

picture / sketch of the pattern



Grigorios Dimitriadis

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Waterloo, Ontario, Canada, 2015
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+ or -
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pattern
limited facade openings

Maya Kazamel
name

key players m
building owners, contractors

description / background
Many buildings in Ard el-Liwa are built without openings in the facades which are seen as an invasion of privacy and a waste of precious wall space, resulting in buildings with entire solid walls and only occasional openings

smaller patterns
windows and openings

larger patterns
informal building practices
macro-economics of land ownership
and construction
health in informal areas

importance rank
high priority

general problems
H- Health

general potentials
N

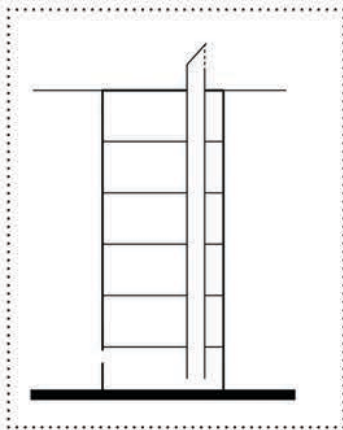
Waterloo, Ontario, Canada, 2015
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problem / potential

Building apartment buildings with limited windows is a widespread practise in informal areas. While the main facade often has windows and balconies, the side facades generally have none and may be stuck to other buildings. This maximises the available interior wall space but also prevents the entry of fresh air and sunlight. The practise of building on entire land plots without setbacks to maximise floor area and profits further exacerbates this problem. Light wells are generally very small and used for ducts as well, limiting their ability to allow in light or air. Therefore there is a need for an intervention to allow light and air inside buildings while maintaining privacy.

solution / tool(s) to optimize this pattern:

illustration



tool 1

windcatchers

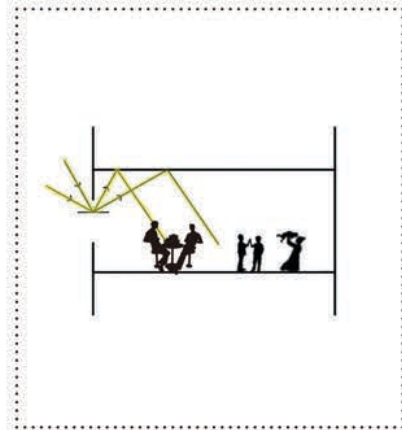
description

Inserting ventilation shafts that can also act as light-tubes. Similar to the Islamic windcatcher, this can be optimized to open/ close on different floors individually operated by residents

new key players

Residents
Workers,
Craftsmen

illustration



tool 2

light shelves

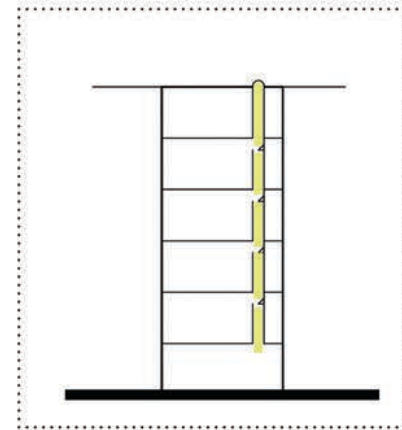
description

Maximising upon existing windows, light shelves can allow light deeper into spaces by using reflective materials. This is easy technology and can be used by residents to control the amount of light entering based on the time of day

new key players

Residents
Craftsmen

illustration



tool 3

light tubes

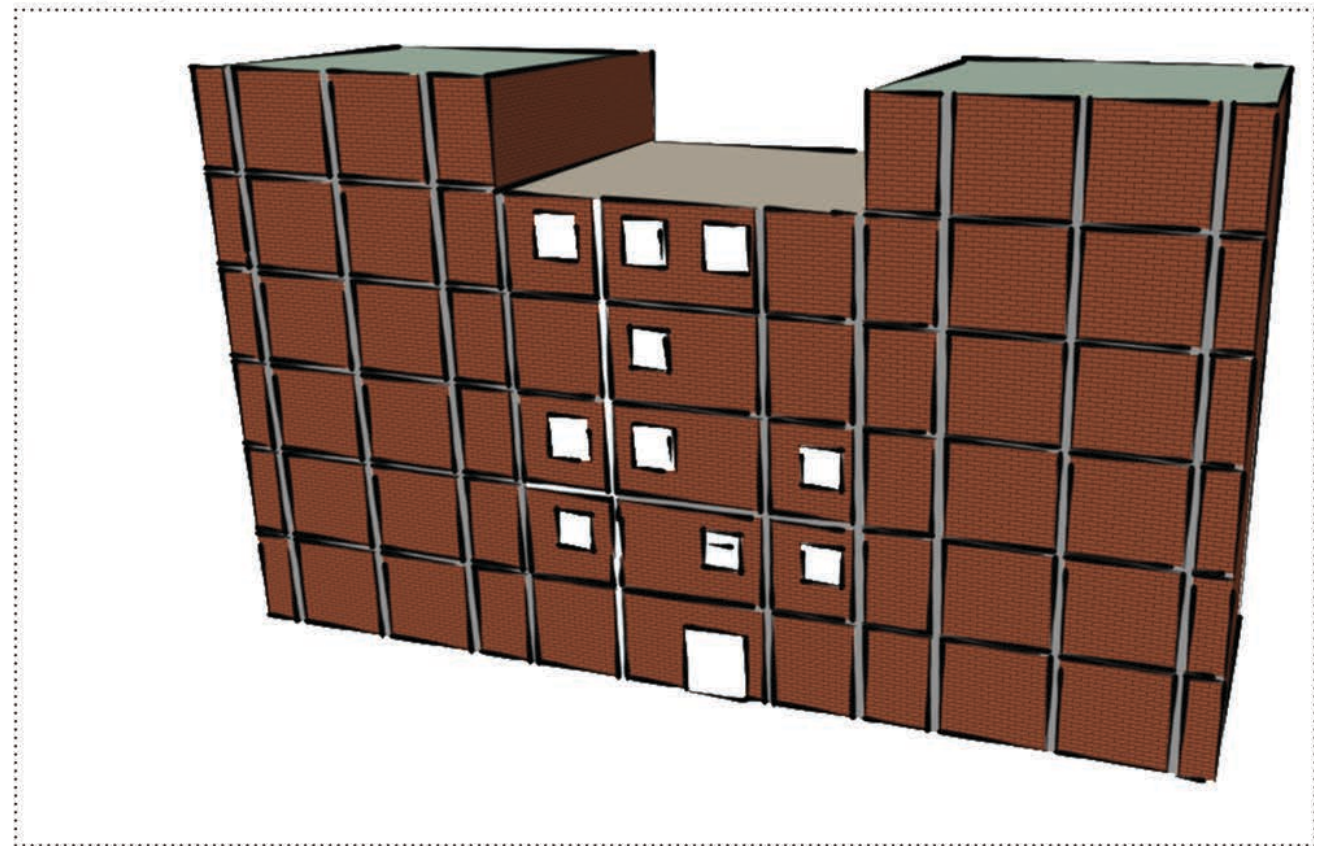
description

Similar to the windcatchers, light tubes can introduce light into the building without changing the facade.

new key players

Residents

existing diagram / layout / map



new diagram / layout / map / design / photographs of a 3d model

