

# SYMBIOTIC AGENCY:

**Establishing Mutualism in Architecture, Parasite and Host**

By:

SALLY VANDRISH

A thesis submitted to the Faculty of Graduate and Postdoctoral Affairs  
in partial fulfillment of the requirements for the degree of

Master of Architecture  
M. Arch (Professional)

Azrieli School of Architecture and Urbanism  
Carleton University  
Ottawa, Ontario

© 2013 SALLY VANDRISH



Library and Archives  
Canada

Published Heritage  
Branch

395 Wellington Street  
Ottawa ON K1A 0N4  
Canada

Bibliothèque et  
Archives Canada

Direction du  
Patrimoine de l'édition

395, rue Wellington  
Ottawa ON K1A 0N4  
Canada

*Your file Votre référence*

*ISBN: 978-0-494-94568-1*

*Our file Notre référence*

*ISBN: 978-0-494-94568-1*

#### NOTICE:

The author has granted a non-exclusive license allowing Library and Archives Canada to reproduce, publish, archive, preserve, conserve, communicate to the public by telecommunication or on the Internet, loan, distribute and sell theses worldwide, for commercial or non-commercial purposes, in microform, paper, electronic and/or any other formats.

The author retains copyright ownership and moral rights in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

#### AVIS:

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque et Archives Canada de reproduire, publier, archiver, sauvegarder, conserver, transmettre au public par télécommunication ou par l'Internet, prêter, distribuer et vendre des thèses partout dans le monde, à des fins commerciales ou autres, sur support microforme, papier, électronique et/ou autres formats.

L'auteur conserve la propriété du droit d'auteur et des droits moraux qui protègent cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

---

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this thesis.

While these forms may be included in the document page count, their removal does not represent any loss of content from the thesis.

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de cette thèse.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.

Canada

**THE PARASITE:**



SYMBIOTIC AGENCY // SALLY VANDRISH | 2013

---

# ABSTRACT

---

Ad hoc clusters of settlements are surfacing in various parts of the world. These constellations, swelling at their bellies, are part of a geographical phenomenon involving millions of modern day migrators. The inhabitants are refugees, confined in a state of limbo, unable to return to their country of origin and prevented from integrating into the foreign land within which they sought sanctuary. Performing under strict institutional and governmental frameworks, the camps themselves are planned as temporary environments however the status quo would argue otherwise.

What results is a form of exigent city, diagnosed with the ills of overcrowding, dependency and protracted uncertainty. Likened to a form of parasitism where the camps survival is contingent on the welfare of its host, and the continuing imprisonment and impermanency that circumscribe refugee camps enable this unbalance to persist, ultimately encouraging resentment and exhausting the good will of host communities.

When it is no longer a matter of life and death, the provision of assistance based on short-term thinking plays out in the most unfavorable of ways when long term realities set in. Piecemeal infrastructure and a lack of foresight in planning and shelter have contributed to significant environmental problems, undesirable living conditions and wasted humanitarian funds. Through a *symbiotic agency*, can architecture facilitate a mutualism between parasite and host? This thesis hopes to reconcile the unbalanced relationship that exists by providing a series of interventions that prove more sustainable over time and are aimed at encouraging an independent livelihood.

---

For my teachers, my blood, my love and kindred spirits.

May we all aspire to be the people our dogs believe us to be.



# LIFECYCLES:

*Abstract*

**Birth** **1**

---

*Methodology*  
*Preamble*

**Diagnosis** **2**

---

*A Prisoner's Camp*  
*Ethnoscape*  
*Orchestrating Chaos*

**Parasitism** **3**

---

*Fitness*  
*Host Culture*  
*Parasite*

**Antidote** **4**

---

*Agency: Expanding Architectural Role and Service*

**Mutualism** **5**

---

*Symbiotic Agency*

*Postscript*

---

# PROLOGUE:

---

Sifting through the contents of my postcard collection sent to me by family working in development and living overseas during my early formative years, I became gently subdued by the captivating depictions of places far beyond my understanding. I would eagerly anticipate the next one's arrival. While I read each line my imagination raced, as the words painted pictures of distant lands and cultures foreign to me. Later I would indulge in my father's enormous compilation of *National Geographic* magazines where I would look up and read about the areas that I had been exposed to. Long before the days of Internet these were my sources of information and earliest introductions into the wondrous world of culture. My mind would forever be intrigued, and my life would inescapably become defined by this rooted desire to explore and experience these representations that colored my childhood.

Fast-forward years to the present and the proliferation of those curiosities have grown, only to be expressed through different mediums. My overwhelming drive to travel and appreciate through direct experience has been focused by the need to contribute and create. Ultimately the research of this thesis challenges all these desires, and thus has been closely related to my ambitions of engaging in development work and marrying it with architectural agency. Through this labor I aim to reveal the realities of those less fortunate, and bring awareness to the conditions that they face daily in hopes of improving their livelihood.

---

## FOOD FOR THOUGHT:

### **+ 10 MILLION // REFUGEES**

ENCAMPED WORLDWIDE HAVE FALLEN THROUGH THE GAP BETWEEN NATION STATES.

### **7.1 MILLION // 3/4**

PROTRACTED REFUGEE SITUATIONS

### **LESS THAN 1% // 2011**

BENEFITED FROM RESETTLEMENT

### **+ 2,500,000 // 1/3**

BEING ACCOMMODATED IN CAMPS

## UNHCR'S DURABLE SOLUTIONS:

### **VOLUNTARY REPATRIATION //**

RETURN OF REFUGEE TO COUNTRY OF ORIGIN

### **RESETTLEMENT //**

ALTERNATIVE SETTLEMENT IN A THIRD COUNTRY

### **LOCAL INTEGRATION //**

INTEGRATION OF COMMUNITIES WITHIN HOST COUNTRY

Source: *UNHCR Global Trends 2011*. (2012) United Nations High Commissioner for Refugees

[Abbreviations]

|               |  |
|---------------|--|
| <b>BKK</b>    | <i>Bangkok</i>   |
| <b>CBO</b>    | <i>Community Based Organization</i>  |
| <b>CCSDPT</b> | <i>Committee for Coordination of Services to Displaced Persons in Thailand</i>             |
| <b>GoUM</b>   | <i>Government of the Union of Myanmar</i>  |
| <b>GoK</b>    | <i>Government of Kenya</i>   |
| <b>IDP</b>    | <i>Internally Displaced Person</i>   |
| <b>KNU</b>    | <i>Karen National Union</i>  |
| <b>MOI</b>    | <i>Ministry of Interior</i>  |
| <b>NGO</b>    | <i>Non-Governmental Organization</i>   |
| <b>RTG</b>    | <i>Royal Thai Government</i>   |
| <b>SPHERE</b> | <i>Sphere Project, Humanitarian Charter and Minimum Standards in Humanitarian Response</i> |
| <b>TBBC</b>   | <i>Thailand-Burma Border Consortium</i>  |
| <b>UNHCR</b>  | <i>United Nations High Commissioner for Refugees</i>                                       |

---

## METHODOLOGY:

---

This thesis is structured according to the evolving lifecycles of two organisms involved in a symbiotic relationship. Like in the beginning of most narratives, this story begins at birth. The first stage is a preamble, revealing the two organisms of interest; i.e. the refugee camp and host. The second stage proceeds to explore the intricate power and social dynamics involved in the ecology of the camps, revealing the main characters at play and diagnosing the persistent parasitism that prevails. This is further developed later in the section where an examination of the shifting perceptions in humanitarian response creates a backdrop against which *symbiotic agency* finds its critique and purpose. This becomes evident through a textual analysis of the evolution of existing humanitarian handbooks on refugee camp shelter and planning guidelines.

This historical investigation will study how design considerations related to the shelter and planning of refugee camps have changed over the years, and illustrate the contradiction between realities today and how the camps continue to be represented formally in text. The handbooks are intended to establish minimum standards and set guidelines for humanitarian action. They are widely distributed within aid organizations and into the hands of those responsible for implementing their practices in the field. As a result, it is a good indication of the opinions of those responsible for governance and demonstrates the inconsistency between who is being represented (refugee), and who is given the voice (institutions). The humanitarian agencies generally make claims of apolitical statutes however upon deeper investigation, with nation-states aiming to shift accountability, aid organizations have been tasked with ever increasing political responsibilities. This thesis will question the capacity of aid agencies to provide adequate living conditions beyond the emergency phase and query constant practices

of containment and restrictions on mobility. Stage three uncovers the reality of conditions within a specific camp when culture collides with universally applicable models of planning and shelter. This will be achieved through a number of the following methods in order to support the previous statements.

Due to institutional and political constraints regarding accessing camps, we will rely here on statistical data already developed by the humanitarian agencies on issues relating to planning and shelter. Performance assessments aid in determining what themes or major issues are present, eventually informing the decisions and design interventions ultimately proposed. This data can be found in online reports made available to the public by the humanitarian agency in question. Obtaining visual documentation has been difficult due to the lack of responses from the humanitarian agencies contacted and the challenge of identifying who the gatekeepers are. Fortunately upon receiving one reply, visual analysis of Mae La camp in Thailand was accomplished using GIS vector

shape file data and high-resolution maps provided by the *The Thai-Burma Border Consortium*. Although it would be ideal to have obtained visual documentation of other camps in order to develop a comparative analysis, the selection of Mae La camp as a case study opened up a specific culture and grounded the context of the research, setting specific site parameters and revealing their particular details of construction. Since participant observation was not possible, secondary observational research was achieved by adopting information already established by those who have had the opportunity to engage in direct participation – mainly through the viewing and analysis of secondary materials such as photographs or video footage. As a secondary observer, one becomes an “interpreter of the observations of others.”<sup>1</sup>

Stage four discusses expanding architectural service in order to assist those underserved in traditional professional

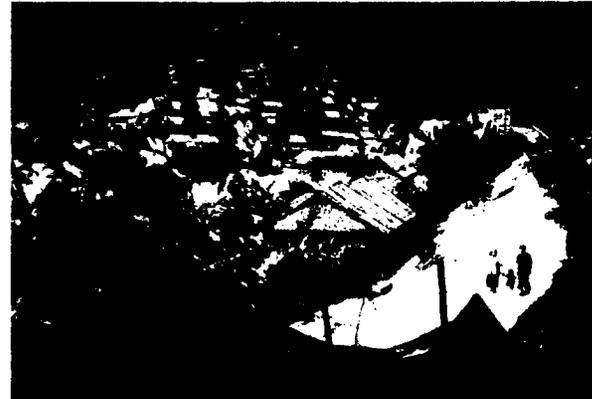
---

<sup>1</sup> Kearns, Robin A. (2010). Seeing with Clarity: Undertaking Observational Research. In Ian Hay (eds.), *Qualitative Research Methods in Human Geography* (3<sup>rd</sup> ed.). Don Mills, ON: Oxford University Press

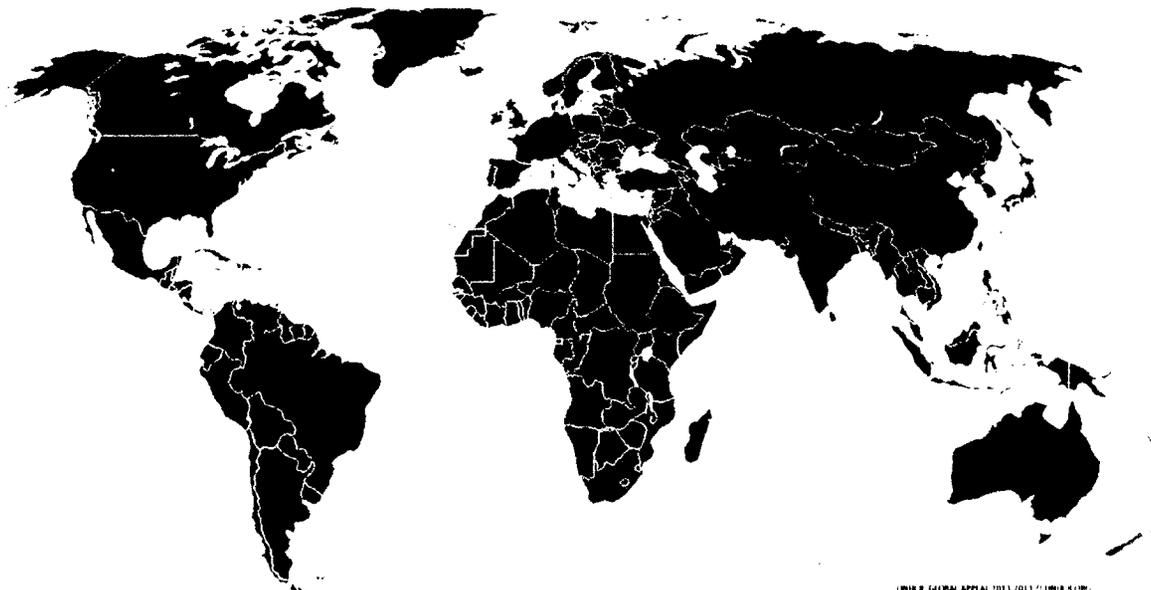
practice. This re-imagining becomes the antidote whereby through its prescription, the ills of a parasitism can be overcome and mutualism achieved. The final stages reveal how through a series of urban acupunctures, a *symbiotic agency*, can restore a balanced relationship for future co-evolution.

With that being said is also the intention of the design solutions proposed to maintain the prospect of resonating outwards to include a general awareness of the social, political and spatial processes that shape and define refugees' lives all over the world, and the potential to ameliorate the environment they live in.

Refugee Camp along Myanmar Border, Thailand



Source: christianbobstphotography.com



UNHCR GLOBAL APPEAL 2013 // UNHCR.ORG

## REFUGEE:

AS DEFINED BY THE UNHCR // SOMEONE "OWING TO A WELL-FOUNDED FEAR OF BEING PERSECUTED FOR REASONS OF RACE, RELIGION, NATIONALITY, MEMBERSHIP OF A PARTICULAR SOCIAL GROUP OR POLITICAL OPINION, IS OUTSIDE THE COUNTRY OF HIS NATIONALITY, AND IS UNABLE TO, OR OWING TO SUCH FEAR, IS UNWILLING TO AVAIL HIMSELF OF THE PROTECTION OF THAT COUNTRY."

### // PREDOMINANT POPULATION OF REGISTERED REFUGEES



|                                       |                   |
|---------------------------------------|-------------------|
| CENTRAL AFRICA AND GREAT LAKES        | 628,360           |
| EAST AND HORN OF AFRICA               | 1,241,100         |
| WEST AFRICA                           | 168,330           |
| SOUTHERN AFRICA                       | 146,160           |
| NORTH AFRICA                          | 129,670           |
| THE MIDDLE EAST                       | 1,811,320         |
| SOUTH-WEST ASIA                       | 2,980,420         |
| CENTRAL ASIA                          | 10,370            |
| SOUTH ASIA                            | 274,850           |
| SOUTH-EAST ASIA                       | 410,560           |
| EAST ASIA AND THE PACIFIC             | 337,910           |
| EASTERN EUROPE                        | 24,540            |
| SOUTH-EASTERN EUROPE                  | 99,320            |
| CENTRAL EUROPE                        | 30,740            |
| NORTHERN, WESTERN AND SOUTHERN EUROPE | 1,452,030         |
| NORTH AMERICA AND THE CARIBBEAN       | 430,950           |
| LATIN AMERICA                         | 373,040           |
| <b>TOTAL</b>                          | <b>10,549,670</b> |

Source: Sally Vandrish  
Data: UNHCR Global Appeal 2013 // UNHCR.ORG

---

## PREAMBLE:

---

*The work of the High Commissioner shall be of an entirely non-political character; it shall be humanitarian and social and shall relate, as a rule, to groups and categories of refugees. –*  
Statute of the UNHCR, 2010

*Humanitarian assistance is political: it is part and parcel of the power relations among governments, opposition forces and other non-state actors. –*  
Jennifer Hyndman, 2002. *Managing Displacement: Refugees and the Politics of Humanitarianism.*

---

Human displacement is a political topic. When a refugee or a category of refugees have been registered with the United Nations High Commissioner for Refugees, it is automatically understood that it has been assessed and accepted that there was a valid justification for their decision to cross an international boundary in order to escape whatever form of conflict caused them to flee. After the Universal Declaration of Human Rights was founded in 1948, the “universal subject was born.”<sup>2</sup> This was necessary for establishing a framework under which individuals could be recognized and entitled to protection under international laws, especially in the case of a refugee who no longer benefits from the citizenship and protection of their country of origin. Who then becomes responsible for implementing international best practices for the stateless? Does it fall on the shoulders of the host country or are all nations globally held accountable? In most cases this serves as an insertion point for humanitarian organizations to assert their position in the management and governance of those in need. Since the resolve of most host countries to behave as an extended babysitter is inversely proportional

---

<sup>2</sup> Hyndman, Jennifer. (2000). *Managing Displacement: Refugees and the Politics of Humanitarianism.* University of Minnesota Press. P 67

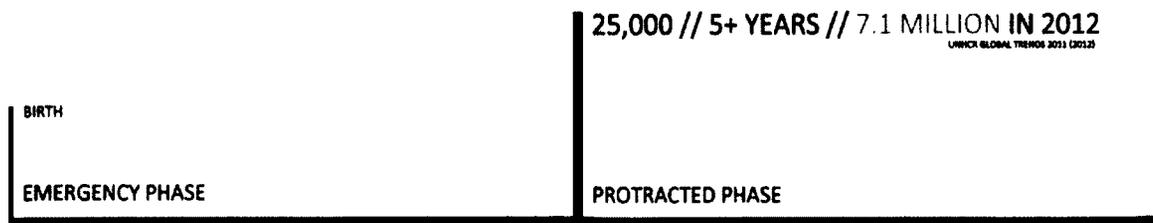
to the scale and lifespan involved with displacement, aid agencies tend to pick up the slack and find themselves in positions of indefinite authority. It can be argued that the nature of humanitarian aid is widely known to be largely dependent on donor funding. In terms of providing financial support for refugee populations, donor governments, on a voluntary basis, are responsible for the majority of funds circulated. What is maybe not so widely professed is that the determination of who lies on the receiving end of those funds is left up to the discretion of donor countries. With nation-states reserving the right to select which crisis they would like to support, the provision of humanitarian assistance unavoidably becomes linked with questions of politics. Organizations, such as the UNHCR inevitably find themselves involved in a balancing act between serving the subjects upon whom they formally represent, respecting host fatigue and satisfying the opinions of donors. This juggling act between varying levels of enforcement and power ends up manifesting itself, depending on the context, in the form of “mass accommodation in existing shelters, dispersed settlements” or *planned* camps where protection and assistance translates into control and containment.<sup>3</sup> The perceived sanctuary within which refugees sought asylum paradoxically becomes a prison of longing, dependence and waiting. The parasitic relationship that ensues between the camp and the host country evolves as a result of this long-term external reliance on aid, exclusion, restrictions on refugees’ livelihoods, unsustainable management of local resources and an ever-growing resentment from host communities.

While referring to the term *planned* camps, in reality when it involves matters of survival, the implementation of emergency shelter and planning is overshadowed by the more pressing concerns for health, sanitation and protection. However when a camp evolves beyond the emergency phase, a lack of awareness and consideration over the long-term becomes a contributing factor to what

---

<sup>3</sup> UNHCR Handbook for Emergencies (July 2007) Chapter 12 – Site Selection, Planning and Shelter P 134

have now been defined as *protracted* refugee situations.<sup>4</sup> Even though the existence of a camp is never infinite, the nature of political conflict lies in its unpredictability and as a result makes it difficult to estimate its lifetime. Repatriation could take years or it might happen within a few days, injecting important planning decisions with unsuccessful temporary resolutions. As James Kennedy highlights in *Structures for the Displaced*, the “interplay between the need for a complex and evolving built environment and insistence upon a lack of predictable longevity, are not only central to the definition of a refugee camp, but also central to the problems contained within those camps.”<sup>5</sup> This misfortune is best illustrated in the extreme overcrowded conditions, makeshift waste and water management solutions, the difficulty in finding adequate shelter solutions in the interim, and an absence of direction in terms of planning and growth. What is also important to consider is how the performance of current refugee camps affect the social livelihood of the refugees themselves over the long term; where the average duration of a refugee living in a camp, protracted or not, lasts 17 years.<sup>6</sup> The initial intention of *planned*



Source: SV

<sup>1</sup> Protracted by definition is a situation in which refugees find themselves in long-standing and intractable state of limbo. Their lives might not be at risk, but their basic rights and essential economic, social and psychological needs remain unfulfilled after years of exile. In technical terms, a protracted situation is one where 25,000 + refugees, have been living in existence for five years or more with not prospect of a solution. (UNHCR, 2004)

<sup>2</sup> James Kennedy, (2008) "Structures for the Displaced: Service and Identity in Refugee Settlements" International Forum on Urbanism (Ifou)

<sup>3</sup> UNHCR. (2005). *The State of the World's Refugees*. P.

camps as being transitory environments is therefore challenged by the reality of the camps protracted nature. Where those exiled are discouraged from settling and when in reality, these 'camps' remain for decades, beginning with a few dwellings and growing into a city. This is where the paradox arises, that to "concede that these are semi-permanent settlements and to plan them as such, is to undermine the very idea that everyone will be returning home; thus are long-term camps built on short-term principles."<sup>7</sup> A disconnect exemplifying the lack of durable solutions on the part of regulatory bodies and the shortsightedness of initial interventions being developed as a means to an end.

Here we explore the possibility of considering design solutions as a process and not as an end result. It is now known that political and institutional regulations have influenced the planning and development of refugee camps and relegated those in exile to an architectural anomaly of debilitated non-cities that fall between nation-states. As a result, the planning and shelter of refugee camps presents an unusual form of architectural practice due to the extreme numbers of those who are contained and forced to live within the boundaries of the camp. It can be argued that the provision of housing within camps has been the result of a delivery of shelter objects rather than through careful development or analysis of the camp as a whole. When shelter is thought of in this way, the consideration of life in the spaces between the shelter objects is lost during implementation and with it the ability to develop in a sustainable manner. Is it possible for a *symbiotic agency* to foster a sense of autonomy within the camp and provide design solutions that can adapt over time to accommodate growth? The first challenge in establishing mutualism is to confront the negative perceptions that characterize this culture of dependency, in order to understand why and how they might be transformed.

---

<sup>7</sup> Jim Lewis, "The Exigent City", The New York Times, June 8, 2008

# DIAGNOSIS:

---

Who are the producers of refugee space? For what reasons are refugees relegated to areas designated by authoritative powers? How does this contribute to the parasitism that plagues refugee camps worldwide? A diagnosis will reveal the different elements that play a part in shaping the planning and shelter of refugee settlements.<sup>8</sup> The following chapters will explore the long-term symbiotic relationship that camps have with their host and query the ability of aid agencies to provide adequate living conditions. Where such significant and concentrated population numbers become reliant on the provisions of others, contributing to negative perceptions and encouraging exclusion. This next stage will contextualize and highlight the predominant restrictions that both organisms face in order to prescribe solutions with hopes of reconciling a lasting mutualistic relationship where both benefit from increased fitness.

---

<sup>8</sup> The "art or act of identifying a disease from its signs and symptoms." The Online Merriam Webster Dictionary (merriam-webster.com) 2013

---

# A PRISONERS CAMP

---

*In the system of the nation-state, so-called sacred human rights are revealed to be without any protection precisely when it is no longer possible to conceive of them as rights of the citizens of a state - Giorgio Agamben. "We Refugees." Symposium. 1995*

*'Imagined Communities' of belonging may constitute national identities, but they can also create the basis for noncommunities of the excluded. - Benedict Anderson, Imagined Communities: Reflections on the Origin and Spread of Nationalism (1991)*



Let us now reflect on the establishment of *planned* camps. It remains conceivable to imagine mass movements of displaced peoples escaping political conflict and violence in their home country, travelling significant distances and crossing international boundaries, to pursue sanctuary and protection within the borders of neighboring states. This much is true with the slight exception of the price refugee's pay in exchange for asylum; that is the price of confinement and an unpredictable fate decided upon by the powers of nation-states and

international law. Here we must question the deliberate provision of camps in order to serve the displaced. When the emergency period has passed its expiration date, in whose benefit is it to continue to relegate the displaced to isolated border areas; is it for the benefit of the host country or the refugees themselves? History has seen repeatedly the pursuit of territorial claims in expanding great empires. Lynn Stewart suggests a refocusing of the governments gaze towards the population instead as another realm of control and power. Here the "family is re-configured as the basic unit of a

population, and re-emerges not as a model of government but as an instrument of government – knowledge of the family provides the basis for a statistical accounting of the population as a whole. Thus the population, its pursuits and products, its very life, become appropriate objects of state management.”<sup>9</sup> In this fashion, *planned* camps become the means through which the host government mitigates mass displacement within their borders and avoids conflict spilling into their territory, potentially destabilizing their own population. From the institutional perspective of the humanitarian agencies, planned camps increase the efficiency and streamline the provision of services and rations to the displaced.

Pausing here for a moment, let us contemplate on what it means to define an environment, its intentions, and the specific function for which it was created. Umberto Eco in the essay ‘Function and Sign: The Semiotics of Architecture’,



Source: SV

---

<sup>9</sup> Stewart Lynn, (1997). "Let the Cross Take Possession of the Earth: Geographies of Missionary Power in Eighteenth-Century British Columbia," Ph.D. diss., Department of Geography, University of British Columbia. (192)

examines a variety of architectural codes. Here he discusses moving beyond architectures' primarily functional purpose in order to explore its communicative potential. Syntactic codes, Eco reveals, are for example "exemplified by typological codes concerning articulation into spatial types (circular plan, Greek-cross plan, labyrinth, high-rise, etc.)" while semantic codes can be further studied based on their connotative meanings. These include "ideologies of inhabitation (common room, dining room, parlor) or at a larger scale, have typological meaning under certain functional and sociological types (hospital, villa, school, palace railroad station)."<sup>10</sup> Further to Eco's insights, Michel Foucault in the essay 'Of Other Spaces: Utopias and Heterotopias', permits a way of understanding from a hierarchical perspective, the meaning assigned to particular spaces. He maintains that there exists a "certain number of unrelenting opposites...that we take for granted such as the contrast between public and private space, family and social space, cultural and utilitarian space, the space of pleasure and

---

<sup>10</sup> Umberto Eco. "Function and Sign: The Semiotics of Architecture." A Reader in Cultural Theory. Neil Leach. (1997) Routledge. P. 193-4

the space of work" all Foucault claims, are still "actuated by a veiled sacredness."<sup>11</sup> This sacredness is the result of culturally embedded relationships in society that circumscribe how we behave, inhabit and are predisposed towards a particular space whether we are conscious of it or not. These are real spaces that differ from utopias in that they are at once *localizable* in the everyday processes and behaviors of an individual and effectively *other* at the same time in what conceptual or abstract element they represent. Utopias on the other hand



Mae La Camp, Thailand.

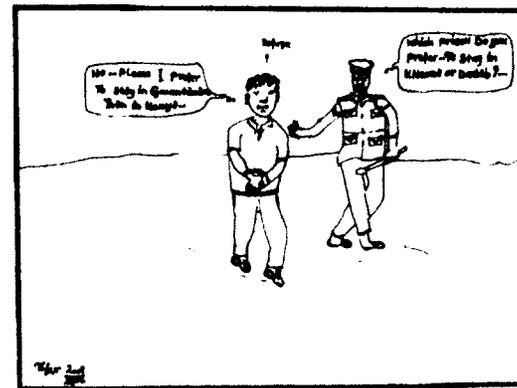
Source: [www.refractoryroad.com](http://www.refractoryroad.com)

<sup>11</sup> Michel Foucault. "Of Other Spaces: Utopias and Heterotopias" in Rethinking Architecture: A Reader in Cultural Theory. Neil Leach (1997). Routledge. P. 351

present an idea of society itself in idealized form. Planned camps are constantly represented and intended as transitional spaces, however its 'ideology of inhabitation' is compromised when multitudes of camps around the world have been and continue to be in existence for decades. It can be argued now that "minimally the term 'refugee camp' connotes safety."<sup>12</sup>

Foucault again observes the prison and describes it as a place reserved for the individual who finds himself in a state of deviance; by this he means "individuals whose behavior deviates from the current average or standard."<sup>13</sup> By definition a prisoner is a "person or thing that is deprived of liberty or kept in restraint."<sup>14</sup> Refugees share commonalities in that their respective behaviors are both considered a matter of deviance, not in the literal sense, but to describe a behavior that is in contradiction with the rest of the general population. In this case, restrictions imposed on refugees such as the lack of

mobility or access to employment, are deviant from what is generally accessible to the majority of society. Furthermore, segregating refugees to border camps geographically and metaphorically subjects them to areas of isolation and exclusion. Barbara Harrell-Bond speaks also of refugee camps as "prison-like places" where "adults are denied the opportunity to work, children cannot get the skills they would normally gain...are expensive and often a waste of valuable



Sketch revealing a refugee's personal reflection on life in Kakuma refugee camp, Kenya.

Source: KANERE - Kakuma News Reflector. ([www.kanere.org](http://www.kanere.org))

<sup>12</sup> Hyndman. (2000). xxvi

<sup>13</sup> Michel Foucault. "Of Other Spaces: Utopias and Heterotopias" in Rethinking Architecture: A Reader in Cultural Theory. Neil Leach. (1997). Routledge. P. 353

<sup>14</sup> <http://dictionary.reference.com>, November 5, 2012

international aid.”<sup>15</sup> According to Hyndman, representation often persists through the influence of higher powers the “international media, humanitarian agencies and human rights organizations. Though good intentions often fuel these representations, the politics of representation have become a practice that purports to speak for others but at the same time effaces their voices.”<sup>16</sup> As a result the displaced, upon losing citizenship, are for an indefinite period of time powerless in directing the course of their own lives and making personal decisions that affect their future.

Following this discussion and situating it within an architectural discourse, the refugee camp can now be imagined as a “standardized generalizable technology of power in the management of mass displacement.”<sup>17</sup> The creation of *planned* camps as previously mentioned becomes a tool by which nation

states hosting refugee populations can mitigate displacement within their own borders. Nicholas Thomas reinforces this statement whereby the “observer, or observing colonizer, commands a knowledge of groups such as institutional inmates, welfare recipients, and the colonized, that is intimately linked with a classification and diagnosis of the inferiority or inadequacy of the latter that establishes the need for management.”<sup>18</sup> After years of relying on the external assistance of donors for their very survival, and some with populations the size of small cities, the confinement of refugees to isolated camps are only now being declared by the UNHCR and aid organizations as a “last resort.”<sup>19</sup> A dichotomy appears where the semantics of refugee camps and the humanitarian intentions under whose protection they emerged do not coincide with the reality of management and the unpredictability of conflict. Where the sacredness associated with refugee camps lies in its ideology of freedom, perceived as

---

<sup>15</sup> Harrell-Bond, Barbara. (2002) What are refugee camps good for? The plight of refugees in sub-Saharan Africa. [www.id21.org/insights/insights44/insights-iss44-art01.html](http://www.id21.org/insights/insights44/insights-iss44-art01.html)

<sup>16</sup> Hyndman. (2000) Xxi

<sup>17</sup> Malkki, Lisa. (1995). Refugees and Exile: From ‘Refugee Studies’ to the National Order of Things,” *Annual Review of Anthropology* 24: 495-523, at 498

---

<sup>18</sup> Thomas, Nicholas. (1994). *Colonialism’s Culture: Anthropology, Travel and Government*. Polity Press. (41)

<sup>19</sup> UNHCR Handbook for Emergencies (July 2007) *Chapter 12 - Site Selection, Planning and Shelter*. P. 134

a temporary sanctuary in the eyes of those affected, away from the conflict from which they escaped. In truth the liberating intentions of a camp is contrasted with the oppressive reality under which some settlements operate where the “most important criticism of camps then is neither their design nor their management but their very conception as potentially long-term segregated safe spaces for refugees.”<sup>20</sup>

Returning back to Foucault in an interview conducted with Paul Rabinow on *Space, Knowledge and Power*, he draws on the importance of architecture and the power of spatial distribution. In discussing architectures’ capacity to influence social exchanges, Foucault makes clear that architecture itself cannot, for example, act as a force of either liberation or oppression for the fact that liberty is a *practice*, and that the guarantee of freedom is successful only through the *practice* of that freedom. In a similar manner the “liberty of men is never assured by the institutions and laws that are intended to

---

<sup>20</sup> Hyndman (2000) P 177

guarantee them.”<sup>21</sup> Since the success of an intention such as that of liberty is not owing to the order of a built environment, then it can be argued that structure alone cannot guarantee the manifestation of morality, however the exercise of a certain practice such as freedom is not “completely indifferent to spatial distribution.”<sup>22</sup> To clarify,

the values themselves can never be inherent in the structure of things in order to guarantee the exercise of freedom, but can only function when there is a certain convergence. In this way the forms and ordering of objects can produce *positive effects*, when the liberating intentions of the architect coincide with the real practice of the people in the exercise of their freedom. The efficient layout of forms and details is merely supporting the exercise of this power.<sup>23</sup>

Is this where the capacity for architecture to influence and affect human behavior lies? In this prison of exclusion, the

---

<sup>21</sup> Michel Foucault. *Space, Knowledge, Power*. In *Rethinking Architecture: A Reader in Cultural Theory*. Neil Leach (1997). Routledge. P. 371

<sup>22</sup> Foucault. *Space, Knowledge, Power*. P. 372

<sup>23</sup> Foucault. *Space, Knowledge, Power*. P. 372

refugees are constructed as “aberrations of the nation-state, where the action of humanitarian agencies entails the management of space and movement for peoples out-of-place.”<sup>24</sup> Can a *symbiotic agency* provide the foundations for which the practice of liberation can be exercised? This first step in the diagnosis concerned itself with the utilization of planned camps as an apparatus of governance and power. Let us now uncover more, specifically on the disenfranchised subjects of displacement.

---

<sup>24</sup> Malkki, Lisa. “National Geographic: The Rooting of Peoples and the Territorialization of National Identity among Scholars and Refugees.” *Cultural Anthropology* 7, no. 1 (February 1992): 24-43, at 34.



# THE POLITICS OF MOBILITY

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

The previous chapter described from an institutional perspective, the reasoning for the establishment of planned camps. Now let us observe the reasoning behind how the practice of planned camps contributes towards a sense of exclusion and why this underscores unequal identities. The image above represents a few differences between what refugee status entails versus the opportunities afforded to the citizen of a nation-state when it comes to mobility. Source: SV

---

# ETHNOSCAPE:

---

*'Some are more in charge of it than others; some initiate flows and movement, others don't. Some are more on the receiving end of it than others; some are effectively imprisoned by it'* - Doreen Massey on the politics of mobility and access, "Power-Geometry and a Progressive Sense of Place," in *Mapping the Futures: Local Cultures, Global Change*. (1993)

*In crossing an international boundary, refugees trade the entitlements of citizenship in their own country for safety on terms decided by international legal instruments, host governments and humanitarian agencies.* - Hyndman, Jennifer. (2000). *Managing Displacement: Refugees and the Politics of Humanitarianism*.



Similar to the way in which a parasite is an unwanted guest, refugee populations become excluded communities of guests who have overstayed their welcome. In efforts of investigating why, let us now turn to migrant status in order to understand how it affects the social relations and spacing of refugees. It can be argued that in our everyday lives, various elements facilitate our ability for movement, most notably the convenience of capital, political and cultural positioning and the

availability of employment. Arjun Appadurai first coined the term *ethnoscape* in his essay 'Disjuncture and Difference in the Global Cultural Economy.' *Ethnoscape* is defined as the "landscape of persons who constitute the shifting world in which we live: tourists, immigrants, refugees, exiles, guest workers and other moving groups and individuals."<sup>25</sup> Furthering this description of a traveling culture, allow us here to

---

<sup>25</sup> Appadurai, (1990) *Disjuncture and Difference in the Global Cultural Economy* In Theory, Culture and Society. SAGE Publications P 192

distinguish between mobility that is forced and mobility that is voluntary. Would it be accurate to say that an individual's level of autonomy is constituted by social and political economies and as such define an unequal ecology of mobility? For example, *Diasporas* are similar to patterns of refugee settlement in "connecting multiple communities of a dispersed population."<sup>26</sup> They differ however in the reality that an immigrant exchanges one nationality for another and is effectively allowed to participate in and identify with their new host country. Refugees on the other hand, are forced migrants who have escaped fear of persecution in their country of origin and sought protection and safety within neighboring political borders. They are the globally *displaced*. Maalki analyses the semantics of the term *displaced* and how it connotes "decentralization in relation to the core from which one is displaced"; the former nation-state.<sup>27</sup> In this way, refugees who have crossed an international boundary and find themselves as foreign subjects within a host country are often

---

<sup>26</sup> Hyndman. (2000) P 34

<sup>27</sup> Maalki. (1995) P 498

considered as outsiders; outsiders who have been defined by abstract political and legal apparatuses that render them stateless. Consequently, they are held indefinitely within clearly demarcated areas designated by authoritative powers and are not incorporated into their host country. According to UNHCR figures, forced migration represents a sizeable portion of global movements, encompassing an estimated population of twenty-five million deemed *of concern* (receiving protection or assistance), including refugees and those internally displaced by conflict or natural disaster.<sup>28</sup> Let us explore a little further how these facts begin to shape and characterize the interrelationships between refugees and their social and spatial environments.

*Refugees are sub-citizens, who have no legal status in the law of the country in which they reside, and are administered through a supranational institutional framework by the supracitizens who work ostensibly for them. This illustrates the unequal positioning and spacing of particular groups under the banner of UN*

---

<sup>28</sup> UNHCR Global Trends Report. 2011

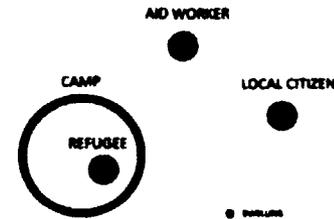
*humanism. The demographic of an international humanitarian squad contrasts with the immobility of forced migrants whose movement is highly circumscribed by legal, geographical and administrative parameters. This cadre belongs to a form of supra citizens coming from around the world who assist the refugees in the camps and have a privileged access pass.<sup>29</sup>*

In other words, having citizen status awards the individual a privileged position within society with greater access to mobility. While refugee status, as outlined in the UNHCR's 1951 convention relating to the status of refugee, emphasizes the right of refugees to have access to livelihood opportunities, employment and education, ultimately the final decision to implement these activities remains up to the discretion of the host government. As Kennedy highlights, "states are expected to uphold the international conventions to which they have become signatory."<sup>30</sup> In Kenya this isn't necessarily the case. While on paper they are signatory to

---

<sup>29</sup> Hyndman. (2000) P.111  
<sup>30</sup> Kennedy. (2008) P.51

UNHCR's international laws, the outcome is very different. The Government of Kenya is currently not awarding "asylum seekers for full convention refugee status" resulting in even fewer privileges and increased restrictions upon refugee mobility.<sup>31</sup> Thailand on the other hand, is not signatory to the 1951 convention or the 1967 protocol. As such, for a long period of time displaced Burmese refugees were considered



Here the contrasting depictions of individuals involved in a camp context are linked through geographical positioning in physical space. It represents how political and regulatory frameworks constitute social positioning and highlight unequal identities. Local populations and migrant aid workers dwell outside of camps and are able to travel freely while refugees dwell within and movement is highly restrictive. Source: SV

---

<sup>31</sup> Hyndman. (2000) P.23

illegal migrants within Thailand's boundaries and were not recognized internationally under UNHCR's count of registered refugees. This resulted in those Burmese migrants escaping political conflict, the majority being of ethnic Karen origin, falling under *prima facie* status. *Prima facie* status being a lesser, sub-status of refugee, results in even fewer rights and since those designated under this title do not benefit from full convention status, "access to employment or the ability to generate an independent livelihood" is greatly inhibited.<sup>32</sup> According to Hyndman, the government of Thailand, "recognizes forced migrants from Burma as legitimate subjects of the international refugee regime only when they have been registered by UNHCR, granted legitimate persons of concern status, and transferred to the designated safe camp."<sup>33</sup> Without official refugee status, the displaced are treated as illegal migrants and subject to arrest, harassment or deportation by Thai officials if found outside of the confines of the camp.

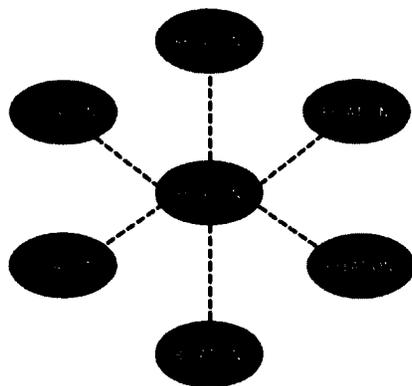
---

<sup>32</sup> Hyndman (2000) P 93

<sup>33</sup> *Ibid.* P.185

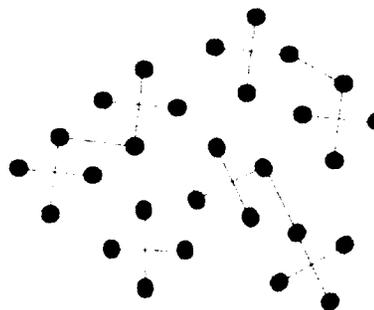
Let us now consider what it is that defines us as other. We have seen how isolating refugees to camps strewn along the border underlines a sense of otherness or exclusion. So what is it about being from here or there that suggests difference? To speak briefly of ethnicity and identity, Doreen Massey in *For Space*, suggests that "what gives a place its specificity is not some long internalized history but the fact that it is constructed out of a particular constellation of social relations, meeting and weaving together at a particular locus, a unique point of intersection, or a meeting place." Can it then be argued that claims of authenticity and cultural distinctiveness are suggestive of unchanging identities? Authenticity implies that its locus, or network of social relations is static in space, unaffected by time and quarantined from other possibilities of transformation or growth. According to Massey, rather than conceiving in this fashion, instead spatiality and identity can be thought of as a "process with the existence of a multiplicity of loose ends and missing links – never a closed container allowing for the possibility of an open future and new relations, next to

other juxtapositions and potentials for interactions.”<sup>34</sup> Unfortunately the practices of governments require a boundary to be set in order to justify the territory within which it exercises governance. James Hathaway draws on the example of colonialism in Africa to describe a circumstance whereby the extents of refugee ethnicity extend beyond the reaches of citizenship. He describes how “the artificiality of the colonially imposed boundaries in Africa has frequently meant that kinship



<sup>34</sup> Doreen Massey (2005) *For Space*. SAGE Publications Ltd.

and other natural ties stretch across national frontiers. Hence, persons in danger may see the natural safe haven to be with family or member of their own ethnic group in an adjacent state.”<sup>35</sup>



Conceptual diagrams illustrating Massey's theory on social relations. The diagram on the left suggests the locus of social interactions while the constellation on the right opens up the possibility for new juxtapositions of relations or exchanges. Source: SV

<sup>35</sup> Hathaway, James. (1991) *The Status of Refugee Law*. Markham and Vancouver: Butterworths. P.93

## MAJOR ETHNIC GROUPS OF THAILAND

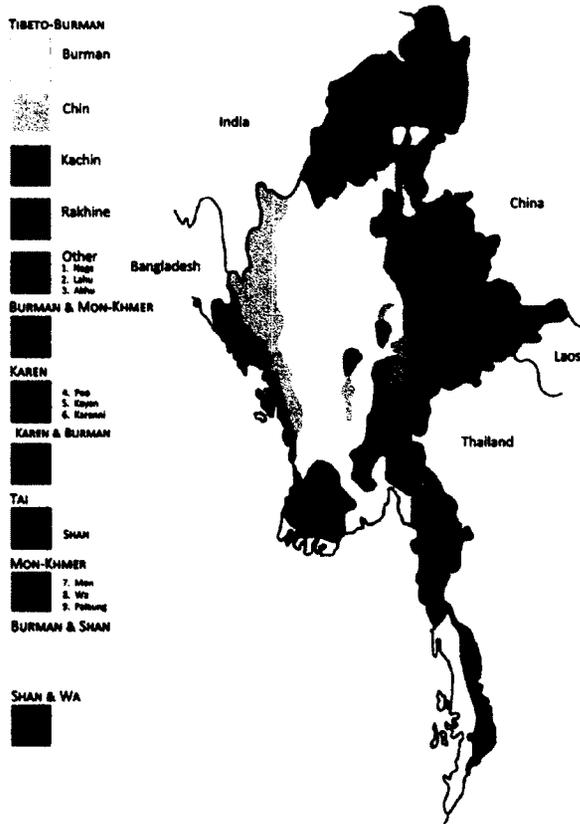
The Thai-Burma border represents a long history of diverse ethnic groups whom have inhabited the mountainous terrain that divides its borders. To concede that the limits of ethnicity remain defined by the abstract practice of mapping territory by political bodies would be a misrepresentation. The following maps depict the major ethnic groups of Thailand and Burma, and their predominant locations. It is evident that the natural ties of ethnic Karen spread across artificially imposed political boundaries as well. Refugee status displaces Burmese-Karen refugees living on the Thai side of the border and isolates them from the very fabric of society by placing them within planned camps. This “deliberate organization and calibration of spaces for refugees...forge connections between the discursive and material sites of power in and around the refugee camps” creating the basis for long-term exclusion. (Hyndman, 121) Let us now investigate what the material expressions of these practices are.



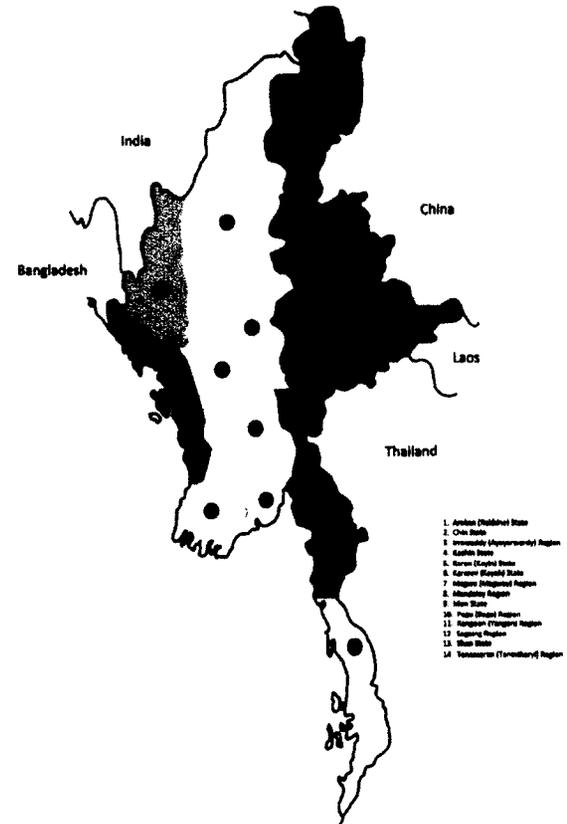
Source: University of Texas Library. ([www.lib.utexas.edu](http://www.lib.utexas.edu))

Redrawn by: SV

## MAJOR ETHNIC GROUPS OF BURMA / MYANMAR



## STATES & REGIONS OF BURMA / MYANMAR



Reference: TBBC Programme Report 2012, January - June

---

## ORCHESTRATING CHAOS:

---

*A form of de facto functionalism: purified as a process through the application of scientific or numerical guidelines – James Kennedy on ‘planning’, Structures for the Displaced: Service and Identity in Refugee Settlements. (2008)*



We have previously concentrated on why planned camps have been designated as a tool for managing displacement, and how this enables exclusion. Our last step in diagnosis requires an analysis of what current planning practices and physical parameters have been set in place by commanding bodies. While the overall authority of camps is the responsibility of host governments, humanitarian agencies are tasked with implementing national regulations and abiding by

international laws that “govern the existence of the planned camp itself – dictating constraints as defined by temporal duration, location and physical dimension.”<sup>36</sup> Before we continue, it is important to understand the history in which the UNHCR was established because it has radically changed since its inception.

---

<sup>36</sup> Kennedy (2008) P.50

Created in the wake of WWII, the UNHCR was founded to help Europeans displaced by its aftermath. Initially operating within an international context, the early days were “concerned with long-term integration of refugees in Europe where camps were seen as transitional environments towards resettlement and emphasis amongst host countries could remain on the building of permanent housing.”<sup>37</sup> Prior to the amendments made in the 1967 protocol, the 1951 convention relating to the status of refugee was extended exclusively to the European population. It wasn’t until a number of notorious political conflicts forced hordes of inhabitants across borders, that a concern for the design and planning of refugee camps became a pressing issue and the UNHCR began to reevaluate its mandate. Subsequent revisions to the convention made “the provisions temporarily and geographically universal.”<sup>38</sup> According to Kennedy, decolonization in Africa and other-high profile emergencies (ex. Cambodia in the mid 1980’s and Rwanda during the mid 1990’s) contributed to “exponential

---

<sup>37</sup> Kennedy (2008) P 52

<sup>38</sup> Ibid. P 52

increases in the number of refugees in single camps.”<sup>39</sup> Consequently, resettlement figures began to decline as swollen numbers swamped the waiting list. It was first in 1985 that the UNHCR openly declared that repatriation would now be identified as the only defensible ‘durable’ solution in “acknowledgement that prevailing policies of integration and resettlement were not coping with the refugee situations at hand.”<sup>40</sup> Following this premise, when the “publicly stated goal is always to support the earliest possible voluntary repatriation of refugees, the planning of anything long term might be seen as an act of bad faith.”<sup>41</sup> This change in policy only magnified the cloud of impermanency that hung and continues to hang over refugee camps today, where the construction of lasting and viable shelters is highly restricted to short-lived materials. As host fatigue began to set in, refugee populations continued to sit in a state of protracted uncertainty with the

---

<sup>39</sup> Ibid. P.2

<sup>40</sup> Ibid. P.56

<sup>41</sup> Ibid. P.40

unpredictability of war making it difficult to estimate when repatriation would be possible.

As previously mentioned, with member states increasingly attempting to minimize commitments, UNHCR correspondingly picked up a greater technical and “coordination role at the apex of a pyramid of organizations.”<sup>42</sup> The rise of populations in need paralleled an increase in the number of inexperienced aid agencies wanting to be involved. This called for the establishment of minimum standards within the humanitarian community. As a result, guidelines established by the UNHCR presented itself in the form of a handbook. These handbooks enabled those aid agencies working in the field the opportunity to have a meter of good practice and qualifications against which conditions and progress could be measured. The UNHCR’s ‘Handbook for Emergencies,’ and the later ‘Sphere Standards’ (Sphere Project) which was written under a consortium of agencies, now

---

<sup>42</sup> Ibid. P.101

“constitutes the most widely accepted inter-agency forum for developing minimum standards for humanitarian response.”<sup>43</sup>

While the complexities of refugee camps are numerous, the design has initially to respond to emergency, while operating under inadequate funds and a “pragmatic nature that dictate that the camp itself will not be permanent, neither the construction materials to be used, nor the



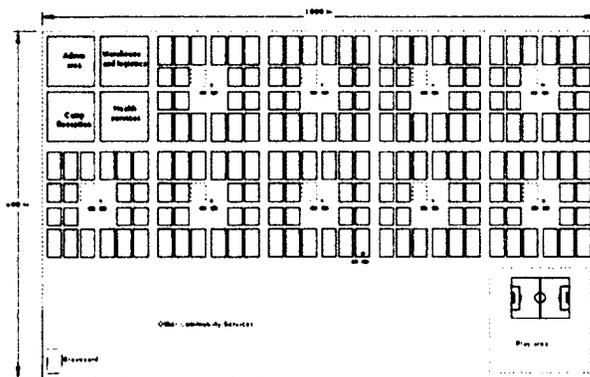
Kakuma Camp, Kenya

Source: [www.matijakovac.wordpress.com](http://www.matijakovac.wordpress.com)

---

<sup>43</sup> Ibid. P.21

morphology of the camp should reflect any aspirations to permanency.”<sup>44</sup> Fred Cuny, the main consultant responsible for UNHCR’s first draft in 1981, brought forward a new model of planning that advocated a community-centered layout and the division of the camp into residential and non-residential sectors. It was an important milestone in camp planning as it advocated for more personal space and provided an escape from the highly “regimented military” form of camp



Generic Camp Layout for 10,000

Source: [www.interworks.eu](http://www.interworks.eu)

<sup>44</sup> Ibid. P.1

distribution.<sup>45</sup> The architectural layout expressed a community and family oriented approach to shelter distribution. This is evident in the generic site plan that can be found today where the focus is on the arrangement of shelter modules, the combination of modules into blocks, and the organization of blocks into sectors.<sup>46</sup> While the plan did advocate for “localized cooking and sanitation units,” contrasting with the regulated “control of cooking” and services of military camps, it did not illustrate how infrastructure could be developed in combination with shelter in order to accommodate for growth and increases in density.<sup>47</sup> When it comes to overseeing displacement, according to Hyndman, “technologies of vision are predicated on control” where the “rationalization of space are used to calculate refugee populations and map the grid layout of the camps.”<sup>48</sup> In other words, in attempts at ordering the disorder, refugee shelters are distributed on plots of land organized in clean rows in efforts of calculating and managing the displaced.

<sup>45</sup> Ibid. P.86

<sup>46</sup> Ibid. P.125

<sup>47</sup> Ibid. P.86

<sup>48</sup> Hyndman. (2000) P. 124

## EMERGENCY PHASE



RAS JDIR, TUNISIA  
FEBRUARY 2011



KIGEME CAMP, RWANDA  
AUGUST 2012

## PROTRACTED PHASE



KAKUMA CAMP, KENYA  
20 YEARS OLD



DADAAB CAMP, KENYA  
20 YEARS OLD



GIHEMBE CAMP, RWANDA  
15 YEARS OLD



DADAAB CAMP, KENYA  
BIRDS EYE VIEW

Source: Balkeena.com; Dadaabrefugee.org; Scottiesplace.org; UNHCR.org; Uno-  
fluechtlingshilfe.de; libyanrefugees.wordpress.com

It can be argued that sprawl, as evidenced in the following photos do not suggest the natural expansion or growth ascribed to refugees' routine activities. The rather colonial top-down approach to planning and organization or rationalization of space is characteristic of an outsiders attempt to streamline the efficient distribution of land, services and rations. Those inhabiting the camp feel the consequences of such an approach daily where sprawl coincides with longer travelling distances by foot, equating with longer hours spent a day gathering sufficient resources to enable basic activities such as cooking, and exposure to unmonitored areas on the periphery. Kennedy would contend that while the construction of camps in the beginning does involve a certain level of imposition at a "larger scale from above...the adaptation or appropriation of that design from the bottom up" equate with a "large proportion of changes in the physical environment

happening as a result of incremental actions undertaken on a quotidian basis by the refugees themselves.”<sup>49</sup>

Let us now explore how, upon the declaration of a global human rights law, and the creation of an *international humanitarian subject*, the physical environment of camps was in turn affected. It becomes evident that the models and standards emphasized in the respective chapters on *Site Selection, Planning and Shelter*, and articulated by Manuel Herz in the essay ‘Ideal Cities in Dust and Dirt’, are “based on the belief that human rights and human needs are valid and identical all over the world.”<sup>50</sup> As a result, “the fundamental planning approach for camps is characterized by neutrality.”<sup>51</sup> Let us reflect again for a moment on the dangers of claiming universality in design and application. Should precautionary measures be taken to avoid homogenizing refugee needs? Hyndman draws awareness to the standardized practices of

representation and statistical accounting of refugee populations in the field. She asserts that these practices at “once simulate and assimilate particular experiences at very different refugee camps in a variety of locations into a more universal narrative, both in terms of consumption and coherence” and without regard for culture or context.<sup>52</sup> Can the same be said for addressing planning in camps? Can it be argued that similar practices or generalizations have been made? Similarly, Kennedy makes reference to the “standardized guidelines or elements used in the current design,” which he designates the *global design type*, as having been “borrowed or adapted on an ad hoc basis from other fields.”<sup>53</sup> Here the numeric guidelines outlined in the handbook, parallels those already proven in the health, sanitation and water sectors. In this way, the guidelines in the handbooks rely upon a “kind of justification through inheritance, rather than an actual evaluation of performance” in the field.<sup>54</sup> A few instances

---

<sup>49</sup> Kennedy (2008) P.44-46

<sup>50</sup> Herz, Manuel (2008). *Ideal Cities in Dust and Dirt*. In ‘Urban Transformations’ Ruby Press

<sup>51</sup> Ibid. (2008)

---

<sup>52</sup> Hyndman (2000) P.132

<sup>53</sup> Kennedy. (2008) P.42

<sup>54</sup> Ibid. P.42

in the chapter on shelter and planning in the most recent third edition of the UNHCR's Handbook, the reader is reminded that it is important to use "long-term provision of services" and consider local cultures and building techniques.<sup>55</sup> This is articulated in the very first page of the chapter under 'Principles of Response', where suggestions are made to "use a bottom-up planning approach, beginning with the smallest social units, preserving traditional social arrangements and structures as far as possible."<sup>56</sup> However when these suggestions are implemented in UNHCR governed camps the reality looks quite different. The prescriptions go no further in suggesting how to go about realizing these procedures and plan for development over time. Only one layout was included in the most recent revision and again focuses on the arrangement of shelter modules with vague references to infrastructure. As we've already seen, the *global design type* becomes almost a scientific or functionalist way of rationalizing the disorder. As evidence

---

<sup>55</sup> UNHCR Handbook for Emergencies (July 2007). Chapter 12 – Site Selection, Planning and Shelter P 206

<sup>56</sup> Ibid. P 134

would suggest, this is achieved through the prescription of numerical guidelines, the practice of distributing plots of land in a grid-like fashion or along neat rows, reflective of the minimum "surface area of 45 m<sup>2</sup>" allocated for each individual and not necessarily influenced by the refugees themselves or local environmental conditions.<sup>57</sup>

Kennedy further highlights that the guidelines, "while prescriptive, pay lip service to the need to think of long-term consequences, whilst at the same time insisting upon standards that are only sustainable in the short-term."<sup>58</sup> In other words, the handbooks prescribe numerical equivalents, such as the minimum distance required between shelter and latrines, however there exists a lack of descriptive standards that address common issues associated with protracted scenarios; how to accommodate development of livelihood, increases in population density, expansion etc. Here the common practice in providing for "population increases do so by resorting to infill

---

<sup>57</sup> Ibid. P.137

<sup>58</sup> Kennedy (2008) P.2

or expansion through simple 'tiling' of residential sections."<sup>59</sup> Kennedy argues that this demonstrates the 'little thought that has been given to the development of camps over time as being evolutionary, whereby the set of functions held in certain spaces of the camp may change over time, and where changes might not be uniform over the entire camp."<sup>60</sup> In the first draft of the UNHCR's Handbook written by Cuny, the reader is "reminded that camps do often exist longer than expected and that the designer must take this into account and indicate that structures may change their function over the lifespan of the camp."<sup>61</sup> Cuny also advocated prior to publication of the first draft, that a camp must be "planned as though it were a town, with considerations of the same factor" while at the same time acknowledging that camps are not an "expression of a natural community."<sup>62</sup> By this he is suggesting that because the inhabitants are not voluntary migrants, the conditions under which a sense of community develops are forced and do not

---

<sup>59</sup> Ibid. P. 39

<sup>60</sup> Ibid. P. 39

<sup>61</sup> Ibid. P. 102

<sup>62</sup> Intertext (1980c:IV-4). Kennedy (2008) P. 102

happen by natural means. The UNHCR as well admits that refugee camps "are not, of course, 'normal' places, particularly where the population has little or no access to land or wage labor, and must rely on external assistance."<sup>63</sup> With protracted situations becoming more of a certainty, and the change in policy focus from resettlement to repatriation, the UNHCR began insisting on closing off any suggestions of permanency or integration with local host populations. This shift in perception on the part of the UNHCR is witnessed with "no explicit repetition of Cuny's previously made statements" in later handbooks.<sup>64</sup> There has been a conscious removal from camp planning, "any elements that might be seen as leading towards turning the camp into a permanent settlement (a process which would come to see the removal of all vocabulary references to 'permanent' settlement features such as 'villages', 'streets', and 'housing'" only to be replaced with vocabulary that suggest transitory, or impermanent qualities, such as 'camp' and

---

<sup>63</sup> UNHCR (1995) *The State of the World's Refugees: In Search of Solutions*. Oxford and New York: Oxford University Press. P. 235

<sup>64</sup> Kennedy (2008) P. 102

'shelter'.<sup>65</sup> In efforts of searching for a handbook that could offer guidance on planning for protracted realities, it becomes immediately evident that such a text does not exist. While the UNHCR's Resettlement Handbook focuses mainly on reintegration and guidelines for resettlement in a third country, the void between planning in the context of an emergency and planning for resettlement is magnified.

Let us return to the *global design type*. Can it be reasoned that the manifestation of this practice, i.e. referring to a camp as "large groupings of shelters for refugees", affects the provision of practical solutions from within the design field?<sup>66</sup> Further, can we argue that designers witness the delivery of shelter objects and fall into the trap of believing that a viable solution begins with the replacement of one universal shelter object, the tarpaulin tent, with a fancier universal model. As Kennedy describes:

---

<sup>65</sup> Ibid. P 107

<sup>66</sup> Ibid. P.31

*The "concept of what constitutes a camp design remain generally constant – based largely upon the tiling of open-plan shelter cluster modules around a central administrative block, with space for 'community activities' designated as happening within each cluster and with the spaces between the clusters relegated in the design to essentially negative or empty spaces, and with little or no reference in the graphics to any relationship between the camp and its surrounding or any demonstrations of an awareness of how a camp might evolve over time. Again the attention is back to the single shelter prototype."<sup>67</sup>*

Furthering this statement, it can be debated that universally applicable models of shelter re-inscribe a form of architectural colonialism and fail to address the specifics of culture and site. This is defended in *Spatial Agency: Other Ways of Doing Architecture* where the reader is made aware of "the need to regard the long haul - where a long-term view is essential to the success of short projects, otherwise the worst traits of short-term thinking are played out in the most vulnerable situations to tragic effect: dwelling design separated

---

<sup>67</sup> Ibid. P 96 - 106

from infrastructure design and/or buildings designed for one place dropped in to another.”<sup>68</sup> With severe funding constraints, affordability plays a significant role and housing is limited to the very basics. UNHCR in its handbook even acknowledges that neither “prefabricated building systems have proved effective in large scale refugee emergencies due to high unit cost, long shipping time, long production, inflexibility.”<sup>69</sup> While this chapter concludes our diagnosis, the next section focuses on how cultures of dependency and exclusion reduce the fitness of host. Where beyond the emergency phase, the parasitism that results from the long-term impacts in supporting protracted situations prove unsustainable both in terms of external aid and its effects on local ecology. Before we do that, lets take a moment to reflect on the following renderings of camp planning models beginning with the original military style.

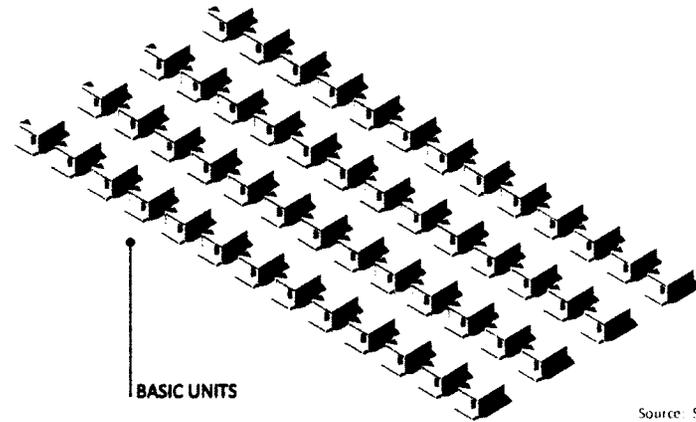
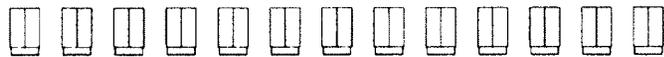
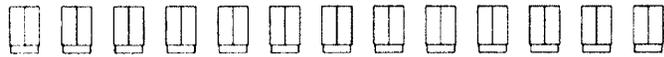
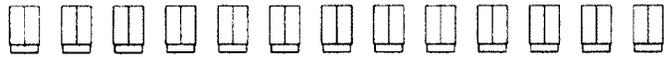
---

<sup>68</sup> Awan, Nishat, Schneider, Tatiana, Till, Jeremy. (2011). *Spatial Agency: Other Ways of Doing Architecture*. Routledge. P.50

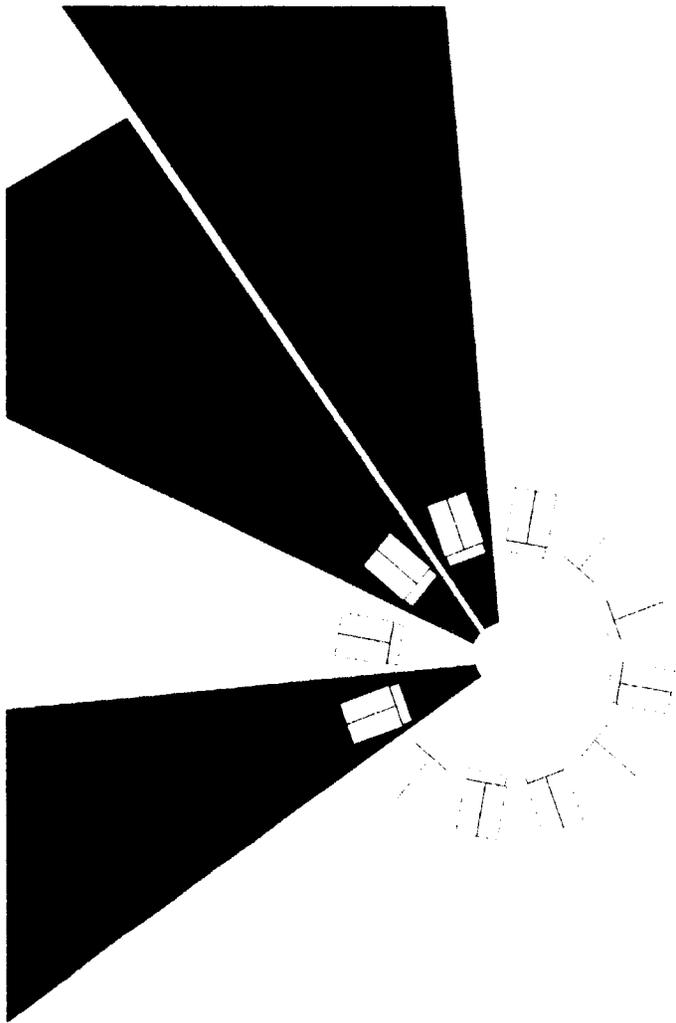
<sup>69</sup> UNHCR Handbook (2011) P. 145

## MILITARY CAMP LAYOUT

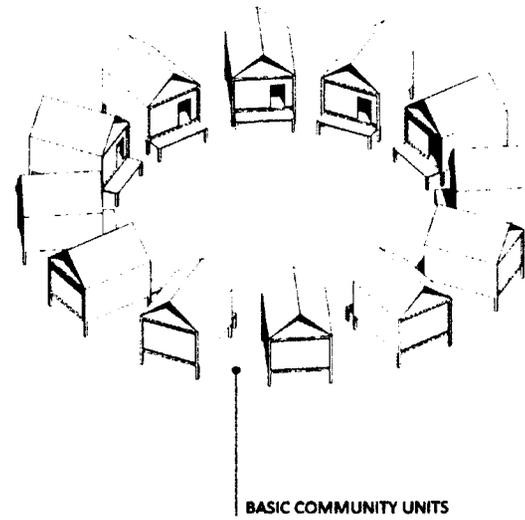
REGIMENTAL CONTROL OF COOKING, SANITATION, LITTLE RECOGNITION OF FAMILY NEEDS



Source: SV



CIRCULAR LAYOUT

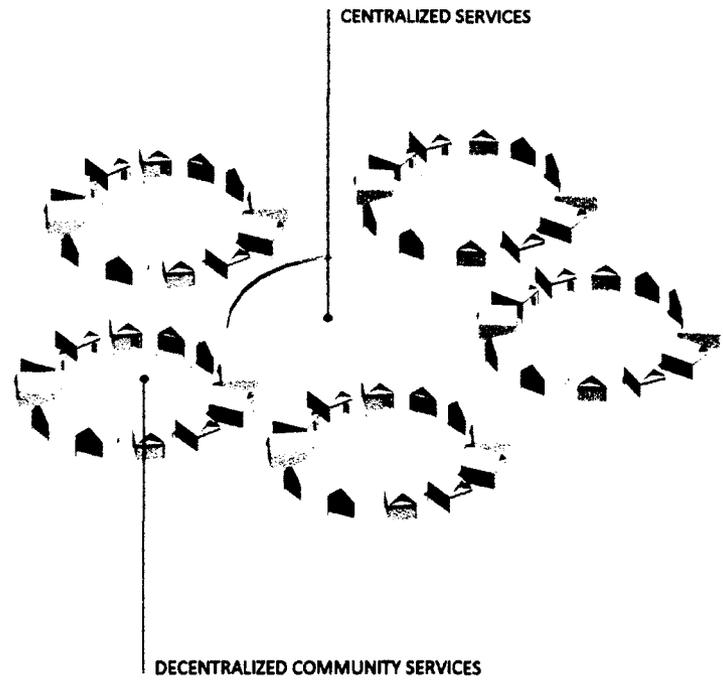
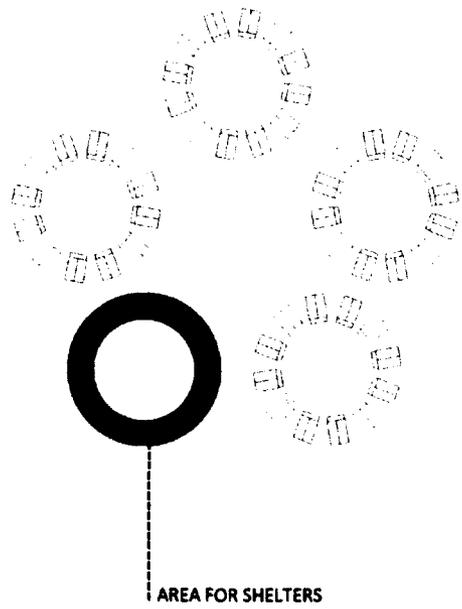


BASIC COMMUNITY UNITS

### **INTERTECT FOR UNHCR 1981**

The model proposed by Cuny in the UNHCR's first draft of the *Handbook for Emergencies*. Beginning of community cluster modules.

Source: SV

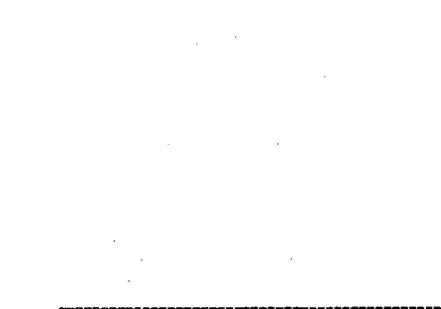


DECENTRALIZED COMMUNITY SERVICES  
First model to propose decentralized services  
Source: SV

## HARDIN'S SCHEMATA CAMP UPGRADING

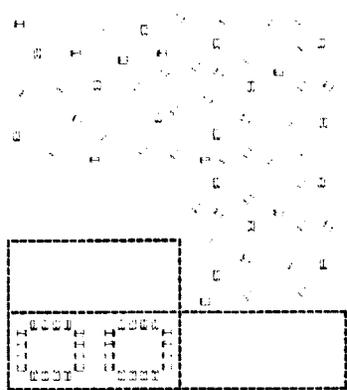
First model to consider growth of camp over a period of time. Hardin also integrates Cuny's community centered clusters

Source: SV

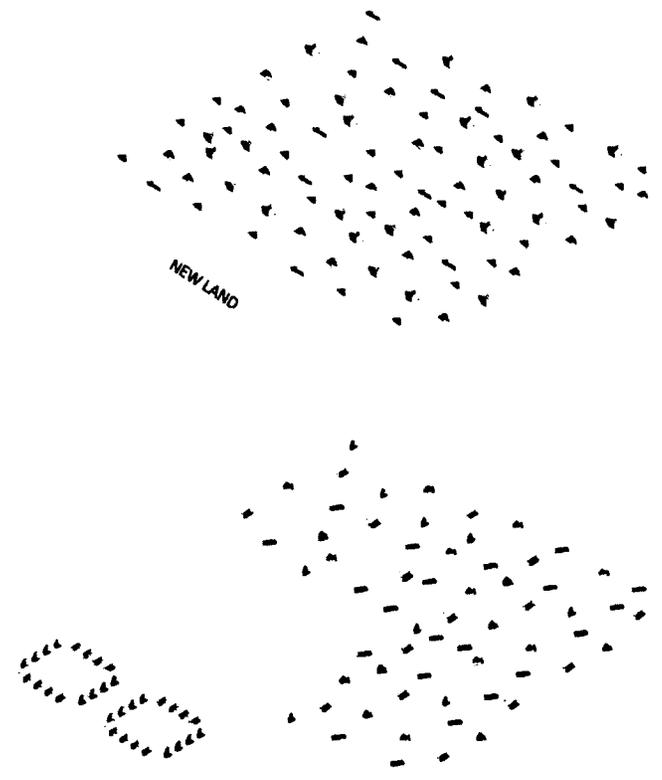


1.

NEW LAND

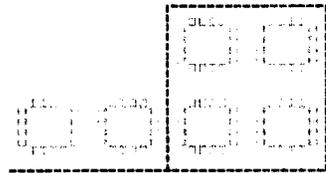


2.

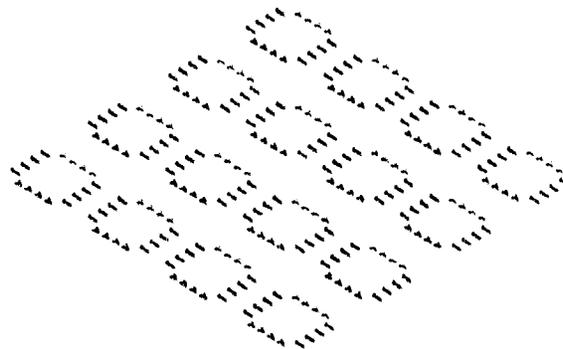
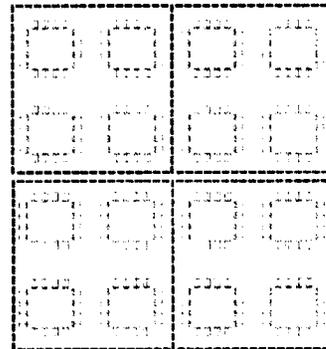


1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100

3.



4.



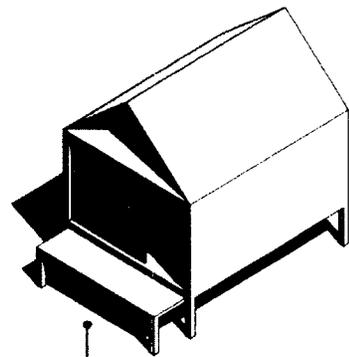
SPACES INBETWEEN THE SHELTERS AND INBETWEEN THE CLUSTERS HAVE BEEN BOTH REDUCED PHYSICALLY AND HAVE BEEN ABANDONED IN THE DESIGN AS EMPTY, 'NEGATIVE' SPACE.  
- KENNEDY (2008) P.109

## UNHCR'S GLOBAL DESIGN TYPE

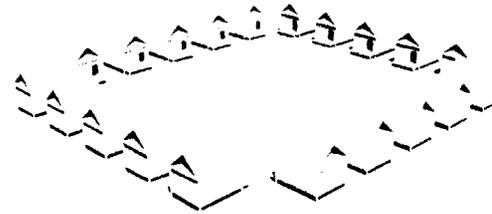
### SCIENTIFIC AND FUNCTIONALIST MODULAR MODEL OF PLANNING

Diagrams modeled according to numeric guidelines advocated in the UNHCR's Handbook for Emergencies, 2011

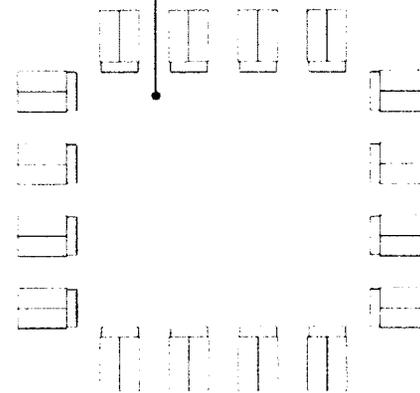
Source: SV

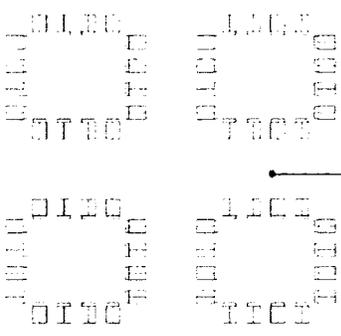


1 FAMILY: 4-6 PERSONS

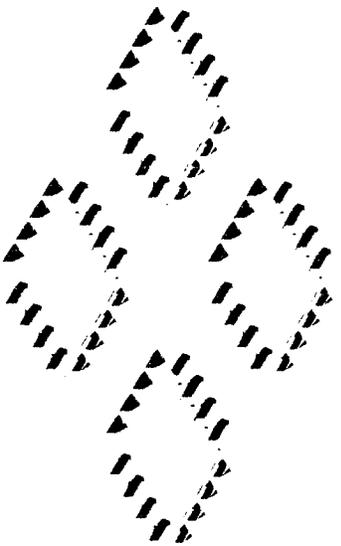


1 COMMUNITY: 16 FAMILIES // 80 PERSONS

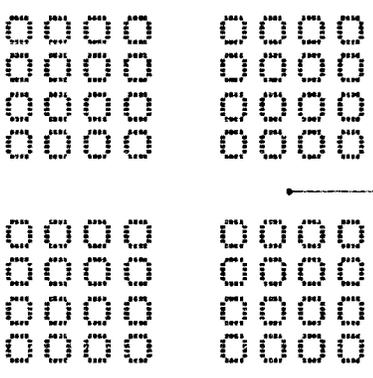




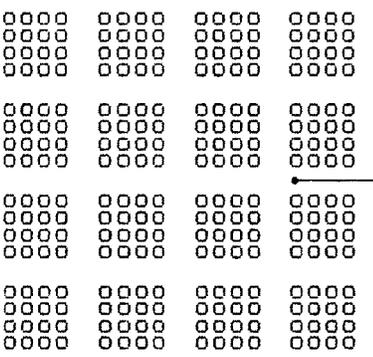
1 BLOCK: 16 COMMUNITIES // 1,250 PERSONS



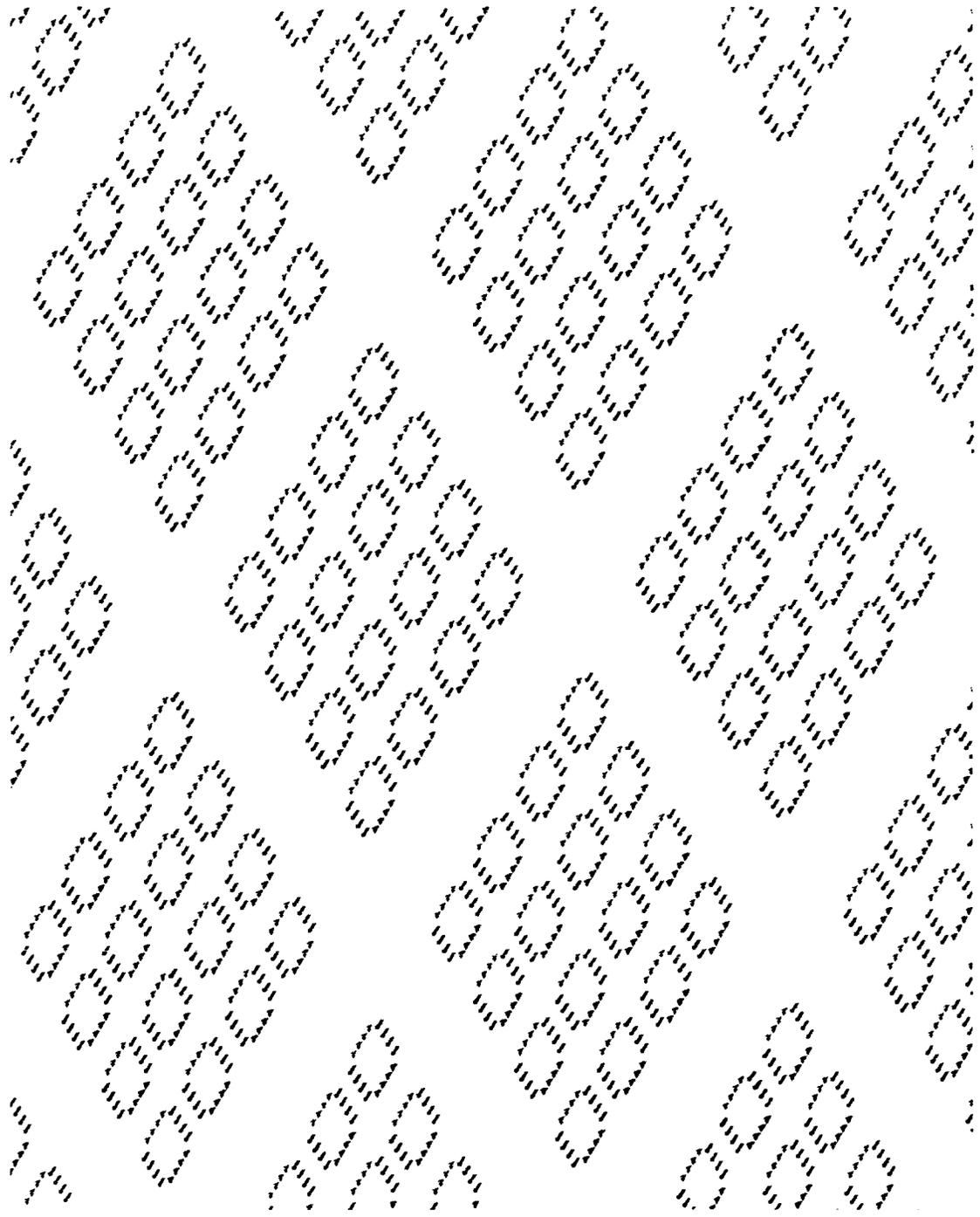
1 CAMP MODULE: 4 SECTORS // 20,000 PERSONS



1 SECTOR: 4 BLOCKS // 5,000 PERSONS



1 CAMP MODULE: 4 SECTORS // 20,000 PERSONS





DADAAB REFUGEE CAMP, KENYA. ESTABLISHED IN 1991, NOW CONSIDERED TO BE THE LARGEST CAMP IN THE WORLD. HOME TO MORE THAN 400,000 PEOPLE.

SOURCE: UNHCR

# PARASITISM:

---

Parasitism can be described as a non-mutual relationship between organisms of a different species where one “benefits at the expense of the other.”<sup>70</sup> When one can imagine the long-term impact of a refugee camp, it becomes inseparable from the fitness of the host country in which it lives. Camps worldwide have become responsible for serious environmental degradation in their area, causing an increased dependency on external aid and developing strained relationships with host communities. Where local “communities have a need for the same kind of materials, collection and possibly depletion of such materials by displaced people is likely to foster hard feelings between the two and reduce the host communities support for sustaining the temporary shelters in their areas.”<sup>71</sup> In regions that are particularly underdeveloped, the quality of medical care and education within the camp can be superior to those that are found locally, adding to growing local resentment and negative perception. The following chapters will bring to light the factors that enable this parasitism to continue.

---

<sup>70</sup> The Online Biology Dictionary ([www.biology-online.org](http://www.biology-online.org))2013

<sup>71</sup> Thadaniti, U-Cha, Lambregts, Bhromkaew, Prombang, Toommakorn, Wijtkosum. (2011). *The Impact of Displaced People's Temporary Shelters on their Surrounding Environment*. Asian Research Center for Migration Institute of Asian Studies. Chulalongkorn University. (P.15)

---

## FITNESS:

---

*Refugee situations involving "long term confinement in this kind of environment, the lack of space for recreational and educational purposes, restrictions on mobility, and limited access to employment and higher education have had a significant negative impact on the potential for personal development among displaced persons."* (2011). The Impact of Displaced People's Temporary Shelters on their Surrounding Environment. Asian Research Center for Migration Institute of Asian Studies. Chulalongkorn University

---



The previous section concerned itself with diagnosing the ways in which the creation of *planned* camps enable cultures of dependency and exclusion. We have seen how the camps become an effective tool for institutions and governments in mitigating uninvited guests and how the establishment of universal guidelines does not necessarily reflect the customs and habits of the refugees themselves or provide adequate examples that address growth. Let us here explore how these factors begin to shape the architectural environment.

Firstly it is important to briefly identify the parameters that distinguish *planned* camps from other similar discourses on informal settlements. The UNHCR explicitly confesses "refugee operations last much longer than initially anticipated."<sup>72</sup> During this time, refugees are able to adapt their environment post-emergency to suit their own needs. This is when settlement patterns begin to reflect the habits of its inhabitants, however refugees are limited to the materials

---

<sup>72</sup> UNHCR Handbook for Emergencies. (July 2007). Chapter 12 – Site Selection, Planning and Shelter. P.135

either found in the area or provided by aid agencies. In comparison with *favelas* or shantytowns, it is this “unpredictability of the finite longevity of a camp that provides one of the central contrasts” with other forms of informal developments.<sup>73</sup> Furthering our understanding from the previous section, the “definition of a camp is deeply tied to the definition of a refugee.”<sup>74</sup> Meaning that internally displaced peoples of post-natural disasters or conflict continue to benefit



Mae La Camp, Thailand

Source: [www.refractoryroad.com](http://www.refractoryroad.com)

---

<sup>73</sup> Kennedy (2008) P 31

<sup>74</sup> Ibid. P.31

from national protection or citizenship. In this regard, efforts can be focused on more permanent methods of construction. Refugee status by definition is impermanent and as a result, construction methods for the stateless are defined by impermanency. On the other hand, *planned* camps benefit in some respects from easier access to education, health services and infrastructure, albeit not the most efficient, as opposed to slums that “lack basic municipal services such as water, waste collection, easy access to schools and hospitals.”<sup>75</sup> These fundamental differences are what set *planned* camps apart from other forms of informal settlements.

Let us investigate how Institutional and governmental restrictions directly influence the physical environment and contribute to a form of parasitism between camp and host. In many cases refugees are spatially confined to border camps by the host governments in question. In efforts of situating our discourse, let us here draw on Thailand as an example. The

---

<sup>75</sup> *Cities without Slums*. [www.citiesalliance.org](http://www.citiesalliance.org)

segregation of refugees along the Thai-Burma border illustrates this practice where “the location of the refugee camps and its physical planning is set by the Ministry of Interior of the Royal Thai Government.”<sup>76</sup> As we have already introduced, regulations dictate that the design of refugee camps are temporary environments and “even construction of non-residential buildings using masonry needs to be justified in terms of handing over to the host community.”<sup>77</sup> This “prohibition on the use of permanent materials for housing has meant that available funds for shelter materials must be budgeted on the assumption that materials will need to be renewed or replaced at regular intervals”, underlining the current unsustainable methods of construction.<sup>78</sup> Protracted refugee situations, which is characteristic of the majority of refugees encamped worldwide, questions the viability of this budgeting practice and the materials used. Not only does this affect funding which could be allocated for other activities,

---

<sup>76</sup> Morgado, David (2012). *Environmental Impact Assessment: Organizational, Program and Field Activities*. Thailand Burma Border Consortium (4)

<sup>77</sup> Kennedy. (2008). P.64

<sup>78</sup> Ibid. P.64

however relying on locally found materials for shelter construction often results in severe environmental degradation in the areas surrounding camps. Refugee populations are commonly forced to source their own shelter materials locally in efforts of supplementing limited shelter rations. The limitation of materials to non-permanent ones, mainly “wood, grass, earth,” leaves, and tarpaulin, greatly restricts any attempt to move away from single shelters and consideration of other models of housing.<sup>79</sup> This means that other models of housing that could be developed in order to better address densification in centers and avoid unnecessary sprawl in other cases is out of the question. In order to further ground our research and highlight the ills that result from this parasitism, it becomes necessary to select and analyze an individual camp as a case study. Let us explore how the previous research applies in the case of Mae La refugee camp in Thailand. But before we do that we must first uncover the parameters that Thailand as a host country has implemented upon refugee populations.

---

<sup>79</sup> Ibid 64

---

## HOST CULTURE:

---

*The most important and consequential environmental issues and impacts appear to be those related to: a) the use of resources available in the shelters' surroundings, and b) the emission of solid and liquid wastes. - (2011).*

The Impact of Displaced People's Temporary Shelters on their Surrounding Environment. Asian Research Center for Migration Institute of Asian Studies. Chulalongkorn University

---

The decision to study Thailand as a host country was for a number of reasons. Although Thailand is "not party to the 1951 Refugee Convention or the 1967 Protocol, the Royal Thai Government (RTG) has hosted displaced persons from neighboring countries since 1965."<sup>80</sup> In this fashion, Thailand's camps are unique in that they are not under the direct authority of the UNHCR. The UNHCR's involvement with refugees in Thailand serve mainly a protective and security role, responsible for recording and registering migrant populations in order to reduce statelessness. So how do they differ from UNHCR's *global design type*? Are restrictions on the built

---

<sup>80</sup> Prungchit Phanawathanawong. (2007) *Strengthening Protection Capacity Project Livelihoods Component: Mae Hong San Province*. UNHCR/ILO Livelihoods Report. P. 7

environment similar to UNCHR ran camps? Let us turn our attention to the current situation along the Thai-Burma border.

In 1962, through a coup d'état, the deposed independent republic of Burma came under the authority of the military government that claimed power in its place. Following years of oppressive rule, a constant stream of refugees has sought safety on Thailand's grounds, "reporting to have fled from ethnic persecution, forced relocation, and physical violence."<sup>81</sup> The most significant crossing of displaced peoples of Burma occurred in 1984 when fighting broke out between major ethnic groups (mainly the Karen National Union) and the

---

<sup>81</sup> Duffy, W. Robert. (2007) *Strengthening Protection Capacity Project Livelihoods Component*. Phase One: Tak Province. UNHCR/ILO Livelihoods Report. P. 6

military regime.<sup>82</sup> Since this time, Burmese refugees have been living under *prima facie* status in ad hoc 'camps' close to the border. In the beginning, the "conditions for land tenure and access to forest products were initially established by Thai villagers, land-owners and local authorities from Ministry of Interior."<sup>83</sup> The situation changed when the Burmese "military escalated its offensives in the mid 1990's" forcing a consolidation of shelters for "security issues" and increased "restrictions imposed upon the displaced" by the RTG.<sup>84</sup> As a result, dependency on external aid was intensified due to stricter regulations on access to land and forest products. Mae La camp in Tak province experienced the greatest consolidation and will celebrate its twenty-ninth birthday this year. From these facts we must query the insistent representation of *planned* camps by humanitarian organizations and political bodies as temporary environments. Can we reason that this

---

<sup>82</sup> Thadaniti, U-Cha, Lambregts, Bhiromkaew, Prombang, Toommakorn, Wijtkosum. (2011). *The Impact of Displaced People's Temporary Shelters on their Surrounding Environment*. Asian Research Center for Migration Institute of Asian Studies. Chulalongkorn University. P.38

<sup>83</sup> Ibid. P.15

<sup>84</sup> Ibid. P.15

neglects, upon closer inspection, the similarities that camps share with permanent settlements? When the actual reality is that many of the refugee populations in Thailand have been in confinement for numerous decades. The Border Consortium, formerly known as the Thai-Burma Border Consortium, has been responsible for the administration and management of camps along the Burmese border in Thailand since the first wave of refugees began pouring in. TBBC is a consortium of ten international Non-Governmental Organizations and is an active executive member of the *Committee for Coordination of Services to Displaced Persons in Thailand*. It is mainly "through CCSDPT that programs are coordinated with other NGOs, UNHCR, and the Royal Thai Government."<sup>85</sup>

The first *formal* registration of displaced Burmese living in Thailand was undertaken in 1999 with the help of the UNHCR and MOI. However the "subsequent large influx of new arrivals in 2004/2005" proved difficult for the Provincial

---

<sup>85</sup> TBBC Programme Report. (2012) January-June P.63

Admissions Board (PABs) that was responsible for registration. As a result the UNHCR and MOI carried out a “new border wide registration which re-registered the populations from 1999” along with the recently arrived.<sup>86</sup> This is important to note, for prior to 2005 all refugees were considered stateless and since they were not recognized under international law, they did not benefit from resettlement. Since refugees in Thailand did not benefit from resettlement, the RTG’s main strategy was (and continues to be) the containment of refugees to border camps until the situation in Burma-Myanmar improved and refugees could return home. The Royal Thai government “allowed third countries resettlement after it realized that deportation to Burma would not be a viable option for the near future due to prolonged political conflict.”<sup>87</sup> Once the approval for resettlement was granted post 2005, relocated bodies have continuously been replaced by newer arrivals or births within the camp maintaining the camps population for decades.

---

<sup>86</sup> Ibid. P.8

<sup>87</sup> Thadaniti, U-Cha, Lambregts, Bhromkaew, Prombang, Toommakorn, Wjtkosum. (2011). *The impact of Displaced People’s Temporary Shelters on their Surrounding Environment*. Asian Research Center for Migration Institute of Asian Studies. Chulalongkorn University. P.39

UNHCR’s even makes this prediction in its handbook, where the likelihood of population growth by natural means could “grow as fast as 3 to 4% per year.”<sup>88</sup> Indicating their awareness of the likely expansion or increases in density that will affect the physical evolution of the built environment in *planned* camps. Since only registered refugees are authorized for resettlement, declining numbers of those registered since 2005 and increasing numbers of those stateless have resulted in a state of intractable limbo. Despite evidences of permanency, UNHCR “maintains that camps are intended only as *temporary solutions*”, and where Hyndman would confirm, “the conceptual-political-material space of the camp is untenable as anything more than an immediate response to crises of human displacement.”<sup>89</sup> However finding permanent solutions for refugees is proving to be a difficult and an unmanageable task where by allowing refugees to “sit in camps and by constructing permanent buildings to house UNHCR staff and offices, the

---

<sup>88</sup> UNHCR Handbook for Emergencies. (2007) Chapter 12: Site Selection, Planning and Shelter. P.138

<sup>89</sup> Hyndman. (2000) P.150

organization is reneging on its mandate.”<sup>90</sup> Currently with the changing political situation in Burma/Myanmar and “new cease-fire agreements, most of The Border Consortium’s programs have been reviewed with return and reintegration in mind.”<sup>91</sup> However the process of peace and reconciliation can be slow, and despite this new turn of events, it is still difficult to estimate when the likelihood of repatriation will be possible. After living close to a third of ones life within the confines of the camp, in the incidence of repatriation, will refugees be equipped with the skills and capacity necessary for rebuilding upon return to Burma?

The Border Consortium, under the direction of their own Shelter Assessment Group, provides shelter materials however refugees are responsible for constructing their own homes. *Sphere Standards* have been adopted as the benchmark for guidelines relating to the management and administration of humanitarian aid within camps in Thailand.

---

<sup>90</sup> Ibid. P.170

<sup>91</sup> TBBC Programme Report. (2012) P. 22

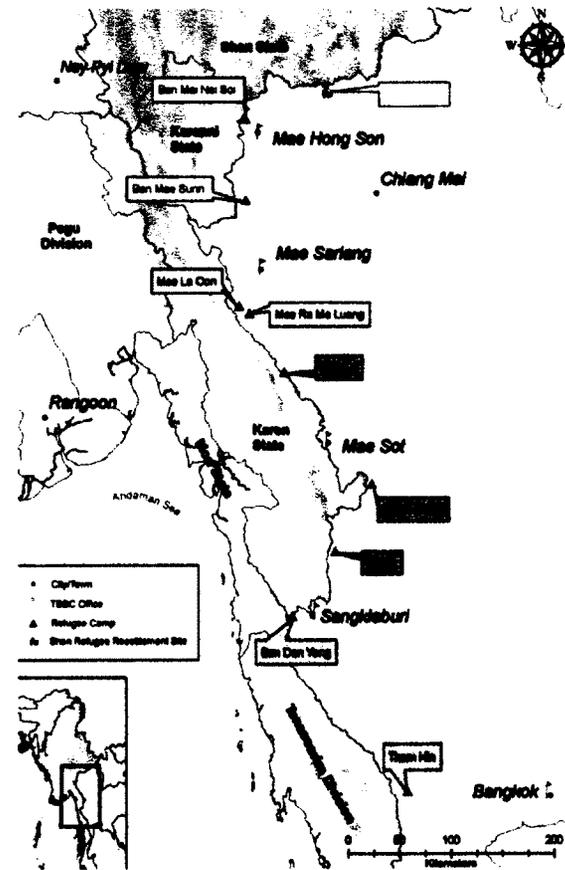
Unlike many UNHCR camps around the world, the TBBC run camps in Thailand are “unique in that they follow a community-based camp management model enabling the refugees to participate in decision-making, program design and implementation, contributing to the longer-term vision of self-reliance.”<sup>92</sup> TBBC in encouraging this model of governance “provides training and stipends to over 2,500 people to run the camps.”<sup>93</sup> In this manner the decision to select and study refugee camps along the Thai-Myanmar border can be considered a model of best practice where the built environment as a result, reflects a settlement pattern adapted by and familiar to the refugees and is not illustrative of a top down abstract model of spatial organization; keeping in mind however that the limited space allocated by the RTG for the camps have resulted in extreme densification and do not necessarily reflect natural circumstances. Despite these

---

<sup>92</sup> Ibid. P.64

<sup>93</sup> Ibid. P. 4

successes, short-term thinking continues to play a large part in the factors that contribute towards the camps parasitism. Disadvantages of informal growth without technical intervention or foresight, the inability to estimate the camps longevity and size, and a lack of awareness of growth and adaptation have resulted in infrastructure and shelter being developed in an ad hoc manner. Humanitarian funds continue to invest in non-durable materials illustrating the wasting of human and financial resources over the long-term. Let us now focus on how these specific issues afflict Mae La camp in particular.



Thailand-Burma Refugee Camps

Source: theborderconsortium.org

# BURMESE BORDER ACTIVITY

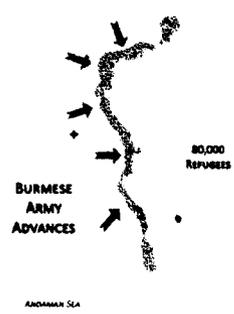
## 1984-2012

REFUGEE CAMP ▲  
 BANGKOK ●  
 RANGOON (YANGON) +

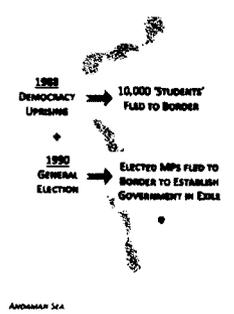
1984: FIRST REFUGEES



1984-1994: BORDER UNDER ATTACK



1988/1990: DEMOCRACY MOVEMENT



1984 – The border under the control of indigenous ethnic nationalities – notably the Shan, Karenni, Karen and Mon who had established de facto autonomous states. The green shaded border areas had never been under direct control of the Government. The Karen National Union (KNU) had been in rebellion for 35 years and since mid-1970's had been gradually pushed back towards the Thai border.

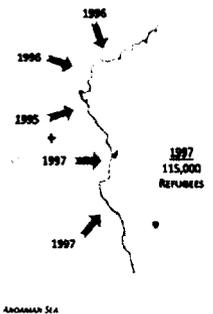
1984 - 1994 – Over the next ten years, the Burmese Army launched a series of offensives, overrunning and taking control of new areas.

1988 – 1990 – In 1988 the people of Burma rose up against the military regime with millions taking part in mass demonstrations. Students and Monks played prominent roles. The uprising was crushed with thousands killed. Around 10,000 student activists fled to the Thai-Burma border and the first alliances were made between ethnic and pro-democracy movements. Offices were established at the KNU headquarters in Manerplaw. In 1990 an election was held with the National League for Democracy (NLD), led by Aung San Suu Kyi, winning with an overwhelming majority. The NLD was not allowed to take power and elected MP's were imprisoned or intimidated. Some fled to the border to form a government in exile.

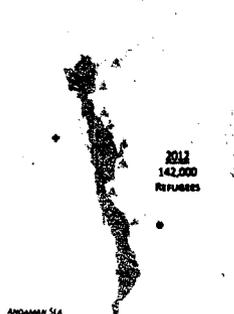
JAN 1995: FALL OF MANERPLAW



1995 - 1997: THE BUFFER FALLS



ASSIMILATION OF ETHNIC TERRITORY



1995 – Manerplaw was attacked and overrun by the Burmese Army.

1995-1997 – Burmese army effectively overran the remaining territory.

1997 - Present – Former ethnic territory now under the control of the Burmese army. More than 3,700 villages were destroyed and ethnic communities face oppression, violence and persecution.

- Thai Programme Report 2012, January to June.  
 The Thailand Burma Border Consortium (171)

Maps illustrating the history of Burmese refugee movement.

Source: SV - adapted from the maps in the 'Thai Programme Report. (2012) January-June. TBBC'

---

## PARASITE:

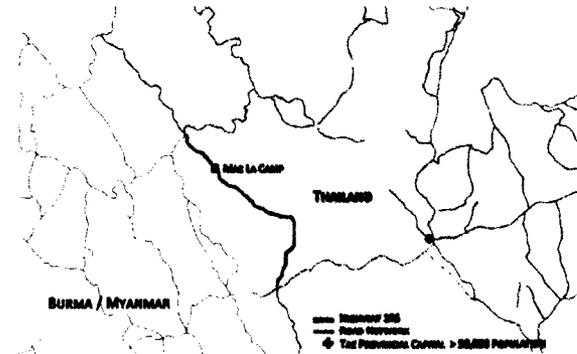
---

*Traditional aid has increasingly encouraged recipients to represent themselves as victims of circumstance. This has eventually led to a diminution of their individual and collective capacities and human potential, as their energy and intelligence are increasingly directed towards manipulating donors for "freebies." Mary Hope Schwoebel and Mohamed Hassan Haji. (1994) Report on Community Consultation. CARE International Refugee Assistance Project*

*Outsiders view refugees as 'helpless'; as needing outsiders to plan for them and to take care of them. This assumption is the cornerstone of nearly all appeals for funds.*

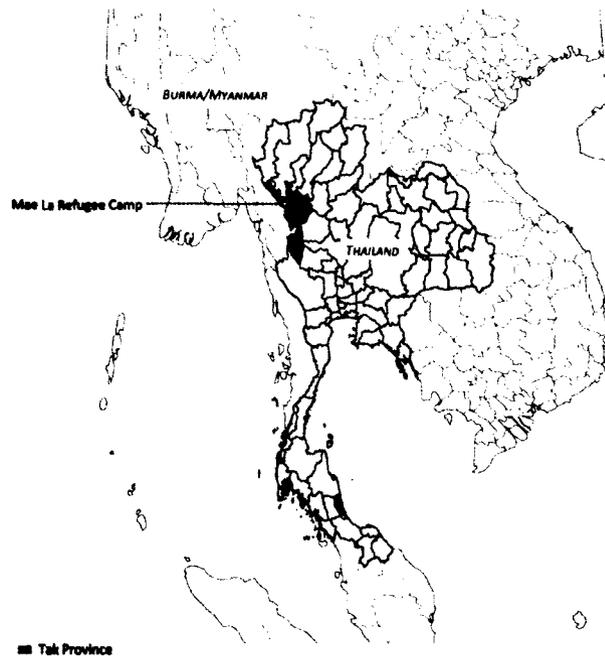
– Barbara Harrell-Bond (1986) *Imposing Aid: Emergency Assistance to Refugees.*

Playing out a role of helplessness forms the foundations upon which humanitarian efforts promote and receive funding. This mindset permits dependency and is a contributor to the negative perceptions that circumscribe refugee camps worldwide. In this way it is imperative for design solutions to enable the refugees themselves, drawing on established skills and promoting independence rather than providing a top down solution towards the built environment. Current practices focus on meeting minimum standards towards the physical performance of the camp and neglect how the social performance plays out when it no longer remains a matter of emergency, ultimately enduring cycles of reliance. Let us investigate how the dependency of



Source: SV

## THAILAND PROVINCES



Source: SV

Mae La camp has contributed towards the diminished fitness of Thailand, enabling a parasitic symbiosis.

Located about an hour mid way between Tha Song Yang and the town of Mae Sot, Mae La sits about eight kilometers from the Burmese frontier in Thailand's mountainous North-Western province of Tak. Route No.105 that borders the camps eastern edge makes its relatively isolated location accessible. Since the camp is "intended, for political reasons, to remain separate from host communities, the overall morphology remains one where the camp does not lead to anywhere, does not have any lines of traffic or communication which run through it, and is connected to a single access road."<sup>94</sup> Ultimately emphasizing the camps deliberate segregated and exclusionary nature.

The high population density of Mae La has lead "to significant pressure on forests and wildlife and respective

<sup>94</sup> Kennedy. (2007) P.139

carrying capacity of the surrounding ecosystem.”<sup>95</sup> In Thailand, TBBC’s total verified caseload stood at 142,194 people, comprising 74,776 registered refugees and 67,418 unregistered.<sup>96</sup> Mae La camp is the largest of all nine TBBC run camps along the Burmese border. The camp alone boasts a population of 49,844 inhabitants resulting in a density of 19,938 people per km<sup>2</sup>, a little over double the total maximum suggested camp population size of 20,000 outlined in UNHCR’s handbook.<sup>97</sup> If we were to calculate the appropriate size of a site according to UNHCR’s guidelines for a population of 49,844, we will see that the physical size of Mae La is not quite exhausting its capacity yet:

$$49,844 \text{ people} \times 45 \text{ m}^2 = 224,2980 \text{ m}^2 = 224 \text{ ha}$$

*(Mae La area is currently 250 ha)*

$$20,000 \text{ people} \times 45 \text{ m}^2 = 900,000 \text{ m}^2 = 90 \text{ ha}$$

---

<sup>95</sup> Morgado, David (2012). *Environmental Impact Assessment: Organizational, Program and Field Activities*. Thailand Burma Border Consortium P.2

<sup>96</sup> Programme Report 2012, January to June. Thailand Burma Border Consortium P.54

<sup>97</sup> Area and density developed from GIS shapefile data; UNHCR Handbook (July 2007) P.137

While TBBC’s fuel, shelter and food supplies do contribute a significant amount in alleviating pressure on the surrounding environment; budget cuts have made the continuous provision of rations problematic. According to a TBBC program report, shelter rations in Mae La camp have been “maintained at fifty percent of Sphere Project standards in 2012 but it has become difficult to source materials even at this reduced level.”<sup>98</sup> Since donor countries are responsible for around ninety-four percent of TBBC’s budget, it is “clear that there are limits to their ability and willingness to continue to support indefinitely the status quo.”<sup>99</sup> As a result, residents are forced to supplement shelter rations within nationally protected forest reserves causing unsustainable forest management and degradation. Alternative solutions are being proposed by TBBC where refugees are included in harvesting and growing their own supply of shelter materials. Bamboo plantations within camps and “pilot roofing leaf production have been expanded both as livelihood opportunities” in order

---

<sup>98</sup> Programme Report 2012, January to June. Thailand Burma Border Consortium. P.3

<sup>99</sup> Ibid. P.85

to “reduce shelter costs” and encourage skills training.<sup>100</sup> This has already been implemented in other Thai camps along the Thai-Myanmar border.

Besides creating activities that empower the refugees and support livelihood development within the camp, the preparation for long-term integration or the possibility of return to their country of origin is important. The program report uncovers the benefits of TBBC’s Community Agriculture and Nutrition (CAN) project and maintains “community household garden allotments are probably the single best way to prepare refugees for repatriation.”<sup>101</sup> By providing areas for home gardens or communal agricultural plots, refugees are able to diversify their diet and reduce reliance on dry rations that are provided by TBBC every month. The refugee diet at the moment relies heavily on rice, yellow split peas, soya bean cooking oil, fortified blended flour, salt, chili and fish paste, “supplemented with leaves and roots gathered from the forest

---

<sup>100</sup> Ibid. P.3

<sup>101</sup> Ibid. P.4

plus any vegetables or livestock that can be cultivated, raised or hunted.”<sup>102</sup> An essential side effect of providing these dry rations is the difficulty in preparing them. Currently, the transmission of electricity by the Provincial Electricity Authority is limited to non-residential buildings (offices, hospitals and school) while residents are forced to rely on “battery, candles and kerosene lamps as a source of power.”<sup>103</sup> Since only around five percent of households in Mae La camp benefit from electricity, the rest rely heavily on the coal rations provided for fuel.<sup>104</sup> The extended use of charcoal has led to concerns for health, not to mention water and air pollution. With recent budget cuts, refugees have again had to support reduced coal rations with firewood sourced locally, adding to the environmental degradation already resulting from sourcing shelter materials. As we have already seen, the parasitism that arises between camp and host is the result of a continuing

---

<sup>102</sup> Ibid. P.132

<sup>103</sup> Thadaniti, U-Cha, Lambregts, Bhiromkaew, Prombang, Toomnakorn, Wijitkosum (2011) *The Impact of Displaced People's Temporary Shelters on their Surrounding Environment*. Asian Research Center for Migration Institute of Asian Studies Chulalongkorn University (80)

<sup>104</sup> Morgado, David. (2012). P.26

reliance on external aid and increased dependency on the local ecology. This ecological degradation surrounding Mae La is harming the 'fitness' of both host communities and local wildlife. Furthering this argument, how is creating a culture of dependency benefiting refugees? In the likelihood of repatriation, it is important that refugees will have gained from the skills developed within the camp in order to prepare them for resettlement back in Burma. Can a symbiotic agency provide design interventions that are able to adapt to growth within the context of the camp, while simultaneously preparing them with long-term solutions in the event of repatriation? The next section examines the way in which the role of an architect can be re-imagined in order to contribute towards restoring a balance between parasite and host.

# ANTIDOTE:

---

Antidote can be described as something that “relieves, prevents or counteracts” injurious or unwanted effects.<sup>105</sup> The following section explores architectural agency as a means of providing an antidote to the ills of parasitism. Can the professional role of an architect be redefined in order to provide for the large numbers of those who are underserved in traditional practice? Imagining new roles encourages expanding practice and providing unconventional solutions to real problems for populations that are affected by insufficient financial means to address adequate housing and infrastructure.

---

<sup>105</sup> The Merriam Webster Online Dictionary (2013) [www.merriam-webster.com](http://www.merriam-webster.com)

---

## AGENCY:

---

*Architectural culture – expressed through reviews, awards and publications – tends to prioritize aspects associated with the static properties of objects: the visual, the technical, and the atemporal. Hence the dominance of aesthetics, style, form and technique in the usual discussion of architecture, and...the suppression of: the processes of their production, their occupation, their temporality, and their relations to society and nature. – Awan, Schneider, Till (2011) Spatial Agency: Other Ways of Doing Architecture.*



We have previously introduced the elements that contribute towards a parasitism between Mae La and Thailand. Here we must discuss the relevance of the architect within this context. In doing so we need to explore whether it is possible for architects to engage in challenging environments outside the conventional realm of the discipline. Today professional designation itself assumes an ethical code of conduct outlining the architect's responsibility to the greater public good where "the founding mission of all professions is to serve society through the development and deployment of a branch of knowledge."<sup>106</sup> This ethical responsibility is challenged by the

statistic that has emerged where the architectural profession "directly affects only two to five percent of all that gets built", hardly making a significant impact on our built environment and scarcely achieving the obligation that professional architects are supposedly required to attend to; that is the "public's health, safety and welfare."<sup>107</sup> A wider geography of social activist architecture has materialized that aims to regain social and political relevance in practice. Activist architecture suggests a way of expanding practice towards a wider contextual relevance and engagement through participatory action whereby architectural action has previously been defined by a reactionary performance towards the "short-term

---

<sup>106</sup> Awan, Schneider, Till (2011) *Spatial Agency: Other Ways of Doing Architecture*. Routledge

---

<sup>107</sup> Bell, Wakeford. (2012). *Expanding Architecture: Design as Activism*. Metropolis Books. P 9

priorities of clients and market” demands.<sup>108</sup> In this way it can be argued that production is circumscribed by providing a service to those who can afford to pay for professional fees – institutions, corporations, political bodies or wealthy individuals – ultimately marginalizing a majority who are most in need of architectural assistance.

Let us here consider the equation “*architecture = building*” and how it magnifies the commodification of architecture.<sup>109</sup> Can it be claimed that this frame of mind highlights and glorifies the visual, atemporal, static elements of building? Henri Lefebvre in ‘The Production of Space’ alternatively speaks to “social space” as a “social product,” suggesting that spatial production is not limited to the domain of the architect and is rather the result of collaboration between numerous individuals.<sup>110</sup> Here *building* does not exist in a vacuum however is embedded in social and political

---

<sup>108</sup> Awan, Nishat, Schneider, Tatiana, Till, Jeremy (2011) P.28

<sup>109</sup> Ibid. P.29

<sup>110</sup> Henri Lefebvre. (1991) *The Production of Space*. Oxford: Blackwell P.26

networks. In *Spatial Agency*, Till, Awan and Schneider describe social space as a ‘dynamic’ space where “production continues over time and is not fixed to a single and final intervention thus forcing a reflection on inhabitation, appropriation of space and temporal characteristics.”<sup>111</sup> In this way the former equation becomes problematic when united with the intertwining social, political and ecological relations in which it is already deeply rooted. This requires spatial agents to go back and reevaluate in order to understand the performance of how users adapt and interact. Similarly, the context of Mae La compels interventions to be flexible and encourages users to modify and adapt their environment according to evolving demands, in acknowledgement that “multiple actors contribute at various stages”, and that spaces may change their function over time.<sup>112</sup>

How can we therefore, define one who is involved in the creation of social space when it is no longer the exclusive dominion of the architect? According to Till, Awan and

---

<sup>111</sup> Awan, Schneider, Till (2011) P.29

<sup>112</sup> Ibid. P.29

Schneider, the definition of an agent encompass all individuals who are committed through “mutual enterprise” towards effecting “change through empowerment of others, allowing them to engage in their spatial environments in ways previously unknown or unavailable to them.”<sup>113</sup> Through a *Symbiotic Agency*, is it possible for architects to help play a role in empowering the displaced in the production of their own environment and livelihood? Here the role of the architect serves to negotiate “existing conditions in order to partially reform them.”<sup>114</sup>

Let us here reflect on how this negotiation can be achieved? The first challenge lies is escaping predefined conceptions of practice and responsibilities. Can it be maintained that architectural discourse is described as a metaphorical “closed loop” of knowledge that is protected and hierarchically contained under the banner of professionalism? This closed loop increasingly feeds of itself and does not offer

---

<sup>113</sup> Ibid. P.32

<sup>114</sup> Ibid. P.31

the inclusion of others. It implies that the creative practice of spatial production should be limited to the domain of the architect. *Spatial agency* suggests that professional codes and values are compromised by this private protection of knowledge and practices where “the profession designates knowledge which architects must possess.”<sup>115</sup> This compromise happens when “professional bodies are torn between public service and private protection.”<sup>116</sup> In *Expanding Architecture: Design as Activism*, Bell and Wakeford reinforce this statement, declaring that while “traditional design and engineering fields will continue to be a part of public-interest practice, professionals who do not normally work with architects – such as public-health physicians, social workers, sociologists and anthropologists – might begin doing so.”<sup>117</sup> This expansion of practice opens up the realm of spatial design to include others in the process. Otherwise, without the broader aim of social justice, this disempowerment from comprehensive discussions

---

<sup>115</sup> Ibid. P.43

<sup>116</sup> Ibid. P.43

<sup>117</sup> Bell, Wakeford. (2012). *Expanding Architecture: Design as Activism*. Metropolis Books P.12

of ethical importance and engagement with other professionals has had a severe impact on qualifying the architect's role, subjugating architectural production to the whim of the elite and ambiguous concerns for originality and style.

Let us briefly consider how it might be possible to serve the underserved. Through agency and activism, the architect is encouraged to become a proactive initiator rather than reactive, going beyond the architect as developer, seeking a need within a community, and engaging with others through negotiations of skills and knowledge to influence social change. In this position, the architect acts as a facilitator without "suppressing the role that professional knowledge plays when it comes to setting up, detailing, financing and running a project."<sup>118</sup> Going back to the former equation of *architecture=building*, here architectural practice does not necessarily entail the designing of a building. It is only through greater participation and collaboration, that the distribution of

---

<sup>118</sup> Awan, Schneider, Till (2011) P.43

architectural "ideas, strategies, practices and values are developed and disseminated" to a wider audience enabling the return of political and social engagement.<sup>119</sup>

As mentioned previously, activist insights toward the production of social environments can enable the expansion of



Source: Shutterstock.com

---

<sup>119</sup> Bell, Wakeford. (2012) *Expanding Architecture: Design as Activism*. Metropolis Books.

architectural services to provide for those who are in critical need of design solutions and development. Currently the reservation of providing for the highest income bracket is limiting the vocations opportunity to engage with others and undermines the ethical conduct attributed to professionals. By reinstating political and social relevance in the process of spatial production, the built environment becomes shaped by the convergence of an array of diverse knowledge and reinforces the importance and worth of the professional through collaboration. Within participatory action, architects are able to expand and develop their capacities with "new sets of tools, some of which may be outside the traditional comfort zone of the design-forming tools of drawing and modeling. Including: conducting interviews, visioning workshops, mind mapping, consultation, collaboration, co-design, stats analysis, drafting funding grant proposals, policy writing."<sup>120</sup> Re-imagining alternatives to the current processes and relationships involved in spatial production, reduces the

---

<sup>120</sup> Awan, Schneider, Till (2011) P.44

professionals reliance on client and market based models and instead seeks to fund, mobilize and support social networks through collaboration. Here potential for architectural practice to reclaim its professional intentions and facilitate the dissemination of its services to the present disparate gap of those underserved may be possible.

Furthering this thinking and within the context of this thesis, the architect's role is reimagined as a *symbiotic agent*. While still retaining the aforementioned concepts of activism and spatial production, the symbiotic agent seeks to understand an environment and the complex relationships involved through alternative means; data analysis, research etc. in order to define what needs are present and how the architect can play out a part as actor within the existing drama. The current parasitism that plagues the numerous camps nesting along the Thai-Burma border, suggest the need to re-balance the status quo. The negative perceptions that abound regarding harboring the stateless in Thailand are likened to issues of co-

dependency and environmentally unsustainable practices. By redistributing the scales and promoting a culture of interdependence between the camps and host, can this parasitic relationship grow into a form of mutualism where both bodies are reciprocally dependent or responsible to each other? The next section will explore the context of Mae La camp in depth and reveal the practices that affect the relationship between host and parasite in efforts of revealing the possibility of design solutions.

# MUTUALISM:

Mutualism is defined as a relationship where two organisms of different species co-evolve and both benefit from their interactions with each other. In other words, co-operation amongst both bodies increases their respective fitness where both sustain a co-dependence for the remainder of the relationship. Could increasing the relative autonomy of the camp and reducing reliance on external aid to the point where development and livelihood practices within the camp are viable, at the same time benefit host communities? By encouraging resourcefulness and allowing refugees to work contributes “positively to the Thai economy, promotes dignity and self-reliance for the refugees, gradually reducing the need for humanitarian assistance.”<sup>121</sup> For example, local resources that are the source of livelihood for refugees are cultivated in the camp and are no longer in competition with local communities or the services and education established within the camp are now accessible to neighboring villages for “shared benefits and community integration.”<sup>122</sup> Since the overall governance of Mae La is already under great influence from the refugee committees that participate in decision-making and management, the goal of establishing a mutualism stems from a desire to increase the economic independence in the camp rather than establishing a democratic independence. In order for greater independence to occur, and as Hyndman maintains, the “transfer of camp governance from organizations to refugee leaders cannot exclude control of economic resources.”<sup>123</sup> The following section begins with an overall introduction of Mae La.

<sup>121</sup> Programme Report 2012, January to June. Thailand Burma Border Consortium. (123)

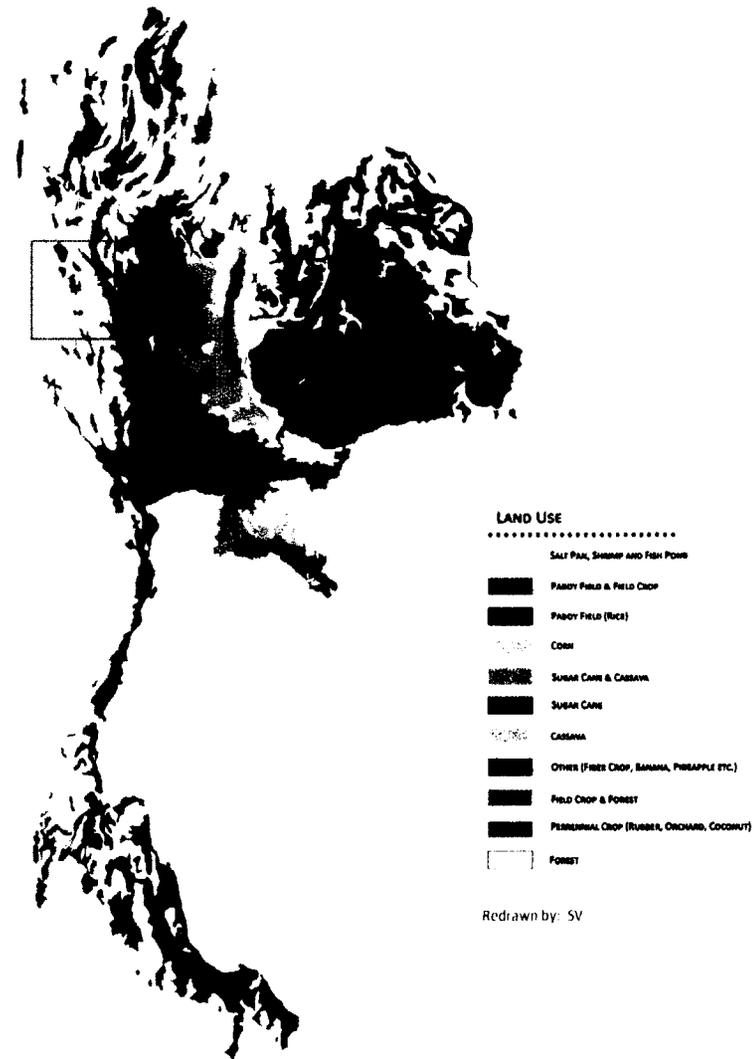
<sup>122</sup> Morgado, David. (2012). *Environmental Impact Assessment: Organizational, Program and Field Activities*. Thailand Burma Border Consortium. (9)

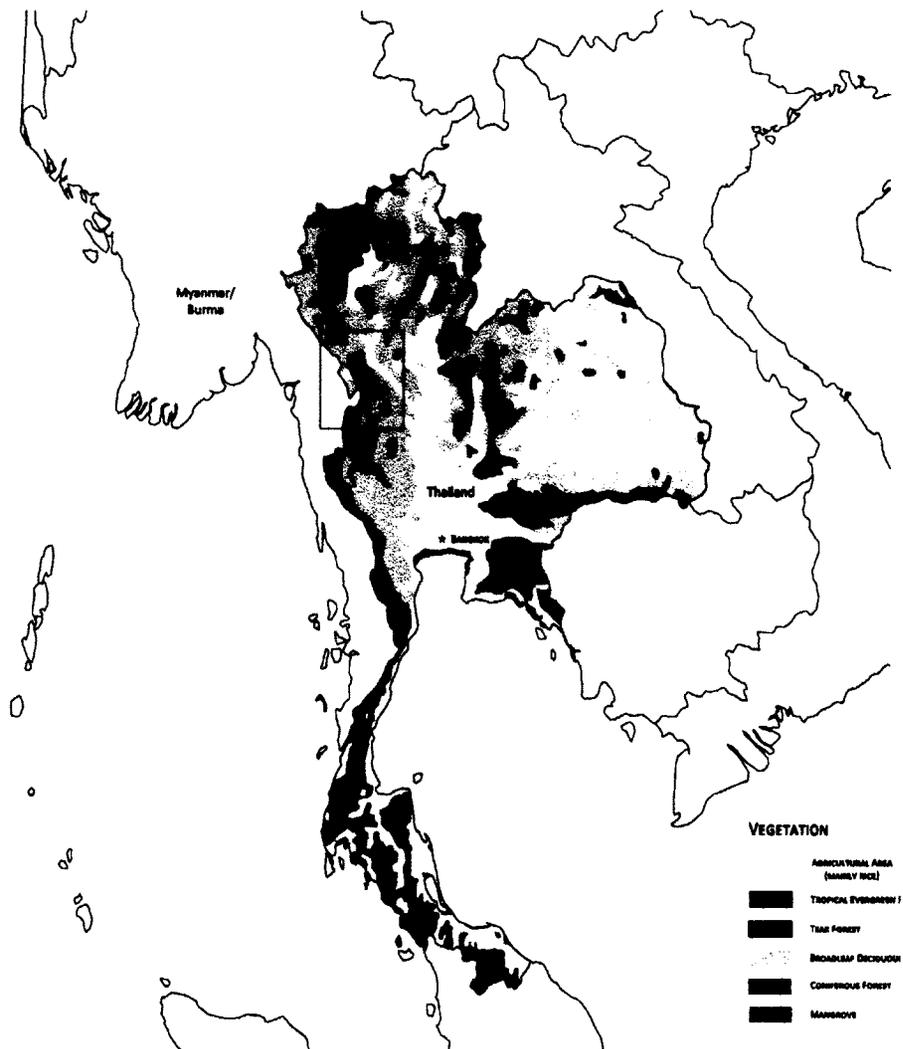
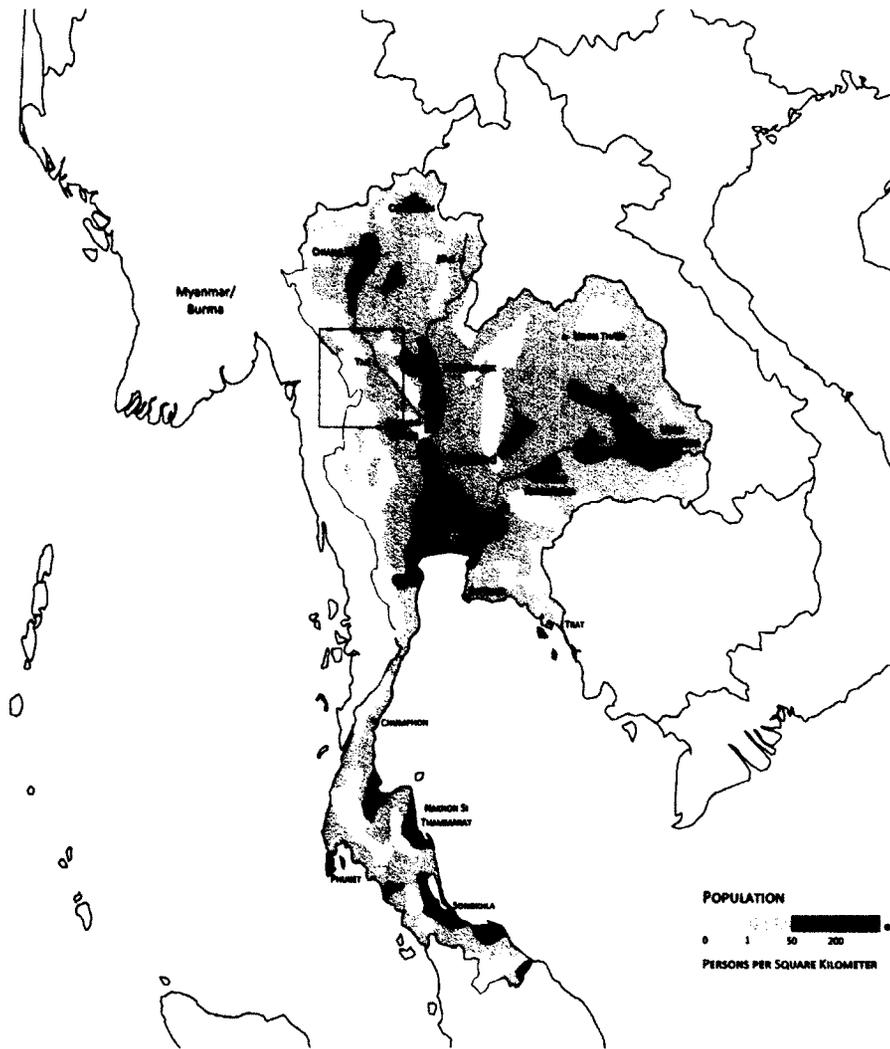
<sup>123</sup> Hyndman (2000) P.139

## MAE LA, THAILAND:

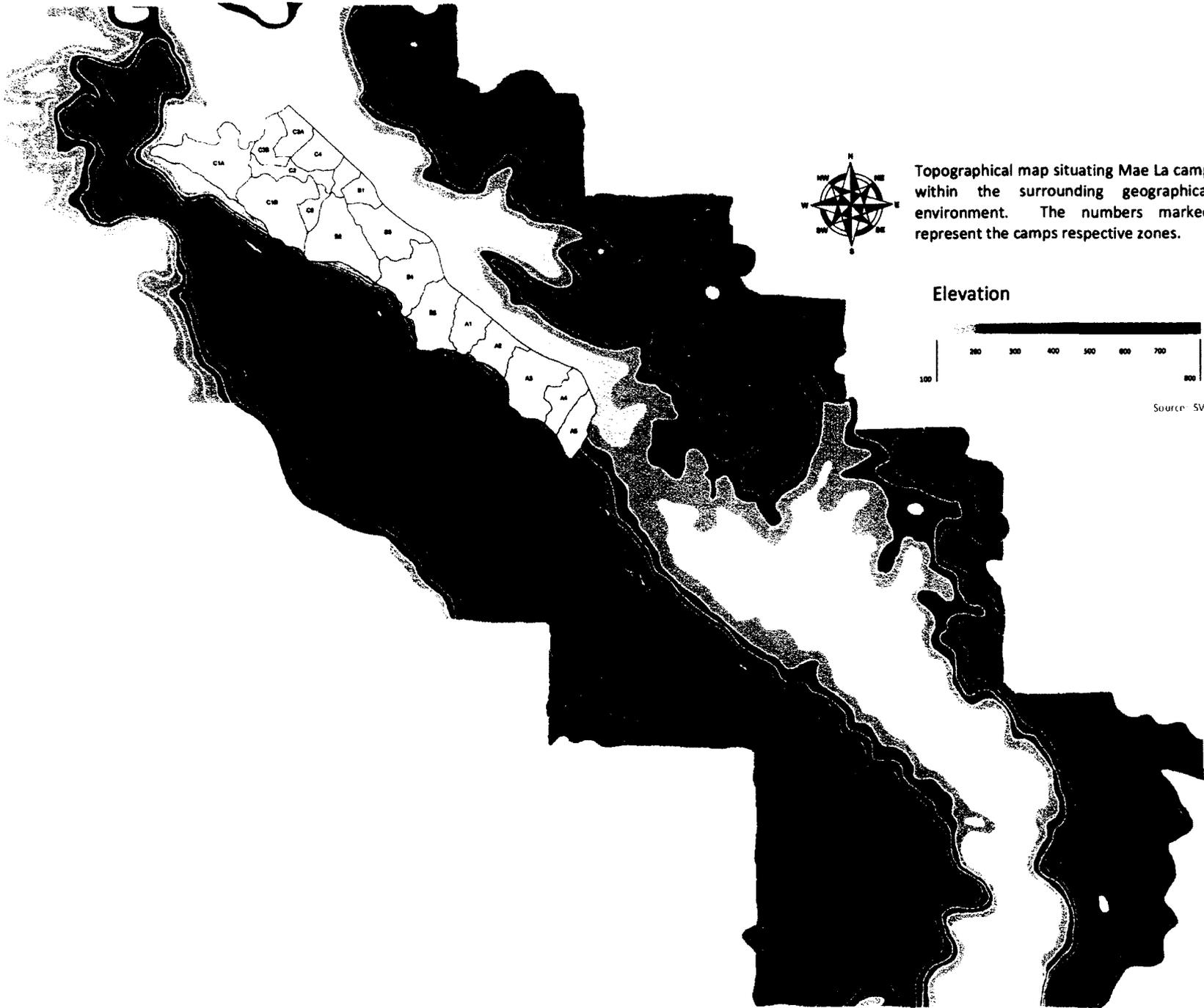
Mae La camp is located in Tha Song Yang National Park in Thailand. Surrounded by sub-tropical and/or deciduous forests as evidenced in the adjacent map, Mae La rests in a valley at an elevation of around two hundred meters with mountains of the Thanon Thongchai range bordering either side. From the topographical map that follows, it can be suggested that Mae La evolved in part due to geographical restrictions where the surrounding elevations reach as high as eight hundred meters. The lowlands are characterized by rice paddy fields that “alternate with vegetation and fruit orchards while highlands are home to plantations of soy bean and corn.”<sup>124</sup> In the following population density map, one can notice that the camp itself is situated within a relatively, not unpopulated, however sparsely populated area.

<sup>124</sup> Thadaniti, U-Cha, Lambregts, Bhironkaew, Prombang, Toommakorn, Wijitkosum. (2011). *The Impact of Displaced People's Temporary Shelters on their Surrounding Environment*. Asian Research Center for Migration Institute of Asian Studies. Chulalongkorn University. (63)





Redrawn by: SV



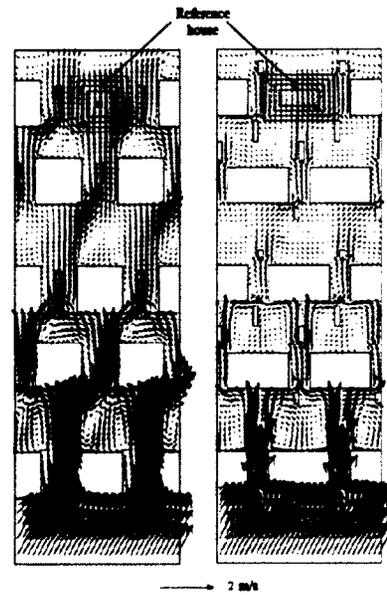
Topographical map situating Mae La camp within the surrounding geographical environment. The numbers marked represent the camps respective zones.

Elevation



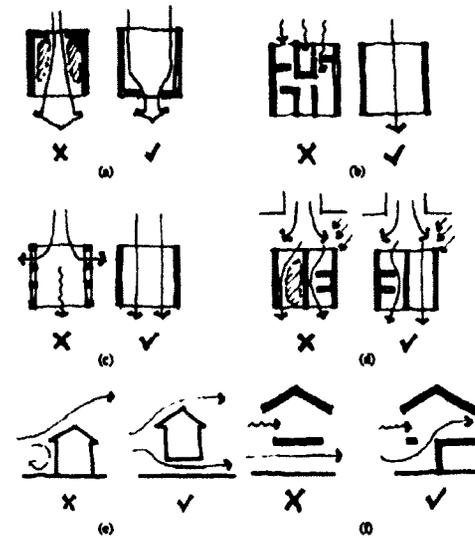
Source: SV

Thailand is subject to two prevailing local wind patterns gusting from the North-Northeast from November to March during the cool season, and the South-Southwest from March through September during the summer. Due to



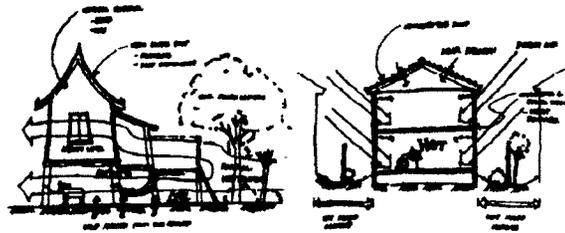
Plan view of the airflow around the houses (a) square shape and (b) rectangular shape\*

Thailand's characteristically tropical and humid climate, traditional vernacular homes have been designed to take advantage of air movement. In order to reduce wind blockage, households should be "staggered to encourage natural ventilation and reducing wind shadow areas at the back of each



Design strategies for airflow through the houses \*

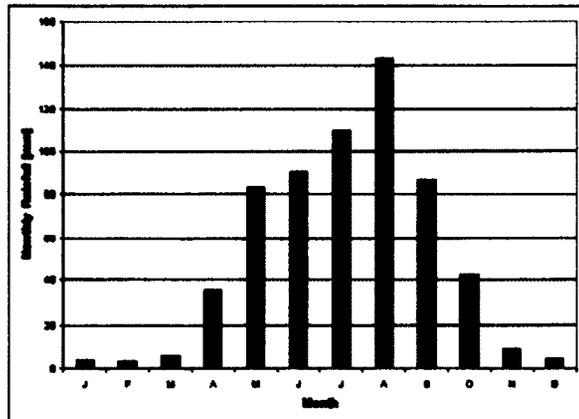
Source: \* Srebric, Chen, Tantasavasdi. (2001) *Natural Ventilation for Houses in Thailand*. "Energy and Building"



Above: Sketch of Thai Houses (Left) Traditional and (Right) Modern\*

Source: Punpairaj Poomchai. The Transformation of Traditional Thai Houses. (2010) Silpakorn University

Below: Average Monthly Rainfall for Mae Sot, Thailand.  
Source: GOSIC, 2007



house.”<sup>125</sup> As a result, households of uniform geometries benefit most from air movement. In the previous diagram illustrating the airflow around houses, it is evident that rectangular geometries are less efficient in maximizing airflow to those homes downstream.

High sun angles and temperatures from March through June encourage wider eaves and overhangs in order to create covered, shaded areas for dwellers. Temperatures typically range from twenty-eight to thirty-three degrees during the summer months.<sup>126</sup> The monsoon season sees its heaviest rainfalls usually during the month of August.<sup>127</sup> Because of the lower sun angle during the winter months, the design of each shelter should take into consideration potential heat gain with longer sides of the surface of a building facing a north-south direction.

<sup>125</sup> Tantasavasdi, C., Srebric, J., and Chen, Q. (2001). 33(8), 815-824

<sup>126</sup> Thadaniti, U-Cha, Lambregts, Bhiromkaew, Prombang, Toommakorn, Wijtkosum. (2011)P 61

<sup>127</sup> Tantasavasdi, C., Srebric, J., and Chen, Q. (2001). 33(8), 815-824.

Since Mae La camp is located in a valley and maintains significant changes in topography within its perimeter, ongoing deforestation and demineralization of soil has subjected the camp to seasonal flooding. In response to an uneven topography and water overflow, the majority of households in Mae La camp have been built in traditional Thai and Burmese vernacular with raised living and sleeping areas. The ground level is left open for multipurpose uses and in order to encourage drainage. In Mae La camp, these spaces are generally used for storage, cooking and keeping livestock. According to a natural ventilation study of wind velocities surrounding traditional Thai houses, the “airflow on the first floor is higher than on the second floor because of a lack of structure to intercept and direct air currents.”<sup>128</sup> Ideally living spaces should be located on ground level with sleeping quarters remaining on the second level however the elevated floor allows for more wind flow underneath and saves the house along with a residents personal possessions in case of flooding.

---

<sup>128</sup> Tantasavasdi, C., Srebric, J., and Chen, Q. (2001). 33(8), 815-824

An “on-slab design greatly reduces the natural ventilation rate.”<sup>129</sup> The study also emphasizes obvious design considerations that suggest larger inlet apertures than outlet apertures and preserving an open indoor space to take advantage of free air movement.



Photo demonstrating the multiple use of ground level spaces including food preparation and cooking.

Source: [www.rescue.org](http://www.rescue.org). (2011)

---

<sup>129</sup> Tantasavasdi, C., Srebric, J., and Chen, Q. (2001). 33(8), 815-824

Most of the land in Mae La camp is dominated by residential areas while “office, commercial and recreational functions are dispersed across the different zones with a concentration found in the north-eastern sector along the main street in Zone C” as illustrated in the map on the following page.<sup>130</sup> An important design consideration as described by Till, Awan and Schneider in *Spatial Agency*, is the idea that “over-determined spaces leave no room for their appropriation by others and tend to be hyper-controlled rather than allowing principles of indeterminacy to become indicators of pleasure by enabling others to realize a different idea of space defined through their own desires and wishes.”<sup>131</sup> In Mae La camp, could concepts of adaptability and multi-use spaces allow for growth over time and become the means through which density is addressed and accommodated in a healthy, sustainable way? Formerly, sufficient materials for shelter construction were “supplied to ensure that houses can provide at least five and a half square meters of floor area per person

---

<sup>130</sup> Thadaniti, U-Cha, Lambregts, Bhiromkaew, Prombang, Toommakorn, Wijitkosum. (2011) P73

<sup>131</sup> Awan, Schneider, Till (2011) P.75

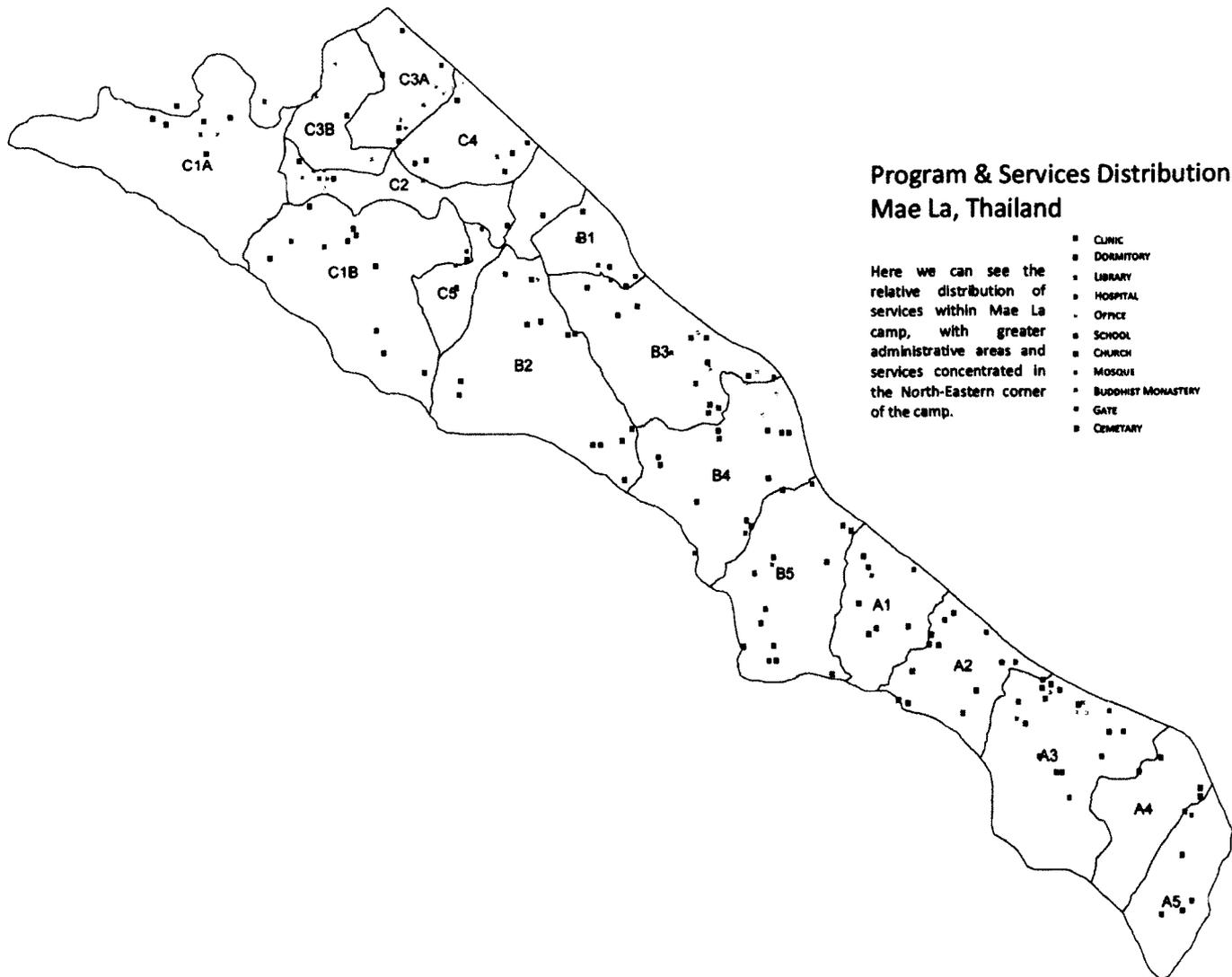
(3.5m<sup>2</sup> – enclosed space, 1.5m<sup>2</sup> covered space and 0.5m<sup>2</sup> fenced area) and where the building materials are those customarily used for houses in rural areas in Burma/Myanmar as well as in Thai villages proximal to the camps.”<sup>132</sup> The use of bamboo, wood, grass and leaf thatch encourages local skills and enables residents to construct and repair their own homes. Recently, due to rising material costs and budget cuts, it has been difficult for TBBC to maintain previous provision rations of shelter materials again indicating the difficulty in sponsoring such significant population sizes for an extensive period of time. Currently only around nine percent of households are able to fully meet their building material needs.<sup>133</sup> This has resulted in the need to collect additional shelter materials, “exacerbated by the RTG policy to only allow the use of non-durable materials in house construction” (which creates the need for frequent replacement of construction materials).<sup>134</sup>

---

<sup>132</sup> Programme Report 2012, January to June. Thailand Burma Border Consortium (133)

<sup>133</sup> Caldwell, Richard. Ravesloot, Bruce. (2011). *Baseline Livelihood Vulnerability Analysis of Refugee Camps along the Thailand-Burma Border* TANGO International Inc (97)

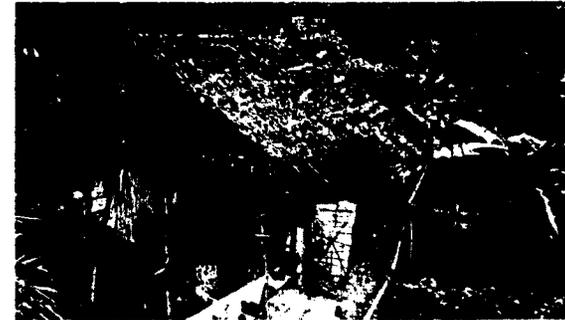
<sup>134</sup> Thadaniti, U-Cha, Lambregts, Bhiromkaew, Prombang, Toommakorn, Wijitkosum (2011). P14



An advantage of using leaf/grass thatch for roofing is that it encourages self-reliance and supports forest cleaning, reducing the risk of fire. Dipterocarpus leaves are found in mixed forest areas and are the main source of thatch production. The Dipterocarpus plant sheds its leaves in winter season, which are then collected for use. The advantages of using thatch however become problematic when results indicate that intensive labor is required for construction and its viability is outweighed by its short life span. According to Caldwell and Ravesloot, a structural analysis of shelters in Mae La camp reveals that over eighty-seven percent of physical failures are leaky roofs, followed closely behind by shifting foundations, building structure and broken flooring.<sup>135</sup> The repair and maintenance of shelters in general is highest within the first year, with complete rebuilds required on average every third year.

---

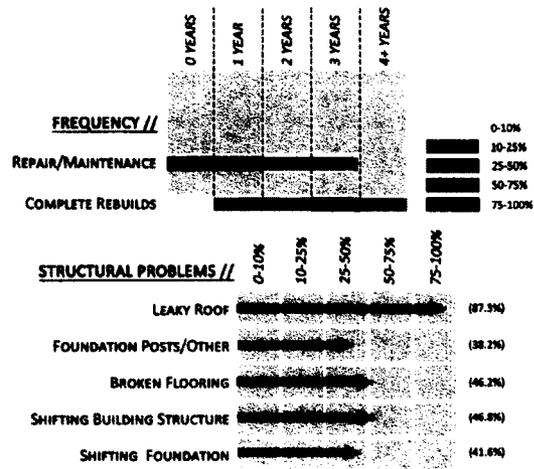
<sup>135</sup> Caldwell, Richard; Ravesloot, Bruce. (2011). *Baseline Livelihood vulnerability Analysis of Refugee Camps along the Thailand-Burma Border*. TANGO International Inc.



Mae La Camp, Thailand

Source: [www.refractoryroad.com](http://www.refractoryroad.com)





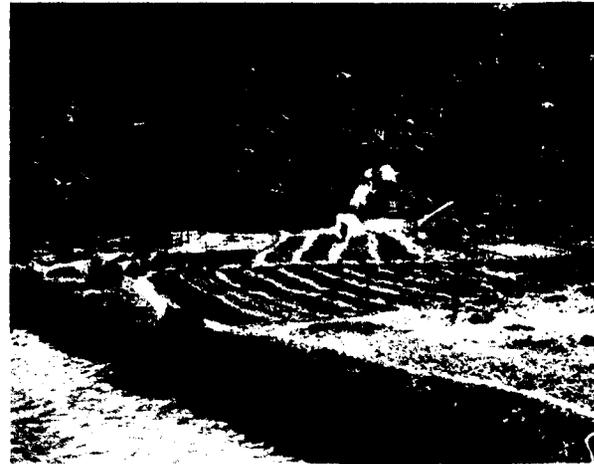
Graph illustrating frequency of shelter repairs.

Drawn by: SV

Now let us explore how the previously mentioned factors begin to shape and define the interventions in Mae La. Redefining the role of architect as *symbiotic agent*, suggests seeking out a need within a community and expanding services in new and unconventional ways in order to restore a balance, or encourage mutualism. According to TBBC's program report, "as a result of funding shortages, rising food costs, and in an effort to encourage self-reliance, TBBC reduced food rations to 1,640 kcals/person/day in 2012 which does not meet the daily calorie needs of 2,100 kcals/person/day suggested by SPHERE for populations who depend solely on external aid."<sup>136</sup> Could the provision of gardening plots encourage livelihood development, income generation and supplement food rations in efforts of reducing dependency? By establishing garden plots as well as bamboo plantations within close proximity of the camps, concerns for outsourcing materials, late deliveries and the use of subpar or lesser quality materials are reduced.

<sup>136</sup> Programme Report 2012, January to June. Thailand Burma Border Consortium. (40)

Another significant element contributing to Mae La's parasitic relationship with Thailand is their dependency on unsustainable fuel sources. TBBC provides charcoal to all households in the camp to ensure all have sufficient fuel to support their cooking and water heating needs. The current average is 8 kg per person/per month however in 2004 a consultant calculated that an average household needed "190 mega joules (MJ) of heat per person/per month which equated with an increased ration of 8.6 kg."<sup>137</sup> Because TBBC is not in a position to provide this increase in fuel needs, refugees have had to supplement with firewood gathered from nearby resources.



Swine Farm and Agricultural Plots in Mae La Source: [www.steveandamber.net](http://www.steveandamber.net) (2010)

---

<sup>137</sup> Programme Report (2012) P.43

Out of TBBC's activities, transportation has the most "significant direct negative impact on the environment in terms of greenhouse gas and pollutant emissions."<sup>138</sup> The raw materials for charcoal production are often "sourced from Cambodia and Lao People's Democratic Republic adding to significant concerns for greenhouse gas emissions."<sup>139</sup> Most deliveries are transported by truck directly to the warehouses located within the camp. Unfavorable storage and packaging of charcoal, and in some cases their close proximity to water sources all have contributed to water, soil and air contamination in the camp. The most significant impact of consuming charcoal for fuel is the daily burning and air pollution that results from cooking. Smoke inhalation by residents is the leading cause of respiratory problems. Not only is the use of coal detrimental to refugees physical health, a vulnerability analysis of refugees daily activities reveals that a significant amount of time is spent everyday preparing and

---

<sup>138</sup> Morgado, David. (2012) *Environmental Impact Assessment: Organizational, Program and Field Activities*. Thailand Burma Border Consortium. (4)

<sup>139</sup> Morgado (2012). P.12

cooking the rations provided by TBBC.<sup>140</sup> This preparation does not necessarily account for the time spent collecting firewood to supplement the coal rations adding to questionable viability of such a fuel source where only nineteen percent of households are able to fully meet their basic fuel needs.<sup>141</sup> The provision of household biogas digesters serves as an alternative fuel source with multiple benefits. The following diagram illustrates the daily routine activities of both male and female refugees living in Mae La. It shows the time allotted every day towards food preparation and the time spent cooking. Keeping in mind that it does not necessarily account for the effort and time required for seeking alternative fuel sources; i.e. collecting their own firewood to supplement coal rations.

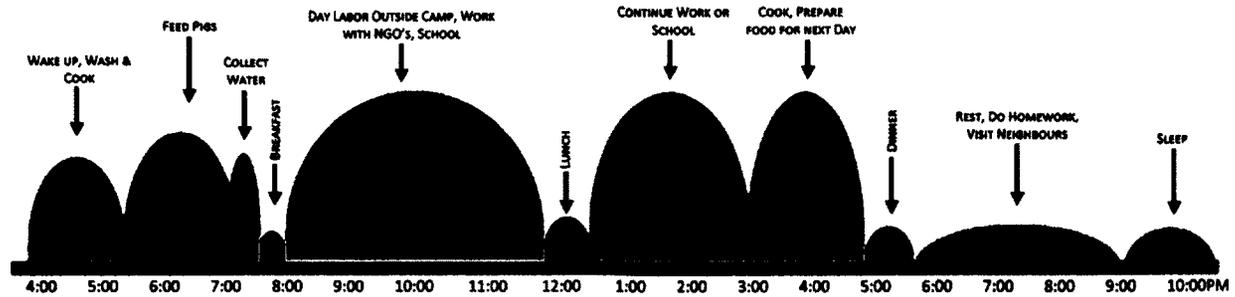
---

<sup>140</sup> Caldwell, Richard. Ravesloot, Bruce. (2011) P.144

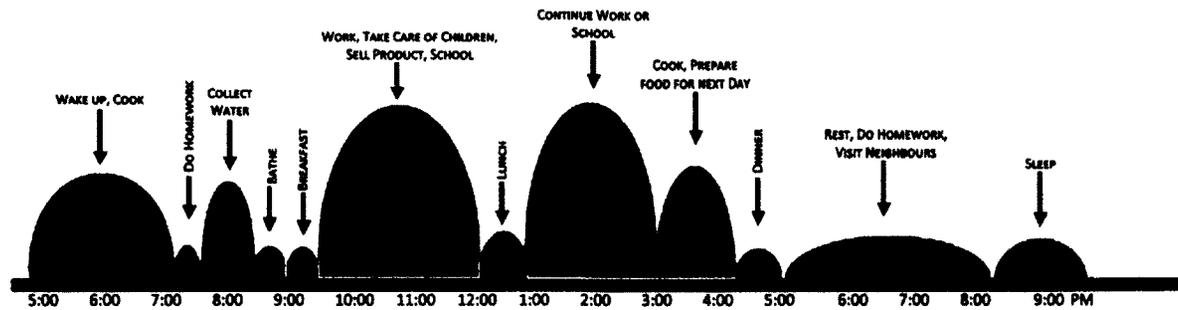
<sup>141</sup> Caldwell, Richard. Ravesloot, Bruce. (2011) P.96

**DAILY TIME USE AND LEVEL OF EFFORT OF MEN AND WOMEN IN MAE LA:**

**DAILY TIME USE OF MALES**



**DAILY TIME USE OF FEMALES**



2011 BASELINE LIVELIHOOD VULNERABILITY ANALYSIS OF REFUGEE CAMPS ALONG THE THAILAND-BURMA BORDER - TANGO INTERNATIONAL INC.

According to a survey, the preferred occupation of refugees within camps is the raising of livestock.<sup>142</sup> The use of animal waste along with organic waste and grey-water from cooking and washing serve as input for anaerobic digestion. In anaerobic digestion, "bacterium that results in the absence of oxygen is responsible for the decomposition of organic matter, converting it into a methane and carbon dioxide mixture."<sup>143</sup> Outputs of methane gas, digestate or slurry and the potential for electricity generation can be used for cooking, fertilization of garden plots and improvement of living conditions respectively. The use of slurry over regular manure for fertilizer has many advantages. The slurry, "rich in organic fertilizers and nutrients, does not release an offensive odor, reduces attraction of insects and lessens the release of excessive amounts of ammonia, phosphorous and nitrogen into the environment that manure does."<sup>144</sup> An environmental impact

---

<sup>142</sup> Duffy, W. Robert. *Strengthening Protection Capacity Project – Livelihoods Component*. Phase One – Tak Province. ILO and UNHCR. (22)

<sup>143</sup> Rajendran, Aslanzadeh, Tahezadeh. (2012). *Household Biogas Digesters – A Review*. University of Borås, Sweden. (2)

<sup>144</sup> Werner, Stohr, Hees. (1989). *Biogas Plants in Animal Husbandry*. Deutsches Zentrum für Entwicklungstechnologien. (25)

report revealed that sixty-five percent of residents in Mae La experienced smell pollution suggesting its relevance as something to consider.<sup>145</sup> Another major advantage of employing biogas production is that it can be carried out in many conditions in reactors of different scales from household production to large-scale plants contributing to its affordability and sustainability. Although the design of bio-digesters varies depending on geographical context and climatic conditions, the warm and humid soil conditions that encourage anaerobic digestion make it an ideal environment for underground digesters in Thailand. Biogas can be stored in a "pressurized tank, floating drum storage, gas cylinders or gasbags in order to reduce low flow rates during cooking."<sup>146</sup> The following diagrams illustrate the biogas production process, demonstrating the flow of input and return on output, while the second reveals the benefits of adopting such a system.

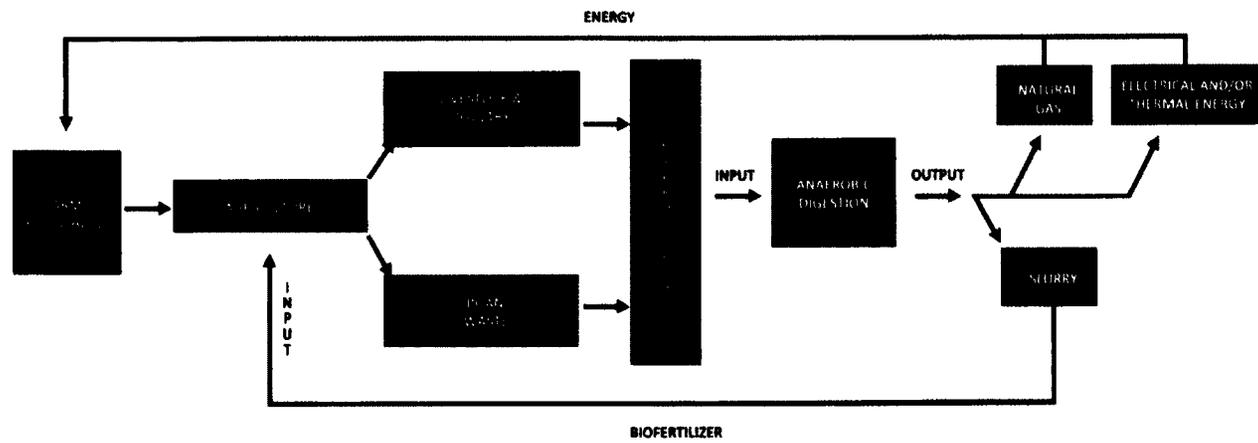
---

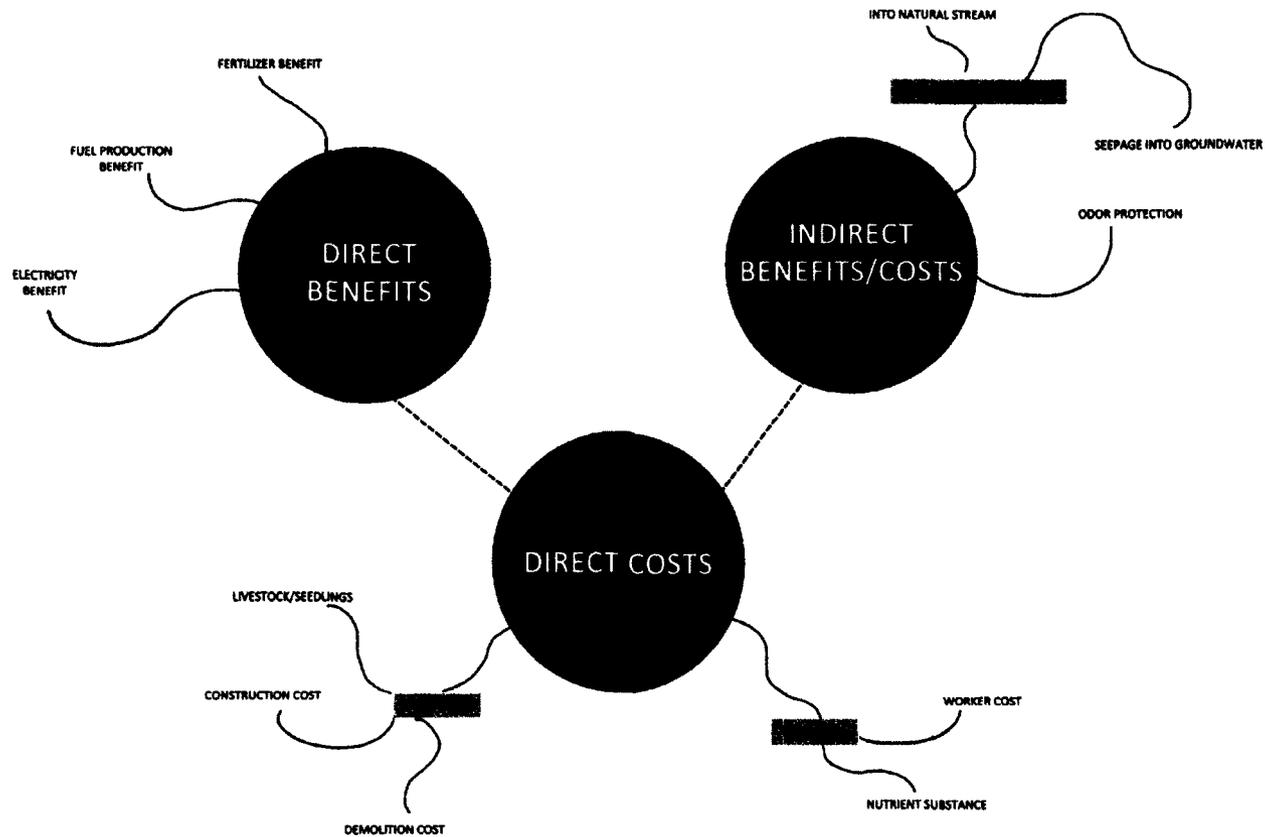
<sup>145</sup> Thadaniti, U-Cha, Lambregts, Bhromkaew, Prombang, Toommakorn, Wijtkosum. (2011) P.137

<sup>146</sup> Rajendran, Aslanzadeh, Tahezadeh. (2012) P.12

# BIOGAS DIGESTER:

Source: SV





REFERENCE: THAILAND SWINE FARM BIOGAS IMPLEMENTATION PROGRAM/POLICIES

Drawn by: SV

In order to raise livestock within the camp, the livestock department of the RTG dictates that only “one pig house is permitted per person in order to ensure that pig density is low and controlled and that every pig has to be in a pig house.”<sup>147</sup> By creating a communal livestock area where each individual can personally manage his or her own livestock ensures the efficient management of waste, effectively reducing potential loss of valuable input for biogas production and minimizing environmental impact from wastewater runoff from livestock.

Geologically the area surrounding Mae La camp is composed of sandstone, sandstone powder and limestone. According to an environmental impact assessment and the soil map of Thailand, “all the refugee camps are located in steep land, made up of acid to intermediate rocks with mainly red-yellow podzolic soils with occasional limestone outcrops” and

---

<sup>147</sup> Morgado, David. (2012) P.37

fairly good drainage capacity.<sup>148</sup> Podzols are relatively “sandy with little or no vegetation, which means that they are easily susceptible to landslides and erosion.”<sup>149</sup> Generally they are poor in nutrients and therefore the composting and slurry produced from the biogas digesters will be important for improving the soils fertility.

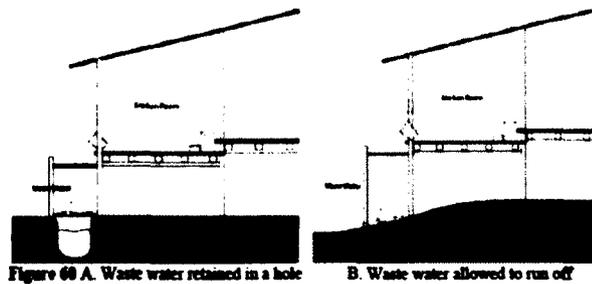


Soil erosion caused by direct pouring of wastewater.  
Source: Thadaniti, U-Cha, Lambregts, Bhiromkaew, Prombang, Toommakorn, Wjitkosum. (2011)

---

<sup>148</sup> Ibid P.18  
<sup>149</sup> Ibid P.18

Waste concerns surrounding Mae La camp involve both solid and liquid waste. Liquid waste includes both wastewaters from cooking and kitchen use as well as wastewater from the latrines. Without adequate drainage infrastructure in place, it has become customary to dump wastewater right beside ones shelter allowing it to run off into



(Left) Waste water retained in a hole (Right) Wastewater allowed to run off  
Source: Thadaniti, U-Cha, Lambregts, Bhiromkaew, Prombang, Toommakorn, Wijitkosum. (2011)

the streets. Improper disposal of wastewater could cause ground water contamination, soil erosion, and floods.<sup>150</sup>

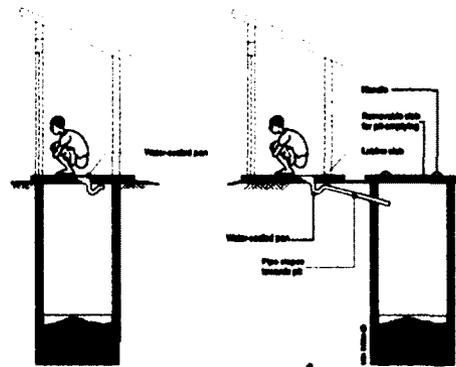
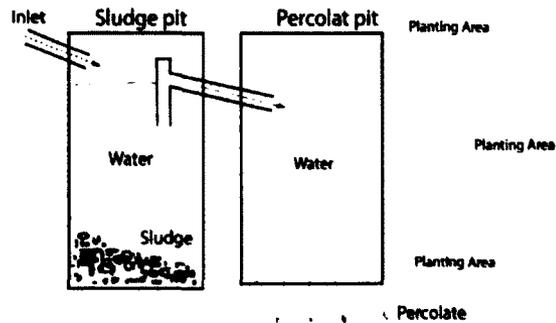
Furthermore, the design of current latrines and their respective septic pits are not protected from seepage into nearby groundwater affecting nearby natural and potable water sources. Solidarités International is the NGO responsible for sanitation and water management in Mae La camp. Most latrines are built outside of the house and comprise different designs. Solidarités covers thirty-five percent of the latrines in Mae La, consisting of a sludge and percolation pit.<sup>151</sup> The rest still use pour flush to natural septic tanks with no protection from groundwater contamination.<sup>152</sup> The following diagrams illustrate the differences between both latrine designs.

<sup>150</sup> Thadaniti, U-Cha, Lambregts, Bhiromkaew, Prombang, Toommakorn, Wijitkosum (2011)

P.22

<sup>151</sup> *ibid.* P.92

<sup>152</sup> Caldwell, Richard. Ravesloot, Bruce. (2011) P.84



Above: Solidarités Latrine System Below: Regular Pour Flush Latrine  
 Source: Thadaniti, U-Cha, Lambregts, Bhiromkaew, Prombang, Toommakorn, Wijitkosum. (2011)

While NGO's have set up and organized solid waste collection and disposal systems, "official dump sites sometimes lack proper measures to prevent contamination of ground and surface water: either they were not lined with plastic or were close to water sources."<sup>153</sup> COEER is responsible for waste management and organizes garbage collection twice a week in Mae La. Otherwise trash that was not collected is discarded inside the camp attracting disease and emitting foul smells. Solid waste consists mainly of "plastic, glass and paper with organic waste disposed of in concrete ring pits with fitted covers and removable access plates."<sup>154</sup> In efforts of minimizing material waste, the fish paste plastic drums (60 liters) distributed to households can be reused for concrete post production while organic waste can serve as another input for anaerobic digestion.

<sup>153</sup> Thadaniti, U-Cha, Lambregts, Bhiromkaew, Prombang, Toommakorn, Wijitkosum. (2011) P.15

<sup>154</sup> Bowyer, Thomas. (2002). *Evaluation of the ECHO Actions in Favor of the Burmese Refugees in Thailand: Water and Sanitation*. GFE Consulting Worldwide. (17)

Two main water sources exist for residents in the camp – non-potable and potable. Potable water for drinking and cooking is made available through public tap stands while non-potable water is used generally for dish washing, laundry, bathing etc. and is made accessible through the main wells. Numerous reservoirs feed the main water supply – the river that runs through the camp, naturally flowing springs and groundwater wells. The water from the taps and wells are regulated and made available for three-hour intervals in the morning and evening. As a result residents, are forced to travel to the nearest source to collect water in containers and return back to their household for use. It is common practice to “withdraw as much water as is available and store excess in the home.”<sup>155</sup> Water is either pumped from the river and/or naturally flows from the springs into storage tanks, where water is treated and disinfected by chlorination and finally released to the pipes, reaching the taps solely by gravity.<sup>156</sup>

<sup>155</sup> Rahimi, Navid. (2008). *Modeling and Mapping of Mae La Refugee Camp Water Supply*. Massachusetts Institute of Technology. (33)

<sup>156</sup> Rahimi, Navid (2008). P 18



Water consumption activities in open areas



Open waterway channels from runoff



Accumulated pollution of environment in Mae La.

Source: Thadaniti, U-Cha, Lambregts, Bhiromkaew, Prombang, Toommakorn, Wjitkosum. (2011)

According to a study of the water network in Mae La, an analysis of tap proximity to respective households was conducted. Since the “amount of time needed to collect water (round-trip) correlates strongly with consumption, assuming a comfortable walking pace of 75-85 meters per minute, tap stands were analyzed with a maximum allowable tap stand distance of 115 meters to determine efficient distribution and access amongst households.”<sup>157</sup> A similar analysis was carried out involving rope-pump wells and their proximity to nearest households. Since it is “customary to bathe and bring their laundry to the well to wash, large amounts of water do not need to be carried back to the house increasing the maximum allowable distance to 180 meters.”<sup>158</sup>



Tham Hin Refugee Camp: Queue for water collection. Becomes a social aspect of daily activity

Source: [www.stambuguysneverdies.blogspot.ca/2010/](http://www.stambuguysneverdies.blogspot.ca/2010/)

---

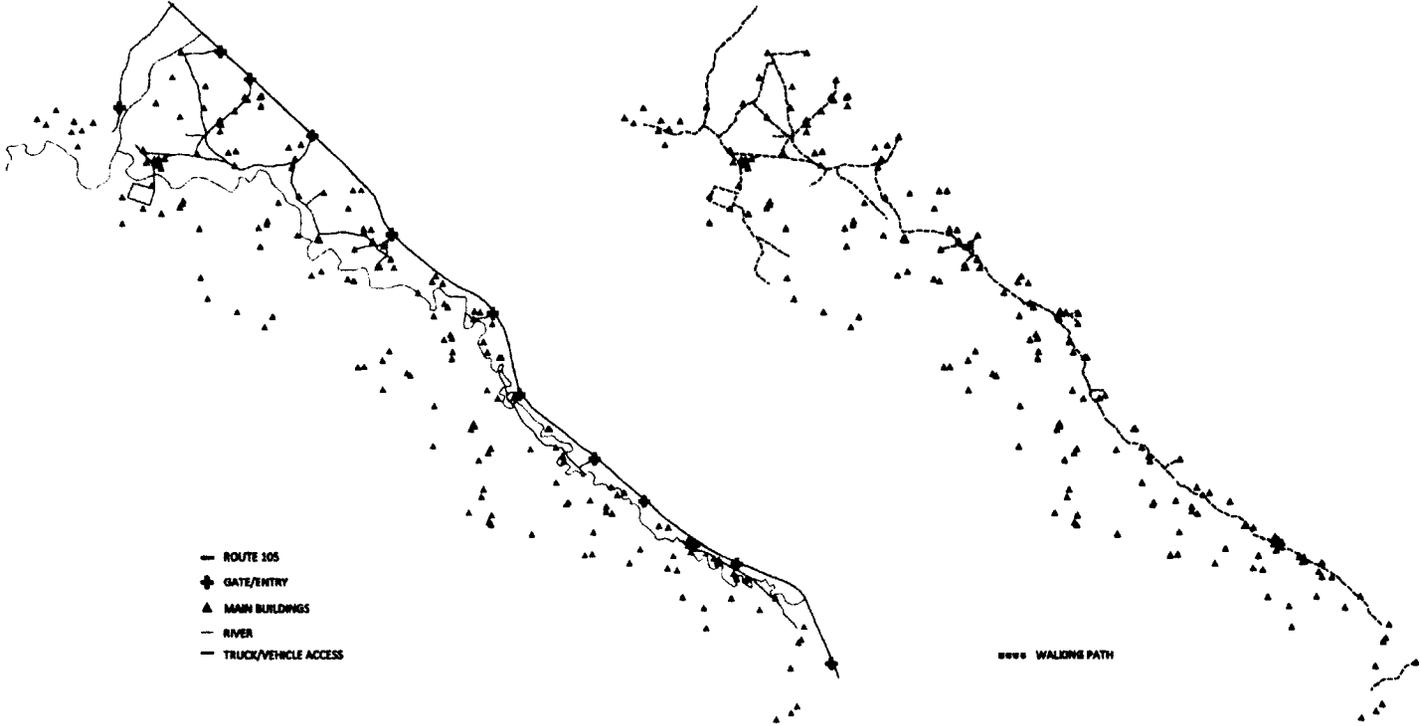
<sup>157</sup> Bahannon, R. (1997). *Comfortable and Maximum Walking Speed of Adults aged 20-79 Years: Reference Values and Determinants*. Oxford University Press.

<sup>158</sup> Harding, Rahimi, Vater (2008). *Water Treatment and Distribution System Improvements for Mae La Refugee Camp, Thailand*. Massachusetts Institute of Technology. (27)

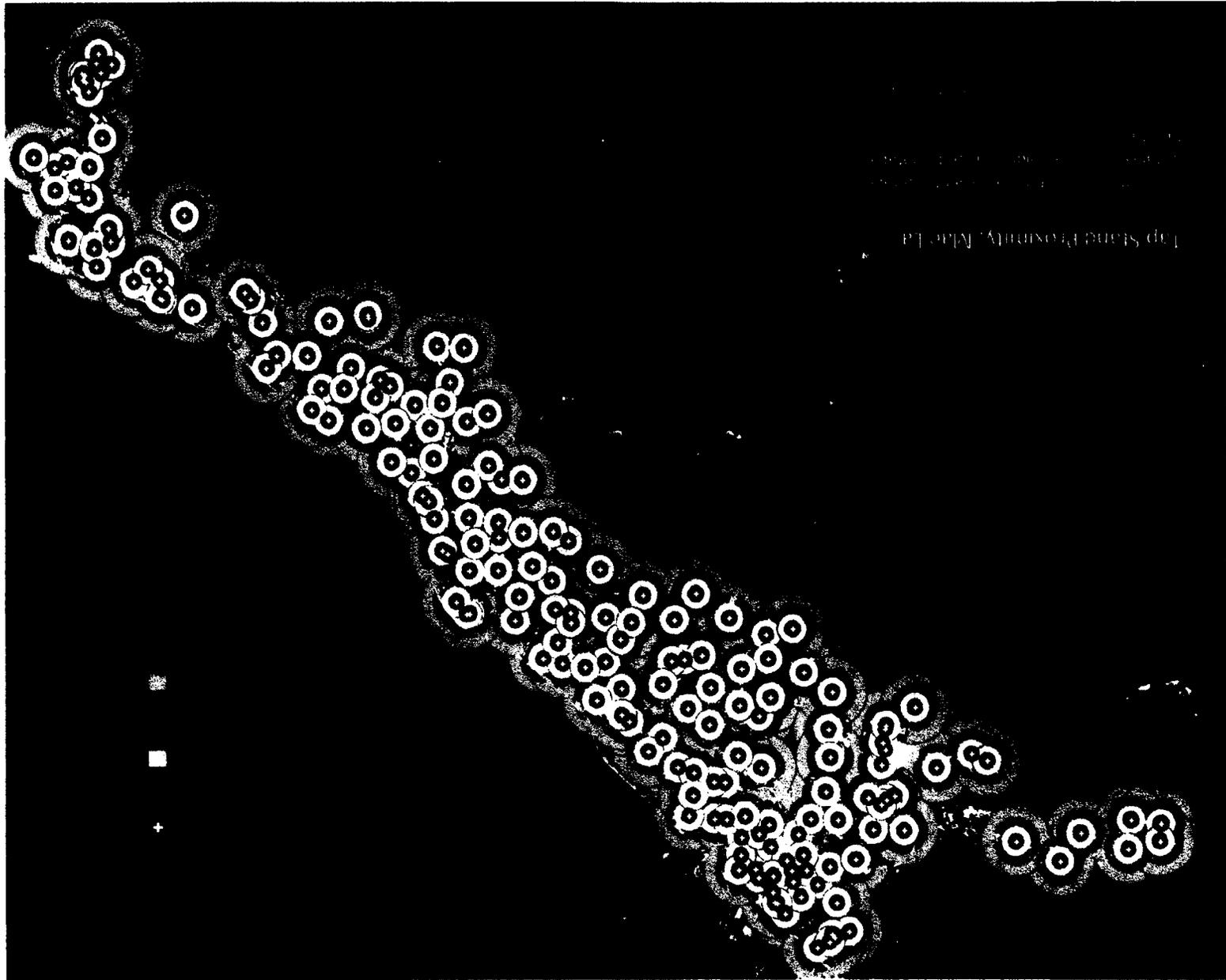


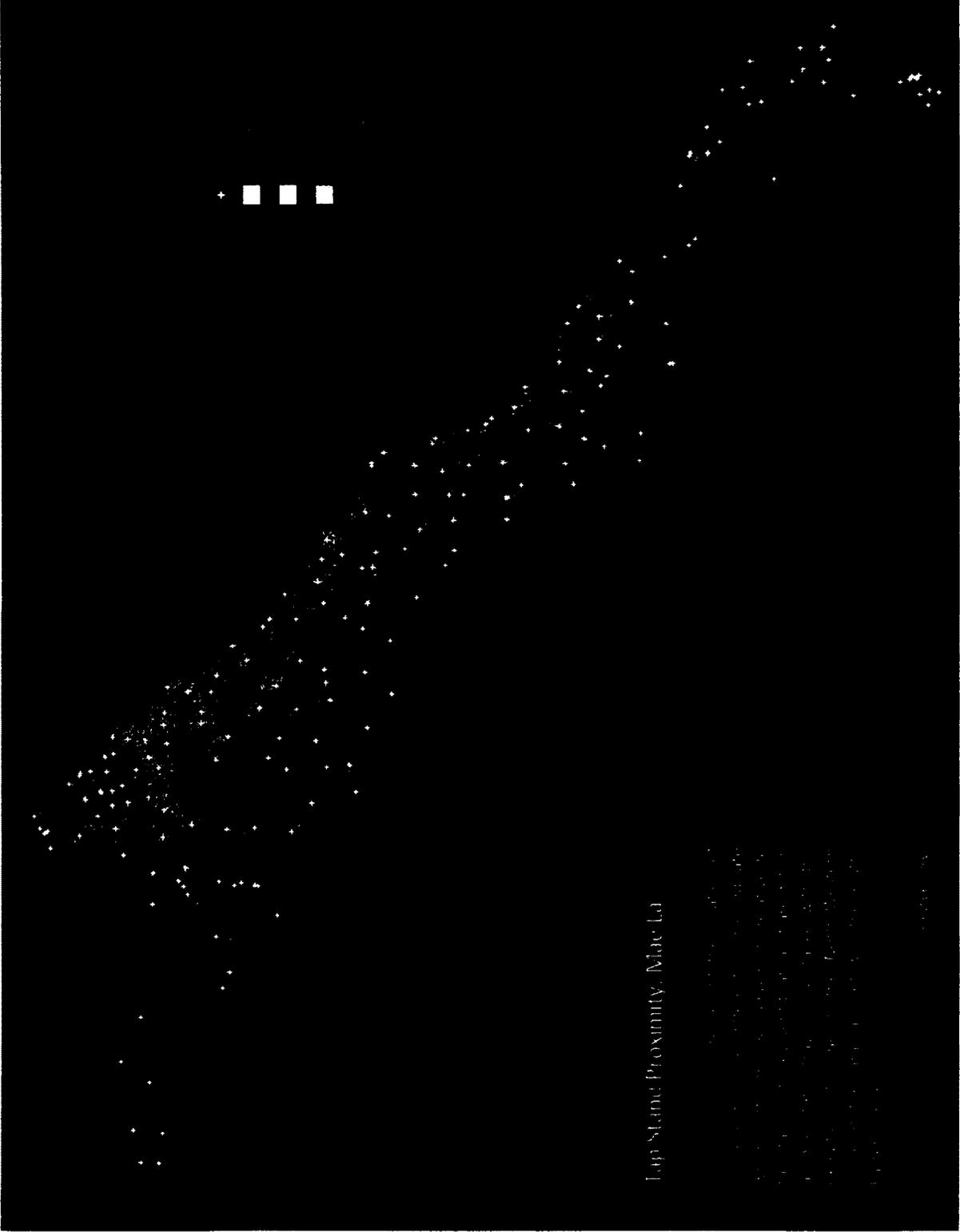
Site Plan, Mao La

Circulation Diagrams, Mae La







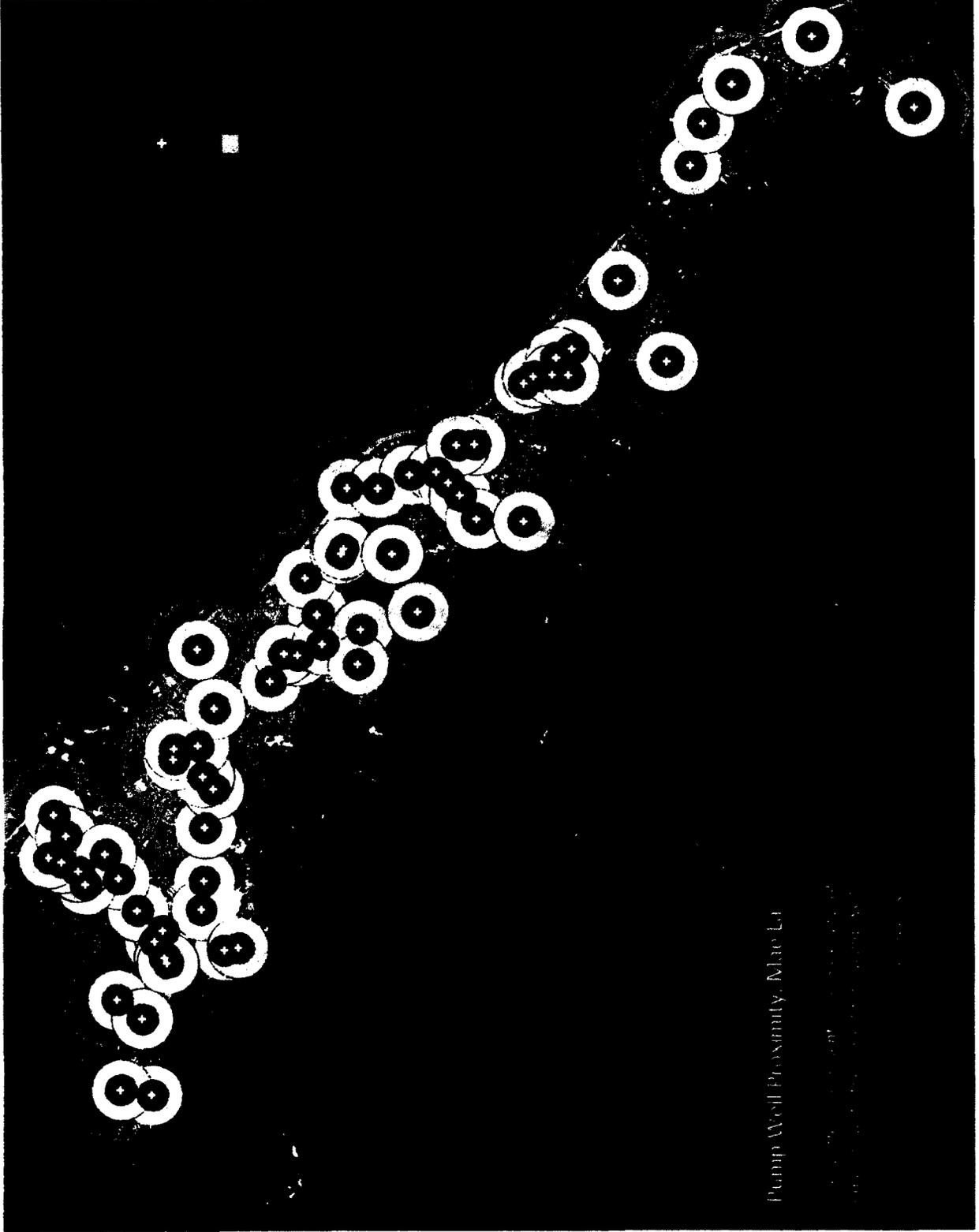


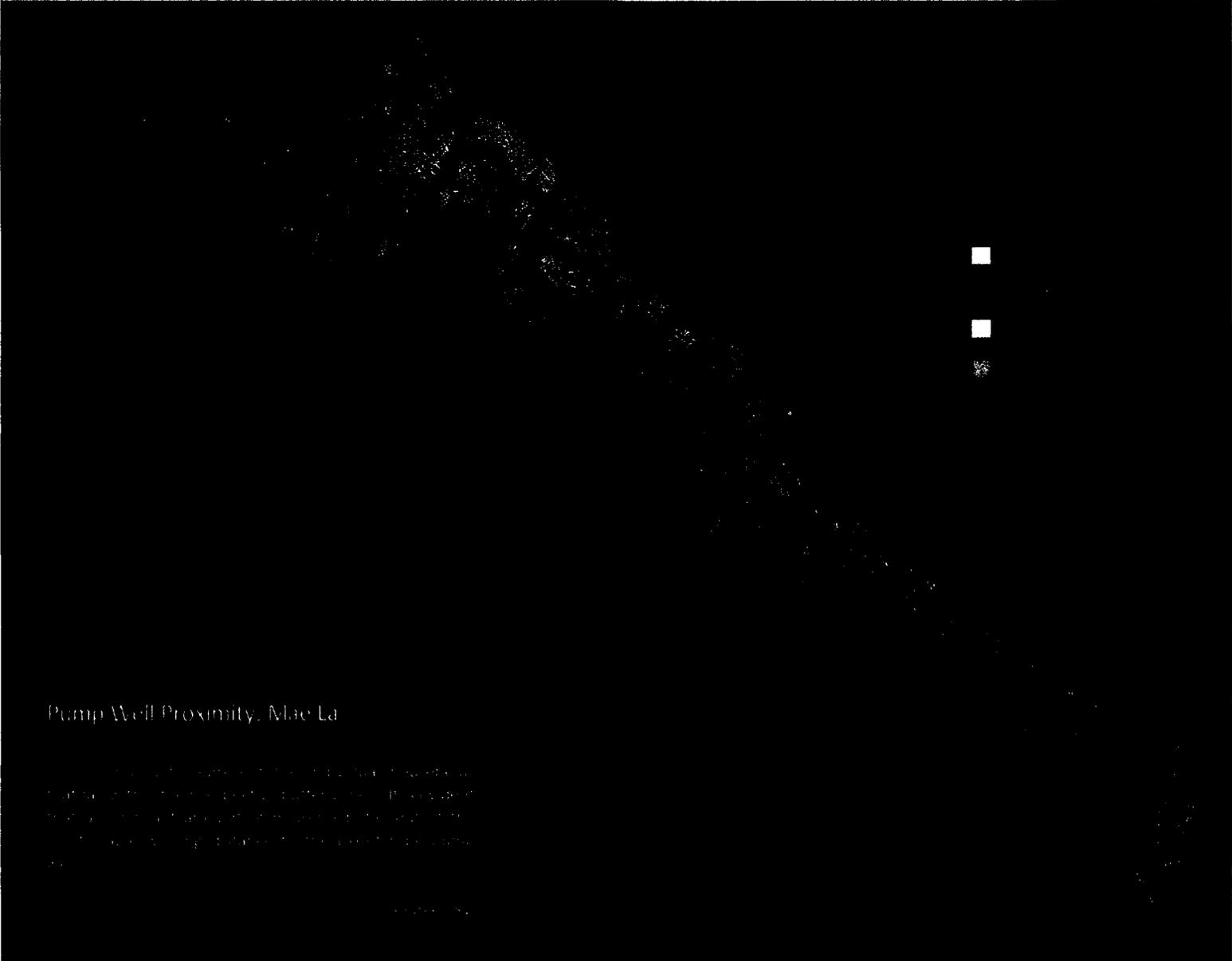
Top Stand Proximity, Mac La

The following table provides a summary of the data points shown in the scatter plot above. The columns represent the Top Stand Proximity (X-axis) and Mac La (Y-axis) values for each data point.

| Top Stand Proximity | Mac La |
|---------------------|--------|
| 0                   | 0      |
| 10                  | 10     |
| 20                  | 20     |
| 30                  | 30     |
| 40                  | 40     |
| 50                  | 50     |
| 60                  | 60     |
| 70                  | 70     |
| 80                  | 80     |
| 90                  | 90     |
| 100                 | 100    |

Source: [Source information]





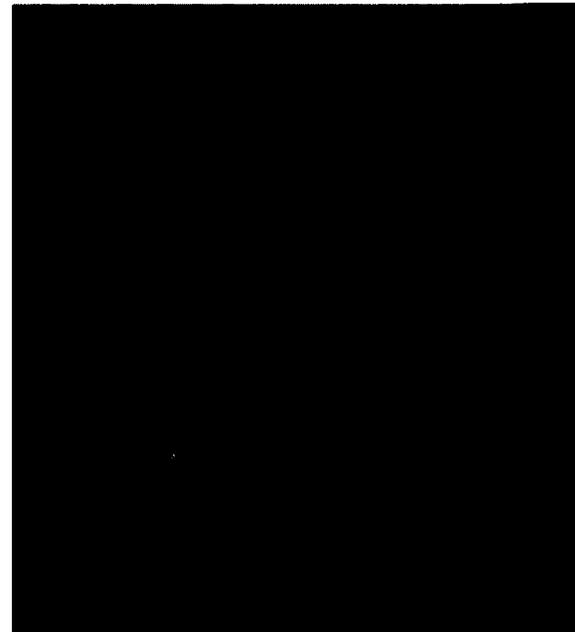


Now lets turn our gaze towards shelter in the camp. As previously mentioned, bamboo is used principally in building structure, ceiling joists and rafters, and are traditionally tied together using rattan or split bamboo. Eucalyptus, being a hardwood and more resilient, is on occasion used for the stilts. Currently TBBC is looking at ways of improving the durability of the bamboo in order to prolong continual replacement. As a result, the process of bamboo “smoking and leaching increases the lifetime of bamboo poles.”<sup>159</sup> Split bamboo culms are the source of material for woven partition and exterior walls. While houses vary in size, on average they accommodate five occupants and an overall area of four by five meters.<sup>160</sup> The three predominant typologies found in the camp are one-story, two-story and one-story raised. One story homes tend to be located along main streets and majority are used to run a business (grocery store, saloon, convenience store etc.)

---

<sup>159</sup> Morgado, David. (2012) P.33

<sup>160</sup> Caldwell, Richard. Ravesloot, Bruce. (2011) P.34



Model of existing shelter.

Source: SV

Source: Thadaniti, U-Cha, Lambregts, Bhromkaew, Prombang, Toommakorn, Wijtkosum (2011)



ONE STOREY



ONE-STOREY RAISED

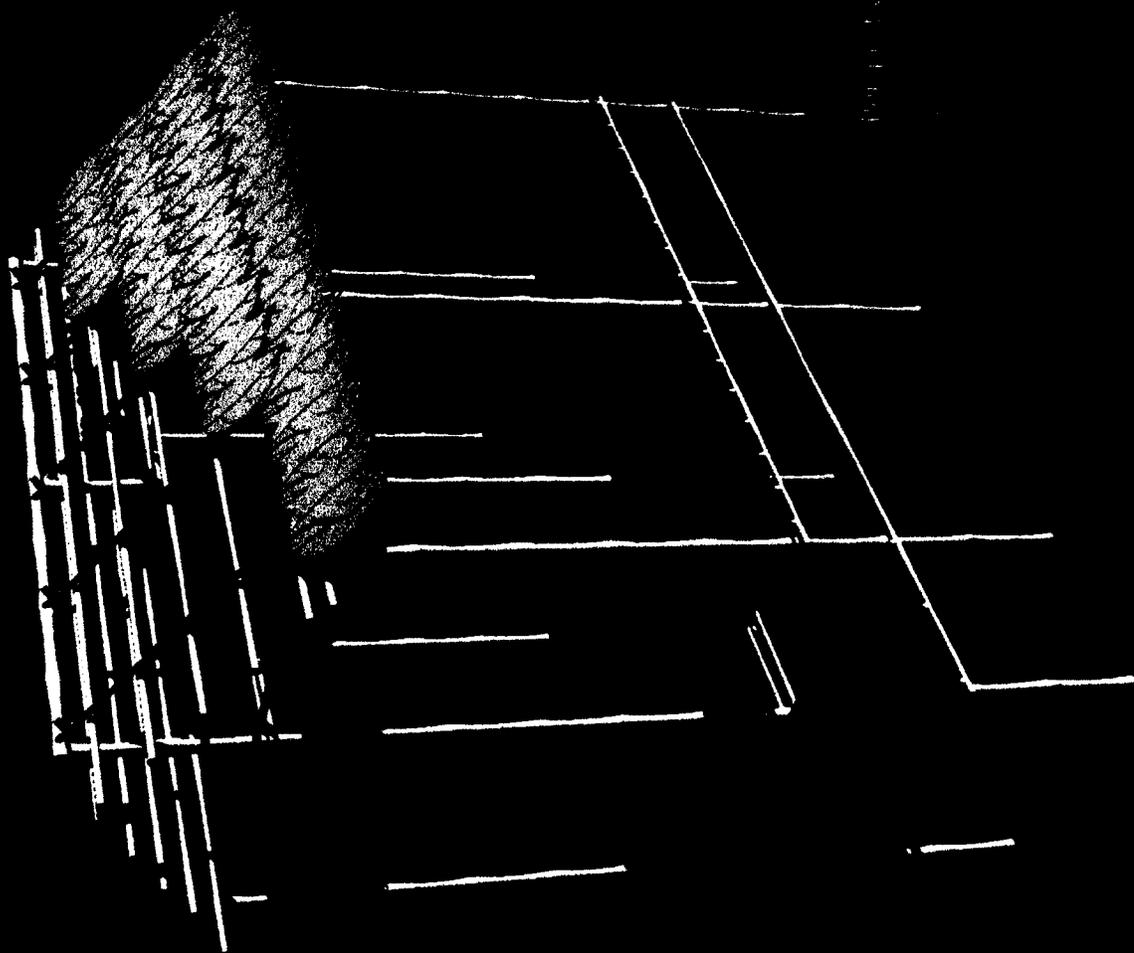


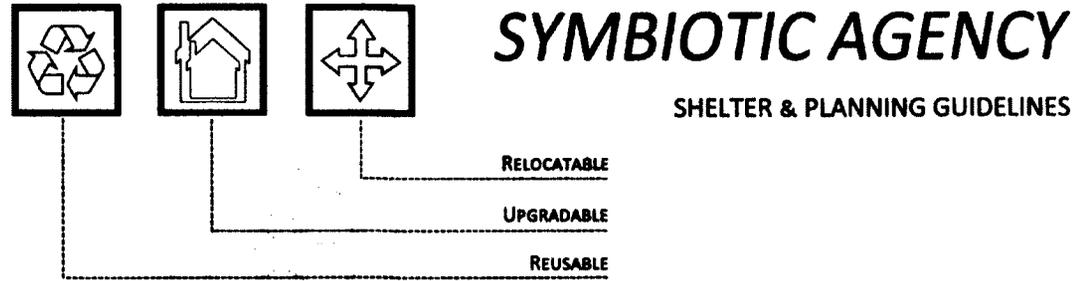
TWO STOREY



Projective and Reproductive Similarity



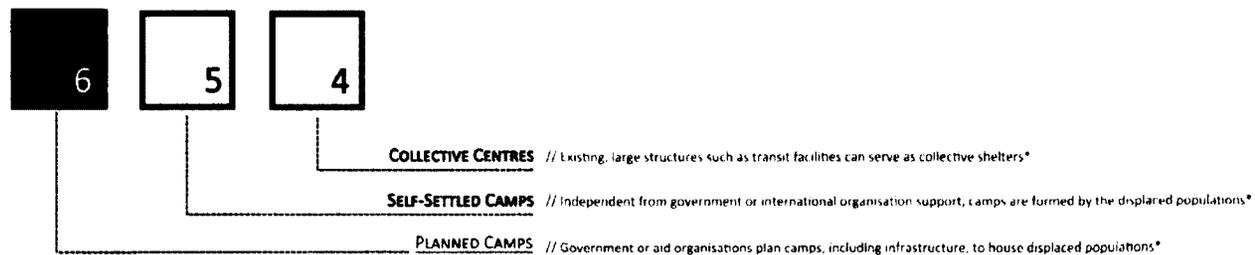
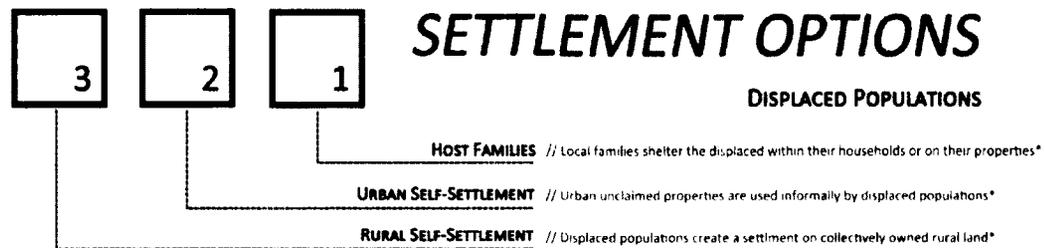




# **SYMBIOTIC AGENCY**

SHELTER & PLANNING GUIDELINES



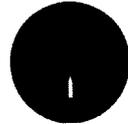


\*Transitional Shelter Guidelines (2011). DFID IOM OIM Shelter Centre P 17

## MAJOR ISSUES



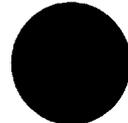
Reliance on coal for cooking



Reliance on local forest reserves for firewood and shleter materials



Water managment issues resulting from improperly built septics and dumping of wastewater



Strict site perimeters



Restrictions on mobility & employment

## CONSEQUENCES



Environmental impact of coal and deforestation  
degradation of local soil and water resources  
& biodiversity



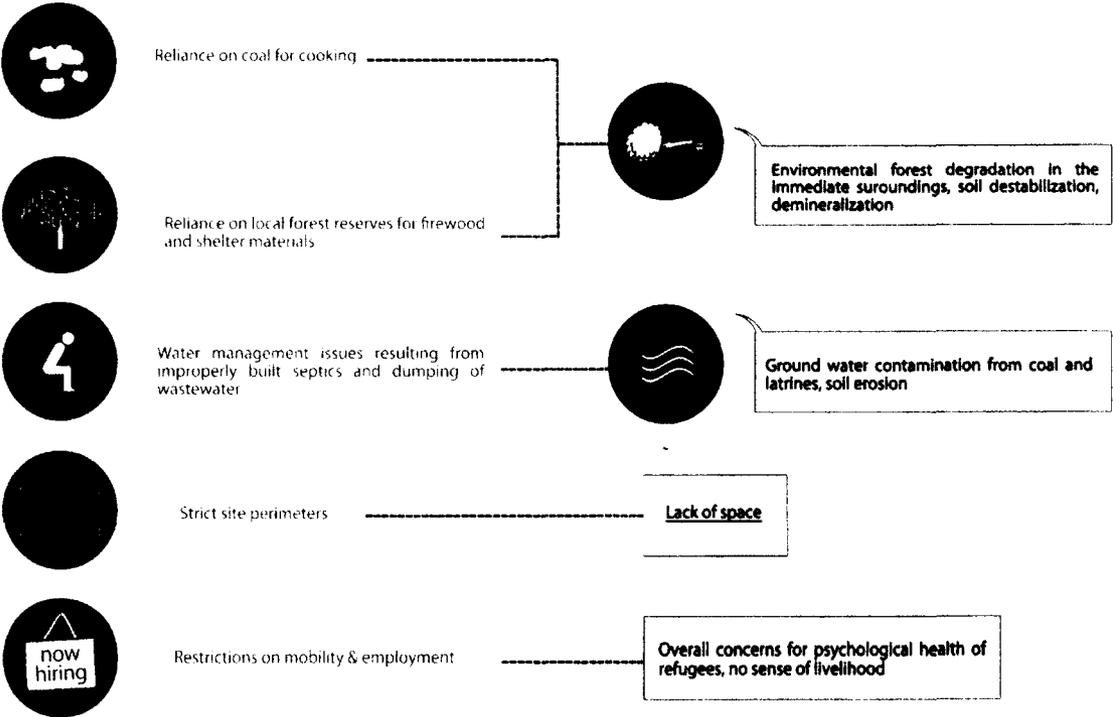
Ground water contamination from coal and  
fertiliser application

Loss of culture

Overall concern for psycholocial health of  
people living in coalfield

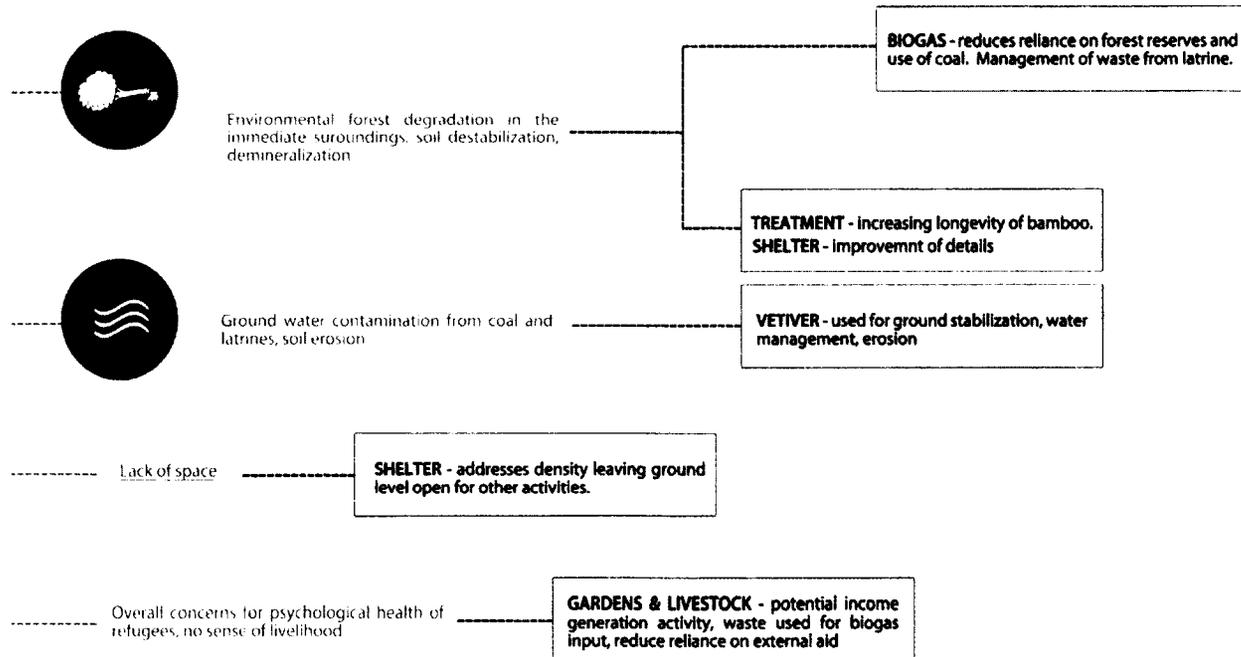
**MAJOR ISSUES**

**CONSEQUENCES**

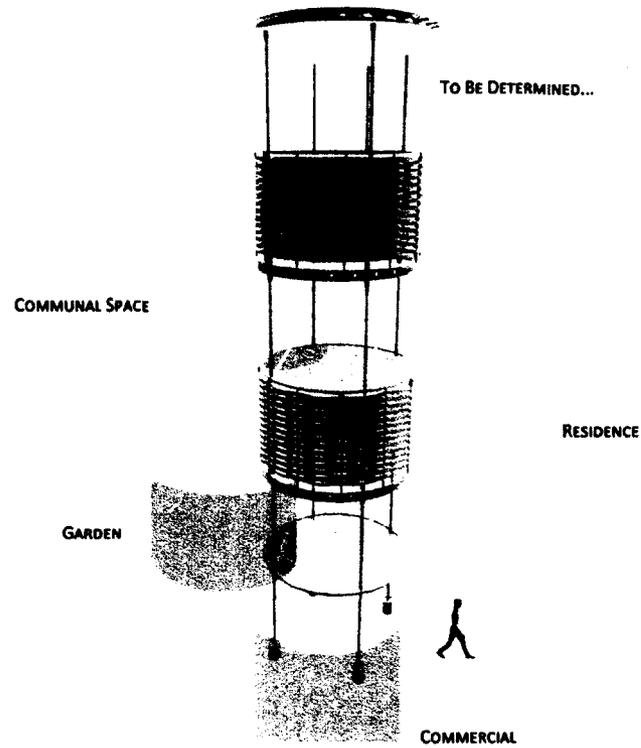


## CONSEQUENCES

## SOLUTIONS



SYMBIOTIC AGENCY // SALLY VANDRISH | 2013



RESIDENCE

RESIDENCE

### Conceptual Rendering

As described in *Spatial Agency*, a level of indeterminacy is left up to the will of its inhabitants. Creating spaces for appropriation allows users to adapt and accommodate different programs over time.

Source: SV

# LABOUR

Selection of labour type is affected by the degree of difficulty and level of participation required

## SELF-HELP



Participants have necessary time and skills. Appropriate when affected communities have a strong tradition of self-building.

## COMMUNITY

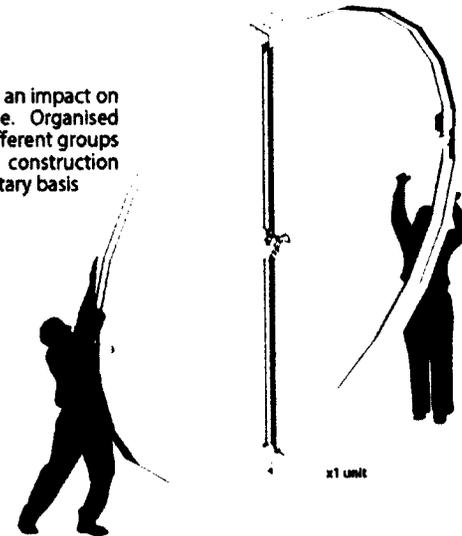


Social participation may have an impact on effectiveness of a programme. Organised as a collective effort where different groups are willing to undertake construction activities together on a voluntary basis

## DIRECT LABOUR



Ensures skilled labour and economically benefits local community. Aid agencies may hire and manage labour directly to undertake construction activities.



Taken from *Transitional Shelter Guidelines* DFID, IOM-OIM, Shelter Centre, 2011, P.75-77

Source: SV

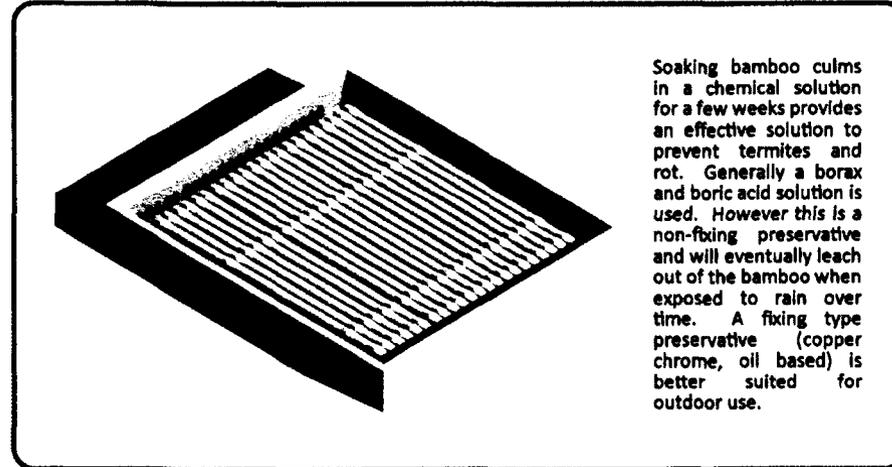
# TREATMENT

## LABOUR

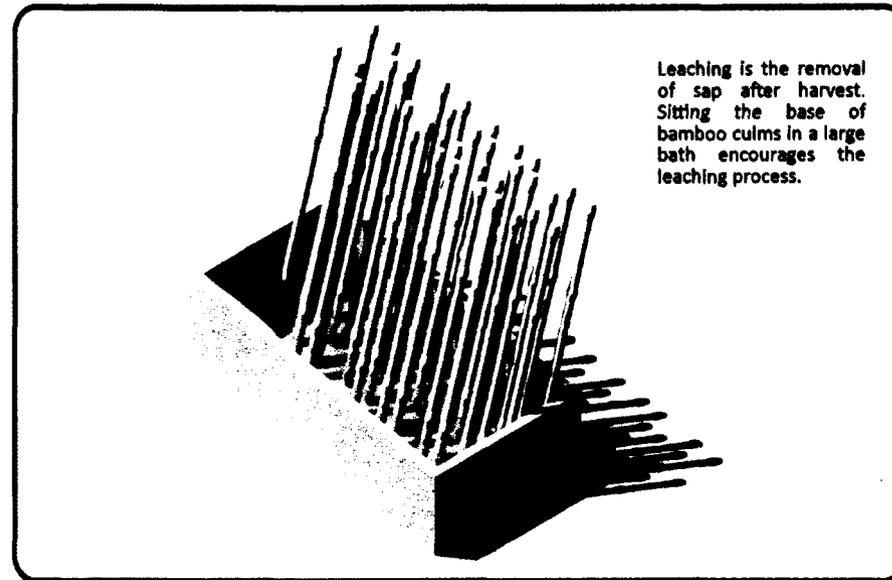


Many methods are available to prolong the durability of bamboo. Untreated, bamboo will last an average of two years, maybe three. With traditional methods or chemical treatment, the longevity of bamboo along with proper construction methods increases the longevity of bamboo exposed to the elements and demonstrates a very versatile building material. With the establishment of bamboo plantations within or near Mae La, inhabitants are educated on when bamboo is mature enough to be cut and when is the appropriate time for harvesting. As a result, treatment of bamboo culms can be executed by the refugees themselves.

1

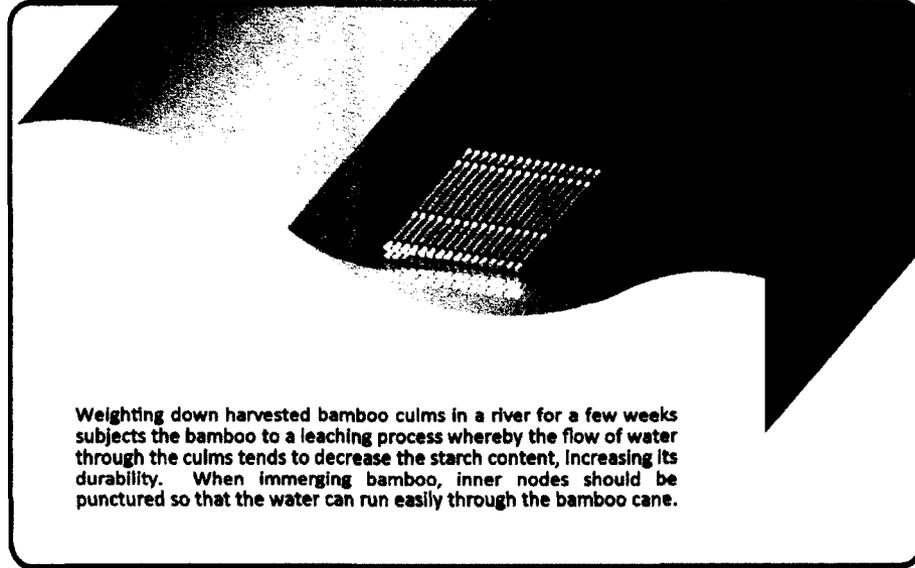


2



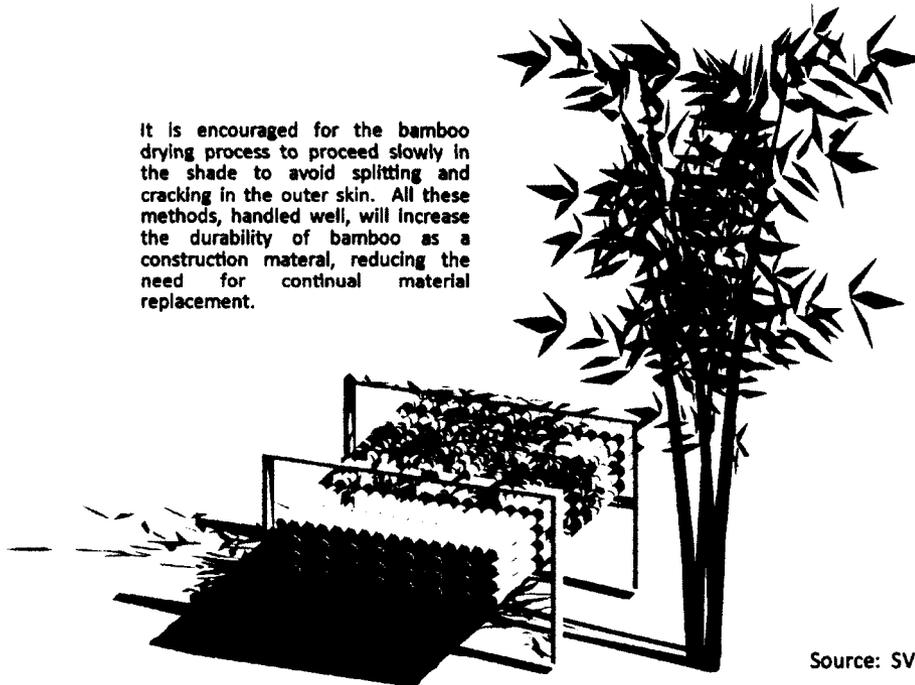
Source: SV

3



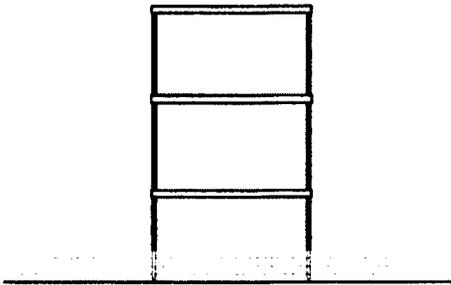
Weighting down harvested bamboo culms in a river for a few weeks subjects the bamboo to a leaching process whereby the flow of water through the culms tends to decrease the starch content, increasing its durability. When immersing bamboo, inner nodes should be punctured so that the water can run easily through the bamboo cane.

4

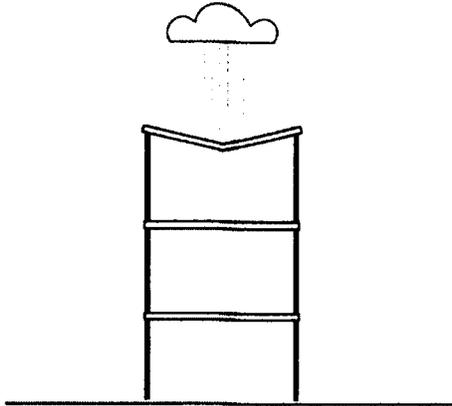


It is encouraged for the bamboo drying process to proceed slowly in the shade to avoid splitting and cracking in the outer skin. All these methods, handled well, will increase the durability of bamboo as a construction material, reducing the need for continual material replacement.

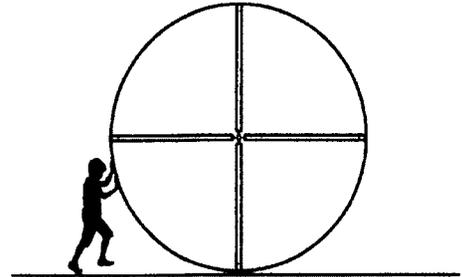
Source: SV



Flooding & Moisture Defense



Rainwater Management



Relocation

Source: SV

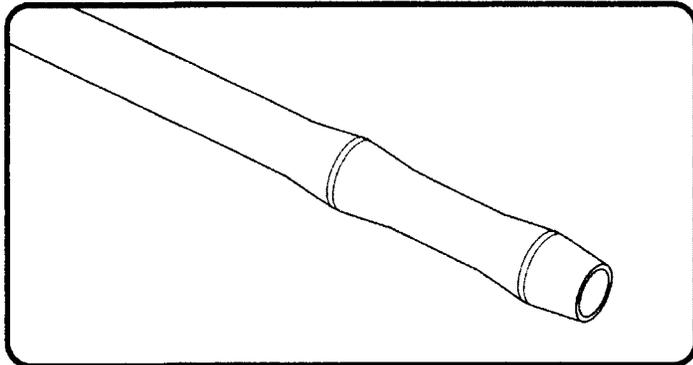
# DETAIL

**LABOUR**

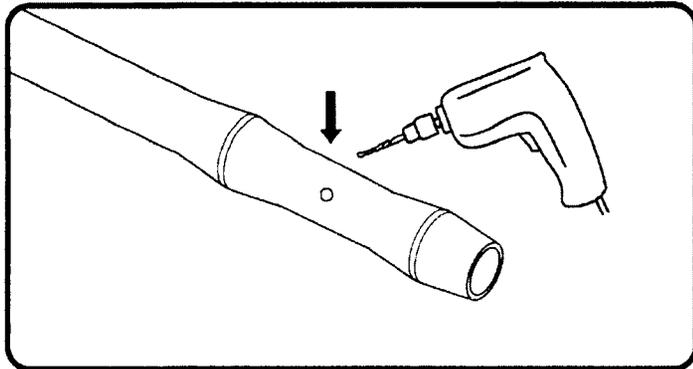


A hole is drilled into bamboo culm between two nodes to create an opening for cement. A threaded rod is inserted into end of culm and cemented in place. Threaded culms can be prepared in advance with desired lengths in order to facilitate quick assembly.

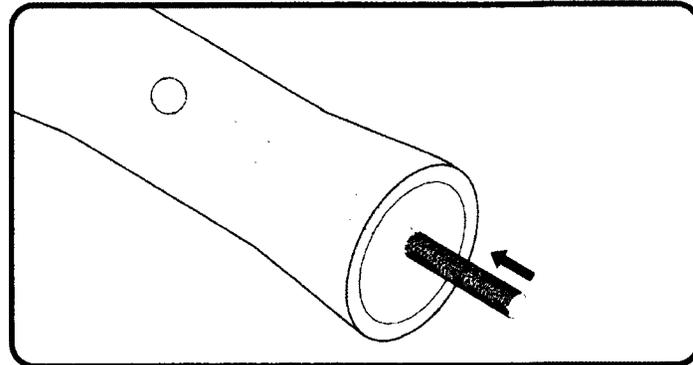
1



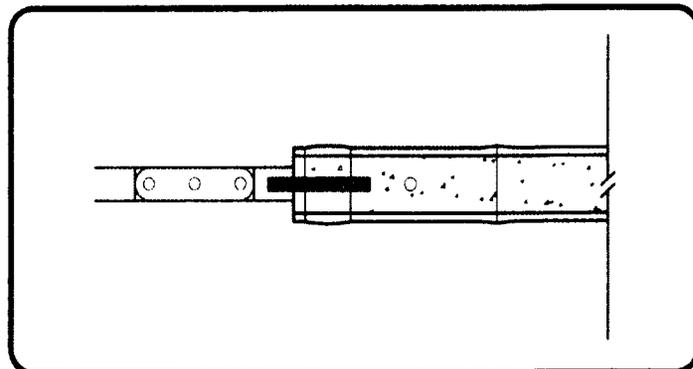
2



3



4



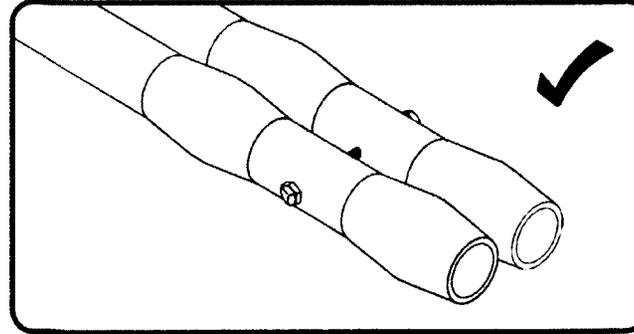
Source: SV

# DETAIL

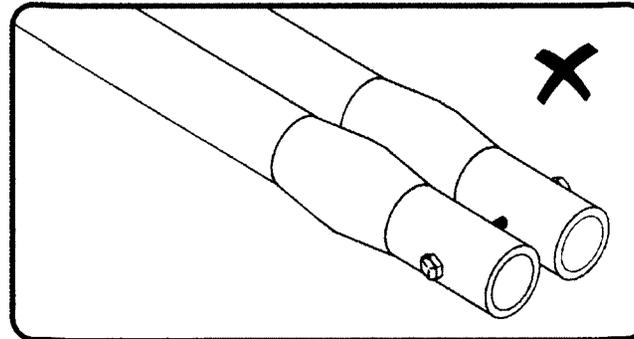
LABOUR 

For any joint, it is imperative that the location of these connections are made between two nodes to prevent crushing and collapse.

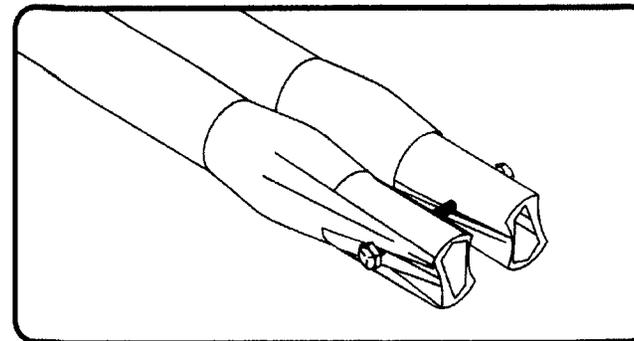
1



2



3



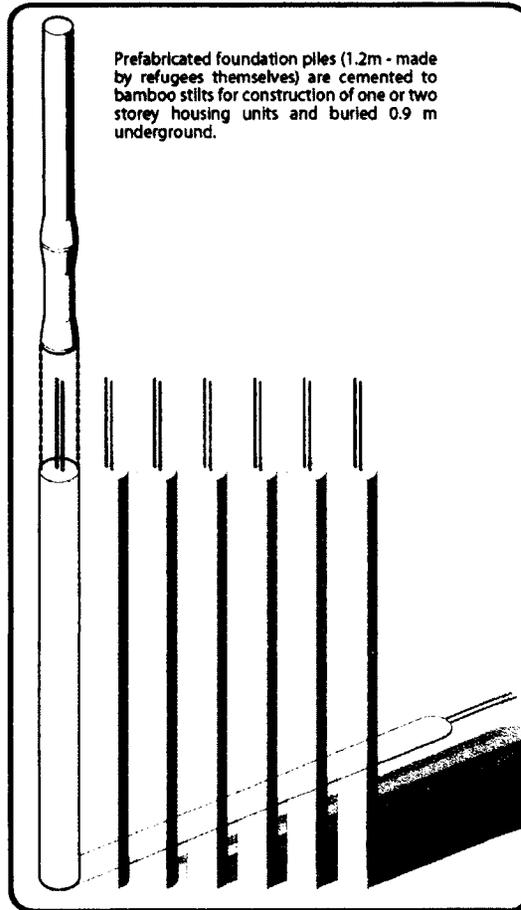
Source: SV

# FOUNDATION

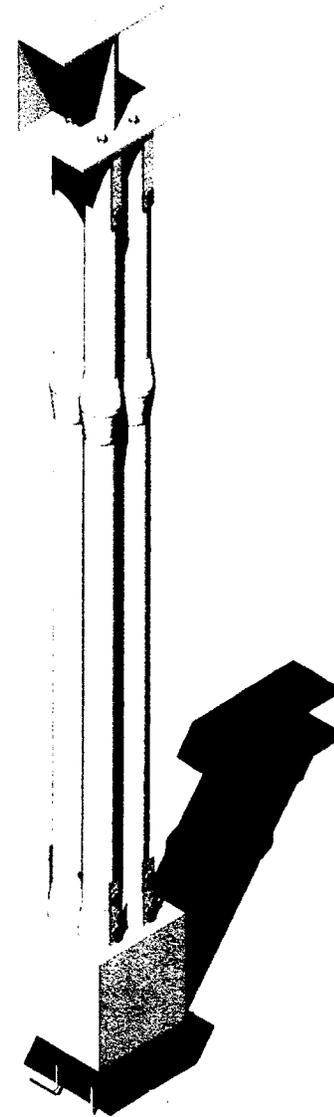
LABOUR

ii & iiiiii

1

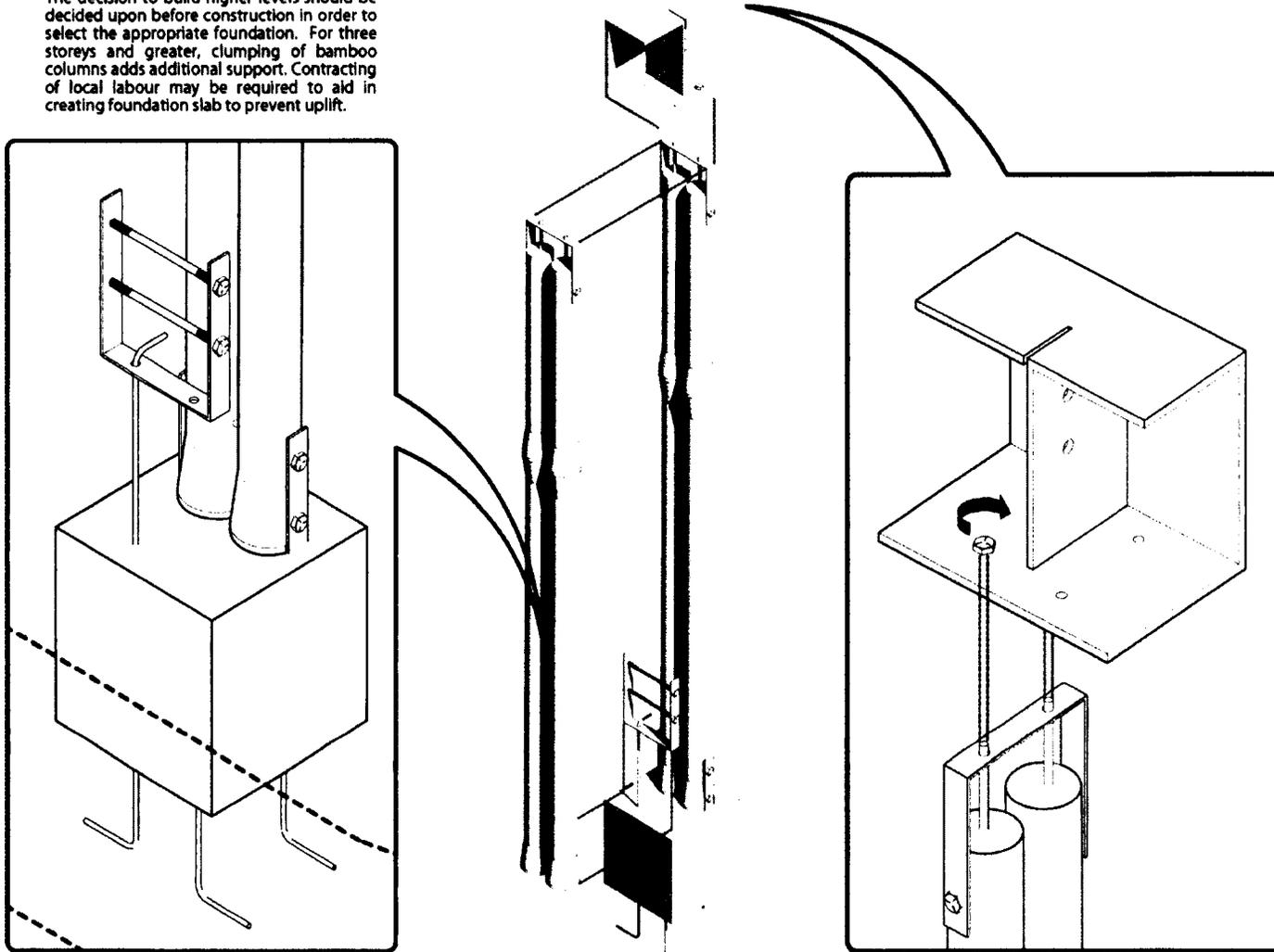


2



Source: SV

The decision to build higher levels should be decided upon before construction in order to select the appropriate foundation. For three storeys and greater, clumping of bamboo columns adds additional support. Contracting of local labour may be required to aid in creating foundation slab to prevent uplift.



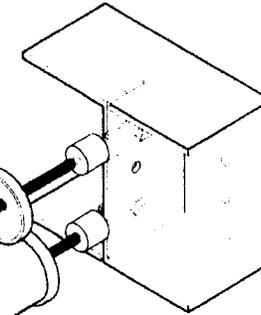
Source: SV

# PHASE 1

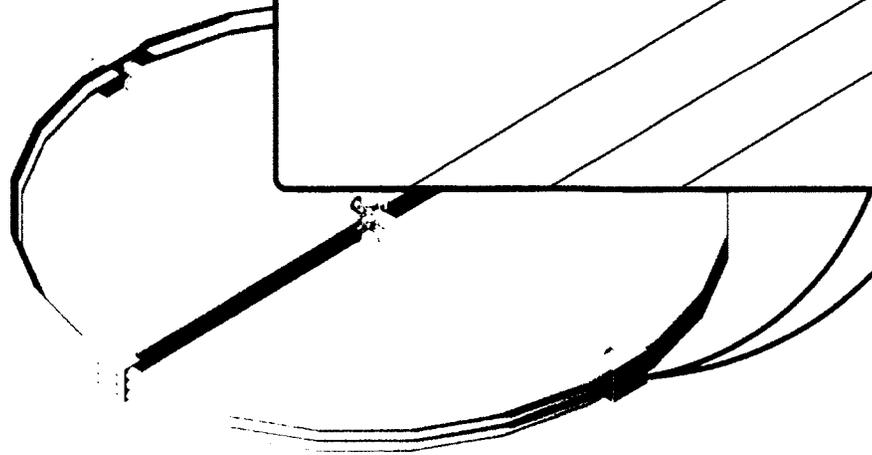
LABOUR



Provision of metal angle (and attachments) facilitates easy assembly. Residents are at liberty to customize height of level and or diameter of floor area. Bamboo culms are already prepared with threaded rod inserts. As a result, the culms can screw easily into metal attachments and bolted into place on metal angle. This also eases the replacement of posts if necessary.

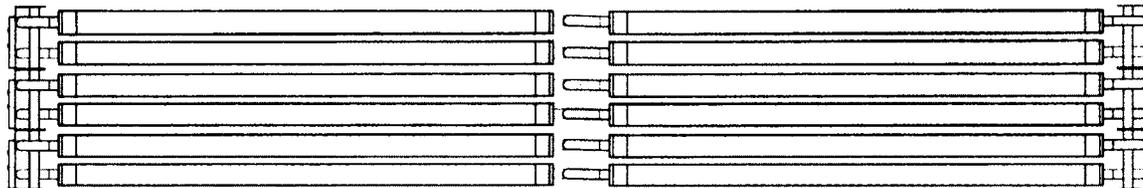


x4 per unit

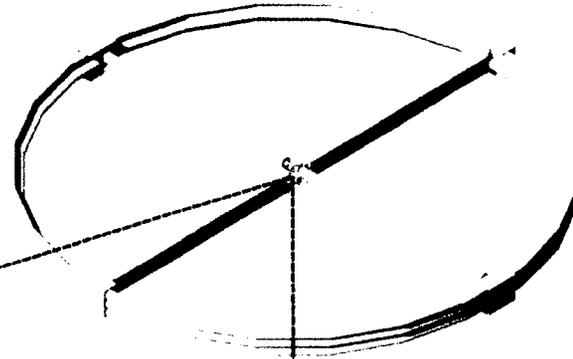
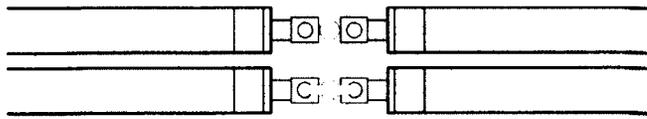


Source: SV

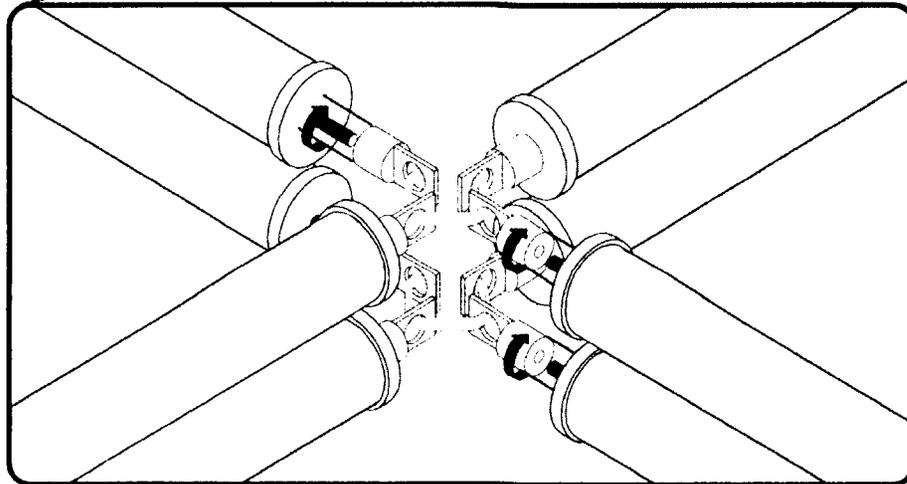
Detail of collapsed structure



Detail of alternative metal piece and rope that can be easily unscrewed and changed in order to secure the columns together when on the ground and being transported



1

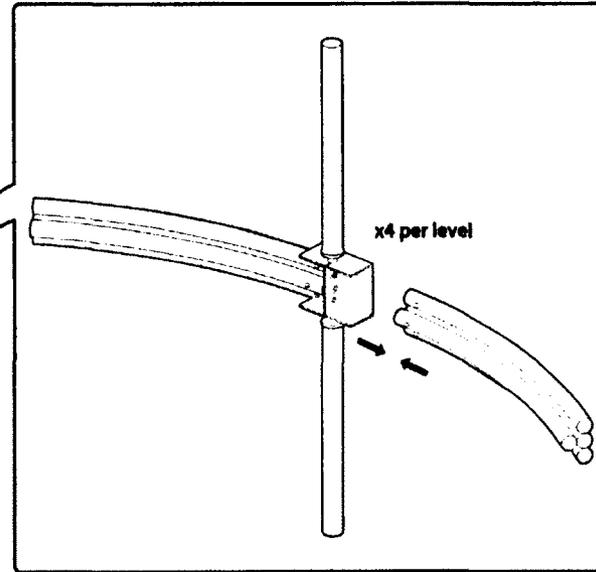
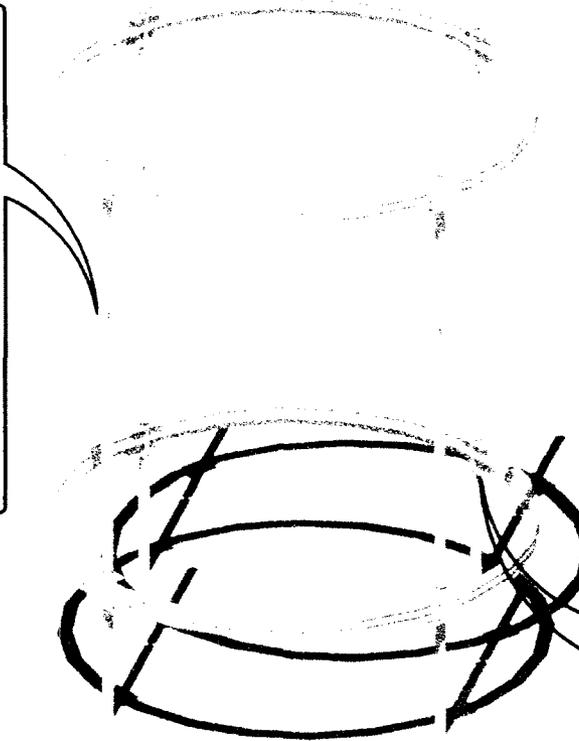
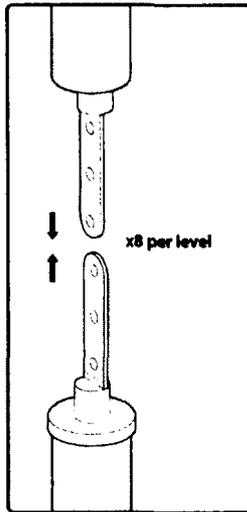


Source: SV

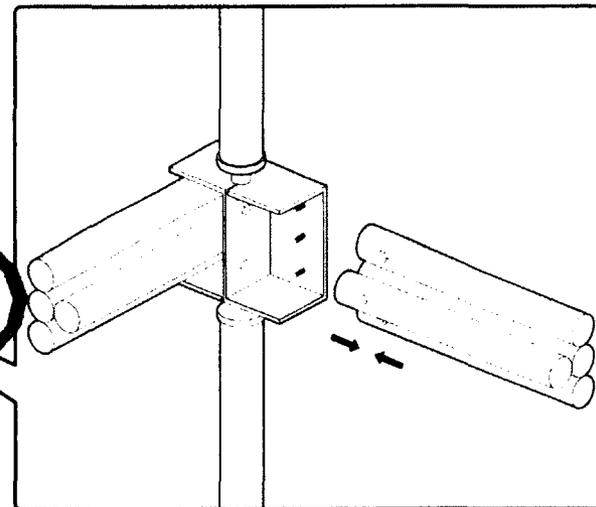
# PHASE 2

LABOUR 

The form of the structure depends on the desire of the inhabitants. The metal angles facilitate square or rectangular levels as well.



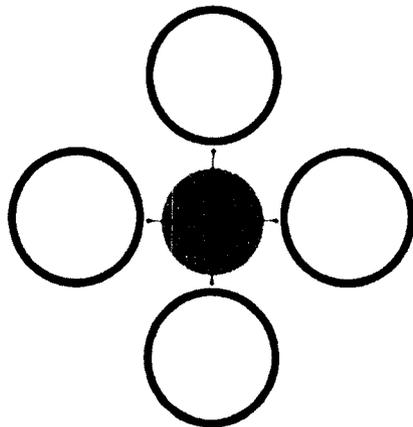
OR



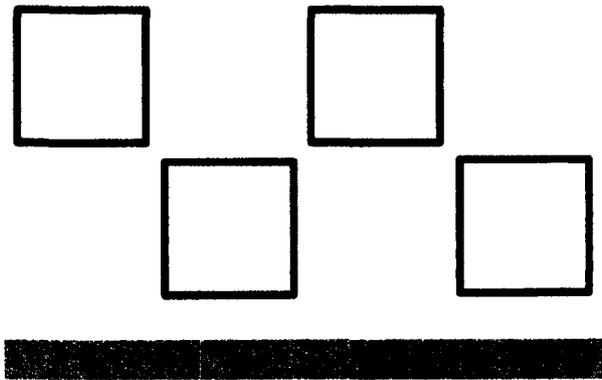
Source: SV

# CONFIGURATION

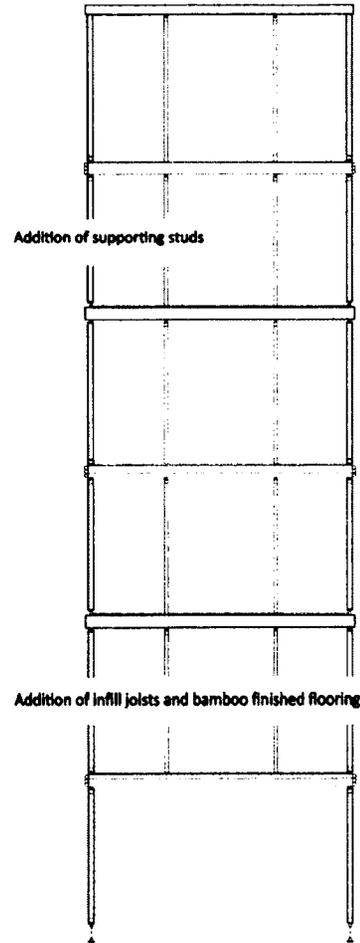
LABOUR 



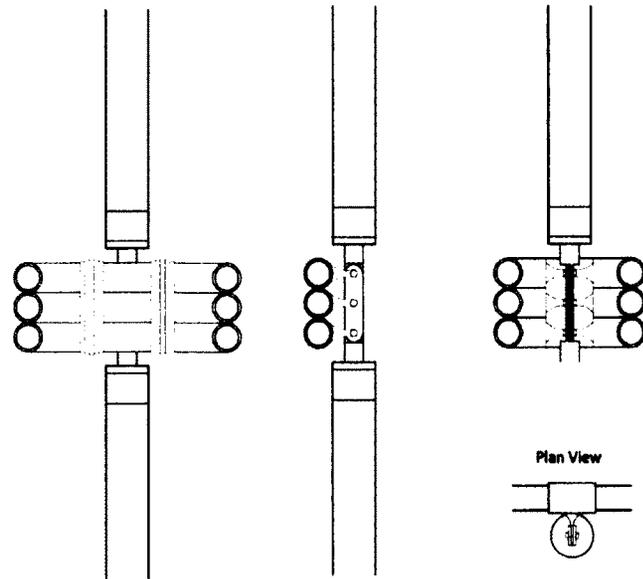
The layout of units will depend on site, slope and the desire of residents. They can be arranged linearly to front a streetscape or clustered to benefit from a shared biogas system.



Source: SV



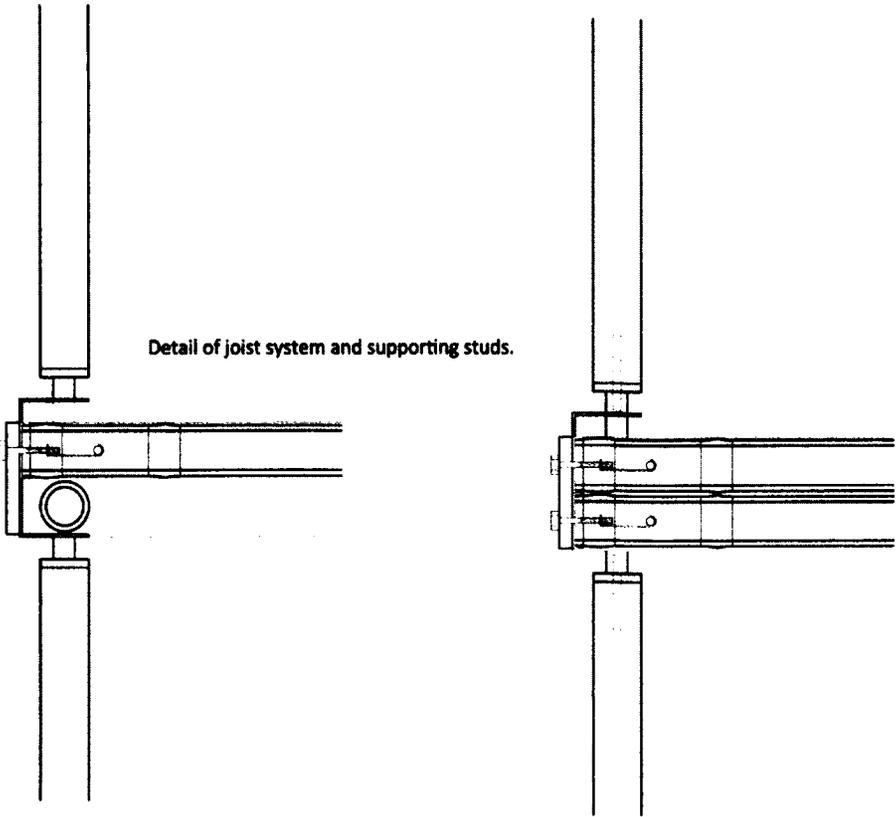
Bracing is added around pivot joint.



Elevation Detail - appropriating traditional stacking of bamboo to create supporting beam

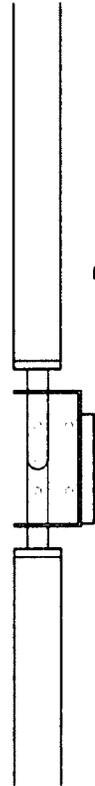
Source: SV

Metal piece is screwed onto threaded rod and claw is anchored to the frame with bolts

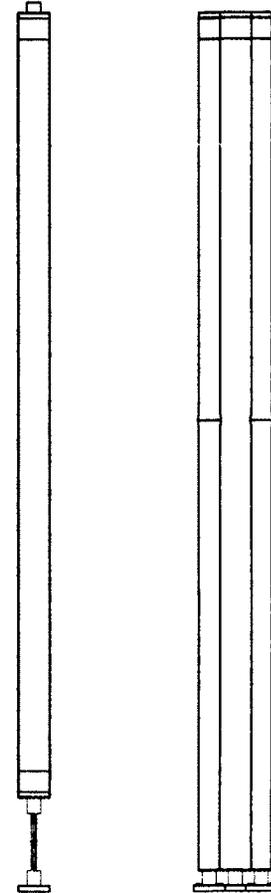
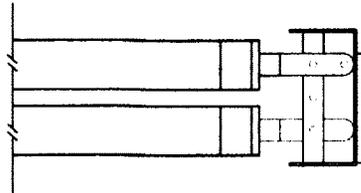


Source: SV

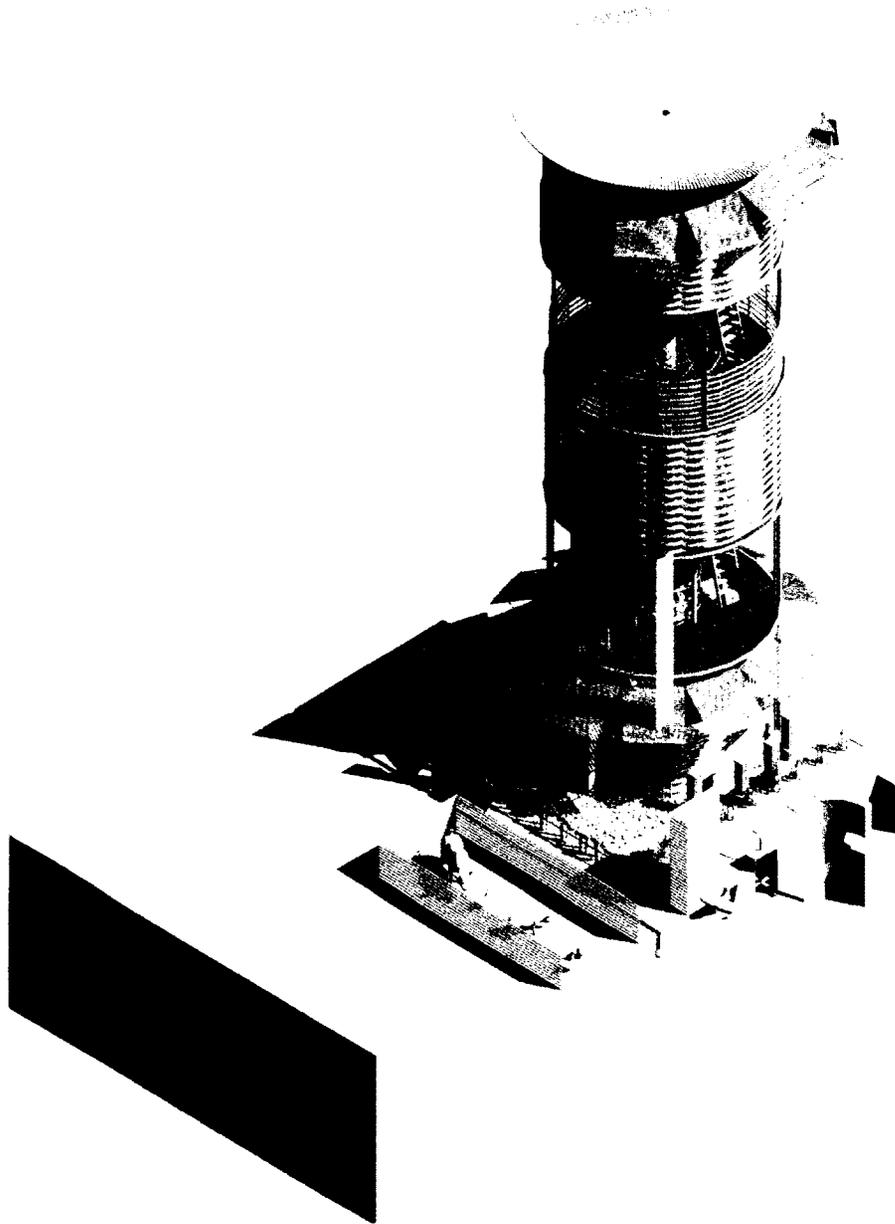
Borrowing from traditional bamboo construction, studs and columns are wrapped in secondary bamboo culms to add support and strength



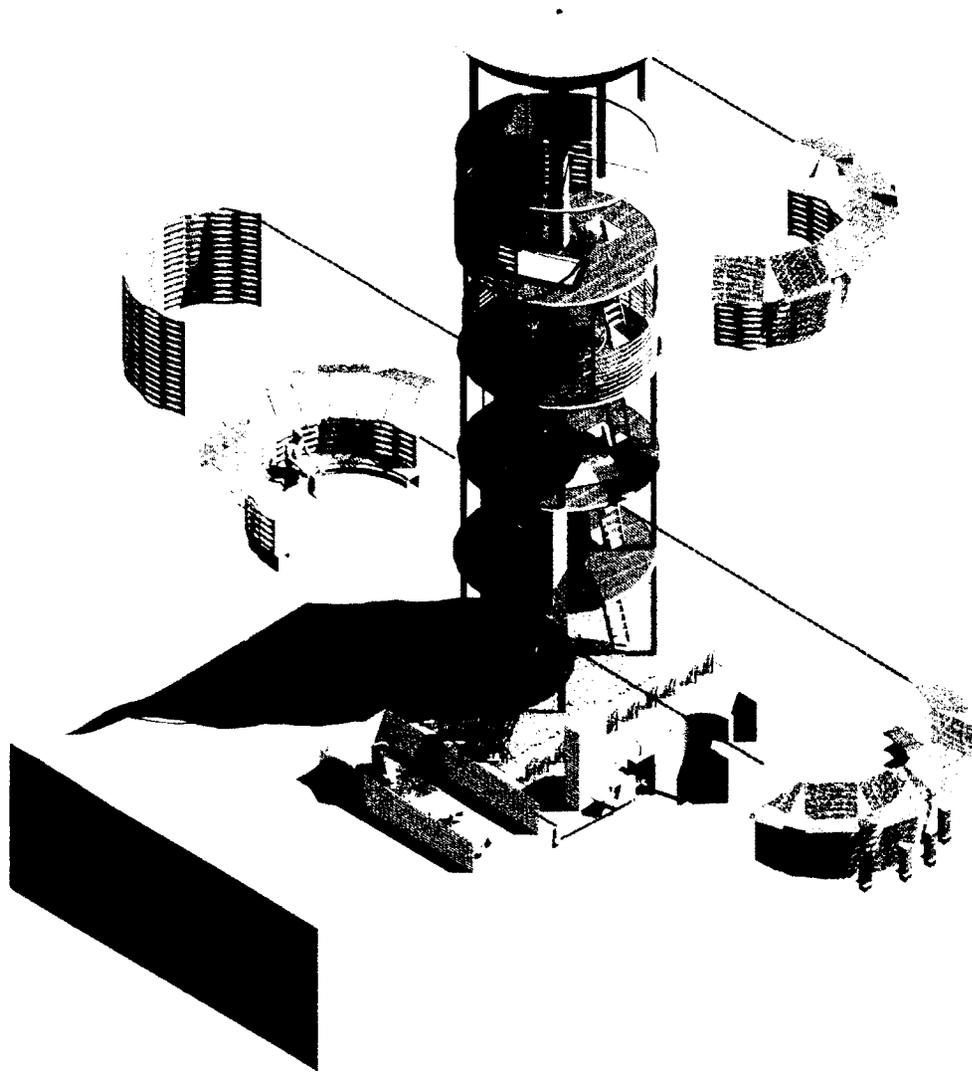
Detail of pivot joint for collapsibility



Source: SV



Source: SV



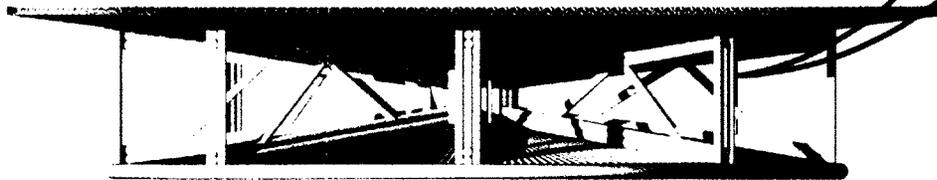
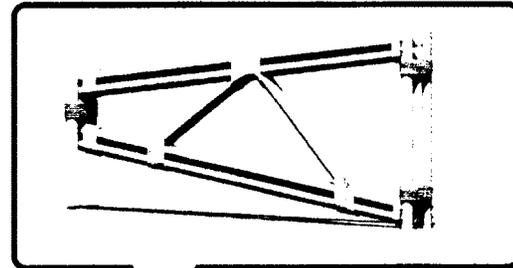
Source: SV

# ROOF

LABOUR

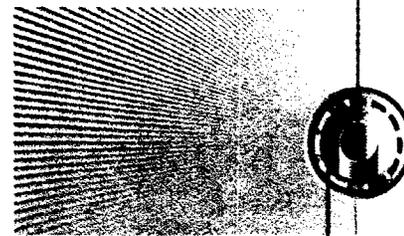
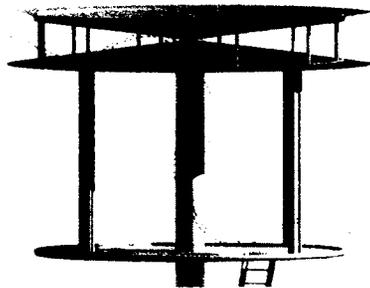


Treated bamboo tiles or bamboo shingles encourage local skills and enable residents to repair their own homes. Prefabricated bamboo trusses are joined together using bolts and also employ traditional methods of wrapping bamboo culms with wet strips of bamboo bark. Upon drying, the strips tighten further securing the culms in place.



Roof serves dual purpose:

- (a) to catch prevailing winds and encourage air circulation
- (b) rainwater collection



Central pipe for water collection

External core responsible for natural ventilation

Source: SV

# WATER RESERVOIR

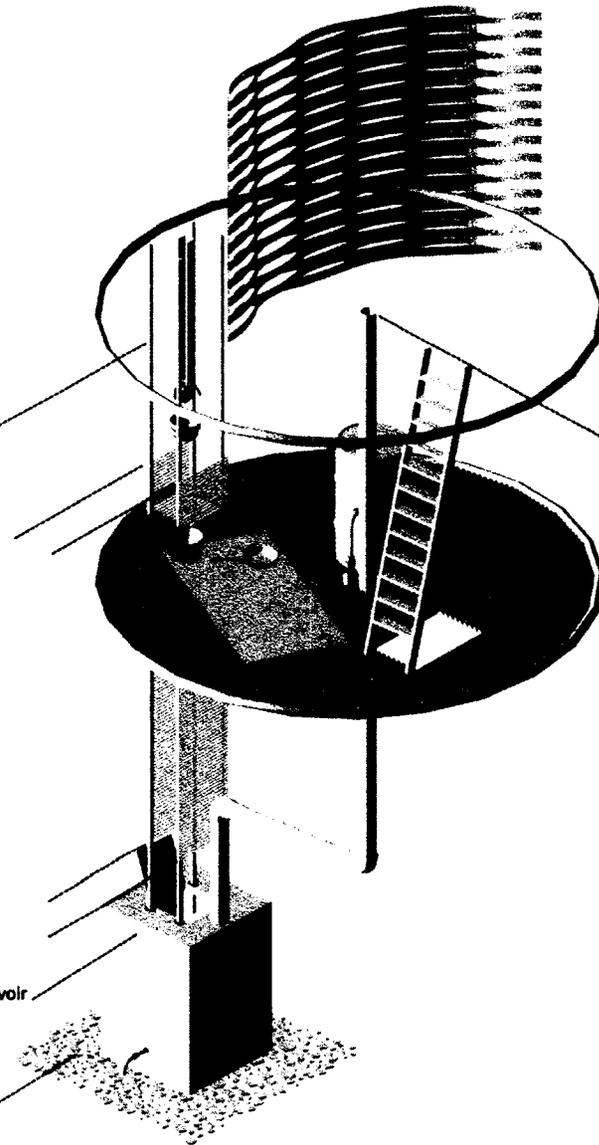
LABOUR 

Pulley system to facilitate feeding hydroponic garden

Roof Pipe

Rainwater Reservoir

Crushed stone to enable drainage



Source: SV



Source: SV

# GARDEN

LABOUR



Inhabitant monitors water flow and adjusts valves accordingly

Hydroponics fed by a drip-gravity water distribution system.

Plants are fertilized with Bio-Slurry

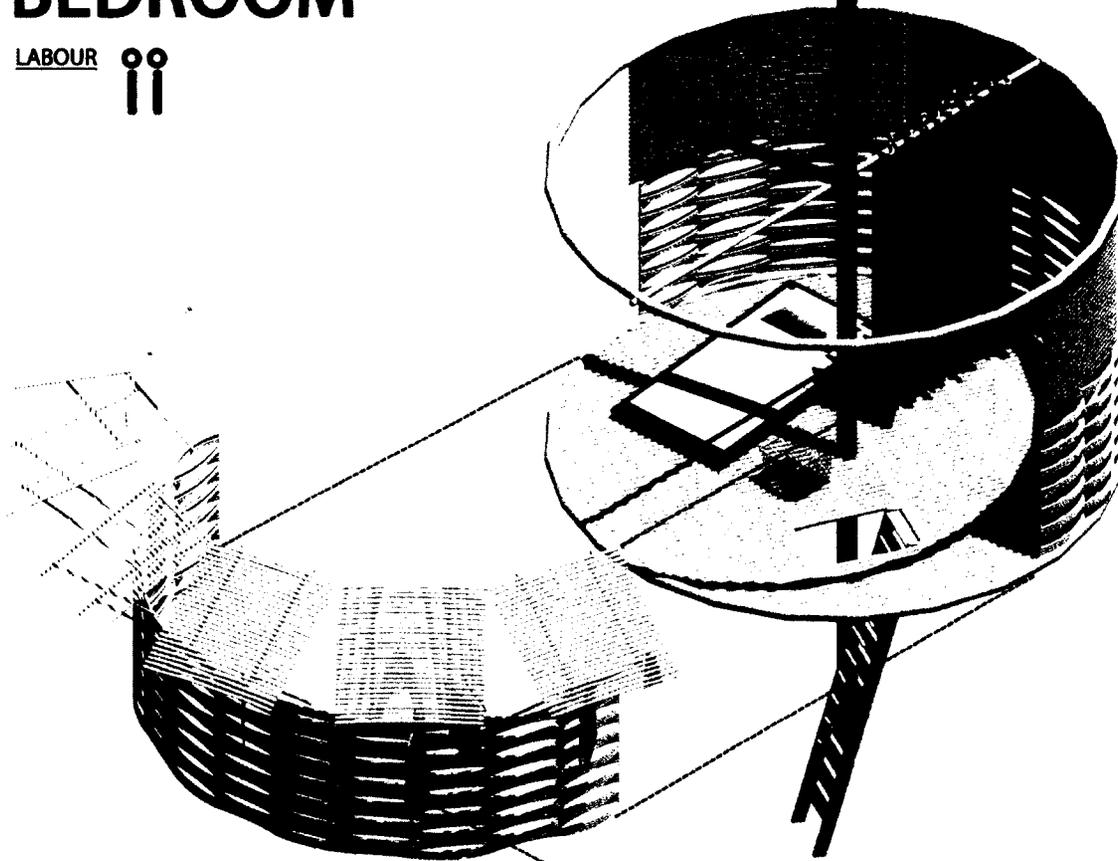
as the primary structure

Due to limited space in Mae La, the proposal of a vertical garden enables refugees to diversify their diet and generate a source of livelihood

Source: SV

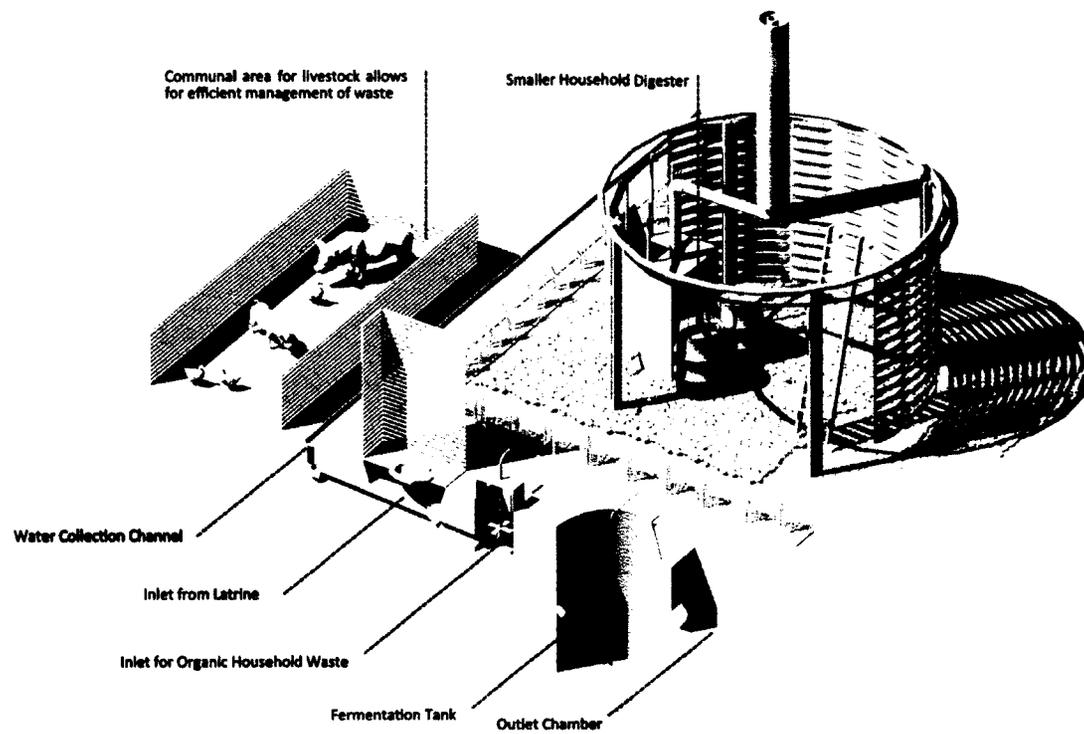
# BEDROOM

LABOUR 



Operable screens provide shade and area to dry clothes

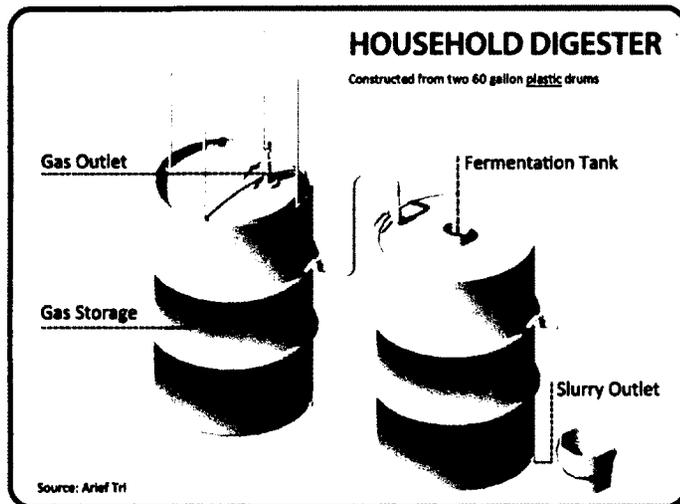
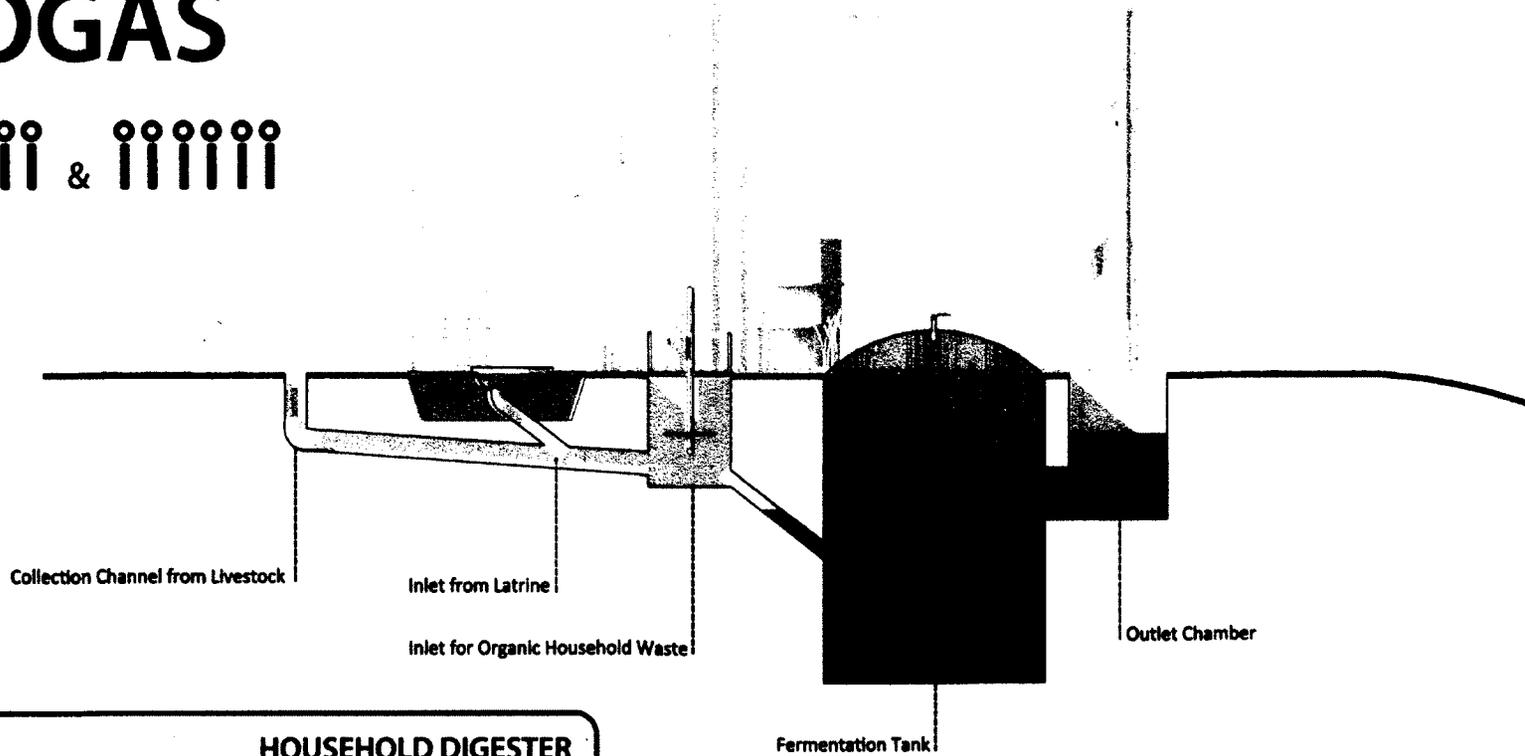
Source: SV



Source: SV

# BIOGAS

LABOUR

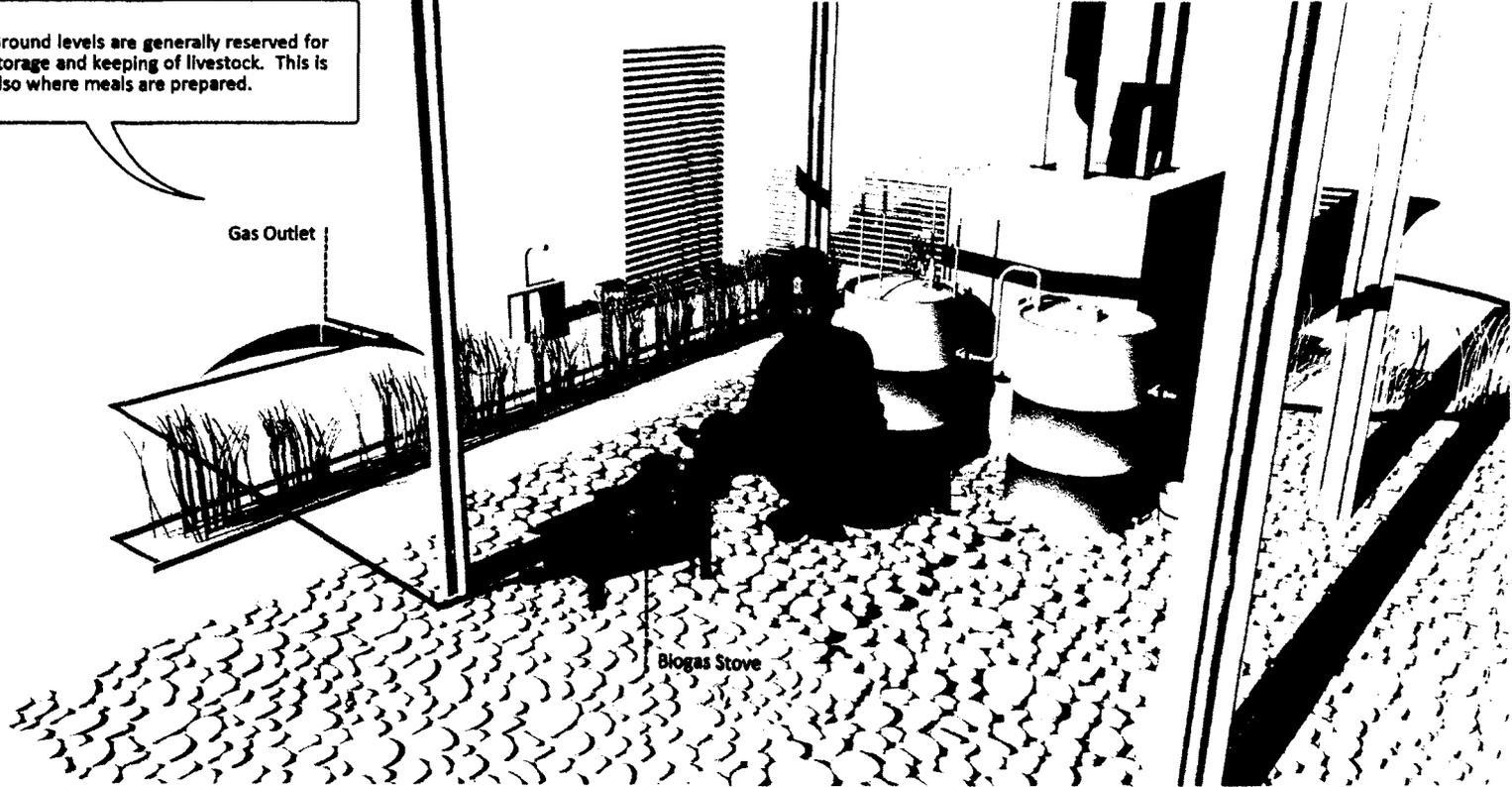


Source: SV

## WHY BIOGAS?

Provision of biogas systems alleviates pressure on surrounding forest reserves for firewood and resolves issues that result from the use of coal for cooking (ground water contamination near potable water sources, health concerns, proper storage, low quality charcoal, reduced rations). It also provides an efficient waste management solution for poor septic systems as well as a way to take advantage of valuable organic waste from livestock and food preparation that would otherwise not be used for its potential energy output. The size and design of the biogas system will depend on the desired yield and amount of input required. Larger more permanent systems can be constructed to service a few households while it is possible for each household to have their own personal sized digester.

Ground levels are generally reserved for storage and keeping of livestock. This is also where meals are prepared.



Source: SV

# VETIVER

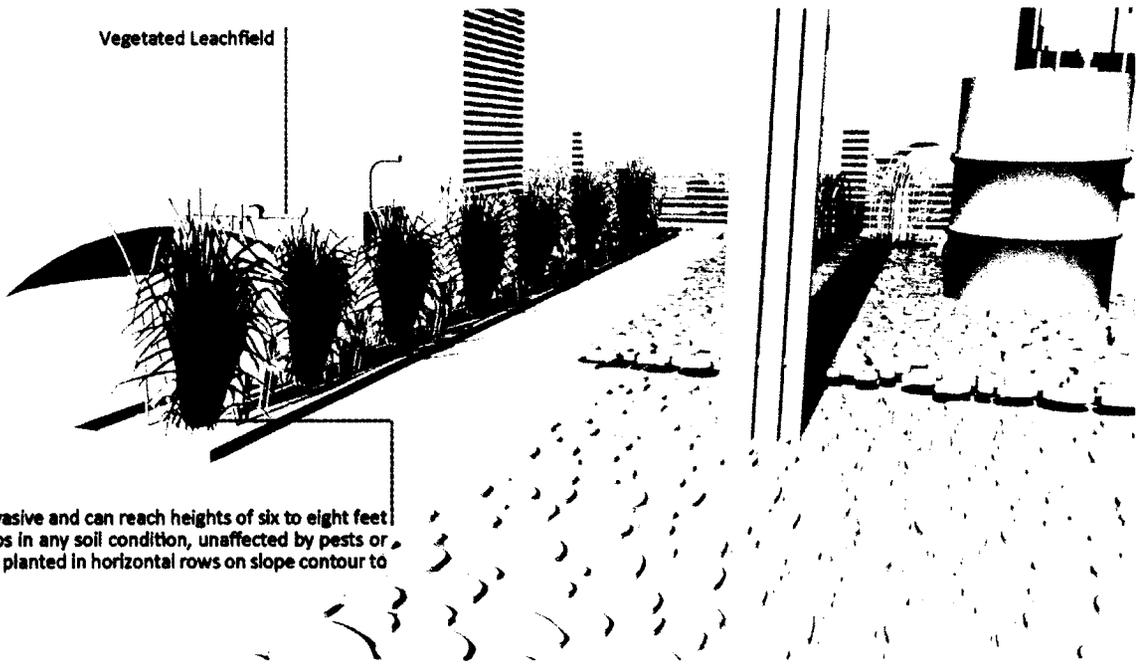
LABOUR



TOOLS



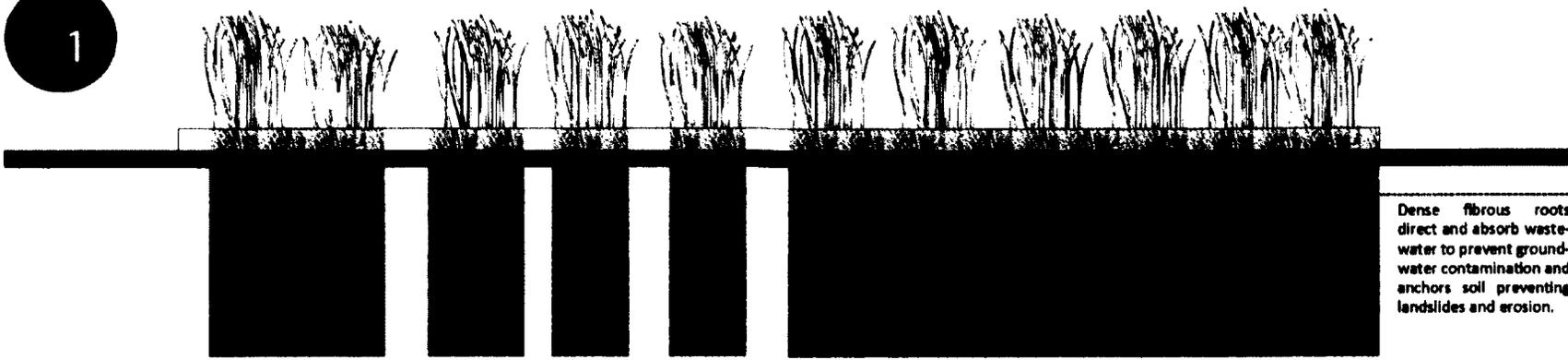
Vegetated Leachfield



Vetiver is non-invasive and can reach heights of six to eight feet. It grows in clumps in any soil condition, unaffected by pests or diseases. Can be planted in horizontal rows on slope contour to stabilize soil.

Source: SV

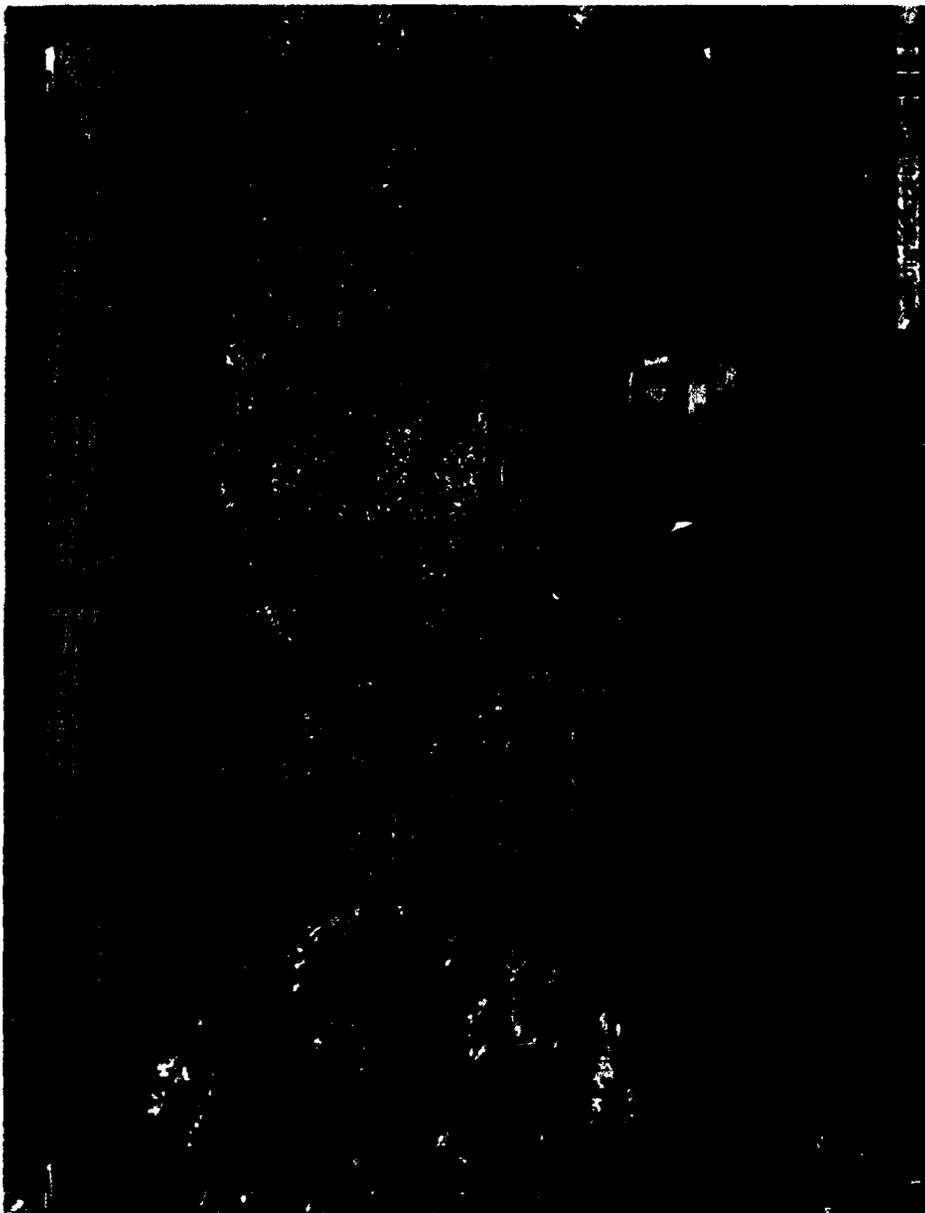
1



Dense fibrous roots direct and absorb wastewater to prevent groundwater contamination and anchors soil preventing landslides and erosion.



Source: SV



---

## POSTSCRIPT:

---

Unlike settlements of internally displaced whose inhabitants still benefit from the rights of citizenship and legally retain some autonomy and access to livelihood, refugee camps operate under strict political and institutional regulatory bodies. These bodies dictate depending on the host country and are certainly the case in Thailand that refugees cannot engage in employment and are confined within the boundaries of the camp. Any attempt to move beyond the environs, risks subject to arrest and worst-case scenario, deportation. Not only are those living within restricted from leaving however refugee camps are inaccessible places to those living on the

outside. Although the UNHCR has declared that *planned camps* are now a last resort in terms of addressing displacement, the reality remains that these last resorts are scattered across the world and have been in existence for decades with the potential for closure very far from sight.

Another element brought to my attention throughout my research and rarely grasped as an outsider, is the sheer magnitude of these environments. With some boasting over hundreds of thousands of people, larger than a small city in terms of population and almost entirely dependent on external

aid. Still most find a way to function informally from within as any normal city would. With commercial districts hosting restaurants, shops, markets, internet cafes, zoning, sports teams and even the production of its own newspaper, the amazement that surfaces when this realization sets in is nothing less than an understatement. When reading articles and watching videos created by refugees living within camps at present time, what is most interesting is the almost normality of refugees everyday lives within the camp, even though the environment in which they live operates under very unusual circumstances.

Once these camps have proceeded past their emergency phase and have now become more permanent settlements, questions regarding the built environment become even more pressing. In matters of life and death, protection and health care take precedence, with planning and shelter taking a backseat. As a result implementation on the ground reflects this priority and the arrangement of camps is not

necessarily thought through for the long-term. The refugees themselves with materials either found or given to them are required to construct their own shelter. This has led to significant negative environmental impacts around the world where host countries harbor such substantial population sizes. Redefining the role of the architect as facilitator or *symbiotic agent* can, through the enablement of refugees own skills, offer design solutions within the camp in order to better the quality of the environment in which they live as it now stands, rather than imagining camps as a *tabula rasa* scenario with the delivery of fancier shelter objects. While it was the intention of this thesis to propose a series of design interventions or guidelines that better the environment in which refugees live, it is acknowledged that spatially confining populations to isolated areas breed long term exclusion and does not prepare refugees for their imminent return. The reality is that a number of camps are now trapped in protracted scenarios with no strong evidence of closure. While it would be of best interest to advocate for a change in government and institutional policy in

order to enable the construction of lasting and durable solutions, such a solution is outside the scope of this thesis. The continual repair of shelters every year is over a protracted period, an inevitable waste of valuable humanitarian funds.

A *Symbiotic Agency* became a series of design interventions that critiqued the status quo in terms of construction and planning. In order to provide alternative solutions it became necessary to expand and push the possibilities of the current built environment of the camp with aims of supporting durable results. In the spirit of Cedric Price who “involves humor, pleasure and delight when producing any form of physical or non-physical design as an effective way of challenging normative conceptions of what a room, a house, and institution or what working, living, learning might look like and be.”<sup>161</sup> In a similar manner, the proposal of a new form of refugee skyscraper or high-rise was not intended initially to be

a practical solution, but rather to critique the practice of sprawl and current issues with density and propose new possibilities with the materials that are already commonly used; i.e. pushing bamboos’ capabilities to the maximum. The aim of the interventions was to lessen the refugee population’s dependence on external aid and local forest reserves. That being said, a significant amount of funding and support will continue to be provided by external donors. These interventions are believed to direct aid into more productive and sustainable solutions that still fall within governmental and institutional restrictions. The combination of traditional construction details with for example, the proposal of modern ones facilitates easy assembly (as well as disassembly in the event of repatriation) and provides a more structurally sound and stable connection. The metal angles that enable the collapsibility of the towers frame, also facilitates quick replacement of damaged bamboo culms. By ‘pre-fabricating’ cement-filled bamboo culms on site, the threaded rod that is inserted into the end of a culm easily screws into the metal

---

<sup>161</sup> Awan, Nishat, Schneider, Tatiana, Till, Jeremy. (2011) P.74

pieces that are provided, making replacement efficient. This metal angle detail was designed as a critique of sprawl, and as such offers the inhabitants the opportunity to decide what area and height of the tower is desired. While it would be impractical to build at higher heights for wind concerns, this combination of modern and traditional details offers the opportunity to continually build more levels on top of each other. What became most important is that the structure was developed based on research of existing infrastructure and as a result is site-specific rather than of a *global design type*. The floor plans have been left open to interpretation in order to allow for inhabitants to appropriate the space however the design enables the customization that is already witnessed or occurs within the camp. For example, creating operable sunscreens that provide shade and a space to dry clothes. Finally, the whimsical towering structure is balanced with smaller practical interventions such as the planting of vetiver clumps, bamboo treatment and advocating for biogas technology. These solutions are real and effective in addressing

fuel consumption, environmental degradation and wastewater management. The keeping of livestock and gardens also establish the means through which refugees can generate a source of income and reduce their dependence on external aid.

While it is possible to strive for a mutualistic relationship between refugee populations and host, a realized independence however is not achievable under current refugee status. It is hoped that what can resonate outward, and apply to camps worldwide, is this idea of creating a contextual handbook, or guidelines that address the camp in question. It is only after an evaluation of the specific performance and behavior of a particular camp that solutions can be proposed. Ways to reduce a camps reliance on local ecologies will depend on climate, available resources, local habits and infrastructure etc. The best thing for *symbiotic agents* is to continue advocating and providing solutions that make the reality bearable during the interim.

# REFERENCES:

---

Jennifer Hyndman, "Managing Displacement: Refugees and the Politics of Humanitarianism", University of Minnesota Press, 2000

James Kennedy, "Structures for the Displaced: Service and Identity in Refugee Settlements", International Forum on Urbanism, 2008

Doreen Massey, "For Space", SAGE Publications Ltd., 2005

Doreen Massey, "Power-Geometry and a Progressive Sense of Place," in *Mapping the Futures: Local Cultures, Global Change*, ed. J. Bird, b. Curtis, T. Putnam, G. Robertson, and L. Tickner. New York: Routledge, 1993

Bell, Wakeford. (2012). *Expanding Architecture: Design as Activism*. Metropolis Books.

Awan, Nishat, Schneider, Tatiana, Tili, Jeremy. (2011). *Spatial Agency: Other Ways of Doing Architecture*. Routledge

Giorgio Agamben, "Beyond Human Rights", *Symposium*. 1995, No. 49(2), Summer, Pages: 114-119, English, Translation by Michael Roche.

Neil Leach, "Rethinking Architecture: A Reader in Cultural Theory", Routledge, 1997

K. Michael Hays, "Architecture Theory Since 1968", The MIT Press, 2000

Michel Foucault, "Discipline & Punish: The Birth of the Prison", Vintage, 1995

Keams, Robin A. (2010). Seeing with Clarity: Undertaking Observational Research. In Iain Hay (eds.), *Qualitative Research Methods in Human Geography* (3<sup>rd</sup> ed.). Don Mills, ON: Oxford University Press.

UN Handbook for Emergencies, [http://www.the-ecentre.net/resources/e\\_library/doc/han\\_Em.pdf](http://www.the-ecentre.net/resources/e_library/doc/han_Em.pdf)

Punpairoj, Poomchai. (2010). *The Transformation of Traditional Thai Houses: Steps Toward Recognition of Changing Vernacular Forms*. Silpakorn University.

Tantasavasdi, C., Srebric, J., and Chen, Q. (2001). *Natural Ventilation Design for Houses in Thailand*, *Energy and Buildings*, 33(8), 815-824.

Morgado, David. (2012). *Environmental Impact Assessment: Organizational, Program and Field Activities*. Thailand Burma Border Consortium.

Caldwell, Richard. Ravesloot, Bruce. (2011). *Baseline Livelihood Vulnerability Analysis of Refugee Camps along the Thailand-Burma Border*. TANGO International Inc.

Thadaniti, U-Cha, Lambregts, Bhromkaew, Prombang, Toommakorn, Wijitkosum. (2011). *The Impact of Displaced People's Temporary Shelters on their Surrounding Environment*. Asian Research Center for Migration Institute of Asian Studies. Chulalongkorn University.

Su-Ann Oh (2010). *Education Survey*. ZOA Refugee Care Thailand.

Bowyer, Thomas. (2002). *Evaluation of the ECHO Actions in Favor of the Burmese Refugees in Thailand: Water and Sanitation*. GFE Consulting Worldwide.

Duffy, W. Robert. *Strengthening Protection Capacity Project – Livelihoods Component*. Phase One – Tak Province. ILO and UNHCR.

Rahimi, Navid. (2008). *Modeling and Mapping of Mae La Refugee Camp Water Supply*. Massachusetts Institute of Technology.

Harding, Rahimi, Vater. (2008). *Water Treatment and Distribution System Improvements for Mae La Refugee Camp, Thailand*. Massachusetts Institute of Technology.

Bohannon, R. (1997). *Comfortable and Maximum Walking Speed of Adults aged 20-79 Years: Reference Values and Determinants*. Oxford University Press

Rajendran, Aslanzadeh, Taherzadeh. (2012). *Household Biogas Digesters – A Review*. University of Boras, Sweden.

Werner, Stohr, Hees. (1989). *Biogas Plants in Animal Husbandry*. Deutsches Zentrum für Entwicklungstechnologien.

<sup>1</sup> Jim Lewis, "The Exigent City", *The New York Times*, June 8, 2008.