Mountain, Lake, Runway: Infrastructure and Symbolic Intent at Mae Hong Son, Thailand

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Infrastructure often predates architecture and thus creates its context. Conversely, infrastructural design may respond to a setting defined architecturally. Yet in spite of the perceptual link between infrastructure and architecture their interests appear different. Infrastructure presents the "serious" side of urban development, where the criteria of technology, administrative authority, and major financial investment, demand a practical or technical approach favoured by modern engineers and bureaucrats. Structures for growth are established, and the future confidently predicted, set in place by the defining parameters of development. Both measurable and scientific, infrastructure is thus considered beyond architecture. Indeed, large scale infrastructural concerns, especially in the developing world, are closely tied to the macroeconomic issues of growth and social development.

The corollary to this technical determinism is often assumed. Architectural response to infrastructural decisions, though significant to the form of a city and its quality of life, are seen as decorative embellishments of these primary actions. Architecture dresses infrastructure. It marks and makes visible infrastructural interventions through building, whether inspired by or reacting to the new situations. Architecture, therefore, has the responsibility of manifesting the culture of a place in relation to its underlying structure.

Yet within the apparently technological functions (or those considered technical) of infrastructure lie the power to create, support, or transform the symbolic form of a city. Indeed the structure of a city may provide its most cogent cultural image, enduring far beyond the lives of individual buildings. As a result one must find ways of considering infrastructure as a key element in the perception of a city, its symbolic significance, and its future architectural potential. This paper investigates this symbolic aspect of infrastructure through the analysis of Mae Hong Son, a small town in northern Thailand.

INFRASTRUCTURE: CAUSE OR EFFECT?

The separation of the technological and the experiential has been well documented with respect to the development of modernity in the west. The founding principles of its cities, rooted in a distant past, have been long obscured by subsequent developments and practices. Yet as works such as The Idea of a Town by Joseph Rykwert have demonstrated, underlying seemingly technological systems such as grids and orthogonal planning were once cultural intentions and clear symbolic concerns.[1] Arguably, remnants of these values remain present in the form and the embodied experience of such cities and their architecture. Original intentions, at least hypothetically, rest latent in the inherited patterns of inhabitation, exerting an influence on the contemporary city far greater than their visible presence.

In situations facing rapid development and simultaneous modernisation, such as the cities of South-East Asia, these connections are more fragile. Allied with the importation of foreign technology and building practices, massive development challenges the original urban and cultural ideals rooted in the city's foundations, and forestalls their gradual transformation. As a result implicit or inherited urban values, especially ones without a clear formal image, may be unconsciously sacrificed through an application of alien infrastructural practices. Such development risks destroying the city it proposes to assist, replacing or obscuring its essential principles with a vision towards its future which is primarily technological.

This does not propose that new infrastructure should be avoided. The cities of the developing world have equal right to the virtues of

Fig. 1. Wat Chong Klang and Lake Jongkam.

Fig. 2. Wat Pra non.

modernity as anyone else. The simple contrast between the "traditional" city and the modern, however, obscures the more fundamental issues regarding infrastructure and its architectural expression. Are there particular principles operative within distinct infrastructural conditions which help explain curiosities in the form or life of a town? Can thinking about infrastructure symbolically rather than (or in addition to) practically lead to provocative possibilities for new urban development and its architecture?

These questions might help us reflect upon infrastructure from the perspective of symbolic intent or significant use rather than practical or measurable concerns alone. Hypothetically this approach can also help clarify the relationships of cause and effect between architecture and infrastructure, which can lead to positive and specific futures for developing cities, and by extension, clarify issues of urban responsibility for designers in other contexts.

Three specific infrastructural conditions within Mae Hong Son are investigated here, relating to a mountain, a lake, and an airport runway within the city. In their mutual influence and interrelation they provoke reflection on the experiential role of infrastructure, and point to its urban function.

ROADS AND MOUNTAINS

Mae Hong Son is situated in a deep valley within a rugged mountainous landscape, inhabiting a small plain where the valley opens to the east. It is primarily a trading centre for a region of small, culturally distinct, villages which inhabit the surrounding hills. These "hill tribes" represent a range of ethnic and linguistic groups coexistent within a tight geographical area, defining the cultural specificity of the region.[2] Mae Hong Son owes its present significance and rapid growth, however, to its status as a provincial capital and popular tourist destination. As a result the town is provocative. Its form is rapidly changing, yet its architectural and social structures are strongly rooted in its diverse local culture. This condition creates a powerful dialectic between the "traditional" and the new, and thus provides a poignant site for reflecting on the implicit values built into the form of the city, and their possible transformation, extension, or destruction.

Given the absence of a railway, roads provide the primary infrastructure of the town. Sited along a major highway running north-south, the city is structurally linear. Clearly the topography is a strong determining factor in the location of the highway, and its subordinate roads leading out to the surrounding villages. Roads follow valleys. Yet certain deformations occur to the form of the highway which can't be explained by the landscape alone. The

orientation of the roads within the city is also perplexing; not easily attributable to any apparent direct or practical cause.

An analysis of the plan, though preliminary, begins to reveal some interesting conditions. At a large scale the highway curiously bends for no apparent reason. There is a sense that it inflects to a new orientation within the town, and then redirects itself upon departure. It is as if, within a subtly or even loosely defined boundary of the city, different rules of orientation apply. Taking precedence over the practical criteria of a determining landscape outside the city, this inflection hypothetically posits a different sensibility active within its borders. It marks an edge, or a type of symbolic town wall.

The canting of the highway defines a general symmetry, whose centre is located at the summit of an adjacent hill. The hill is not a literal destination, however, as the road creates a tangential relation to it. Although the highway points towards the hill while outside the city, once inside it shifts to the east, leading away from it. Visual connection to the hill, however, is maintained by the roughly perpendicular cross streets. Perhaps more important than this directional inflection, the shift allows significant inhabitation to occur between the main road and the base of the hill. The quieter street flanking the hill houses significant institutions: temple complexes (wats), and a major school. The shift also serves to keep the main
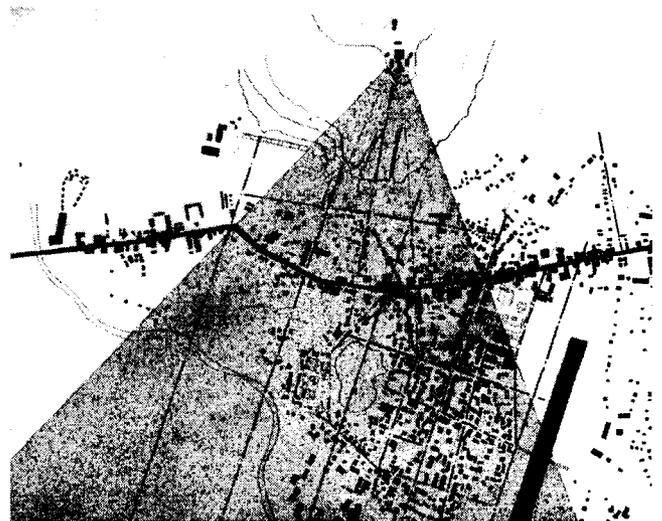

Fig. 4. Plan study.

Fig. 5. Plan study.
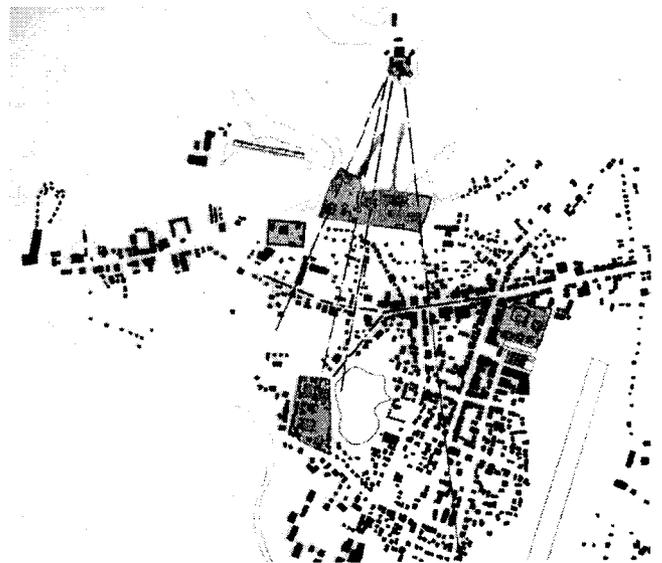

Fig. 3. Mae Hong Son.

street of the town, lined with commercial buildings, away from the landscape. The city is thus both separated from, and reconnected to, the hill by its principal institutions. This serves to define the hill more as a special region than a point, which is flanked rather than intersected.

The symbolic centre of these reorientations, the mountain summit, has a noticeable effect on some of the east west streets, which change direction to face the hill. This is evident especially where they contrast the more pervasive orientation of the city's grid. A subtly defined block structure is broken both by the shifted highway and the roads which point straight to the summit. The latter, however, are generally modest roads within the city. The principal east/west streets follow the orthogonal grid.

This hill provides a strong natural image within the experience of the city. Densely wooded, it hovers above, providing a visual backdrop to urban life. Yet the hill is also a marker, housing an architectural event. For here the hill is crowned with Wat Doi Kong Mu, the most significant Buddhist shrine in the area, and one of the reasons for Mae Hong Son's existence. Housing a series of cheddhis and temples, along with its supporting domestic structures, Wat Doi Kong Mu defines a self contained precinct, independent from the city below. Yet it still faces into the city, visually related to it though distanced by its landscape. Floating over the city, and potentially defining its orientation, the Wat is both a landmark and a founding principle, overlooking the town and defining its conscience.

The relationship of the urban Wats to the hill is also provocative. Those along the base of the hill create a form of city wall, juxtaposed against the landscape. Yet they also face into the town. Visually they act as pointers, leading up and out to the landscape beyond. This orientation is also subtly recognised within the wats sited elsewhere

in the city. Wat Chong Klang, fronting Lake Jongkam (discussed below), is structured along a central path, perpendicular to the orientation of the temple themselves. This path, however, bends to accentuate the view from within the complex to the hill top shrine.

Thus it appears here that the infrastructure of road and highway responds to the hill, the symbolic focus of the town, even though this centre rests outside the town's literal boundaries. The importance of the landscape, and its religious significance, are thus brought to greater visibility through the affected infrastructure. Symbolically the temple complex is paired with the hill, and both are presented to the town below, which arranges its form accordingly. The commercial aspects of the town, its roads and activities, politely keep their distance.

The value of hill is demonstrated by its horizontal relationships. The significance, however, is more clearly vertical. One looks up and away, from the secular to the sacred identified in conjunction with the natural setting. It is notable in this context that a very strong hierarchical value to the vertical exists within Thai culture, especially in relation to the body. It is considered very rude to touch someone's head, just as one should never point their feet at an image of the Buddha. A similar vertical progression is clearly seen in the form of temples, where a casual plane of inhabitation culminates in remarkable roofs. Urbanistically this significant vertical passage is stressed through the visual and ritual orientation up to the temple on the hill.
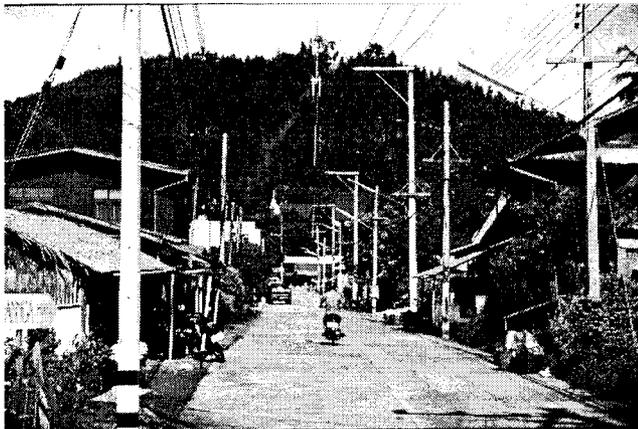

Fig. 8. Roofs of Wat Chong Klang.

Fig. 6. View to Wat Doi Kong Mu.
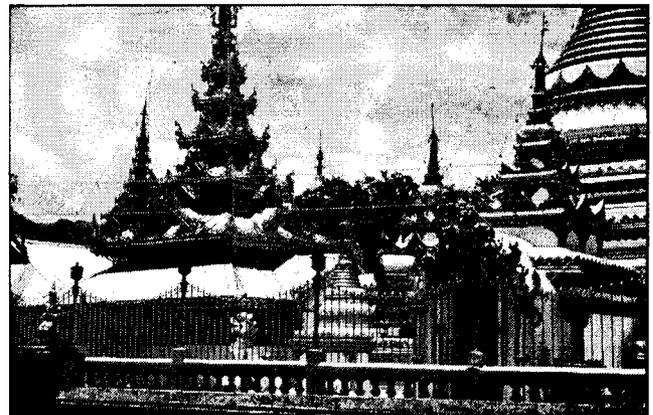

Fig. 7. Wat Doi Kong Mu.

Fig. 9. Wat Pra Non.

LAKE AND CENTRE

The visual and scenographic centre of Mae Hong Son, however, occurs within the town, around a small lake. Surrounded by a public park, Lake Jongkam presents a striking scenic image of Mae Hong Son; its most identifiable face. Yet this site is only ambiguously the centre. The principal roads bypass it, as if keeping a safe distance. This delineates an area where the main roads frame the lake as they do the hill. They do not directly point to it, nor create an immediate tangent, but rather outline a buffer zone around it. In this sense the lake and its precinct identify more a symbolic than actual centre.

Like the hill, this symbolic effect is created through a powerful combination of nature and religion. Here the outside edge of the lake is defined by Wat Chong Klang. Viewing across the lake, its roofs create an impressive sight. In glistening white and gold, they present an ethereal image; architectural sculptures reflected in the water, poised between the city and the landscape beyond. Especially in the changing weather conditions this combination of building and landscape, sky and water is constantly alive; serene and dynamic simultaneously.

The lake, therefore, while at the physical centre of the town, still creates a threshold. The surface of the water provides a front yard to the Wat, viewed against the landscape behind. It is interesting here that the Wats are built only along the outside, natural side of the lake. Its urban edges are more domestic, constructed of houses, guest houses, and restaurants. Like the hill mentioned above, the water creates a buffer between the commercial city and the religious precinct. Yet it is an ambiguous one. With its parts arrayed along a line, the Wat Chong Klang is visually displayed; accessible but separate.

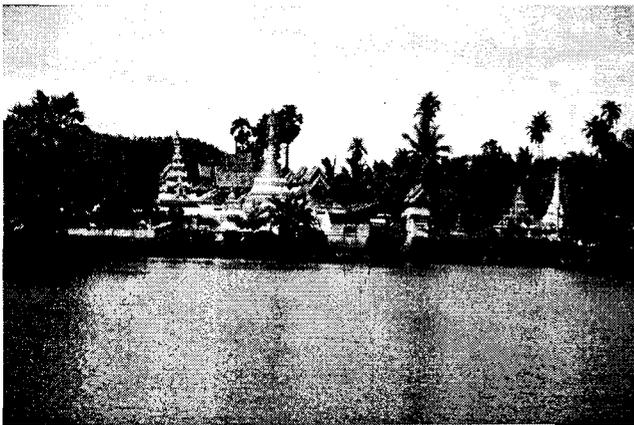The Wat forms a wall between the lake and the landscape beyond.
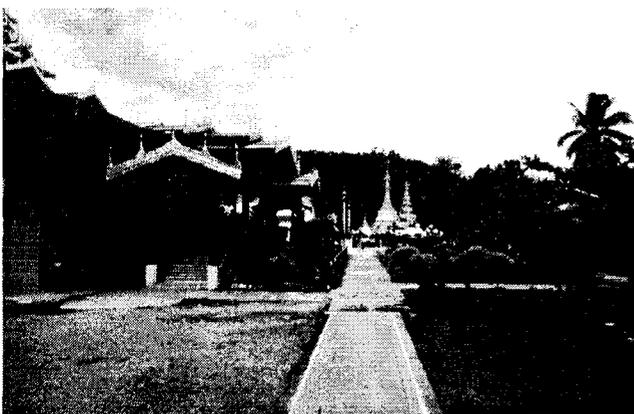

Fig. 10. Lake Jongkam.

Fig. 11. Wat Chong Klang, interior.

Its exterior image is thus defined by its facade, seen from across the lake and juxtaposed to the surrounding hills. More subtly, however, its internal arrangement creates an alternate focus, recognising the important wat/hill condition mentioned earlier. The path linking the different temples, running perpendicular to the entry/ facade view, points to the summit of the hill. It even shifts orientation slightly to clarify this destination, redirecting attention to Wat Doi Kong Mu. This creates a dual hill/landscape condition. The view outwards is thus heightened through contrast with the structural layout of the monastery.

In this sense Lake Jongkam allows perception of the landscape in different ways. At its simplest level it presents a front yard to Wat Chong Klang. This eliminates urban distractions and focuses attention on the powerful combination of the elaborate roof structures and the landscape beyond. Its siting and structure accentuates this view, visually foreshortening and juxtaposing the temple/landscape image. Once inside the temple precinct, however, the central path focusses attention on the primary temple on the hill, though more subtly and spatially.

As an infrastructural condition the lake is curious. It presents the symbolic centre of the town most effectively by keeping the literal or practical activities of urban life away from it. The principal roads bypass the lake, creating a region or precinct around it. Within this region a more sacred conversation of nature and religion appears to hold sway. Yet neither the hill or the lake deals with the more prosaic demands of daily life. It appears as if the two cities, the symbolic and the secular, reside in independent adjacency.

RUNWAY AND MARKET

This symbiotic relationship of urban activity to infrastructure is clarified dramatically, however, at the other side of town where the market precinct is bounded and animated by the airport runway. Indeed the airport runway is the most significant modern infrastructural insertion in Mae Hong Son. Eight hours from Chiang Mai (the nearest major city), by mountainous road, Mae Hong Son's status as a provincial capital justifies approximately six flights daily. The contrast between the aeroplanes (the runway recently expanded to accommodate mid sized jets) and the small scale, almost village like, buildings adjacent is provocative in itself. Yet even stranger is the runway's social function. For each evening, after the last plane for Chiang Mai has departed, the runway turns into the primary social space in the city.

Jogging, picnics, badminton and soccer games animate the large field of asphalt. The infrastructure necessary for rapid travel, seemingly non architectural, thus takes on an alter ego as a piazza. It is an intriguing example of a social inhabitation of a space designed for something else. The activities are seemingly contradictory; landing planes having different spatial requirements from concerns for social inhabitation. Yet the character of the space, and its location, renders these evening activities poignant, and even dramatic.

The runway flanks the principal market of the town, which expands each evening into a night market selling prepared foods. Though the market may have predated the runway, it has also reacted to it, by stretching along the adjacent parallel road towards the pedestrian runway crossing. The social inhabitation of the space is, however, clearly a response to the new infrastructure. This active symbiotic relation of runway and market defines the social focus of the town, distinct from the more symbolic centres mentioned above.

Though dependent on administrative generosity (allowing its casual use), this inhabitation is likely accidental. There are no evident signs that social occupation was a concern to the designers. The pedestrian access is modest. This might imply that infrastructure may happily ignore the conventions or traditions of a place, as long as its use remains flexible. A city will adapt to new interventions according to its personality or traditions of use, adopting them into its lived experience. If this is the case, the energy resulting from new infrastructures is sufficient to provoke a contextually appropriate architec-
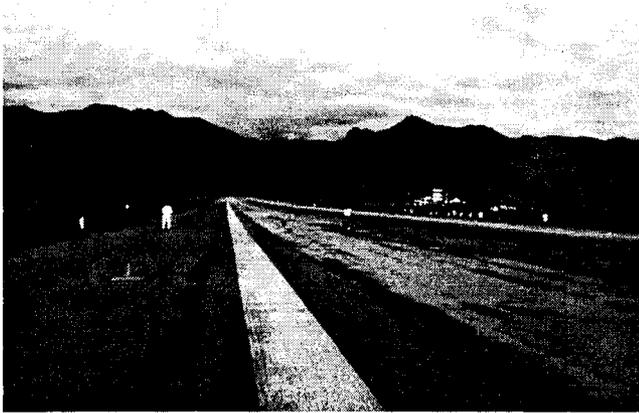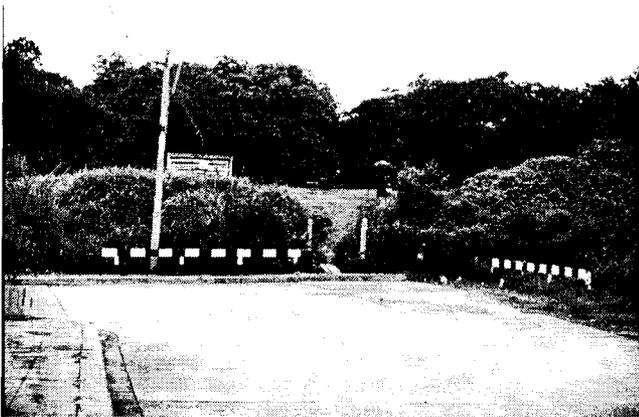
Fig. 12. Runway.

Fig. 13. Pedestrian access.

tural response. Architecture and social inhabitation thus domesticate practical interventions, and render them specific to a culture and place. This removes the cultural responsibility from infrastructure, freeing it to solve its significant practical concerns, and leaving the city to take care of itself. And indeed, in this case it does.

Unfortunately many examples exist to the contrary, where infrastructural insertions have had disastrous results. The highways carving up North American cities should render such a complacent attitude towards infrastructural effect problematic. It is also interesting to note that other large scale interventions have not had the same positive effect on Mae Hon Son. A romantic park at the south end of the town rests empty and forlorn. Clearly designed for recreation, it stands as a monument to hopeful but unsuccessful planning. Its form is specific but its use is clearly circumscribed. The park presents an image of recreation or social inhabitation rather than providing its setting.

Perhaps paradoxically, the runway's provocative use is a result of its design. It is an exciting space in itself. More fundamentally, however, the space of the runway follows the principles of the other infrastructural conditions discussed above. As a result it participates with and clarifies the implicit character and inhabitation of Mae Hong Son.

The space of the runway is large and open. It is raised above the level of the surrounding streets, creating a dramatic stage-like quality. Indeed, recreational or social activities take on a heightened aspect, viewed against the natural backdrop. Though its plan form is defined by the rectilinear asphalt, spatially it remains more open. It is one of the few places within the town where one has the sense of the surrounding landscape in all its breadth. This creates a visual forecourt to the landscape beyond; vast, open, and uncluttered. The view to the hills, dramatic in itself, thus relates the social space of the city to its larger setting.

The runway flanks the commercial city, maintaining its own independence. Here, however, the runway establishes a strong edge to the market precinct, allowing small scale commerce to react to its form. Through a tight adjacency each activity is clarified. Yet the practical city effectively disappears due to the change in level. This visual separation between commerce and public space leaves the more symbolic conversation between the viewer and the landscape powerfully evident and exposed. In this sense the runway is remarkably like the two more traditional infrastructural conditions mentioned above. It is spatially dramatic, even beautiful, and reinforces the special and even sacred quality of the landscape itself.

CAUSE OR EFFECT?

The inhabitation of the runway is perhaps a strange response to its form, seemingly independent from its designed intention. Yet this social reaction to an apparently alien infrastructure is provocative. It demonstrates the vitality of a living culture, which is the field where architecture should operate. In its social lessons it also points to the virtues of strong forms and their relaxed use. It both defines future building within the market precinct, and provides a new space of activity within the city. As a result the runway provides an interesting example how contemporary infrastructure can become part of a city through participation in its social experience. Yet, as argued above, this use results from its spatial qualities. While these qualities are impressive in themselves, they also reinforce the practices applied elsewhere in the city. The runway, therefore, fundamentally demonstrates the same spirit as found within the town; one whose enduring value is demonstrated through its active use.

In this accidental success the runway points to the value of relating
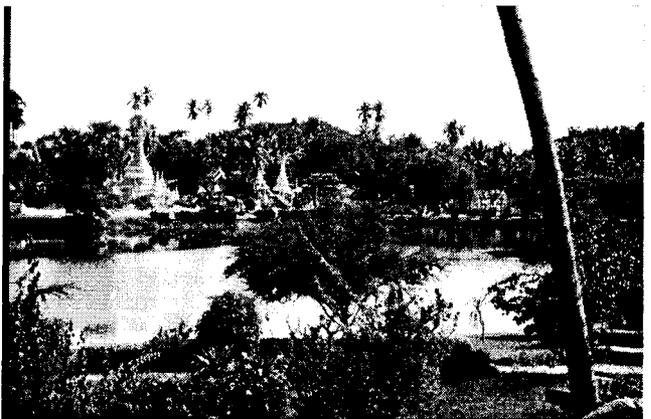

Fig. 14. Market.

Fig. 15. Lake Jongkam.

infrastructure to the spirit of the place. Its value, and potentially the value of any new development, thus relies in the degree of participation with the principles and practices of the town. While it may be difficult to predict exactly how infrastructure will be used, this relation posits an integral and positive function for infrastructural changes within the city, and their capacity for redirecting architectural development in a positive way.

Yet one can't always rely on accidents. Rather than blindly hoping, or waiting, for such provocative moments we should investigate the underlying principles of the city in advance. Through a conscious relation to this essential city, its possible extrapolation into design can be tested. Thus the sterile debate of traditional versus modern can be replaced by provocative speculations on the fundamental extension and development of the specific character of a place without recourse to nostalgic form.

NOTES

[1] Joseph Rykwert, *The Idea of a Town* (London: Faber and Faber, 1976). See also McEwen, *Socrates' Ancestor* (Cambridge, MA: MIT Press, 1993), for a discussion on the significance of orthogonal planning in the Greek world.

[2] The "hill tribes" is the local term which refers to the different villages and peoples inhabiting the surrounding region.
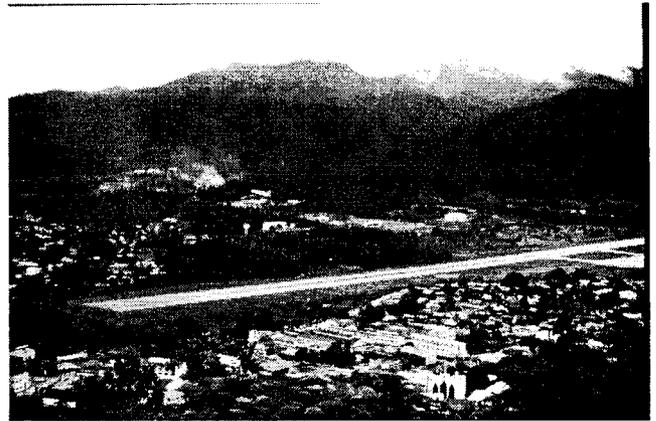

Fig. 16. Mae Hong Son.

[3] The plan analyses are somewhat hypothetical given the relative unreliability of the base documents. One of the problems in this research has been finding and adapting base drawings, using our rather primitive surveying methods. The general principles here discussed, however, seem to be consistent.