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Raaxo: A post-refugee landscape

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RAAXO: A POST-REFUGEE LANDSCAPE

An Honors College Project Presented to
the Faculty of the Undergraduate
College of Visual and Preforming Arts
James Madison University

by Bailey Mariah Riales

Accepted by the faculty of the Department of Architectural Design, James Madison University, in partial fulfillment of the requirements for the Honors College.

FACULTY COMMITTEE:

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HONORS COLLEGE APPROVAL:

Bradley R. Newcomer, Ph.D., Dean, Honors College

PUBLIC PRESENTATION

This work is accepted for presentation, in part or in full, at [venue] JMU Studio Center on [date] April 28, 2017.
raaxo:

a post-refugee landscape

jmu architectural design  [spring 2017]

bailey m. riales
**steps + process**

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- Researching previous landscape projects/land artists
- Learning + experimenting with using materials in architecture + design of landscapes
- Research of dadaab camps + space analysis
- Studying site conditions to understand + design the idea of comfort
- Placement of screens into site
- Prototype of protective barrier from wind / creates facade for refugee comfort (dwelling + community spaces)
- Process of sand build-up over time
Sited in Dadaab, Kenya // raaxo is a transformation of the current landscape that works with harsh conditions of sun and wind to provide spaces of dwelling and gathering, improving refugee comfort by initiating a sense of community. Tall, mechanical screens protect against the strong desert winds, while also creating a build-up of sand. Over time, the sand build-up forms an exterior barrier around the community and dwelling spaces, and creates a façade on the interior. Other designed screens are placed opposite the formed community spaces, providing shade from the desert sun for the refugees. Throughout the span of a year, raaxo becomes a designed landscape of multiple protected spaces of comfort where refugees occupy, gather and call “home”.
sited in east kenya, dadaab is mud & tent metropolis, a 17-mile span of flat, red plain surrounded by desert and thorn trees, occupied by the four most populated refugee camps in the world. within the month, the kenyan government will start the process of closing all four camps - due to prolonged insecurity and violence of the barren, dusty settlement, they feel the need to terminate dadaab.
Baris was an interesting problem in which I was to create all the parts of a community, to bring together in the best manner possible people whom I did not know. All that I worked to create an indigenous environment at a minimal cost, and in so what should be built, rather than what can be built, both for the community to define solutions, fundraise, design and carry out the projects.

...of the studio, to bring together in the best manner possible people whom I did not know. All that I worked to create an indigenous environment at a minimal cost, and in so what should be built, rather than what can be built, both for the community to define solutions, fundraise, design and carry out the projects.

The Rural Studio philosophy suggests that everyone, both rich and poor, deserves the benefit of good design. To fulfill this ethic, the Studio has evolved towards more community-driven design, making projects possible with limited resources and little prior knowledge of the people involved.
CASE STUDY 11
Danae Stratou + Alexandra Stratou + Stella Constantinides
Sahara Desert
desert breath
An impossibly immense land art installation dug into the desert
involved the displacement of 280,000 square feet of sand and the creation of a large central pool of water.

CASE STUDY 12
Rasem Kamal, Jordanian desert
wadi rum
Kamal has proposed a network of burrow-like spaces that would
“drawings” is the earth itself; the artists scraped the form and internal space. As a result the project has little detectable

CASE STUDY 13
Christo + Jeanne-Claude, USA + Japan
the umbrellas
This Japan-USA temporary work of art reflected the invitational inner space, as houses without walls, or
temporary settlements and related to the ephemeral character of the work of art.

CASE STUDY 14
Michael Heizer, Nevada, USA
city
The sculpture consists of three rectangular structures around a curved, sunken gravel-coated court or pit.
“I don't work with scale, I work with size. Scale is an effete art term.”

CASE STUDY 15
Mohave and Quechan Indians, Blythe, California
blythe intaglios
Ancient human, animal, and geometric drawings are somewhere
like mountain peaks. and several upright slabs that poke up over the top two projections, one triangular and one rectangular, quarter-mile long. Its irregular surface incorporates sloped sides. “Complex 2” is by itself more than a

SITE STUDY 20
dadaab: camps

CASE STUDY 16
Christo + Jeanne-Claude, United Arab Emirates
better shelter
The couple likes to create ‘gentle disturbances’ in spaces owned by human beings - to make people become more aware of themselves and their surroundings.

CASE STUDY 17
Rasem Kamal, Jordanian desert
wadi rum
Kamal has proposed a network of burrow-like spaces that would
“drawings” is the earth itself; the artists scraped the form and internal space. As a result the project has little detectable

SITE STUDY 18
dadaab: environment

CASE STUDY 19
Rasem Kamal, Jordanian desert
wadi rum
Kamal has proposed a network of burrow-like spaces that would
“drawings” is the earth itself; the artists scraped the form and internal space. As a result the project has little detectable

SITE STUDY 20
dadaab: camps

SITE STUDY 21
dadaab: climate

Rainfall in Dadaab is considered to be BWh according to the Köppen-
virtually no rainfall during the year in Dadaab. This climate graph temperature graph

dadaab: climate

Climate graph temperature graph

dadaab: climate

Climate graph temperature graph

dadaab: climate

Climate graph temperature graph

dadaab: climate

Climate graph temperature graph
[material] study models
individual camp analysis
site analysis

[condition]
detail model [1:1]
a day in the life of raaxo

06:15 SUNRISE ABOVE DADAAB DESERT
07:00 WAKE UP
07:15 BREAKFAST—“anxera”, a traditional Somali snack made from wheat flour
08:00-17:00 WORK—could include
+ teaching (school // building techniques //
+ building (screens // brick facades // markets //
+ community spaces)
+ coordinating (camp activities for refugees, youth //
+ community activities & spaces)
+ gathering (materials for bricks, ingredients for cooking
meals for family, etc.
18:00 DINNER
19:34 SUNSET
22:30 SLEEP