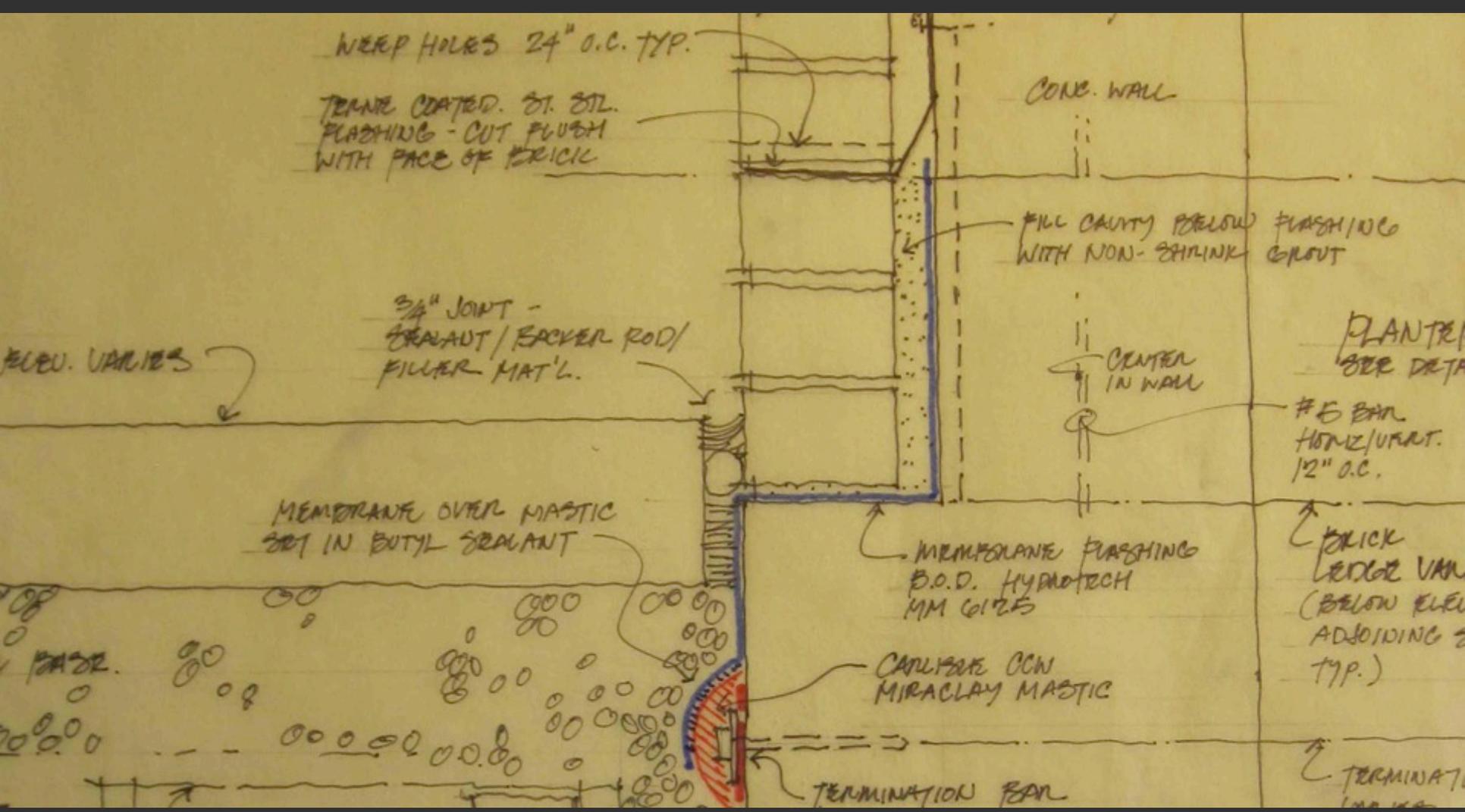
CARLISLE CCW
MIRACLAY MASTIC

TERMINATION BAR

TERMINATION
BAR

ELEV. VARIES

PASR.



So as it concerns digital work, what's the solution?

How do we make this...





more like this...



I think it's already starting to happen