Robie House Derivation
Shape Grammar: Frank Lloyd Wright's Robie House
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Example: First Derivation
Problem:

Based on Koning and Eizenberg's shape rules, the final external view of Robie House is different from the original design.

I think the problem is on the "establishing roof eave lines" (rule 75 - rule 82).

*Right two diagrams are copied from Koning & Eizenberg's paper.*
(1981: p308 & 318: *59 Robie House*)
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Example: Second Derivation
Sheet 1
Schemata 1 locating the fireplace
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The Robie House: Frank Lloyd Wright
Sheet 6
Schemata 18, 13 assigning function zones
Shape Grammar Derivation
The Robie House: Frank Lloyd Wright
Sheet 8
Schemata 21 adding to concave corners
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Schemata 45, 46, 46 adding terraces
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Schemata 63, 63 bedroom floor extensions
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Schemata 75...,76...,77... establishing roof eaves lines
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Sheet 18
Schemata 91..., 93..., 94..., 95..., 96..., 97..., roof formation
Schemata 99 extending the chimney through the roof
Shape Grammar Derivation
The Robie House: Frank Lloyd Wright
Sheet 19
Completed Derivation
Shape Grammar Derivation
The Robie House: Frank Lloyd Wright