

HARKA GURUNG



NATURE & CULTURE

Random Reflections

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By
HARKA GURUNG

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To

Ama Mayishebo Gurung

My Mother

who never went to school.

By the same author

- Mountaineering: *Annapurna to Dhaulagiri: A decade of mountaineering in Nepal Himalaya, 1950-60.* Kathmandu: Department of Information, 1968.
- Development planning: *Regional Development Planning for Nepal.* Kathmandu: National Planning Commission, 1969.
Graduates in Nepal: A diagnostic study. Kathmandu: National Planning Commission, 1972.
Nepal: Dimensions of Development. Kathmandu: Sahayogi Press, 1984 & 1989.
- Travelogue: *Vignettes of Nepal.* Kathmandu. Sajha Prakashan, 1980.
- Cartography: *Maps of Nepal: Inventory and evaluation.* Bangkok: White Orchid Books, 1983.
- Political economy: *Kehi Abhibyakti* (Some expressions). Bensishahar, 1986. In Nepali.
- Demography: *Regional Patterns of Migration in Nepal.* Honolulu: East West Population Institute, 1989.

PREFACE

This is the third compilation of my writings. The first, *Vignettes of Nepal*, was about my travels in interior Nepal. The second, *Nepal: Dimensions of Development*, was a collection of articles on various aspects of economic development. The present volume has a less thematic focus. This was deliberate in an attempt to traverse two cultures - the arts and the sciences. In order to bridge what Arnold Toynbee has called "schism of the soul", my inclination has been to take a holistic view of things, be it nature and culture or mountains and men. That is why I start with the Yeti (anthropology or zoology ?) and conclude with economic opportunity versus political identity.

The sub-title 'Random Reflections' does not pertain to the diversity of the agenda but rather the long period, nearly three decades, during which the thoughts found expression. These span my career transitions from a research student (1960-64) to teacher (1964-68), from planner (1968-75) to politician (1975-78) and a free-lance consultant/writer over the last decade. Whether there is any evidence of evolutionary strand in the process, it is for the reader to discern.

The collection is grouped in four broad areas. The first on the Himalaya has wide regional canvas beyond Nepal. The second, landscape, is basically geography with an inter-disciplinary approach. The third, society, relates to culture with focus on Nepal. The fourth area is on history and politics in spatial terms. The compilation includes 9 articles, 12 book reviews and 4 seminar presentations. All except three (Chapters 5, 24 & 25) have been published in different journals cited at the end of each chapter. These include *The Geographical Journal*, London; *Chirigaku Hyoron* (Geographical Review of Japan) and *Minzokugaku-Kenkyu* (Japanese Journal of Ethnology), Tokyo; *The Himalayan Journal*, Calcutta and Oxford; *The*

Himalayan Review, The Motherland, Nepal Himal Journal, Nepal Vision, Philately, The Rising Nepal, Tribhuvan University Journal and Vasudha, Kathmandu.

It was my wife Saroj who encouraged me into this publishing venture. I acknowledge her full support and other subtle contributions. I am also indebted to Mr. Lalkaji Gurung of Machhapuchhre Estates who supervised the printing work, and to Dr. Pitamber Sharma who helped in editing.

Finally, how does one express gratitude to a mother who though illiterate, nurtured a son that lives by writing ? This book is therefore dedicated to my mother on her 90th birthday even though she will not read it !

Dasain, 1989

Harka Gurung

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Front, upper: Tawoche peak (6,542m), Khumbu
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I. HIMALAYA

ASPECTS OF THE SNOWMAN

i. Fact and Fiction

Does the Snowman, however abominable or amiable, exist? Mountaineers are grateful to Mallory for having said regarding climbing, "Because it is there." Unfortunately, no Snowman believer has justified the situation so affirmatively and neither have non-believers categorically committed, "Because it is not there." To begin with, it is not only the existence of the Snowman or Yeti that is in question but even that of its image. Ever since Waddle (1899) reported the trail of "the hairy wild man" from Donkya La, the debate has remained unabated. "Nowadays", sighs Gerald Durrell, "to say you believe that in some parts of the world there be quite large animals unknown to science is tantamount to admitting that you are weak minded." Scalps, skins, hairs, and droppings accredited to the Yeti have been discredited one by one. The few first-hand evidences available are submerged in a maze of myth, magic, imagination and superstition.

Yet the Himalayans are not to be despised for their belief nurtured by geography and preserved by tradition. Within the compass of 1,500 miles of the Himalaya are extensive areas that are still remote and inaccessible. These are not empty deserts to the inhabitants on the fringes as they are elsewhere. In the Scottish Highlands, the bland hills look bleak and millions of years old and it is impossible to think they preserve anything novel. Even the Loch Ness monster is supposed to be pre-historic. But one can conjure up anything to happen in the refulgent youth of the Himalaya. Alternated with innumerable forbidding peaks are the deep valleys each with its own secret. If there were no mountains, men would create them: like the pyramids in the featureless Sahara. If there were mountains, men would adorn them with life.

A highland boy's highway code is to run down-hill when chased by the Yeti. For, if it is a 'he', the crest-hair will fall over his eyes and if a 'she', her long, pendant breasts (supposed to be carried on the shoulders) would encumber her movement, and while the Snowman or Snowwomen is thus fumbling, our junior

Sherpa or Gurkha is safe down in the valley. In actual fact, confesses Hagen, not a single soul has ever actually seen a Yeti so far. If one follows-up the story of Sherpas seriously, if one cross-examines the story-teller, his answer is always, "No, I have not seen the Yeti myself: it was my cousin's father, and he lives on the other side of the mountain, and he died two years ago." This does not necessarily mean that all Yeti stories are native figments as George Orwell would generalise, "That is invariably the case in the East: a story always sounds clear enough in a distance, but nearer you go to the event, the vaguer it becomes." Even on logical grounds, a simple Himalayan might ask: if there can be wild goat (*ghoral*), wild sheep (*naur*), wild dog (*bwanso*), wild donkey (*kyang*), then why not the wild man (*Yeti*)? It is equally naive of the scientist to assume that these people cannot identify monkeys. The Himalayans, in fact, appreciate the affinity between man and monkey and have been calling monkeys 'Mon Oncle' long before Darwin was born.

ii. Search and Research

Either a distinguished research worker introduces his subject or an unusual subject advertizes the researcher. The Yeti is a subject ideally sensational and we pity the American scholar surveying the nine million rhesus monkeys (equal to Nepal's total *Homo sapiens*) in Uttar Pradesh. When the Yeti is finally scientifically classified into zoology or anthropology, all the journalistic zeal for it will melt away. As long as science poaches on publicity, be it so.

Most of the Yeti footprints have been met casually, by Waddell (1898), Howard-Bury (1921), Kaulback (1934), Tilman (1937), Hunt (1937), Shipton (1951) and Wyss-Dunant (1952). *The Daily Mail* Expedition (1954), specifically in search of the elusive Yeti, came back only with more foot-prints. The American expedition of Tom Slick (1957) was equally unrewarding and a Japanese Expedition spent a fruitless winter in 1960 waiting to capture a shivering Yeti. Nor were the Czechoslovakians in Mongolia (1958) and the Russians in the Pamirs the same year any more successful. The second Soviet Expedition (1960) came to similar conclusion as the Himalayan Expedition of 1961 that the 'Snowman' existed only in local legends. But their leader Professor Stanyukok's valedictory remarks are most sentimental:

Farewell, you fascinating riddle. Farewell, inscrutable Snowman, ruler of the heights and snow. A pity, a thousand pities that thou art not to be found. What, not at all? Perhaps thou art yet to be found in the remotest mountains of Nepal. Perhaps!

What has confounded Yeti investigators is his nebulous character. He has many names to justify his adherents: Metoh Kangmi, Mi-tre, Mi-go, Mirka, Shupka, Thloh-Mung, all refer to the same elusive image. The focus for the search is also widely diffused. Originally a native of the Eastern Himalaya, the Yeti has been allegedly reported from Karakoram, Garhwal, Burma, and Borneo. The latest dossier, *The Snowman and Company*, even imposes upon him such distant cousins as the Tibetan *Dremon*, the Mongolian *Alma* and British Columbian *Sasquatch*.

The dictum that suspended judgement is the greatest triumph of intellectual discipline is fully ignored when it comes to explaining mysterious foot-prints in the snow. Expert speculations on the foot-prints' authorship have been so prolific and diverse that any sensible Yeti (he would not play hide-and-seek if he had no sense of humour) must be prone to plantigrade more cautiously in order to further confound his pursuers. Extreme sceptics attribute the prints to rolling boulders, 'blob' tracks, or snow-sandals. Some suggest apes, gorillas or langur monkeys. Others think of snow leopards, loping wolves, giant pandas, Tibetan outlaws, Hindu ascetics and bears (not one but of three species). The advocate who pleaded for the Yeti, "if finger-prints can hang a man, I see no reason why foot-prints should not establish the existence of particular kind of man," must envy the inimitable paleontologist.

And all the time, the myth multiplies. One asks of the credentials of the Yeti: "anthropology or zoology?" another queries; "Is the Yeti a biped or quadruped?" While most of the scientists reject the supposition of an unknown zoological specimen daring to escape their classification, those more hopeful think of the Yeti in terms of a 'missing link'. One of the latter laments, "It is difficult not to be exasperated when all the pieces of evidence run away as soon as the experts arrive on the scene." Another scientist, relying on embryological evidence, believes in some sort of a giant primate, perhaps akin to the Pleistocene Gigantopithecus. Even

classificatory names have been appended to the already long list of Yeti nomenclature. Tilman suggest *Homo niveus odiosus* and Heuvelmans prefers *Dinanthropoides nivalis* or the 'terrible anthropoid of the snow.'

iii. Attraction and Distraction

Climbing or exploring in the Himalaya is like booking seats in a theatre but sitting on the top is one's own business. In a single year, there were eleven applications to climb Dhaulagiri. Each magnitude of peak has its price fixed and the fee for a Yeti expedition tops all with about Rs. 5,000. As long as the Yeti helps being scarce, the underdeveloped Himalayan countries are assured of this foreign aid in royalty without strings attached. The search for the Yeti has also contributed greatly to the geographical exploration in regions where explorers claim to have made the first foot-prints and at the same time chide the Survey of India for inaccurate maps!

Himalayan travellers have found the Yeti to be their Achilles's heel causing distraction in camp and during the climb. Climbers need not read *The Hound of Baskervilles* to be convinced when alone in the flapping tent of the Yeti's eerie whistle down the wind. Leaving apart the high-altitude Sherpas, the natives believe that the Sahibs are also scared of the Yeti; otherwise, why should they be carrying such lethal weapons such as ice-axes and crampons ? Neither is a surveyor wielding a theodolite on a remote ridge much safer. While taking bearings, he has only to imagine a Yeti's grisly tackle from behind his shoulder and we are led to suspect that the oscillating height of Chomolungma from 29,002 feet to 29,141 feet and 29,080 feet was not due to the heaving Himalaya but rather due to the proclivity of the shaking surveyors!

iv. Conclusion

Most Yeti investigations suffer from generalization. If the creature is to be found, it should be pinned down to a place instead of debating on its ubiquitousness from Alaska to Borneo. The attempt of unsuccessful expeditions to seal Yeti's fate is being unrealistic. Failure to find a thing does not necessarily deny its existence, Neither does Smythe's Garhwali bear or the fake Khumjung scalp invalidate each and all of the Yeti 'facts' elsewhere.

It is presumptuous to hope that the Yeti will contribute extensively to zoology, zoo-psychology, anthropology and the theory of evolution. This will be the more heart-breaking if the end of the trail reveals a hibernating *Ursus arctos isabellinus* or a snoring *Semnopithecus entellus dufresne*.

On the subject, it is healthy to be open-minded. For the opening of a closed mind causes more embarrassment than the closing of an open one.

Finally, things that persist may or may not exist.

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(*The Himalayan Journal*, Calcutta, Vol. XXIII, 1961, pp. 171-175.)

OROGENESIS OF THE HIMALAYA

The face of the earth is criss-crossed by mountains - ancient and recent. Compared to the older orogenic phases, the Alpine uplift was a tremendous shudder of an intensity and tempo unknown to former geological times. The Himalaya represents the last phase of this Alpine mountain-building epoch.

'Out of the geosynclines have come the mountains' is now regarded as established. Yet the true nature of the origin of mountain-building has been one of the chief questions of natural history. If high mountains were born of geosynclinal depths, then what primeval forces caused this transformation ?

i. Mountain Building Theories

Theories of mountain building are as prolific in conception as they are confounding in perception. "We are forced to confess our wonder has been more excited than our reasoning power" (James Hall). Early ideas viewed that great chains of folded mountains originated in a considerable compression of the earth's crust. The basic conception of this theory still persists with some modifications. In spite of its many ramifications, the application of continental sliding theory' conjectures the crumpling of geosynclines adjoining rigid blocks due to tangential movement. Du Toit¹ even views all major plications as due to 'drifting'. In the case of Asia, Wegener² believed that the compression forces were directed from the west and north-west. Taylor,³ who believed that tital-rotational centrifugal forces pushed the continents into lower latitudes, contended these compression forces to have come from north-west while Pascoe advocated forces acting from north-west to east round three-eighths of the compass. Gregory⁴ directs this movement from north to south, as does Wager. Again, the 'over-

1. A. Du Toit, *Our Wandering Continents*, 1937.

2. A. Wegener, *The Origin of Continents and Oceans*, 1934, p. 162.

3. E. Taylor, *The Theory of Continental Drift*, 1927, pp. 153-77.

4. A. Gregory, *The Structure of Asia*, 1929, p.33.

turned' and 'under-thrust' ideas of Suess⁵ and others are opposed by the 'under-turned' and 'under-thrust' flexures of Willis⁶ and Hobbs,⁷ while to Lee⁸ neither over-thrust nor under-thrust can be taken as an argument to determine the direction of the earth movements. Mushketov⁹ thinks that both the Gondwana and Angara may have participated actively in creating the structures of Central Asia with the Gondwana ultimately prevailing in the Alpine period.

Contrasted to the above 'displacement hypothesis' are the extreme advocates of 'intrusion theory', according to whom the heaving-up of the mountains takes place through internal forces. Still others formulate that the folding of mountains is a compression subject to the preservation of isostatic balance. Daly¹⁰ attributes the folded structures of principal mountain ranges as being due to horizontal forces caused by the down-sliding of the continents. The 'theory of thermal contraction' invokes the accommodation of the cooled and solidified lithosphere to a still shrinking nucleus. A variant due to Lee¹¹ accounts zones of compression as due to differential rotation between the upper layers of the earth's crust and the berysphere. Holmes¹² hypothesis that two approaching sub-crustal convection currents cause root-development and localised folding and thrusting of the overlying sedimentary strata has found a wider acceptance. Bemmellan,¹³ on the other hand, in his undation theory' developed the bi-causatory concept of mountain development by way of systems of crustal waves which start from the foci of diastrophism in the central and deepest part of the mobile belt.

Some modifications have been put forward in recent times. Hess¹⁴ views that passive geosyncline and active tectogene are

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5. E. Suess, *The Face of the Earth*, 1904-1909.
 6. B. Willis, *Research in China*, Vol. II 1907, p. 243-52.
 7. W. Hobbs, *Bull. Geol. Soc. Amer.*, Vol. XXXIV 1923, pp. 243-52.
 8. J. Lee, *Geol. Mag.*, Vol XLVI 1929, pp. 358-75, 457-73, 501-22.
 9. D. Mushketov, *Inter. Geol. Congr*, 1936, pp. 885-94.
 10. R. Daly, *Our Mobile Earth*, 1926, p. 269.
 11. J. Lee, *op cit.*, p. 517.
 12. A. Holmes, *Trans. Geol. Soc., Glasgow* , Vol. XXIII, 1931, pp. 559-605.
 13. R. Bemmellan, *Mountain Building* , 1954.
 14. H. Hess, *Proc. Amer. Philoso. Soc.*, Vol. LXXI 1960, pp. 363-97.

unrelated and he gives more importance to zones of crustal activity (tectogenes). The tectogene concept that postulates convection cells in the mantle to be the mechanism that cause the great down-buckle, on the other hand, explains only the intense folding and metamorphism in the core of deformation belts and not the structural types of the continental interiors. New geophysical data show that isostatic forces modify but do not originate mountains. According to Hsu,¹⁵ the geosynclines are earth depressions created after tectonic disturbances when the isostatic equilibrium is restored by crustal faulting. To King,¹⁶ geosynclinal subsidence is not primarily a function of sedimentation but of tectonic processes. It is equally wrong, Billings¹⁷ maintains in his 'plutonic hypothesis', to equate mountain building with folding and thrusting: "Although some mountains apparently result from folding, many do not".

With regard to the continental drift, Du Toit¹⁸ deduced the climatic vicissitudes of lands to be the most telling demonstration of their north-ward drift. But as pointed out by Chaney,¹⁹ evidences of Eocene flora point to a south-ward migration of forests rather in response to changing climate over continents whose stability through ages seem well-established. Irving's²⁰ conclusions from palaeo-magnetic data that India lay 7,000 kilometres south of its present position is questioned by Pushcharovsky on structural grounds and by Rezanov on geological evidence. Pushcharovsky²¹ finds Himalayan fore-deep and its continuations into east and west Pakistan of the same structure and fundamental development as the other Alpine and earlier troughs. Rezanov²² is emphatic that India was never separated from the Asiatic land on the evidence of the presence of Peninsular formations in the Himalaya and *vice versa*. For example, while the Peninsular Salt Range, like in Kashmir, is an integral part of the Hindu Kush-Himalayan folded belt, the deposits of Vindhyan series are contained in the Upper Palaeozoic beds of the southern districts of the Himalaya. The Peninsula was

15. K. Hsu, *Amer. Jour. Sci.*, 1958, pp. 305-27.

16. L. King, *Morphology of the Earth*, 1962, p. 115.

17. M. Billings, *Bull. Geol. Soc. Amer.*, Vol. LXXI 1960, pp. 363-97.

18. Du Toit, *op. cit.*

19. R. Chaney, *Scientific Monthly*, 1940, pp. 489-99.

20. E. Irving, *Geophys. Jour. Roy. Astro. Soc.*, Vol. III 1960.

21. Y. Pushcharovsky, *Gin, Vyp.*, Vol. XXVIII 1959.

22. I. Rezanov, *Inter. Geol. Rev.*, Vol. IV 1962. pp. 1118-34.

separated from the Himalaya and other folded regions only by a system of fore-deeps.

Mountain building theories seem as mobile as the subject they presume to explain, and Moore's statement that 'no hypothesis of mountain-building is entitled to be ranked as a theory', seems pertinent. The divergent ideas reviewed above each makes some partial explanation not the whole. Neither is mountain building a product of one type of diastrophism. Forces as complex as the structure they create have gone into the making of the most telling terrestrial land-mark – the mountains. Our present knowledge on the subject may be stated briefly. Mountain building appears to be a rhythmic process related to igneous activity in the sub-stratum that in turn induce tectonic processes. Elasticity instability due to cooling stresses in the earth's crust seems to be one plausible explanation of the formation of the mountains and continents.²³ Igneous activity within the geosyncline are associated with quiet intrusion of the sediments by tholeiitic basalt and upward infiltration of vapours and magmas into the higher realms of the crust. These primary vertical movements are physico-chemical in origin. If accumulation of volatiles be particularly strong, this heat transfer may induce convective currents which causes the geosyncline to subside in the less dense current. Continued concentration of water vapour reduces the density of the substratum beyond the point when crustal load will collapse locally along the axis of the origin in the form of crustal shears.²⁴ This weakened crust is invaded by vapour-charged sub-stratum which under reduced pressure expands as a peridotite belt. Bemmellan calls this the incubation period. Irruption of peridotite belt retards geosynclinal subsidence. There ensues a phase wherein volatiles penetrate the upper basalt and granitic layers through near-vertical laminar tectonic structures and contributing mobility to the core of the orogen. Increase of infra-density with the termination of volatile accumulation within the sub-crust maintains levity and causes the orogen to rise. Once this primary mechanism of uplift is established, gravitational reactions take over the 'secondary tecto-genesis'.²⁵ Mountains are generated

23 . B. Agrawala & E. Saibla, *Trans. Amer. Geophys. Union*, Vol. XXXVIII 1957, pp. 245-47.

24 . A. Eardly, *Amer. Scientist*, 1957, p.p. 189-217.

25 . R. Bemmellan, *Inter. Geol. Congr.*, 1960, pp. 99-116.

largely because of vertical motion and major folds and faults associated with them are gravitational in origin though concomitant lateral thrust is not excluded.²⁶ All kinematic types of folding (block-folding, folding of injection, folding of general crumpling) are a reaction to the differential vertical movements of the blocks of the earth's crust.²⁷ Redistribution of gravity equilibrium in the process of vertical movements causes displacement involving gliding and folding in the upper sector and thrusting in the lower sector. Thus, the mountains may be likened to the facial expressions of what goes within the interior of the earth.

ii. Paleo-geography of the Himalaya

Stratigraphic evidences have been used to reconstruct the uplift of the Himalaya and its chapters of pre-history alternate in lithogenic and orogenic periods. An extensive sea existed in the Himalayan region as far back as the Paleozoic era. This orthogeosyncline, the Tethys of Suess, stretched right across Eurasia wedged between Lauresia and the Gondwana. The Tethys Sea that came into being about the Middle Permian persisted throughout the Mesozoic and gradually dried up in the Kainozoic with the first emergence of the Himalaya.

During the close of the Permian epoch, almost all of the now highly-elevated areas between India and Central Asia was invaded by the Tethys Sea. Further sinking and widening commenced during the Middle Triassic and continued into the Upper Triassic. The Jurassic epoch was a period of localised unrest, contemporaneous with the Indo-sinian movement of Lauresia. It is conjectured that earth movements synchronous with the Yenshan movements of Karakoram caused the shallowing-up towards the Lower Cretaceous. This regression however was brief. A final marine transgression flooded in the Upper Cretaceous submerging much of the surrounding land during the Paleocene and Middle Eocene. This deluge was followed by the ultimate dissolution of the Himalayan sea as 'all post-Eocene strata within the Himalaya (except those laid down in local basins) are continental.'²⁸

26 . G. Kennedy, *Amer. Scientist*, 1959. pp. 491-504.

27 . V. Belousov, *Inter. Geol. Congr.* 1960, pp. 326-34.

28 . H. De Terra, *Inter Geol. Congr.*, 1936, pp. 859-71.

The fluctuating character of the Tethys up to the Eocene was primarily marine, even if early Jurassic and late Cretaceous upheavals caused some minor longitudinal ridges and valleys within the geosyncline. Thus, were the sediments of great thickness of over 15,000 feet accumulated from the Permian period till the close of the Eocene in this Mesozoic sea site. The pre-Tertiary upheavals were accompanied by some magmatic activity as well. These were the first spasms of the birth of the Himalaya which took place in a series of stupendous upheavals punctuated by intervals of comparative quiescence. The Kirthar beds show a second upheaval to have occurred in the Upper Eocene, raising the primary ridges and basins of the Tethys into mountain ranges with intervening shallow marshes and large river valleys. It was, however, the intense orogeny of the mid-Miocene that created the major structure of the present-day Himalaya. This third Himalayan uplift was followed by a quiescent period towards the end of the Pliocene during which the Kainozoic Himalayan chains were eroded away in turn to form the Siwalik system along the older mountain front. The Siwalik deposition of coarse boulder conglomerate, 3,000-5,000 feet thick, has been likened to the Molasse Nagelfluh of the Swiss Alps²⁹.

The fourth Himalayan paroxysm, 'Siwalik folding', towards the close of the Pliocene caused the mid-Tertiary nappes to thrust southwards over the Siwaliks. This over-riding is well-demarcated by the 'main boundary thrust' plane. The beginning of the Pleistocene was a period of calm when the Karewas of Kashmir and lignites of Kathmandu were deposited. The fifth and final upheaval ensued during the Pleistocene period. Its impact was felt most in the sub-Himalaya where in Pir Panjal, for instance, the Karewa beds were pushed up at least 6,000 feet.

Ever since the Tertiary time, the Himalayan region has been subjected to compression, contortion, elevation, and denudation. That the area is still in the process of adjustment is substantiated by the thirty-year (approximately) visitations of earthquakes as well as fresh local tensions. Middlemiss³⁰ noted the Pliocene over-thrusting in the foothills and a 50-degree tilt of the Karewa beds

29 . H. De Terra *op. cit.*, p. 866.

30 . C. Middlemiss, *Memoirs Geol. Surv. India*, Vol XXIV 1981,

over the Pir Panjal. De Terra³¹ similarly reported infra-Pleistocene warping and folding between Kashmir and Indus valleys. Hagen³² also found that the strata of Kathmandu lake deposits that now dip north-wards had been uplifted 600 feet over the last 200,000 years. Others are particularly impressed by the progressive rejuvenation exhibited in the convexity of gorge-walls of the rivers³³ and river terraces.³⁴

All agree that the Himalaya is still rising. The cause of this youthfulness has been explained by various workers in the field. Wager³⁵ deduced from the reconstruction of the Eastern Himalaya primary surface that this up-warping was due to the maintenance of approximate isostatic balance during a period of erosion. Garwood³⁶ and Odell³⁷ also favour isostatic adjustment but rather due to the unloading of the Quarternary ice sheet. Glennie,³⁸ however, found excess gravity data for the Himalayan stations and is opposed to the idea of isostatic adjustment as the cause of recent uplift.

The rise of the Himalaya seem to be related to two diverse yet complementary phenomena. First, the uplift of the 750,000 square mile Tibetan plateau to an average altitude of 14,000 feet has caused the upward dragging of the adjoining Himalaya, maintaining its floatation five miles above sea-level within the last 30 million years.³⁹ Second, the down-warping of the 15,000-20,000 feet thick deep Gangetic fore-deep, the last of the southward 'migration' of the Tethys geosynclinal belt which has experienced progressive subsidence and may be even faster than the accumulation of the enormous quantities of material brought down the Himalaya⁴⁰. This successive overloading of the Gangetic alluvial trough must

31 . H. De Terra, *Connecticut Acad. Arts & Sciences Memoirs*, Vol. VIII 1935, p. 67.

32 . T. Hagen, *Nepal*, 1961, p. 53.

33 . A. Heim & A. Gansser, *The Throne of the Gods*, 1939, p. 217.

34 . H. Chhibber, *Proc. Indian Sc. Congr.*, 1953, p. 32.

35 . L. Wager, *Geogr. Jour.*, Vol. LXXXIX 1937; pp. 239-50.

36 . Garwood in D. Freshfield's *Round Kanchenjunga*, 1903, pp. 275-99.

37 . N. Odell, *Geogr. Jour.*, Vol. LXVI 1925, p. 306.

38 . E. Glennie, *Nature*, 1933, p. 411.

39 . G. Kennedy, *op. cit.*

40 . A. Heim & A. Gansser, *op. cit.*, 1939, p. 218.

have some counter-effect on the unloading of the Himalayas. One might thus conclude that the Himalaya is maintained by these two balancing factors.

(Tribhuvan University Journal, Vol. III, No. 1, January 1967, pp. 1-7.)

MOUNTAIN IMAGES

This photographic volume, *Himalayas* by Yoshikazu Shirikawa,¹ succeeds in matching the scale and grandeur of the subject. It includes a foreword by late King Mahendra of Nepal, preface by Arnold Toynbee, introduction by Edmund Hillary and a geographical description of the Himalaya by Kyuya Fukuda. There are 20 pages of text by the author on the Himalaya and a note on photographing them. Of the 119 photographs, 91 are in colour and many of them in double-page. The Everest environ and Ramtang Glacier have each a four-page fold-out (45 in. × 65 in.). The photographs are not numbered but there is an index of miniature insets in black and white that is easy to follow. The photographs include both terrestrial views from the ground and oblique views from the air. The author used Asahi Pentax (6 × 7) and Asahi Pentax (SP) cameras with Super Takumar lenses. Aerial photographs were generally taken from above 7,000 metres. Lens aperture ranged between f/6 and f/45 and exposure time was usually 1/30 second to one second. Exposure timing for photographing the moon was about two minutes: in the photograph of Ama Dablam with the moon, the lunar image resembles a clinical tablet indicating the movement of the moon during the given exposure time.

The author visited the Himalaya six times over three years. But the Himalaya is both a natural and political frontier. In the course of the author's photographic mission, he had to face innumerable problems of entry permit in India, Pakistan and Afghanistan. But, he seemed to have had no such problems in Nepal and this may explain for his wider coverage given to Nepal Himalaya. The photographs are divided into four sections: Nepal Himalaya (54), Punjab Himalaya (18), Sikkim Himalaya (31) and Hindu Kush (16). In fact, of the 31 photographs included under Sikkim only two, Kangchenjunga from Tiger Hill and 'Woman at Gangtok', are from outside Nepal. The other 29 photographs of the Kangchenjunga group were taken from the Nepal side and this

1. *Himalayas* by Yoshikazu Shirikawa. New York, Harry R. Abrams Inc., 1971, 11 1/2 × 16 1/2 inches, 119 plates, 4 maps. US \$ 100.

brings a total of 83 photographs for Nepal Himalaya. Within Nepal, the author trekked to the Everest region (Kala Pathar, Chukhung, Gyoko), Pokhara region (Namun Bhanjyang, Jomosom) and upper Tamur valley (Pangpema, Chungjerma Pass) and made aerial flights between mid-March and mid-May. The photographs of Nepal can be classified as 22 of the Everest trip, 27 of Tamur trip, 9 of Pokhara trip and 18 from the air, mostly of central Nepal. Individually, Machhapuchhre has seven plates followed by six of Jannu and three each of the Everest and Annapurna I.

Of the 18 pictures of Punjab Himalaya, six are of Nanga Parbat and six of the Rakhiot Glacier. To cover Punjab Himalaya, the author trekked to Gilgit (Pakistan) after failing to proceed beyond Manali in India. The mountain ranges west of the Indus river are not conventionally included in the Himalayan system and this approach is also subscribed by Kyuya Fukuda in his essay in the volume reviewed here. However, the inclusion of 16 photographs of the arid Hindu Kush range from Afghanistan and Pakistan sides enriches the book with landscapes that sharply contrast to that of the humid Eastern Himalaya. The photographs of the Hindu Kush area include Tirich Mir (25,363 ft.) first climbed by the Norwegians in 1950, the second highest peak Istor-O-Nal (24,272 ft.) and three views of the Lower Tirich Mir glacier. The aerial photographs of barren ridges, and particularly, the cobalt blue lakes of Band-I-Amir are impressive images.

There are some errors in place-names and details. In the note on photographs, the ascent of Nanga Parbat by the Germans is wrongly dated as 1932. Nanga Parbat was first climbed only on 3rd July 1953 by Hermann Buhl in a solo feat that remains an epic in Himalayan mountaineering.² The Lobuje camping site on the Khumbu Glacier is wrongly put as Lhotse and although the author was only on Kala Pathar, there is a reference about photographing Mount Everest from the summit of Pumo Ri ! Other errors in place-name are 'Nandara' (Naudanda), 'Dahna' (Dana), 'Ghansa' (Ghasa), and 'Chandra Gil' (Chandragiri). And in one reference, Chandragiri is misplaced south of Darjeeling instead of Kathmandu. In the note to the panoramic view of Kathmandu

2. P. Bauer, *Das Ringen um den Nanga Parbat (1856-1953)*, Munich, 1955.

Valley from Chandragiri, the peaks in the sky-line are incorrectly identified. The peak on the left is not Ganesh Himal or Annapurna as ascribed in the note but Gosainthan (26,291 ft.) in Tibet.

Apart from these minor errors, the book succeeds in conveying the magnitude and mood of the Himalaya. The immensity of the scale is well-conveyed by the miniature houses of Kobang under Tukche Peak (22,691 ft.), Tengboche monastery dwarfed below Ama Dablam (22,494 ft.) and the village of Roshum snuggled high up in the Afghan Hindu Kush. The summer huts of Gyoko and the net-work of trails in Band-I-Amir symbolise man's struggle for livelihood in a harsh mountain environment.

The mountain shapes range from the pyramid of the Everest to the pinnacle of Machhapuchhre and solidity of Nanga Parbat. The shape and profile of the mountains vary according to the viewer's perspective but Shirakawa's photographs are most effective in conveying the mood of the mountains through colour and time dimension. These range from sulphurous serenity of Jannu under moonlight to the refulgent gold of South Chongra Peak and african violet of Annapurna I to the eery blue of Ramtang Glacier. The diversity between the distal parts of the Himalaya is best illustrated by the sea of monsoon clouds engulfing the Arun valley and the rugged ridges of Kafiristan. The over-all impression one gathers from this feast of hue and colour is of an alchemist at work in a giant cauldron. To the average reader, the price of the book is as stupendous as the mountains themselves but scanning through the volume, one might reflect on an eulogy to the Himalaya in the Skanda Purana:

He who thinks of the Himachal, though he should not behold him, is greater than he who performs all worship in Kashi. In a hundred ages of gods I could not tell thee of the glories of Himachal. As the dew is dried up by the morning sun, so are the sins of mankind by the sight of the Himachal .

(The Himalayan Review, Vol. VIII, 1975, pp. 43-45.)

ROUND KANGCHENJUNGA

*Round Kangchenjunga*¹ written at the turn of the present century still remains a classic in Himalayan literature. If its predecessor, *Himalayan Journals*,² was a scientific break-through in an unknown area, the present volume epitomizes an accomplished scholar's appreciation of nature and mountain exploration. The book is about an event when a distinguished explorer approached a famous mountain.

First about the man. Douglas William Freshfield was born on 27 April 1845, went to Eton and Oxford, taking Honours in Law and History (1868). He accompanied his parents on their summer holidays to the Alps and while at Eton he crossed the Col du Geant and ascended Mont Blanc. He recorded his early travels in a privately printed journal *Thonon to Trent* in 1865 and during the Sixties and Seventies, made at least 25 alpine ascents and published *The Italian Alps* (1875). He visited the Central Caucasus in 1868, 1887 and 1889 where he made many first ascents and produced *The Exploration of Caucasus* (1896) with an authoritative map. In 1899, he visited India and the Eastern Himalaya and this visit is the theme of the present book. Freshfield was already 54 years old and an alpine authority when he visited Kangchenjunga. He had been elected to the Alpine Club in 1864, edited the *Alpine Journal* (1872-1880) and was elected president of the Club in 1893 and had been one of the honorary secretaries of the Society from 1881 to 1894.³ His views on mountain glaciation had aroused much academic discussion and he had contributed greatly to the furtherance of geography as a scientific discipline.⁴ When Freshfield died in 1934,

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1. *Round Kangchenjunga* by Douglas William Freshfield, London, 1903.
 2. *Himalayan Journals or Notes of a Naturalist in Bengal, The Sikkim and Nepal Himalayas, The Khasia Mountains, & C.* by J. D. Hooker, London, 1854.
 3. He was elected president of the Royal Geographical Society, 1914-1917.
 4. He had a hand in shaping *The Geographical Journal* and was one of the editors of early editions of *Hints to Travellers* (1883). His other

another famous Himalayan explorer T.G. Longstaff wrote, "Both the Royal Geographical Society and the Alpine Club have lost the last outstanding figure of their Old Guard".⁵

Now to turn to the mountain. While the main Himalayan range is aligned east to west, the Kangchenjunga massif extends north to south along the Nepal-Sikkim border. Thus Kangchenjunga (8585 m), the world's third highest peak, at 27°42'09" latitude is the most southerly of the major Himalayan peaks. And, its proximity to the old hill resort of Darjeeling made it one of the better-known mountains during the initial phase of Himalayan exploration. While early writers wrote its name as 'Kanchenjunga', 'Kuncan-Jungha', and even had German versions 'Kangchendzonga' and 'Kantschindschanga', the form 'Kangchenjunga' followed by Freshfield after the Survey of India has been generally accepted. It is derived from Tibetan 'Kang-chen-dzo-nga' meaning 'The five treasuries of great snows'. Some ascribe the treasuries to be the five principal summits of the mass while others refer to its five main glaciers. The ascription of the summit prominences seem to be more convincing since it is presumptuous to assume that the natives would be familiar with the glacier provenance around the mountain. While the Sikkim side of the mountain was the best-known and the most easily accessible section of the Himalaya, the Nepal side of Kangchenjunga had been visited only by botanist J.D. Hooker (1848), surveyors S.C. Das (1881)⁶ and Rinzin Namgyal (1884)⁷. The regular survey of the Sikkim side began in 1878 and was further extended by W.W. Graham in 1883. Rinzin explored several side-valleys and was the first surveyor to map the circuit of Kangchenjunga. L. A. Waddell⁸ and Claude White⁹ were two other prominent explorers of Kangchenjunga that preceded Freshfield.

publications include *Hannibal Once More* (1914), *Unto the Hills* (1914), *Life of de Saussure* (1920) and *Below the Snowline* (1923).

5. *Geographical Journal*, Vol. 83, No. 4, April 1934, pp. 257-262.

6. Sarat Chandra Das, *Narrative of a Journal to Lhasa*, Calcutta, 1885.

7. *General Report on the Operations of the Survey of India Department, 1884-85*, Appendix pp. xviii to li.

8. L. A. Waddell, *Among the Himalayas*, London, 1899.

9. J. Claude White, *Sikkim and Bhutan: Twenty-one Years on the North East Frontier*, 1887-1908. London, 1909.

Douglas Freshfield's expedition included geologist climber E.J. Garwood, photographer Vittorio Sella and surveyor Rinzin Namgyal, among others. They left Darjeeling on 5th September 1899 and reached the upper part of Zemu glacier two weeks later by way of Kalimpong, Rhenok, Gangtok, Chungthang and Lachen. Their plan to reconnoitre Nepal Gap (6170 m) and Zemu Gap (5861 m) was foiled by the great storm of 24th September. They then turned north into Lhonak valley, crossed the Jonsang La (6159 m) on 6th October and with great difficulty reached the first Nepalese village Kangbachen (4010 m) on 10th October. On the way back through Ghunsa (3380 m), Tseram (3410) and Dzungri (4005 m), they crossed Chungjerma or Sino La (4150 m), Kang La (4971 m) and then visited Gocha La (4940 m) and climbed a minor peak, Kabur (4801 m).

This first circuit of a major Himalayan massif was done under trying weather conditions: they set out in rain and clouds and were buffeted by snow and sleet five weeks later at Dzungri. Apart from inclemencies of weather and difficulties of traversing an unknown terrain, they had to contend with political uncertainties of a frontier area. The Tibetans had not forsaken their claim to northern Sikkim even after the military expedition of 1888, and the passage through the Nepalese territory had to be done in a clandestine manner. Indeed, passages in the book such as "In oriental eyes generosity is a false name for fear" or Chumbi being "a most covetable district, without any of the disadvantage of climate and situation which affect Darjeeling as a health resort", provide intimations of the Younghusband mission to Lhasa five years later.¹⁰

The expedition, however, succeeded in completing its mission without mishap and gathered valuable alpine and scientific information. The book provides much knowledge on the various approaches to Kangchenjunga peak as the party were within 6.4 kilometers to the east, 9.7 kilometers to the north and 11.3 kilometers to the south of the main summit. There are descriptions on the extent and nature of glaciers, geological and geomorphological features and vegetation of the environs. The value of the book is further enhanced by the fine photographs of

10. Peter Fleming, *Bayonets to Lhasa*, London 1961, provides one of the best accounts of this expedition.

Sella and glaciological and geological maps of Garwood. The distinctive feature of the book lies, however, in Freshfield's clear and objective account.

In his narratives, Freshfield reverts frequently, rather too frequently as he himself admits, to Alpine comparisons. To give a few examples: Kangchenjunga massif between the Kosi and the Tista is compared to the Bernese Oberland between Rhone and Reuss, Kangchenjunga summit itself to Monte Rosa (as seen from the Italian lakes), Siniolchu as Jungfrau, Twins as Grande Jorasses, Jubonu as Muerren, Kangbachen as Vispthal, Chomolhari as Cima Tosa, Chungthang as Stalden, Lhonak as Engadine, and so on. Apart from these distractions (essential in those days of initial exploration), the book is replete with vivid descriptions of places, time and moods. Freshfield's 'mountain sense' is best revealed when they approach their main barrier Jonsang La (and of which Rinzin seemed to be unsure) and the end of the tunnel is so described:

"As we approached an angle where the hitherto smooth current of the snows became broken like the rapids of a stream into confused waves, I was suddenly aware of a winged messenger from the outer world towards us. A tiny wisp of white vapour floated into sight quite low down between two apparently connected cliffs. We no longer needed to walk by faith. Where this child of the lowlands had found its way into the sanctuary of the snows, we should find our way out to its birthplace in the valleys of Nepal".

The three-day descent down the Jonsang glacier was an arduous task but also provided the first view of the north-west face of Kangchenjunga. After Kangbachen village, they climbed to Chungjerma pass from where Hooker had described a view in December 1848 thus:

"Looking north, the conical head of Jannu was just scattering the mists from its shoulders, and standing forth to view, the most magnificent spectacle I ever beheld".

Freshfield, 50 years later described the same vista as:

" Prodigious both in its extent and splendour and in the marvellous variety of light and shadow, of atmosphere and of colour Beneath the deep blue vault of heaven, the giant mountains of Nepal stretched in a wide curve, extending all along the line of the northern horizon from a point nearly due west to the base of Jannu".

And Sella's photograph of Jannu from this vantage-point remained the portrait of a magnificent mountain for decades. Seventy years later, in January 1970, another famous mountain photographer visited Chungjerma and wrote,

"The red glow of the sky dotted with constantly moving clouds was the backdrop for the mountain (Jannu) I had been dreaming of. The majestic appearance and overwhelming massiveness of the mountain were right in front of me. I felt I was being consumed by it".¹¹

From Chungjerma, they descended down to Tseram, had a close view of the Yalung face of Kangchenjunga and re-entered Sikkim through Kang La. The last place Dzongri which Freshfield hoped would develop into a great mountain resort provides a glimpse of a sunset befitting the conclusion of a memorable tour:

"More beautiful colours in earth and sky I have never seen. Beyond the broad shadows of the foreground the more distant foothills turned into solid waves of sapphire, the snows blushed rose-red, until the flush, slowly dying out on the lower heights, lingered last on the crests of Pandim and Kabru. Slowly the dusk deepened in the luminous sky until the moon rose, and kissing the icy foreheads of the loftiest peaks, threw its mild radiance over the vast spaces spread out beneath us".

The early explorers of Kangchenjunga had been handicapped by the lack of local guides and in 1889 Waddell noted that the natives were not good on the hillsides. Freshfield, who took six

11. Yoshikazu Shirakawa in his pictorial *Himalayas*, New York, 1971, has caught three portraits of Jannu, each in a different mood (a) pink at sunset, (b) white and (c) sulphurous green under moonlight.

Gurkha policemen as a precaution against Tibetans in northern Sikkim, found them efficient on the heights and commented.

"The more I saw of them the more convinced I became that it is on the trained and disciplined Gurkhas that the future progress of Himalayan mountaineering depends."

Of course, those were about the time when C. G. Bruce¹² had trained some of his men of the Fifth Gurkhas in the Karakoram while two had even accompanied Lord Conway across the Alps¹³ but A. M. Kellas¹⁴, who first came to Sikkim in 1907, had yet to introduce the Sherpas to climbing.

Kangchenjunga still remains one of the most tempting and challenging of the world's highest peaks. In spite of various attempts since 1950, it has been climbed only twice. The most notable attempts were made in 1929, 1930 and 1931. The main summit was first climbed by a British expedition in 1955 via the Yalung face¹⁵ and also reached by an Indian expedition in 1978 by the north-eastern route.¹⁶ But the north-west aspect, first thought to be accessible by Freshfield and tried in 1930 by an international expedition and turned back by an avalanche, still remains invincible.

Round Kangchenjunga is not merely a superb travelogue but its details on extent of glaciers could be a basis for scientific study on their processes through time. Glaciers have definitely receded but the political climate on the tri-junction represented by Kangchenjunga has not been yet conducive to systematic exploration and research. It is for this reason that the book retains much of its initial value.

(Introduction to 1977 edition of *Round Kangchenjunga* by Douglas W. Freshfield, Ratna Pustak Bhandar, Kathmandu, 1979, pp. v-xi.)

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12. C. G. Bruce, *Twenty Years in the Himalaya*. London, 1910 and *Himalayan Wanderer*, London, 1934.
 13. William Martin Conway, *The Alps from End to End*, London, 1895.
 14. *Alpine Journal*, xxvi, p. 52 & 113; xxvii, p. 125 & xxxvi, p. 408 and *Himalayan Journal*, II (1930), p. 10-12.
 15. Charles Evans, *Kangchenjunga, The Untrodden Peak*, London, 1956.
 16. Narinder Kumar, *Kangchenjunga: First Ascent from the North-East Spur*, New Delhi, 1978.

INTRODUCTORY NATURAL HISTORY

The most apparent physiographical aspect of Nepal is the vertical contrast from the southern tarai plain to the northern mountain heights. There are also landscape and ecological variations from the east to west. This has been caused mainly by the north-west/ south-east lateral disposition of the country. Thus, western Nepal or the Far West with a greater share in the higher northern latitude has a much drier and colder aspect than the more southerly eastern region where humid monsoon conditions prevail and these greatly influence local flora and fauna.

This regional diversity is reflected even in the case of man if we survey the distribution pattern of racial types in Nepal. The Himalayan range does not form an ethnic boundary. The contact zone between the Indo-Aryan Caucasoid people and the Tibeto-Burman Mongoloids is not along the crest-line of the Himalaya but rather tangent to it in the north-west/south-east alignment. Thus, we find Caucasoid Khasa adapted to the environment of the remote Humla in the trans-Himalaya and the Mongoloid Kiranti who once ruled Morang, descend down to the plains in the east. Even at present, the western part of Nepal is sparsely populated in comparison to similar areas of central and eastern regions. For example, the population density of Jhapa district in eastern tarai is seven times higher than that of Kanchanpur district of the Far West. In terms of phyto-geography, Nepal is the meeting-ground of the dry West Himalayan type and the East Himalayan type. In addition to the general phenomenon of vegetation zonation with altitude and variation according to aspect, field researchers have noted changes in the provenance of plant species in their distribution pattern. For example, *Cedrus deodara* does not occur east of Longitude 83 degree, the eastern limit of *Cupressus torulosa* is the Kali-Gandaki, and that of *Quercus dilatata* is Manang Valley. In this respect, one can do no better than summarise J. D. A. Stainton¹ whose field explorations in botany in Nepal can be favourably compared to the geological explorations of Toni Hagen:

1. J. D. A. Stainton, *Forests of Nepal*, London, John Murray, 1972.

- Although the East Himalayan element is the dominant in the flora as a whole, this becomes reduced as one travels westwards through Nepal.
- The West Himalayan element is strongly represented in the western half of the country, particularly in the Jumla area and some of the inner Himalayan valleys.
- The Tibetan element is dominant in the flora of some dry areas along the northern border.
- Locally endemic species of trees and shrubs are not an important element in the flora.

Nepal is also rich in animal and bird life. Here are a sample of wild denizens encountered during my travels.

Langur, Langtang²

We were travelling through a mixed forest of silver fir, blue pine and evergreen oak in Langtang Valley. We came across a large group of Langur monkeys in a meadow in the midst of the forest. On our approach, they ambled off to nearby boulders and trees and perched with their long dangling tails and an expression of disdain on their dark faces.

Rhesus Monkey, Dailekh³

On a clearing below the path, I saw some burnt-down sheds and learnt that a group of Raute, a nomadic hunting tribe with particular liking for monkey meat, had camped there the previous month and had moved up river. However, the Rautes had not exhausted the clever monkeys of Katti Khola as I soon met a colony of rhesus monkeys. They were crossing the Katti Khola to the north side by jumping across the river at a narrow section. They had selected a large boulder as a launching pad and they leapt across the river one by one. I was particularly impressed by the long jump accomplished by the mothers with their babies clasped fast to their breasts.

Blue Sheep, Dolpo⁴

After an unsuccessful bid on Kagmara Peak (6,711 m), we continued our descent along the south flank of the Shute Khola

2. Harka Gurung, *Vignettes of Nepal*, Kathmandu, 1980, p. 284.

3. *Vignettes*, p. 139.

4. *Vignettes*, p. 75.

through alternate stretches of snow and slush. We had to move cautiously, particularly across the slush on steep slopes. Turning a corner, we suddenly came face to face with a flock of wild sheep on the path but we neither had the strength nor armory to pursue them. They rushed with great agility down the steep flank of the Shute Khola and as soon as they reached the other bank, began grazing unconcernedly. The leader was a grey male with enormous curved horns.

Blue Sheep, Humla⁵

On reaching a steep rocky section on the north side of the Humla Kamali, we surprised a flock of *naur* (blue sheep) perched on crags immediately above us. They were all male in a group of 18 with large curving horns and thick grey mantle. They made their flight to the higher slopes jumping from crag to crag, dislodging boulders and pebbles on our path in the process. We clung to the nearest available rock-face as scared as the blue sheeps until the fusillade of rock-fall had died far down into the gorge below.

Pine Marten, Surkhet⁶

One fine morning I was riding down Ranimatta Lekh and near Lade (1700 m), I saw two pine martens sucking the nectar of rhododendron flowers. They had dark snouts with pointed white ears and their amber coat shone in the slanting rays of the morning sun. They shuffled nimbly using their bushy tails as a balance among the tree branches emblazoned red with flowers. They would use their fore-paws to lower a particular over-laden branch and suck fast. I held the reigns of my horse, marvelling at their lively activity but when they saw me, they jumped-off the tree and disappeared in the forest.

Ruddy Shelduck, Humla⁷

As we followed the Takche Chu for six kilometers, the river valley turned north. There were some birch stands on the southern bank and the rest was all azalea bushes and alpine grassland with numerous horses and yaks. We sighted some pairs of Ruddy Shelduck in the shallow river. These birds are also found on the

5. *Vignettes*, p. 109.

6. *Vignettes*, p. 144.

7. *Vignettes*, p. 116.

banks of the Narayani river during winter. There were even some fish in the cold river at this great height (4,000 m).

Migratory Birds, Narayani River⁸

The swift waters of the Narayani river rushed on both sides of the island while large flocks of cormorants swarmed on the banks. They would fly in groups and would overwhelm the stretch of water in splashes where they landed. White terns and sleek dark swallows swooped on the water surface and flocks of teals and mallards wheeled up and down the river. The Ruddy Shelduck, invariably in pairs, seemed less afraid of men. Flocks of cormorants wheeled in the dusk, their flapping wings silhouetted against the large golden disc of the setting sun and soon darkness was upon us.

Migratory Birds, Mustang⁹

The track north of Kagbeni traversed across gravel terraces of black shale, dark sandstone and red quartzite. The slopes were covered with Caragana bushes and looked an ideal goat country. Up in the clear blue sky, we could see numerous columns of Demoiselle cranes heading south on their migratory flight from Central Asia. They flew at great height and sometime the orderly columns scattered like beads of a broken string when attacked by falcons. Some of the birds so diverted from the main flock circled above the vast sands of the Kali Gandaki with high pitched calls and a few stragglers landed on the ground.

Yellow-billed Chough, Everest¹⁰

Most of the time we were in the Western Cwm, we were enveloped in grey wilderness without a sense of direction or perspective. And when sometimes visibility descended briefly, we would only confront the precipitous walls of Nuptse and the west shoulder of Everest while the deep chasm down the Ice Fall further heightened our precarious situation. On rare occasions, we felt we had contact with the world below when Yellow-billed Choughs flew up the Base Camp. But they would soon be gone riding the strong air draft.

8. *Vignettes*, p. 258.

9. *Vignettes*, p. 213.

10. *Vignettes*, p. 326.

Lophophorus impejanus, Jajarkot¹¹

I lay on the soft alpine grass for a long time scanning the flight of clouds over the Chyakhure pass (3964 m). When we started our climb up a ridge between two streams, a strong up-valley wind spurred us on towards the pass. The path rose steeply and we saw a pair of Impejanus pheasants scratching snow under a pine tree. The male was a magnificent cock of iridescent colours, emerald crown, golden neck, blue back and brown tail, and they careened down to the lower forest.

Lophura leucomelana, Lamjung¹²

When young I once accompanied my elder brother Mahila for pheasant shooting to a site where the latter had spotted some bird droppings and guessed that birds roosted there. Mahila had a muzzle-loader and I carried a torch and it was dark when we reached the appointed place. I was asked to light the torch and point it towards the tree, and lo, the branches were thick with Kalij pheasants roosting wing to wing. The birds were too surprized at the flash-light and sat there blinking. Mahila aimed his gun and fired at point-blank: there was a big bang but no birds dropped. The gunpowder had burst at the striker and Mahila's face was black. Luckily, he was not badly hurt. While the two brothers cursed the lousy gun, the birds now fully awakened made away in the dark of the night.

(Paper presented at the First International Pheasant Symposium, Kathmandu, 22-23 November 1979.)

11. *Vignettes*, p. 39.

12. *Vignettes*, p. 3.

PROTECTION OF HIMALAYAN ENVIRONMENT: TRAVERSE AND BIVOUAC

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Our concern is the protection, preservation and conservation of the Himalayan environment. It is also our objective as embodied in the U. I. A. A. 's Kathmandu Declaration of October 1982. Once the objective has been identified, one need to assess the magnitude of the problem and reconnoitre the route. The sequence sounds simple yet the seize may be long before the final assault.

Assuming this symposium to be one of many camps to the task, we should begin with two clarifications:

- what constitutes Himalayan or mountain environment, and
- protection of that environment against what ?

The clarification to the first should commence with the definition of the mountain. A mountain, strictly speaking, is a conspicuous elevation of small summit area. An essential and yet indefinite element in the definition of a mountain is the conspicuity.¹ The Himalaya is a congregation of high mountain peaks and a emphatic barrier between the Gangetic plain and the Tibetan plateau. The elements of its environment are excessive altitude, steep gradient, low air pressure, high insolation, poor soil, sparse population and immense diversity. No attempt has yet been made to portray its regional variations in environment. Extant observations about Himalayan environment, therefore, remain bland generalizations.

The clarification to the second question - protection against *what* needs no digression. The prevailing notion is basically one of man vs mountains.² Man, particularly the natives, are said to be

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1. Roderick Peattie, *Mountain Geography: A Critique and Field Study*, Cambridge, Massachussetts, Harvard University Press, 1936, p. 3.
 2. H.C. Rieger, "Man versus mountain: the destruction of the Himalayan ecosystem," in *The Himalaya: Aspects of Change* edited by J.S. Lall, Delhi, 1981, pp. 351-376.

imposing on the mountain environment to an irreversible change. The route to environment protection of the mountain is fraught with similar other conceptual crevasses.

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In order to reach the higher elevations, one must first negotiate and cross these conceptual crevasses. They are not the making of ignorance but borne of sentimentality, platitude and exorbitance. One might begin with the terrestrial tenure of the mountain. If the mountain is said to be fragile,³ then in relation to which land form - early eroded plateau or the plain, the orogenic womb ? Gravitational law ordains that objects must come down-hill and geomorphic processes are more dynamic in mountain areas. Mountain range and ridge, peaks and pinnacles are outliers of immense resistance. In geologic time-scale, all landforms are not only fragile but transitory.

Another widely held view relates to the maintenance of ecological balance including in mountain environment.⁴ It is a futile perpetuation of the past and therefore, a myth. Human occupancy of the earth has a linear progression: from dominance of nature over man to dominance of man over nature. The progression of human civilization has been a continuous effort to be free from the shackles of nature.⁵ However, it is the raw nature of the mountain environment that motivate trekkers and climbers.⁶

The discussion on mountain or Himalayan environment should include the hill region where the impact of man on land is more visible. But here too, the extent of human contribution to soil erosion, flood and other natural processes remains an unknown quantity. Investigations of reconnaissance nature are open to wide

3. 'The Fragile Mountain', film documentary.

4. J. D. Ives, "Applied mountain geocology", in J. S. Lall (editor), op. cit, pp. 377-402.

5. Harka Gurung, "The sun and shade", in *Nepal: Dimensions of Development*, Kathmandu: Sahayogi Press, 1984, p. 98.

6. In 1985, Nepal had 28,707 persons or 15.9 percent of the total tourist arrivals for the purpose of trekking and mountaineering (Department of Tourism, *Nepal Tourism Statistics 1985*, Table 17). Of these, 682 or 2.9 percent were mountaineer from 87 expeditions (*Nepal Himal Journal*, 1985 Annual).

interpretation: that 53 percent of mass-wasting is accelerated by man⁷ or 75 percent of all landslides are natural.⁸ Human intervention is most obvious in the depletion of natural vegetation. It certainly affects visual environment but forests do not necessarily control soil erosion.⁹ Deforestation is said to have led to decrease in rainfall implying climatic change towards more aridity in parts of the Himalaya (Dolpo, Mustang).¹⁰ Yet, there is no scientific evidence available to support such conclusions or rather assumptions.

The natives are said to be ignorant of ecology or the consequences of environmental degradation. First, it is said that the people in hill and mountain regions should not multiply so fast. If the land could not sustain them, how was this population growth possible? Shifting cultivation or cultivation of marginal land are said to be bad land use practices. But such practices are essential extension of the farm system to supplement the low productivity.

Technical experts and advisors conclude that sloping terraces contribute more to soil erosion than horizontal terraces. Laying-out field terraces is the hill men's elemental device to deal with adverse slope and sloping terraces are not products of native ignorance or indolence but represent the equation between labour and output.¹¹ It is universally acclaimed that trees should not be cut as tree growth rate in the mountains is only 1 cm. per year. Then how would the mountaineer or hill men cook his food and contend with the cold? The case for alternative energy sounds theoretical if not futile when one realizes the extent of mountain-hill poverty where the cost of

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7. Peter Laban, "A preliminary appraisal of land mass movements in Nepal", *Journal of the Nepal Research Centre, Sciences*, Vol. II/III,
 8. De von Nelson, *A Reconnaissance Inventory of the Major Ecological Land Units and Their Watershed Condition in Nepal*, Kathmandu, HMG/FAO/UNDP, 1980.
 9. D. Brunnsden *et al*, "The geomorphological character of part of the Low Himalays of Eastern Nepal," *Zeit. Geomorph. Nature Forschungen, Suppl*, Band 37, 1981, pp. 25-72.
 10. National Planning Commission, *The Seventh Plan (1985-90)*, Kathmandu, 1986, p. 177.
 11. Harka Gurung, *Ecological Change in Nepal: A Native Interpretation*, New ERA, Occasional Paper No. 1, October 1981, p. 10.

the cheapest biogas plant far exceeds the entire asset of most households.¹²

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Immediately beyond the series of crevasses just enumerated, rises a steep wall with two challenging dimensions. One is the excessive altitude of physical reality and another the extreme slope of pervasive poverty. These need to be traversed. Elevated areas are more exposed to natural elements. High mountains have glacial scouring, avalanche, solifluction, frost-shattering, soil erosion and landslides whether there be man or not. In the case of the Himalaya, consider the erosive impact of the Central Asian wind, the westerly cyclone and the monsoon down-pour that contribute to seasonal wind and fluvial erosion. These natural elements have been essential components of the Himalayan environment ever since the pre-eminence of the Himalaya. Add to these, the structural tensions as evidenced by the frequent visitations of the earth tremors and earthquakes.

The relative fragility of the mountains may be debated. But there is no question about the level of poverty of the people who live in the Himalaya or its pedestal, the hill region. Mountains everywhere are marginal areas for human occupancy. The mountain-dweller must remain mobile to survive: with livestock according to season for pastorage, travel where trade opportunity lies and engage in smuggling if on the border. The hill man/woman must commute between down-hill paddy, uphill maize and further up for animal grazing. Dwellers of the mountain and hill need to forage for more land resources or else migrate to the lowlands, initially seasonal then permanent.¹³ Since there are no other economic opportunities. It is this pervasive poverty that compel these highlanders to clear forest for cropland, fuel and fodder, become migrant laborers and some even mercenary soldiers.

12. Harka Gurung, *op. cit.*, 1981, p. 11.

13. Harka Gurung, "Migration and development," in *Nepal: Dimensions of Development*, Kathmandu, 1984, pp. 225-245.

Imagine a mountain bivouac. The summit is still far and to return to the lower camp is wasting the day's effort of traversing the steep wall. The enforced bivouac is a symbol of hope for the next day. The sun has already set in the western horizon leaving a mysterious glow. The night is long, and the only thing one can do is to ruminate and reflect. What are the lingering thoughts before one is overtaken by sheer physical exhaustion? That nothing can be done about the inexorable processes of nature. The avalanche will continue to thunder, the rocks embedded in ice at night must be released with the heat of the sun,¹⁴ gravels must creep down the slope to find their temporary ledge and snow storms will fell the tallest trees in its path. This is the reality of the mountain world, the Himalayan environment. It is this eternal drama that fascinate lowlanders and outsiders. Climbing is not mere histrionic but test of human will against such raw nature.

But if very little or nothing can be done about the natural processes in the Himalaya, then what are the ways to protect its environment. The prevailing scenario illustrated by the conceptual crevasses tends to highlight natural blight and ignore human plight. Environment means the surroundings, influences, and circumstances affecting the existence or development of the organism—in this case, the people who dwell in the Himalaya or its periphery.

The relationship between natural environment and economic development is considered to be antagonistic. This is based on a general observation that more advanced the economy, greater the pressure on natural resources. However, in the case of the Himalaya, the relationship between environment and development should be considered as introverted or even atavistic since environmental problems of the Himalaya are the making of least development.¹⁵

14. Harka Gurung, *Vignettes of Nepal*, Kathmandu, Sajha Prakashan, 1980, p. 74.

15. Harka Gurung, *Nepal: Environment and Development*, (Paper commissioned by UNEP), Nairobi, 1986, p. 48.

Thus, in order to arrive at some credible prescriptions of environmental protection, one must first appreciate the human compulsions to live in a harsh environment. Man-land relationship varies both in time and space depending on available resources and technology. The Himalayan situation is one of a low level of development. It is the search for survival that force people to adopt extensive methods of cultivation and grazing. Sectoral programmes such as soil conservation, forestry, alternative energy development will have only a limited impact as long as the economy languishes at the present level of morbidity. The first pre-condition to the protection of the Himalayan environment is the tackling of the economic poverty of the Himalayan people. All else is peripheral prescription.

The bivouac is quiescent and the dawn is still far.

Finally, let me conclude with the 4th century B.C. Taoist philosopher Hsuen Tzu:

You glorify Nature and meditate on her:
Why not domesticate her and regulate her ?
You obey Nature and sing her praise:
Why not control her course and use it ?
You look on the seasons with reverence and await them:
Why not respond to them by seasonal activities ?
You depend on things and marvel at them:
Why not unfold your own activity and transform them ?
You meditate on what makes a thing a thing:
Why not so order things that you may not waste them ?
You vainly seek the cause of things:
Why not appropriate and enjoy what they produce ?
Therefore, I say, "to neglect man and speculate about Nature
Is to misunderstand the factors of the universe¹⁶ "

(Paper presented at the International Seminar on the Protection of the Himalayan Environment, 8-9 December 1986 and published in *Nepal Himal Journal Annual 1987*, Kathmandu, pp. 9-11.)

16. Charles A. Moore (Editor), *The Chinese Mind: Essentials of Chinese Philosophy and Culture*, Honolulu, 1967, p. 37.

II. LANDSCAPE

WESTERN HIMALAYA

The two books deal with specific areas in Western Himalaya. Gerald Berreman,¹ an anthropologist, concentrates on the social inter-relations in a Garhwali village and gains in intensity. S.L. Kayastha² sweeps wider as a geographer in seeking factors of man-land relationship within a Himalayan river basin. The studies contrast not so much in their scale of investigation as in their approach of the subject. The former is an outside observer of an alien society and thus more objective while the latter gives a sophisticated native's account of his homeland. In this, Kayastha complements S.D. Pant's book, *The Social Economy of the Himalayans* (1935), on Kumaon published three decades ago.

Berreman's work in a hill village at 5,300 ft., near Dehra Dun aims at ethnographic enquiry and functional analysis of a 'previously unreported culture area'. The bulk of the book describes the hillman's (Pahari) relationship with the supernatural, family, caste, community and the outside world. The village is composed of partly-clustered homesteads with some satellite settlements (*chan*). The inhabitants are derived from two major ancestral stocks now distinguished as the high-caste Khasa and the depressed Dom. Most land is owned by the higher castes with dry grain cultivation as the traditional economy. In the structural framework of the Pahari social interaction, kinship and not caste is of greater significance. As compared to the Hindu culture prevalent in the plains, the Pahari society exhibits a smaller range of castes, freer participation of women in most aspects of life, greater reliance on sorcerers and mediums, distinctive culture traits in marriage customs, dress, food, and finally in the rusticity of the Paharis. On

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1. *Hindus of the Himalāya: Ethnography and Change*. By Gerald B. Berreman, Berkeley and Los Angeles, University of California Press, 1963, 9 1/2 x 6 inches; 430 pages; sketch-maps, and plates.
 2. *The Himalayan Beas Basin: A Study in Habitat, Economy and Society*. By S.L. Kayastha, Varanasi, Banaras Hindu University, 1964, 9 1/2 x 7 inches; 346 pages; maps, and plates.

their self-consciousness as to their inferior religious and social practices, Berreman quotes a Pahari:

'We can't observe all those rules that plains people can do. Our women have to work, they can't bother with being secluded (*purdah*) We haven't enough water nor enough time to waste bathing all the time like some plains people do. If a Brahmin here practised all the observations like some plains Brahmin does, his family would starve',

An apt environmental explanation. Thus, one comes to accept Pahari culture as an ecological adaptation of Hindu culture to tribal society in a hilly environment. The author rightly claims Garhwal, with its numerous Hindu shrines, as the heart of the Pahari culture area. This may be corroborated from the Indian Census returns which reveal Garhwal and Kumaon with the highest percentage of Brahmins in India. He also estimates the Pahari-speaking population of India at five millions. To this may be added another four million Nepali speakers (Census of Nepal, 1952/54) and the total Pahari-speakers for the entire Himalayan region comes to nine millions. The study by focussing on a local area defines conclusively the Pahari culture as viable in its own right.

On his monograph on the Beas basin covering 5,638 square miles in montane Punjab (including parts of Kangra, Mandi, and Chamba), Kayastha makes a case for a single Himalayan district on the basis of its homogeneous natural boundaries. Of the three parts of the book, there is a justifiable emphasis on land-use and the author reveals considerable personal knowledge of the region. Unfortunately, the section on geology repeats old gazetteer accounts and makes poor reading in the context of recent structural studies of the Himalayan area. The three natural regions recognized are the conventional ones: mountainous region (above 10,000 ft.) in the north and east, valley region (2,000 - 4,500 ft.) of Kangra and Kulu in the centre, and low hill region of Siwalik formation in the south.

The three agricultural regions follow a similar geographical pattern. The mountainous region has an average rainfall of 40 inches and is used mainly for pasturage and some agriculture. The low hills with less than 60 inches average rainfall are given to dry

crops (maize and pulses), and the central valleys with precipitation exceeding 60 inches grow wet rice. The valley region with its extensions into fruit-growing and tea-growing on upper slopes (3,000 - 6,500 ft.) forms the economic centre of the Beas basin where agricultural densities in places compare well with the middle Ganga plain. In spite of the hydro-power at Jogindernagar, established 1933, and about ten *bazar* settlements, the economic structure is dominated by subsistence agriculture. The high density of livestock at 1,920 per square mile has resulted in overgrazing with consequent soil erosion. The depletion of natural resources has been aggravated by the increase in population. Although a favourite refuge of plains emigrants for centuries, the region experienced a ten-fold increase in the rate of population (23.4 percent) since 1921 mostly through natural increase. Under existing conditions of economic development, the population density has reached its saturation point and economic exigencies have forced the natives, Dogra, to seek outside employment, mainly in the army. Yet it is not only in their martial tradition but also in Rajput 'superiority complex', Pahari dialect and shamanistic beliefs as well, the Dogras share Pahari culture with the Garhwali, the Kumaoni, and the Hindu Nepali. The regional validity of the Beas region is refined in the final type studies of the complementary economies of the agricultural Ghirth and the pastoral Gaddi. In spite of the profusion of footnotes, two to a page and mostly irrelevant, Kayastha fails to lift his eyes beyond the Beas watershed. The numerous plates are of poor quality and the physiographic diagram (Fig. 3) of the Beas basin does injustice to a Himalayan landscape. However, the book makes a laudable attempt in creating Indian interest in the Himalayan area.

(The Geographical Journal, London, Vol. CXXXI, 1965, pp. 274-275.)

ON GEOGRAPHY OF NEPAL

Nepal remained a *terra incognita* till the mid-20th century and even Marco Polo had occasion to remark that "The country is wild and mountainous, whose visit the king discourages." The opening of the country to foreigners in 1949 brought in its wake an influx of mountaineers, explorers and scientists with consequent growth of literature on Nepal. A few of these oft-quoted publications deserve a retrospective review.

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In *Nepal* by Toni Hagen,¹ the approach is more of a introductory style and the author succeeds in drawing the main features of the country. Hagen travelled extensively in Nepal as a geologist but also makes pertinent observations in the field of economic development as well borne of his intimate knowledge of the country.

The author reconstructs the orogenesis of the Himalayas in four successive phases and makes a strong case for tectonic thrusts in determining their basic structure. He compares the Himalayan and the Helvetic nappes and goes on to draw interesting analogies between the Siwalik and the Molasse zone as well as between the Thak Khola transverse fault and the Upper Rhine rift valley. He draws on field observations to support his statement that the Mahabharat Lekh is still in the process of adjustment. He appreciates that morphological investigations made without consideration for geological structures are inadequate and goes on to define Nepal into seven natural divisions: Terai, Siwalik zone, Mahabharat Lekh, Nepal Midlands, Himalayas, Inner Himalayas and Tibetan marginal mountains. He observes that the Tibetan marginal mountains form the watershed between the Tsangpo and

1. *Nepal: The Kingdom in the Himalayas*, by Toni Hagen, Berne, Kummerly & Frey, 1961. Reviewed by Gurung in *Geographical Journal* (London), Vol. CXXI II, 1961, pp. 86-87.

Ganges, that the Himalayan chains are not massive elevations but narrow ridges and that the great river gorges here are among the deepest cuttings in the world with the greatest extreme of altitudes in shortest horizontal distance.

The chapter on climate and vegetation makes interesting revelations. He finds the Himalaya an emphatic meteorological limit and also cites locations like Thibru (Tharpu) and Thak Khola that exhibit inversion of temperature. He observes that the Himalayan glaciers are fed mainly by avalanches and that they are fast retreating. The lowest line of perpetual snow was found at Rupina La at an altitude of 4,500 metres (p. 46) and the highest human settlements were met north of the Himalaya. Nepal offers unrivalled varieties of flora arranged into different altitudinal levels but extensive deforestation draws a spectre of devastating soil erosion, landslides and floods.

Hagen describes Nepal as the 'ethnic turn-table of Asia' and this explains his very general description of the people although he presents interesting ethnic cross-sections (p. 64) into ecological levels. He is mistaken to state that 'Sanskrit is still used in some parts as the colloquial spoken language' (p. 60). The eastern limit of the Gurung region is not Marsyangdi (p. 67) but Ankhu Khola east of Burigandaki. Again, the principal animal the Gurungs depend on is not buffalo but sheep which has given them a long tradition of weaving woollens.

Hagen writes at great length of the Sherpas and their alpine exploits. In a book which provides many comparisons between Nepal and Switzerland, the author has ignored the first two Nepalese who accompanied Lord Conway to the Swiss Alps in 1894 and climbed a peak in the Uri Alps which was named Piz Gurkha (10,050 feet) after them.

The author rightly observes that the greatest obstacle of economic development seems to be the poor knowledge of their own country by the Nepalese (p.101). He contends that with better utilization of resources, the Nepalese land could not only easily feed the entire population but has prospects of exporting hydro-electricity, dairy products and fruits. Hagen makes relevant observations on the seasonal movement of the people and thus the

establishment of road net-work seems to be the key to better circulation and economic development.

The author presents a photographic feast of 70 plates selected from 10,000 negatives covering diverse aspects of the country. But for the lack of a table of contents, the book is well-conceived and remains the best introduction to Nepal.

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Nepal by Pradyumna P. Karan² may be described as the first comprehensive geography of Nepal. The book includes ten systematic chapters, 36 maps and 59 photographs. The author's acquaintance of Nepal was through his four months (May-August, 1957) reconnaissance land-use survey of the country³. There are obvious limitations in such a broad survey and this is more so in the case of a little-reported area like Nepal. Thus the book contains numerous statements that are either over-generalizations or factual errors. Such sweeping statements are amply substantiated by equally simplistic maps such as those of historical growth (Plate 2), rural settlement and house types (Plate 22), ethnic groups and languages (Plate 30), and geographic regions (Plate 35). In the case of the map of Kathmandu valley (Plate 24) the author fails to refer to Perceval Landon's *Nepal*, Vol. II (1928) in which it was first published.

To start with, Karan subscribes to the conventional fallacy that "The northern boundary [of Nepal] coincides more or less with the high peaks of the Great Himalaya, along the frontiers of Tibet" (p. 8). He qualifies his statement in plate 4 (inset) by shifting the Mahabharat Lekh to correspond with the alignment of Dhaulagiri and Byasrikhi Himal (Great Himalaya). In fact the northern border of Nepal in the western sector lies about 24 miles

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2. *Nepal: A Physical and Cultural Geography* by Pradyumna P. Karan & W. M. Jenkins, University of Kentucky, Lexington, 1960. Reviewed by Gurung in *Chirigaku-Hyoron* (Geographical Review of Japan), Vol. XXXVI, May 1963, pp. 296-297.
 3. P. P. Karan, "Land use reconnaissance of Nepal with aero-field techniques and photography," *Proceedings, American Philosophical Society*, Vol CIV, No 2, 1960, pp. 172-187.

north of the Great Himalaya along a subsidiary range which forms the watershed between the Tsangpo and the Ganges.

The physiographic chapter draws heavily on Toni Hagen's geological researches but the basic landform characteristics have not been fully dealt with. In dealing with climate, the author makes statements as ill-founded as "The country suffers from extreme heat", (p. 25) and as naive as "The south-west wind (summer monsoon) is generally much stronger than it is in China or Mongolia" (p. 25). The chapter on land use and agriculture forms the basis of the book wherein the author discusses the land use pattern both at the regional (Kathmandu Valley) and the national level (Plate 12).

Karan provides a good chapter on population where dynamics and distribution patterns are cartographically well-represented (Plates 17, 19 & 20). For the first time, he has mapped the smallest census unit and this provides an interesting regional pattern of population density. The folding map (back pocket) does not represent 'Administrative Units' as Karan erroneously labels it but instead shows the census sub-divisions first devised during the 1952/54 Census of Population. The same map is again wrongly grided: Nepal lies between latitudes $26^{\circ}21'$ and $30^{\circ}17'$ North and not between $27^{\circ}21'$ and $31^{\circ}17'$ North as shown in the map. Again, in the population table, the number of males are given as total population for the *thums* Hyangja and Sarankot.

In the chapter on cultural diversity, the author stresses on social differences and fails to describe the cultural matrix wherein different ethnic groups have their economic domain that increase 'social productivity' of the country. The ethnographic map and the linguistic zones map are highly unreliable and their oversimplification is only surpassed by the maps purporting to be the distribution of chief diseases and diet deficiency (Plate 30). In the final chapter, the author attempts a resume of the various geographic regions as defined by the Statistics Department. It is unfortunate that the author has not examined the geographic validity of such a regional classification in which the minor differences between the tarai are better recognized than those between the sub-tropical hills and the trans-Himalayan *bhot* region.

The author, however provides a fitting conclusion to his subject, "A small land of great diversity is Nepal !" If there are inadequacies in the book, these are obvious in a pioneer work on a complex area. The high standard of cartography and a bibliography of over 235 items are the main assets of the book.

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Nepal in Maps by the Department of Publicity⁴ needs to be evaluated closely for the reason that it might be taken as an authoritative reference work which it is *not*. The format is handy and there is liberal use of colour in printing. The volume has no table of contents and page numbering. It is regrettable that in a publication on maps, most of the maps bear no scale, an inexcusable ignorance of basic cartographic principle.

The volume contains 26 maps dealing with physical, cultural, and economic aspects of the country and the appendix includes 25 tables showing comparative progress of Nepal. One striking feature about the series of maps is that the international boundary of Nepal varies from map to map: there are at least four versions (compare maps 1,3,5 & 9). The qualifying statement that "the boundaries shown in the map are not authoritative" comes as a surprize in an official publication inspite of the fact that the Sino-Nepal boundary was demarcated in 1960/61.

The colour scheme in the 'physical map' is misleading wherein tone values are not related to the altitudinal levels: the green colour for the 1,000-5,000 feet elevation as well as 10,000-15,000 elevation shows little difference. Another colourful map depicts 'land use' which is, in fact, an over-simplified version of Karan's land use map. The first two maps (Physical, Rivers and Mountains) which have a fair amount of lettering is replete with mis-spelt place-names such as Semikot for Simikot, Thakuri Lekh for Thakurji Lekh, Kangiroba for Kanjiroba, Machapuchar for Machhapuchhre, Manslu for Manaslu, Gosikundalekh for Gosainkunda Lekh, Helbu for Helmu, Takhu for Takh, Hamja for Hamga, Lamtang for

4. *Nepal in Maps*, Department of Publicity, Kathmandu, 1966. 26 maps, and statistical appendices. Reviewed by Gurung in *The Rising Nepal* (Kathmandu), 24 June 1966.

Langtang, Mangpa for Nangpa and many more. In the first map, even the alignment of the major rivers are sketchy and the Babai river is shown as Rapti and Seti river as R. Medi.

The rainfall map is a useful guide while the map showing hydrological stations is reduced to too small a scale and superfluous. The population maps are not qualified by the statement that the subdivisions are not administrative units but census districts. Economic maps based on the data furnished by the various departments are unsatisfactory. It is difficult to distinguish the relative value of symbols on the map. As an instance the transport and communication map fails to distinguish between Tribhuvan Rajpath and Sunauli-Pokhara (Siddarth Rajmarg) Road which are at different stages of development. Similarly, as in the case of the Industries map, some of the information are out-dated while many are mere propositions.

One has to consider that this is the first official attempt in map publication. But many of the obvious errors could have been easily avoided and the cartographic style much improved with a more careful editing.

(The Himalayan Review, Vol, I, 1968, pp. 78-86.)

GEOGRAPHIC FOUNDATIONS OF NEPAL

Nepal extends 500 miles along the Himalaya between longitudes 80° and 88° East and latitudes 26° and 30° North. In terms of spatial location, Nepal has some significant features. With an area of 54,717 square miles and a population of over nine million, the kingdom is the largest Himalayan state. Nepal, however, is a mere fraction in the Asian political set-up viewed in relation to her immediate neighbours. India is 22 times bigger in size and 44 times larger in population and China is 75 times bigger in size and 70 times larger in population than Nepal. Nepal is thus sandwiched between two giant neighbours, If geographically Nepal marks a transitional mountain area between the fertile Gangetic plain and the arid Tibetan plateau, the country is politically a monarchical state wedged between republican India and communist China.

i. Natural Division

Nepal exhibits a wide range of terrain; less than hundred miles north of the low tarai plain, the culminating heights of the Himalaya dominate the landscape. The rugged topography presents a maze of spurs and valleys but some order can be discerned (Fig. 1). Three parallel ranges of varying height and extent traverse the country east to west. Approaching the country from the south, the first elevation are those of the Chure Range rising abruptly from the tarai lowlands. It averages 3,000 feet in altitude and is five to twenty miles broad. The Chure has a marked hog-back landscape of rugged character and is forested. The soils are immature and dry. The Mahabharat Lekh running closely parallel to the Chure Range averages 7,000 feet in height and ten miles in width. The structure is synclinal and the topography steep and jagged. The lower and gentler slopes have been cleared for terrace cultivation and forests are found only on higher elevations. Fifty miles north of the Mahabharat Lekh rise the ultimate crest-line of the main Himalaya. This is the realm of snow-peaks, some of the highest in the world including Sagarmatha (Mount Everest). There are over 240 peaks exceeding 20,000 feet in elevation and snow-line lies above 17,000

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FIGURE 1 : ORIENTATION MAP



feet. The landscape is wild and forbidding without human habitation for miles.

The parallel ranges, Chure Range, Mahabharat Lekh and the High Himalaya, are alternated by characteristic lowlands. South of the Chure, the level tarai or *Madhesh* merges into the Gangetic plain. The Nepalese tarai is a 25 to 35 miles broad belt of forests and farms. The Chure and Mahabharat ranges confine spindle-shaped low valleys (*dun*) resembling the tarai in relief and climate. North of Mahabharat Lekh but south of the High Himalaya, lie the broad hill complex of *Pahar* country which though much dissected has a subdued topography. It includes the longitudinal valleys of the principal rivers Karnali, Gandaki and Kosi and the vale of Kathmandu. The *Pahar* region is extensively cultivated and has been the traditional zone of Nepalese settlement. West of the meridian of Kathmandu still another range, the Tibetan marginal mountains, runs about twenty miles north of the main Himalayan crest-line. They average 19,000 feet in height and the topography is comparatively less rugged than that of the main Himalaya. Significantly, the Tibetan marginal mountains form the chief watershed between the Ganges and Tsang-po and define the boundary between Nepal and Tibet. Between the high Himalaya and the Tibetan marginal mountains lie the elevated *Bhot* valleys reminiscent of the Tibetan landscape. Each of these lowland areas, *Madesh* (south of Mahabharat Lekh), *Pahar* (between Mahabharat Lekh and the main Himalaya) and *Bhot* (north of the main Himalaya) have their distinctive natural environment, population and economy.

ii. Climate

Topographic extremes have resulted in the vertical distribution of bio-climatic types in narrow zones. Thus in Nepal, tropical temperate and tundra types of climate are encountered within a short distance of each other. Four major climatic types make vertically distributed zones in Nepal. Humid tropical climate prevails up to an elevation of 3,000 feet and includes the tarai, Chure range and enclosed *dun* valleys. Summers are hot with temperature exceeding 100° F. Winters are cool with mean temperature at 54° F in the west and 60° F in the east. The summer rainfall varies from 70 inches in the east to 35 inches in the west. Western tarai receives brief

showers during the winter. The tarai and *dun* are areas of endemic malaria although much of it has been controlled in recent years.

Moist sub-tropical climate is characteristic of the hill region between 3,000 feet and 8,000 feet. The summer is milder than in the tarai but the maximum temperature still approaches 90° F. Winters are cold with mean temperature at 50° F with occasional frost. Summer rain is heavy but decreases westwards. The western half, however, receives some westerly rain in winter. The higher hills (8,000 - 13,000 ft.) are under the influences of temperate climate. Summers are cool and short while winters are cold with night temperature below freezing-point. Summer rainfall is still dominant and most of the winter precipitation is in the form of snow-fall. Frequent thunderstorms, fog and frost put a limit on agriculture.

Tundra type of climate is found on the higher grounds above 13,000 feet. Summer is short and cool and the winter severe and dry. Temperature remains below 25° F throughout the year and there is much snow-fall. High insolation and strong westerly winds are other characteristic features of the high altitude weather.

Intricate variations occur within the broad vertical climatic zones owing to locational factors. Broadly speaking, the mean temperature for the whole country is 60° F increasing from north to south and the average rainfall 60 inches decreasing from east to west. There is a recognizable seasonal pattern that regulates the rhythm of human activity. The two warm periods (February-April and September-October) are brief transitory phases between the hot summer (April-August) and the cold winter (November-January) seasons. The seasonal variation becomes less apparent with increasing altitude and in the northern highlands, winter season is lengthened considerably and summers are brief. The hot season under the influence of the south-east summer monsoon gets most of the rain and this is the period of intense agricultural activity. During the winter season, westerly cyclones cause snow-fall on higher elevations but for most people, this is the season for trade and travel.

iii. Vegetation

Similar to the climatic contrast, vegetation types in Nepal range from the tropical luxuriance in the south to nival zone in the north. In the tarai, Chure range and *duns* are found tropical deciduous forest covering a large area. *Shorea robusta* (*sal*) attains its optimum conditions of growth in the tarai where they make pure stands. In poorly-drained areas, large stretches of elephant grass studded with clumps of *Acacia catechu* (*khair*) recall savannah landscape. In the old riverine areas grow *Salmalia malabarica* (*simal*) and *Dalbergia sissoo* (*sisu*) trees with bushes of *Zyziphus jujuba* (*bair*). On the lower hills are found *Shorea* of inferior quality with *Pinus longifolia* (*chir*) growing on drier slopes.

Sub-tropical wet hill forests supercede the tropical forest above the 3,000 feet level and are found as far high as 6,000 feet on the Mahabharat Lekh and hills of the Pahar belt. Hill type *sal* continues to the lower levels but the dominant trees in this vegetation zone are the broad-leaf *Schima wallichii* (*chilaune*) and *Castanopsis indica* (*katus*). Other common associates are *Dendrocalamus* (*bans*) of numerous species. Along with *Alnus nepalensis* (*utis*), and *Rhododendron arboreum* (*gurans*) on higher ridges, are found oak, magnolia, alder and poplar.

Temperate moist montane forest prevails in the highlands between 6,000 feet and 13,000 feet. The common plants are evergreen conifer oaks of at least three species, rhododendron, *Juglans regia* (*okhar*), *Michelia excelsa* (*chanp*), *Fraxinus floribunda* (*lankuri*), and *Arundinaria* (*nigalo*) on wetter slopes. In drier west Nepal, large stands of *Pinus excelsa* (*sallo*) and cedar (*deodar*) are widespread. Higher up grow *Abies spectabilis* (fir), *Picea morinda* (spruce), *Betula utilis* (*bhoj*), juniper and cypress. Tree trunks and branches are festooned with parasitic orchids and filigree of moss and lichen.

In the Sub-Alpine zone above the temperate forest are found the dwarf varieties of rhododendron, juniper and birch. Most of the exposed ridges are, however covered with *Anaphalis nubegena* (*buke*) grass interspersed with occasional *Caragana* bushes and other alpine plants such as *Stellera chamaejasme*, violet and primula.

iv. Cultural Process

The medieval history of the Himalayan region is wrought with the fluctuations of Mongoloid and Khasa dominance. The most notable phases were the 7th century golden age of Tibet when Srong-btsan-sgampo extended his empire to the Himalayan foothills, the 12th century occupation of Western Tibet by Khasa rulers of Jumla, and the 18th century expansion of the Gorkha from Kangra to Sikkim.

The peopling of Nepal Himalaya, therefore, was the outcome of successive migrations of Mongoloid groups from the north-east and Caucasoid people from the south-west. Nepal is also the meeting-ground of the northern Lamaism and southern Brahmanism though most of the tribal groups still cling to the shamanistic *jhankri* cult of mediums and sorcerers. The impact of the Hindu rulers over the last few centuries has been progressive 'sanskritization' and the establishment of Indo-Aryan language Nepali as the *lingua franca* of the kingdom.

The cultural diversity is evident from the fact that at present about 36 languages are spoken in the country. Though there are more than 24 Tibeto-Burman languages in Nepal, the Indo-Aryan speakers far outnumber the others as Nepali is spoken by 48 per cent of the total population and another quarter of the total population speak the tarai languages. One may define broad culture areas taking linguistic units as their core region. Thus, the people of northern valleys (*Bhot*) follow Tibetan cultural tradition in language, religion, and economy. At the other extreme, the people of the tarai are oriented towards the culture and economy of the Gangetic plain. Between these two peripheral culture areas (*Bhotia* and *Madhese*) lie the tribal culture area and the Pahari culture area arranged in successive ecological zones. The temperate highlands are the natural area of the Mongoloid tribes who speak Tibeto-Burman languages. The caste-stratified Caucasoid Paharis who speak Nepali are, on the other hand, widely distributed in the lower sub-tropical zone. Kathmandu Valley though the home of Newar, has been for centuries a melting pot of diverse groups, a process of cultural syncretism.

v. Population and Settlement

The 1961 Census of Nepal gives a total population of 9.4 million. With the present rate of annual increase at 1.6 percent, the country will have a population of 12 million by 1975. The average density of population comes to 173 persons per square mile (Table 1). Topographic control has caused extremely irregular distribution of population. The tarai plain covering 17 percent of the total area accounts for 31 percent of the total population with an average density of 311 persons per square mile. Two-third of the tarai population is concentrated in the eastern half where districts approach a density of 700 persons per square mile. The *duns* support 6 percent of the total population and the density here is over 113 persons per square mile. The hill country between the Mahabharat Lekh and the Himalaya has an average density of 125 persons per square mile. Regional variations in density here range from 80 persons per square mile in the west to 157 persons per square mile in central to 167 persons per square mile in the east. The mountainous highlands and the inner Himalayan valleys are sparsely populated and density rarely exceeds 25 persons per square mile.

TABLE 1 : POPULATION PRESENT BY REGION, 1961.

Census Region	Area		Population		Density Persons/Mile ²
	Mile ²	Percent	Number	Percent	
NEPAL	54,362	100.0	9,412,996	100.0	173.2
Mountain & Hill	40,378	74.3	5,991,297	63.6	148.4
1. Far West	18,902		1,698,083		89.8
2. West	11,144		1,946,502		174.7
3. Kathmandu Valley	218		459,990		2,110.0
4. East	10,114		1,886,222		186.5
Inner Tarai	4,719	8.7	536,509	5.7	113.7
5. West	714		98,607		138.1
6. Central	2,176		244,236		112.2
7. East	1,829		193,666		105.9
Tarai	9,265	17.0	2,885,190	30.7	311.4
8. Far West	2,843		271,551		95.5
9. West	1,307		400,357		306.3
10. East	5,115		2,213,282		432.7

Source: Population Census, 1961, Vol I, Table 1.

The basis of population concentration is agricultural productivity and the more fertile areas have higher density. Therefore, the wetter eastern half of the country supports three-quarters of the population. The 218 square mile Kathmandu valley occupies a mere 0.4 percent of the total area and accounts for five percent of the total population. This gives a high density of over 2,000 persons per square mile and the urban density of Kathmandu even exceeds 50,000 persons per square mile.

About 8 percent of the population is literate and the occupational pattern has been classified as agriculture-88 percent, business-2.5 percent, industrial labour-1 percent. Agriculture is the chief occupation and 95 percent of the population live in 28,446 villages. The settlement pattern and house types show regional differences determined by local relief and material. The tarai villages are fairly compact and large, houses have mud-plastered walls and thatch roof. In the lower hills, the basic pattern is one of dispersed hamlets with houses of stone walls and thatch roof. In the mountainous area, the houses are solidly-built with stone wall and slate roof and they are closely-packed into nucleated villages. Beyond the Himalaya, the villages are again compact but the houses have flat roofs.

The rural areas have been organized into 3,570 village panchayats of about 2,000 persons each for administrative purposes. There are 14 town panchayats incorporating 3.6 percent of the total population. More than half of these towns are located in the fertile tarai close to the Indian rail-heads. The chief urban concentrations are Kathmandu (122,507), Patan (48,577), Bhadgaon (33,058) in Kathmandu Valley and Biratnager (33,293) Nepalganj (15,217), and Birganj (10,759) in the tarai.

vi. Circulation Pattern

Geographically, Nepal provides an intricate pattern of diverse natural regions. The three trans-Himalayan rivers Kosi, Gandaki and Karnali define three major river basins of varying geographic character. The Kosi drainage basin (East Nepal) exhibits a general topography of narrow ridges and deep valleys, receives heavy rainfall and is the home of the Mongoloid tribal groups. The Karnali basin (West Nepal) is a dry tract of extensive highlands and

majority of the population is composed of Caucasoid caste groups, the only tribal group being the Tharu of the plains. The Gandaki basin (Central Nepal) is a transition zone both in physical and cultural terms. The high intermont valleys (*bhot*) are found only north of the central and west Nepal.

The east-west parallel ranges of Chure, Mahabharat Lekh and the main Himalaya separate even more emphatic zones of settlement - tarai, *Pahar*, *Bhot* with increasing importance to the south. The greater importance of the south is related to agricultural potential of the region. The tarai region grows and exports rice, jute, sugar cane, oilseeds, maize and various other tropical crops. The *Pahar* region grows paddy, maize, millet and barley at a subsistence level. The *Bhot* region with a short growing season has barley, buckwheat, and potato and is a food-deficit area.

The diverse products of the different regions must be exchanged inspite of the physical barrier posed by high ranges, swollen rivers and sheer ruggedness of the terrain. One is, therefore, impressed by the mobility of Nepalese population: according to one estimate, about a quarter of the total population is on the move during the dry winter. This is the season free of malaria and low water level in rivers and people from remote villages trudge the precarious mountain trails to reach market centres. Thus, in winter there is an exodus of people: Bhotias from the cold valleys descend to the warmer hills and the hillmen visit tarai markets. They bring unprocessed agricultural and forest products and return to the hill with salt and other manufactured goods.

During the summer when the rivers are swollen and the plain and hill people are busy in their fields, Bhotias of the northern border area cross over the snow-free passes to the Tibetan market. There are 24 high passes (average 17,000 feet) leading into Tibet and lowest of these at Kodari and Rasuwa (6,000 feet) have been important trade routes since historical times. Through the northern passes are exported foodgrain and manufactured articles in exchange for Tibetan salt, wool, and sheep and goat.

Such have been the traditional circulation pattern in the country where transportation costs discourage retail business and organized

trade. The movement of the people, though seasonal, has contributed much to the contact and economic interdependence of different groups and the resultant exchange includes material goods as well as ideas.

Modern transport system in the country is represented by 70 miles of railway, 650 miles of unmetalled road, 200 miles of metalled road, 42 miles of rope-way, and 1,200 miles of airway. Kathmandu is connected with 13 locations by air of which only two are in the hills. The proposed 520 miles east-west highway across the potentially rich tarai holds a great promise for the country's future. The two highways, Tribhuvan Rajpath and Kathmandu-Kodari Rajmarg, linking Kathmandu with India and Tibet respectively are significant both economically and politically. For the first time, the great Himalayan barrier has been traversed by a modern communication route. Construction of good roads and their maintenance pose immense problems in a mountainous country like Nepal. Yet a close network of communication line is a basic pre-requisite for welding a nation of such immense diversity.

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(The Himalayan Review, 1968, pp. 1-10)

GEOLOGICAL RESEARCH IN NEPAL

The Himalaya presents an interesting field for geological research. The area evidences an extreme compression of structural elements and a survey of its stratigraphic and tectonic patterns provides a key to the understanding of the formation of the highest topographic eminence in the world. Nepal, lying 500-miles astride the central part of the Himalaya, was one of the last areas to be explored geologically.¹

The earliest geological observations in Nepal can be attributed to the naturalist J.D. Hooker who visited Tamur Valley in 1848. He entered Nepal near Sandakphu and went up the Tamur river as far north as the Walung pass (16,740 ft.) on the Nepal-Tibet border and also visited Yangma, Ghunsa and Yalung valleys on the way back to Sikkim. His journal embodying observations *en route* on local geology, geography, flora and fauna remains a classic in Himalayan literature.² However, Medlicott who visited Kathmandu and Nuwakot valleys in the third quarter of the last century was the first geologist to visit Nepal.³ He made reconnaissance field observations along the route from Amlekhganj to Nuwakot and suggested that the quartzite and schist series of Chandragiri Range may be equivalent to the Simla slates and also drew an interesting parallel between the alluvial deposits of Kathmandu Valley and the 'Karewas' of Kashmir.

No geological researches were made in Nepal for another half a century although climber-geologists on Kangchenjunga (28,208

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1. This review of geological research in Nepal deals primarily with tectonic and stratigraphic geology. Field reports of economic geology and mining prospects are well-documented by D.N. Rimal in *Summary of Geological Reports of Nepal to 1962 along with the Index*, Kathmandu, 1963. Mimeo.
 2. J.D. Hooker, *Himalayan Journals: Notes of a Naturalist in Bengal, the Sikkim and Nepal Himalayas, the Khasia Mountains, etc.* 2 vols., London, 1854.
 3. H.B. Medlicott, "Note on the geology of Nepal", *Records of the Geological Survey of India*, Vol. VIII (1875), p. 93-101.

ft.)⁴ and Mount Everest (29,028 ft.)⁵ explored the adjacent Sikkimese and Tibetan areas. Shortly after the disastrous Nepal-Bihar earthquake of January 1934, J.B. Auden visited Nepal to assess the effects of the calamity. His surveys in the neighbourhood of Kathmandu Valley and traverses in eastern Nepal made a significant contribution to the geological investigation of Nepal.⁶ He identified most of the tectonic elements and noted that the present disposition of the various formations and units owed to their large-scale warping and folding. He further indicated the three-fold Siwalik formations in Nepal being similar to those found in India and the so-called 'main boundary thrust', separating the pre-Tertiaries from the underlying lower Siwaliks was located just north of Sanotar (27°28'N: 85°32'E) and again on the first col east-north-east of Udayapur Garhi (26°57' N: 86°32 E).

Two years later, Arnold Heim and August Gansser made clandestine incursions into extreme north-western Nepal along the transverse section of the Mahakali river to extend their investigations in Kumaon⁷. They distinguished at least six thrusts of different sizes and depth in the Central Himalaya and observed that the 'main central thrust' mass represents an enormous deep-rooted body of injected crystalline rocks covered with Algonkian, Paleozoic, and Mesozoic sediments. They also found remarkably well-preserved Norian faunas (Upper Triassic) on Tinkar Lipu Lekh (c. 17,000 ft.).

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4. E.J. Garwood, "Geological structure and physical feature of Sikkim", in *Round Kangchenjunga* by D.W. Freshfield, London, 1903, pp. 275-299; G.O. Dyhrenfurth, "Geologische Ergebnisse", in *Himalayan Unsere Expedition 1930* by G.O. Dyhrenfurth, Berlin 1931, p. 293-311.
 5. A.M. Heron, "Geological results of the Mount Everest reconnaissance expedition", *Rec. Geol. Surv. India*, Vol. LIV (1923), pp. 215-234; N.E. Odell "Geology and glaciology", in *The Fight for Everest* by E.F. Norton, London, 1925, pp. 289-323; L.R. Wager, "A review of geology and some new observations", in *Everest 1933* by H.Ruttledge, London, 1934, pp. 312-336.
 6. J.B. Auden, "Traverses in the Himalaya", *Rec. Geol. Surv. India*, Vol. LXIX (1935), Pt. 2, pp. 123-167.
 7. A. Heim and A. Gansser, "Central Himalaya: geological observations of the Swiss expedition, 1936" *Denkschr. Schweiz. Naturforsch. Geol. Ges.*, Vol. LXXIII, Zurich, 1939.

Arnold Heim returned in 1949 to make an aerial reconnaissance flight from Butwal over Tansen and Kali-Gandaki Valley up to the Tibetan frontier and conjectured that the north-eastern face of Dhaulagiri (26,975 ft.) to be composed of granite-laminated gneiss over-laid with slate strata⁸ which Hagen later diagnosed to be para-gneiss and schists intruded by granite. About the same time, Auden and Shah visited Kathmandu Valley, Bhimphedi and the confluence areas of the rivers Seti, Marsyangdi, and Kali-Gandaki.⁹ The 'main boundary thrust' was traced for 12 miles from the grid co-ordinates 2388: 1229 on the Kali-Gandaki to 2410: 1274 in the hills east-south-east of the Marsyangdi river. The main Siwalik formation south of the northern 'Nahan zone' was found to be anticlinally disposed with an eastern pitch bounded on the south by a concealed fault.

The opening of Nepal to foreign expeditions in 1950 brought an influx of mountaineering expeditions to Nepal Himalaya. Geologists accompanying some of these climbing teams contributed much to the understanding of the local geology of the main mountain groups. The first of these, the French expedition to Annapurna (26,545 ft.), brought back some samples from the Thak Khola area including some Spiti ammonites and provided a fair regional geological account.¹⁰ Augustine Lombard accompanying the 1952 Swiss Expedition to Mount Everest (29,028 ft.) was the first geologist to visit the south side of Everest. He recorded three major tectonic units in the area: the gneiss and crystalline schists of the Khumbu nappes with folds of north-south axis, the north-pitching granitised gneisses with anticlinal imbricate structure as seen on Nuptse, and the overlying 'Tibetan slab' of transverse

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8. A. Heim, "The 1949 flight over Nepal and the Himalayas", in *The First Ten Years* by the Swiss Fondation for Alpine Research, Zurich, 1951, pp. 27-28.
 9. J.B. Auden, "Geological structure of Central Nepal", *Rec. Geol. Surv. India*, Vol. LXXXII (1952), pp. 354-357.
 10. M. Ichac and P. Pruvost, "Resultats geologique de l'expedition francaise de 1950 a l' Himalaya", *Comptes Rendus Academie des Sciences (Paris)*, Tome 232, no. 19, 7 Mai 1950, pp. 1721-1724.

structures and recumbent folds forming the highest summits of the Nepal-Tibet frontier.¹¹

Bordet visited the environs of Mount Everest twice with the 1954 and 1955 French expeditions to climb Makalu (27,824 ft.) and distinguished two major lithologically different masses which he grouped as the 'Low Himalayas' and the 'High Himalayas'.¹² The Low Himalayas composed of enormous thickness of gneiss is surrounded by a series of mica, schists, quartzites and phyllites whose mutual overlaps are at times visible for 40 kilometres. This nappe assemblage was superposed by the High Himalayas of garnet and black gneiss, the visible amplitude of the overthrust attaining some 50 kilometres in the Arun valley where erosion has cut through nearly 1,500 metres of gneiss.

The results of the geological researches made by the French are best documented in the comprehensive studies of Michel Latreille¹³ and Piere Bordet.¹⁴ The geology map of the Everest-Makalu area at a scale of 1:50,000 by Bordet in the later volume is the first of its kind for Nepal.¹⁵ Similar other geological investigations associated with mountaineering expeditions were those by Jean-Michel Freulon in the south-western area of Kangchenjunga,¹⁶ C.G. Egeler and associates of Thak Khola,¹⁷

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11. A. Lombard, "Les grandes lignes de la geologie Nepal oriental", *Bull. Societe Belge de Geologies, de Palaontologie et d' Hydrologie* (Brussels) Tome 61, Fascicule 3, 1943, pp. 260-264.
 12. P. Bordet, "La structure geologique de Nepal oriental", *Bull. Soc. Belge de Geol. de Paleont. et d' Hydrologie* (Brussels), Tome 65, Fasc. 2, 1956, pp. 282-290.
 13. M. Latreille, "Les grands traite de la structure geologique de l' Himalaya *Travaux du laboratoire de Geologie de la Faculte des sciences de Grenoble*, Tome 35, 1959, pp. 193-228.
 14. P. Bordet, *Recherche geogiques dans l'himalaya du Nepal, region du Makalu*, Paris, 1961.
 15. P. Bordet, "Esquisse geologique de la region de l'Everest et du Makalu" op. cit.
 16. J-M. Freulon, "Coupe geologique de la partie orientale de l' Himalaya du Nepal, de la Plaine indo-gangetique au massif du Kangchenjunga", *Comptes Rendus Academie des Sciences* (Paris), Tome 250, no. 22, 30 Mai 1960, p. 3687-3689.
 17. J.W.A. Bodenhausen, T. Body, C.G. Egeler, and H.J.Nijhuis, *On the Geology of Central West Nepal: A Preliminary Note*, (Pre-print), Amsterdam, 1964.

and G. Fuchs of Dolpo area.¹⁸ In the Siwaliks, K.W. Glennie and M.A. Ziegler, from their traverses for oil prospecting, offer fresh dimensions to the interpretation of intermont valley (*dun*) formations.¹⁹ The implications of these latter researches are yet to be full evaluated.

In contrast to these various local and regional studies, Toni Hagen made an extensive coverage of Nepal and took eight years (1950-1958) to cover the entire country with an area of 54,000 square miles that was so far little known in Himalayan geology.²⁰ He found early proof of nappe structure near Nuwakot where boulder-beds were over-laid with the older phyllites of the Daling type. He classified the main nappe groups encountered in Central Nepal as 'Nawakot nappe' for the lower and 'Kathmandu nappe' for the upper and assumed their correspondence to Auden's Krol and Darjeeling series. Intrusions of granite, pegmatite and aplite were found to be characteristic in these nappes.²¹ He further classified the eight main nappe groups found in Nepal as the crystalline nappes, Mesozoic sediment nappes and Carboniferous-Mesozoic nappes, some with a maximum overthrust of 80 kilometres. The discovery of Silurian trilobites on Phulchoki ridge in 1956 led to the discrediting of the long-standing epithet 'unfossiliferous' as applied to the over-thrust structures of Central Nepal. In the foothills, Hagen remarked on the evidences of the Middle Siwalik sandstone over-riding the recent Gangetic

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18. G. Fuchs, "*Beitrag zur Kenntnis des Paleozoikums der Tibetischen Zone in dolpo (W-Nepal)*". A preliminary draft quoted by A. Gansser in *Geology of the Himalayas*, 1964, p. 164.
 19. K.W. Glennie and M.A. Ziegler, *The Siwalik Formation in Nepal*, The Hague, 1963. Pre-print.
 20. T. Hagen, "Route-mapping and topographical surveys with the aid of photographs", in *Route-Mapping and Position-Locating in Unexplored Regions* by W. Filchener, E. Przybyllok, and T. Hagen, Basel, 1957, pp. 247-275; T. Hagen, *A Brief Survey of the Geological Survey of Nepal*, UNCTA Report No. TAO/NEP/2, New York, 1960.
 21. T. Hagen, "Ueber die raumliche Verteilung der Intrusionem im Nepal-Himalaya", *Schweizerische Mineralogische und Petrographische Mitteilungen*, Band 34, 1954, pp. 300-308.

alluvium.²² In his tectonic map,²³ he elaborated a mosaic of 24 tectonic units in the geological formation of Nepal. He also drew a grand system of the country's major topographic forms with the Himalayan peaks as the root-zone of the Kathmandu nappe, the 'midlands' or the Pahar complex corresponding to the back-zone of the nappes, and the conspicuous Mahabharat Lekh as the front of the nappes.

Hagen's researches bear a strong emphasis towards tectonic interpretation. For example, he recognizes no less than 19 nappes piled one over the other although their regional occurrences are nowhere contiguous. His multiplicity of nappes is particularly emphatic in the Lower Himalaya where also his para-autochthonous zones such as that of Pokhara have been contended by other workers. It is difficult to follow Hagen's nappe sub-division due to their lack of stratigraphical control and petrological distinction.²⁴ Moreover, mountain structures being most liable to invite freedom in their interpretation as exemplified in the case of the Everest section²⁵, the need is for more systematic researches. One must recognize, however, Hagen's pioneering investigations and his findings (yet to be fully published) will remain an important reference-point for all future research in Nepal.

On the basis of this review of the various geological researches in Nepal, one might attempt a brief summary of the geological divisions. The main geological division confined by the Ganges alluvium in the south and the Tethys sediments in the north found in Nepal are the Sub-Himalaya, Lower Himalaya, Higher Himalaya, and the Tethys Himalaya. The Sub-Himalaya corresponds to the Siwalik and the younger deposits and extends along the southern belt of the country where it merges into the

22. T. Hagen, "Ueber den geologischen bau des Nepal-Himalaya mit besonderer Beruecksichtigung der Siwalik-Zone und Talbildung", *Bericht ueber de Taetigkeit, Jahrbuch der St. Gallischen Naturwissenschaftlichen gessellschaft*. St. Gallen, Band 76, 1959, pp. 3-48.

23. T. Hagen, *Reports on the Geological Survey of Nepal*. Zurich, 1960, Pre-print, fig. 19.

24. C.L. Shrestha, *A Preliminary Geogical Note on the Krishna-Kali Gandaki Valley south of the Dhaulagiri Himalaya, Central Nepal*, Kathmandu, 1961.

25. A. Gansser, "Nepal Himalaya", in *Geology of the Himalayas*, London, 1964, p. 145-167.

Gangetic alluvium. The Siwalik belt is further distinguished as the Lower, Middle, and Upper Siwaliks. Most of the Siwalik exposure in Nepal belong to the Middle Siwalik. The sub-Himalaya has a normal section dipping northwards and the foothills have been covered by fans. At the upper section of the Sub-Himalaya are found some features of relief thrusting where they are demarcated from the Lower Himalaya by the 'main boundary fault'.

The Lower Himalaya is a comparatively broad belt composed of two main geological and tectonic units. The older unit, 'Nawakot nappe' of Hagen, is primarily sedimentary while the overlying younger unit, 'Kathmandu nappe' of Hagen, is mostly crystalline. The Lower Himalaya exhibits both normal and reversed sections as a consequence of severe folding and thrusting.

The Higher Himalaya overlying the Lower Himalaya is demarcated from the latter by a major thrust zone. The Higher Himalaya is a thick depository of sediments of normal sequence gently dipping north. Most of culminating peaks of Nepal are found in this belt. The Tethys Himalaya overlying the Higher Himalaya is more characteristic of the Tibetan zone and in Nepal, it occurs west of Kyirong. In it are found fossiliferous sediments and intrusions of granite. The strata generally maintains the regional northerly dip but at places has undergone complicated folding.

In tectonic terms, the main anticlinal and synclinal axes are directed north-west to south-east in conformity to the longitudinal alignment of the Himalaya. Two conspicuous morphological exceptions are the north-south directed fault zone of Thak Khola and the deep north-south anticlinal valley of Arun. These in themselves epitomise the fact of Nepal being an interesting field for further geological research.

(Tribhuvan University Journal, Vol. IV, 1968, pp. 6-12.)

LANDSCAPE PATTERN OF NEPAL

i. Introduction

The kingdom of Nepal covers an area of 141,000 square kilometres with an average length of 800 kilometres and breadth of 160 kilometres mainly along the south slope of the Himalaya. The spatial location of the country between longitudes 80°4' to 88°12' east and latitudes 26°22' to 30°27' north has certain significant landscape features. The Himalayan range within Nepal undoubtedly forms the most central and extensive section of the whole system. The stupendous mountain pedestal has caused extreme elevations in that more than a quarter of the country's land surface exceeds 3,000 metres in altitude including nearly three thousand square kilometres under the realm of snow and ice. The country is not all peaks and pinnacles however, and has a fair share of low land. Half of the total land surface lies below 1,500 metres and about 20 percent of the total area is less than 300 metres above the sea level. Such a close juxtaposition of contrasting altitudinal levels implies rugged relief with a wide variety of terrain. The rise of the land from the south to the north is not in a singular grand sweep but rather through a succession of ranges arranged *en echelon* punctuated by lowlands. Nepal may, therefore, be likened to a giant stair-case ascending from the low-lying tarai plain to the culminating heights of the Himalaya.

ii. The Elevations

Some order can be discerned inspite of the rugged topography with a maze of spurs and valleys. The basic physical lay-out has been determined by a series of parallel ranges of varying height that traverse the country east to west. The first elevation is that of the Chure range which rises abruptly from the tarai lowlands (Fig. 1). These foothills have a general elevation from 750 metres to 1,500 metres and even exceeds 1,800 metres in the western section. The geological strata of the Chure range is composed of alternating hard and soft rocks inclined to the north and presents a hog-back profile of steep south face and gentle north slope. The relief is rugged and soils are dry and immature.

Immediately north of the Chure range, rises the Mahabharat Lekh with elevations ranging from 1,500 metres to 2,700 metres. The Mahabharat Lekh runs close and parallel to the Chure Range and where the two ranges converge, they can be distinguished only geologically and by the superior height of the Mahabharat Lekh. The geological structure is characterized by complicated folds particularly along the south side. The higher slopes are steep but the general elevation along the main axis is remarkably regular. The Mahabharat Lekh which has been broken through only by a few river gorges, provides an effective natural barrier to the interior part of the country.

The third range system is represented by the main Himalaya that lies about 90 kilometres north of the Mahabharat Lekh. The main Himalaya does not form a continuous range but rather separate narrow ridges and the deep river gorges incised across the Himalaya present greatest extremes in altitude in the shortest horizontal distance. The rock strata in the high Himalaya are inclined to the north and are expressed in the asymmetrical relief of steep south face and comparatively gentle north slope. Steep gradients discourage formation of large glaciers and the snow-line varies between 5,000 metres to 6,000 metres depending on the aspect and slope. The mountain groups in turn send out high spurs in diverse directions thus contributing to a profusion of snow peaks in Nepal including eight of the world's ten highest peaks.

In western Nepal, another mountain range, lying 30 to 45 kilometres north of the main Himalaya, defines the boundary between Nepal and Tibet. These Tibetan marginal ranges have altitudinal levels of 6,000 metres to 7,000 metres and the relief is less rugged than those found on the main Himalaya. The climate is dry owing to their location in the rain-shadow area and the lower slopes of these marginal ranges have a modulated surface. Although they are lower than the main Himalaya in altitude, they form the chief watershed between the rivers of the Ganges and Tsang-po.

iii. The Depressions

The series of parallel ranges are alternated by characteristic lowlands. Within the grand parameters defined by the tarai extension of the Gangetic plain and the high Tibetan plateau, the

depression areas within Nepal may be distinguished as the *dun* valleys between the Chure range and the Mahabharat Lekh, the *pahar* complex of low hills enclosed by the Mahabharat Lekh and the high Himalaya, and the *bhot* valleys north of the high Himalaya but south of the Tibetan marginal range.

The tarai (*madhesh*) plain within Nepal is a 25 - 40 kilometres broad belt and its gentle topography makes a striking contrast to the rugged relief of the rest of the country. The tarai is not a monotonous flat plain but slopes gently towards the south. The higher elevated part of the tarai adjacent to the Chure range is known as the *bhabar* where streams from the Chure foot-hills deposit sand and gravels. The streams that filter down the *bhabar* tract as well as the rivers swirling down the mountains become sluggish waters as they enter the lower tarai and the alluvial plains so enriched with silt deposition are marked by meander loops and marshy swamps.

The *dun* (Inner Tarai) valleys although disjointed from the tarai by the Chure range, have topographic forms similar to those prevailing in the tarai plain. The *duns* are found in areas where east-west flowing rivers between the Chure and Mahabharat Lekh have carved longitudinal basins as in the case of Jogbura, Surkhet, Marin, Kamala, Trijuga and Kankai valleys with general elevations varying from 180 metres in Trijuga and 275 metres in Chitawan to 480 metres in Dang valley.

The *pahar* zone between the Mahabharat Lekh and main Himalaya is a 60-80 kilometres broad complex of ridges and valleys. Compared to the pronounced altitudinal levels of the ranges enclosing it from the south and north, the *pahar* zone provides a composite impression of topographic depression as the land surface has been much eroded by a large net-work of streams and rivers. The relief is less rugged than those in the high Himalaya and the lower limit of snowfall varies from 2,600 metres in the east to 2,000 meters in the west. The southern part of the *pahar* zone is dominated by longitudinal valleys that run east-west close to the Mahabharat Lekh. The higher northern part is characterized by numerous north-south valleys alternated with southern extensions of the Himalayan spurs. Higher ridges with temperate climate and

winter snowfall are called *lekh* that are ultimately linked-up with the higher Himalayan slopes above 3,000 metres elevation.

The trans-Himalayan *bhot* valleys are found only in western and central Nepal where the country includes large areas north of the main Himalaya. They are particularly extensive in the upper reaches of the Karnali river as the Tibetan marginal ranges here about are more clearly defined than the main Himalaya. With the exception of Mustang and Mugu valleys which run north-south, these valleys lie east-west aligned to the enclosing high ranges. The *bhots* are elevated valleys exceeding 3,600 metres in general elevation and their broad open profiles and pronounced dry climate are reminiscent of the Tibetan landscape.

iv. The Three Basins

The alternating highlands and lowlands that characterise the orographic alignment of the country is further super-imposed by an intricate hydrographic pattern. The river systems of Karnali, Gandaki and Kosi drain western, central and eastern Nepal respectively and they exhibit certain common features. The three river systems cover their drainage basins like the branches of a tree and the trunk is represented by a single major outlet. The network of rivers join the main rivers Karnali, Gandaki and Kosi to form three major longitudinal river valleys – Seti-Karnali (130 km), Kali-Trisuli Gandaki (150 km), Sun Kosi-Tamur (225 km) and force their way across the Mahabharat Lekh. The Karnali river has a complicated three-fold bend in its lower reaches where it negotiates through the twin barriers of the Mahabharat Lekh and the Chure range and enters the plain at Chisapani.

The Gandaki system that drains central Nepal between Dhaulagiri Himal and Langtang Himal includes the Kali-Gandaki, Bari Gad, Seti, Marsyangdi, Darondi, Buri-Gandaki and the Trisuli-Gandaki rivers. While the trans-Himalayan rivers make deep gorges across the main Himalaya, those like the Seti and Darondi which originate on the south slopes of the Himalaya have steep gradients. The Kali-Gandaki which flows south from Mustang and the Trisuli Gandaki that enters Nepal at Rasuwa from Tibet together describe a large loop circumscribing the central hills and other tributaries join them within a close distance of the Mahabharat Lekh. The combined waters of the Gandaki system

breach through the Mahabharat Lekh at Deoghat and after a short westerly trend through Chitawan valley enters the plain at Bhainsalotan.

The Kosi river system draining east Nepal is made up of the Indrawati, Sun Kosi, Tama Kosi, Likhu Khola, Dudh Kosi, Arun and Tamur rivers. The Arun (Phung Chu) has its source in Tibet and flows more or less due south. Sun Kosi (Poe Chu) and Tama Kosi (Kang Chu) also originate in Tibet (hence called Bhote Kosi) and enter Nepal through narrow gorges at Bhainse and Lapche respectively. Dudh Kosi draining the south flank of Khumbu Himal descends south to join the Sun Kosi while Tamur Kosi flowing down the western flank of Kangchenjunga flows south-west to join the Arun. The five tributaries west of the Arun join together to form the main Sun Kosi river and continue eastwards close to the Mahabharat Lekh. The combined waters of the Sun Kosi from the west, the Arun from the north and the Tamur from the east join together above the Chhatra gorge to cut through the Mahabharat barrier and enter the plain as the Sapt Kosi.

The rivers that do not fall within the above main river systems, drain the western and south-eastern peripheries of the country and the gaps between the three drainage systems. The far western part beyond the Seti river watershed is drained by the Mahakali river with its eastern tributaries Chaulyani and Suma Gad to enter the plain at Barmdeo Mandi as the Sarda river. In the south-eastern sector, the Mechi and Kankai rivers flow down their separate courses to join the Mahananda river in India. The gap between the Karnali and Gandaki drainage system is drained by the Babai and Rapti rivers which traverse the valleys of Dang and Deokhuri respectively. Similarly, the intervening space between the Gandaki and Kosi drainage areas is covered by the Bagmati river with its headwaters in Kathmandu Valley.

v. East-West Division

Apart from the more apparent vertical contrasts from north to south there are subtle differences in landscape pattern from east to west owing to the north-west/south-east lateral disposition of the country. Thus, western Nepal with a greater share in the higher northern latitudes has a much drier and colder aspect than the more southerly eastern Nepal where humid monsoon conditions prevail and these bio-climatic divergences affect the local geomorphic

processes. The horizontal variations in landscape are not so much in the basic alignment of major landforms but rather in the degree of their relief expression.

Western Nepal corresponding to the Karnali sector has a broad extent averaging 225 kilometres and incorporates a whole gamut of natural divisions from the tarai plain to the Tibetan highlands. The Tibetan marginal ranges appear as the dominating feature since the main Himalayan range is practically insignificant here for about a distance of 75 kilometres between Saipal and Kanjiroba Himal. However the lateral spurs branching off the main Himalaya and the Tibetan ranges are fairly high with long extensions. The ridge-tops are comparatively less dissected and have a broad level surface. A considerable portion of the land area lie within the intermediate temperate elevation and even the Chure range exceeds 1,800 metres in altitude. These free-lying mountain slopes with easy gradient provide western Nepal a composite landscape of an elevated plateau. In spite of the gentle topography, ecological contrasts between the north and south slopes in relation to the exposure to the sun are very evident in this sector as implied by the local terms *pahara* (sunny) and *siyala* (shady).

In central Nepal served by the Gandaki river system, the striking landscape feature is the sharp transition from the high Himalaya to the low sub-tropical hill complex. The main Himalayan range in this area send out high spurs towards the north enclosing large amphitheaters of Bhot valleys but the south-trending spurs are short and steep providing a free south face. This sharp inflection of high spurs into a net-work of minor ridges and low hills has much depressed the general elevation of the central *pahar* region and even the Mahabharat Lekh averages below 1,500 metres in height. The altitudinal declivity from the heights of Annapurna Himal to Pokhara Valley, for instance, is of the order of over 6,000 metres within a short horizontal distance of 30 kilometres. In western and eastern Nepal, such great contrasts in relief are observable only in the trans-Himalayan gorges where low elevations intrude far to the north.

Eastern Nepal or the Kosi sector is comparatively narrow and has no share in the trans-Himalayan zone. The tarai plain is conspicuously extensive and the Chure range has been much

eroded away. This sector has a far wider vertical dimension encompassing the highest of the Himalayan peaks to the low-lying tarai. The main Himalayan range is well-defined and there is a high concentration of land area above 6,000 metres. On the other hand, land surfaces of intermediate temperate elevation are of limited extent. The spurs bifurcating off the main range have sharp ridges with narrow steep valleys in-between. Khumbu in upper Dudh Kosi and Walung-Ghunsa in upper Tamur Valleys are high montane enclosures on the south slope of the Himalaya. Eastern Nepal receives twice as much rainfall as western Nepal and much of the broken topography may be attributed to the heavy precipitation. In contrast to the bold elevated relief of western Nepal and pronounced depression of central Nepal, the *pahar* landscape of eastern Nepal, is characterized by long narrow ridges with deeply incised trans-section valleys.

vi. Geographic Regions

The physical setting of Nepal may be studied either by correlating the alternating highlands and lowlands from north to south or comparing the main drainage basins from east to east. Both these approaches yield three major geographic regions each with its own distinctive landscape and ecological pattern.

The area south of the Mahabharat Lekh, composed of the *dun* valleys, Chure foothills and the tarai plain corresponds to the tarai or *madesh* region. In spite of the intervening Chure range, this southern region as a whole has a dominant plain aspect. The Chure range does stand-out conspicuously from the level plain particularly in western Nepal but elsewhere, they have been much reduced in height and even appear as isolated hillocks. The increasing elevation of Chure range from east to west is complemented by the corresponding rise of tarai plain from 90 metres average elevation in the east to 180 metres in western tarai. The longitudinal *dun* valleys or Bhitri Madesh have been formed mainly by the detrital depositions from the slopes of the enclosing Mahabharat Lekh and Chure range. The bhabar tract acting as the transition zone between the foot-hills and the tarai plain is very much the creation of large-scale hill-wash, detrital cones and alluvial fans. The tarai is a finely graded alluvial plain overlain with silt and sand. The prevailing climate of the tarai region is humid tropical and supports luxuriant vegetation. Prevalence of malaria in the past made this region a

negative settlement zone dominated by dense forests and marshy stretches. This natural landscape has considerably changed over the last decade through the agency of man. The southern strip of the tarai plain has been transformed into an extensive belt of farms and new settlers have made deep in-roads even into the bhabar and dun areas by clearing forest and draining marshes.

The *pahar* or the Hill region extends along the central belt of the country between the Mahabharat Lekh and the high Himalaya and its characteristic landforms are low hills and sinuous ridges much dissected by numerous river valleys. While the smaller valleys make narrow steep defiles, the larger valleys have an easy gradient and wide open character. The main longitudinal valleys and their northern tributary extensions make deep indentations in the *pahar* topography and these low *bensi* valleys have numerous old river terraces (*tar*) indicating periodic fluctuations in the depositional process. Landslides and landslips are common and the tributary streams overloaded with such materials deposit alluvial fans and cones at their terminus. The mild sub-tropical climate and adequate rainfall have made the *pahar* region a favourable zone for agricultural settlement thus encouraging large-scale deforestation that accentuate the spoliation of natural landscape. The typical scenery of the *pahar* country with flights of terrace fields carved out of steep slope and overgrazed barren hillsides are an eloquent expression of man's imposition on land.

The northern part of the country dominated by snow ranges and intermont valleys falls under the Himalayan or the mountain region. This region is conspicuous for its extreme altitude and wild terrain and the highest ranges have sharp ridges crowned by jagged peaks. Although glacier fields are limited, ice-scooped rock basins are found at lower elevations indicating a much wider glacial provenance in the past. The mountain region has a pronounced north and south aspect. The south-trending spurs of the main range are covered with temperate forests lower down and confine steep valleys marked with occasional waterfalls. North of the main range, the prospect is much more desolate with bare mountain slopes and undulating valley bottoms filled with detrital material and sparse vegetation in sheltered corners. The mountain region is a marginal area for human occupation and hence, man's impress on the landscape is minimal.

vii. Conclusion

The configuration of the Nepalese landscape has been determined by emphatic ridges that run east-west and numerous south-flowing rivers. They define the vertical and horizontal dimensions of the country's physiographic component. The third dimension is provided by the lateral disposition of the country causing bio-climatic variation from the arid west to the humid east. The fourth but no less important element in landscape evolution is the impact of man. Man attempts to adapt himself to the natural environment and in the process leaves his imprint on the landscape. Thus, while harsh nature dominates in the mountain region, in the hill region, man has accelerated soil erosion and this depletion in natural resource is being reflected in the current process of increasing migration to the tarai region. Since these three major geographic regions (tarai, hill, mountain) correspond to latitudinally arranged ecological zones, they have inherent differences in natural endowment and their diverse products must be exchanged. The mountain ranges act as a natural barrier among the various regions but the rivers traversing down the mountain to the plain not only shape the landscape but also articulate circulation in man, materials and ideas. It is not without significance that the Nepalese deify the imposing mountains that divide them and sanctify the fertile rivers that unite them.

(The Himalayan Review, Vol. XII, 1971, pp. 1-10.)

REVIEW OF 'HIMALAYAN REVIEW'

i. Introduction

Geography that deals with space and history that deals with time have both been early fields of knowledge. While the frontiers of geography was much widened by the age of exploration, it became an important discipline particularly following the colonial era. And many of the earliest geographical journals were published in countries with some colonial heritage. The first professional geographical journal, *Erde* (Zeitschrift der Gesellschaft für Erdkunde) was issued from Berlin in 1853. The then Austrian empire soon followed with *Geographische Gesellschaft* in 1857 from Vienna. The Russian *Geographicheskoe Obshchestvo S.S.S.R. Izvestiia* came out in 1865 (Leningrad) and the Italian *Societa Geografia Italiana Bollettino* in 1868 (Roma). In the last decade of the 19th century appeared the Japanese *Chirigaku Zasshi* in 1889 (Tokyo), the French *Annales de Geographie* in 1891 (Paris), and the British *Geographical Journal* in 1893 (London). The first American geographical series, *National Geographic Magazine*, commenced publication in 1889 (Washington) followed by the *Journal of Geography* in 1902 (Chicago). In India, the *Indian Geographical Journal* was first published in 1926 (Madras) while in China, *Acta Geographica Sinica* commenced publication in 1934.

By 1971, there were 310 geographical journals published in 66 countries¹. Of these countries including Nepal, 35 had only one geographical journal. In conformity with its pioneer contribution to geography, Federal Republic of Germany had the largest number with 47 geographical serials. Next came U.S. with 28 serials; France, 25; U.K., 19; Poland, 17; and U.S.S.R., 14. Eastern Europe with a total of 63 serials led as a block: Poland (17), Yugoslavia (11), Hungary (10), G.D.R. (7), Czechoslovakia (7), Rumania (7) and Bulgaria (4).

1. Chauncy D. Harris, *Annotated World List of Selected Current Geographical Serials in English, French and German*, University of Chicago, Research Paper No. 137, Chicago, 1971.

The Nepal Geographical Society was established in 1962. It started the publication of the first geographical journal in Nepal in 1968 and the annual was appropriately titled *The Himalayan Review*. The inaugural volume was issued as a special number for the 21st International Geographical Congress held in New Delhi in December 1968. Since then, the *H.R.* has been published regularly but for the two breaks in 1969 and 1973. It must be considered a noteworthy effort in the light of the high mortality and morbidity of most professional journals in Nepal. The present article is an attempt to review the progress and content of *The Himalayan Review* during its first decade of publication.

ii. Shape and Size

The *H.R.* has seen three changes in its editorial board: covering the periods 1968-72, 1973-74 and 1975 to-date. It has also undergone changes in format from the initial pocket-book size to a larger one since 1973-74, and native Nepalese paper has replaced polished paper as the cover page. The size of the journal has decreased in the number of pages. The first five volumes had an average of 84 pages while the last four average only 53 pages. The number of articles has similarly decreased with an average of only four in the last four issues. The under-nourishment of the *H.R.* will probably be accentuated by the appearance of another serial, *Geographical Journal of Nepal* ² since August 1978 ! The contributors to the later journal are not only those who were long associated with *H.R.* but two members of editorial board are common to both journals. There is also some correlation in the progressive lean size of the latter volumes with substantial decrease in the advertisement material. Compared to nine items in the first volume, there is only one advertisement in the last volume. Another interesting feature is the constant price of the journal although paper and printing costs have gone up by nearly four times over the last decade. The original price of Rs. 10 quoted in the first issue has remained unchanged but for the foreign countries (\$ 1 to \$ 2.50).

2. Published by Geography Instruction Committee, Tribhuvan University, Kirtipur.

iii. Contributors

The nine volumes of *H.R.* published during the 10 year period, 1968-78, include 45 articles and 16 book reviews along with news about activities of the Nepal Geographical Society. In all, 25 contributors were responsible for the articles and book reviews. Among the contributors, seven were foreigners and the rest Nepalese. And five contributors were non-geographers representing other disciplines such as anthropology, architecture, meteorology, ornithology and archaeology. Among the most frequent contributors to the journal were C.B. Shrestha with 6 articles, S.L. Amatya (5), Harka Gurung (4) and U.M. Malla (3). Ratna S. Rana, Mohan N. Shrestha, S.H. Shrestha and R.K. Shrestha had two articles each. U.M. Malla and Harka Gurung ceased to contribute articles after 1972 and S.L. Amatya followed suit after 1973/74. The pioneer Nepalese geography teacher J.B.S. Burathokey published only one article (1968) and he passed away in 1974.³ Nine other younger geographers contributed one article each. Among the Nepalese contributors, five each were trained in India and U.S., four in U.K. and one in Nepal. Of the 25 contributors, 17 were Ph. D.s and six were not associated with teaching.

iv. Content by Theme

The articles published in *H.R.* have been classified by theme and aspect in Table 2. Each article is given a cumulative number and placed under the relevant theme according to its emphasis. They have, thus, been categorised into 16 major and minor geographical themes. From the point of view of major themes of geography, 11 deal with cultural and social geography, 10 with economic geography and only seven pertain to physical geography. If we examine the 45 articles by further systematic aspects, the pattern is as follows. Regional description and planning lead the field with ten contributions. These include four country-wide and three local descriptions and three regional planning studies. Urban geography and theoretical model come next with five articles each. Among the articles in urban field, one refers to urbanisation trends in Nepal and only one deals on a specific Nepalese town (Bhaktapur).

3. Obituary by M.S. Manandhar in *The Himalayan Review*, vol. VII (1975), p. 46-47.

TABLE 2: CLASSIFICATION BY THEME

Geographical Theme	Vol. 1968	Vol.II-III 1969-70	Vol. IV 1971	Vol. V 1972	Vol. VI 1973-74	Vol. VII 1975	Vol. VIII 1976	Vol. IX 1977	Vol. X 1978
1. Regional	1. Nepal (General)	7. Nepal (Regionalisation)	12. Nepal (Crop Production)	20. Nepal (Education)	24. Arniko Rajmarg area 25. Growth		34. Khandbari (Planning)		42. Nepal (Socio-economic)
2. Physical	2. Palanchok (description)		13. Chaudbise (description)	also item 21					
3. Geomorphology	3. Nepal Himalaya	8. Pokhara valley	14. Nepal 15. Kathmandu valley						
4. Climatology	4. Kathmandu					30. Nepal			
5. Zoo-geography			16. Distribution of birds						
6. Land Use		9. Nala				31. Nepal	35. Khandbari		
7. Agriculture	5. Crop distribution		also item 12	21. Cash crop distribution, also item 23	26. Crop combination, also item 23		18. Far West		
8. Settlement					27. Isauli	32. Sultampur			43. Kathmandu valley

Table 2 (Cont.)

Geographical Theme	Vol. 1968	Vol. II-III 1969-70	Vol. IV 1971	Vol. V 1972	Vol. VI 1973-74	Vol. VII 1975	Vol. VIII 1976	Vol. IX 1977	Vol. X 1978
9. Urban	6. Bhaktapur		17. Coat-bridge		also item 24	33. Nepal		38. Sultapur 39. Foreign trade	44. Glasgow 5
10. Transport					28. Nepal migration 29. Nepal		37. Nepal highways		
11. Commerce									
12. Population									
13. Political									
14. Cultural			18. Matwal Chhetri	22. Rotating credit 23. Agriculture (Kathmandu)	also item 28			40. Architecture	
15. Historical									
16. Theoretical Model		10. Game theory 11. Stochastic model	19. Spatial choice					41. Diffusion of innovation	45. Simulation (energy)
No. of Articles	6	5	8	4	6	4	4	4	4
Book Review	5	3	1	-	1	1	1	2	2
Pages	88	96	84	72	80	48	54	60	5

Three other urban studies concern places as distant as Sultanpur in U.P. and Coatbridge and Glasgow in U.K. The contributions related to methodology are all in the nature of theoretical models and remain the exclusive preserve of geographers trained in U.S. They deal with game theory, stochastic model, diffusion of innovation and simulation of energy.

Of the four articles in the field of agricultural geography, three are by the same author. The aspects described are crop distribution, cash crops, crop combination and factorial analysis of agricultural pattern. Land use, geomorphology, settlement (rural) and cultural aspects have three articles each. Contributions on land use refer to Nepal in general and Nala and Khandbari in particular. Geomorphology is represented by articles on landscape pattern of Nepal and details of Pokhara and Kathmandu valleys. Articles on Matwali Chhetri, rotating credit and Kathmandu architecture, all with cultural emphasis, are contributions by non-geographers.

There are two articles on climatology. One deals on Nepal in general and the other refers specifically to Kathmandu Valley. There is one article each representing physical, zoo-geography, transport, commerce, population, political, and historical geography.

v. Content by Area

Description of various geographical aspects of Nepal as a whole is the recurrent theme of most articles published in *H.R.* There are 19 articles that pertain to different aspects of Nepal ranging from landscape to foreign trade. While those dealing with crops, birds, education and socio-economic imbalance yield a definite regional pattern other themes such as population, transport and geopolitics provide a more general overview.

There are only seven articles that deal with a specific area. These studies are plotted by location in Table 3 representing Nepal in a regional matrix. The chart is the summation of geographical-planning regions. Thus, the area studies by regions come to:

Far West Mountain	= 2
Western Mountain	= 1

Western Hill	= 1
Central Hill	= 1
Kathmandu Valley	= 6
Eastern Hill	= 2

The chart clearly shows wide disparity in coverage among the regions. For example, the entire plain or tarai region still remains a *terra incognita* as far as Nepalese geographical research is concerned. Even regarding the mountain region, the three contributions deal not with orography or glaciology but social anthropology. The largest number of area specific articles refers to Kathmandu Valley which covers only 0.4 percent of the total area of the country. The articles on Kathmandu Valley are related to climate, geomorphology, settlement, agriculture and architecture.

TABLE 3. LOCATIONAL STUDIES BY REGION

Far West	West	Central	East	
FWM 13,18	WM 22	CM	EM	Mountain
FWH	WH 8	CH 2 KV 4,6,15 23,40,43 24	EH 34,35	Hill
FWT	WT	CT	ET	Tarai

Note: The serial numbers of articles are according to Table 2.

The next area of concentration is the eastern part of the Central Hill coterminous with Kathmandu Valley. It has three articles dealing with land use in Nala, description of Palanchok and system of central places along the Arniko Highway. The Far Western Mountain and Eastern Hill have two articles each. While the contributions on Chaudbise Dara and Matwali Chhetri of the Far West were the by-product of a mountaineering expedition to

Kanjiroba Himal , the two articles on Khandbari in the Eastern Hill were the result of an in-depth study in small area development. The lone article about Western Mountain (rotating credit) and Western Hill (Pokhara geomorphology) were both the outcome of field studies for doctoral dissertation. One article dealing with agricultural pattern covers the entire Far Western region.

vi. Observations

Most of the contributions in the *H.R.* belong to the category of economic and cultural geography. Among the numerous articles that deal with economic aspect, there are at least seven that may be classified as applied geography or are related to development planning. There are, however, no other important economic themes such as pastoralism, internal trade, manufacturing or tourism. Another missing dimension is medical geography or human ecology in which aspect one of the first serious geographical papers on Nepal was published.⁴

The various aspects of physical geography are not only poorly represented but many are entirely lacking. For example, there are no articles on geology, glaciology and plant geography in which field foreign researchers have done much work in Nepal. In spite of the numerous contributions on land use and agricultural aspects, there are no articles on pedology or irrigation. It is understandable that geographers in a land-locked country have not dealt on oceanography. But it is surprising that in a country imbued with some of the largest Himalayan rivers of tremendous hydro-power and irrigation potential, geographers have yet to turn to hydrography or water resources.

Although the *H.R.* has published numerous maps related to various articles and even including a map supplement, there is no article on cartography. Many regional and thematic maps of Nepal have been published during the period under review and yet there are no references to these in the articles or reviews. Similarly lacking are any contribution related to field method or methodology concerning the discipline.

4. C.E. Taylor, "A medical survey of the Kali Gandaki and Pokhara Valleys of Central Nepal", *Geographical Review*, Vol. XLI (1951), pp. 421-37.

vii. Suggestive Note

The Himalayan Review has undergone various transformations in format and content since its first publication. The size and format should be kept uniform and the average of four articles since Vol. VII (1975) needs to be considerably expanded. The size of the journal can be increased by incorporating a separate section that gives summaries and news of significant current researches in the fields related to geography. This may involve translating some materials from foreign languages.

There has been an over-emphasis on contributions regarding Kathmandu Valley while other larger regions have been neglected. This situation needs to be rectified by publishing more articles on other areas. The editorial board should not only publish what it receives but also pursue or even commission contributions on important themes and lesser known areas. Although the frequency of articles on applied geography seems satisfactory, there should be more avenues for articles concerning current issues such as water resources, environmental stress, land use change, population dynamics and air transportation. More contributions by scholars in related fields need to be published in order to affect cross-fertilization while articles of joint authorship among researchers in different disciplines could be encouraged to promote interdisciplinary approach. *The Himalayan Review* does not refer to many books on Nepal of much geographical significance published since 1968. The section on book reviews should be considerably expanded. Similarly, there should be more reviews and notices regarding new maps of Nepal.

(*The Himalayan Review*, Vol. XII, 1980, pp. 44-52.)

IMAGES OF NEPAL

Ever since Toni Hagen revealed the pictorial splendours of Nepal two decades ago, there have been numerous photographic books on the country. Nepalese landscape and people have been recorded in attractive volumes by Heinrich Seemann (*Nepal 2031*), Takehide Kazami (*The Himalayas*), Yoshizawa Shirakawa (*Himalayas*), Mario Fantin (*Himalaya, Nepal, Sherpa*), Dietmar Frank (*Dreamland Nepal*) and Tomoya Iozawa (*Trekking in Nepal*). The latest in the series is *This Beautiful Nepal* by Dorothy Mierow and Kesar Lall.¹ Mierow has to her credit another colourful volume, *Himalayan Flowers and Trees*, in collaboration with Tirtha Bahadur Shrestha while Lall has written extensively on Nepalese culture and the countryside. The book size is 12 cm by 18 cm and has 44 pages of text and 334 colour photographs. The size is rather too small to do full justice to the pictures. The photographs have been grouped into ten themes. People and culture section includes the largest number of pictures (119) followed by those on trekking (40) and religion (39). Other sections covered are food (37), animal (28), mountain (26), ritual (21), lake (19) and flower (15).

In terms of geographic area, the photographs cover most of the important touristic destinations in Nepal. These include 79 photographs of Kathmandu Valley, 55 of Pokhara area, 32 each of Khumbu and Karnali areas, 25 of eastern hills, 24 of Gosainkund and Langtang areas and 15 of Thak Khola. There are less than a dozen photographs of the tarai and inner tarai regions. With the exception of 36 photographs by Betty Woodsend and one each by Colin Smith and Berger Fritz, the rest are of the authors, mostly Mierow. Naturally, Machhapuchhre peak, under whose shadow Mierow worked for many years in Pokhara, appears both on the front and back covers as well as in other ten photographs.

1. *This Beautiful Nepal* by Dorothy Mierow and Kesar Lall, Sahayogi Press, Kathmandu, 284 pages, Price Rs. 150.

The brief introductions to each section are lucidly presented with a good knowledge of Nepalese culture and customs. Native perspective is much in evidence whether it be while referring to mountains or lakes, animals and flowers. A section, without photographs, is devoted to three popular folk songs including the Newari "Silu Me" which dwells on the ill-fated journey of a couple to Gosainkund lake. Like most tourist-oriented books, this volume also includes a section on the Yeti although its photograph is limited to the fake Khumbu scalp ! But for unusual spellings like Swoyambhu, Swoyambara and Sanscrit, the text has been carefully edited. A more careful editing of the photographs would have much improved the volume. In fact, the book may have looked much better by doing away with some mediocre photographs and also by resorting to a larger format. Photographic margins and pagination are not uniform while numerous photographs carry no title. There are seven double-page and 27 full-page photographs and the rest are crowded in two's and three's on a single page. More than 50 photographs seem to be out of focus and another 35 are of poor colour including 10 rendered off-colour during reproduction. There are also some errors in the description and Swayambhu is spelled 'Swoyambhu' on page 21 and Swoyambhu on page 23. The hamlet on page 34 is nowhere near Ghandrung but close to Pokhara. The captions to the plates on page 36 and bottom half of page 55 are reversed.

On the other hand, the book includes some vivid photographs. The two plates (p. 22-23 and p. 124-25) of Kathmandu Valley by Betty Woodsend of the monsoon cloud and young paddy swathed in lemon green are truly evocative of the text (p. 119): "It is a pleasure to see the brown field become suddenly green. With each passing day the rice grows tall until the field is covered with a carpet two feet deep, the colour changing from emerald to gold". Other beautiful images include the snow peak of Kanjeralwa (p. 35), paddy fields in East Nepal (p. 138-39), man at morning prayer (p. 180) and profile of two sheeps (p. 210). Three photographs are particularly striking for their composition and theme: yak with a mountain backdrop (p. 198), trekker and porter at rest (p. 220) and traditional bench under a young shade tree (p. 237). *This Beautiful*

***Nepal* succeeds well in presenting the rich variety of shape and colour of the landscape as well as life and labour of the people. The book is a welcome contribution to a better understanding of Nepal.**

(The Rising Nepal, 25 June 1982.)

III. SOCIETY

HIMALAYAN PILGRIMAGE

By Oriental standards, David Snellgrove seems to have acquired good 'karma' for all his rambling described in *The Himalayan Pilgrimage*.¹ Travelling a thousand miles in seven months, he visited the remotest Bhotia regions of Nepal - Tibrikot and Dolpo (Charkhabhot), Lo (Mustangbhot) and Thak Khola, Nye-Shang and Nar (Manangbhot), Nup-ri (Larkya) and Tsum (Kutang). Parts of his route had been visited earlier by Rev. Kawaguchi, geologist T. Hagen, botanist O. Polunin, climbers H. Tilman and J. Roberts, and the Japanese Scientific Expedition of 1953 and 1954. But he combined all in a whirl-wind of a 'Lama', visiting 104 temples and gompas, including 11 Bon and 5 Hindu shrines. He was not only bagging shrines but found time to study them.

Most of the geographical description, embellished with botanical notes (where their rarity adds colour), are reliable. All the eleven passes, the expedition crossed after Phuksumdo were definitely above 17,000 feet, though Numla Bhanjyang, the great watershed separating the upper waters of the Bheri from those of the Karnali is not 20,000 feet (p. 153) but about 19,000 feet. And all this physical hardship had an end in view -- that of exploring the world of northern Buddhism. We can only applaud this "applied mountaineering" when so much has been expended in vertical climbing in the last decade. R. Nebesky-Wojkowitz did much exploration in Buddhist studies in the Sikkim Himalaya and present work is a further research in a different region.

Tibetan Buddhism has developed not only four main groups and two sects (Red and Yellow Hats) but it has been further jumbled with Bon-po, (p'on-po according to Snellgrove) and

1. *Himalayan Pilgrimage* by David Snellgrove, Oxford, Bruno Cassirer, 1961, 304 pages, maps, plates.

shamanism or *Jhankrism*.² The author may call the Bon-pos the world's greatest plagiarists but Buddhism itself has many Hinduistic substance. This does not, however, detract us from the fact that the journey has many revelations to make. The author was a keen observer of the shrines, classifying them into their proper order and hierarchy. In this, he was greatly helped by his own erudition of Buddhist scriptures and their pantheons. Most of his encounters, of course, were with those 'of the doctrine' (chos-pa). The Bon-po shrines were few but widely distributed. Indeed they might be remnants of the "bon practice" described by the Tibetan geographical work *Dzam gling rgyas bshad* as the religion of the Monpas - Gyu rin (Gurung ?) and Ma kra (Magar ?). It is also revealed that only the "white Bon" (bon dkar) is represented in these regions, the "black Bon" (Bon nag) being limited to the Eastern Himalaya.³

The author saw two bronze images of Maitreya and Manjusri at Karang monastery. Maitreya' regular pose is supposed to be of both hands raised in gesture of preaching (p. 110) but the referred pl. XXIII (a) has one hand raised in explanatory gesture, pertaining to that of Manjusri. Neither the text nor the plates give any clue to the hierarchy of Maitreya who normally has pendant legs as Buddha and locked legs as Bodhisattva. But what interests one in their co-existence here is the projection of a common culture with that of China where both are chosen guardian deities.

The author describes the morphology of the monasteries (Lo Ge' -kar impressed him most), interprets their iconography and retrieves dusty volumes from oblivion. He picks out the large monastery of Tsarang as the most splendid he had seen on all these travels. This temple overwhelmed him with wonder and sadness and he writes: "I left the place feeling as though I had had a vision of the last days of Tibetan Buddhism, its images and texts no longer understood or cared for, while the more horrific elements continue to exercise a powerful fascination on the mind". One is obviously

2. J. Kawakita, "Ethno-geographical observations on the Nepal Himalaya", in *Peoples of Nepal Himalaya* edited by H. Kihara, Kyoto, 1957, pp. 1-363.

3. Rene von Nebesky-Wojkowitz: *Oracles and Demons of Tibet*, Graz, Austria, 1956.

reminded of the Japanese monk Rev. Kawaguchi who stayed at Tsarang one year (1901) and wrote that volumes of texts are but so many sheets of waste paper, if their possessors do not understand and live by the them.⁴

The writer is pained at the visible Hinduising signs of Buddhism. His interlude with a young monk who says, "How can I act as a lama if no one believes in me" (p. 176) is not an isolated case. This reviewer met many Tibetan refugees at Pokhara who gave their reasons for flight because of not physical torture by the new rulers but their own inability to adjust to a changed society. The older folks were bewildered with the new attitudes and social values. Here, one can only hope that as Hinduism found a safe hiding in Nepal, the displaced Tibetan Buddhism will reclaim its lost ground in the land of its origin - that is Nepal.

The Tibetanised Magars encountered above Bunyer (p. 36) are a proto-type of the Lama-Gurung,⁵ a result of differentiation of one ethnic group by the Great Himalaya. The writer's observation that Dolpo must be the highest region in the world is not amply substantiated. Altitudinally, one prefers picking-out points but no particular settlement is named. He simply adds that the villages (between 14,500 and 16,500 feet) are scattered over some 500 square miles. Incidentally the highest village in the Everest-Chomolungma region, Chukhung (15,978 feet), is occupied only seasonally.

On entering a Thakali house the writer "gazed astounded. We found ourselves in a bright kitchen, spotlessly clean" (p. 174). Thakali road-side inns are proverbially tidy and they sprout-up during the dry season all the way from Butwal to Pokhara. The only occasion on which the author was refused entrance was at Ghyaru temple in Mananbhot. He seems to attribute the impudence of the Manang people due to their being impure Tibetans (p. 207). A naive conclusion indeed. Tilman's observations of Manang people are worth recalling here." the men as a whole had that free independent air, traditionally ascribed to any hardy mountain

4. Ekai Kawaguchi, *Three Years in Tibet*, Madras, 1909.

5. J. Kawakita, *op. cit.*

race , which we rejoice to find and like to encourage until it begins to conflict with our own needs".⁶ The Manangbas are as great travellers and smugglers as any mountain-pass people⁷ but to call them "black-hearted" (p. 231) is too subjective an epithet. In contrast to this, we note the reaction of the Japanese Expedition who called the holy indignation of the Sama villagers as the "uprising of the faithful".⁸ This is not, however, meant as a disparagement to the author who both in his preface and conclusion stresses the unity of diverse cultures in Nepal.

The appendix on Tibetan place-names overshadows the whole book. However cumbersome it may make the narration, its aim to ratify the 30-year old Survey of India place-names is healthy. Place-names should reveal the character of the region and that is what Snellgrove implies throughout. The eight route maps with grid references are reliable in following the text.

(*Minzokugaku-Kenkyu* (Japanese Journal of Ethnology), Vol. XXVII, 1963, pp. 38-40. Also in brief in *Geographical Journal* , (London), vol. CXXIII, 1961, p. 343.)

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6. H. W. Tilman: *Nepal Himalaya*, Cambridge, 1952.
 7. D. W. Freshfield' "The great passes of the Western and Central Alps" in *Geographical Journal* , XLIX (1917) speaks of the smuggling common in the Canton Ticino.
 8. Funjiro Muraki; "Uprising of the faithful" in *The Mountain World*, 1955, pp. 129-132.

PEOPLE OF NEPAL

The Department of Publicity has recently published an attractive volume, *People of Nepal*¹ by Dor Bahadur Bista. The book priced at Rs. 25, is in quarto format of 176 pages and colourfully bound. The 12 colour plates and 47 half-tone photographs, including 29 by the author, are of high standard and enhance the text. Unfortunately, there is no map to help the general reader through the profusion of strange place-names. An ethnographic map would have been an excellent supplement.

The book is divided into three parts: Middle Hill and Valley People (Pahari), Terai People (Madhese) and Northern Border People (Bhote). Within this broad frame-work, each tribal, caste, and local group is described in turn as to their distribution, economy and social structure. In describing the groups, the author seems to have given undue importance to the census data on languages as the dominance of Nepali as second language is so pre-eminent that comparative figures mask the large number of people who have moved away from their native culture area.

The three parts of the book based on major geographic regions betrays systematic classification. Such a division has meant making distinction between the Brahmin (Bahun), Chhetri, and Occupational castes of the hills on the one hand and the Brahman, Rajput, and Occupational castes of the tarai on the other. It seems inconsistent to emphasise the regional variation of these ethnic-cultural groups and at the same time ignore the regional differences between the hill 'Churaute' and the tarai Musalman. After all, the regional distinction between these two Muslim communities is no less significant than those between the hill and tarai Brahmins.

Again, it is going beyond the confines of defined area to place the Thakali and their northern neighbours Punel and Thinel in the hill group. They may have become conspicuous in the hill area but

1. *The People of Nepal* by Dor Bahadur Bista, Kathmandu, Dept. of Publicity, 1967.

their group characteristics are distinctive of their mountain habitat, Thak Khola. And the grouping of people of the hill and tarai and northern border are not comparable. The hill and tarai people are grouped by caste or tribe while the grouping of the northern border people is merely geographic as exemplified by such terms as Thudam and Topke Gola people, Tamur and Dolpo people. Some of the group names of the northern border people, the author is loathe to use the term Bhote, are arbitrary. For example, the words Lhomi and Lopa, referring to the upper Arun valley and Mustang people respectively, bear the same meaning: 'lho' or 'lo' means 'south' and 'mi', 'pa' 'ba' or 'wa' means people. In fact, it is customary for the Tibetan-dialect speakers to refer to their southern neighbours 'Lhomi' as the Lamjung Gurungs do for their southern Khasa neighbours. This shows that we still know very little about the northern border people. Though Bista makes no mention of the Mugu, Humla, and Byans people, his introduction of ten 'Bhote' communities is itself a laudable contribution.

One is in fact impressed by the author's extensive travels among diverse people across the country. The treatment of most subjects is on the basis of acquaintance and the description is balanced and enlivened with personal touches. There is a graphic reference to Bung village "comprising of ninety-six houses scattered along the Hongu river valley; it is an hour's walk from the lower end to the top most house" (p. 31) and when he quotes a Thori Majhi, "My grandfather was said to have sacrificed buffalo every year at the shrine, but in my father's time it was more expensive so he slaughtered sheep instead... But I have been so impoverished that I cannot even buy a sheep, so I sacrifice only a chicken" (p. 121). There could not be a better way of expressing the desiccation of small tribal groups.

There are some errors inevitable in such a large canvas. It seems wrong to contrast the general east-ward migration with that of Newar migration westwards (p. 16). Newars have settled in all directions where there were market possibilities just as Magars and Gurungs have settled where they were granted land in lieu of their military service and where there were mines. This explains the wide distribution of these two tribes. The general east-ward migration could not be because West Nepal is old and over-crowded (p. 58) but rather the extensive highland topography and

low rainfall there has put a limit to the expansion of arable land. Facts do not bear out that "the geographic environment of the Terai changes little from east to west" (p. 99) as the eastern tarai is 500 feet lower than the western tarai and receives twice as much rain contributing to a different landscape and economic activities. The Gurung word 'rodi' is itself a combination of two words, 'ro' means singing and 'di' or 'ti' means house just as 'kra-ti' meaning head house (p. 73) and thus 'rodi-ti' (p. 78) seems superfluous. The two statements "wherever Sherpas live, their's are among the highest settlements in the mountains" (p. 136) and "Some of them (Dolpo villages) are among the highest human settlements in the world" (p. 160) are contradictory. The scope of employment for Sherpas has not increased (p. 138) but rather declined since 1965 due to the restriction on expeditions. And how can Bon-po that ante-dates Buddhism be an imitation of the latter (p. 158) ? It seems necessary that the footnote (p. 161) stating that Dolpo people "might not let any one into their home until he pays a rupee" should be qualified with the explanation that they had been so spoiled by some foreign anthropologists in 1958! The main Tibetan market joined by the Buri Gandaki route is Tradom across Gya La and not Kyirong (p. 167) which is best reached by Rasuwa Garhi in Trisuli valley.

These points of error do not minimise the usefulness of the work. One learns many things from the book: that distance enhances sanctity to religious centres; among tarai Rajputs, the bride is taken from west to east; *kipat* land was not exclusive to the Kiranti but also existed among the Tamang, Sunuwar and Chepang; the economy of the northern border has been upset by the influx of Tibetan refugees, and that livestock raising and trade with Tibet has been dislocated by Tibetan brigands.

A careful reader will discern three distinctive features basic to the Nepalese society. First is the pervasive influence of Jhankrism (shamanism), the cult of medium and sorcerers that bear different names: Dhami (Chhetri), Ngopa (Rai), Phedangma (Limbu), Bompo (Tamang), Gyabre (Gurung), Naso (Sunuwar), Phompo (Jirel), Pande (Thakali and Chepang), Guruwa (Tharu) and Loben (Kath Bhote). People may value the higher religions but the harsh nature ordains that the old, anonymous gods of animist-shamanist era should remain alive in the mind of the people.

Second is the cultural dominance of Sanskritic values through the Brahmin agents. The tribal groups not only claim Aryan ancestry but have also adopted the basic Brahmanic tenet of social stratification. Thus, we find status schism even among the once egalitarian tribal societies such as Bara jat and Athara jat (Tamang), Char jat and Sora jat (Gurung), Bara thar and Das thar (Sunuwar), Pukunthali and Kachhare (Chepang), Pradhan and Apradhan (Tharu), Khadev and Khamendu (Sherpa), Kutak and Righin (Baragaonle) and so on. It is obvious that where two religious-cultural groups impinge, the more well-off of the affected group try to join the privileged section, Hinduism, the State religion. The dynamics of social transformation can be more effective in smaller groups as exemplified by the Thakali (p. 87) and the Sunuwar (p. 65). Bista makes a correct diagnosis when he says, "the past governments of Nepal misled them by creating an unnatural social ladder, framing the legal code accordingly". We realize that the New Legal Code is more democratic (p. 171) but we should not ignore the recent trend of intensive Sanskritization. Needless to emphasise though that syncretism has been the basis and strength of Nepalese society.

The third significant aspect of the Nepalese people is their seasonal circulation. Their spatial mobility, inspite of the geographic barrier, has been a potent factor in acculturation along with exchange of goods and ideas. Therefore, if the Newars of metropolitan Kathmandu distinguish between northern 'sain' (Tibetan), hill 'khain' (Khasa), and southern 'marsya' (Madhese), it is not ethno-centricism, since Newars include both Mongoloid and Europoid elements, but regional sentiment inherent to each geographic group.

The author has done a praise-worthy job of collating so much material on the people of Nepal that represents the "ethnic turn-table of Asia."² He could have, however, much improved on his field material if he had made full use of some of the recent researches on the individual ethnic and cultural groups such as Magar

2. Toni Hagen, *Nepal: Kingdom in the Himalaya*, Berne 1961.

(Hitchcock),³ Gurung (Pignede),⁴ Tamang (Lama),⁵ Newar (Rosser),⁶ and Musalman⁷ (Gaborieau) to take some examples. Within his own limitations, he has succeeded in drawing a legible mosaic of the various elements that make-up the Nepalese society. The well-produced book, therefore, is a good introduction to Nepal not only for inquisitive foreigners but also a useful compendium for those Nepalese themselves who want to know more about their fellow countrymen.

(*The Motherland*, Kathmandu, 4 September 1967.)

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3. John T. Hitchcock, *Magars of Banyan Hill*, New York, 1966.
 4. Bernard Pignede, *Les Gurungs: une population himalayenne du Nepal*, Paris, 1966.
 5. Santabir Lama, *Tamba Kaiten*, Darjeeling, 1959.
 6. Colin Rosser, "Social mobility in the Newar caste system", in *Caste & Kin in Nepal, India & Ceylon*, edited by C. von Furer-Haimendorf, New Delhi, 1966, pp. 68-139.
 7. Marc Gaborieau, "Les Musulmans du Nepal", *Object et Mondes*, Vol. No. 2, 1966, pp. 121-132.

KATHMANDU: FACTS AND FOIBLES

Kathmandu is an illusive place. It is a metropolis for the rurals, a refuge for native elites, a phantasy for foreigners and in many ways a world in microcosm. If its shape is panoramic, its substance is kaleidoscopic. To try to define it is inviting polemics as evidenced by Kamal P. Malla's article "Kathmandu Your Kathmandu", in *The Rising Nepal*, 28-29 November, 1987. Malla's observations are perceptive and his thesis compelling. He examines Kathmandu on the basis of its geographical setting, architectural elements and the duality of its body politic. Throughout the essay, he labours on the apparent dichotomy between natural bounty and human indigence and between native simplicity and alien sophistry. He takes architecture as the index of value judgement and points to the incongruity of vulgar importation at the expense of local ingenuity. By dramatizing the New Road congregation as a proof of the capital's cultural bankruptcy, he decries petty-bourgeoisie ideals numbing the sensibility, intelligence and articulateness of the new generation.

He is most eloquent in exposing the sycophancy of the Hindu doctrinaires who claim to be the guardians of our cultural heritage. He pinpricks the mythic balloon of a monolithic Nepalese society by reminding us of the socio-cultural realities of the tribal communities. He implies a concern for the countryside by focussing on the problems of ego-centric Kathmandu.

Malla's opening statement dwells on the absurdity of Kathmandu as a city. Sure enough, this city teeming with 'intellectuals' has its share of detractors and devotees and some cross swords with Malla for trying to define the undefinable. We anticipate some enlightened dialogue but the dissension unfortunately reverts to an exercise in tangential argument, chasing the shadow for substance. Some criticize Malla for not subscribing the pill to cure the ills he diagnoses; others chide him for bad historiocity while many damn him for ignoring their intelligence. One prolific critic implies at Malla's poor attempt at plagiarism though we are left in no doubt of his own success in that particular

literary vein. He also admits his inability to understand Malla's theme yet he is the most insistent for further rejoinder as if he orients better in the deeps. A classic revelation of shallow understanding is made by one who imposes Freudian jargons (condition reflex, sublimation, etc.) to Malla's purpose and our sub-conscious mind yields a boomerang! The desiccation of the capital's intellectual level is apparent from the critics who mistake the parading of prejudice for objective appraisal and lends support to Malla's claim that "here men are more pretentious than elsewhere in the kingdom."

The wrath of those who decry Malla for damning the sanctity of Aryan culture is an expected arrogance in this Hindu-dominated society. They have a strong point against Malla in the way he presents his case. The facade in which he stuffs his rich substance is essentially European and more alien than Sanskrit. Therefore, the profusion of Biblical, Greek, and English literary imageries puts-off many of his readers. We admit that his perception of Kathmandu has been sharpened by western perspective but that is no justification for adopting a remote literary device to discuss an immediate national problem. And his reference to architectural vulgarization is not peculiar to Kathmandu. It is the price of modernisation. The medievals built for centuries, the moderns are after quick money. The concrete edifices that multiply on the new real estates replacing old mansions are the product of urban explosion. Exigency sets the pace and utility replaces art with artifice.

Malla reaps a rich harvest. Whatever the facade, in basic content and substance he is at once candid and articulate. He deftly throws in relief the essentials and succeeds in conveying what some feel but cannot express and what many are immune to perceive. If his realistic views take on the garb of iconoclasm it is because the intelligentsia of the capital is emasculated. For in Kathmandu, there is no time to stop and think while success lies in chasing the slogans. The air is thick with the platitude of the pretentious and pomposity of the plebeians.

Kathmandu is not the whole of Nepal we admit. One would feel less chagrined if the anachronism of the Valley were to be confined within its four passes (*char bhanjyang*). Yet, judging the

efficacy of modern means of circulation in men and ideas, one suspects contamination wider afield. Being Kathmandu what it is, we care not if the city fathers concentrate on concrete flag-posts to the neglect of basic sanitation or if the sacred bulls create traffic islands of utter immanence. However, we do care if the other needy areas lack in concrete bridges or if the cows (agents of overgrazing and soil erosion) are exempted from unholy taxation. We do not grudge the pious for converting the Tol Rakshya Sanghas into *kirtan* assemblies but we do feel disturbed by the reverberation of conch-blowing through Nepal Radio in Bhotia valleys where *mirkang* (thigh bone) prevails. We respect and envy the foreigners who reveal us our indigenous culture and we pity our compatriots who propound the infallibility of Hindu culture and compromise their progeny to Bible-reading schools.

The contradiction of the Hindu ideologues confound the pragmatic. If they boast of the peaceful co-existence of religions in Nepal, in the same breath they go hoarse asserting the superiority of Hindu spirituality, If these Vedic romantics would have their way, they would flatten the Himalaya in the name of salvation. They ignore the spatial reality that regional variation gives character to people and places. Their phantasy is best expressed in their attempts at formulating Nepalese values in terms of fossilized Vedic concepts. Their myopic vision cannot realize that Nepalese society is a product of culture contact and that it is an evolutionary legacy of miscegenation and synthesis. In the simplest terms, the fundamental issue that confronts us to-day is Hindu jingoism or Nepalese symbiosis. Geography tells us that Nepal is the home of different peoples prolific in cultural diversity. History reminds us that cultural intercourse and syncretism have been our strength and character. And our times and problems convince us that our future lies in mutual understanding and respect.

(The Motherland, 14 December 1967.)

THE INTELLECTUAL MYTH

I thought of fountains merely as decorative motifs until one hot summer day in Rome, a sudden breeze sprayed my face with soothing droplets from the Fontana di Trevi. I felt a similar refreshing sensation on reading Kamal P. Malla's essay "The Intellectual in Nepalese Society"¹ in spite of his somewhat florid language and sanguine style. His grand survey of intellectual processes operative in Nepal has a strong historical perspective and covers political and social, cultural and educational aspects of the country. He recognizes three distinct phases particularly over the last century: the painful growth of intellectual efforts during the Rana regime, the brief decade of intellectual efflorescence following the democratic innovation, and the subsequent emaciation of intellectual enthusiasm during the present decade. It is hard not to be provoked by Malla's penchant observations on life and society,² and the present theme indeed deserves a wider dialogue.

One basic aberration in Malla's assumption is his advocacy of literacy or the culture of printed word as a pre-requisite for the existence of intellectuals. He implies a sequential development of the literate to intelligentsia to intellectuals and this explains for his pre-occupation with the growth of printing press (1851), school (1853), literature and the educated. However, we need to be clear on the role of intellectuals. An intellectual may be defined as one who attempts to interpret the world around him and communicates his conclusions as being nearer truth. Such a transcendental approach is not the exclusive province of the educated. The universal need to ruminate beyond the immediate experience marks the existence of intellectuals in all societies, whether literate or pre-literate. To quote Edward Shils: "There is in every society a minority of persons who, more than the ordinary run of their fellow-men, are enquiring, and desirous of being in frequent

1. *Vasudha*, Vol. XIII, No. 5, pp. 17-27 and No. 6, pp. 5-16.

2. K.M. Malla, "Kathmandu, your Kathmandu", *The Rising Nepal*, 28-29 November, 1967, evoked a wide response including one from Gurung, "Kathmandu-facts and foibles", *The Motherland*, 14 December 1967.

communion with symbols which are more general than the concrete situations of everyday life, and remote in their reference in both time and space".³

This holistic definition becomes even more pertinent in Nepalese situation where the population is predominantly illiterate. Malla refers to the rich profusion of diversity in Nepalese culture using language as an index but the contours of Nepalese culture complex pervade linguistic or ekistic dimensions. In spite of the immense diversity, Nepalese society is a mosaic of four basic culture patterns. The autochthonous shamanistic culture incorporates disjunct, tribal societies speaking diverse languages and dialects. The Lamaistic culture refers to the Bhotia societies coterminous to Tibet from where it drew its sustenance. The Brahmanistic culture conforms to the tropical Hindu realm that includes both native converts and immigrants from India. The fourth culture, of the educated moderns, is distinguished by modernisation ideals of a contemporary society. Each of these different cultural forms have sustained their own intellectuals, be they *Jhankri* shamans or Lama and Brahmin priests. In terms of their functional utility, the illiterate shamans and modern intellectuals serve the same purpose within their cultural context.

Literacy does extend avenues to the wider universe but literacy or education is not synonymous with modernisation. It is not literacy but the quality of education which provides a better indicator to a society's attitude. Indeed, Lamaistic or Brahmanistic education which emphasizes liturgical learning instead of enquiry and understanding may lead to strengthening of traditional and conservative values that are less amenable to change than the primitive tribal societies. Given the linguistic diversity in Nepal, one may even question the impact of intellectual ideas with pretensions of national significance. The limited utility of literary device is obvious in the abysmally low level of literacy of the general mass. As for verbal exposition, even the national language

3. Edward Shils, "The intellectual and the powers: some perspectives for comparative analysis," *Comparative Studies in Society and History*, Vol. I, 1958, pp. 5-22.

Nepali in recent times shows signs of alienation from popular usage owing to overt Sanskritization.⁴

In addition to the patterns of diversity, it seems relevant to examine the processes of development. If the Shamanistic culture has been eroded by the culture of higher religions, the Lamaistic culture has also atrophied with the dissolution of the Tibetan theocracy. Brahmanism has been on the ascendancy over the last few centuries owing to State advocacy as well as the wider mobility of its exponents. The culture of advanced modern education is a recent phenomenon in Nepal and it confronts two problems simultaneously: that of constricting the traditional conservatism and meeting new demands of a developing nation. The commodity and mode of circulation may vary from one culture to another but the system of *jajmani* relationship between peddlers and patrons has remained more or less constant. The shamanistic *Jhankris* that regulate tribal life, the hagiographers that invent mythical genealogies, the priests who perform sacred rituals as well as the modern intellectuals all depend on patronage.

Malla is justified in stressing the economic poverty of Nepalese intellectuals yet he seems not to be too appreciative of those who seek shelter in bureaucratic anonymity. It is true that one of the distinguishing features of intellectualism has been anti-establishment but there are obvious limitations to working in a vacuum. In the Nepalese situation where the purveyors of ideas receive minimal popular patronage, the intellectuals are inevitably drawn to the economic security of the pervasive patron - government bureaucracy. The government has not only been the largest client for intellectual concerns and skills but the chief agent in creating educated personnel as well. The increasing incorporation of intellectuals into organized institutions is indeed a contributory factor to the deflating of tensions between intellectuals and the power. Whether change wrought from without is more effective

4. A comparison of to-day's *Gorkhapatra* with that of two decades ago clearly reveals the increasing constriction of native Nepali language by Sanskrit imposition. Even Balchandra Sharma's *Nepali Sabdakosh*, (Kathmandu, 1962), is a distinct retrogression from R.L. Turner's *A Comparative and Etymological Dictionary of the Nepali Language*, (London, 1931).

than that generated from within is a dialectical problem I feel ill-equipped to discuss here.

My main contention is that Nepalese intellectuals have little relevance to the larger society they presume to address. If the traditionally educated, who continue to dominate the realm of the mind by ascription, confine themselves to the ivory tower of past heritage, most modern intellectuals derive their inspiration from alien concepts and thus, fail to fathom the realities within Nepal. There is also the dichotomy of two Nepals owing to the in-breeding of urban intellectuals. While reading on Nepal, one needs to do a hair-splitting exercise of determining whether the writer implies Kathmandu Valley or the political Nepal.⁵ This is particularly true in the case of historical writings and since most natives remain busy navel-gazing in metropolitan Kathmandu, some of the best regional accounts have come from foreign researchers.⁶

A classic example of how Nepalese intellectuals confound rather than illuminate fundamental issues is the prevailing lop-sided understanding of the national culture. The banal emphasis on Sanskritic and Indian aspects of the Nepalese culture has assumed ridiculous proportions. The pedantic culture historians not only rely heavily on the pronouncements of Chanakya,⁷ Altekar, and Mazumdar for extant quotations to justify native Nepalese institutions but even lay jingoistic claims on Kaushik, Vyasa and Vatsayana that defy historicity.⁸ Most intellectuals continue to subscribe to the erroneous notion of Mongoloid tribes being mere castes within the Aryan hegemony in spite of two decades of

5. As an instance, contrast D.L. Snellgrove's "Shrines and temples of Nepal" *Arts Asiatique*, (Tome VIII, 1961, fascicule 1, pp. 3-10 & fascicule 2, pp. 93-120) and Manvajra Vajracharya's *Nepalko Madhyakalin Kala* (Kathmandu, 1970).

6. For example, Giuseppe Tucci's *Nepal: the Discovery of the Malla* (London, 1962) and D.L. Snellgrove's *Four Lamas of Dolpo* (Oxford, 1967).

7. Chanakya, *Arthashastra*: A.S. Altekar, *State and Government in Ancient India* and R.C. Majumdar, *Local Government in Ancient India*.

8. The tone of most of the articles in *Hamro Sanskriti (Our Culture)* magazine are in this vein and imply Sanskriti (culture) and Sanskrit (language) as synonymous terms. One exception is the note of dissent by Nagendra Sharma in *Hamro Sanskriti*, Vol. II, No. 1, 1969, pp. 87-94.

anthropological exposure of Nepalese as a multi-ethnic society.⁹ An ecological interpretation of Nepalese culture is beyond the scope of the present essay but it must be emphasized that Nepalese culture is a symbiosis of diverse races, languages, religions and societies.¹⁰ One of the basic functions of intellectuals is rational interpretation and they can influence the laity only if their thoughts are nearer truth and reality. Many modern intellectuals have been affected by liberal constitutional politics and a few may even be conversant with Mao Tse Tung's *Four Essays*. What seems more significant is not their dissent or assent of the legitimacy of the existing order but their own relevance to the needs of the society. Irreverence may be one of the intellectual characteristics but irrelevant intellectual pursuit and mental obfuscation can bear the seeds of anti-intellectualism. One of the important tasks that challenge intellectuals in Nepal is the formulation of a nation out of tribes and communities. The concept of nation-state is the creation of intellectuals and the basis for such an approach is the proper appreciation of realities. Until the Nepalese intellectuals are capable of meeting this challenge, their cerebral pre-occupation will have no meaning and their existence as enlightened intellectuals a mere myth.

(*Vasudha*, Kathmandu, Vol. XIII, no. 8, July-August 1968, pp.17-20.)

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9. Dor Bahadur Bista's *People of Nepal*, Kathmandu, 1967, is a pioneer venture that calls for further analysis and interpretation.
 10. Harka Gurung, "Need for dialogues in Nepalese researches", *The Motherland*, 15 February 1968.

FLIRTATION WITH PHILATELY

My interest in postage stamps was indeed brief and juvenile. It began when I was in the VIIth grade at the suggestion of my geography teacher. It was both a pleasant labour and instructive exercise drawing a wall map of the world with stamps of as many countries adorning its margin. Each stamp affixed on the margin had an arrowed line connecting the capital of the concerned country without crossing each other's path. As the country collection increased, there was further juggling of vertical stamps on the upper and lower margins and horizontal ones to the left and right margins to provide adequate room. Thus, political units that occupied flat spaces of varying colour on the map assumed an individual personality by their native name, currency term and the theme of the stamp. This collage of map and stamps was a good introduction to global geography.

The collections were made mainly through exchange with pen-friends. Although Nepalese stamps from the home mail were much in demand for exchange among collectors in India where I was a student, I had discovered a unique source. My main quarry was the rubbish dump by the school wall where I spent many week-end hours foraging through the discarded stationary for stamped envelopes. It was a dirty job but yielded a veritable harvest of stamps. Later I would buy stamps by mail order and even subscribe to the annual catalogue of Stanley Gibbon. Reading philately books led me to counting of perforations and deciphering of water-marks. Once I thought I had struck gold. This was one of the earlier post-Independence stamps of India. The series of stamps on archaeological monuments included a one anna denomination with the Bodhisattva Padmapani mural from the Ajanta. I knew from the cave paintings that the Padmapani held the lotus in his right hand and so were many on the stamps. But I found one with a lotus on the left-hand or rather with a reverse image. My excitement knew no bounds at the discovery of this rarity. I wrote-off to Jal Cooper in Bombay, the regular philately columnist of *The Illustrated Weekly of India*, mentioning my find and asking how much rarity value it had. The response from the good old philatelist was prompt but dis-heartening.

He wrote back saying that the discovery was commendable for a school boy but my find had no rarity value since numerous were the left-handed Padmapanis in circulation as the printing press had first printed many of this wrong version and then corrected the mistake. Last August, I had at last the chance to visit the Ajanta caves. I confronted the Bodhisattva in Cave No. 1 that had failed to deliver me and reflected long of my early philately.

By the time of my high school graduation, I had made a fair collection. This album of my boyhood labour was with me when I was last travelling home from my boarding school in Nowgong near Jhansi. At Lucknow railway station, I was accosted by a domiciled Nepalese who poured his woes and I had to part with some rupees in sympathy. But when I reached Patna airport, I was short of money to buy the plane ticket for Kathmandu. And I cursed the Lucknow compatriot or cheat. I thought of my stamp album and enquired whether any one would buy it for raising the ticket fare. Unfortunately, there were no takers and I had to retreat to Pahaleja Ghat to take the cheaper but longer surface route. I thought even more of the Lucknow cheat when the DC-3 bound for Kathmandu overtook the steamer I was travelling across the Ganges.

I gave up stamp-collecting as abruptly as I had fallen for it. The problem was one of subject specialisation in the midst of increasing number of more beautiful and varied stamps. I just presented the album to a college friend who seemed to be a more serious collector. I know not of my early collections as the friend is now settled in West Germany as a medical doctor.

If I gave up philately on entry to college, I did not miss it as I had found a new love—water colour painting. Painting had been a jealous rival to other interests for my attention since the school days. I was fond of painting landscape but when I saw the collection of stuffed birds of "Uhi" Govinda Bahadur Gurung, I was fascinated by this colorful aspect of nature. Although a full-time student at Tri-Chandra and active in various sports and sports-writing, I managed to paint a series of 40 Nepalese birds during 1955-56. It was, therefore, a happy coincidence that two of my paintings were selected in a nation-wide competition to be issued as postage stamps in 1956 during the coronation of the late King Mahendra. *Danphe* was not yet the national bird, but my water colours of *Lophophrus impejanus*

(Danphe) and Tragopan satyra *(Monal)* were issued in denominations of Rs. 5, Rs. 2 and Rs. 1. Neither the paintings nor their stamp reincarnations are in my possession now. For, soon thereafter, I was lured by colour photography. Thus, I commend those who are ever faithful to their first love or early hobby.

(Philately . Souvenir Issue, Kathmandu, Vol. XI, 1981, pp. 93-95.)

THE LOW AND THE HIGH

The Sanskrit word *dixit* may mean 'the ordained' but I am beginning to assume it to be synonymous with penmanship or authorship. For there are numerous Dixits in the Nepalese literary firmament, both old and new. To mention only a few, Ram Mani Acharya Dixit not only recorded the long regime of Chandra Shumsher in his memoir *Purana Samjhana* (Old Memories) but was also said to be associated with two major works: *Nepal* by Perceval Landon (1928) and *A Comparative and Etymological Dictionary of the Nepali Language* by Ralph Turner (1931). Narendra Mani Dixit, a distinguished civil servant of the last Rana days, edited his father Kashinath Mani Dixit's diary *Bhayeka Kura* (Things That Happened) and also an English-Nepali dictionary. Among the later generation are Kamal Mani Dixit of the Madan Memorial Library and a prolific writer on Nepali literature and Madan Mani Dixit of the political weekly *Samikchhya* who has a regular column 'Tyo Yuga' (That Epoch) in *Roop-Rekha* monthly. Hemang Mani Dixit, Kunda Dixit and Kanak Dixit represent the younger generation of this literary clan.

Of the two books under review, one is by Mani Dixit (Hemang)¹ and the other he co-authored with Ina Shumshere Rana.² While the theme of the first book is about the tribulations of a Tamang soldier, the second dwells on the sporting adventures of a privileged Rana. Although the title of both books is related to time - past nostalgia and future hope, they deal with a phase that has passed. Both characters roam far and wide as Nepal is too small a theatre for them. There is an historical irony in the story of the *lahure*: a grandson of Chandra Sumsher's *athpahariya* (constant guard) returns to Nepal as an officer of the Mukti Sena 'liberators' on the democratic side during the political turmoil of 1950. Similarly, the sentimental title of the book by Rana and Dixit rings true not only for the vanishing wild life but for the eclipse of a feudal grandeur.

1. *Come Tomorrow* by Mani Dixit, Sajha Prakashan, Kathmandu, 1980.

2. *Those Were The Days* by Ina Shumshere Rana and Mani Dixit, Sharada Prakashan Griha, Kathmandu, 1977.

Come Tomorrow is a novel about the life of Bir Bahadur Moktan whose grandfather and father had both served Chandra Shumsher well. The over-all time span extends nearly a century - before Chandra became the Commander-in-Chief to the period of foreign goods smuggling that commenced in the last decade. Although the story commences at the turn of the century, it relates to four generations of the Moktan family and who form a quartet of Rana *athapahariya*, Gorkha soldier, international smuggler and Sandhurst subaltern. Bir's father accompanies Chandra Shumsher to England and Europe (1907) and then spends four years with a Nepalese battalion in the North-West Frontier during the First World War. He loses one leg on the last day at the front, not in a battle but by a falling boulder. He retires to Chhetraphul village (Dhading) after acquiring a sizable property that is transformed from Sapkota Hill to Moktan Danda. He marries a girl whose lover has died fighting in Europe and their son Bir is born in 1923. The son follows his father's foot-steps when he enlists in a Nepalese regiment and is dispatched to the North-West Frontier during the Second World War. There is little action and the regiment is transferred to the Burma front to fight against the Japanese. Bir is captured by the enemy but escapes to a Shan village and works in a ruby mine. He comes home after the war, has a brief liaison with a local girl, then returns to Burma and marries a Shan girl. He is back in Nepal with the revolutionaries but retreats to Burma when political events take an unfavourable turn for the expatriates like him. He engages in smuggling ruby and sapphire out of Burma and finally settles in Kathmandu as an international smuggler. I must not give away the ending of the novel but the back alleys of Kathmandu and Casino are his last haunts.

It is a long tale with events and happenings of the time woven-in. These include Chandra's accession as Maharaja, his visit to Britain, King George V's *shikar* in Nepal tarai, two World Wars, Victory parade of 1946 in London, communal riots in Calcutta following the partition of India, revolution in Nepal and wave of nationalisation in Burma. The author gives a good account of the battle action in the jungles of Burma and the impact of Burmese Nationalisation Act on the domiciled Nepalese. Particularly interesting are the details on the reactions of different Nepalese in Burma and inter-action among the Nepalese cadets at Sandhurst who come from the British Gurkhas and the Nepalese Army. However, some

thoughts attributed to characters seem to be imposed such as the Dhading villagers discussing sovereignty after the signing of the Britain-Nepal Treaty of 1923 and Bir Bahadur's perception about the future of tourism in Nepal during his pilgrimage to Lumbini with his Burmese wife. The novel is entertaining with glimpses of the days gone by but there are numerous errors including grammatical, unexpected from an author educated at Sherwood College, Bishop Cotton School and another decade in London where I first met him.

Those Were The Days is not fiction but a real life story. The plot is a series of confrontations between an expert *shikari* and wide variety of games. Ina Sumshere is a good specimen of an avid hunter turned conservationist and the book details his rich experience ranging over thirty-five years. In fact, his descriptions of animal encounter are so realistic that the frequent references to books of other *shikar* experts seem superfluous and even distracting. The book is dedicated 'To the Tiger', at whose killing the author seemed to have particular fascination. One wonders whether it was for *prayaschit* or expiation! Naturally, twelve out of eighteen chapters are devoted to the tiger.

The arena of the author's hunting exploits is spread over Nepal tarai and half a dozen choice localities in India. The games the keen hunter seeks range from sambhar to wild boar, panther to tiger, wild fowl to rabbit - the last one as a delectable snack with liberal doses of liquor in the camp. The author describes some occasions when the hunter becomes the hunted and his details of close encounters with the panther and the tiger have authentic psychological substance.

But the tiger remains the central character of the book. His first meeting with a tiger in the Giridh forest is described vividly. Two other prominent tigers dealt with are the cattle-lifter of Hetauda and the sardonic tiger of Amlekhganj. He goes at great length to interpret the meaning of the tiger's tail movements, vibrations of its whiskers and how it goes for the final kill. He describes the variety of natural food the tiger lives on and an interesting chapter dwells on the regular patrolling of the tigers to maintain their territorial imperative. The author champions the new cause of wild life conservation both in the book's preface and the concluding chapter. However, the cat is out of the bag when he ends up betraying his *shikari* instinct. Thus, he devotes full-length chapters on how and where to tie the bait and the art of making *machan* for tiger-shooting as if others will ever be as

fortunate as the author! Needless to sentimentalise that the halcyon days of big-game hunting are over with the passage of the Maharajahs, Rajahs, Nawabs, Rai Sahebs and Pucca Sahibs. The value of the book is in the recording of their noble pastime. Although bibliographic details are incomplete, this book is better edited than *Come Tomorrow*. Mani Dixit and Ina Rana are to be commended for their presentation of the dichotomy in the past Nepalese society. They also help us to reflect whether dichotomy of the high and low is a thing of the past

(The Motherland, 19 May 1982.)

AMONG THE MAGARS

The book, *Life Among the Magars*¹ deals with the experiences of a linguist who lived among the Magar people for nearly a decade. In spite of the title, the book is not an anthropological treatise. It does not include theoretical premises, academic footnotes or even a bibliography. There are no references to extant works on the Magar such as *The Magars of Banyan Hill* by John Hitchcock (1966) or *The Hill Magars and Their Neighbours* by Jiro Kawakita (1974). Neither does the linguist author mention the long paper "On the Magar language of Nepal" by John Beams in the *Journal of the Royal Asiatic Society* (1870) and the Magar word-list in the *Dictionary of Synonyms* published by the Royal Nepal Academy (1973).

The author makes no scholarly pretensions. The book, in fact, is a careful recording of social and economic events in two Magar villages in Central Nepal. Three factors enrich the author's observations - long association, role of setting an 'example' and linguistic facility. He, therefore, succeeds well in providing an insight into the realities of hill life. And much of the problems and processes he encountered among the Magars of Yangchok and Arakhala could be true for other ethnic groups living in similar geographic areas.

The author spent the initial two years in Yangchok in Tanahu district and rest of the time in Arakhala in Palpa (later included in Nawal-Parasi) district and much of the material is drawn from the later village. In his quest for Magar language and values, he tried to participate in most of the local activities. The presence of his young family in the field (much in evidence from the photographs) seemed to have further broadened his area of inter-action with the natives. He even betrays Magar perception in transcribing Nepali words such as Bhairum for Bhairav, Jyamarat for Yamaraj and Ludreche for Rudraksha as well as in describing the spring thunderstorm: "I have

¹ *Life Among the Magars* by Gary Shepherd. Sahayogi Press, Kathmandu, 1982. 269 pages, 32 colour and 34 black & white photographs. Price Rs. 100.

heard them come, the thunder and lightening repeating so rapidly that it makes me think of a stampeding herd of celestial horses charging across the mountains" (p. 99).

Magars outnumber other ethnic groups in the Gurkha regiments and recent engagements in Falkland Island and Lebanon have revived the legend of Gurkha bravery. In this context, the author is much nearer the truth when he observes: "The strong spirit of unity, cooperation and obedience to authority that runs throughout Magar society persisted on the battlefield as well" (p. 29). He, however, could not understand the incongruity that these bravest of the brave in the battle were much terrified of witches, ghosts and demons! He tries to better understand the Magar mind by enquiring into their beliefs and customs that are listed in two chapters with such esoteric headings as "Black Pepper and Witches" and "Crow's Blood and Leopard's Milk". He found the supernatural realm of the Magar infested with witches, elves, ghosts, *mayus* (good fairies) and *vayus* (wandering spirits). Many of these identified by name are also common among other ethnic groups in Central Nepal. On the other hand, the Arakhala Magars have adopted the Tharu version of Bhuiyar deity instead of the original term Bhume. There is an interesting observation that older the settlement, more numerous the supernatural elements. Arakhala had only the *mayus* of Deva Chuli when first settled in the late 18th century. But later, the famous *jhankri* (shaman) Aganda Rana (1849-1927) held the community at ransom by creating many local spirits for blood sacrifices and prescribed an elaborate holiday system for appeasing them. "The main reason the villagers made so many sacrifices to the deities was to enlist their assistance and not to be forced into debt. The facts, however, seem to indicate that this custom was actually counter-productive" (p. 109).

Another aspect dealt at length is the hunting system of the tribe including two appendices on the deities and rituals related to hunting. The past importance of hunting in the Magar society is indicated by a pantheon of no less than 58 deities to be invoked for success. Of these, two dozen are shamans, hunters and witches of the past. The inclusion of Rama, Lachhman and Maharaja evidence later Hindu influence. The role of *jhankri* medium-sorcerer has much importance whether dealing with spirits or wild denizens.

There is a good reconstruction of the history of Arakhala village through the life of six generations of a prominent family. This provides a peep into the past including the socio-economic changes and tragedies that befall a hill community. He also focusses on four personalities with distinctive qualities. Gurkha Major Nar Bahadur Thapa of Yangchok distinguishes himself in community work. Khadga Bahadur Lungeli of Arakhala is another community leader. Aganda was a medium-sorcerer of immense stature while his grandson Khadga Bahadur Rana though invalid, maintains the tradition of a magician, hunter and herdsman. The author even affects a sentimental re-union between two veterans long separated by the Kali-Gandaki in their own homeland. Nar Thapa and Khadga Rana were dancing partners and fighting mates in the 2/6th Gurkha Rifles until 1939 and it is only in mid-1970's that they meet again at the author's house in Kathmandu.

The author documents well the changes taking place in rural Nepal over the last decade. These include the impact and responses with regard to agricultural extension, national education system plan, consensus politics after the Second Amendment of the Constitution and Panchayat Development and Land Tax (PDLT). The author himself tried to introduce some innovations by demonstration but admits that patterns of living that had been established since ancient time including black magic, could not be changed overnight.

Ecological degradation and rural or integrated development have become new catch-words in development discussion and the author addresses to these in two chapters. The last chapter dealing with community development problems particularly, includes some relevant observations. The author states that a poor understanding of the total life of the village is a major reason why people involved in development reach wrong conclusions. Again, while the planners may emphasize integration among projects in a particular area, the author provides a different perspective thus: "It's fine to talk about integrated projects, but if they are not truly integrated to the society (and only the villagers themselves will be capable of doing that) integration will remain a sterile theory" (p. 239). And his observations are supported by concrete instances of processes of decision-making and community mobilisation at the local level. One need not complain that the author's Swadesh word list does not have

Magar terms for/

breast, knee, many, sand and skin. What Gary Shepherd has offered in his book is a realistic portrayal of rural Nepal and its basic problems. It is a book to be read with profit by planners and policy-makers.

(The Rising Nepal, 30 July 1982.)

ROMANCE OF THE GURKHAS

The drama was enacted again in 1982 at two flash-points. The bravery of the Royal Nepal Army contingent in Lebanon and a British Gurkha battalion in the Falklands has a unique heritage. The term Gurkha is a British version of Gorkhali which means men of Gorkha, once a small principality in Central Nepal. The Gurkha tradition now is made-up of three strands of the gallant story of hill soldiers in the Nepalese, Indian and British armies. Its genesis goes back to two hundred years under the shadow of Himalchuli. It was Prithvi Narayan Shah who galvanized a hill soldiery to expand and consolidate his kingdom. He subdued the more resourceful Kathmandu Valley kingdoms in 1768-1769 after a tenacious campaign of two decades and later subjugated the western and eastern regions. By 1814, these *khukuri*-wielding soldiers had swept over the entire Central Himalaya from Sutlej to Tista. The Gorkhali force then was composed mainly of Magar, Gurung and Chhetri ethnic groups.

The first regular Gorkhali battalion, Sri Nath, was raised in 1763 and saw action against the British in 1768, Tibet in 1789 and 1855. The Purano Gorakh, also raised in 1763, fought against the British in 1768, in Garhwal and Kangra in 1807 and the Anglo-Nepal war of 1814-16. The other battalions, Sher (raised in 1807), Kali Bahadur (1831), Mahindra Dal (1845) and Shamsheer Dal (1845) were all involved on the British side during the Indian mutiny, confrontations in Burma, North-West Frontier Province during the two world wars.

The legend of Gurkha bravery that emanated from the 1814-16 Anglo-Nepal confrontation soon percolated into the higher echelons of the Honourable East India Company and was finally established with their later exploits in the service of the British India. The first association of Gurkhas with the British had an ironic beginning. The initial Gurkha regiments were raised from Garhwali, Kumaoni and Gorkhali soldiers in the western front in 1815 even before the hostilities had ceased. By the time the recruitment of Gurkhas was formalised in 1886, India already had eight Gurkha Rifles through

clandestine recruitment by individual regiments. The 7th and 10th Gurkhas, originally raised in Burma, recruited Rai, Limbu and Sunuwar tribes from eastern hills, the 9th from the Khasa of western hills and the rest drew men from Magar and Gurung tribes.

The uneasy relationship between Nepal and Britain since the Treaty of Sugauli was converted into one of utter allegiance of the former to the latter with the emergence of Jang Bahadur Rana into power and his subsequent England visit in 1850. During the mutiny of 1857, it was not only the Gurkha regiments under the British but also 12,000 Gorkhalis led by Jang Bahadur himself that fought with decisive results. The Gorkhalis were very prominent during the seize of Azamgrah, Jaunpur, Gorakhpur and Lucknow.

After the Mutiny came the half-century of imperial expansion in the borderlands and everywhere the Gurkhas were in the forefront. They fought in Ambeyla (1863), Bhutan duars (1864), Hazara (1868), Lushai Hills (1871), Perak (1876), Afghanistan (1878-80), Upper Burma (1885), Sikkim border (1888), Manipur (1891), Wana and Kaniguram (1895), Tirah (1897), Peking (1900) and Lhasa (1904).

Here also enters another little-known romance, the Gurkhas as pioneer mountaineers. The Sherpas were still in their mountain fastness when a group of Gurkhas explored and climbed peaks in North-West Frontier, Karakoram and Western Himalaya with Charles Bruce, Francis Younghusband and Lord Conway. With the later in 1894, went Amar Singh Thapa and Karbir Burathoki and traversed the Alps covering 1,600 kilometres in 86 days and crossed 39 passes and 21 peaks. In Switzerland, they ascended a virgin peak of 3,063 metres at the head of Valpingta that was named Piz Gurkha. A col on nearby Catscharauls ridge was named Gurkha Pass. They later climbed in Wales and Scottish Highlands where they are said to have climbed a Skye peak in record time. When the first major Himalayan ascent was accomplished in 1907 on Trisul (7,120 m), Karbir Burathoki was one of the summiters with Tom Longstaff. That was also the year when A.M. Kellas first introduced the Sherpas to climbing in Sikkim Himalaya. Indeed, the first encounters between the Nepalese Gurkhas and Sherpas took place during the early Everest expeditions. The Gurkhas were involved in the Everest expeditions of

1921, 1922, 1924, 1933 and 1937. But soon the call of war drum was to turn them away to new frontiers.

The number of Gurkhas recruited in the Indian Army from 1886 to 1904 was 27,428 and reached 128,770 during 1904-1915. The total recruited during the First World War alone was 114,565 men, the annual peak being 18,296 in the winter of 1915/16. In addition to the total of 200,000 men mobilised in the Indian Army, Chandra Shumsher - another staunch supporter of the British-provided 16,000 men of Nepal's own army to garrison the Indian frontier. The Gurkhas fought with credit in many fronts--Givenchy, Ypres, Gallipoli, Palestine, Mesopotamia, Suez, Persia and Waziristan. Kulbir Thapa and Karna Bahadur Rana were decorated with Victoria Cross for their gallantry in France (1915) and Palestine (1918) respectively.

The involvement of Gurkhas in the Second World War was at an even grander scale. Ten new battalions and further two paratroop battalions were mobilised in addition to the 20 existing battalions in the British service and the final strength expanded to 45 battalions. They were engaged in extended theatres of war - Iraq, Persia, Cyprus, Tunisia, Italy, Greece, Burma, Malaya and Indonesia. Their role of honour was studded with ten Victoria Crosses: Lal Bahadur Thapa in Tunis, Sher Bahadur Thapa and Thaman Gurung in Italy, Gaje Ghale, Ganju Lama, Tul Bahadur Pun, Netra Bahadur Thapa, Agam Singh Rai, Bhanubhakta Gurung and Lachhiman Gurung in Burma. Birta Singh Gurung of 3rd G.R. was decorated with the Russian Star, one of the two awarded to the entire Indian Army.

Two years after the conclusion of the Great War also ended a long chapter of Gurkha tradition under British India. Independence of India in 1947 led to the parting of the ways for the 1st, 3rd, 4th, 5th, 8th and 9th as Indian Gorkha Rifles and that of the 2nd, 6th, 7th and 10th as British Brigade of Gurkhas. Subjects of an independent kingdom but soldiers of two alien states, they became vanguards of separate regional wars. In India, they plunged immediately into the Kashmir battle between India and Pakistan. Then came the Sino-Indian war of 1962 along the Himalayan heights and further sub-continental conflicts between India and Pakistan in 1965 and 1971. Their brethren who opted for the British were engaged in other wars

in Malaya, Indonesia and Brunei. They still man posts in Hong Kong, Singapore and Brunei under various garbs.

As soldiers of fortune, the Gurkhas had many predecessors. Scottish and Irish mercenaries epitomised in Sir Walter Scott's *Quentin Durward* are a vanished breed and the Swiss guards at the Vatican is a singular relict of a distant past. But the Gurkha soldier continues; his demand fluctuating with peace and war in the Indian region and vagaries of British political climate. The Gurkha martial character moulded out of rustic youth matures into a dedicated mercenary. He brings home pension, experience and a common national culture. For the most, the final home coming is as a simple farmer and his toils are as eternal as the hills

(*Nepal Vision* , Vol. II, No. 3, July-August 1984, pp. 8-10.)

IV. POLITICAL CULTURE

GEOGRAPHY OF REFERENDUM

It was the 2nd of May 1980. The pre-monsoon rain or the 'mango shower' was late in arriving. The golden wheat had only been partly harvested while maize fields lay parched and thirsty. Finally, in the afternoon crackled the long-awaited first thunder-storm. By then, nearly half a million adult population of Nepal were at the 10,000 odd polling booths across the country. They had responded well to the call of His Majesty the King for a national referendum to express their choice for the type of political system they wanted. They had been asked to choose between the partyless Panchayat with yellow colour and the multi-party system with blue colour. Their decision would determine the future political destiny of the country.

The result of the national referendum was finally announced twelve days later on May 14th. A majority of nearly 55 percent had voted for the partyless Panchayat system with suitable reforms. In essence, the verdict reflected the average Nepalese people's preference for stability as against change. It was interesting to note that in a country where political opinion polls are yet unknown, the prediction of a group of astrologers came very close to the final result.

This review is an attempt to describe the geographical pattern of voting without any political interpretation. The total number of eligible voters listed by the National Election Commission was 7,192,451 that accounted for half of the total population of the country. Of this, one-third voters were in the central development region, about a quarter in the eastern development region and the remaining 43 percent in two development regions in the west. Again, the eligible voters by geographical regions were spread as follows: 48.1 percent in 37 hill districts, 38.1 percent in 18 tarai districts, 7.7 percent in 15 mountain districts and 6 percent in five inner tarai districts (Table 4).

The voter turn-out was fairly good. The high attendance must be considered significant in that the voting was not for power or policy as in a general election but rather a choice of polity through national referendum. Of the total eligible voters, 4,813,486 or nearly 67 percent cast their votes. The break-down of total votes cast was

TABLE 4: VOTING PATTERN, 1980

Geographic Region	Total Votes	Percent	Votes Polled	Percentage Polled	Invalid Votes	Percentage Invalid	Valid Votes	Partyless Vote	% of Region	Multiparty Vote	% of Region
Mountain Districts (15)	555,913	7.7	340,338	61.2	25,061	7.3	321,275	228,617	71.1	86,568	28.9
Hill Districts (37)	3,461,068	48.1	2,127,615	61.4	158,581	7.4	1,967,295	1,126,169	57.2	844,124	48.8
Inner Tarai Districts (5)	433,233	6.0	278,780	64.3	20,645	7.4	258,135	87,895	34.0	139,021	66.0
Tarai Districts (18)	2,747,237	38.1	2,066,753	75.2	169,041	8.1	1,897,715	848,754	44.6	938,162	55.4
Total (75)	7,192,451	100.0	4,813,486	66.9	372,069	7.7	4,441,417	2,433,452	54.7	2,007,965	45.3

33.9 percent in central region, 25.6 percent in eastern region, 21.5 percent in western region and 18.9 percent in the far west. Out of the total eligible voters within a given development region, the percentage of turn-out shows progressive increase from the west to east: 58.8 in the far west, 66.7 in the west, 68.1 in the central and 72.7 in the east.

There was a similar increase in voter participation from the north to south. The mountain districts showed a turn-out of 61.2 percent while it was 61.4 percent for the hill districts and 64.3 percent for the inner tarai districts. The voter turn-out in the tarai districts was 75.2 percent.

At the district level, 19 districts had a turn-out of more than 75 percent of the eligible voters. Of these, seven were mountain districts and nine tarai districts. The six contiguous tarai districts east of Dhanusa all had a very high voting ratio. Dolpo and Manang recorded 90 percent participation while the lowest was in Baitadi (43%). In the hill region, only Bhaktapur, Lalitpur and Ilam polled more than 75 percent and nine districts in the far west hills polled less than 55 percent. In the tarai, nine districts polled more than 75 percent and Kanchanpur (58 %) was the only tarai district that had less than the national average of 67 percent.

Of the total votes cast, 372,069 or nearly 8 percent was declared invalid. The share of invalid votes by development regions was highest in the central region (28.4 %) and lowest in the western region (20.9 %). The eastern and far west regions each claimed a quarter of the total invalid votes. Within given development regions, the far west had a high invalid vote percentage of 10.3 while it was 6.5 percent in the central region. The eastern and western regions had 7.6 percent and 7.5 percent invalid votes respectively.

The percentage of invalid votes by geographical regions shows a pattern whereby the percentage of vote wastage decreases from the south to north (Table 4). This percentage was 8.1 in the tarai, 7.4 each in inner tarai and the hill and 7.3 in the mountain. Twelve districts recorded more than 10 percent invalid votes and these were six from the tarai and six from the hills. Eleven districts had less than 5 percent invalid votes and only one of these was from the tarai. Manang (0.9 %) had the lowest percentage of invalid votes and Jajarkot (26.8 %) the highest. The percentage of invalid votes in 27

districts exceeded the national average of 7.7 per cent. Of the 12 districts with very high rate of invalid votes, the partyless secured majority in nine.

The partyless Panchayat with suitable reforms secured 2,433,352 of 54.7 percent of the total 4,441,417 valid votes. The partyless side carried not only all the four development regions but all the 14 administrative zones as well. The percentage of partyless majority by development regions was 54 in the east, 54.1 in the central, 53.1 in the west and 58.8 in the far west (Table 5). The partyless carried Karnali zone with an overwhelming 84.1 percent while in Gandaki zone, it edged by a narrow margin of 50.4 per cent.

In terms of geographical region, the partyless side prevailed by 71.1 percent in the mountain and by 57.2 percent in the hills. It got 34 percent in inner tarai and 44.6 percent in the tarai (Table 4). On the other hand, of the 2,433,452 votes cast in favour of the partyless, 46.2 percent was from the hill, 34.7 percent from the tarai, 9.3 percent from the mountain and 3.6 percent from inner tarai. The regional votes in favour of the multi-party was 46.7 percent from the tarai, 42 percent from the hill 6.9 percent from inner tarai and 4.3 percent from the mountain (Table 5).

The partyless gain in the mountain region was 88.4 percent in the west, 73.2 in the far west, 71.3 in the central and 65.7 in the east (Table 5). In the hill region, it carried the east by 65.4 percent, central by 64.3 percent, the west by 62.4 percent and the far west by 53.2 per cent. In the inner tarai, the multi-party won the east by 65.2 percent and the far west by 54.3 percent and lost the central by 34.0 percent. In the tarai, the multi-party gained in the east (52.2 percent), central (55.5 percent), and the far west (51.5 percent) while losing in the west (48.3 per cent).

The partyless side gained majority vote in 54 districts out of 75. It secured very high votes in most mountain districts and fairly high votes in the hill districts (Fig. 2). Although the highest gains by the partyless in the south was 67.9 percent in Parsa and 64.1 percent in Banke, it won in nine of the 18 tarai districts. The highest percentage vote for Panchayat was in Dolpo (96.4) and lowest in Bhaktapur (34.4). The eastern mountain and hill districts was a compact stronghold of the partyless.

FIGURE 2 : MULTI - PARTY VOTE BY DISTRICT



TABLE 5: PERCENTAGE OF VOTES BY REGION

	Far west		West		Central		Eastern		TOTAL	
Region	Party-less	Multi-party	Party-less	Multi-party	Party-less	Multi-party	Party-less	Multi-party	Party-less	Multi-party
Mountain Districts (Reg. %)	73.2 (24.7)	26.8 (11.1)	88.4 (1.7)	11.6 (0.2)	71.3 (4.5)	28.7 (2.1)	65.7 (10.2)	34.3 (6.3)	71.1 (9.3)	28.9 (4.3)
Hill Districts (Reg. %)	62.4 (43.7)	37.6 (39.3)	53.2 (68.8)	46.8 (68.86)	64.3 (28.1)	45.7 (18.5)	65.4 (35.4)	34.6 (22.0)	57.2 (46.2)	42.8 (42.0)
Inner Tarai Districts (Reg. %)	45.7 (10.0)	54.3 (17.0)	-	-	31.7 (3.2)	68.3 (8.3)	34.8 (2.0)	65.2 (4.4)	34.0 (3.6)	66.0 (6.9)
Tarai Districts (Reg. %)	48.5 (21.4)	51.5 (32.4)	51.7 (29.3)	48.3 (31.1)	44.5 (32.9)	55.5 (48.2)	47.8 (52.2)	52.2 (67.2)	44.6 (34.7)	55.4 (46.7)
Total	58.8	41.2	53.1	46.9	54.1	45.9	54.0	46.0	54.7	45.3

Among the nine districts where the contest was close with a narrow margin of 2 percent, the multi-party managed to edge in five. In contrast to heavy polling in favour of the partyless system in many districts, the multi-party nowhere got more than 66 percent votes. The multi-party secured less than 35 percent votes in 24 districts.

The main gain by the multi-party were in Bhaktapur (65.6%), Udayapur (65.1%), Siraha (64%) and Bardiya (62.1%). It got high votes in 12 districts but polled less than 45 percent in 42 districts. The multi-party, however, won four of five inner tarai districts and also carried the three districts with regional development centres except Dhankuta. Apart from the three districts of Kathmandu Valley, it also made deep in-roads into some hill districts served with roads.

The over-all regional pattern that emerge may be stated very briefly as follows. The partyless side had an overwhelming dominance in remote areas and most of the hill districts that polled more than 45 percent votes. One was made up of ten districts in western tarai and hills and another of seven tarai and hill districts in the far west. In inner tarai districts, inhabited mostly by new settlers, there was a higher propensity for the multi-party and only Sindhuli remained pro-partyless.

The partyless maintained a strong-hold in some large districts in the tarai including those with urban centres (Jhapa, Saptari, Dhanusa, Parsa and Banke). Otherwise, no specific pattern could be discerned in the populous tarai districts except the preference for multi-party in the extreme western tarai districts.

It would be misleading or even spurious to try to explain the voting pattern in terms of hill-tarai dichotomy and such cultural factors as ethnicity or religion. The more realistic factor seems to be the level of economic and social development. For example, of the eight districts that had high literacy rate of above 20 percent during the 1971 census, seven went to the multi-party side. On the other hand partyless side carried 18 out of 23 districts with very low literacy rate, below 10 percent. The multi-party also won majority of the districts with town panchayats and hill districts with highways. The highways that sustain development in these areas obviously convey political innovation as well to the inhabitants.

Pablo Picasso suffered through his blue period and Van Gogh reveled in yellow sunshine. In a more prosaic painting parlance, both the yellow and blue are primary colours that when mixed yield the secondary green - a soothing colour. And the narrow margin of vote difference among the two contending sides ordain for a subtle chemistry during the present phase of political transition in the country. The people have indicated their preference and it is for the politicians and policy-makers to ponder on its long-term implications

(The Motherland, 9 June, 1980.)

SOCIOLOGY OF ELECTION

The Nepalese people were involved in two significant political events in the last two successive years. On 2nd May 1980, they were asked to give their preference between two political systems and in which the partyless Panchayat system held on with a narrow majority.¹ Then a year later, on 9th May 1981, they had to choose their representatives to the national legislature in a nation-wide direct election. Both the national referendum and the general election were tumultuous moments in which the general populace was directly involved in the political process.

The general election of 1981 was not however the only time the Nepalese were electing their representative through adult franchise. The first general election was held in February 1959 and it took nearly eleven weeks for the announcement of the last result.² It is indicative of the improved communication situation over the last 22 years that the final return of the 1981 election was announced within 10 days inspite of re-polling in some booths.

In 1959, there were 4,246,468 voters and this increased to 7,793,119 in 1981. The number of candidates for 109 seats in 1959 was 768. In the present election, there were 1,096 candidates contending for 112 places. The voter turn-out was about 42 percent in the earlier election compared to 52.2 percent this time. Other comparable features of the two general elections were the candidacy security of Rs. 250 in 1959 as against Rs. 1,500 in 1981 and election expenditure ceiling of Rs. 5,000 in 1959 and Rs. 30,000 in 1981. The most distinguishing difference in the two elections, of course, was that while the earlier one was fought on the basis of political parties, the latter was contested under the partyless principle of the Panchayat system.

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1. Harka Gurung, " Geography of referendum", *The Motherland*, 9 June 1980.
 2. G. B. Devkota, *Nepalko Rajnitik Darpan* (Political Mirror of Nepal), Kathmandu, 1979-80 (Second Edition), Vol. I, pp. 671-690; Vol. II, pp. 79-112. See also Bhuwan Lal Joshi and Leo E. Rose, *Democratic Innovations in Nepal*, Berkeley, 1966, pp. 292-299.

i. The Voting Mass

The total number of voters registered in the 1981 election was 7.8 million. This was an increase of 8.3 percent since the referendum in 1980 and over 83 percent increase since 1959. The break-down of voters by development regions was 32.9 percent in the central, 24.1 percent in the eastern and 21 percent each in the western and far western region. On the other hand, the distribution of voters by geographic regions was 46.1 percent in 37 hill districts, 39.3 percent in 18 tarai districts, 7.3 percent in 15 mountain districts and 6 percent in 5 inner tarai districts.

In spite of the boycott call of certain political groups, 4,073,836 or 52.2 percent of the total eligible voters went to the polls. The voter turn-out was higher than that of the 1959 election but much less than that of the referendum. During the referendum, the turn-out was highest (72.7%) in the eastern region and lowest in the far west (58.8%). In the 1981 election, the voting was highest (59.1%) in the central region and lowest (44.5%) in the far west. However, all development regions recorded a lower turn-out rate than during the referendum.

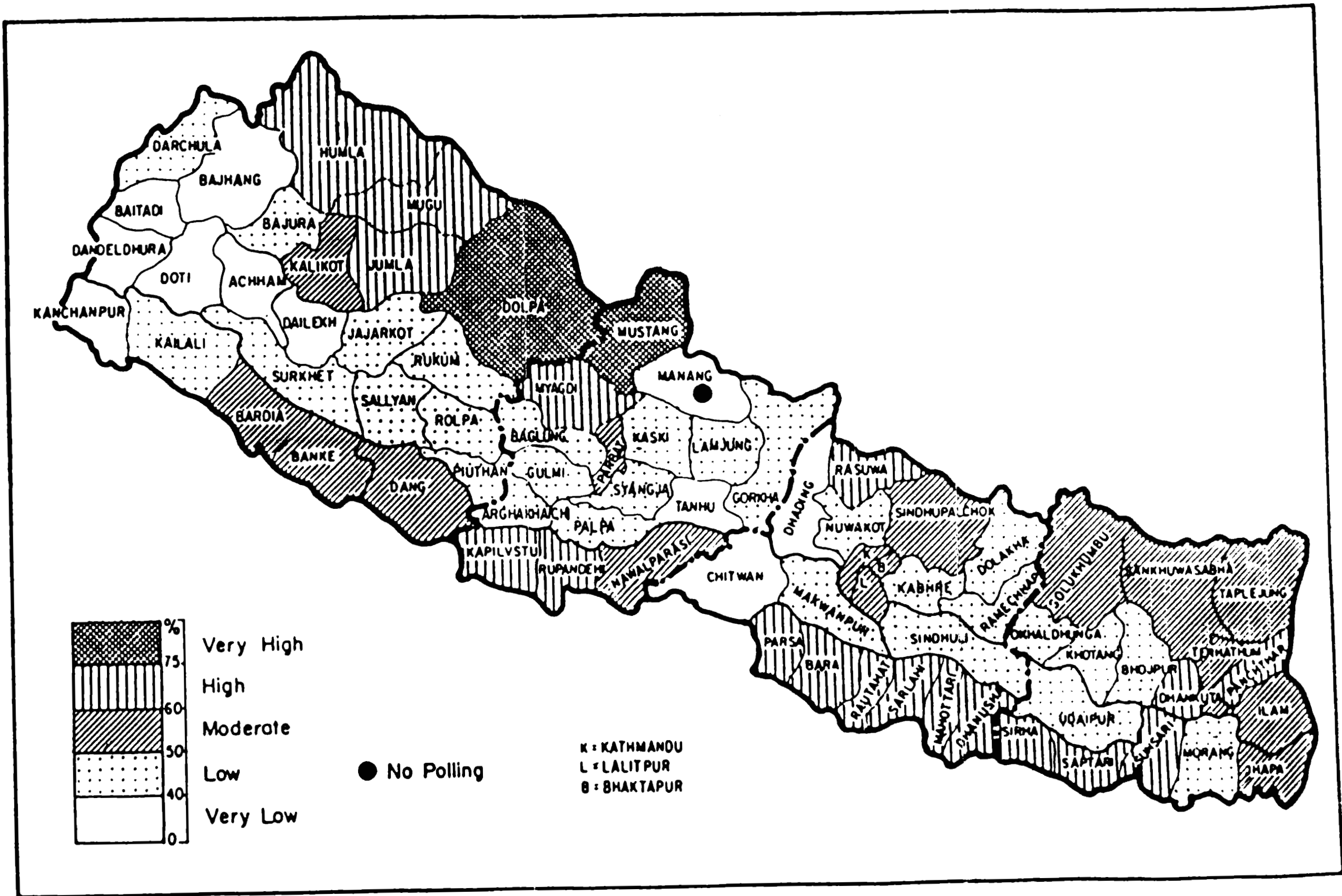
The voter turn-out by geographical region was 64.4 percent in inner tarai, 57.2 percent in the tarai, 51.9 percent in the mountain and 47.9 percent in the hill (Table 6). The pattern of increasing participation from the west to east was similar to that during the referendum but the earlier pattern of increasing participation from the north to south was disturbed by the lower turn-out in the hill districts. The percentage of participation remained the same as in the referendum in inner tarai but declined by 18 percent in the tarai, by 13.5 percent in the hill and 9.3 percent in the mountain districts.

Table 6: VOTING PATTERN, 1981

Geographic Region	Total Voters	Votes Polled	Percent	Invalid Vote	Percent
I. Mountain					
Districts (15)	5,75,937	2,99,285	51.9	28,289	9.4
East	1,79,112	96,035	53.6	8,535	8.8
Central	1,01,878	46,263	45.4	3,885	8.3
West	7,756	6,378	82.2	459	7.1
Far West	2,87,191	1,50,609	52.4	15,410	10.2
II. Hill					
Districts (37)	35,99,532	17,25,729	47.9	86,011	4.9
East	5,74,184	3,01,537	52.5	15,284	5.0
Central	11,31,027	5,65,476	49.9	22,483	3.9
West	11,75,976	5,25,369	44.6	27,101	5.1
Far West	7,17,335	3,32,347	46.2	21,143	6.3
III. Inner					
Tarai (5)	4,72,046	3,03,685	64.3	15,947	5.3
East	76,183	36,644	48.0	2,359	6.4
Central	2,03,294	84,780	41.7	8,339	9.8
West	-	-	-	-	-
Far West	1,92,569	97,481	50.6	96,440	5.4
IV. Tarai					
District (18)	30,67,271	17,57,244	57.2	96,440	5.4
East	10,54,053	6,41,193	60.8	35,468	5.5
Central	11,31,021	7,38,636	65.3	29,685	4.0
West	4,80,720	2,86,565	59.6	15,064	5.2
Far West	4,01,477	1,84,506	45.9	16,223	8.7
TOTAL	77,93,119	40,73,836	52.2	2,26,705	5.6

During the referendum, 19 districts had a very high turn-out of more than 75 percent. But this time, only Dolpo and Mustang, both mountain districts, belonged to this category (Fig. 3). Among the 21 districts that polled over 60 percent, seven were mountain districts, 11 tarai districts and only three hill districts. The nine contiguous tarai districts from Parsa to Sunsari all polled over 60 percent. Twenty-

FIGURE 3 : VOTES POLLED BY DISTRICT, 1981



seven districts polled low, 40 to 50 percent, and of these 23 were hill and inner tarai districts. Districts that polled very low, e.g. below 40 percent, formed two compact blocks. One group was composed of Chitawan, Tanahu and Dhading and the other group was made-up of seven far western districts with its core in Doti that had the lowest voting rate of 27 percent. As a general pattern, the tarai districts had a higher participation rate and it was low in the hill of which only five districts exceeded the national average of 52.2 percent.

Of the total votes cast, 226,705 or 5.6 percent was declared invalid. This was lower than that of the 7.7 percent during the referendum. Similar to the situation during the referendum, the highest percentage of invalid votes was in the far west (7.8%), followed by the east (5.7%), west (5.2%) and central (4.3%) regions. However, the pattern by geographical region was reversed. The tarai that had a high invalid percentage of 8.1 during the referendum had only 5.3 percent this time (Table 6). The percentage of invalid votes in the mountain districts increased to 9.4 percent as compared to 7.3 percent in 1980. The hills with 4.9 percent and inner tarai with 5.3 percent showed an improvement of 2.5 percent and 2.2 percent respectively. Among the 10 districts with over 10 percent invalid votes, five were mountain, four hill and only one tarai district. Of the 28 districts that recorded less than 5 percent invalid votes, 20 were hill, eight tarai and none among mountain districts. The highest percent (15.3) of invalid votes was recorded in Jumla and the lowest (2.8%) in Kabhre-Palanchok. In all, 38 districts had a lower percentage of invalid votes than the national average of 5.6 percent.

ii. The Contending Class

In all, 1,451 political aspirants filed nomination for 112 places in the 1981 general election. About half of the aspirants were from the hill, nearly a third from the tarai and just over 10 percent from mountain districts. However, 353 or about a quarter later withdrew from the contest. The regional distribution of those withdrawing were: 46.1 percent in the hill, 29.7 percent in the tarai, 15.5 percent in the mountain and 8.4 percent in the inner tarai.

Finally, 1,096 candidates were left in the field to contest for 112 places in the Rastriya Panchayat. This meant more than 9 candidates for one seat in the national legislature as compared to seven

candidates for one place in 1959. The ratio of candidates to seats by geographical regions is given below:

Region	Seat	Candidate	Candidates per seat
I. Mountain districts	15	103	6.9
II. Hill districts	58	559	9.6
III. Inner tarai districts	7	85	12.1
IV. Tarai districts	32	350	10.9
	112	1097	9.7

In 1959, all the 109 constituencies were independent each with one representative to be elected. The 1981 constituencies were based on the Second Amendment of the constitution whereby districts with larger population had two seats and smaller districts one seat. All the 15 mountain districts fell into one-seat category while 21 hill districts, 2 inner tarai districts and 14 tarai districts fell into the two-seat category.

Another fundamental difference between the two general elections was the political basis of the contesting candidates. During the earlier election, there were 700 candidates representing nine political parties and 268 independent candidates. The present election was on the other hand fought on partyless principle. Each candidate was given a distinct symbol but there was little to choose from the common catch-word of slogans and appeal of the candidates except in emphasis.

In order to understand the nature of political elites, one could look into the past political affiliation if not the present inclination of the various candidates. This also provides some indication on the continuity and change among candidates during the 1959 and 1981 elections. It is interesting to note that of the 768 candidates of 1959, nearly 11 percent or 70 candidates were again active in the field in 1981. These 'repeater' candidates after an interval of 22 years were spread over 43 districts. Some districts witnessed more than one old rival pitted against one another. Rupendehi had five of these veterans although one had migrated from Doti and another from Syangja since

the 1959 election. Lamjung had four repeater candidates and the one that had lost to the then winner, turned the table against his rival this time. There were three repeater candidates in Kathmandu, Bhaktapur, Sindhu-Palchok, Nuwakot, Nawal-Parasi and Palpa while Kabhre-Palanchok, Makwanpur, Gorkha, Syangja, Banke and Bhojpur had two each.

Of the 70 repeater candidates, 29 had contested in 1959 as independent candidates, 18 for Nepali Congress, eight for United Democratic Party, six each for Gorkha Parishad and Praja Parishad and one for Tarai Congress. Among them were also 11 former elected members of the Pratinidhi Sabha (House of Representative). In addition, seven former members of the Mahasabha (Senate) participated in the 1981 election. There was, however, more continuity in terms of those candidates who had been politically active since the introduction of the Panchayat system. In all, 96 former and 48 sitting members of the Rastriya Panchayat contested the election this time. The number of ministers among the contestants was 66, including 14 incumbents.

In contrast to the obfuscation regarding political background and belief of the candidates, we are on a firmer ground when examining their social profile. This also provides some indication of societal change in national politics when compared to the situation two decades ago. The percentage of candidates from hill ethnic caste/groups increased from 76.9 percent in 1959 to 81.9 percent in 1981. In contrast, candidates among tarai caste-religious groups declined by 5.3 percent during the same period. The number of Chhetri (including Thakuri) candidates remained high with 29.8 percent in 1959 and 30.7 percent in 1981. The second largest group among political elites were hill Brahmins whose percentage of candidacy increased slightly from 25.3% percent in 1959 to 25.9% in 1981. The overwhelming number of candidates from these two caste groups is not surprising because of their widespread distribution throughout the country. Thus, Chhetri candidates contested the 1981 election in 69 districts and Brahmins in 61 districts. The percentage of hill tribal candidates increased from 11.8 percent to 14.4 percent while that of Newar candidates decreased slightly between the two elections. Tribal candidates were represented in 42 districts and Newar candidates in 38 districts.

In the tarai, all three important caste groups showed decline in the percentage of candidates. The largest decrease (3.7%) was among tarai Brahmins and they contested the 1981 election only in 8 tarai districts. The percentage of candidates among landed castes (Rajput, Bhumihar, Yadav) who contested in 14 districts including one in the hills also decreased slightly. They, however, continued to form the largest of the tarai social groups with 6.6 percent of the total candidates. Candidates among trader caste/groups who contested the election in 15 districts also showed some decrease. The tarai social groups that showed some increase in number of candidates during 1959-81 were the tarai tribals and Muslims. The tarai tribal (Tharu, Rajbanshi, Dhimal) candidates increased by 0.3 percent and Muslim candidates by 0.7 percent. Among the tarai tribals, the most numerous were Tharu candidates and they participated in 15 districts. Muslim candidates were involved in 14 districts including two in the hills.

iii. Winners and Losers

A large number of candidates contesting for a limited number of places obviously meant that there would be many losers. And the rate of attrition was proportionate to the proliferation of candidates for a given place whether the district was one-member or two-member constituency. Apart from Manang which sent its representative unopposed, Humla, Dolpo, Mustang, Rasuwa, and Panchthar all had less than 4 candidates. Bhaktapur and Dolakha, with 21 each had the highest number of candidates among one-seat districts. In the case of two-seat districts, Kabhre-Palanchok led the field with 35 candidates, closely followed by Kathmandu and Jhapa, while Baglung had only seven candidates.

Many candidates forfeited their deposit for failing to secure the minimum five percent of the votes cast. Among the 16 districts for which details are presently available, on the average, 60.9 percent candidates lost their deposit. The percentage of candidates who forfeited their deposit ranged from 26 in Kapilvastu to as high as 85 in Kathmandu.

Among the 70 candidates from the 1959 election who contested again, only 17 won and 53 lost. This Group of 70 also included 14 former members of Pratinidhi Sabha and of these 11 lost this time. The overall performance of these 70 old guards was as follows: 3 repeated success even after an interval of 22 years, 11 former

representatives lost, 16 made up the loss of 1959 and 40 failed in both elections. On the other hand, among the seven former Rajsabha members who participated in the election 1981, five were successful.

Another political aspect, although of a speculative nature, is related to the performance of the so-called "official" candidates. The exercise remains conjectural since the list of these candidates was not published. However, according to one reliable estimate, at least 59 of the 'official' candidates lost in the election. Majority of them lost in the tarai districts where the voter turn-out was much higher. In eight districts with two seats, both such candidates were defeated.

Candidates associated with the Rastriya Panchayat in the past or present were much in evidence in most districts. Kailali, Bajhang and Bajura were the only districts where all the candidates were new aspirants. Among the 96 former Rastriya Panchayat members who contested this time, only 25 won. Of the 69 sitting members, 48 contested and of whom, 22 lost including 5 ministers. In all, 66 former and present ministers participated in the election and 37 lost. Among the 66 ministers, 14 were incumbents of whom 9 were returned. In Kathmandu district, 6 former and present R.P. members including four former ministers contested and only one was successful. Of the five districts where four candidates associated with the R.P. were involved, one district sent two and three districts sent one each. There were 13 districts with three R.P. associated candidates and of these three sent two each, five sent one each and five sent none. Among the 30 districts with two R.P. associated candidates, only one district sent both former members, 21 district sent one of the former members and eight rejected them.

There were at least 34 women candidates contesting the present election. Women candidates participated in 19 districts including five of them in Kathmandu. Among the women candidates, 21 were from the hill and 13 from the tarai. Only two of them won, one with a surprisingly large majority from the capital. There were only two candidates among occupational castes in 1959. The number of such candidates increased to 15 in 1981 but none were elected. Among the four professionals, three Ph.D.'s and one engineer, who participated in the present election, only two succeeded.

Very few candidates won with an overwhelming majority. Among the winners in single constituency districts and the highest vote-getter in double constituency districts, only 11 candidates secured more than 50 percent of the total votes cast. The number of those securing 40 to 50 percent vote was 15 and those receiving 20 to 40 percent were 41. Seven candidates won the election with less than 20 percent vote, the lowest one being 16.5 percent. Among those who lost narrowly 34 were former or incumbent R.P. members, including 12 former ministers and 3 incumbent ministers.

A brief note regarding the election symbols may be relevant here. The symbols that appeared on top of the ballot paper seemed a clear preference among voters. The top left hand symbol, umbrella, got 19 winners and the top right hand symbol, sun, had 18 winners. Other symbols nearer the top were plough with 10 winners, cow and jar each with 7 winners. The symbols on the lower half of the ballot paper had only 3 winners.

iv. Composition of the House

The composition of the national legislature may be examined from both social and political aspects. But first about the new entrants. Of the 112 elected members of the Rastriya Panchayat, 61 or 54.4 percent are new faces. Among these, 19 are from central region and 14 each from other three development regions. And geographically, 39 new members are from the hill while 22 are from the tarai. There were 21 hill districts with 2 seats and of these, six districts sent fresh representatives and 13 returned one new face. Of the 16 tarai and inner tarai districts with two seats, three sent new representatives and the rest sent one new representative each.

A comparison of the composition of the new Rastriya Panchayat with earlier national legislatures shows some positive trend. From the point of regional representation, the present house provides a more favourable picture not only than that of earlier Rastriya Panchayats but also including the Pratinidhi Sabha of 1959. The percentage of the hill social group was 85 percent in the 1959 House by direct election. Their percentage increased to 89 in the Rastriya Panchayats of 1969 and 1975 that were formed by indirect election through the zonal assemblies. The percentage of the hill group was 85 in 1978, same as of 1959, after the introduction of

consensus politics following the Second Amendment of the constitution.

In the present House, the percentage of the hill group is down to 81.4 percent and if we take only among the 112 elected members, their percentage comes to 79.4 (Table 7). Thus, the 1981 percentage of tarai social group was 3.5 percent more than that of 1959 and 1978. With the rapid increase of population in the tarai over the last two decades, it seems justified that there should be a proportionate increase in regional representation.

TABLE 7: ETHNIC/CASTE REPRESENTATION, 1959-1981

	<u>1959</u>		<u>1978</u>		<u>1981</u>		<u>Change</u>	
	No.	%	No.	%	Elec.+Nom.	%	59-81	78-81
Hill Group								
Hill Brahmin	30	27.32	27	21.26	14 + 4	13.33	-14.19	- 7.93
Chhetri	34	31.19	46	36.22	41 + 8	36.29	+ 5.10	+ 0.05
Newar	4	3.67	10	7.87	9 + 2	8.14	+ 4.47	+ 0.27
Hill Tribal	17	15.60	24	18.90	25 + 6	22.96	+ 7.36	+ 4.06
Occupational								
Caste	-	-	1	0.79	- + 1	0.74	+ 0.74	0.04
Total	85	77.98	108	85.02	89 + 21	81.48	+ 3.50	- 3.54
Tarai Group								
Tarai Brahmin	4	3.67	3	2.3	-	-	3.67	- 2.3
Landed Caste	11	10.09	9	7.0	8 + 1	6.66	- 3.43	- 0.34
Trader Caste	3	2.75	2	1.57	2 +	1.48	- 1.27	- 0.09
Tarai Tribal	4	3.67	4	3.15	11 +	8.14	+ 4.47	+ 4.99
Muslim	2	1.83	1	0.79	2 + 1	2.22	+ 0.39	+ 1.43
Total	24	22.01	19	14.9	23 + 2	18.50	- 3.51	+ 3.60
Total Hill and								
Tarai	109	100.0	127	100.0	112 + 23	100.0	-	-

Another feature of the 1981 House is the increased political representation of certain social groups that had fewer members in the earlier legislatures. If we compare the social make-up of the legislatures of 1978 and 1981, there have been some distinct changes in the percentage of different ethnic/caste groups. The largest gain was among tarai tribals (4.2%) followed by hill tribals (2.5%),

Muslim representation increased by 1.4 percent and there were marginal increases in the percentage of Chhetri and Newar representatives. Hill Brahmin representation decreased by 8 percent and there was also a slight decrease in the share of tarai landed castes and trader castes.

As indicated earlier, the 1981 House consists of more than half of newly elected members. However, not all entrants are new political personalities. Three are former members of 1959 Pratinidhi Sabha, two of the 1959 Mahasabha and 16 veterans of the first general election. Among the new members are also included a few old party stalwarts who decided to join the Panchayat mainstream after the referendum verdict.

The present Rastriya Panchayat is therefore, composed of a wider spectrum of elements owing to two political factors. First, the very mechanism of direct election through adult franchise led to the rejection of some traditional elites in politically-conscious districts: the people voted in favour of younger and popular candidates. Second, since the candidacy was allowed liberally without any political screening, men of varying shades of political belief also found entry into the new House. There is, therefore, a possibility that the distant echo of the referendum debate may be audible on the House floor. Although many candidates resorted to communal appeal during the campaign in the absence of distinctive political slogans, it is more likely that the House will see regional and new political alignments for privilege and power. Many representatives have made to the House at great cost in terms of their energy and resources. Both for them and the countrymen who voted, the politicking in the forthcoming Rastriya Panchayat will have much at stake. To the nation at large, the political performance of the new House has much significance since it will determine the future course of national politics.

(The Motherland, 20 June 1981.)

MAKING OF A NATION

National integration is a political idea and an ideal. It implies a national state where citizens have full right without any form of segregation. The terms state and nation are not completely synonymous concepts. The state is a political organization of a section of land and a section of people. Nation also denotes a community of race, language and religion. A political state may include various such nationalities. All states occupy space, large or small, and they administer the people and resources within that space. The authority to administer is derived from political power that may be "either usurped by a few or else granted by many to those who control the state".¹ The power structure is maintained by fear as well as love and loyalty. Thus, the relationship between the rulers and the ruled is an important aspect of national integration.

Space denotes territorial parts that may vary in distance from the power centre in culture content and population density. The state, therefore, should have a *raison d'être*, reason for existing, without which the centrifugal forces² would disrupt the state-area as a single entity. Power needs to be sustained by the state-idea. Those states are strongest "in which the political idea of the stage fills the entire body of the state, extends to all its parts".³ National integration is much more than obedience and conformity: it denotes political unity and allegiance to a single government.

The present paper is a preliminary enquiry into the integration of Nepal as a national state. The focus is on the socio-economic dimension. The opening section deals with the making of Nepal to its present territorial extent. This is followed by sections on the

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1. William F. Christians, "Geography and the origin of national states", in *Global Geography* edited by E. Willard Miller, George T. Renner and Associates, New York: Thomas V. Crowell Co., 1958, 2nd edition, p. 358.
 2. Richard Hartshorne, "The functional approach in political geography", *Annals Assoc. Amer. Geogr.*, Vol. XL, No. 2, 1950, pp. 95-130.
 3. Friedrich Ratzel, *Politische Geographie*, Munich/Berlin, (3rd ed.), 1923.

identifications of its socio-economic components and their inter-face. The fourth section relates to the spatial aspect in relation to power and resource base. The concluding section attempts to assess the current state of national integration with some propositions.

i. Space and Expansion

Most states grow round a nucleus and expand by conquest and aggrandizement. The case of Nepal was no different. Until the mid-18th century, the territory presently occupied by Nepal was a congeries of diverse political units. Despite the proliferation of states, petty-states and tribal units, there were four broad regions of political culture. These had drainage basin foundations: Bagmati, Kosi, Gandaki and Kamali. The most distinctive political culture developed early at the head-waters of the Bagmati. The basis was horticultural productivity and trade surplus. It supported the growth of city-states as early as the 5th century A.D. Economic prosperity contributed to cultural accretion. It attracted distant conquistadors and looters. The looters left with what they got while the conquerors imported their deities and imposed a cosmopolitan culture. Here, in the Nepal Valley of the Newars was rooted the kernel of present-day Nepal. It is not a primordial notion as even now for most common people, Kathmandu Valley is *the* Nepal.

East of the Nepal Valley was the Kosi basin inhabited by various Kirant tribes. The largest groups were the Tamang west of Tamba Kosi, the Khambu between Tamba Kosi and Arun, and the Limbu east of Arun. Political organization was based on a loose association of tribes with some confederation. Of these, the League of Ten Limbus (Yakthumba) was well-established during the medieval period.⁴ The Kirant tribes were hill-based and their conflict during the modern period was directed mainly to the east against the Lepcha of Sikkim.

West of the Nepal Valley lay the Gandaki basin. Its early inhabitants were the Magar, mainly in the lower hills. They were the western off-shoot of the Kirant and bore the brunt of Khasa expansion from the west since the 12th century. During the medieval period, they had a confederation of Twelve Nations (Barah Magarant)

4. I.S. Chemjong, *History and Culture of the Kirat People*, Phidim, Tumeng Hang, 3rd ed, 1966.

mainly along lower Kali-Gandaki. The higher region was occupied by the Gurung with a league of Nine Chiefs (Gyu Rong). These were later supplanted by the Ghale from Manang. Barah Magarant disintegrated with the penetration of Khasa Thakuri from the west and Sen Thakuri from the south. By the 18th century, the Gandaki basin had at least 24 (Chaubisi) petty states with Thakuri chiefs.⁵ Gorkha was the eastern-most lordship in direct contact with the Nepal Valley.

The Karnali basin extended as a large area west of the Gandaki. It was the eastern extension of the Khasa realm. Except for the northern belt of snows (Jadan), the region had a homogeneous Khasa population. The Khasa Mallas of Jumla had an imperial tradition from 11th to 14th century including Kumaon, and Guge and Purang in Tibet.⁶ After the 14th century, the Khasa empire splintered into numerous petty states. By the second half of the 18th century, these states numbered 22 (Baisi) and in addition their chiefs sired those who ruled over some of the Chaubisi states west of the Kali Gandaki.

Such was the broad regional canvas when the House of Gorkha was searching for a wider *lebensraum* (living space) during the mid-18th century. It could only turn east as it was borne of the west. There was a gap of 58 years between the establishment of Bhirkot (1501) and Gorkha (1559) states in six generations of a family via Nuwakot, Kaski and Lamjung.⁷ It took Gorkha another 185 years to cross east of the Trisuli river. During this period, a nation was in ferment. Since the establishment of the state, the Gorkha kings had the active support of their Brahmin, Khasa, Magar and Gurung subjects. Unto this multi-ethnic society, Rama Shah (1606-36) introduced a commercial community from Patan and a sophisticated social and legal system modelled on the Nepal Valley. Gorkha was a small state but with the advantageous combination of Khasa and Kirant manpower and Nepal Valley cultural influence.

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5. Francis-Buchanan Hamilton, *An Account of the Kingdom of Nepal and of the Territories Annexed to this Dominion by the House of Gorkha*, Edinburgh, 1819.
 6. Giuseppe Tucci, *Nepal: The Discovery of the Mallas*, London, 1962, Trans. Lovett Edwards, 1956.
 7. Babu Ram Acharya, *Sri Panch Bada Maharajdhiraj Prithvinarayan Shah Ko Samchhipta Jivani*, Kathmandu, Royal Press Secretariate, 4 Vols., 1967.

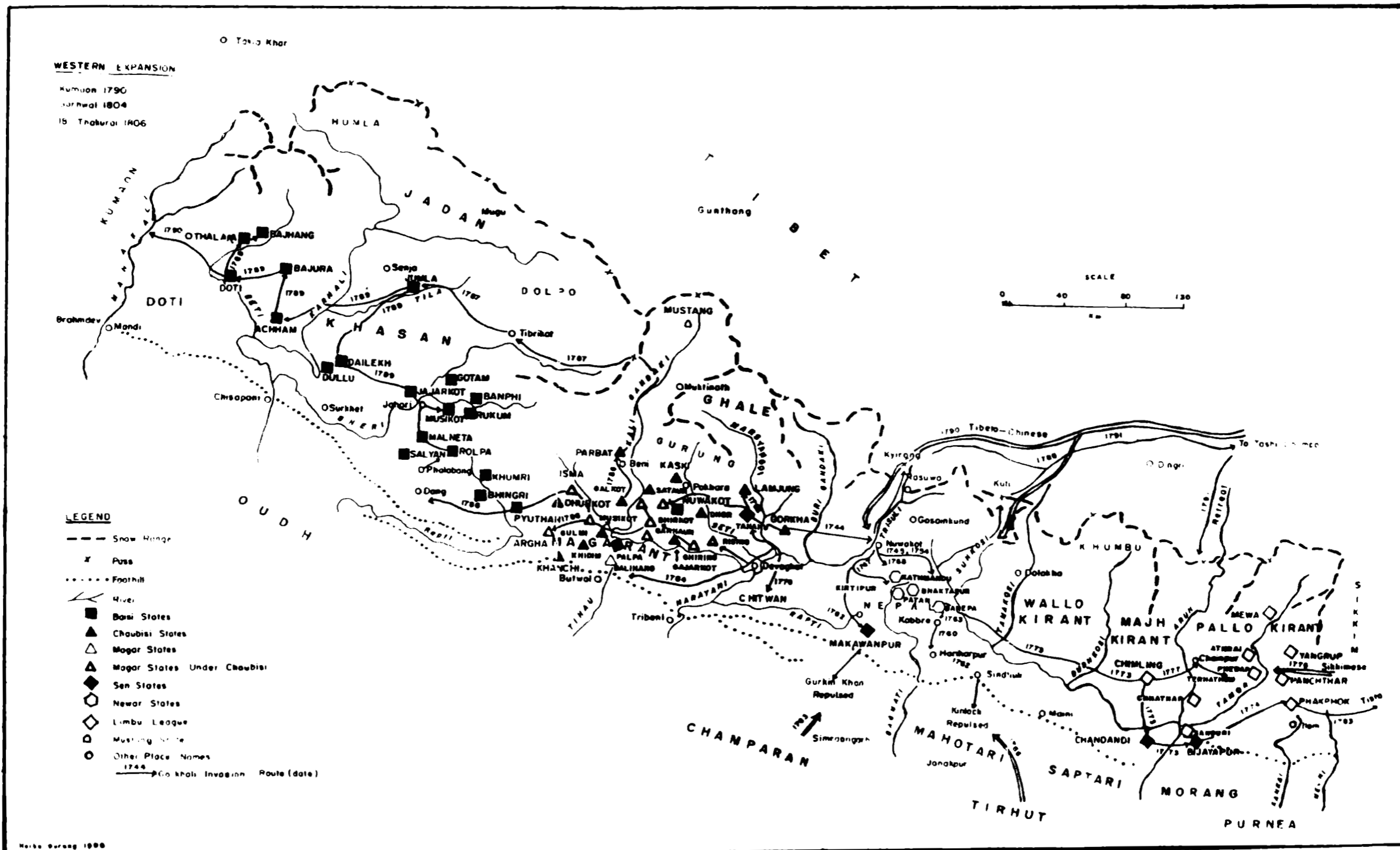
The expansionist phase of Gorkha began immediately after the accession of Prithvi Narayan Shah (1743-75).⁸ What he sought to do, Newar Mallas had no need (with extended trade hinterland) and Palpa Sens had squandered (parceling of patrimony). The capture of Nuwakot in 1744 was the commencement of the Gorkha expansion (Fig. 4). Prithvi Narayan pursued his ambition of creating a larger Gorkha with perseverance and tenacity. It took nine years to hold Naldum and defeat Kirtipur. The conquest of Nepal Valley kingdoms was a long campaign of 25 years. During this time, Gorkha also had to contend with attacks from her western neighbours in 1755, 1763 and 1766 as well as from the south in 1763 (Gurgin Khan) and 1866 (Kinloch). Prithvi Narayan become king of Nepal on 12th November 1769, when the combined last stand of the Newar kings collapsed at Bhaktapur.

After the conquest of Nepal Valley, Gorkha turned west in the Gandaki territory but was beaten back in 1772. This was followed by the eastern campaign reaching Bijayapur in 1774. By 1783, they had reached the Tista. The second, western campaign began in 1782 by capturing Lamjung and Tanahu.⁹ Other states east of Kali-Gandaki were taken during 1784-85 and those to the west in 1786. In the Karnali basin, they had to face considerable resistance from Jumla (1789) and Doti (1789). By 1790, Gorkha had crossed the Mahakali river to over-run Kumaon. Garhwal was taken in 1804 and the land between Jumna and Sutlej in 1806. It took 9 years to subdue the Kosi area and Sikkim and 17 years to subdue the Chaubisi and Baisi states. The march further west involved another 16 years. Thus, between 1806 and 1815, Nepal extended nearly 1,500 kilometres from the Sutlej to Tista. It was not only over-extended but a challenge to a newly emerging regional power in the plains of Hindustan. Anglo-Nepal War of 1814-16 forced Nepal to abandon Sikkim after 33 years' rule and Kumaon after 25 years' rule. The present eastern and western boundaries of the country was thus defined 171 years ago.

8. Ludwig F. Stiller, S.J., *The Rise of the House of Gorkha*, New Delhi, Manjusri, 1973.

9. Mohan Bahadur Malla, "Baise Chaubise Parichaya", *Nepali*, No. 66, B.S. 2032 (1975).

FIGURE 4 : CONQUESTS OF GORKHA, 1744 - 1814



i. Diversity and Disparity

Nepal is a small country with immense diversity. It was ordained by the locational aspect. This was a land of transition between the northern highland and southern lowland (natural) as well as the occidental Khasa and oriental Kirant (cultural).¹⁰ How such a diverse land emerged as one political unit was due to two specific barriers. To the north lay the snow ranges that provided seasonal passage to traders and herders but was an effective political frontier. In modern times, only four military expeditions have managed to cross it: Nepalese (1788), Nepalese (1791), Chinese-Tibetan (1792) and Nepalese (1856). To the south, the malarial tarai was an effective ecological barrier, particularly during the long summer. Refugees, adventurers, preachers did come from the plains during the salubrious season but regular inter-course was only for trade. So, much of the movement of the people and political contest was along the hill corridor confined by these two barriers.

The main diversity was represented by geographic regions according to elevation.¹¹ The lowlands beyond the Chure foothills was known as *Madhesh* or the tarai. With a pronounced tropical climate, it supported dense forests and grassland. Forest products and extensive cultivation were the main source of income. Between the Chure Range and Mahabharat Lekh lay the Bhitri Madhesh, known as *dun* in the west, *madi* in the centre and *khonch* in the east. Limited in extent, it formed a distinct transition zone between the plain and the hill regions. With the increase in hill population, Bhitri Madhesh became the first stepping-stone to lowland migration.

North of Mahabharat Lekh but south of the main Himalaya was the broad belt of the hill country known as *Pahar*. Climate was sub-tropical with potential for growing a variety of crops. With the exception of the elevated Kathmandu Valley, lower river valleys (*kachhar*) were avoided for its humid climate and malaria. The settlement process of the hill region was lateral expansion for cropland through forest clearance. At elevations with warm temperate climate

10. Suniti Kumar Chatterji, *Kirata-Jana-Krti, The Indo-Mongoloids: Their Contributions to the History and Culture of India*, Calcutta, The Asiatic Society, 1974.

11. Harka Gurung, "Landscape pattern of Nepal", *The Himalayan Review*, Vol. IV, 1971, pp. 1-10.

climate (*lekh*), the economy was based on dry crop farming and livestock rearing.

The high mountains and northern territories represented the mountain region variously known as *Jadan* (west) *Seshant* (central) and *Bhotang* (East). It had another geographic distinction. Those in the east were entirely cis-Himalayan while in the central and western section, it included extensive trans-Himalayan tract called *bhot*. Climate ranged from temperate to tundra and the economy relied on the trilogy of trade, pastoralism and agriculture.

The altitudinal differences between the various geographic regions imply friction in space, that is, the physical effort of climbing and descending. It was equally true in the east-west dimension traversed by numerous rivers. Geographic regions also meant differences in their natural resources, economic activity and products. Commodity exchange through trade, thus, became an important aspect of linkage among the regions. Diversity of products promoted regional inter-dependence. Long-distance trade had a definite seasonal rhythm: during winter to the southern border and during summer to the north. The hill region located between these two frontiers had the advantage of an intermediary. This pivotal role was most pronounced in the case of Nepal Valley in India-Tibet trade. For example, during 1830/31, eleven percent (in value) of Indian imports to Kathmandu was re-exported to Tibet while of the Tibetan imports, 57 percent was re-exported to India.¹²

Natural and economic diversity among regions was an asset in maintaining circulation within varied territorial parts of the country. In contrast, social diversity represented by race, language and culture tended to break communication. Racially, the people inhabiting Nepal were drawn from two stalks: Mongoloids (Kirant) from the north and east and Caucasoids (Khasa) from the west and south. The earliest Mongoloid groups were located in eastern tarai and inner tarai. The second group migrated west along the hill as far as the Bheri. The

12. B.H. Hodgson, "On the commerce of Nepal", *Essays on the Languages, Literature, and Religion of Nepal and Tibet, Together with Further Papers on the Geography, Ethnography and Commerce of Those Countries*, London, 1874, pp. 91-121.

third group crossed over from Tibet and settled on higher elevations.¹³ Among the Caucasoids, the mass was composed of the Khasa who had moved early from west of the Mahakali. The Khasa were supplanted by small colonies of Brahmins and Rajputs fleeing Muslim persecution in the plains. Their dominance among the Khasa was made easier by the commonality in race, language and the immigrants' superior culture.

Some of the racial characteristics have been subsumed or blunted over the centuries through miscegenation and mixing. The old vestige of social diversity is, however, preserved in language and dialect. As late as 1952/54, the census recorded at least 44 varieties of mother-tongues in Nepal. Despite 185 years of Parbate (Nepali)-speaking Gorkha rule (dating from conquest of Nepal Valley), less than half of the total population then had Nepali (Parbate) as their mother-tongue.¹⁴ The 44 mother-tongues were divided as 48.7 percent hill Indo-Aryan (Nepali), 28.8 percent plain Indo-Aryan, 22.4 percent Tibeto-Burman, 0.2 percent Munda and 0.1 percent Dravid language speakers (Table 8). Indo-Aryan language speakers were in overwhelming majority while the Tibeto-Burman speakers were split into as many as two dozen language groups. Nepali was dominant in the western hill while Tibeto-Burman languages were confined mostly in the central and eastern hills.

iii. Colonization and Hinduisation

Economic disparity among regions promotes trade and migration. The expansion of Nepal was followed by a large-scale movement of people to conquered territories and new frontiers. The State had a deliberate policy of land occupation and colonization. The 40-point judicial regulations of April 1806 included 22 items dealing with land, property and revenue.¹⁵ Two items are of particular significance:

No. 24: In the area between the Tista River and Garhwal, including Palpa, Gulmi, Argha, and Khanchi, have all *khet* lands

13. Matthias Hermanns, *The Indo-Tibetans: The Indo-Tibetan and Mongoloid Problem in the Southern Himalayas and North-North-East*, Bombay, 1954.

14. Statistics Department, *Nepal Ko Janaganana (1952/54)*, Kathmandu, 1957.

15. Dinesh Raj Pant, "Swami Maharaj Rana Bahadur Shah ko B.S. 1862 ko Bandobast", *Purnima*, No.24, 1969, pp. 238-267.

TABLE 8: PERCENTAGE DISTRIBUTION OF POPULATION BY MOTHER-TONGUE, 1952/54

	<u>Indo-Aryan</u>		Tibeto-	Munda	Dravid	Other
	Nepali	Other	Burman			
Mountain and Hill	92.0	1.6	86.8	-	-	38.8
West-Central	66.1	1.5	28.3	-	-	0.8
Kathmandu Valley	4.0	0.1	13.4	-	-	9.4
East	22.8	0.0	45.0	-	-	28.0
Inner Tarai	5.7	4.2	10.3	-	-	19.7
West	0.8	2.4	0.0	-	-	-
Central	2.3	1.2	6.5	-	-	15.7
East	2.6	0.6	3.8	-	-	4.1
Tarai	2.3	94.2	2.9	99.9	100.0	41.9
West	0.2	9.6	0.1	-	-	0.3
Central	0.2	14.4	0.1	-	-	3.7
East	2.0	70.3	2.7	99.9	100.0	37.9
TOTAL (Number)	4,013,357	2,352,283	1,846,160	17,258	4,949	4,122
Percent	48.7	28.6	22.4	0.2	0.1	0.1
Number of Language/Dialects	1	13	24	2	3	-

Source: Census of Population, 1952-54, Part I, Section, 2, Table 9.

which were scrutinized in 1862 (1805 A.D.) and assigned to the army, surveyed.

No. 34: Prepare separate records of the land that has been confiscated since 1861(1804 A.D.) and 1862 (1805 A.D.) for each *thum*, town, and village.

Payment for service was land-based in the form of *khuwa*, *chhap*, *jagir* and *birta*.¹⁶ The nobility relied on revenue from large land grants in the plains. However, migration of colonization was mainly from west to east: Khasa and Brahmins from the Karnali to the Gandaki and Kosi basins and Magar, Gurung and Tamang from the Gandaki to the Kosi basin. It was the search for cropland from the drier west to the humid east. It was also colonization of the Kirant land by the Hindu Khasa¹⁷ and Hinduised tribes. The tarai land was the colony of hill-based states although attempts to resettle the inner tarai and the tarai with hill people since 19th century remained unsuccessful.

The earlier spill-over of the Khasa from Kumaon to Karnali and thence to Gandaki gained momentum with the extension of Nepal. The eastward migration along the hill region continued even beyond the national frontier. By 1891, India had an estimated 295,657 persons speaking languages of Nepal origin.¹⁸ Of this, 174,074 or 63 percent were in Darjeeling district that Nepal had relinquished in December 1815 after 33 years of rule. In contrast, migration to the tarai remained merely a percolation despite economic colonization. Thus, of the total 2,388,343 population of the tarai in 1952/54, only 93,639 (3.9%) were Nepali speakers and 50,828 (2.1%) Tibeto-Burman language speakers of hill origin.¹⁹ The subsequent dominant pattern of hill-to-tarai migration over the last three decades was facilitated by malaria eradication. It is a political process whereby population adjustment takes place through colonization and migration within regions of the national territory.

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16. Mahesh Chandra Regmi, *A Study in Nepali Economic History, 1768-1846*, New Delhi, Manjusri, 1971.
 17. Lionel Caplan, *Land and Social Change in East Nepal*, London, 1970.
 18. Siddheswar Varma, *G.A. Grierson's Linguistic Survey of India: A Summary*, Hoshiarpur, Vishveshvaranand Institute, Punjab University, 1972-73.
 19. Statistics Dept., *op. cit.*

The conquered territories were consolidated through usurpation, conciliation and population redistribution. Difficult terrain and diversity of annexed areas ordained some form of delegation of authority in economic and political spheres. But there was no compromise in the legal frame-work to regulate social life throughout the kingdom. It was modelled on the Hindu law of the plains. For the rulers, be it of Kathmandu, Palpa or Gorkha, who claimed Indian origin and found their ancient land usurped by the Muslims, the hill region inhabited by the tribals was the new theater of socio-religious revival and reconstruction. Thus, the *raison d'etre* of the expanding Gorkha, later transformed into larger Nepal, was creation of a Hindu state. This is best expressed by Prithvi Narayan Shah who though called himself the 'King of Magarant' also betook the title of 'Hindupati' (Lord of the Hindus) and described Nepal as "Yo Asil Hindustana Ho" (this is the true land of Hindus).²⁰

The inspiration for Hinduisation of the diverse communities lay within Nepal. Vrishadeva, one of the earliest verifiable historical kings of Nepal, was said to be a partisan of the Buddhist order.²¹ But his great-grandson Manadeva turned to Vishnu. Later Amshuvarma venerated Pashupati. During the medieval period, new Hindu deities were imported from as far as Kamarup (Assam) and Kamatak. The climax was provided by Jayasthitiraj Malla (1382-95) who imposed an elaborate caste law on the Newar society.²² This Hindu social code reached Gorkha 200 years later during the time of Ram Shah. Thus, by the time Prithvi Narayan Shah broke beyond the narrow confines of Gorkha, the multi-ethnic society in that state had been moulded into Hindu values through seven generations of Hindu rulers.

The expansion of the state was followed by Hinduisation through the official social code. Hinduisation process was not through persecution but proselytization for conformity within the caste system. The Khasa had already been converted with a sharp division

20. Yogi Narahari Nath (Editor), *Dibya Upadesh, (with Translation)*, Kathmandu, Siddhachal Mrigasthali, 1959.

21. Kamal P. Malla, (editor) "Introduction", *Nepal: A Conspectus*, Kathmandu, 1977, p.i.

22. Luciano Petech, *Medieval History of Nepal (C. 750-1480)*, Roma, 1958.

between high castes and occupational castes. Among the Newars, Shiva-margis took precedence over the Buddha-margis in state patronage.²³ The highlander Bhotias who followed Lamaistic Buddhism were considered peripheral both geographically and socially. The Kiranti tribals, some pagan, some animistic and still others shamanistic became ready converts to the State religion. Since Hinduism carried political prestige, the well-to-do among the tribals became the first converts.

The *Muluki Ain* of 1854 was a Hindu frame-work to impose a hierarchy on the Nepalese multi-ethnic society. It had four divisions: (1) *Tagadhari* (Brahmin and Khasa castes), (2) *Matawali* (Kiranti tribes) (3) *Pani Nachalne* (castes including Muslims) polluting water only and (4) *Pani Nachalne* (untouchable castes).²⁴ The above four divisions included only 13 castes and 9 ethnic groups. There was further categorization of people as Na-Mahsine (non-eliminable) and *Mahsine* (eliminable people). The signatories of the *Muluki Ain* provide a realistic picture of the then established power structure. Of the 212 signatories, all holding senior military and civil rank, over 70 percent were *tagadhari* Chhetri, Brahmin and Thakuri (Table 9).²⁵ But for two Thakuris, the top 27 in the seniority role was occupied by the Rana (Chhetri). The nine Newars were all Hindus (Rajbhandari). The six Magar and Gurung were army officers.

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23. Colin Rosser, 1966: "Social Mobility in the Newar Caste System", *Caste & Kin in Nepal, India & Ceylon: Anthropological Studies in Hindu-Buddhist Contact Zones*, edited by C. von Furer-Haimendorf, Delhi, Asia Publishing House, 1966, pp. 68-139.
 24. Prayaga Raj Sharma, "Caste, social mobility and sanskritization in a tribal-Hindu society: A study of Nepal's old legal code", *Changing Aspects of Modern Nepal* edited by Shigeru Iijima, Tokyo, 1977, pp. 93-118.
 25. *Muluki Ain*, 1854

TABLE 9: ESTABLISHED POWER STRUCTURE

Caste/Ethnicity	Signatories 1853		Signatories 1951	
	Number	Percent	Number	Percent
Brahmin	38	17.9	35	13.6
Thakuri	5	2.4	41	15.9
Chhetri	107	50.5	135	52.3
Thapa (Chhetri/Magar)	12	5.7	-	-
Newar	9	4.2	22	8.5
Magar	3	1.4	-	-
Gurung	3	1.4	2	0.8
Other	2	0.9	5	1.9
Unidentified	33	15.6	18	7.0
Total	212	100.0	258	100.0

The socio-political power structure had not changed much during the next hundred years. A memorandum of 1951 calling for replacement of King Tribhuvan was signed by 258 senior army and civil officials.²⁶ Of these, over 80 percent were high-caste Hindus (Table 9). Ranas occupied the 82 senior-most rank in the role. Among the 22 Newars, a few were Baudha Margi. No Magars were listed and the two Gurungs were army officers. The caste-dominated *Muluki Ain* was repealed in 1962 but replaced with a constitution establishing Nepal as a Hindu state. Thus, the past tradition of Hinduisation continues in modern Nepal.

iv. Core and Periphery

The primeval core of Nepal was the Kathmandu Valley. It need not expand as it flourished on extra-territorial trade. By the 18th century, there were other power centres but none as sophisticated as Nepal Valley. The making of larger Nepal was the usurpation of the core by a more dynamic periphery. For some decades after the conquest of the Valley, the Gorkha Kings commuted between two capitals, Pokharithok and Kathmandu. Prithvi Narayan Shah thought that metropolitan Kathmandu would soften his soldiery. But the pull of the great city was too much even for the new Parbate (hill) rulers.

26. Grisma Bahadur Devakota, *Nepal Ko Rajanitik Darpan*, Kathmandu, 2nd ed, 1979.

Territorially, the extended Nepal had a series of effective areas with decreasing intensity from the centre of power. The central core was the lower Gandaki, corresponding to the Chaubisi including Kathmandu Valley. The ruler, nobility, priests, army commanders and the soldiery were drawn from the high caste and a few Hinduised tribals of the Gandaki region. The regime was hill-based and martial. The hills of the Gandaki basin was the heartland of the state. Western and eastern hills were further extensions of this central core. What lay beyond the hills was the periphery. The tarai had economic resources but it had a sparse population to be of any political challenge. The Treaty of Sugauli and good relations with the British had pre-empted any external threat. Even more peripheral was the Himalayan region. It was culturally Tibetan and after the defeat of Tibet in 1856, the subservient status of the Himalayan dwellers was complete.

Thakuri, Chhetri and Brahmin formed the power elite. The state had been carved by the Shah sword and there was no debate about royalty. Struggle for power was mainly among the Chhetri clans: Pande, Thapa, Basnet, Bhandari and Kunwar.²⁷ The self-promotion of the latter clan from Kanwar to Kunwar-Ranaji to Jang Bahadur Rana was power at play. Brahmins, whether of western origin (Kumain) or plains origin (Purbiya) had the indispensable role of priest-hood and diplomacy. There were some Magar and Gurung²⁸ commanders during the expansion campaign but their utility ended with the termination of the war. Hindu Newars gained some place among later elites. The rest were peripheral people whether nearby Tamang or distant Kiranti. The tarai people had the least link with the power centre.²⁹ The distance between the hill rulers and the tarai subjects was both geographic and psychological. Yet the State relied heavily on the tarai resources. The annexation of the tarai territory between the Narayani and Kosi rivers after the Anglo-Nepal War so disturbed the Nepal nobility that the British returned it after 11 months

27. Ludwig F. Stiller, S.J. *The Silent Cry, The People of Nepal: 1816-39*, Kathmandu, Sahayogi Prakashan, 1976.

28. Jagaman Gurung, *Nepal Ko Ekikaran ma Gurung haru Ko Bhumika*, Pokhara, Baudha Arghoun Sadan, 1985.

29. Frederick H. Gaige, *Regionalism and National Unity in Nepal*, Delhi, Vikas, 1975.

of the Sugauli Treaty to maintain amity. The tarai west of the Tinau river (Naya Muluk) was returned to Nepal in 1860 in appreciation of Jang Bahadur's services during the Indian Mutiny (1857). Most of the nobility depended on the tarai revenue - agricultural and forest. Yet, this region with the richest economic resource had the least political influence.

v. Trident and Thunderbolt

The discussion so far had an historical bias. This was deliberate as Nepal still remains highly tradition-bound and any prescription for an effective national integration must be based on a proper diagnosis. Some of the conclusions from historical perspective are compelling. The larger Nepal was created in the second half of the 18th century by military might. Conquest was the basis of political unification. It is a normal process that in the early stages of nation-building, the conquerors impose their rule and cultural values on the vanquished.³⁰ In the economic arena, colonization and labour exploitation was the practice. In the social arena, it was Hinduization and Nepalization (advocacy of the ruler's language). The process of socialization through the legal code was not integration and assimilation but incorporation and absorption within the caste hierarchy. Economic and political power was vested in the dominant castes. The operative processes remain the same after more than two centuries of state-hood and the task of national integration still remains unfinished.

The national personality projection of any nation is the reflection of various social groups and communities residing there-in. The trident (Hindu) and the thunderbolt (Buddhist) symbolise two formal religious traditions of the Nepalese society. The trident need not be of *Kashi-gotra* nor the thunderbolt one of *Lhasa-gotra*. They represent ritualized missile symbols emanating from the porcupine quill of the native *jhankri* sorcerer.³¹ The new Legal Code of 1962 indicated a progressive stance whereby a mature State encourages all societies and communities to enter the national main-stream with the relaxation of initial restrictions. This was the recognition of multi-

30. Karl W. Deutsch, *Nationalism and Social Communication*, New York: John Wiley & Sons, 1953.

31. John T. Hitchchok and Rex L. Jones, *Spirit Possession in the Nepal Himalayas*, New Delhi, 1976, See also Harka Gurung, *The Himalaya: Perspective on Change*, Kathmandu, 1982.

ethnic Nepal. Multi-ethnicity also implies diversity in language, religion and culture. The State should adopt universal values in order to involve all communities in nation-building. Therefore, to qualify the nation with a theocratic label does not conform to the social realities of modern Nepal.³² Similarly, Nepali is the *lingua franca*, and the only media of wider communication. Its literary and national status is well-established and need not fear pretenders. A multi-lingual State should have the magnanimity to encourage other native languages.

Socio-cultural content is the soft-ware aspect of national integration. How it is affected depends on the State's confidence and attitude. The hard-ware aspect is represented by the economic content and this in turn is determined by availability and distribution pattern of resources. "In Nepal where the various ecological zones represent different population groups as well, it is imperative to reconcile economic and social aims within the frame-work of national growth".³³ By implication, it means resolving the dichotomy between the poor and rich regions. Economic development should have a spatial dimension whereby the various regions are integrated. The regional strategy, originally proposed by this writer, had a north-south orientation to affect hill-tarai complementarity. Since then, the East-West Highway has taken a penultimate form and it should be fully exploited as the spine of national development. The emergence of this highway axis as the core of development will contribute to economic integration between the hill and the tarai. Again, economic development should involve the people not only their labour and sacrifices. This means maximum mobilization of internal resources. The present trend of increasing external dependency will not only sap the spirit of self-reliance but also encourage centrifugal forces that are detrimental to national integration.

This paper commenced with the statement that national integration is a political concept. The long historical digression on socio-economic dimension had political implications. The discussion

32. Harka Gurung, "Social Dimensions of National Integration in Nepal", *The Motherland*, 14 July 1980.

33. Harka Gurung *Regional Development Planning for Nepal*, Kathmandu, National Planning Commission, 1969.

will close with a full circle by touching very briefly on two political problems: boundary and core of Nepal as a national concept. Firstly, Nepal has come a long way since the postal union of early 1950's and currency union of early 1960's with India. But the national common market still remains an ideal. The regulation of the border is necessary not only for economic integration of the state-area but also to strengthen centripetal forces for national integration. Secondly, the present consitutional clause, "person of Nepali origin", regarding citizenship needs to be clarified.³⁴ There is a Nepali language and a Nepalese state but no Nepalese race. A modern State should be above race, religion and culture and subscribe to the territorial foundation.

(Paper presented at the Tribhuvan University Seminar on Political Development and Social Change in Nepal, Kathmandu 6-7 December 1986.)

34. Task Force on Migration, *Internal and International Migration in Nepal*, 4 Vols, (In Nepali), National Commission on Population, Kathmandu, July 1983, p. 485.

ISSUES IN POLITICAL DEMOGRAPHY

i. Prologue

The discussion of the relationship between countries to be meaningful, must begin with defining the parameters. To attempt one regarding Nepal and India is to discover a litany of platitudes on the close ties between the two countries. These relate to geography (*Jambudwipe-Bharatkhande*), history (Vikram-Saka era), language (*Sanskrit*), religion (Brahmanism), philosophy (Hindu) and culture (*Aryavarte*). These symbols of cultural India find true reverberations within political Nepal, be it in Lekhnath Poudyal's poems, Laxmi Prasad Devakota's essays, Balkrishna Sama's Nepalisation of rishimunis or Kedarman Vyathit's lexicon. But all is not well with Nepal-India relations; not only presently but at frequent intervals. The current confrontation is an indication of the harsh realities of political economy that impinge on sovereign states. History and culture are not diminished by sharing; the measure lies in whether to emphasize heritage or current realities. But geography or space cannot be shared. It needs to be partitioned, occupied and defended since land resources are limited. Political states operate within a defined territory whether bounded by a flexible frontier or a rigid boundary.

States represent a piece of territory, be it large or small. It also represents a population entity of those residing within that territory. National flag, national anthem and other national symbols are invented to identify or isolate such a population entity. Political demography relates to population dynamics and their consequences in the political arena. The current problem between Nepal and India revolves around political and economic conflict. Within the political arena, India has raised the issues of security, special relationship, work permit and the interest of the people of Indian origin residing in Nepal. The latter three fall within the realm of political demography. Special relationship refers to both the security and free movement of people across the border, work permit and the reference to people of Indian origin pertain to national treatment in economic and other matters.

This seminar has identified three such areas: migration, work permit, and citizenship. They are important and inter-related issues.

To be sure, these are not only three strands of a rope but rather a composite of increasing political density. Migration or movement across the international boundary is the outer circle. This outer circle is trespassed in order to enter the second circle for certain purposes, generally economic. Citizenship represents the inner core, the possession of which guarantees the individual full political and economic rights within a nation-state.

ii. Migration

Political relations between States are often influenced by the actions or inactions of States vis-a-vis international migration.¹ Despite the defined boundary with India since 1817-40, the Nepalese state until a few decades ago, seemed to have a dual concept regarding its national territory. What lay beyond the foothills to the south, was considered a frontier to be colonized from whatever source be the migrants. In fact, there was a deliberate policy to encourage migration of yeoman farmers from across the border since the last quarter of the 19th century. What mattered was the hill heartland: therefore, the system of passport check-points along the Mahabharat Lekh (Sindhuligarhi, Chisapanigarhi, Masyang) and the custom of restricted sojourn for Shivaratri pilgrims from the plains in Kathmandu Valley. Similar to the free entry of Indians to the plains, there was no restriction on the exit of Nepalese to India. In fact, overpopulation (particularly in the hills) and exploitation at home, on one hand, and British encouragement to Nepalese settlement in the Eastern Himalaya on the other, induced a large-scale emigration from Nepal. By 1891, the Linguistic Survey of India estimated 295,657 persons with Nepali and other eight Nepalese hill language groups residing in India.² Two decades later, 1921 Indian census recorded 455,631 persons with eleven languages of Nepal origin and of these, 56.9 percent were registered in Bengal and Sikkim.³ Thus, during 1891-21 the population in India speaking various languages of Nepal origin increased by 54.1 percent.

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1. Myron Weiner, "On international migration and international relations", *Population and Development Review*, Vol. II, No. 3, Sept. 1985, pp. 441-455.
 2. G.A. Grierson, editor, *Linguistic Survey of India*, Vol. III (1909) and Vol. IX (1916), Calcutta, 1909-1916.
 3. W.H. Thomson, *Census of India 1921*, Vol. V, Calcutta, 1923.

The 1950 Treaty of Peace and Friendship between Nepal and India reiterated the free entry and exit of people across the boundary of the two countries. The tradition of free movement of people across the border has continued with only one minor aberration during 1975-76. When strains developed over the renewal of trade and transit treaty in 1975, India threatened to seal the open border. Later on 2nd December 1976, an agreement was signed in Kathmandu regarding the entry/exit procedures for Nepalese to the so called 'restricted and protected areas' in India. It specified six entry/exit points in the east and four in the west; transit permit for a period not exceeding 15 days; multi-journey permits valid for six months for Nepalese nationals residing within 10 kilometres of the border; and multi-journey permits valid for a period not exceeding one year at a time (and renewable) to bonafide students from Nepal. It seems pertinent to refer here to a Nepalese suggestion in 1983 for the regulation of population movement across the Indo-Nepal border.⁴ It was so vehemently opposed from certain quarters that HMG/Nepal washed its hands off the commissioned report. Thus, the movement of people across the boundary between Nepal and India remains unrestricted.

There has been, therefore, a large-scale exchange in population between Nepal and India. The migratory moves can be daily (border towns), seasonal, recurrent and permanent with varying relevance to political demography. The decennial population censuses of the two countries provide some indicative data on the magnitude (Table 10). Census of India 1951 reported 278,922 as Nepal-born and 82,071 or 29.0 percent of Nepal-born as Nepalese nationals. Census of Nepal 1952/54 included no data on Indians but reported 157,723 as absent in India. According to the 1961 census of the two countries, India had 498,836 Nepal-born and Nepal had 324,159 as India-born: 53.9 percent more Nepal-born in India than the India-born in Nepal. Similarly, there were 133,524 Nepalese nationals in India and 76,311 Indian citizens in Nepal: 75 percent more Nepalese in India than Indians in Nepal. In Nepal, Indian citizens constituted 23.5 percent of the India-born. In India, Nepalese nationals were 26.8 percent of Nepal-born in India. Nepalese nationals as percent of Nepal-born in India declined from 29.4 in 1951 to 23.5 in 1961.

4. Task Force on Migration, *Internal and International Migration in Nepal*, 4 Vols. (In Nepali), National Commission on Population, Kathmandu, July 1983.

TABLE 10: DATA ON INDO-NEPAL MIGRATION

A: By Country of Birth

Data Source	Country and Category	1951	1961	1980, 1981 1982 & 1983	Change	
					Number	Percent
In India						
Nepal-born ¹	278,922	498,836	526,526	501,292	222,370	79.7
Nepal as last place of residence ¹	-	-	-	444,427	-	-
Absentee in India ²	157,723	302,162	NA	375,196	217,473	137.9
In Nepal						
India-born ²	NA	324,159	322,718	222,278	-101,881	-31.4
India-born ³		-	-	419,516	-	-
India-born ⁴		-	-	439,230	-	-
India-origin ⁵		-	-	3,800,000	-	-

B: By Citizenship

Table 10. (Cont...)

In India						
Nepalese nationals ¹	82,071	133,524	NA	NA	51,453	62.7
In Nepal						
Indian citizens ²	NA	76,311	128,829	116,755	40,444	53.0
Indian nationals ⁵	-	-	-	1,412,027	-	-
Indian nationals ⁶	-	-	-	150,000	-	-

- Source: 1. Census of India, 1951-81
 2. Census of Nepal, 1952/54-81
 3. Nepal, CBS Estimate, 1985
 4. Task Force on Migration Estimate, 1983
 5. India, External Affairs Ministry, 15 July 1980
 6. India, External Affairs Ministry, 1 April 1982.

Indian censuses of 1971 and 1981 provide no data on Nepalese nationals. However, the Nepal-born in India declined from 526,526 in 1971 to 501,292 in 1981. Nepalese censuses of 1971 and 1981 show a decline of 45.2 percent among the India born and of 10.3 percent in Indian citizens.* Statistical analysis show that these declines are spurious. The Central Bureau of Statistics itself considers such a decline as suspect due to mis-classification by enumerators, wilful distortion on the part of foreign born citizens not to identify themselves as foreigners, and that those foreign born with long residence in Nepal may no longer have considered themselves as foreigners.⁵ Three different methods of estimate yield a much higher volume of immigrants.⁶ First, by surviving and projecting the 1971 foreign-born population up to 1981 on the basis of 1961-71 trend, there would be 357,000 foreign-born in 1981 or 52.5 percent more than the census figure. Second, application of inter-censal cohort component method on the volume of immigration during 1971-81 yields 369,033 as immigrants. Third, an estimate by two census projections using estimated mortality rates obtained from the West model life table gives the number of immigrants to be 441,596, e.g., 88.7 percent more than the census figure. Since 95 percent among the total reported foreign-born were India-born, their proportionate number would be 419,518, and very close to the 1983 estimate of 418,748 for the tarai.⁷

According to the Indian census 1981, there were 444,427 migrants in India with their last place of residence in Nepal. More than half had been in India for 10 or more years. Two-third of these migrants were female and 70 percent were in the rural area. The Nepalese census of 1981, reported 222,278 as India-born and of these, 93.5 percent were in the tarai and 56.7 percent had been residing there for more than 11 years. Over 70 percent of the India-born were females. A survey of 10 tarai districts in 1983 showed that 48 percent of the immigrants were in rural areas and 57.7 percent of India-born had acquired Nepalese citizenship.⁸

* However, the number of Indian citizens as proportion of the India-born in Nepal increased from 39.9 percent in 1971 to 52.5 percent in 1981.

5. Central Bureau of Statistics, *Demographic Sample Survey, 1986/87, First Report*, Kathmandu, 1987, p. 29.

6. Harka Gurung, *Regional Patterns of Migration in Nepal*, Honolulu, 1989.

7. Task Force on Migration, op. cit.

8. Task Force on Migration, op. cit.

According to the Nepalese census, there are significant divergences in reasons for migrants moving to Nepal or India. Nepalese reported absent in India were 82.1 percent males while India-born reported in Nepal were 70.6 percent females (Table 11). Of the Nepalese absentees in India stating their reason for migration, majority were for service. The second and third important reasons were marital relation and agriculture. Trade/commerce was a negligible reason for such out-migration. In the case of the India-born in Nepal, marital relation was the most important reason. Trade/commerce and agriculture were more important reasons than service. The magnitude of Nepalese migrants in India is much larger than that of Indian migrants in Nepal. It is the making of an established migration trajectory from the poor periphery (Nepal) to a more developed core (India) with much larger geographic space and economic opportunity.

iii. Work Permit

The system of work permit is a general practice in most countries to control and regulate the employment of immigrants. Since immigrant workers are either skilled or cheap and perform a necessary function in the economy, they are also, euphemistically called 'guest workers'. The basic objective of the system is to assure employment to native labour. Nepal introduced the system in 1960 through the Nepal Factory and Factory Workers' Act 2016. The relevant rules of 1963 specified contractual employment of aliens for a period not exceeding two years with the approval of the Labour Department where no Nepalese of similar skill were available. The Fifth Plan (1975-80) included a policy statement emphasizing the control of immigrant workers. However, the Industrial Enterprises Act 1981 made a more liberal provision for aliens, in that the duration of employment was for initial seven years along with provision of extension for another five years. In fact, extant legal provisions are applicable only to defined manufacturing establishments, standard hotels and the transport sector but excludes agriculture, construction and trade/commerce sectors. More significantly, the work permit system apply only to those foreigners who require a visa to enter and stay in Nepal and thus excludes Indian nationals.

In April 1987, the Nepal government attempted to introduce the work permit system for all immigrants working in the three districts

TABLE 11: REASONS FOR INDO-NEPAL MIGRATION, 1981

Reasons	Nepalese Absentees In India (a)						India-Born Reported In Nepal (b)					
	Male		Female		Total		Male		Female		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
1. Agriculture	11,378	3.7	2,292	3.4	13,670	3.6	14,977	22.9	6,711	4.3	21,688	9.7
2. Marital relation	345	0.1	3,174	4.7	3,519	0.9	2,645	4.1	97,722	62.2	100,367	45.2
3. Service	241,189	78.3	8,248	12.3	249,437	66.5	9,830	15.1	1,188	0.8	11,018	5.0
4. Study/Training	7,528	2.4	1,976	2.9	9,540	2.5	1,455	2.2	843	0.5	2,298	1.0
5. Trade/Commerce	2,043	0.7	330	0.5	2,373	0.6	12,135	18.6	9,623	6.1	21,758	9.8
6. Others/Unstated	45,463	14.8	51,230	76.2	96,693	25.8	24,243	37.1	40,906	26.1	65,149	29.3
Total	307,946	100.0	67,250	100.0	375,196	100.0	65,285	100.0	156,993	100.0	222,278	100.0
	82.1		17.9		100.0		29.4		70.6		100.0	

Source: a. Census 1981, Vol. IV, Table 2
 b. Census 1981, Vol. I, Part II Table 10.

of Kathmandu Valley. India objected to the application of work permit system to Indians in Nepal. The Indian objection is obviously based on the principle derived from Article VII of the Treaty of Peace and Friendship 1950 that agreed on the provision of national treatment "in the matter of residence, ownership of property, participation in trade and commerce, movement and privileges of a similar nature" to the nationals of other country. The Nepal government initially responded with a feeble explanation that the objective of the system was to "safeguard the welfare of non-Nepali labourers". When the Indian criticism increased in vehemence, official Nepalese versions ranged from redefining the system as "work registration" for all (native and aliens) to an obtuse statement that Nepal had no objection to other countries implementing the work permit system (vide R.P. Chairman's statement in Brussels). The Indian objection to the introduction of work permit system to Indians in Nepal as against the spirit of the Treaty of Peace and Friendship 1950 has a precedence. It may be recalled that the Indian Government had raised the issue of Nepal contravening the Treaty when Nepal enacted Industrial Enterprises Act 1961, Revised Muluki Ain 1963, Citizenship Act 1963 and Land Act 1964. However, the legislations were implemented despite the Indian objection. It is also pertinent to note that paragraph 3 in the letter accompanying the 1950 Treaty qualified the provision regarding national treatment. It stated that the Government of India recognized the need to protect Nepalese subjects from unfair competition for a certain period and that mechanism and scope of such protection would be established with mutual understanding of the two governments. Presumably, this matter was never discussed or there was no understanding on the matter.

Work permit system does not mean debarment of alien workers whether Indians or others. It certainly means giving preference and protection to the natives. It is the responsibility of any State to guarantee employment to its own citizens in the first place.⁹

iv. Citizenship

The important issue of citizenship can be viewed from both the Nepalese and Indian perspectives. Both seem to confuse nativism

9. Within India itself, such restrictions are widespread even from one state to another. See Myron Weiner, *Sons of the Soil: Migration and Ethnic Conflict in India*, Princeton: New Jersey, 1978.

with political identity. The Constitution of Nepal (Third Amendment 1980) under Articles 8, clause (2), (d) states that a person of 'Nepali origin' who has been residing in Nepal for a period of not less than two years may qualify for the acquisition of naturalized citizenship. For others that are not of 'Nepali origin', the residential requirement is of not less than 15 years. First, the very term 'Nepali origin' has not been defined by law. In practice, it is interpreted as a cultural definition with bias towards Nepali speakers of hill origin. This provision is contrary to the concept of a modern state, narrow in national context, discriminatory on geographic and ethnic basis, and ambiguous in operation. The term 'Nepali origin' should be clearly defined or deleted. Second, the proviso for residential requirement does not specify whether the period of residence is to be continuous or aggregate. Even if this were to be clarified, it would be meaningless for those foreigners, particularly Indians, who require no entry/exit permit. The absence of vital registration system also makes the operation of this proviso ineffective.

Now to turn to the Indian perspective. The avowed Indian concern for the interest of the people of Indian origin living in Nepal needs to be seen in the light of politics of citizenship. First, what is the definition of people of Indian origin. Does it refer to cultural or political India? If it is cultural, then 12.4 million or 82.7 percent of Nepal's total population of 1981 with Indo-Aryan mother-tongues are of Indian origin! Official Indian statistics also evidence a nativist approach. According to an Indian source, 11.2 million Indians were residing in 131 countries as of 15 July 1980.¹⁰ Of these, 60 percent had acquired citizenship in their respective country of domicile. Of the total abroad, 3.8 million or 35.4 percent were in Nepal. Among the Indians in Nepal, 2.3 million or 62.8 percent had acquired Nepalese citizenship (Table 12). In other words, 1.4 million were still aliens. On the other hand, the data of External Affairs Ministry of India for April 1982 state that there were only 150,000 Indian nationals in Nepal.

10. India, Ministry of External Affairs quoted by *The Sunday Statesman*, 6 June 1982 and *The Economic Times*, 16 August 1982.

TABLE 12: INDIANS IN SAARC COUNTRIES, 1980

Country	Indian Origin	Accepted Foreign Citizenship	Percent Naturalized
Bangladesh	450	-	-
Bhutan	40,000	20	0.1
Maldives	120	-	-
Nepal	3,800,000	2,387,973	62.8
Sri Lanka	1,350,000	432,986	32.1
Total	5,190,570	2,820,979	54.3

Source: *The Sunday Statesman*, 6 June 1982 and *The Economic Times*, New Delhi, Vol. IX, No. 143, 16 August, 1982.

Another dimension to the politics of citizenship is the deteriorating situation of emigrants from Nepal to India. The armed conflict for "Gorkha Land" in the hill areas (Darjeeling and Kalimpong) of West Bengal since 1986 and recent wholesale expulsion of settlers of Nepalese origin from Assam and Meghalaya has generated a stream of return migrants into Nepal. The events in North-East India also prove that nativist policies that are weak in immigration control but restrictive in naturalization have all the making of a larger socio-political conflict. The main contributory factor to the problem of citizenship is the unrestricted entry and exit rules between the two countries. Illegal trade associated with free movement of people across the border has been a matter of concern for both countries. Similarly, policies and programs for the resolution of Nepal's population problem and national identity will have limited impact until the Indo-Nepal border is regulated in terms of human movement.

v. Epilogue

The imagery of three concentric circles of population mobility (migration), economic opportunity (work permit), and political identity (citizenship) alluded to earlier has a valid basis. Measures regarding work permit and citizenship will be difficult to implement unless the outer circle of migration is regulated. Moreover, an aligned or open border with India is not at all in conformity with Nepal's foreign policy of non-alignment. Although movement of population across

the Indo-Nepal border will continue for social and economic reasons, such movement should be regulated with necessary permit or passport system. In the context of attempts in national integration, the present status of the open border between Nepal and India can be likened to the futile operation of an air-conditioner in a room with open windows.

The second line of defence or barrier to aliens (work permit) can be effective only if the international border itself is regulated. The movement of workers across the border will continue as long as there is patronage and opportunities for work. In any case, the ecological niche created over a long period, of skilled and informal sector entrepreneur Indians in Nepal and of cheap Nepalese labour to India will persist as long as Nepal remains economically under-developed.

The inner circle or core of citizenship, remains the heart of the matter. Statistical records indicate that within the SAARC countries, Nepal has the most liberal policy in welcoming new citizens (Table 12). However, citizenship is not merely a piece of paper but one of national identity and aspiration. This calls for a realistic programme of national integration. The independent foreign policy of a sovereign State must be buttressed with solid economic and social foundations. The implication is one for self-reliance in the economic sector and equality of opportunity in the social sector.

Nepal must develop economically to provide economic opportunities to its own citizens. Just as emigration or export of poverty decreases the nation's leverage in immigration control, increasing external dependence reduces the intrinsic capacity of a nation. It is not the first time that India has tried to teach Nepal a lesson. But Nepal always has opted for the principle of least effort. Sovereignty entails high cost and only a welded nation can sustain it. But the welding is feasible only within a defined national space.

Finally, to conclude with a poetic intimation:

Before I built a wall I'd ask to know
What I was walling in or walling out
And to whom I was likely to give offense.
Some thing there is that doesn't love a wall,
That wants it down.
He will not go behind his father's saying
and he likes having thought of it so well
He says again good fences make good neighbours.¹¹

(Keynote address to the Centre for Nepal & Asian Studies 'Seminar on Nepal India Relation: Issues in Population Dynamics', Kirtipur, 5-6 July 1989.)

11. Robert Frost, 'Mending Wall', *Collected Poems of Robert Frost*, 1923.

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