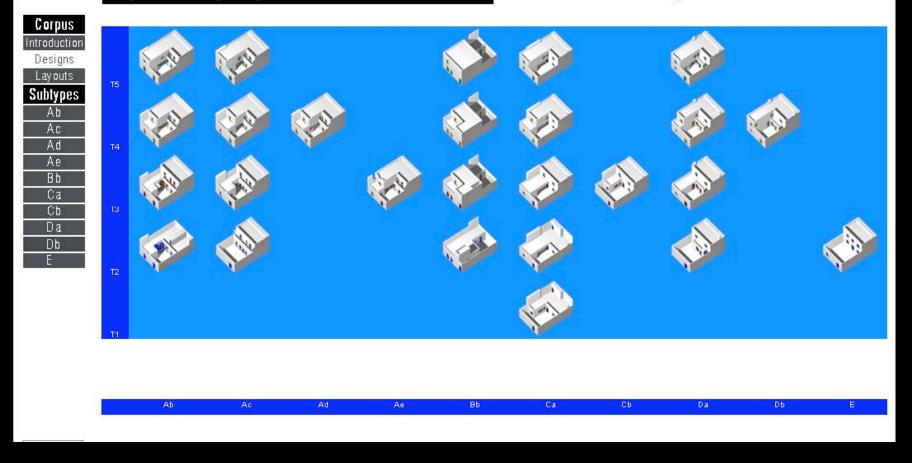
## Corpus of Existing Designs - 1977 / 1997

## Malagueira - Alvaro Siza Vieira



Malagueira housing designs of Alvaro Siza (Jose Duarte)

| wall        | s spaces   |
|-------------|--|
| Context:    | <pre>a4 : <front. back.="" left.="" right=""></front.></pre> |
| Housetype:  | a <sub>s</sub> i null  |
| N. rooms:   | a <sub>6</sub> : 0   |
| Balconies:  | a <sub>7</sub> :no   |
| Zones:      | a <sub>a</sub> :Ø  |
| Room:       | a, Ø   |
| Adjacencies |  |

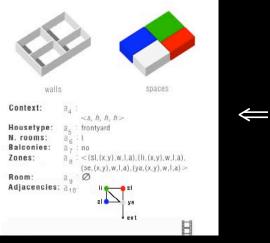
|             | ~   |                |      |
|-------------|---|----------------|------|
|             |   | 1              |      |
|             |   |                |      |
|             |   |                |      |
| wall        | S   | spaces         |      |
| Context:    | a <sub>4</sub> :                            |                |      |
| Housetype:  | $\langle s, h, h, h \rangle$                | >              |      |
| N. rooms:   | a <sub>5</sub> : null<br>a <sub>6</sub> : I |                |      |
| Balconies:  | a <sub>7</sub> :no                          |                |      |
| Zones:      | a : < (US0,(X,Y                             | (), w, l, a) > |      |
|             | 8 <(1,(4.0,6                                | 0),7.8,11.8,92 | 04)> |
| Room:       | a, Ø  |                |      |
| Adjacencies | : a <sub>10</sub>                           |                |      |
|             |   | = lot          |      |
|             |   |                |      |
|             |   | ↓ ent          | H    |
|             |   |                |      |

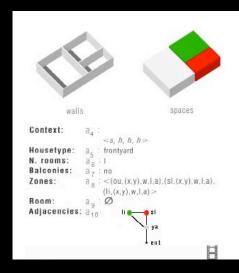
|              | ~                |            |             |              |
|--------------|------------------|------------|-------------|--------------|
|              |                  | i i        |             |              |
|              | 1                | 20         |             |              |
|              |                  |            |             |              |
| walls        |                  |            | sp          | aces         |
| Context:     | a <sub>4</sub> : | s, h, h, h | >           |              |
| Housetype:   | a5 : fro         |            |             |              |
| N. rooms:    | a. : 1           |            |             |              |
| Balconies:   | a - : no         |            |             |              |
| Zones:       |                  |            | w.l.a).(ou. | (x,y),w,l,a) |
| Room:        | a, Ø             | j.         |             |              |
| Adjacencies: | a 10             |            | 🌪 in        |              |
|              |                  |            | out         |              |
|              |                  |            | ent         |              |
|              |                  |            |             | t.           |

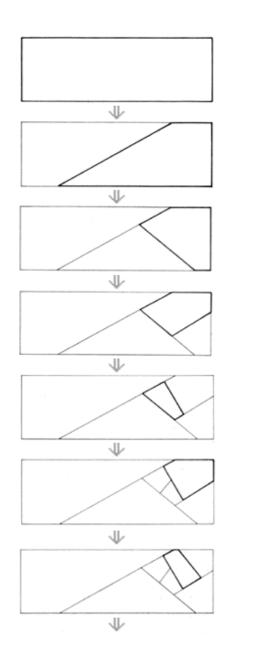


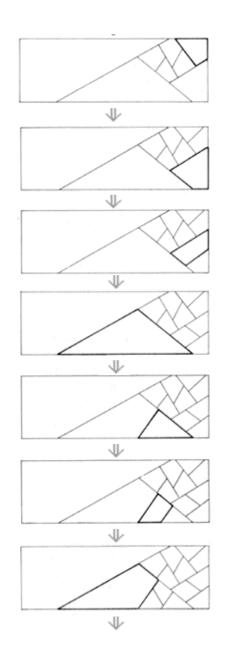


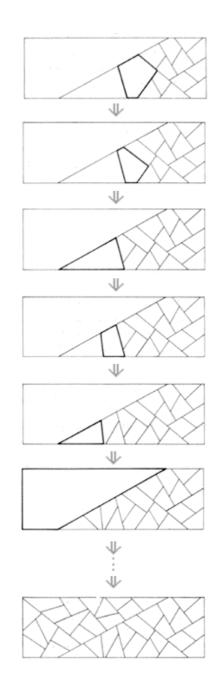
part of a computation in Siza grammar





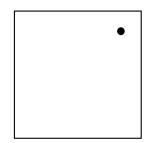




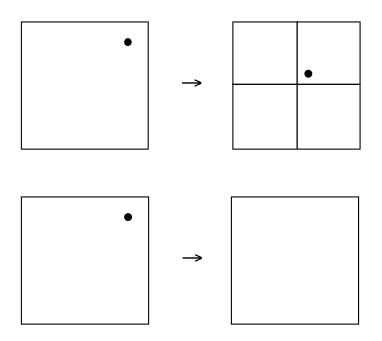


derivation of an ice-ray design

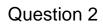
## Question 1

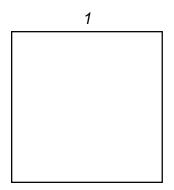


## initial shape

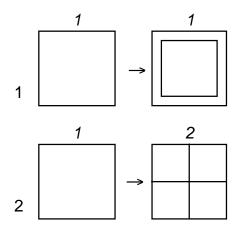








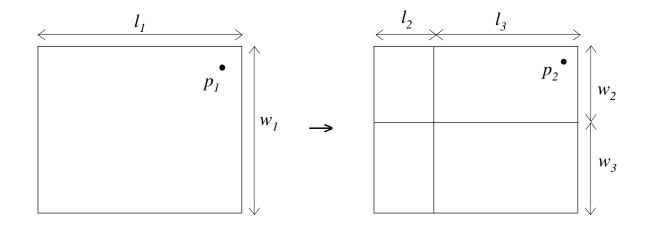
initial shape



rules

final state: 2





Conditions on variables:

 $l_1$  and  $w_1$  are the sides of a rectangle  $l_1, l_2, l_3, w_1, w_2, w_3 > 0$   $l_2 + l_3 = l_1$   $w_2 + w_3 = w_1$ point  $n_2$  is at a dictance from the verte

point  $p_1$  is at a distance from the vertex defined by  $l_1$  and  $w_1$  which is proportional to  $l_1$  and  $w_1$  point  $p_2$  is at a distance from the vertex defined by  $l_3$  and  $w_2$  which is proportional to  $l_3$  and  $w_2$