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## Places

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### Author

Smith, Maurice K.

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# Dimensional Self-Stability and Displacement in Field-Ordered Directional Alternations

Maurice K. Smith

The adjoining subject skeleton for (my) FORM LANGUAGE WORKSHOP reviews the “FACTS OF FORM” in major rubrics of (in case you can’t decipher it!):

## I: FORMAL ATTRIBUTES

**A: “Form-Sphere”** (cf. Ostwald / Munsell’s color-solids): Recognizes some 30 “pure” (diagrammatic) morphologic / geometric definition-groups located around “equator” in generative transformation. Toward North Pole, identified FORM-FAMILIES transform through the organic + surface-tension-bound—dissolving in snowy mists (+ Alexander Cozens “blot”). In LANDSCAPE (+ geomorphology) Euclidean “geometric” clarity is abandoned. Toward South Pole, firm “GEOMETRIC” characteristics are retained / predominate—in machines, crystals, architecture, etc. . . .

**B: Size:** Some eleven, from microscopic through human-use ranges to telescopic.

**C: Categories:** Thirteen, from inclusive landscape to building.

**D: Media:** Six, from drawing through materials to light.

**E: Time:** Here + now / historic, and **Place:** varied cultures / geographies.

## II: BEHAVIOUR / ORGANIZATION SYSTEMS

### 1. Field Organization:

Three Variable Territorial “Packings”

A: DIRECTIONAL  
B: MULTIDIRECTIONAL  
C: UNIFORM

### 2. Territorial Control:

Three References,  
Intensifications

A: CENTERS: Points + Lines  
B: EDGES: 1. Registration  
2. Mirroring  
3. Lateral Displacement  
C: OPEN FIELD: (Containments Deployment)  
“Rocks-in-the-Sand”

### 3. Alternations / Self-Stability:

Five Methods:

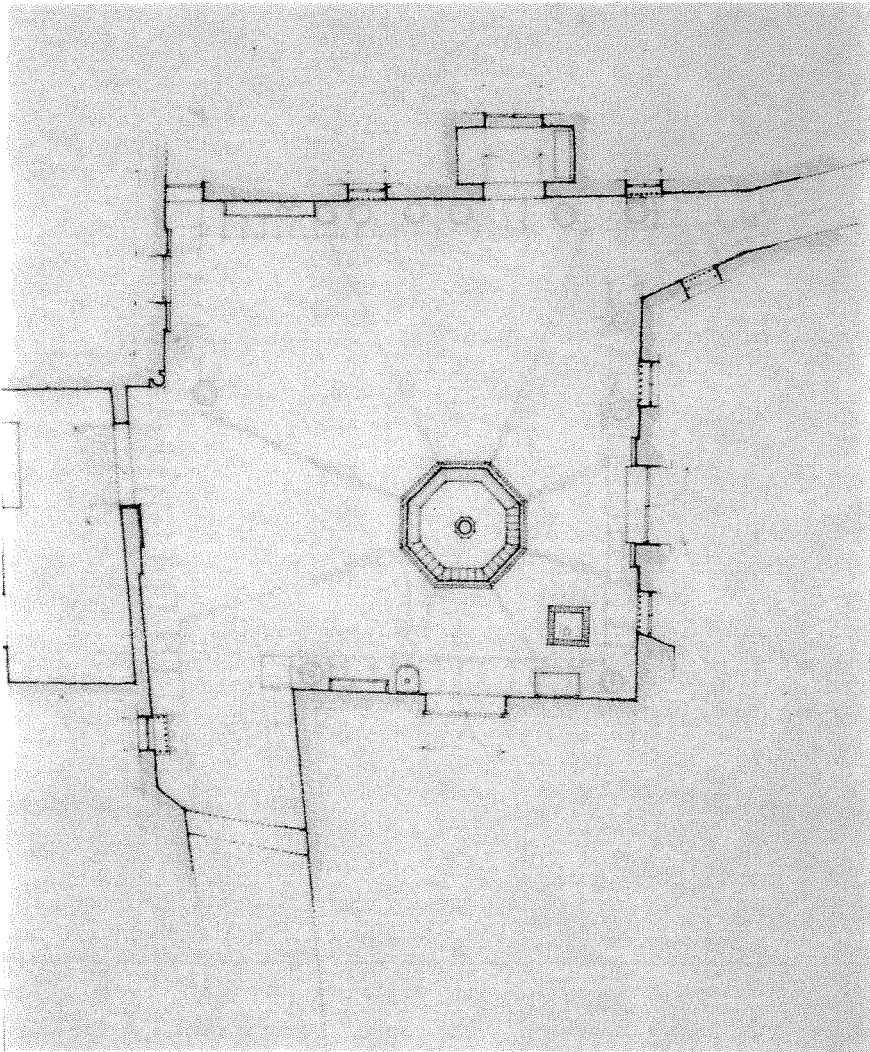
Three ACTIVE A: DIMENSIONAL EQUALITY:  
Directions “NORMAL,”  
Form “in-COMPLETE”  
B: RECIPROCITY: Directional EDGES Displaced  
C: LIGHT-DARK REVERSALS  
Two PASSIVE D: PROPORTION: Fractals, Golden Mean  
E: BALANCE: “Composition,” Resolved “Weight”

The most habitable / associative (built) environments in II:

BEHAVIOUR / ORGANIZATION include / exemplify 1A, 2B+2C, 3A, 3B, 3C.

The following observations offer a brief introduction to some aspects of (only) **one** of those mutually sympathetic six topics: **DIMENSIONAL SELF-STABILITY—II 3 A.**





### Cordoba: Plaza de las Flores

The Plaza de las Flores measures 37 feet in both orthogonal directions (large dot-dot tape)—no Renaissance surprise, an almost topologically complete self-stable, if singular, stopping place at Plaza size.

20 feet both ways (dot-dash tape) for easy movement / work through / in the Plaza—both GO and STOP.

The octagonal well “object” is displaced by its own 9 feet (width) from the Plaza building wall—again both ways.

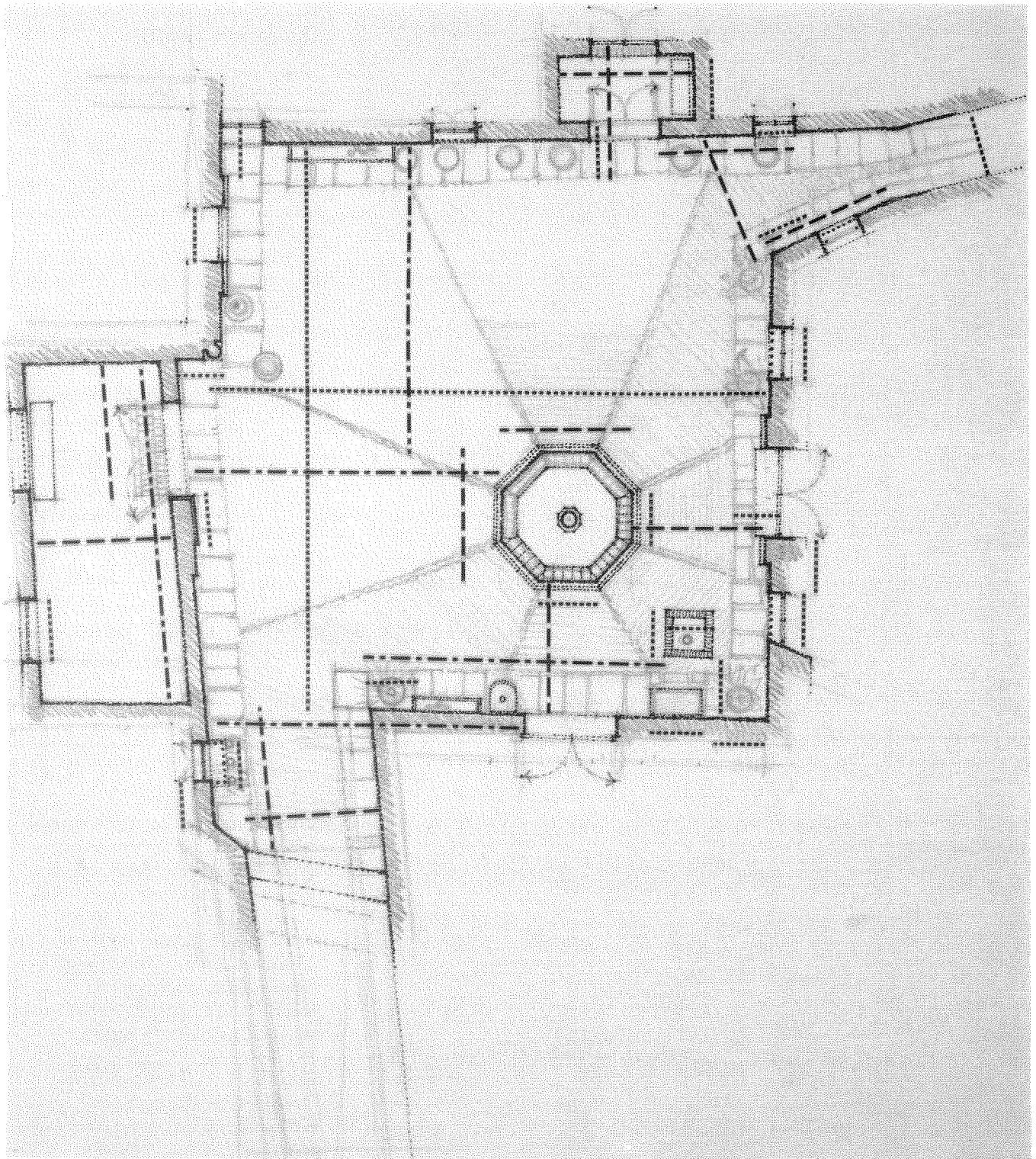
This is the Plaza’s “GOING” access dimension (dash-dash tape).

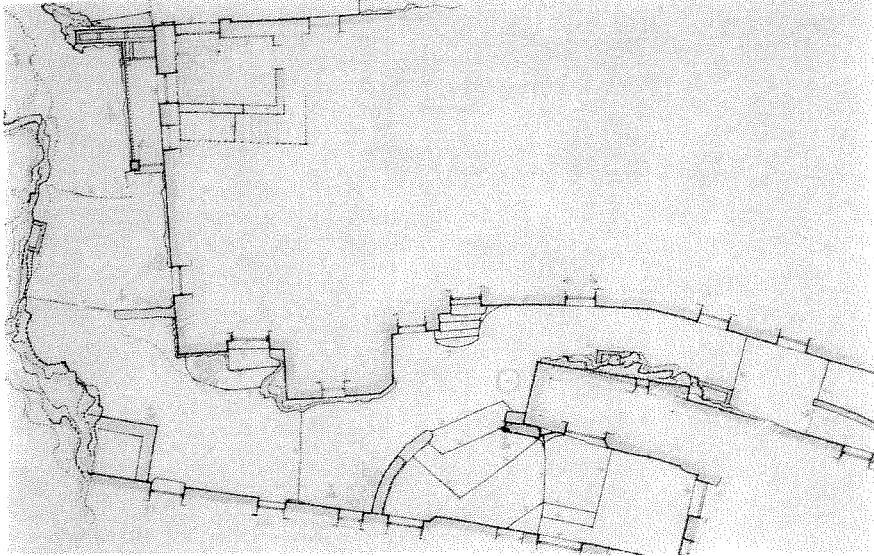
Varied uses of that small room size in multiple continue the double-directional field.

The *calléjon* funnels along + out at “public” Plaza entry equally, and so narrows at “private” departure.

Depth of larger domestic entry lock is width of the smaller in parallel; similar demarkations position many openings.

The shortest tape, small 4 feet (dot-dot), is for narrowest part of the *calléjon*, depth of small entry, several windows / doors, wall set-back and well-facets, etc. . . .





**Casares, Andalusia (upper 6 color photographs overleaf)**

Serpentine lines represent “unfinished” rough rock—either = full building height (at far right) or at building wall to ground exchange. This steeply ramped + stepped street climbs 30 feet in 70, generating, as it rounds the top-right corner, an entire floor height—donkey / manger below, citizens / house up-stepped above. In leveller terrain, people and animal (erstwhile) doors alternate.

Tape dimensions:

red: 4'3"—personal size, one-donkey going.

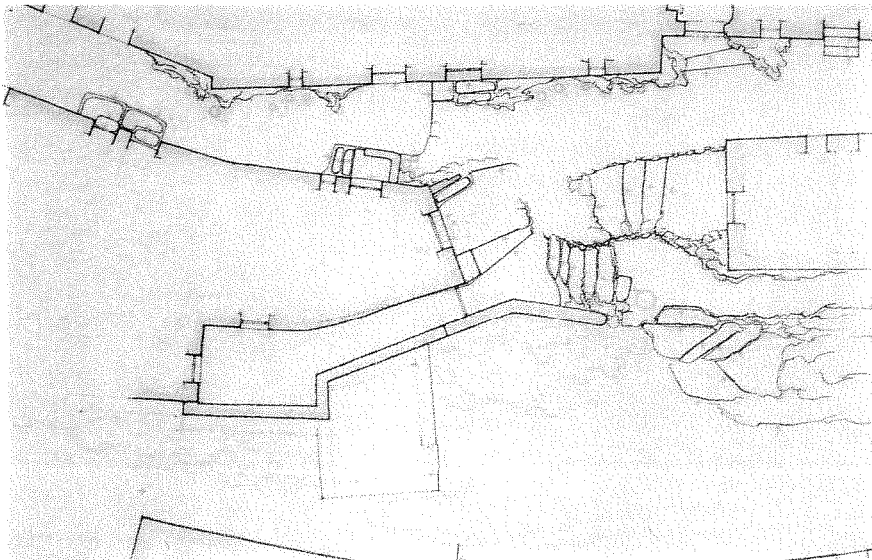
light-green: 8'0"—room width, two-donkey actual going.

dark-green: 11'9"—room length, street territorial width.

yellow: 20'0"—building size, collective plaza.

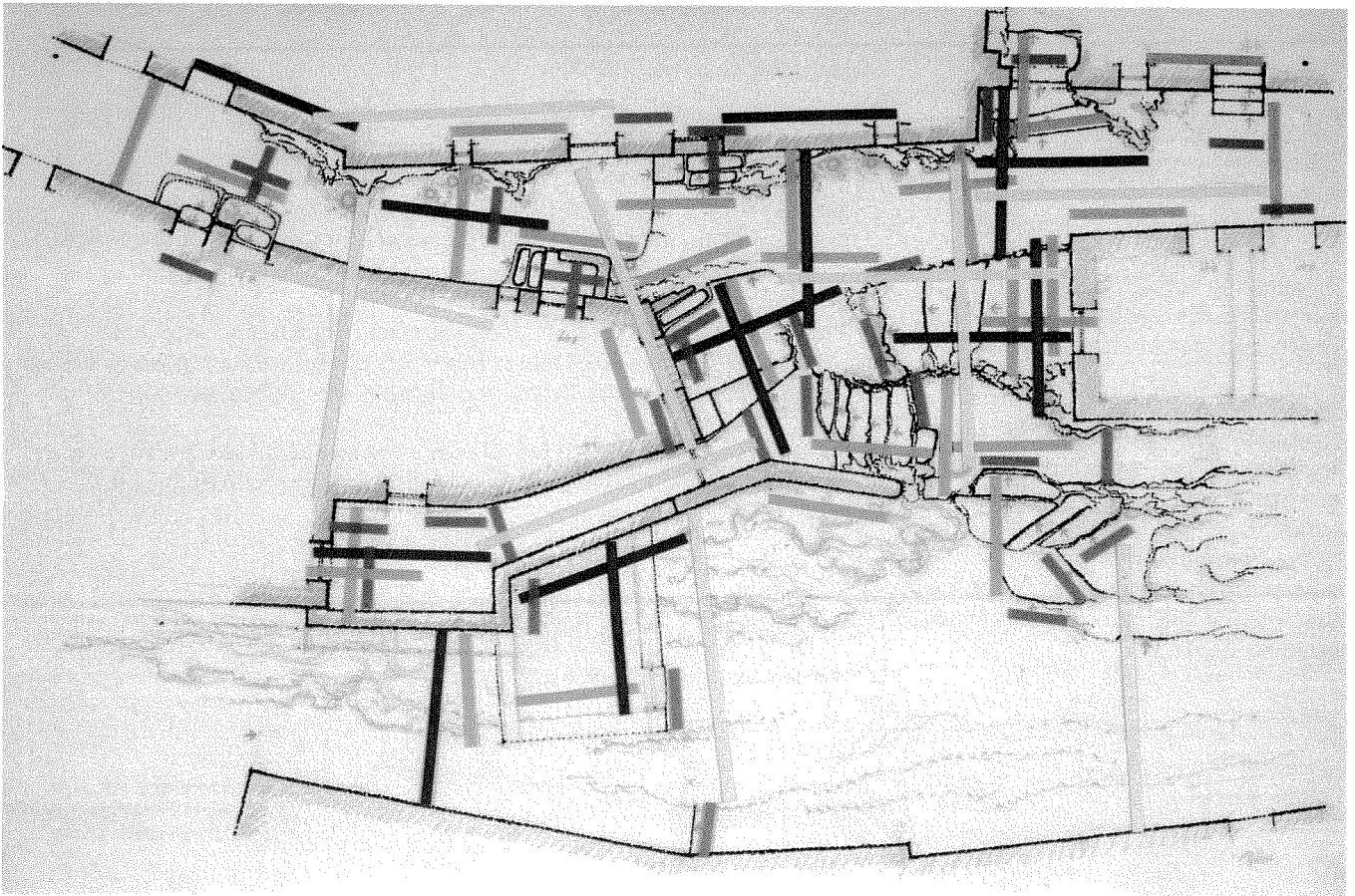
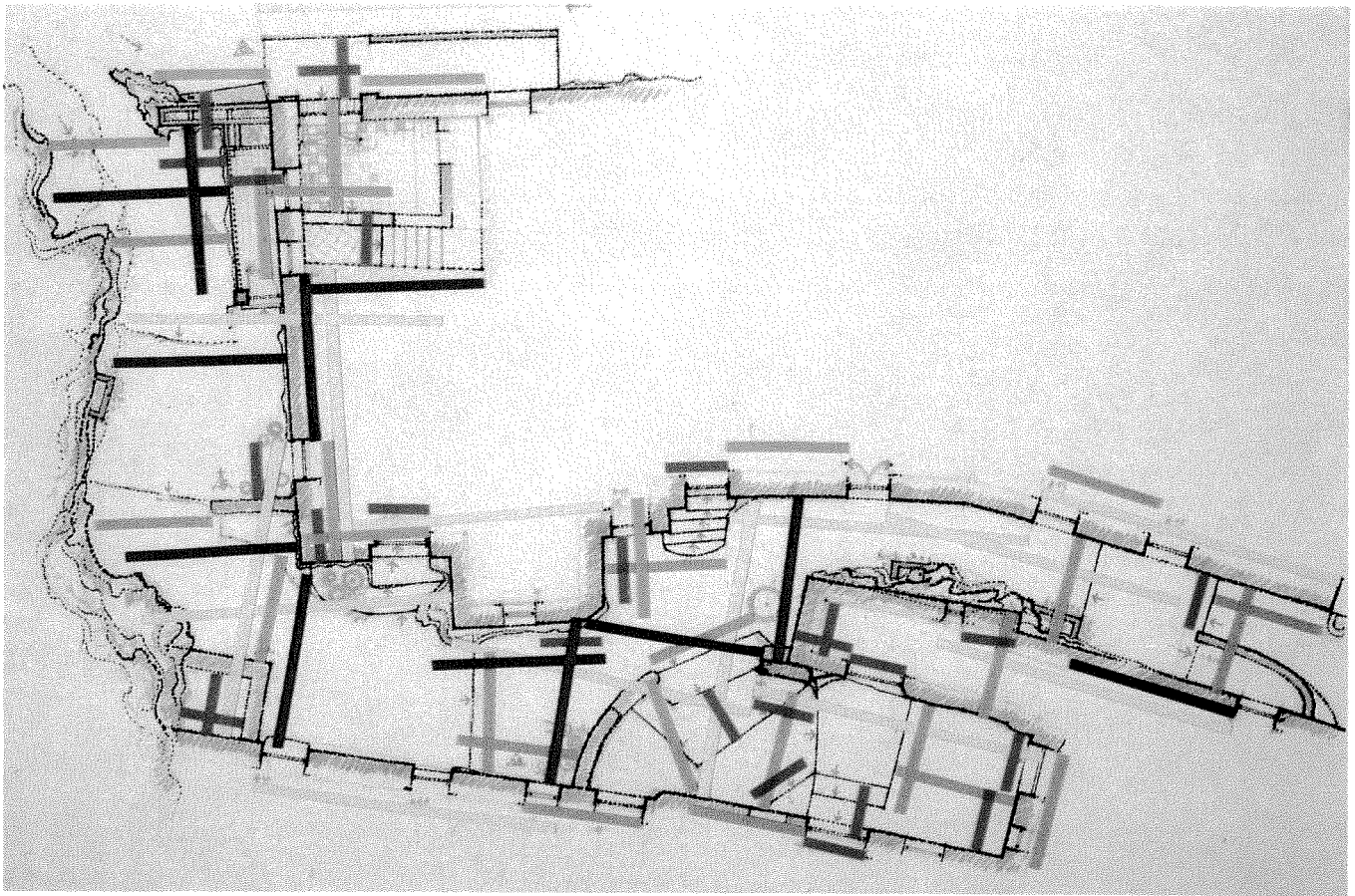
Throughout all CASARES these dimensions are remarkably consistent. The full (yellow) collective is achieved here only at the upper “YIN-YANG” directional reciprocity.

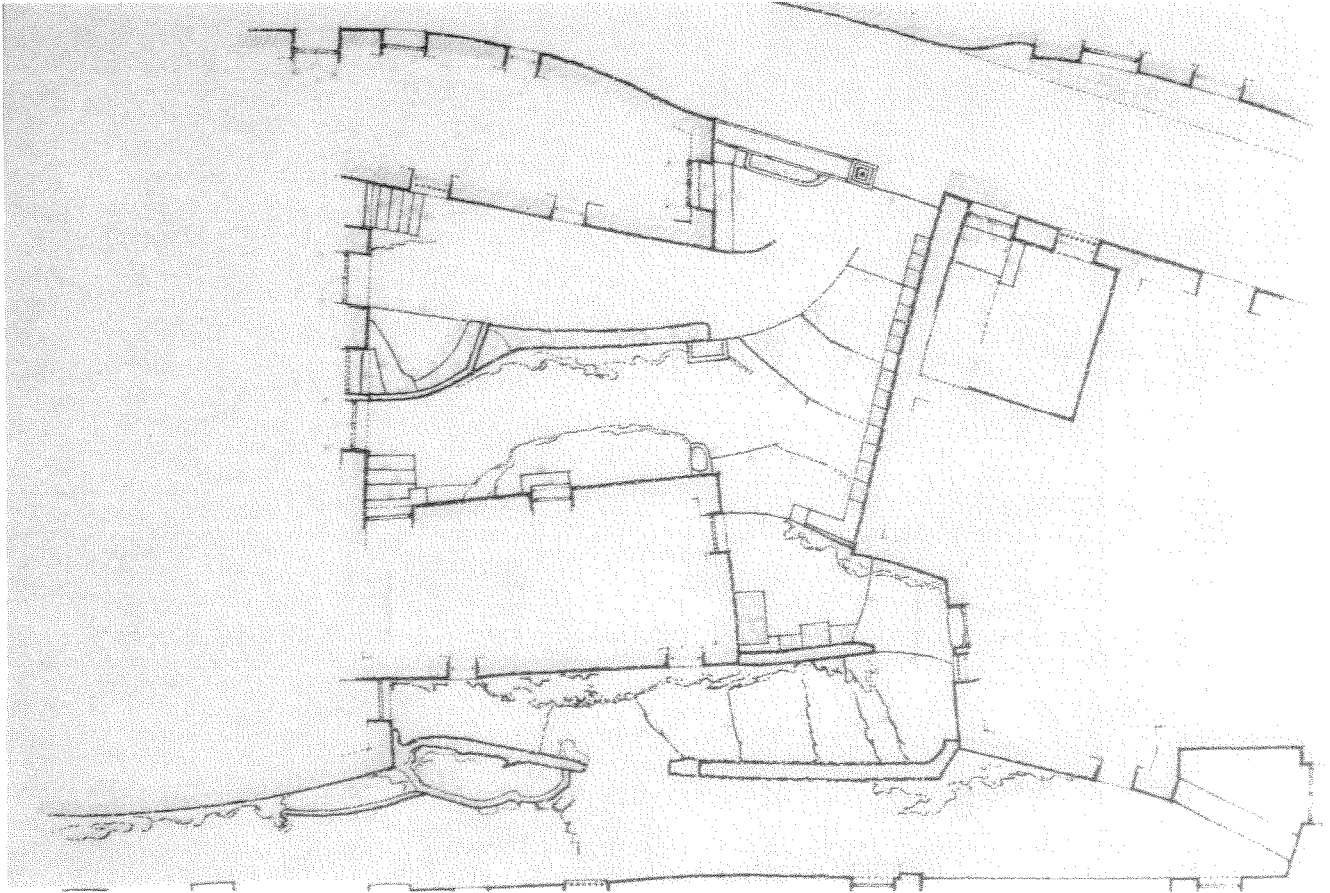
The projecting 4-floor building arm within the “S” yields room width of only 4 feet, as in the lean-to pig-pen at right upper inside corner.



Still in landscape intensificational development, this portion shows the town's (yellow) basic building dimension already securely in place. Rough-formed (but red width) street / public steps lead down / up through a semiprivate outside room / patio, once a stable access / work area (furnished with red-width slate wall-bench).

So public / private boundaries vary / reverse through use / occupation. There is no total / permanent privacy “outside.” Similar use options pertain throughout the town's exterior / domestic porches / rooms.





You are invited to inspect / check the dimensions / reciprocities! The room-size produce / food “store” at upper right is one of some 30 in the town. This one offers a public floor-territory of 5'6" × 3'9"—enough for two standing customers. Others prospecting can see in through a barred window from the ramped street, and wait their turn outside.

In this drawn area of only 60 feet maximum each way, there are 19 separate entries, each particular and semiprivate—achieved through careful open-field-distribution (none mutually opposite) and advantageous exploitation of the reciprocally alternating six contour-terraced slope.

### Andalusian Courtyard (#7)

No two courtyards are identical. Customary “inhabitants” include tree, well, mounting block, steps / stairs to upper levels, etc. . . .

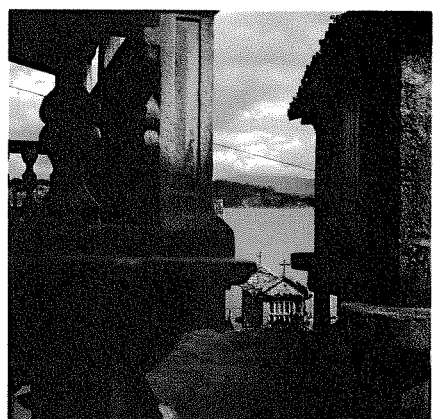
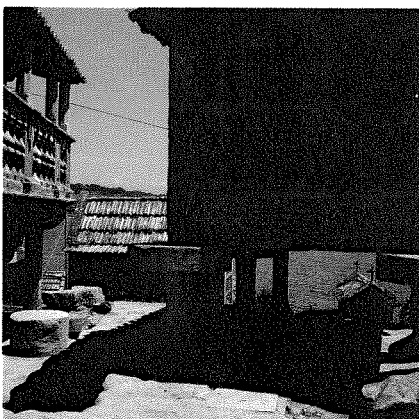
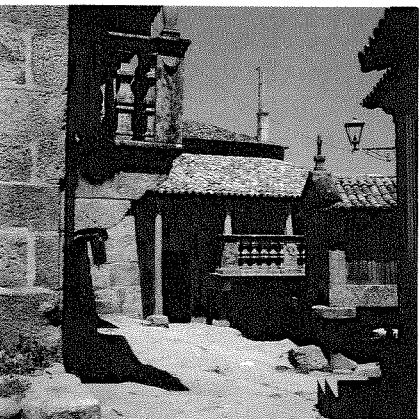
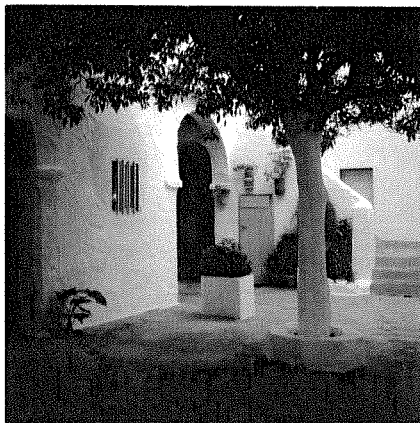
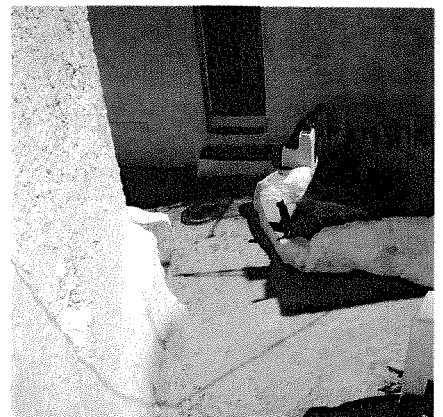
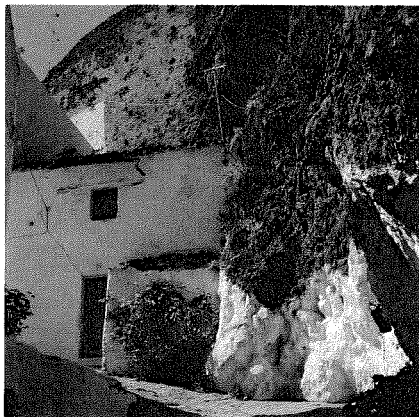
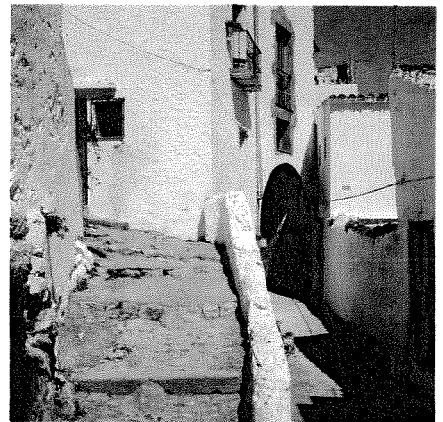
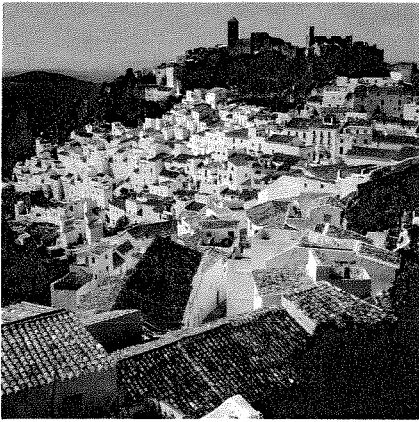
While these components / “players” are almost always present, their positions relative to both the varied form (rectangle, el, tree, etc . . . .) + dimensions of the courtyard itself and to each other display a full range of (ordering) permutations.

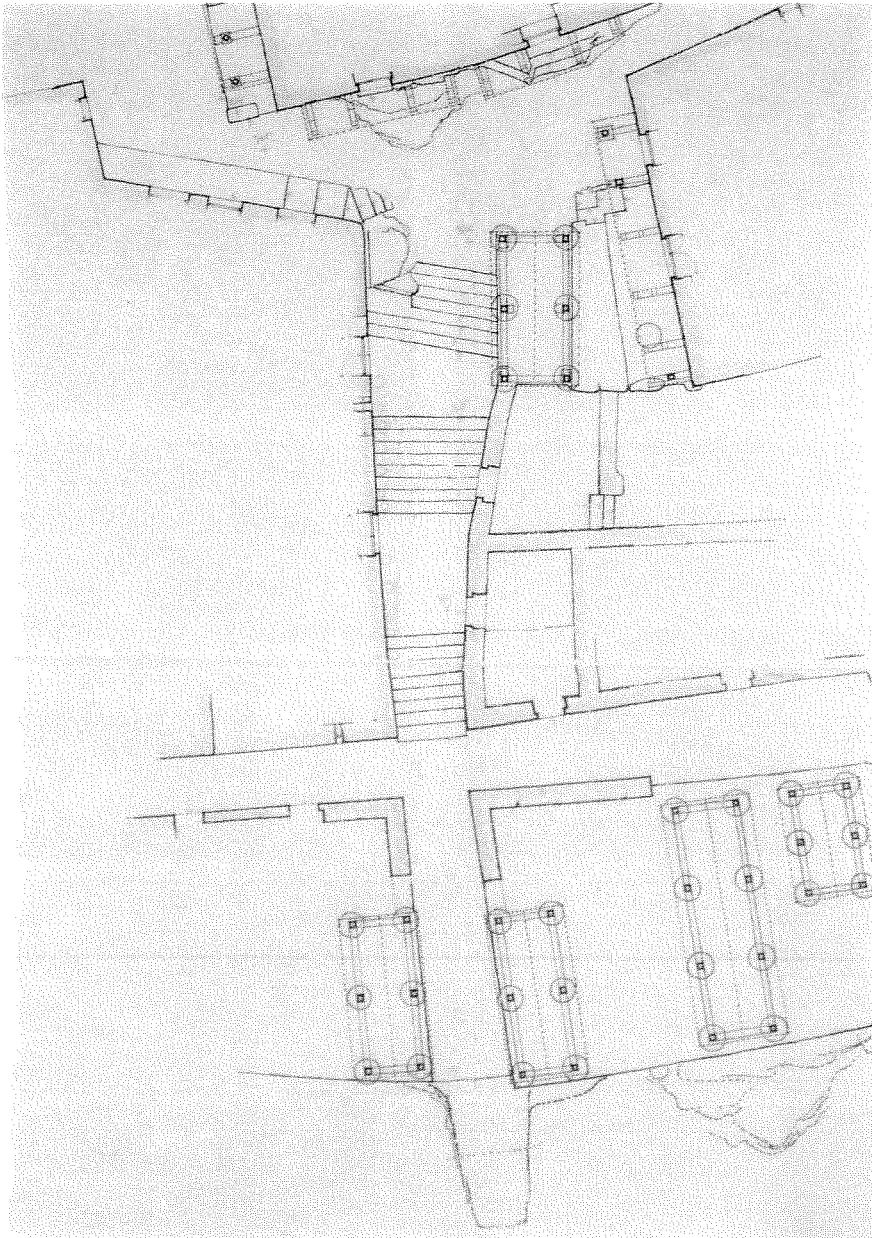
In the shown example (? Vejer de la Frontera) dimensional stabilities evidenced by white-washed tree trunk = displacement from court wall and its-own / arched-doorway height (small room size, light-green tape).

Mounting block is displaced by its own cube-measure from wall—also equals barred window, width of smaller doors, and platform height / width—(person size, red tape).

Opposite: Casares—upper six  
 Vejer de la Frontera—middle  
 Combarro—lower three







## Combarro

Several *horreos* are normal to and at the walled *ria*'s edge.

A single raised storage building "inhabits" the small plaza (one of a triple chain) 20 feet above the sea, and 70 feet inland.

Generated from below by processional stepped access and bounded above by a second contour street, the plaza form simultaneously encourages both

GO and STOP  
MOVE and STAY.

Measurement confirms. Plaza dimensions 31½ feet each way (dot-dash tape). This is also the (width of) building size "parallel" to upper *horreo*, etc . . . at the more public outside edges of *horreo* to plaza building wall faces. They are equal—a virtual but incomplete "square." Again, as for the Flores well, the freestanding object (here the *horreo*) is displaced precisely by its own dimensions to / from plaza-bounding wall / ground definition—both length (dot-dot, 15 feet) and width.

This width (dash-dash, 8 feet) is also the "normative" steps / street going—similar to the light-green tape in Casares.

The narrowest street passage (dot-dot, 4 feet) again equals many doorways, thresholds, corbelled balcony projections, etc. . . .

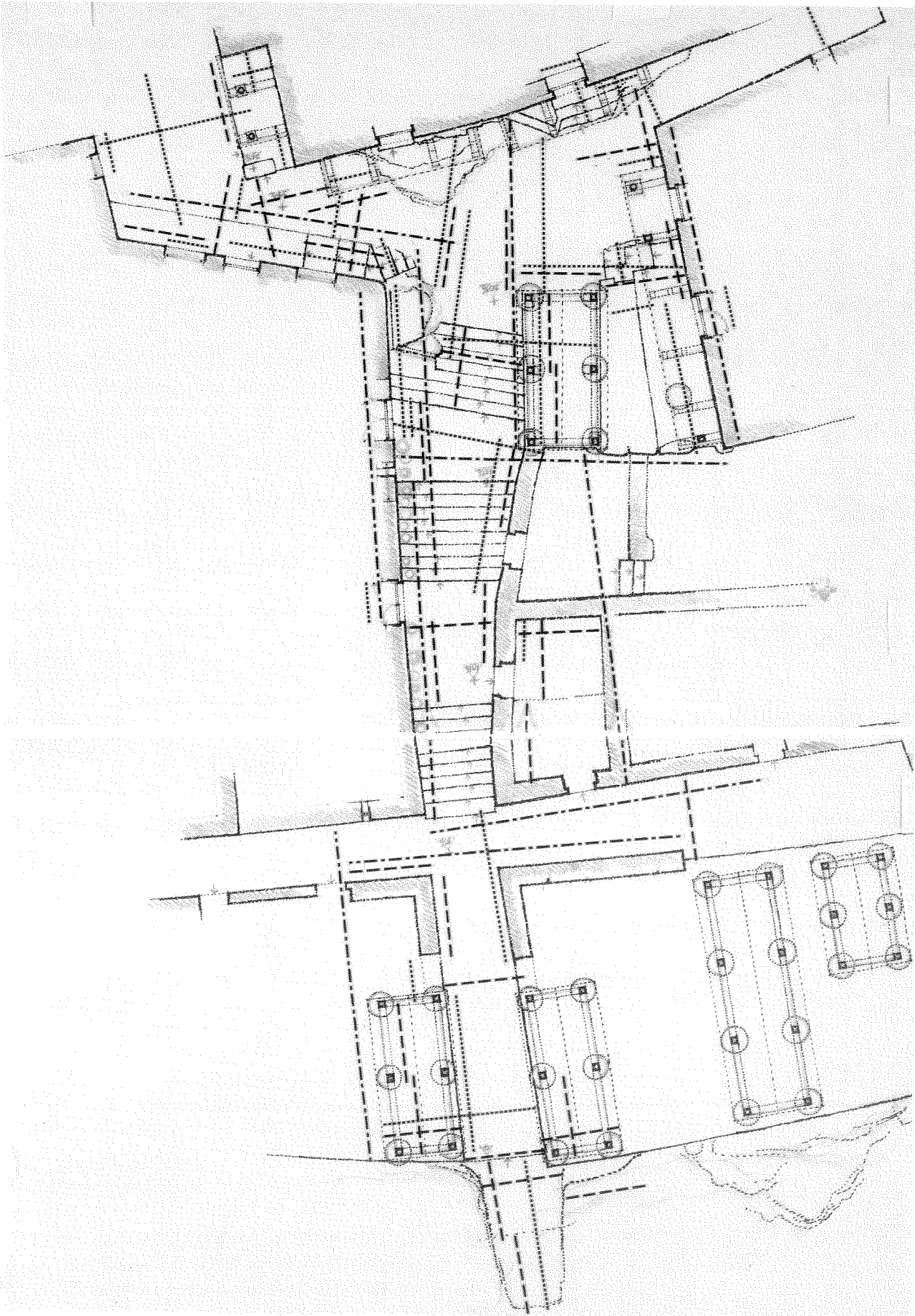
A precise measurement system / method involving use-dimensions and self-displacement for key

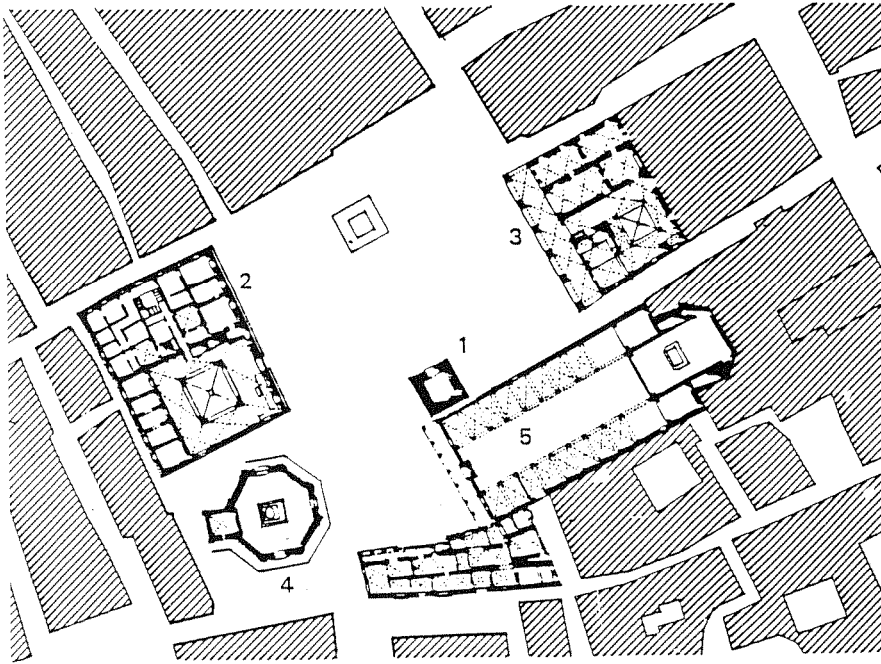
demarkations is clearly in effect—optional open-field disposition—without the more limiting control of serial repetition, additive modules, or extended subdivision / multiplication of "high" architectural composition.

Variable "slack" in adaptation to local terrain / ownership is largely in the "walls"—host to specific premade door / window openings. Larger collective to building-size demarkations may / may not include one or more access / material dimensions.

So here, in village / town context, is the more inclusive, lively-field, use-dimensional precursor of more limited / rigid close-packing proportionate orders paramount in architect-designed "high" Renaissance etc. systems.

At this investigation stage, it seems self-evident that in "optional alternation dimensional self-stability" is embodied part of an operative universal form field-theory.





### Pistoia: Piazza del Duomo

The structuring double-directional dimensional displacement observed in Iberian towns / villages, doubtless controlled / measured by inspectoral / agreed authority / chains / knotted ropes (?), is also manifest in intensified (European) urban plazas, e.g., this one.

The Duomo's (#5) length (longest dot-dot tape, circa 70 meters) displaced longitudinally **and** laterally demarks the major plaza boundaries / extent. It also positions (when containing Duomo width) the west side of City Hall (#3) and, usually including one or more access ways, is a recurrent building / block size.

City Hall width (dot-dash tape), circa 37½ meters, is also Pretoria (#2) depth.

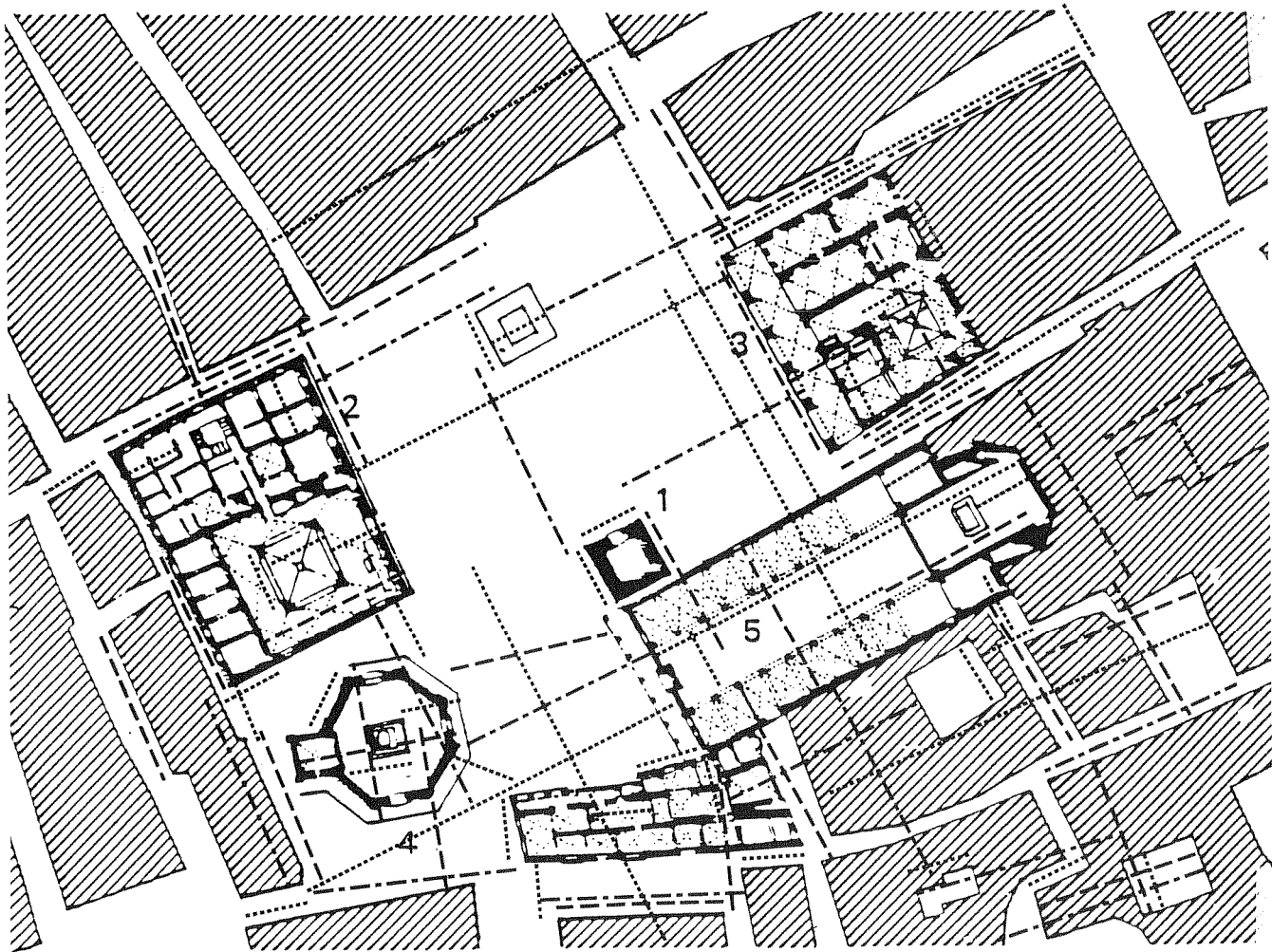
Duomo width (dash-dash tape) is circa 26 meters.

The shortest of the 4 dimensions / sizes tape-shown-street going (short dot-dot, circa 10 meters) demarks also the narrowest building width, baptistry facets (#4), Duomo nave width, belfry side (#1), courtyards, large rooms, etc. . . .

This equivalents at public / collective size the behaviour of the small red / personal-size tapes = one loaded-donkey width in Casares, etc. . . .

Behaviour, then, may be "fractal" at different sizes, but end-result form is not.

Similar demarkational systems are evinced in many elsewhere, e.g.



**Palermo: Piazza Pretoria.** The two churches, St. Caterina and Martorana, almost normal to each other, each maintain building length ahead. Between them is Piazza Bellini (Martorana is “buried” in (?) later “fabric”) defined by Caterina equally accurately by its laterally displaced width.

**Milan: Piazza del Duomo.** A singularly simplistic site with its adjoining 19th-century Galleria, etc. . . . , the cathedral’s own length is repeated to bound the extent of its open forecourt.

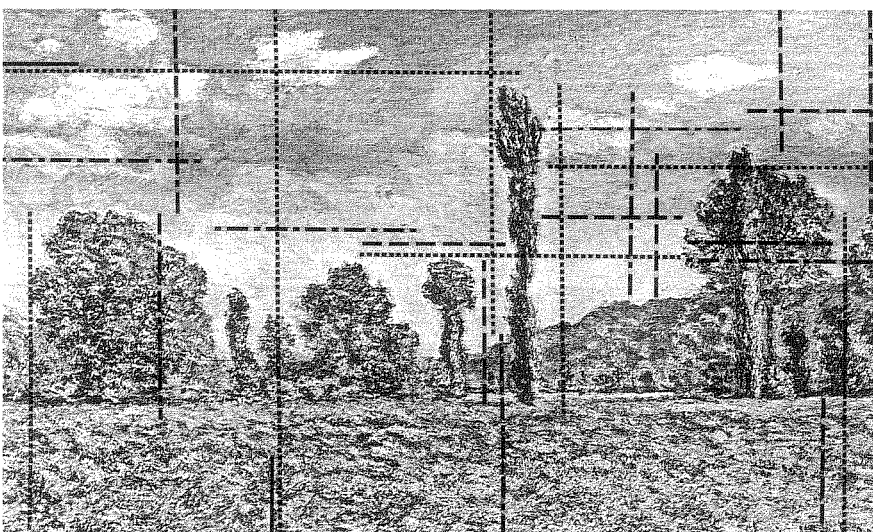


**Saul Steinberg: *New Yorker* Cover, January 6, 1975**

The ink bottle's (true) height equals width equals lateral displacement from right-hand page boundary, and demarks vertically to the second pencil: centers or material edges construct optional "slack." This single dimension distances each item in vertical series: top pen from left-hand boundary, lower pen from its "frame"—and even the signature!

*The landscape has its formation and as after all a play has to have formation and be in relation one thing to the other thing and as the story is not the thing as any one is always telling something then the landscape not moving but being always in relation, the trees to the hills the hills to the fields the trees to each other any piece of it to any sky and then any detail to any other detail, the story is only of importance if you like to tell or like to hear a story but the relation is there anyway. . . .*

Gertrude Stein: *Lectures in America*, "Plays" (Boston: Beacon Press, 1957, after Random House, 1935), p. 125

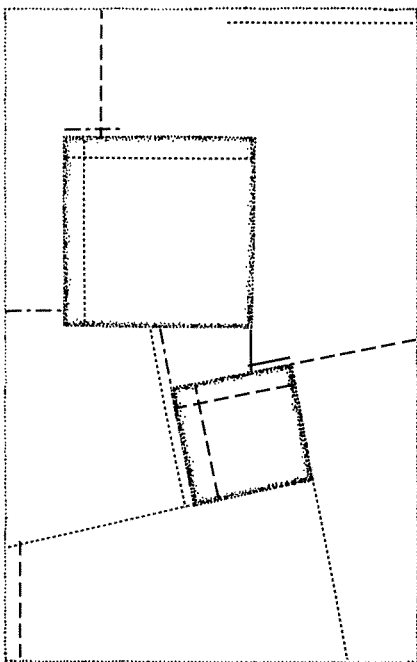


**Claude Monet: *Poppies near Giverny*, 1890**

Double-direction self-stabilities and displacements demark major definitions—tallest poplar both by its own height from right-hand boundary, and by "frame's" height from left edge, etc. . . .

The (picture) "frame" remains a participant in the "landscape" field. (Monet was a closet constructivist?)

Similar structural relationships / displacements are observable in almost every work illustrated in Albert Skira's 1949 *History of Modern Painting!*



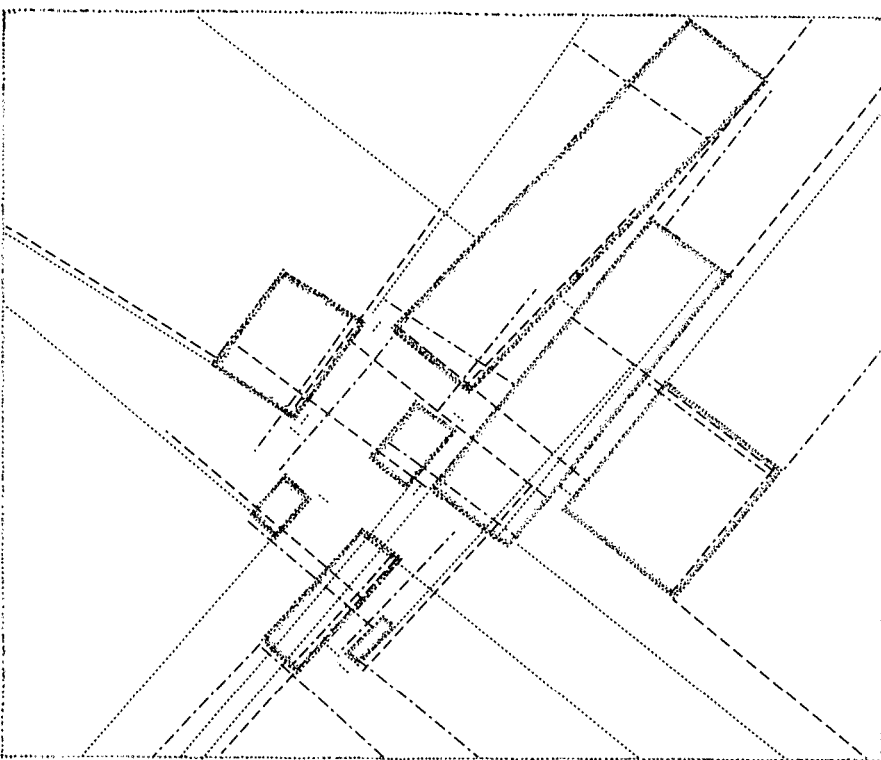
## Kasimir Malevich

*Carée Rouge et Carée Noir*, 1915

Although plausible accounts exist (Pedersen et al) of derivations (from black cross) for the two square sizes, there appears no adequate accounting of their “in-site” organization / construction / deployment.

Each square is finitely boundary-positioned as shown—by its own dimension, the other’s and / or the displacement (length) in extension of left-hand side of (small) rotating RED square which bisects lower side of (large) orthographic BLACK square.

Even “passings” from BLACK to within RED (full tape) are self-stable / equal and the whole is “solidly” / completely constructed.



*Eight Red Rectangles*, 19XX

The pieces are area-derived and “plate-shifted” from two squares: one, the length of 2nd top rectangle; the other, its width.

All 8 “mobiling” parts are firmly “nailed” to the including (9th) frame / site and / #2. Although seemingly much looser and more complex than “the red + the black square,” the same methods pertain. Each demarkation is precisely positioned; the middle-size series are tape-omitted to retain clarity.

As in “architectural” plazas—domestic, collective, public, CORDOBA COMBARRO PISTOIA etc. . . .—primary territorial positioning is double-directionally stabilized, while the “uses” of each dimension vary / “reverse.”

The size range (may even) analog proportionally—from building / block size (#2 length) to the smallest (#8) section, which, of course, equals the normative smallest “field access” and inverse / obverse “passings.” The entire field then is a “supreme” study in intrinsic / dimensional self-stability.

## After-notes

The Spanish towns drawings were made at  $\frac{1}{8}'' = 1'0''$  from accurate on-site measurements by M.K.S. (on MIT sabbatical) in spring 1982.

More extensive street-plan portions of some 11 towns were subsequently measured and later drawn at  $\frac{1}{16}'' = 1'0''$  by Thomas Hille and Andrès Mignucci. Their work, under my auspices / supervision, was supported financially through the Grunsfeld Fund.

We presented a near-300 running-foot exhibit at MIT in fall 1982. In addition to dimensional self-stability, topics addressed included primary street-access systems (in landscape intensification); directional access-street junctions / displacements; building–street territorial exchanges.

Mr. Hille has since furthered our street plan-studies with plans + elevations of late-Renaissance, a-thematic interventions in two highland eastern Portuguese towns, Monsaraz and Marvão. Vertical dimensions, of course, continue / reinforce / intensify the systems observable in plan. The later Renaissance “composition” serialises / subdivides with dimensions already generated / determined and open-field deployed in the more variable pre-extant landscape-intensified “habitable” / associative “indigenous” built-form.

Several graduate students have incorporated this “universal” observation method and have demonstrated (in part) its generative application in their respective theses—other countries / cultures / times. For example, Louise Hara, “Passage,” June 1985 (applied to a Warrenton, Virginia, project); Matthew Longo, “Reciprocal with the Landscape,” June 1985 (applied to several New England North Shore towns).

Within each Iberian town studied the specific dimensions for each “tape” are phenomenally consistent—while the entire family of dimensions differed somewhat from town to town.

As expected, in easier / flatter terrain, building / collective dimensions were greater than in difficult / sloping sites—transportation vehicle-aided versus donkeys only, etc. . . .

Each town’s dimensional consistency, then, surely predicates a finely tuned / agreed / enacted / asserted measuring system—“building inspector” with official knotted rope? chain? marked sticks?—rather than the “intuitively” shared understandings often attributed to under-documented indigenous building / architectures.

There can be no doubt of similarly finite measurements / displacements in urban plazas.

How ubiquitous / “mandatory” this particular behavioural / formal attribute really is awaits further assimilation / assessment.

It is certainly observable as a convincing delineator of territoriality in association with the other alternations (light-dark,  $\pi$ , reciprocity, etc. . . .)—not only in building and design but also in a host of other particular sizes / categories / media, etc. . . .

The range includes ridge-roosting seagulls, the dark spots white aureoled on foxglove petals, and, probably, Jacobs cattle beans.

Antienvironmental, disassociative, minimal modular repetitionisms achieving variation / change only through removal / substitution receive no further comment here.

Should the case for, say, the painters founder and be held largely intuitive (I would demur), then the frequency / density of dimensional self-stabilities employment / existence is so great that even stronger acceptance for its deep-(built in)-structure is warranted.

Most painters, from “romantic” landscape recorders to projective constructivists (Monet, Steinberg, and Malevich represent them here), and photographers—Ansel Adams, Eliot Porter, David Muench, etc. . . .—join with other “visual” designer species.

All methodically employ lateral or double-directional displacements. Prospective “external” continuities are predicted through edge self-displacements and reversals.

Their plazas / contexts are the extents / boundaries of their frames / sites, even as

*. . . (the painting) must have its own life. And yet it may not move or imitate movement, not really, nor must it stay still. It must not only be in its frame but it must not, only, be in its frame. This whole question of a picture being in its frame returning to its frame or not returning to its frame is the question that has latterly bothered me the most. Modern pictures have made the very definite effort to leave their frame. But do they stay out, do they go back and if they do is that where they belong. . . .*

Gertrude Stein, op. cit., p. 87