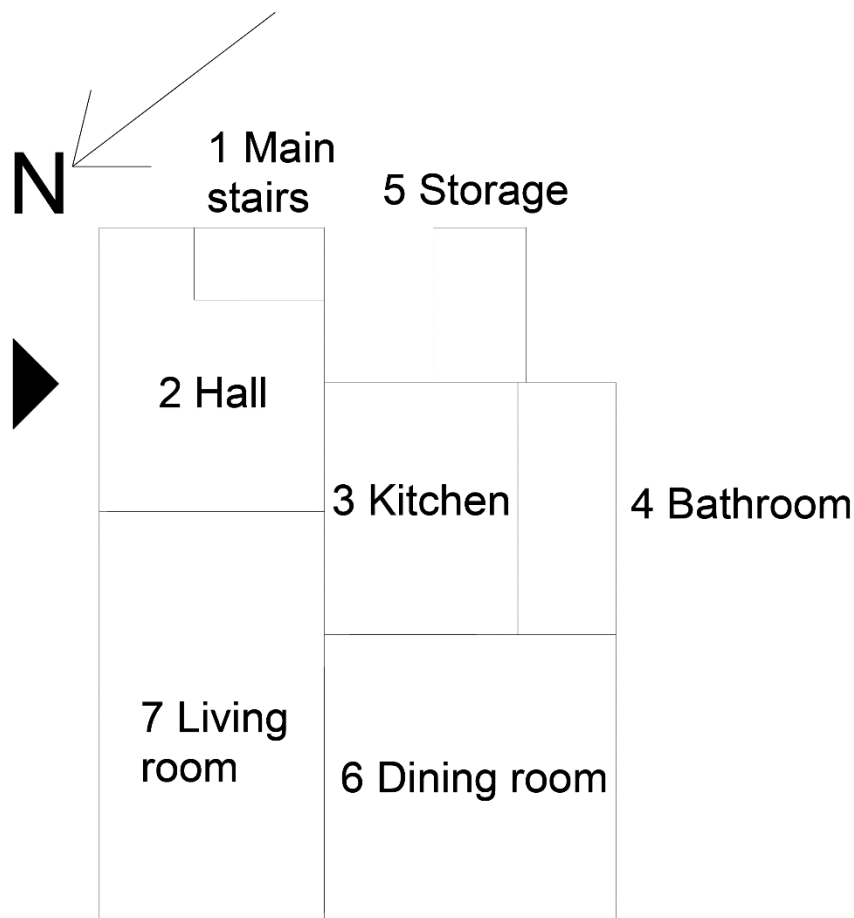


The example of typical single-family, 3-storey building located in the Complexo do Alemão neighbourhood, one of Rio de Janeiro's dense chaotic urban favelas area. The building is a peculiar example of vernacular architecture. Despite the lack of architect's involvement in the design and construction of the object, it retains orthogonal geometry and classical zoning division. The ground floor is occupied by living (day) zone (kitchen, living room, bathroom and dining room), bedrooms (night zone) are located on the first floor, the top floor (roof) is an multipurpose terrace. Current benchmark counts only the ground floor.

Research materials were provided thanks to courtesy of Solène Veysseyre, a French architect, investigating architecture of South America *favelas*.

Floor simplified layout



Room geometrical properties

No.	Floor	Name	Area sq. m.	Dimension Y (width) bounding box (cm)	Dimension X (length) bounding box (cm)	Bounding box area (sq. m.)	Area sq. Cm	Bounding box area sq. cm.	Room location relative to cardinal directions
1	0	Main stairs	0,88	70	126	0,882	8800	8820	South East
2	0	Hall	5,00	275	218	5,995	50000	59950	North East, East
3	0	Kitchen	3,75	244	154	3,7576	37500	37576	Inner space
4	0	Bathroom	2,30	244	95	2,318	23000	23180	South, South West
5	0	Storage	1,26	140	90	1,26	12600	12600	South East, South, South West
6	0	Dining room	7,57	279	282	7,8678	75700	78678	West, North West, North
7	0	Living room	8,65	398	218	8,6764	86500	86764	North East, North, North West

		TOTAL AREA	29,41						
--	--	------------	-------	--	--	--	--	--	--

Room adjacency matrix

	Main Stairs (Ground floor)	Hall	Kitchen	Bathroom	Storage	Dining room	Living room
Main Stairs (Ground floor)	-	1	0	0	0	0	0
Hall	1	-	0	0	0	0	1
Kitchen	0	0	-	1	1	1	0
Bathroom	0	0	1	-	0	0	0
Storage	0	0	1	0	-	0	0
Dining room	0	0	1	0	0	-	1
Living room	0	1	0	0	0	1	-

Room topological graph

