Sanpong Village Revisited: Anan Ganjanapan's Contribution to the Study of Agrarian Change in Northern Thailand

(ย้อนเยือนบ้านสันโป่ง: คุณูปการของอานันท์ กาญจนพันธุ์ ต่อการศึกษาการเปลี่ยนแปลงของสังคมเกษตรกรรมในภาคเหนือของไทย)

Paul T. Cohen (พอล ที โคเฮน)

Abstract

Between June 1980 and August 1981 Anan Ganjanapan carried out anthropological fieldwork in Sanpong - a village in Sanpatong district (now Mae Wang), Chiang Mai province, northern Thailand. As I understand, the primary aim of Anan's research was to study agrarian transformation of the village over a long period of time, with a focus on rural differentiation based on varying control of peasant groups over land and labour. As a foreign anthropologist I had previously studied Sanpong, conducting periodic fieldwork there on agrarian issues between September 1967 and March 1969 on agrarian issues and with a brief period of follow-up research in 1978, though my research also encompassed a comparison with the farming community of the nearby town of Ban Kat. In this article I shall summarise what I consider to be the main arguments of Anan's research on agrarian change in Sanpong. I shall also offer some evaluation of his work, particularly in relation to my own earlier and Yos Santasombat's later research in the same village.

Keywords: Anan Ganjapan, Ban Sanpong, agrarian change, northern Thailand

บทคัดย่อ

ระหว่างเดือนมิถุนายน 2523 ถึงเดือนสิงหาคม 2524 อานันท์ กาญจนพันธุ์ ลงพื้นที่ทำงานวิจัยภาคสนามทางมานุษยวิทยาที่หมู่บ้านสันโป่ง ซึ่งขณะนั้นเป็นหมู่บ้านหนึ่งในอำเภอสันป่าตอง (ปัจจุบันอยู่ในเขตอำเภอแม่วาง) จังหวัดเชียงใหม่ ทางเหนือของประเทศไทย ตามความเข้าใจของข้าพเจ้า จุดประสงค์หลักของงานวิจัยชิ้นนี้ของอานันท์ คือ เพื่อศึกษาการเปลี่ยนแปลงด้านเกษตรกรรมของสังคมหมู่บ้านดังกล่าวในบริบทประวัติศาสตร์ที่ยาวนาน โดยมุ่งความสนใจไปที่กระบวนการสร้างความแตกต่างทางชนชั้นในชนบท อันเป็นผลมาจากความสามารถในการควบคุมที่ดินและแรงงานที่ต่างกันของชาวนากลุ่มต่างๆ ในฐานะที่เป็นนักมานุษยวิทยาต่างชาติ ก่อนหน้านี้ ข้าพเจ้าเคยศึกษาบ้านสันโป่งมาก่อน โดยได้ทำงานภาคสนามที่นั่นระหว่างเดือนกันยายน 2510 ถึงเดือนมีนาคม 2512 เพื่อศึกษาประเด็นต่างๆ เกี่ยวกับการเกษตรกรรมของชาวนา และหลังจากนั้นได้ทำการติดตามศึกษาวิจัยในช่วงระยะสั้นๆ ในปี 2521 แม้ว่างานศึกษาวิจัยของข้าพเจ้าจะเป็นงานศึกษาเชิงเปรียบเทียบระหว่าง (บ้านสันโป่ง) กับชุมชนเกษตรกรรมใกล้เคียงคือบ้านกาดในบทความนี้ ข้าพเจ้าจะสรุปสิ่งที่ข้าพเจ้าเห็นว่าเป็นข้อเสนอสำคัญในงานศึกษาของอานันท์เกี่ยวกับความเปลี่ยนแปลงในสังคมชาวนาของบ้านสันโป่ง และข้าพเจ้าจะพยายามทบทวนคุณูปการบางประการจากผลงานของอานันท์ โดยเฉพาะในประเด็นที่เกี่ยวข้องสัมพันธ์กับงานวิจัยของข้าพเจ้าที่ดำเนินการมาก่อนหน้านั้น และงานศึกษาของยศ สันตสมบัติ ที่เพิ่งดำเนินการไปเมื่อไม่นานมานี้ในหมู่บ้านแห่งเดียวกัน

คำสำคัญ: อานันท์ กาญจนพันธุ์ บ้านสันโป่ง การเปลี่ยนแปลงของสังคมเกษตรกรรม ภาคเหนือของไทย

Introduction

Between June 1980 and August 1981 Anan Ganjanapan carried out anthropological fieldwork in Sanpong - a village in Sanpatong district (now Mae Wang), Chiang Mai province, northern Thailand. Sanpong is situated some 30 kilometres south of Chiang Mai city in a fertile, well irrigated area that then supported intensive agriculture. As I understand, the primary aim of Anan's research was to study agrarian transformation of the village over a long period of time, with a focus on rural differentiation based on varying control of peasant groups over land and labour. This emphasis on historical development no doubt reflects Anan's earlier training in history[1] and he has acknowledged (in personal communication) the special influence of Mark Bloch's classic historical study of the French peasantry (1966).

As a foreign anthropologist I had previously studied Sanpong, conducting periodic fieldwork there on agrarian issues between September 1967 and March 1969 on agrarian issues and with a brief period of follow-up research in 1978, though my research also encompassed a comparison with the farming community of the nearby town of Ban Kat (Cohen 1981,1983[2]). Needless to say, my own earlier research in Sanpong gives me a special interest in Anan's work on agrarian transformation in that village and also, I should add, in a recent re-study of Sanpong by Yos Santasombat (2008).

In the following I shall summarise what I consider to be the main arguments of Anan's research on agrarian change in Sanpong as presented in his Ph.D. thesis ('The Partial Commercialization of Rice Production in Northern Thailand (1900-1981') and in several thesis-based publications; I shall also offer some

evaluation of his work, particularly in relation to my own earlier and Yos Santasombat's later research in the same village.

The (Partial) Privatisation And Commoditisation Of Land

Anan traces the beginning of the monetisation of the Northern Thai economy to British colonial intervention dating back to the 1830s. Monetary exchange remained relatively undeveloped until the 1880s when the Bombay Burma Company and Borneo Company expanded their operations in the region and had to purchase increasing quantities of rice to feed forestry workers (1984: 51).

Parallel with this trend was the progressive surrender of political power of the Northern Thai aristocracy (*chao*) from the 1870s (in response to increased Siamese state intervention) and accompanying loss of economic resources due to the penetration of foreign trade. The Northern *chao* relinquished their monopolistic control of the caravan and slave trade. Shan traders (under British protection) came to dominate the import of British manufactured goods from Burma and the Chinese assumed increasing control over the river trade from Bangkok to the north (1984: 51,52). Furthermore, the *chao* lost a major source of revenue from teak when the Forestry Department took over control of forest leasing (1984: 55).

Anan argues that the response of the Northern *chao* to their economic plight was to appropriate peasant rice land as private property (*na chao*) and as a new source of income. For example, in the 1890s Chao Inthanon, the *chao muang* of Chiang Mai, confiscated about 400 *rai* of peasant rice land at Thung Pa Chi

to the immediate north of Sanpong village and altogether some 2,000 *rai* of peasant rice land and unoccupied land in nearby villages in Sanpatong and in the neighbouring district of Chom Tong. In Sanpong the seized land was divided into small tenancies (*hom*) of 6 *rai* each with a rent eventually of about a third of the crop (1984: 56). Chao Inthanon assured his control over the local irrigation system by appointing the steward of his *na chao* in *Sanpong* as chief of the dam on the Wang River that diverted water to the village. The evidence that Anan provides that this *na cao* was essentially private land as distinguished from state land (*na luang*) attached to the office of the *chao muang* is that the rice fields confiscated at Thung Pa Chi was not inherited by Chao Inthanon's successor as *chao muang* (Chao Inthawororot) but by another son, Chao Kaeo Nawarat. Also, the Siamese government exempted, within limits, the *chao* and their descendants from land taxes, thereby indirectly recognizing their private rights to the land (1984:57,85). However, Anan emphasises that this *na cao* in Sanpong and in nearby villages could not be considered fully privatised as it remained encumbered with a number of feudal-type obligations for local peasants such as corvee work for the local irrigation system, the milling of rice for the *chao* and the payment of tribute (in items such as firewood and garden crops) (1984: 57).

Another major step in the development of land as private property and as a marketable commodity was the promulgation of the Land Tax Collection Act of 1900, introducing land taxes based on the size of landholdings (1984: 85-87). To minimise tax peasants avoided declaring the actual size of their holdings; this required the collusion of local headmen who approved and

issued the relevant documents and encouraged the emergence of patronage to protect land rights. Consequently, early in the 20th century private property was circumscribed by the absence of legal security and dependent on personalised patron/client relationships (1984: 89). Furthermore, Anan emphasises that the development of land as a marketable commodity was very limited in this period and indeed remained so until the mid 1950s. The most common form of monetary transaction in Sanpong was known as *'sui'* i.e. the pre-emptive right to buy the inherited share of a sibling's land and to pay it off over an extended period. Most commonly women purchased land in this way from their male siblings, resulting in a form of de facto matrilineal succession to rice land (1984: 90,209; see also Cohen 1981: 170-173). Another form of land transfer took the form of an exchange of plots (*laek*) based on the necessity of keeping plots close together, with additional cash payment to compensate for differences in land size and fertility (Anan 1984: 209). Indebtedness, particularly in the form of crop mortgaging (*khao khiaw* or 'green rice'), also forced the sale of some rice fields to well-off rice traders in the village (1984: 151,213). Still, Anan concludes that, at least until about the mid 1950s, the situation was one 'in which riceland had not yet become free of all bonds and subject to the competition of the market place' and that, furthermore, most rice-land sales occurred 'only within certain limited conditions, specified by some forms of relationships based on kinship, patronage, or indebtedness – or some combination thereof' (1984: 211). The intensification of commercial agriculture from the mid 1950s encouraged a freer market for rice land; in particular rich peasants were able to access loans from credit cooperatives to purchase *na chao* from aristocrats – a situation that furthered the concentration of land-

holdings in Sanpong village. However, Anan argues that even in the 1970s and early 1980s the land market was still only partially developed (1984: 506).

Socio-Economic Differentiation

In his analysis of socio-economic differentiation in Sanpong Anan traces an emergent category of rich peasants back to the loosening of aristocratic control over trade in the late 19th century. As the political and economic power of the aristocracy declined under Siamese state intervention many aristocrats, particularly the more impoverished minor *chao*, seized the opportunity to recoup their wealth through accusing newly rich peasants of being witches (*phi ka*), inciting villagers to expel them from the village and allowing the *chao* to appropriate their land (1984: 58-60). This did not occur in Sanpong; rather Chao Inthanon simply asserted his royal prerogative as *chao muang* to confiscate land to the north of the village (as already noted). This historical event was a major cause of socio-economic differentiation in the village with a legacy till the present day. Previously the size of peasant landholdings was largely determined by the domestic cycle and labour availability within the family. However, the creation of a large tract of na chao severely limited access of Sanpong villagers to land available for clearing.

According to Anan, Sanpong villagers responded to this land scarcity in a number of ways:

a. The communal holding of rice fields by households, with the fields being worked jointly the after the death of the parents (1984: 63).

b. Restrictions on the marriage of household members (particularly of women) to prevent the division and fragmentation of landholdings (1984: 63).

c. The emergence of a class of tenants who rented *na chao* or the rice fields (*na muang*) of large landowners in the village whose land had not been confiscated by Chao Inthanon (1984: 67).

d. Witchcraft accusations to prevent the dispersal of land through intermarriage. These cases were not the result of the devious machinations of minor aristocrats but reflected intra-village conflicts between landowner and landless groups in competition for land (1984:119;1984 b).

Rich landowners accused members of two descent groups in the north of the village who had lost their land to Chao Inthanon. Anan notes that in the first two decades of the 20th century there was only one reported marriage between villagers in the northern quarter of the village and other sections of the village, precluding inter-marriage and access by the poor to the land of wealthier landowning villagers. These accusations also limited patronage obligations of the rich to the needy poor of the village (1984: 119). Witchcraft accusations were thus the idiom for the expression of incipient class conflict within Sanpong village.

By 1920 Sanpong villagers had already been significantly stratified in terms of unequal access to rice land, prompting Anan to distinguish three classes of peasants in the village: poor, middle and rich peasants (1984: 125). The rice boom of the 1920s (stimulated by the extension of the railway to Chiang Mai in 1922) encouraged rich peasants to invest more in rice fields (1984: 215).

By 1920 about 15 of the 56 households were landless poor and 9 rich peasant households owned 50 per cent of the rice fields (1984:121). The inequality in landholdings increased steadily so that, by 1970, 36 rich peasant households (out of 132) owned almost 70 per cent of the irrigated rice fields in the village (1984: 313, Table 5.8)[3]. This concentration of land in the hands of rich peasants was partly due to the sale of *na chao* in the 1940s through to the 1960s, which in turn was facilitated by the capacity of rich peasants to use their existing land as security for loans from credit cooperatives (1984: 217,327).

Anan argues that the intensification of cash crop production in the period from the mid 1950s to the early 1970s 'aggravated both social inequality and the contradictions between those within unequal access to capital' (1984: 358). As commercial agriculture intensified poor peasants were relatively disadvantaged due to lack of capital, minimal access to institutional credit (forcing them to pay higher rates of interest), higher costs of production and lower productivity, and higher risks (1984: 300). The combined effects of these factors forced many small landowners to sell their land to join the ranks of the landless (1984: 323).

From 1974 until 1981 (the year Anan completed his fieldwork) economic and social inequality in Sanpong was exacerbated, in particular by the expansion of institutional credit in the form of commercial banks and the Bank of Agriculture and Agricultural Cooperatives (BAAC). For example, Anan notes that in Sanpong, during the period 1975 to 1980, only approximately 33 per cent of poor peasant households received BAAC loans, whereas about 73 per cent of rich households received loans (1984: 371). Some of the loans from the Bangkok Bank to rich villagers were substan-

tial and included large sums for the construction of three huge piggeries, and the purchase of tractors and six-wheel trucks (1984: 373-374). Such credit privileges made possible the transformation of a small group of rich peasants into entrepreneurial 'capitalist farmers' (*nai thun*). These were large landowners who cultivated part of the land with the use of hired labour but also invested heavily in off-farm enterprises such as trading, machinery hire, haulage, pig raising and money lending (1984: 409;1989:106).

Labour And Tenancy

The progressive intensification of wealth differences in Sanpong was accompanied by significant changes in labour and tenancy relationships between rich and poor villagers. Between about 1900 and 1930 rich peasant households depended on extra labour to work their large holdings. However, a free labour market did not exist in this period. The rich depended on kinship and patronage ties to gain access to sufficient labour, which took the form of reciprocal exchange labour (*ao mue ao wan*), the free labour service of tenants (*chuai*) and the bonded labour of household servants (*luk chang*) (1984:138-139). There was no evidence of wage labour (that is, labour freed from kin and patronage ties) until the late 1920s, at the height of the rice boom (1984:143). The rice boom also saw the emergence of a new form of tenancy, namely sharecropping (with a 50/50 division of the crop) that enabled peasant landowners to benefit more from the boom in rice exports and higher rice prices (1984: 202). The migration of poorer Sanpong villagers to frontier regions during the 1930s and 1940s severely limited the supply of labour to rich peasants and encouraged the continued use of sharecropping that emphasised

patronage and landlord generosity but also enabled rich peasant landlords to minimise costs by taking advantage of the exchange labour relationships of their tenants (1984: 232). The use of hired labour also increased (with almost 50 per cent of poor peasants working for wages in 1950 compared to 30 per cent in 1930 (1984: 235, Table 4.18). However, the continuing scarcity of labour and of cash and credit forced landlords to establish patronage relationships with labourers for several forms of wage labour in which payment was in cash as in *chang mao* (contract hiring) or more commonly in kind as in *chang thai* (hired labour for ploughing), *chang roi thon* (contract hiring for rice harvest for a percentage of crop) and *chuai ao khao* (a daily wage paid in rice to tenants or poorer kinsmen (1984: 236-244). Anan notes that in the late 1960s there began a significant decline in the use of exchange labour due to the rise in the price of rice and non-staple foods and thereby the cost of providing a mid-day meal to helpers (1984: 337) and also the need to speed up rice harvesting in order to plant follow-crops. From the mid 1950s to early 1970s the number of landless labourers in Sanpong increased but so also did the demand for labour in the wake of the intensification of commercial agriculture and multiple cropping. For rice cultivation rich peasants continued to resort to patronage to secure labour. However, there was increasing tension between landowners and wage labourers. This tension was most apparent in the cultivation of dry-season crops (e.g. soybeans, onions, tobacco) which used hired labour almost exclusively and in which profit (through the depression of the fixed–rate wage) took precedence over patronage (1984: 354-355).

By the late 1970s the tension between landowning employers and wage labourers and also between landlords and tenants in Sanpong had intensified. This accompanied the progressive commercialisation of agriculture in the form of triple cropping (with main-season rice followed by soybeans and then a second rice crop or garlic, onions or chili). As the number of landless increased so did the competition to rent land and landlord actions to squeeze more rent from tenants, with some landlords demanding as much as two-thirds of the main-season rice crop (1984: 427;1989: 111). There emerged also a new form of land rental which Anan describes as 'shared-cost leasing' (*yia na pha nai thun*) in which the landowner provides all inputs. This arrangement enabled the landlord to claim more than 50 per cent of the rice crop and also to gain more control over decision making. Consequently, tenants became more like permanent hired labourers and this form of land renting a type of hybrid combination of tenancy and wage labour (1984: 440;1989: 113). In the 1970s population declined as a result of a fall in the birth rate and household size and further out-migration from Sanpong (for work in Chiang Mai and Bangkok). Antagonism between employers and labourers was exacerbated by the upward pressure on wages (promoted by labour scarcity) and the desperate efforts of employers, particularly large landowners, to keep wages down (1984: 496; 1989: 116). Also, Anan argues that triple cropping significantly increased the monetisation of wage-labour employment and reduced individual bargaining within relationships based on patronage (1989: 117,118). This intensified conflict between employers and unattached mobile labour. Workers began to bargain collectively for higher wages, which brought an angry and threatening response from the Sanpong village headmen (1984: 111).

In my thesis, I also highlighted this conflict between rich landowners and poor tenants and wage labourers. I observed:

> 'In 1968 there was no patent antagonism. In 1978, by contrast I was surprised by the many unsolicited comments by poor villagers of Sankham[4] that expressed unequivocally that their rich neighbours were being unjust and exploitive. One poor villager, for example, told me that "the richer are getting richer and the poor, poorer". He added that soon the poor would be forced to steal rice from rich villagers and the poor and the rich would be killing each other'. (1981:193)

This underscores a very significant transformation in agrarian relations in Sanpong village. When I carried out my initial and major fieldwork in Sanpong in the period 1967-1969 I was aware of the relationship between the intensification of commercial of agriculture (in the 1960s) and increased rural differentiation. However, I concluded that: 'common peasant opposition to the bureaucracy still tends to override the widening wealth differences and growing tension between rich and poor peasants…' (Cohen 1981: 274). Indeed, the penultimate and key chapter of the thesis is entitled 'Peasants against Officials' with a focus on bureaucratic corruption that deprived peasants of needed resources and the machinations of local officials to undermine efforts to create autonomous peasant organizations. The agrarian situation in Sanpong and nearby villages in the late 1970s and early 1980s that Anan analyses in depth approximates Andrew Turton's 'local power structures' in which rich capitalist farmers form a separate 'upper stratum' of villagers who are socially, politically and economically more closely connected to

district and provincial elites than to their fellow villagers (Turton 1984: 30-33; Turton 1989: 81-88;Anan 1989: 103).

Sanpong Village Revisited – Again

Between 1998 and 2003 Yos Santasombat revisited Sanpong as part of a wider research project on four villages that had been studied by Western and Thai anthropologists over the past fifty years. The other three villages were Ban Sanpong in Mae Rim, Ku Daeng in Saraphi and Ban Phaed (Ping) in Chiang Kham district, Phayao. He found that in Ban Sanpong (of Mae Wang district) there was greater occupational diversity than in the past. It should be noted that this diversity was already apparent in 1980-81. Then Anan had observed that there were some households that were entirely non-agricultural, dependent on house-building, small shopkeeping, petty trading, bamboo weaving, garment making, woodcarving and a number of capitalist farmers had already invested in piggeries (1989: 106,114-115). Twenty years later Yos notes the addition of construction work, government service and factory work. The more recent emergence of factory work (predominantly in nearby food-processing factories in Mae Wang and Sanpatong district) has created a new class of 'landowning laborers', that is, landlords who choose to work in factories and rent out the land they own. Yos also found that there were an increasing number of small landowners who preferred agricultural wage labour to working their own land – a response to the high production costs of rice growing and presumably the continuance of labour scarcity and upward pressure on wages that Anan had noted two decades earlier. Another important change in agriculture in the 1990s in Sanpong was the gradual conversion of about

a third of all irrigated rice fields into longan orchards.

Yos argues that occupational diversification in Sanpong is a reflection of a peasant 'flexibility' that also characterised the other three villages studied but he emphasises that the diverse livelihood strategies adopted varied according to the particular situations and conditions in each village.

Conclusion

In this chapter I have summarised Anan Ganjanapan's anthropological study of rural differentiation in Sanpong village under the influence of progressive, though incomplete, commercialisation of agriculture. I have also situated Anan's study in the context of my own earlier study of Sanpong and of Yos Santasombat's more recent research in the same village.

There are arguably limitations to the anthropological study of a single village. Yos makes a valid argument in his multi-village study of lowland peasant communities in northern Thailand that not all rural villages in this region follow the same trajectory as Sanpong, that is, one of 'increasing land and income distribution inequality' leading to 'large commercial farmers and a landless proletariat'. Indeed, my own comparative study (1981) of Sanpong and the nearby the town of Ban Kat supports this conclusion: socio-economic differentiation within the large farming community in Ban Kat was minimal, even as recently as the late 1970s, as most of the landed wealth had been concentrated over the years in the hands of Shan traders and Chinese merchants.

However, there can be little doubt that in Sanpong village the trajectory of economic and social change over a period of

almost a century until the early 1980s was towards 'increasing rural polarization and immiseration' (1984: 509). And it is to Anan's credit that he was able, through oral and documentary history, rich ethnography and innovative methodology, to illuminate this process by demonstrating the complex interplay between historical, ecological, demographic, socio-cultural and national and local economic factors. Consequently his thesis and subsequent publications on Sanpong have become among the most influential and frequently cited studies of agrarian transformation Thailand – and deservedly so.

Endnote

1. Anan completed an MA in Southeast Asian History in 1975 at Cornell University.

2. In my thesis and subsequent publications I used the pseudonyms Sankham and Baan Talaad for village and town respectively.

3. Anan was able the reconstruct levels of socio-economic differentiation (as measured in terms of size of landholdings) at ten year intervals over a period of 60 years. This required household histories constructed through a unique combination genealogical data, oral histories, aerial maps and painstaking interviews. Related data were also obtained on household size, household labour, labour use, tenancy, etc., for each period.

4. Pseudonym for Sanpong.

References

Anan Ganjanapan.1984. The Partial Commercialization of Rice Production in Northern Thailand (1900-1981), Ph.D. thesis, Cornell University.

--------.1989. 'Conflicts over the Deployment and Control of Labor in a Northern Thai Village'. In Gillian Hart, Andrew Turton and Benjamin White (eds) *Agrarian Transformations: Local Processes and the State in Southeast* Asia Berkeley, University of California Press, pp.98-121. Reprinted in Anan Ganjanapan (2000) *Local Control of Land and Forest: Cultural Dimensions of Resource Management in Northern Thailand,* Regional Center for Social Science and Sustainable Development, Faculty of Social Sciences, Chiang Mai University, pp.84-112.

--------.1984. 'The Idiom of Phii Ka: Peasant Conception of Class Differentiation in Northern Thailand'. In Paul Cohen and Gehan Wijeyewardene (eds) *Spirit Cults and the Position of Women in Northern Thailand, Special Issue Mankind* 14(4).

Bloch, Marc *French Rural History: An Essay on its Basic Characteristics,* London:Routledge.

Cohen, Paul T. 1981. The Politics of Economic Development in Northern Thailand, 1967-1978, Ph.D. thesis, University of London.

--------.1983 'Problems of Landlessness and Tenancy in Northern Thailand' *The Developing Economies*, 21(3):244-266.

Turton, Andrew. 1984.'Limits of Ideological Domination and the Formation of Social Consciousness'. In Andrew Turton and Shigeharu Tanabe (eds) *History and Peasant Consciousness in Southeast Asia*, Senri Ethnological Studies 13, Osaka: National Museum of Ethnology, pp.19-73.

--------.1989. 'Local Powers and Rural Differentiation'. In G.Hart, A.Turton and B.White (eds), op. cit.

Yos Santasombat .2008. *Flexible Peasants: Reconceptualizing the Third World Patterns*, Research Center for Social Science and Sustainable Development, Faculty of Social Science, Chiang Mai University.