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## Transformation of Local Living: Buddhist Thai Communities and Vernacular Houses around Songkhla Lake Basin

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### Abstract

This research has explored the relationships between community ecosystems and ways of life in the context of modern development, especially how these relationships are manifested in the changing physical characteristics of communities and their vernacular houses. Using qualitative methods and a holistic approach to study tradition and change, three Thai-Buddhist communities around Songkhla Lake Basin were selected for comparative study. Data were derived from documentary sources, direct and participant observation, in-depth interviews and architectural drawings. It was found that differences in local micro-ecosystems underlie differences in people's adaptability to transformations, in both cultural and physical characteristics, but that kinship ties, their Buddhist beliefs and local traditions reinforce sense of identity.

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*Keywords:* Transformation; local living; community eco-system; vernacular house; Songkhla Lake Basin

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### 1. Introduction

Modern development has brought change, both physical and cultural, to rural communities everywhere. There has long been a literature exploring the links between cultural practices, traditional

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lifestyles and local ecologies in the context of cultural modernization and economic development (reviewed, for example, in Steward, 1979; Rapoport, 1969, 1994). More recently writers have specifically focused on these links in the context of Thai traditional communities (Nartsupha & Lertvicha, 1998; Natalang, 2000; Ganjanapan, 2001; Pongpaiboon, 2001; Jarernsinolarn, 2002).

The objective of this research has been to explore the relationships between community ecosystems and ways of life of these communities in the context of modern development and especially how these relationships are manifested in the changing physical characteristics of the communities and how they are translated into their vernacular houses. We specifically invoke the idea of community eco-system, by which we mean the rich and complex relationships between the local community and its immediate local (micro-) eco-system – the ways in which the local community and its cultural practices are embedded in and, in part, determine the transformations of the local eco-system.

The concern of the research has been to see how present change, both cultural and physical, is manifested in cultural practices, community structure and the architecture of (vernacular) housing in specific rural communities in the Songkhla Lake Basin area of southern Thailand.

## 2. The Songkhla Lake Basin

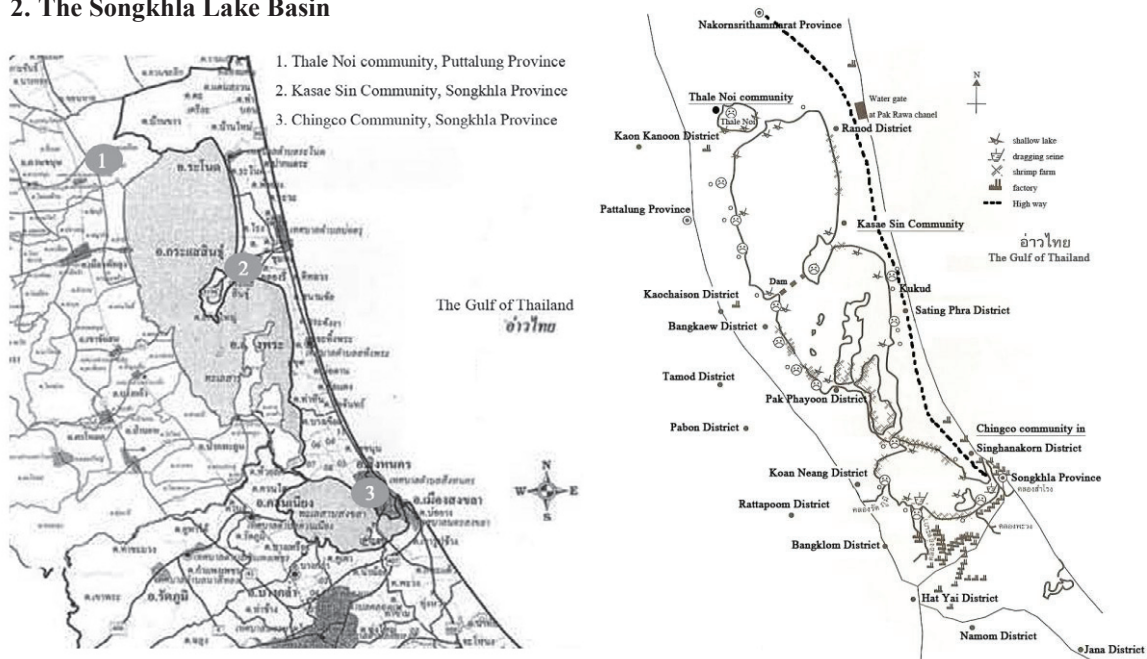


Fig. 1. (a) The location of three selected communities of Songkhla Lake Basin; (b) Modern developments around Songkhla Lake Basin; Source: modified from Duangsuwan (2002)

Songkhla Lake is the largest natural lake in Thailand, located on the Malay Peninsula in the southern part of the country. Though classified a lake, it is geologically a lagoon complex divided into three distinct parts. The southern component opens through a 380 m wide strait to the Gulf of Thailand at the city of Songkhla; its water is brackish, of about half the salinity of the Gulf. Further north, beyond a bottleneck of only 6 km, is the Thale Luang of some 782.8 sq. km. Finally, at the northern end, in the

midst of a mangrove swamp, is the small Thale Noi of 28 sq. km. There are two dominant characteristics of the lake: the first is the 75 km long spit separating the lake from the sea, probably formed when originally existing islands became interconnected by silting from the lake’s precursor.

The second characteristic relates to the ecological differences between the three lake components. The northernmost Thale Noi Lake is one of the few surviving freshwater wetland ecosystems in Thailand and has been protected as a Ramsar wetland since 1998. It displays lake, marsh, Melaleuca swamp forest, paddy and swamp grasslands. The central Thale Luang, by contrast, is an extensive freshwater lagoon while the southern stretch is characterised by its openness and links to the sea.

Three communities in the basin were selected for comparative study: Thale Noi community in the north (in Phatthalung Province), Krasae Sin community and Chingco in the south (in Songkhla Province). In each community, 5 tradition houses selected for study traditional and change. The data collected from documentary and field survey during 2008-2010. The oral history is important for rural community that maps and photographs were rare. The analysis task conducts by chronological study to ascertain changes of living and physical characteristics from morphological studies.

All are Thai-Buddhist traditional communities, established for a century or more, in decidedly different micro-ecosystems and differently affected from modern development especially water management projects and transformations of waterways to terrestrial ways. Various analytical approaches were adopted to study tradition and change, derived from documents and field research (participant observation, interviews) to cover the period 1927-2010, in order to read the significant changes that have affected physical characteristics and ways of life of the communities and their vernacular houses.

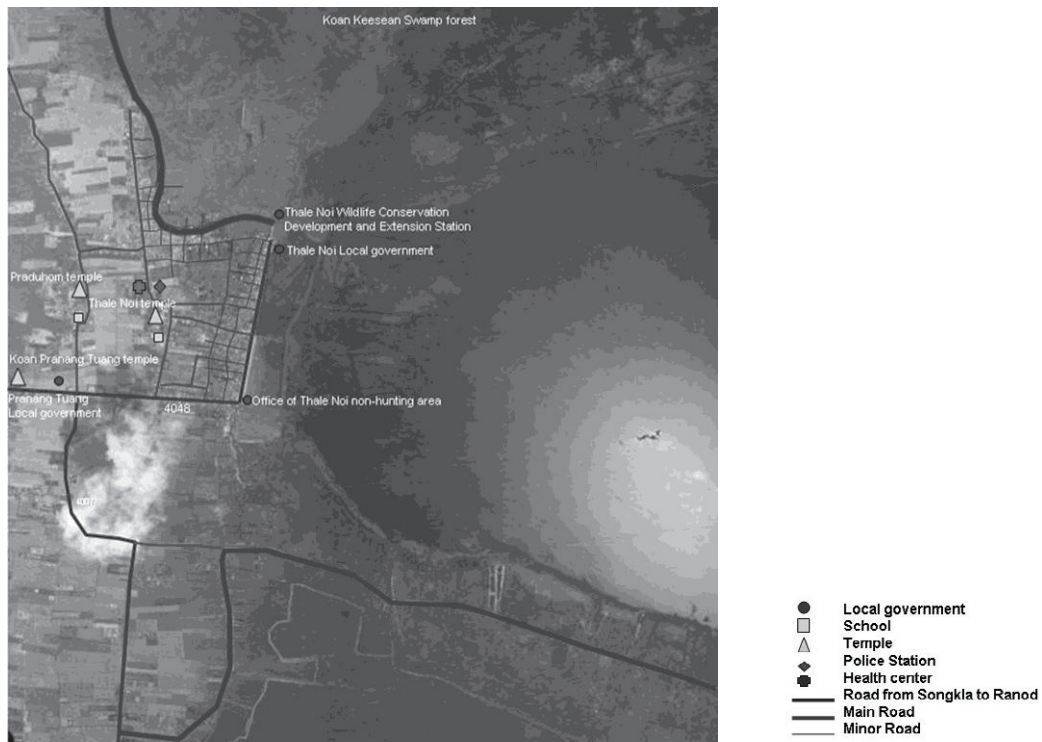


Fig. 2. Thale Noi community; Source: modified from Royal Thai Survey Department (2002)

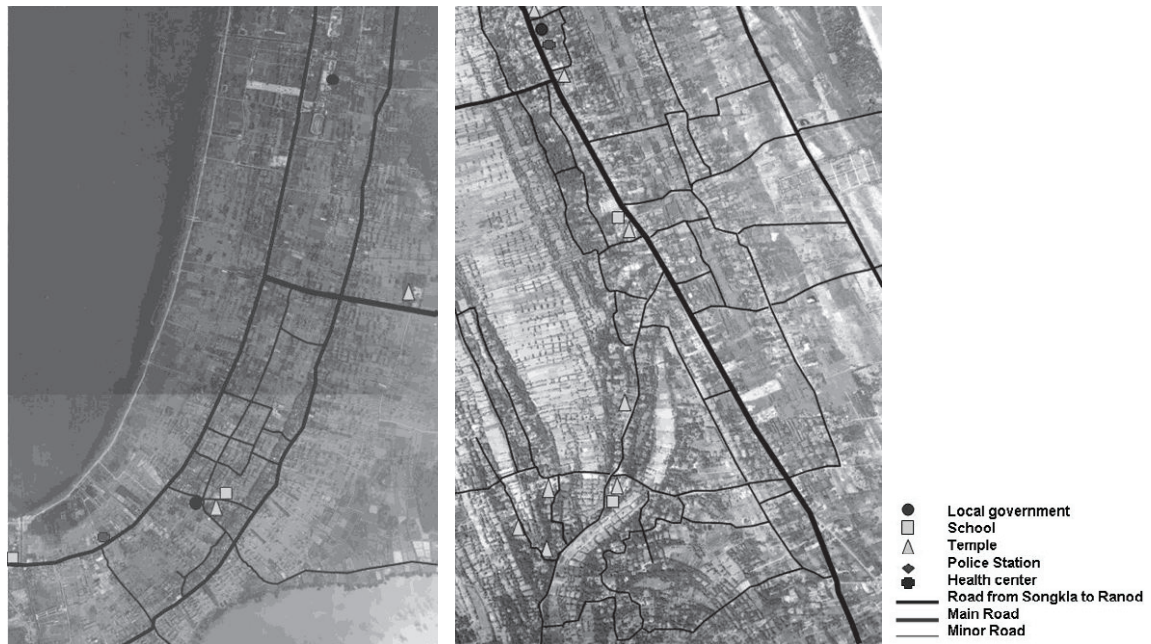


Fig . 3. (a) Krasae Sin community; (b) Chingco community; Source: modified from Royal Thai Survey Department (2002)

### 3. Significant changes affecting local living

Two sets of changes have affected the traditional communities around Songkhla Lake Basin. The first relate to resource managements: a) A water gate was constructed in 1954 at *Pakrawa* canal in *Ranod* district to block sea water and thereby to enable 132 irrigation projects for rice plantation (Duangsuwan, 2002). This has directly affected the existing fishery regime and changed the peasant economy and lifestyle. b) *Thale Noi* (North Lake area) and *KuKud* (Middle Lake area) were announced to be a Ramsar site in 1998 (Office of Natural Resources and Environmental Policy and Planning, 1999). Local people became virtual outsiders to this process and an increasing specialization of functions affected the social space of the community. The lake has become shallower and aquatic ecosystems have changed, in turn differentially affecting livelihoods and local systems of production. The second set of changes relate to the transformation of waterways to terrestrial ways: the first highway from Songkhla city to Ranod district was constructed in 1973 (Pongpaiboon, 1993). The road as agent of modernization has changed community structure both physically and socially.

### 4. Adaptability for survival: three case studies

*Thale Noi* community's name refers to the name of the northern area of Songkhla Lake, where it is clustered; likewise *Wat* (Temple) *Thale Noi* of this community also represents the relationship of the settlement with its natural environment. The ecosystem of swamp forest and wetland is the basis of local occupations that include fishery, paddy farming and handicrafts made from bulrush, and connects the community to other similar communities in a network of friendship called *Kler khao Kler le* (the friend from the mountain and the sea) with the waterway of the lake as the main route, reflecting the reality of

an aquatic rural world. As the lake is common property of many communities, its use was historically managed via the circulating water that accompanied the change of seasons, until modern developments changed the mode of production from subsistence to mono-plantation, especially the paddy farming of Ranod district in the eastern part of the lake following 1954 construction of the water gate at Pakrawa canal to block sea water and enable irrigation (Duangsuwan, 2002). This action profoundly affected the shallow lake and thereby the fishermen of *Thale Noi*. With the declaration of *Thale Noi* as a Ramsar site in 1998, the conservation goal and linked tourism policy, with the consequent demand for facilities, pushed the villagers to the status of outsiders. Especially the road from *Thale Noi* to Ranod, though potentially an agent for prosperity, forced value changes on the villagers. New occupations, specifically service jobs, have led to new interactions with the environment. Yet, despite that, older collective occupations seem to be surviving.

Table 1. *Thale Noi*: characteristics of change, pre-1927 to 2010

	Before 1927	during 1927-1957	during 1957-1987	during 1987-2010
<b>Causes</b>	-Flat and swamp forest. -Biological diversity.	-Water gate and irrigation were built. -The government wanted to change structure of production.	-Increased population -Announced to be reservation area.	-Announced to be a Ramsar site. -Tourism -Department of Fisheries takes clear authority in the zone.
<b>Results</b>	<b>Environment</b> -Close relationship of living and environment such as in use of natural materials. -Image of community was a clustered settlement of a fishery community on the lake.	<b>Environment</b> -Shallow swamp and filled with weed. -Decreased diversity of biology. -Flooded -The government built concrete pathways as substitute for wood pathways.	<b>Environment</b> -More shallow swamp and increasingly filled with weed. -Further decreased diversity of biology. -Flooded -The government built even more concrete pathways. -Some houses were raised a floor higher. -Some households use new materials to fix their houses. -Orientation of some house faced to the new pathways.	<b>Environment</b> -More shallow swamp and filled with weed. -Further decreased diversity of biology. -A lake edge road constructed -Flooded -The government and the villagers built still more concrete pathways. -More house were raised a floor higher. -Orientation of morehouse faced to the road or path ways. -More households use new material to fix their houses. -Image of community shifted to eco-tourism and a center of the bulrush handicraft and fishery product/equipment.
	<b>Livelihoods</b> -Fishery, paddy farm, bulrush farm/ handicrafts -Subsistence and mutual aid of community network. -Against the power of government.	<b>Livelihoods</b> -Decreased diversity of biology affected fishery directly. -The villagers began to comply with the government's wish to change the structure of production.	<b>Livelihoods</b> -Direct trouble to fishery, paddyfarm/ bulrush handicrafts -The villagers searched for ways to survive. -Mode of production increasingly dependent on the government and market.	<b>Livelihoods</b> -Occurrence of service jobs. -The villagers separated from the lake. -Agents of prosperity made villagers change their values. -Some villagers aware of their situation and need to work cooperatively and in new collective occupation groups.
	<b>Social</b> -Close relationship of kinship and co-existence of community. -Close relationship of community and temple.	<b>Social</b> -Close relationship of kinship and co-existence of community. -Close relationship of community and temple.	<b>Social</b> -Kinship still sustained but relationship between community and community reduced. -New popular occupation: working in the government agencies. -Continuing close relationship of community and temple.	<b>Social</b> -Roads as 'agents of prosperity'. -Kinship still remains strong. -Working in government agencies still popular together with traditional occupations. -Continuing close relationship of community and temple.

*Krasae Sin* community's name means a city replete with water, again referring to the relationship with its environment. The term also refers to three districts and the harmony of communities in this place.

*Krasae Sin* is a new district established in 1978; it was in *Ranod* district in the past (Krasae Sin local administration, 2008). The centre of *Krasae Sin* district is *Tanod Duan* village; likewise there is *Wat Tanod Duan* of this community, where *tanod* refers to a sugar palm and hence the relation between the environment and local people's occupations, manufacturing from sugar palm. This community is on the sand ridge of *Sating Phra* peninsula, in the middle-western area of Songkhla Lake. Their community ecosystem was traditionally one of alternating fresh and brackish water related to the seasonal circulation of water, until the modern developments of the water gate at *Pakrawa* canal and irrigation system since 1954 (Duangsuwan, 2002). The water is now mostly fresh and thus becomes the basis for new local occupations including paddy farming, manufacturing of sugar palm, fishery and raising cattle. This settlement of *Tanod Duan* village is landward but near the lake in the south though far from the main access way. However, it is connected with other communities by both water and road. The first highway from Songkhla city to *Ranod* district, constructed in 1973 (Pongpaiboon, 1993), shifted activity from waterways to territorial ways, reinforced by the increasingly shallow lake. This affected ways of life as the mode of production shifted to dependence on government and the market, and *Kukud* (the southern area of the community) was in 1998 announced to be a Ramsar site. This community had to adapt in many way for its survival. There have been new occupations, labour in factories and construction sites, and a shift to collective occupation groups.

Table 2. Krasae Sin: characteristics of change, pre-1927 to 2010

	Before 1927	during 1927-1957	during 1957-1987	during 1987-2010
<b>Causes</b>	-Flat and sand ridges. -Biological diversity.	-Water gate and irrigation systems were built. -The government wanted to change structure of production.	-Road from Songkhla to Ranod was built in 1973. -Tinnasulanon Bridge was built in 1986.	-Kukud was announced to be a Ramsar site in 1998. -Increase in factories.
<b>Results</b>	<b>Environment</b> -Close relationship of living and environment, such as in use of natural materials. -Image of community was of a peasant society and a small port.	<b>Environment</b> -Decreased biological diversity. -Area near the lake flooded.	<b>Environment</b> -Further decreased diversity of biology. -Area near the lake flooded. -Orientation of some houses changed to face the road. -Some households use new materials to fix their houses. -The density of settlement higher near the road than the lake.	<b>Environment</b> -further decreased biological diversity. -Area near the lake flooded. -Orientation of further houses to face the road. -Further households use new materials to fix their houses. -Image of community was that of a very remote rural community.
	<b>Livelihoods</b> -Fishery, paddy farm, sugarpalm, orchard field, cattle breeding. -Subsistence and mutual aid in a community network. -Close relationship of family and community. -Opposition to the power of the government.	<b>Livelihoods</b> -Farmer began to be dependent on the government and market. -Agricultural investment, planted crops.	<b>Livelihoods</b> -The high cost of farming has affected the farmers. -Terrestrial transportation was more convenient. Water transport was worse.	<b>Livelihoods</b> -Villagers separated from the lake. -Sugar palm production reduced. -Collective occupation groups. -Some go outside to work in factories and as labor.
	<b>Social</b> -Close relationships of kinship and co-existence of community. -Close relationship of community and temple.	<b>Social</b> -Close relationship of kinship and co-existence of community. -Close relationship of community and temple.	<b>Social</b> -Kinship still remained strong but relationship between community and community reduced. -Popular occupation: working in the government agencies. -Continuing close relationship of community and temple.	<b>Social</b> -Roads as agents of 'prosperity'. -Kinship still strong. -Working in the government still a popular occupation. -Continuing close relationship of community and temple.

*Chingco* Community's name is ambiguous. *Chingco* means stealing cattle and might refer to some distinctive activity; however, it is also distorted from the word *Chongkho* (the name of a tree in the Thai language), possibly referring to the environment of this locality; it is also a distortion of the word *Singora* (the name of *Singhanakhorn* district) by which foreigners used to refer to this place. The community is on

a sand ridge of the *Satingphra* peninsula, in the southwest of Songkhla Lake. The community ecosystem is one of alternating brackish or sea water circulating seasonally, providing the bases to local occupations that include paddy farming, manufacturing of sugar palm, and raising cattle. As with *Krasae Sin* community, there is the connecting *Kler khao Kler le* community network, with the waterway of the lake enabling exchange between communities, although the walkway has always been significant.

However, the modern development has taken its toll. The first highway from Songkhla city to Ranod district, constructed in 1973, divided the community in half; then Tinnasulanon Bridge, built in 1986, affected the community significantly. *Chingco* community was split into a *tessaban* (municipality) of *Singhanakorn* district, in consideration of its size, capacity and function rather than any sense of a co-existing community. This seriously fragmented both the community structure and its image and meant that different parts would be affected by different policies.

Table 3. Chingco: characteristics of change, pre-1927 to 2010

	Before 1927	during 1927-1957	during 1957-1987	during 1987-2010
<b>Causes</b>	-Flat and sand ridges -Biological diversity -Ancient trade route	-Water gate and irrigation systems were built. -The government wanted to change structure of production.	-First road from Songkhla to Ranod was built in 1973. -Tinnasulanon Bridge was built in 1986.	-Increase of factory, hotel activity.
<b>Results</b>	<b>Environment</b> -Close relationship of living and environment such as in use of natural materials. -Image of community was of the conjunction of waterway and terrestrial way. There were many temples, pavilions and pools.	<b>Environment</b> -Decreased biological diversity. -Some plains flooded.	<b>Environment</b> -Decreasing biological diversity. -Some plains still flooded. -Increasing density of settlement near the road.	<b>Environment</b> -Further decreased biological diversity. -Some plains still flooded. -Some households use new materials to fix their houses. -Image of community was 'modern' on the main road but continued to be more traditional at the back. -Pavilions and pools continued to determine the image.
	<b>Livelihoods</b> -Fishery, paddy farm, sugar palm, orchard fields, cattle breeding. -Subsistence economy and mutual aid of a community network. -Against the power of government.	<b>Livelihoods</b> -Decreased biological diversity. -The villagers began to comply with government policies that wanted to change the structure of production.	<b>Livelihoods</b> -Direct negative impact on paddy farming. -Villagers searching ways to survive -Mode of production dependent on government and market. -Terrestrial transportation increasingly convenient, water transportation worse.	<b>Livelihoods</b> -Occurrence of service and laboring jobs. -Dichotomy in villagers' ability to adapt.
	<b>Social</b> -Close kinship relationships and cooperative spirit of community. -Close relationship of community and temple.	<b>Social</b> -Close relationship of kinship and wider community. -Close relationship of community and temple.	<b>Social</b> -Kinship still remains strong but relationship between community and community reduced. -Popular occupation: working in government agencies. -Continuing close relationship between community and temple.	<b>Social</b> -Road as agent of 'prosperity'. -Kinship remains strong. -Working in the government agencies remains popular together with traditional occupations. -Continuing close relationship between community and temple.

## 5. Community transformations

Nartsupha & Lertvicha (1998) viewed communities in southern Thailand as comprising a 'network community', characterized by community-to-community interrelationships. These interrelationships were clearly limited by the possibilities of movement – aquatic, in the case of the communities of Songkhla Lake. New roads and then the vaster reaches of globalization transform all that.

Against that fracturing of old networks, however, has been the re-centering power of the *wat*, the temple. People of all three communities are very close to the temple. They make merit at the temple and

help the temple's work. They still go to Sunday market in front of the temple and utilize its public pool, intended for everyone's use. The influences of Buddhism profoundly inform people's beliefs, ideas and way of life.

Srisak Wallipodom (2011) argued that, in the past, Thai people saw the world as a whole. There was no separation between the material and spiritual realms. His idea of the traditional community can be represented as a space where house, community space and temple intermingle; the only divisions, albeit always porous, are between community and its hinterland of orchard and paddy and its surrounding public lands of forest, wilderness but also, in the present context, lake. Such an abstracted representation of traditional rural community is presented in the top-left image of Fig 6; the other three images summarize transformations of this order, over the period covered by this study, in the three communities. Roads have intruded, there are now state agencies, houses have multiplied. The most dramatic interruption has been to *Chingco* where the main road has bisected the community and where the space of the road is now ambiguous: it is simultaneously a communal meeting place, the link to a wider sphere of economic and social action (attracting the young away to city life and employment) and a barrier dividing a once unified community. Cuttaleeya Noparatnarapon has noted a quality of flowing, 'unbounded' space in a semi-traditional village in the urban fringe of Bangkok but observed that, with increasing urbanisation, walls, fences and other barriers fractured that previously undifferentiated space (Noparatnarpon, 2004; Noparatnarpon & King, 2007). The same quality of openness and lack of boundaries characterises the space of the Songkhla Lake villages; there, however, the walls, fences and prohibitions are not in evidence – but, then, while these villages are being drawn into an urban-dominated world, they remain un-urbanised. Lifestyles might transform into new, hybridising forms, yet these remain non-urban.

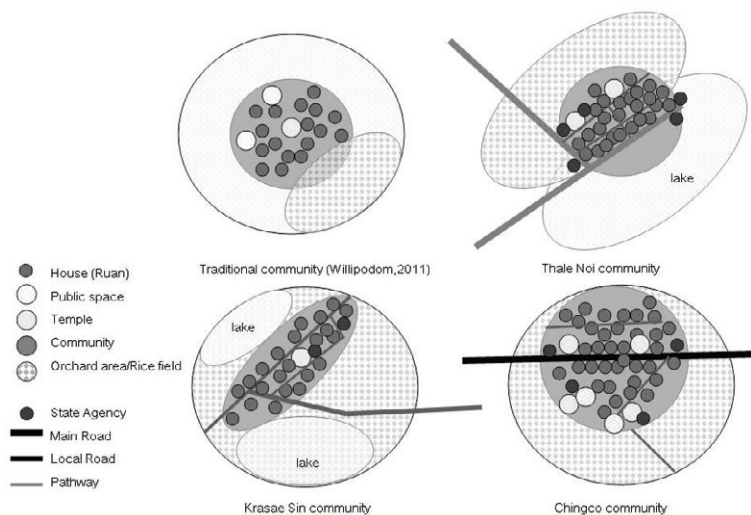


Fig. 4. Representation of community structure: comparative analysis of Songkhla Lake communities

The other dramatic change, affecting all three communities, has been the arrival of state agencies at village level in the form of local governance (once mostly the prerogative of the temple and its committee), education (also previously a temple responsibility), health care (yet again previously linked to the temple), law and order. Whereas the temple, its monks and its activities were once central to most aspects of community life, there are now other centralities, again most startlingly revealed in the Chingco case where jurisdictions are now split between different local government agencies. That said, the temple and the people's Buddhist religion retain cultural centrality. Buddhist festivals and ceremonies still focus



in the temple and, as observed above, within the dwelling the indivisibility of the spiritual and the material remains strong.

## 6. Household transformations

The data displayed above reveal processes of transformations in community economy and accordingly in households, consequent on aspects of a modern market economy inserting into a pre-modern, traditional, rural economy that could previously be seen as, in part, self-generating and self-renewing (Natsupha, 1997; Natsupha & Chanikornphadit, 1997; Ganjanapan, 2001). Ernst Bloch, writing in 1932, coined the term ‘nonsynchronism’ to refer to the phenomenon of living in a range of different times at once and in the same place (Bloch, 1997); there is a “coexistence of realities from different moments of history” (Jameson, 1994: 307). Jan Nederveen Pieterse has likewise drawn attention to the way that globalisation produces a proliferation and hybridisation of modes of production and organisation. This principle of hybridisation is counterposed to the ‘dual economy’ split in traditional/modern sectors; instead we get an interpenetration of modes of production (Nederveen Pieterse, 1995: 50-51).

Fieldwork in the Songkhla Lake communities revealed households who could be seen as operating in two economies. While modern Thailand might be described in terms of dual economies in the sense argued by Julius Boeke (1953), at the level of the household there seems to be more of a sense of interpenetration as suggested by Nederveen Pieterse – a sort of economic muddle. Old practices of production (e.g. bulrush weaving) persist in Thale Noi but the influx of the tourists link these practices to a modern market sector; new irrigation brought paddy farming to Krasae Sin and hence a link into the market and corporate economy even while older production practices persist; households in all three communities are involved simultaneously in traditional production and informal exchange and in paid, formal sector employment – most notably government services but also factory and laboring employment.

The question, then, is whether we are witnessing the ‘clash of economies’ (Boeke) or a hybridisation? The question is of some theoretical significance: the gist of Nederveen Pieterse’s extended argument is that these situations of interpenetrating modes of production become sites of what Michael Mann (1986) calls ‘interstitial emergence’ – of what are effectively new, emerging modes of production – and thereby important sources of social transformation or renewal.

The suggestion at this point in the present paper is that in places like Songkhla Lake one can detect fundamental economic and social transformation – the emergence of new ways of economic and social organisation. However, it is really only at the level of the household that this becomes visible.

## 7. Dwelling transformations

Transformation of household production, practices and livelihoods has brought inevitable change to the vernacular houses of the communities. Houses are required to accommodate new activities while some older activities linked to pre-modern rural life may no longer be salient. Change also comes with new technologies – electricity, telephones, new household appliances. Modern media bring new expectations and patterns of behaviour, especially among the young, with new idea of privacy and individual autonomy, as well as new potential for intergenerational tensions.

Southern Thai Buddhist houses around Songkhla Lake Basin are similar to the Thai Buddhist vernacular house depicted in the painting of *Wat* (temple) *Mudchimavad* in Songkhla city as in other traditional depictions – timber houses built on stilts, with double roof and clay roof tiles.

A number of authors, on the basis of direct observation and survey, have written on the Thai vernacular house (Panin, 2008; Pisuttirattananon & Maneechod, 1992; Pongpaiboon, 1999), always noting its links with the local environment and the people’s beliefs. The use of space is flexible in relation

to the mode of subsistence and the physical environment; the main approach is typically from covered front-stairs to the semi-covered terrace, thence continuing to the main hall and bedroom. The kitchen was always separated in a pavilion adjoining the open terrace. The direction of the house was significant: the front of the house would face to the east although the kitchen building was separated to the back and located in what was really an adverse direction.

The relationships of kinship and of Buddhism always dominated the design and use of the house. The vertical dimension was associated with the deceased ancestors, the horizontal dimension with the family. The twin roof form of the house in one sense represented this dichotomy: all would live together, in the same house, on the same land. The direction of the sleeping household head was also significant: the most senior resident would sleep with head turned to the south; younger residents must not turn their feet in this direction when they sleep. The differentiated levels of the house's platforms and its steps (the vertical dimension) also represent respect for seniority. The space under the house would not be used for habitation because of the respect to be accorded the household head as properly and respectfully elevated. So space under the house was used only for storage.

Contents of the house were primarily determined by their Buddhist beliefs. In the highest pavilion, of the household head, would be the shelf of both the Buddha statue and their ancestor image and shrine, also facing south. The living space was to express their beliefs. However, despite these requirements of belief and respect, the living space was never static but would adapt in different ways to different conditions, as different contexts would transform the process of household living expressed in the vernacular house. Some aspects of this adaptability are displayed in the following Table 4, which summaries differences in the three communities of the present study, in response to the changes displayed in the preceding Tables 1 to 3.

Table 4. Vernacular houses and their characteristics in the three Songkhla Lake communities

House	Thale Nol community	Krasae Sin community	Chingco community
Data base of local living	Environment	-Flat and sand ridges -Decreased biological diversity -Government wants to change structure of production and villagers begin to comply. -Kukud announced to be a Ramsar site in 1998. -Change from waterway to terrestrial way forces community far from the other, older community.	-Flat and sand ridges -Ancient trade junction: -This place is near Songkhla city -First road from Songkhla to Ranod was build in 1973 -Tinnasulanon Bridge was built in 1986
	Dwellers	-Fishery, bulrush handicraft, paddy farming, vegetable crops and fish farm. -People built their houses as present owners or are second generation. -An extended family living together in the house or in houses nearby.	-Paddy farm, sugar palm production, chicken farm, cattle farming, fish farm and additional service labour. -People built their houses as present owners or are second generation. -An extended family living together in the house.
Physical change of houses	Planning and orientation	-Surrounded by a garden outside and by a yard. Some have paddy farm in front. A pond is outside the house. -Most houses face the east, but some are now facing the road. -Most houses have demolished the kitchen and built it again within the house. Most are facing the new road.	-Surrounded by a garden outside and by a yard. Some have paddy farm in front. A pond is outside the house. -Most of the houses face east, but now some are facing the road. -Most houses have demolished the kitchen and built it again within the house, mostly now facing the new road.

Form	<ul style="list-style-type: none"> <li>-Most houses have twin hip roofs.</li> <li>-The walls do not splay inwards as in the past.</li> </ul>	<ul style="list-style-type: none"> <li>-Most houses have twin hip roof, although some have mixed hip and gable roof forms.</li> <li>-The walls do not splay inwards.</li> <li>-Some minor adjustments to new houses by changing the roof to tile roofing with reduced slope.</li> </ul>	<ul style="list-style-type: none"> <li>-Most house have twin gable roof in Thai-style, although some houses are in triple form.</li> <li>-Walls knocked out.</li> </ul>
Materials and Construction	<ul style="list-style-type: none"> <li>-Hardwood used from the forest near the community. The clay roof tiles were from Ko Yo, Songkhla, but are no longer in production.</li> <li>-Use of new materials to repair such as galvanized zinc plates and precast concrete slabs.</li> </ul>	<ul style="list-style-type: none"> <li>-Use of hardwood from Puttalong and of sugar palm wood for joists. Tiles were produced in the communities themselves but now stopped.</li> <li>-Use of new materials to repair such as galvanized zinc plates, bricks.</li> </ul>	<ul style="list-style-type: none"> <li>-Use of hardwood from Puttalong and use of bamboo for walls.</li> <li>-Clay tiles were from Ko Yo which is close by, but now stopped.</li> <li>-Use of new materials to repair such as galvanized zinc plates, bricks.</li> <li>-Some have double beams for structural strength.</li> </ul>
Incorporeal aspects of the house	<ul style="list-style-type: none"> <li>-The differences in levels in the house have been reduced, in part to prevent flooding.</li> <li>-Space in the house's pavilion, terrace and pathway in the front is now used for productive activity: specifically, bulrush handicraft.</li> <li>-The front of the bedroom has a shelf for the shrine to ancestors.</li> <li>-The addition of toilets within the back or to the side.</li> <li>-Use the space under the house for storage and drying bulrush.</li> </ul>	<ul style="list-style-type: none"> <li>-Some houses use the space under the house for parent's bedroom for reasons of convenience.</li> <li>-The level of the pavilion is reduced down to the ground.</li> <li>-The front of the bedroom has a shelf for the shrine to ancestors.</li> <li>-Toilets are added in the back of the houses.</li> </ul>	<ul style="list-style-type: none"> <li>-Some houses use the space under the house for parent's bedroom for reasons of convenience.</li> <li>-The level of the pavilion is reduced down to the ground.</li> <li>-The front of the bedroom has a shelf for the ancestor's shrine. Some houses have Chinese guardian spirit and ceiling honouring the grandparents.</li> <li>-Toilets are added within the back or side of the houses.</li> </ul>
Ideals and beliefs in the house	<ul style="list-style-type: none"> <li>-The householder's head is turned to the south when they sleep and the feet of others may not be similarly turned.</li> <li>-Respect for the head in not using the basement area.</li> <li>-The owner's position will be pointed towards the spirit column; there will be appropriate respect and ceremony.</li> <li>-A shrine in front of the house.</li> </ul>	<ul style="list-style-type: none"> <li>-The head is turned to the south when the owner sleeps; feet of others may not be turned towards the major pavilion.</li> <li>-There is a spirit column ceremony and respect is to be observed. Owner of the house cannot be pointed at.</li> </ul>	<ul style="list-style-type: none"> <li>-The head is turned toward the south when the owner sleeps; others' feet may not be turned towards the major pavilion.</li> <li>-There is a spirit column ceremony and respect is to be observed. Owner of the house can not be pointed at.</li> <li>-There will be a shrine in front of the house. Some have a pavilion and a pond to accommodate the public.</li> </ul>

We have observed popular reactions of disappointment as visitors to indigenous Thai communities, like those studied here, consider the sorts of changes to houses summarized above – modern materials, low-pitched roofs replacing high-pitched, galvanized zinc plates rather than terra cotta or wood shingles, culturally-determined differences in floor levels abandoned, particle board walling replacing bamboo or bulrush weaving, kitchens and toilets brought into the house. The ‘passing of the real Thai house’ is bemoaned. These reactions, however, miss the point: what is emerging is a new vernacular. Simply, these are not Melbourne or even Bangkok houses – rather, they are an altogether new southern Thai.

Just as the Songkhla Lake communities manifest the emergence of a new mode of economic and social organization, so they display a new architecture. Both are hybridized and both are ‘muddled’. Simply, they might be the reality of an emerging Thailand.

## 8. Conclusions and Recommendations

The stories of these villages over some 80 years and observations of their present states reveal a great array of transforming changes, variously infrastructural (alterations to the aquatic regime leading to ecological change, roads displacing water-focused lifestyles), economic and occupational (in turn consequent on ecological change but also on the intrusions of a market economy), social (new household structures in part linked to new paid employment), cultural (new technologies, new media, new values among a younger generation). The transformations are different in each of the three villages observed here, in part due to their different community micro-ecologies and different histories and cultural practices. While the people's Buddhist religion and cultural practices remain strong and, on the evidence

of this study, a stabilizing force in a time of otherwise great change, there has been a clear loss of the temple's centrality as the state has moved into increasing aspects of people's lives.

There is a temptation to look at the consequence of these transformations through a lens of nostalgia, mourning the passing of old economies and lifestyles, of what were regarded as indigenous vernacular houses, and of old community structures. However, as argued here, what we are really seeing are manifestation of what might well be the emergence of a new form of Thai society. First, we observe an ongoing process of economic hybridity as old and new forms of production, exchange and consumption seem to fuse into something quite original. Second, old houses transform (low-pitched roofs, simplified floor levels, new materials, new spatial arrangements), new houses are built with scant acknowledgement of older traditions, yet what is emerging can also be seen as a new vernacular. It might be strongly at variance with houses of the past but it is also distinctive and an expression of the emerging, hybrid economy and society. Third, community structures are changing – they mutate with new opportunities, popular demands and practices. The Buddhist religion in the communities is also mutating as its role is redefined.

The study highlights the adaptability of Southern Thai people to changes their communities and dwellings in their micro-ecosystem and modern developments for survival. The recommendation for further study, the holistic approach is important to truly understand the diversity and change of folkways as living culture which displays their communities and dwellings in micro-scale differences especially vernacular architecture study. The planners and designers should carefully plan and design that would allow culturally unique characteristics to be sustained of local living with their context.

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