

MAYA-YUCATECAN HOMEGARDENS: SUPPORTING SOCIAL NETWORKS THROUGH EXCHANGES

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June 30th, 2008

1

How is this presentation organized?

1. Objective of this presentation
2. Some characteristics of site selected
3. Some characteristics of the researched population
4. Methodological approach
5. Objects and relations under study:
 1. Homegardens' (HG's): a general description
 2. Genealogy, Kinship and Social Networks (GKSN)
 3. Exchanges (how far are related to HG's and GKSN's?)
6. Conclusions and implications

▶ 2



What this presentation is about:

To demonstrate the importance of **homegardens** for **social networks** within an indigenous community by looking at **exchange relations** and **genealogy (kinship) networks**.

[preliminary (partial) findings of ongoing research]

▶ 3

Site selected

- A Maya-Yucatecan village named "Nenelá" (meaning "this is a mirror"); located in SE Yucatan State, Mx.



- ▶ Cultivated area about 30 km²; populated area less than 0.5 km²
- Low subcaducifolia tropical forest (sub-humid)
- Avg. temp. 26.3°C (16°C -46°C).
- Rainfall avg. 1200mm.
- Abundance of rendzines within cemented soils.

▶ 4

Population researched:

- ▶ 100% of population:
 - ▶ 208 inhabitants in 31 households; most male headed; most nuclear, several extended.
- ▶ Maya-speaking; Spanish understood yet only spoken by some.
- ▶ Literacy improved through generations.
- ▶ About 10 % of population--> Intra-State migration.
- ▶ Men devoted to traditional agriculture; beekeeping as most frequent economic activity.
- ▶ Women mainly devoted to hh work (including HGs). Hammock weaving as most freq. income generation activity; cloth stitching for own-use and sometimes income generation.
- ▶ First time they are ever systematically researched.

▶ 5

Methodological approach

How each 'object under study' has been researched?

Homegardens' survey:

Eight HG's deeply researched (Jun-Aug 07). For every plant, informants (mostly women) were asked:

- Local name(s) of plants.
- Time of plant in HG
- If not already in HG or self-germinated: Who grows and/or has decided to grow that plant.

Social Networks:

- First approximation within a baseline survey (April-May 07); complemented by field observations and conversations.
- Triangulated through genealogy (kinship) networks and exchange relations (Jan- April 08).

▶ 6

... methodological approach

Exchange relations: items exchanges (Feb-March 08)

- Diaries were handed to a literate person in every hh's for self-record of agricultural, animal and derivate products that either came into the hh or were given away.
- Questions included:
 - Name and amount of item exchanged.
 - Type of exchange (purchase/sold, gift, barter, borrowed, other).
 - Origin place of item exchanged (hg, fields, kitchen, forest, other).
 - Person in hh either giving or receiving/ from whom.
 - If any knowledge was shared within the exchange transaction.

A total of **846 transactions** were recorded

Analyzed using SPSS and Microsoft Excel.

▶ 7

... methodological approach

Exchange relations: knowledge exchanges

- Since knowledge exchange was not frequently found within items exchanges, it was further researched through other means:
 - Via qualitative questioning to selected informants.
 - Probed while collecting local concepts of status and prestige.
- As by the answers obtained, it seems that:
 - Common knowledge is transferred via close relatives (generational), taking place largely within the household.
 - Specialized knowledge can be shared without much prejudice as part of status and prestige attainment.

In both cases, not necessarily related to hg's.

Due to the complexity of knowledge exchange and the (so far) not found direct relationship to items exchanges in this study, knowledge exchanges won't be further discussed during this presentation.

▶ 8

... methodological approach

Genealogy (kinship) networks:

- A first approximation was made within a baseline survey (April-May 07); triangulated by field observations and conversations with local people.
- As social networks are closely related to kinship networks, a detailed genealogy network was drawn (January 08).
 - By tracking descent relations and marriages

Objects and relations under study:

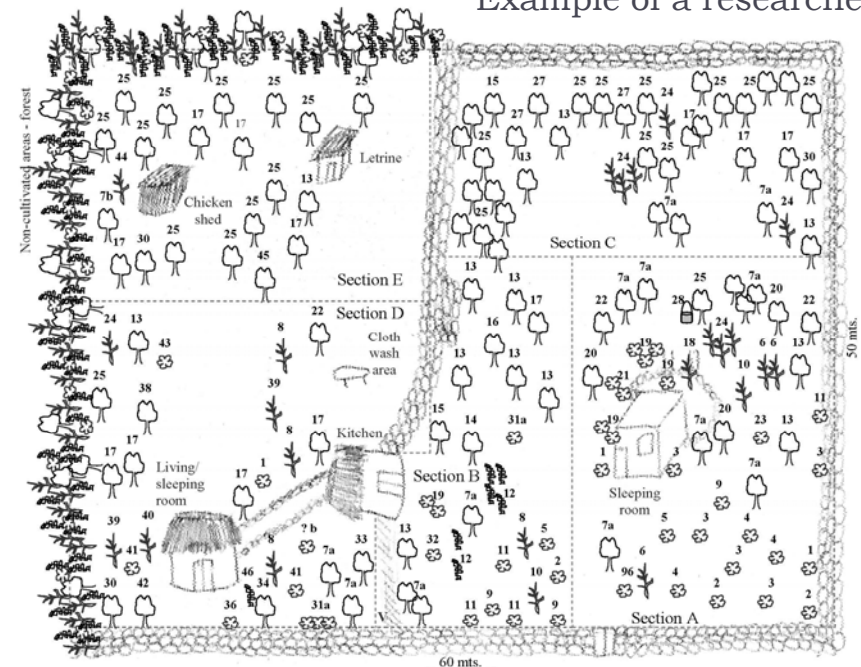
1. Homegardens (HG's)



Characteristics of the researched Maya-Yucatecan HG's

- Do not look like 'gardens'.
- Helpful to define the Maya-Yucatecan household.
- 136 different plants found across eight HGs:
 - + 40 ornamentals
 - + 40 fruit trees
 - + Others: herbs, spices, green leafy (horticulture grown, wild plants), bee-feeding and/or precious woods, grains, roots and tubers.
- Major and minor livestock.
- Area about 3000 mts².
- Biodiversity lay out related to:
 - Plant uses.
 - Gendered labor and gendered decision-making.
 - Resilient strategies (e.g. against high temps, hurricanes).
 - Accessibility to fuel wood.

Example of a researched HG



Objects and relations under study: 2. Genealogy, Kinship and Social Networks



▶ 13

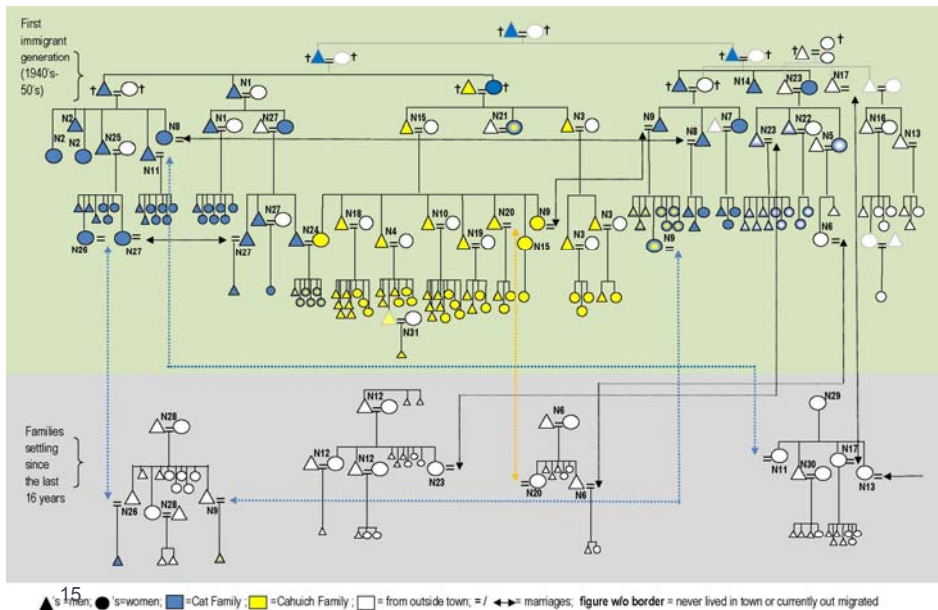
Genealogy, Kinship and Social Networks

Some historical facts related to genealogy in the village:

- ▶ By 1920's, the village was almost abandoned due the 'Cristeada' war.
- ▶ By 1940's, two brothers of last name Cat immigrated into the village.
- ▶ Siblings eventually joined the Cat brothers.
- ▶ The Cat brothers' only sister was married to a man of last name Cahuich.
 - ▶ One of this couple's sons converted to a minority religion, giving place to a new network: the Cahuich.
- ▶ In the last 16 years a few other families/hh's immigrated to town.
 - ▶ Sons/daughters have often married members of both the Cat and Cahuich families.

▶ 14

Genealogy, Kinship and Social Networks: Descent and Marriage



▶ 15

Genealogy, Kinship and Social Networks

Regarding social networks it has been found that:

- Formal and informal networks are present in the village (cooperatives, hunting companion, etc.).
- The salient bonding force of these networks seems to be sibling relations.
- ▶ Predominated kinship networks in the village are:
 - ▶ 1. The Cat Family.
 - ▶ II. The Cahuich Family.
- ▶ Several other networks are derived from these two networks (next two slides):

▶ 16

Genealogy, Kinship and Social Networks

Social Networks derived from genealogy/kinship networks :

- ▶ I. Religion:
 - ▶ Cat → Catholic
 - ▶ Cahuich → Pentecostal (NI5 and descendants); NI5's sister Presbyterian; NI5's brother none.
 - ▶ Others → either Catholic or Presbyterian
- ▶ II. Political affiliation:
 - ▶ Cat → PAN party
 - ▶ Cahuich → PRI party (with a few exceptions)
 - ▶ Others → PAN party
- ▶ III. Cooperatives and groups in development projects:
 - ▶ Cat tend to associate with Cat and with selected 'Others'.

▶ 17

Genealogy, Kinship and Social Networks

- ▶ IV. Cooperatives and groups in development projects:
 - ▶ Cat tend to associate with Cat and with selected 'Others'.
 - ▶ Cahuich tend to assoc. w/Cahuich and w/ selected 'Others'.
- ▶ V. Neighbouring (see graphic in next slide):
 - ▶ Cat hh's in oldest town areas (Center and NW corner).
 - ▶ Cahuich hh's cluster in Center-South, extending over the periphery on that side (newest road).
 - ▶ Others: dispersed, most through the periphery.
- ▶ VI. *Compadrazgo* (God-parenting): Not relevant for this research → occurs only among Catholics and is regulated by the Church.
- ▶ VII. Exchange networks: see next section

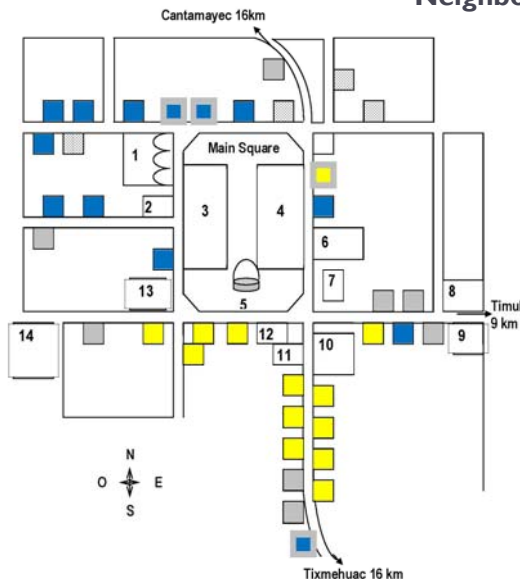
▶ 18

Nenelá, Municipio de Cantamayec
Yucatán, México.

Neighbouring

Public buildings and areas

- 1 Ejido house
- 2 Old grinding house
- 3 Basketball playing court
- 4 Park
- 5 Old water well
- 6 Catholic church
- 7 Health center
- 8 Elementary school
- 9 Kindergarden
- 10 Pentecostal temple
- 11 New grinding house
- 12 Water plant
- 13 Presbyterian temple
- 14 Football camp



▶ 19

Objects and relations under study: 3. Exchanges of items



▶ 20

Exchanges of items

Type of exchange transaction		
	F	%
Borrowed	3	0.35 %
Gift	585	69.15 %
Sell/Bought	251	29.67 %
Subsided	6	0.71 %
Swapping	1	0.12 %
Total	846	100.00 %

Is it gift or barter? ...sold or borrowed?

Timing between giving and receiving determines the type of transaction (Bourdieu in Jenkins 1992).

► 21

Exchanges of items

Of the 585 gift transactions:

- 18 cases: items received from a sibling residing outside town.
- 55 cases: items given to a sibling residing outside town.
- **512 transactions involved giving and receiving between people in town.**

Of the 251 sell/bought transactions:

- 59 cases: items were bought to somebody from outside town.
- 77 cases: items sold outside town.
- **115 transactions involved selling and buying between people in town.**

► 22

Exchanges of items

Gift (512 in town transactions)

- 128 cases, kitchen origin
- 22 cases, agricultural fields origin
- 51 cases, other (forest, etc.)

► 311 cases, HG origin.

- **280 woman to woman**
- Most freq. HG items: ornamentals, chives, sour and sweet oranges, wormseed, lemons, chaya (Mayan spinach), coriander, papaya, basil, chicken, spear mint, ambarellas. Habanero peppers, bananas.

Sell/Bought (115 in town transactions)

- 14 cases, kitchen origin.
- 6 cases, agricultural fields origin.
- 19 cases, other (forest, hort.plot, out of town)

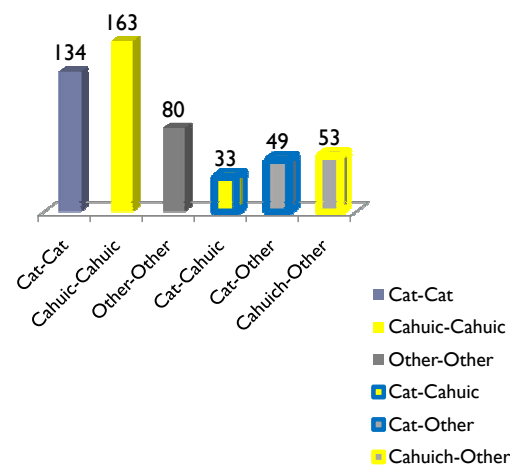
► 76 cases, HG origin.

- **67 woman to woman**
- Most freq HG items: pork and chicken meat, tomatoes, pork bone-marrow, coriander, papaya, sweet oranges.

► 23

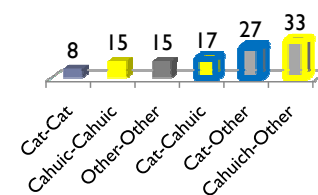
Exchanges of items by kinship networks

GIFT (512 in town transactions)



► 24

SELL/BOUGHT (115 in town transactions)



Conclusions

- ▶ Exchanges within people in town are very common; suggesting that households rely on each other in a variety of situations.
- ▶ More than half of the items exchanged are generated in homegardens, evidencing that from all of the biocultural rich spaces of the Maya-Yucatecan (e.g. forest, fields, kitchen), hg's are the main material providers for exchanges.
- ▶ Most of the exchanges are made between women, suggesting that women are the main agents of exchange relations in daily life.
- ▶ Exchanges seem to follow certain pattern that is related to kinship networks:
 - ▶ Predominant networks (Cat, Cahuich) seem to have a tendency to exchange more between people of either their own network or the neutral network ('other') than to people from the other 'predominant network'.
- ▶ Since exchanges reinforce social networks, women also are main supporters of social networks.

▶ 25

So what? (theoretical/academic implications)

- ▶ It is well known nowadays that in order to understand how a given resource is conserved and/or diversified we need to approach both, the natural or ecological part, as well as the social, cultural and economic part(s) [co-evolution].
- ▶ However, such approaches (nature-society; social-ecological; etc.) tend to explain issues such as conservation and diversification as due to 'human agency', without further explanation of where such 'agency' is rooted.
- ▶ Today, I have attempted to explain that the so called 'agency' needed to exchange a given thing with a given person is rooted into specific bonds -called a kinship network-. In this case, a genealogical network from which we can predict who is likely to associate with whom, as part of (traditional) social dynamics.
- ▶ Bourdieu's Theory of Practice:
 - ▶ 'Habitus' may explain where 'agency' is rooted.
 - ▶ A social network is a 'field of action' within a broader field (the community), giving place to 'Social Practice'.

▶ 26

▶ Thanks!



Acknowledgements:

People from Nenelá,
Yucatán, Mex.

Prof. Howard in
Wageningen UR, the
Netherlands.

Univ. of Kent –
Canterbury, Dept. of
Anthropology, UK.

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▶ 27