Fall 1984

Research News, Projects and Reports

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Historical Background

In 1966 the Tribhuvan University Syndicate conceived a plan to establish an Institute of Nepalology (Nepal Adhyayan Samsthan) with a view to facilitating studies of Nepali history, culture, art, religion, tantra, language, literature and the like in order to project a faithful image of Nepal both on the national and international level.

In 1968 Institute of Nepalology, which was still a plan in principle, was named Institute of Nepal Studies.

In 1969 the Institute of Nepal Studies actually came into being. The committee was formed under the chairmanship of the Vice-Chancellor, and sub-committees of History, Culture, Nepali, Literature and Sanskrit were formed.

The Institute of Nepal and Asian Studies (INAS) replaced the Institute of Nepal Studies on July 16, 1972 under the provisions of the Tribhuvan University Act, 1971.

The Institute was set up to promote Nepal and Asian Studies through both teaching and research programmes. It established the faculty board and subject committees of History, Linguistics, Sociology/Anthropology. It also set up a documentation centre of its own to provide services to scholars working in the field of Nepal and Asian Studies. It not only created a number of posts for scholars to devote themselves to research in various disciplines but also provided research grants for both Nepalese and foreign scholars. It invited scholars from CEDA, the Summer Institute of Linguistics, Panchayat Training Centre, Royal Nepal Academy and Departments of Tribhuvan University and HMG for consultation and mutual exchange of ideas.

INAS carried out a 14-month post-graduate programme in conjunction with the Summer Institute of Linguistics in Linguistics, a degree by dissertation programme in Anthropology and a Ph.D. programme. Four successful students were awarded the M.A. in Linguistics; three candidates were awarded the M.A. in Anthropology; and two candidates were awarded the Ph.D. in Linguistics and Anthropology.

INAS published bibliographies, research reports, works of special interest, and books on Nepal. It also brought out a journal, Contributions to Nepalese Studies twice a year, and the Information Bulletin.

On September 8, 1977 the Institute was converted into Centre for Nepal and Asian Studies, a non-teaching centre, so that it could concentrate on research. At the same time the Centre was brought under the Research Centre Management Committee headed by the Vice-Chancellor of Tribhuvan University. The Centre functions under the Executive Director who is both its academic and administrative head. The Centre has a Research Advisory Committee of which the Executive Director is the Chairman. A meeting of the committee is held periodically as required.

The Centre maintains the sanctity of freedom of thought and speech in pursuit of its research and other academic activities in the highest academic tradition.

Objectives

The programmes and activities of the Centre are guided by the following objectives:

- To plan and conduct issue-specific research related to Nepal's role, identity and aspirations;
- To plan and conduct research on the problem of national integration, the impact of modernisation, and the interaction of tradition and development;
- To promote and undertake the study of current development issues in Nepal in both temporal and spatial dimensions;
- To promote and undertake the study of emerging trends in the domestic and foreign policies of Asian countries separately as well as regionally;
- To promote on the international level a greater awareness and understanding of Nepal, both its political role and aspirations in the region as well as its cultural heritage and traditions.
To encourage academic exchanges with other research organisations both within and outside of Nepal and to act as a venue for contact, affiliation, and coordination of research activities of Nepalese and foreign scholars in Nepal; and
To disseminate research on Nepal through quality publications.

Research Policy
The Centre is guided by the following considerations in planning and conducting its research programmes and activities:

-- The Centre gives priority to research programmes which are designed to:

a. analyse the structure of Nepalese societies and to discover linkages that hold them as a nation;
b. study the social response to development programmes and its implications in terms of various policy options;
c. assess Nepal's political role and aspirations in the context of Asian developments in general and neighbouring countries in particular;
d. examine localised Nepalese societies to arrive at fuller appreciation and understanding of those aspects of traditional cultures that contribute to national identity.

-- The Centre endeavours to adapt conventional academic disciplines to the needs and reality of Nepal and apply interdisciplinary approach.

The Centre develops its research programmes and activities in the following areas of study:

<table>
<thead>
<tr>
<th>Areas of Research</th>
<th>Scope of Study</th>
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<tbody>
<tr>
<td>1. Culture and Heritage Studies</td>
<td>Art and archaeology, history, historical-cultural forms; religion; folk studies.</td>
</tr>
<tr>
<td>2. Social Change and Development Studies</td>
<td>Social structure, national integration, ethnic studies, population dynamics, institutional processes, development processes, applied linguistic and socio-linguistic studies.</td>
</tr>
<tr>
<td>3. Himalayan Studies</td>
<td>Study of man, environment, development, and geo-political setting of the Indus-Brahmaputra Regions.</td>
</tr>
<tr>
<td>4. Nepalese Political Studies</td>
<td>Regional Studies, study of institutions, processes and international relations.</td>
</tr>
<tr>
<td>5. South and Asian Studies</td>
<td>India, Pakistan, Bangladesh, Bhutan, Sri Lanka, the Maldives, China and Japan.</td>
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Programme
1. The Centre conducts programmes designed to bring about frequent and meaningful exchange of ideas pertaining to its research works.
2. The Centre endeavours to bring about interaction between the members of society by conducting formal and informal seminars, talk programmes, etc.
3. The Centre invites scholars, Nepalese and foreign, to participate in its programmes.
4. The Centre establishes links with international institutions with similar interests and promotes exchange of ideas and people.

Documentation
1. The Centre endeavours to expand and consolidate the services under the documentation section relevant to its research interests and activities.
2. The Centre gives priority to collection of academic journals.
3. The Centre seeks to establish an historical and archival section.
4. The Centre with the consent and cooperation of various governmental and non-governmental agencies, seeks to catalogue and index historical documents deposited with them.

5. The Centre develops a programme to translate non-English international publications on Nepal relevant to the Centre's research interests.

6. The Centre creates and maintains all necessary secretarial services.

Publication
The Centre publishes in Nepali and/or English completed "work-in-progress" reports in the forms of monographs, books, bibliographies, and occasional papers on specialised themes within the research interest of the Centre.

The Centre publishes a multidisciplinary journal, Contributions to Nepalese Studies. Specialised, professional, and research articles and reviews of books in Nepali or English are published in the journal which comes out three times a year.

The Centre also brings out Strategic Studies Series in English four times a year. The journal publishes articles and reviews of books on Nepalese views on various global, regional, and bilateral issues; political institutions, processes and developments in Nepal; and contemporary international issues and events. The Centre brings out a quarterly CNAS Newsletter in English to publicise its activities and programmes.

Affiliation
The Centre functions as the academic contact point within the University system for affiliation of all foreign scholars working on Nepalese Studies. Foreign research scholars can seek affiliation with the Centre through the Research Division, Rector's Office, Tribhuvan University, Kirtipur. The Research Division handles the administrative operational details, including visa-formalities. A foreign research scholar's research proposal has to be compatible with the objectives of the Centre for recommendation and affiliation.

All affiliated foreign research scholars will have to maintain a periodic contact with the Centre and lead discussion programmes on their research problems at the Centre. Affiliated research scholars will have to submit specific number of copies of their final research report. Affiliated research scholars will have to collaborate/to be in contact with assigned Nepalese counterparts.

Increasing contact and cooperation with foreign scholars working on Nepalese Studies both within and outside the country will be promoted by the Centre through:

a. exchange of visit by scholars;
b. joint training programmes for research scholars, Nepalese and foreign;
c. exchange of information and publication;
d. joint study/research project;
e. joint seminar.

(Reprinted from CNAS Newsletter 3/7/84 — Courtesy of N.M. Tuladhar)

*RESEARCH PROJECTS OF FOREIGN RESEARCHERS AFFILIATED WITH CNAS, 1983-84

The Life of Jang Bahadur Rana
Researcher: John Whelpton
Purpose: Ph.D. Dissertation
Objective: Examination of archive material relating to Jang Bahadur Rana and interview with the present-day Rana family for use in writing a political biography.

Social and Cultural Aspects of Mental Illness
Researcher: Alfred Pach III
University of Wisconsin, Madison
Ph.D. Dissertation

The study will attempt to examine cultural definitions of mental illness, social responses to disordered behaviour and the personal and social consequences for those identified as mentally ill.

Newar Religion and Nepalese Society

Researcher: David Nicholas Gellner
Oxford University

Ph.D. Dissertation

Social anthropological study of Newar religious institutions, particularly those of the bare, but with an attempt at historical analysis to supplement it.

Traditional Patterns of Decision-Making in Buddhist Communities

Researcher: Rebecca Redwood French

Ph.D. Dissertation

Objective: To gather information regarding the manner in which decisions are made in at least four distinct Buddhist subgroups in Nepal: the family subgroup, the religious institutional subgroup, the community subgroup, and any subgroups that transcend the other three subgroups.

The Development of Social Cognition and Behavior

Researcher: Steven M. Paris
University of California, San Diego

Ph.D. Dissertation

Objective: To understand how culture affects the development of social cognition and social behavior. It will examine the influence of cognitive and developmental processes on social knowledge and behavior. It will also examine the acquisition and use of cultural "rule systems."

Tourism and Newari Visual Art and Conceptualization Styles

Researcher: Joyce Wolf Shepard
University of Michigan

Ph.D. Dissertation

Objective: To examine the relationship between Newari culture and art and to establish how changing cultural meaning and cognitive styles can be recognized in visual art.

Mani-Rimdu, Meaning in a Sherpa Ritual

Researcher: Richard Jay Kohn
University of Wisconsin, Madison

Ph.D. Dissertation

Objective: A comprehensive interdisciplinary study of the major festival of the Sherpa Buddhist calendar, combining translations of its texts with a description of its practice, with special reference to the systems of meaning embodied in its symbols.

The Manangba: A Study of Urban Adaptation

Researcher: Merritt Todd Cooke
University of California, Berkeley
Purpose: Ph.D. Dissertation
Objective: To study the Manangba in both urban and rural contexts in order to examine how a village population adapts to the urban environment.

Culture and Food in Nepal: A Study in the Symbolism of Food

Researcher: Per Erik Lowdin
University of Uppsala, Sweden

Purpose: Ph.D. Dissertation
Objective: To compare food culture in Nepal, Bolivia and Thailand. The study is focused on symbolic, ritual and nutritional aspects of food culture.

Social Integration and Economic Innovation: Thakali Traders in West-Central Nepal

Researcher: William Francis Fisher
Columbia University

Purpose: Ph.D. Dissertation
Objective: To identify and analyze the socio-economic, political and ritual processes of Thakali. To examine the nature and consequences of their social and economic interactions with Hindu caste groups.

Cultural Change in Tamang Society of East Nepal

Researcher: Klaus Euler
University of Cologne, Koln

Purpose: Ph.D. Dissertation
Objective: Ethnographic field research and the process of cultural change in the eastern Tamang community.

The Tibetan Ritual Music Symbolism and Practice

Researcher: Daniel Wolfgang Amadeus Schiedegger
Creative Music Foundation (University of New York State)

Purpose: M.A. Dissertation
Objective: Exploration of an almost unknown kind of sacred music.

Forest Utilization in a Mountain Village of Nepal and its Impact on Life of the Inhabitants

Researcher: Kadota Takeshi
Kyoto University

Purpose: M.A. Dissertation
Objective: To investigate the action-reaction of the rural people and the forest destruction problem in Nepal.

Family Life and Family Structure of the Newars in Kathmandu

Researcher: Marie-Louise Hill

Purpose: M.A. Dissertation
Objective: To collect material on the family life and family structure of the Newars in the city of Kathmandu.
Kathmandu in 1951: A Socio-Historical Reconstruction

Researcher: Daniel Lewis Breen
University of Wisconsin, Madison

Purpose: B.A. Dissertation

Objective: To gather information regarding the broader social context within which the dramatic events of 1951 occurred in the Kathmandu valley.

Multilateral Assistance Programs and Nepal's Development Planning: An Historical Review

Researcher: Scott James Davis
University of Wisconsin, Madison

Purpose: B.A. Dissertation

Objective: To gather information about the ways in which Nepal's development planners have utilized multilateral assistance programs during 1950's, 1960's and 1970's.

Maintenance of Self-Esteem Among Urban Dwellers in Kathmandu

Researcher: Stephan David Derne
University of Wisconsin, Madison

Purpose: B.A. Dissertation

Objective: To examine the self-esteem-maintaining psychological supports of one or more selected neighborhoods of urban Kathmandu.

Male-Female Divisions of Household Labor in Kathmandu

Researcher: Kirsten Adrea Duckett
University of Wisconsin, Madison

Objective: To examine the male-female divisions of labor -- especially regarding child-rearing -- in selected households in Kathmandu.

Iconography in Social Life

Researcher: James Douglas Eggert
University of Wisconsin, Madison

Purpose: B.A. Dissertation

Objective: To examine how various visual symbols of religious iconography are invested with personal significance (by individuals) and with collective significance (by groups).

Child-Rearing Practices and the Transmission of Culture

Researcher: Jean Friend Pritzker
University of Wisconsin, Madison

Purpose: B.A. Dissertation

Objective: To gather information about the ways in which cultural materials are transmitted to children as techniques of child-rearing.

An Historic Study of Buddhism in the Kathmandu Valley

Researcher: Stephan Desmond Ryan
University of Wisconsin, Madison

Purpose: B.A. Dissertation
Objective: To gather information about the history of Buddhism in the Kathmandu valley, focusing especially on those elements concerning the continuity of Buddhism as well as changes within Buddhism.

Nineteenth and Twentieth-Century Religious Art in the Kathmandu Valley

Researcher: Peter Andrew Westerman
University of Wisconsin, Madison

Purpose: B.A. Dissertation

Objective: To gather information about the various forms of religious artistic expression in the nineteenth and twentieth centuries, looking for changes in those forms of expression and for possible historical explanations for those changes.

The Social Organization of the Newars of the Kathmandu Valley

Researcher: Declan Quigley
London School of Economics

Purpose: Ph.D. Dissertation

Objective: To analyse the interrelations between social organisation, economy and religion, and the nature and effects of recent social change and economic development. The study will focus on the guthi associations since these are the main agencies for assuring social cohesion among the Newars.

An Ethnomusical Study of the Musical Culture of the Kathmandu Valley

Researcher: Duncan Henderson Jackman
Queen's University, Belfast

Purpose: Ph.D. Dissertation

Objective: To undertake an ethnomusical investigation of the music of the people of the Kathmandu valley, and to understand the music of the valley as a product of its people, and to show how that music is an integral part of the cultural matrix of those people.

Exclusive Study of Rana Period of Nepal and Tokugawa Period of Japan

Researcher: Hiroshi Kaida
Institute of World Affairs, Takushoku University

Purpose: Non-degree Research

Objective: Comparative study of Rana regime and Tokugawa regime. To establish the synthesis of the factors responsible for the rise and fall of the rulers of Nepal and Japan.

Little and Great Traditions in Nepal (Sanskritisation): Traditions and their Mutual Relations in the District of Jumla

Researcher: Gunter Unbescheid
South Asia Institute, University of Heidelberg

Purpose: Non-degree Research

Objective: To study the historical events and the mythological as well as ritualistic features of this process of "Sanskritisation", which brings certain village gods and goddesses in contact with such famous figures as Siva, Bhairava or Durga.
Household Dynamics and Fertility in Nepal

Researcher: Nancy Elaine Levine
University of California

Purpose: Non-degree Research

Objective: To find that certain economic conditions promote higher fertility, but that this varies according to rules for marriage, household partition and so on.

Anthropological and Linguistic Study of the National Integration in Nepal

Researcher: Hajime Kitamura
Institute for the Study of Languages and Cultures of Asia and Africa
Tokyo University of Foreign Studies

Purpose: Non-degree Research

Objective: To study the national integration in Nepal at the "grass-root" level from the interdisciplinary point of view.

Social Change in a Multi-ethnic Society under particular Consideration of the Tamang

Researcher: Michael Jastrzebski
University of Kologne, Koln

Purpose: Non-degree Research

Objective: Study of cultural and social changes among people from the mountain areas who migrate down into urban areas, like Kathmandu.

Western Tamang Folk-religion

Researcher: Andras Hofer

Purpose: Non-degree Research

Objective: To carry out fieldwork on shamanism and oral tradition.

Monasteries and Exterior World (in the Kathmandu Valley)

Researcher: Seigfried Lienhard
Stockholm University

Objective: Research in the structure and socio-religious functions of three Biharas in Kathmandu and/or Patan.

Oral Literature of Northern Himalayas and Its Buddhist Implications

Researchers: Dieter Schuh
Roland Bielmeier
Kretschmar Karludo
Monika Marget


Household Material Culture and Subsistence Economy with Particular Concern About the Roles that Women Play in It

Researchers: Christian, Schicklgruber, Albin, Diemberger, Hildegard

Objective: To deal with the household economy, particularly the non-market, subsistence economy focusing on the roles the women play in it.
Soil Surveys of the Kathmandu Valley including Studies of Pedology, Geomorphology and Land Management

Researcher: Theo M.W. Vanden Broek

Objectives: (1) To carry out soil surveys of the Kathmandu Valley, which will be based on aerial photographic interpretation and fieldwork. (2) To find out about the kind of problems of the present land use and land management, also possible alternatives will be given to make some adjustments to the present land use and management.

Affiliation: Geology Instruction Committee, Tri-chandra Multiple Campus, Ghantaghar, Kathmandu.

Entomological Trips for Some Particular Phytophagous Insect Groups in Nepal

Researchers: Takagi, Sadao, Kumata, Tosio, Suwa, Masaaki, Kkudo, Iwao

Objectives: (1) To find out phytophagous insects of some specified groups surveyed in forests, orchards, crop fields, etc. (2) To secure material for promoting the systematics of these insect groups in particular relation to the supposed faunal connection between the Far East and South Asia.

Affiliation: Zoology Instruction Committee, Kirtipur Multiple Campus, T.U. Kirtipur.

Socio-Ecological Studies of Macaques in Nepal

Researcher: Kazuo Wada

Objectives: (1) To compare seasonal changes of food habits, troop movement area and the behaviour of monkeys at several National Parks and other several areas. (2) To observe monkey troop behaviours among troops by identification of every monkey individual using binoculars only. (3) To compare species behaviour against another monkey species along the boundaries between both monkey species distributions.

Affiliation: Institute of Science and Technology Natural History Museum, T.U., Swayambhu, Kathmandu.

*CNAS SPONSORED RESEARCH PROJECTS

National History Project


Objective: To produce a comprehensive, authoritative and thoroughly documented history of Nepal.

The research reports will be published in nine volumes:
(a) Ancient Nepalese History Vol. I & II
(b) Medieval Nepalese History Vol. I & II
(c) Modern Nepalese History, Vol. I, II, III, IV and V dealing with political, diplomatic, social, economic, religious and administrative histories.

Duration of the Project: 5 years. This project has been conducted since 1983.
China's Military Deployment and the Theater Force Posture in the 1980s

Researcher: Drubha Kumar  
Research Centre for Nepal & Asian Studies  
Tribhuvan University

Objective: The monograph in preparation will examine the basic structure and pattern of China's Military Deployment in the 1980s. This study will also seek to determine the level of Chinese vulnerability and try to analyse how China has responded to the perceived threat (from the Soviet Union) and the probable measures it will take to avert the threat per se and build a confidence capability to enhance China's security in the contemporary world.

Distribution of Ethnic Groups in Nepal

Researchers: Prayag Raj Sharma  
Chaitanya Mishra  
Research Centre for Nepal & Asian Studies  
Tribhuvan University

Objective: The basic objective of this five-phase study is to carry out a survey of the magnitude and the regional distribution of various ethnic groups in Nepal. The present pilot phase programme focuses on Chitwan District of Nepal.

Buddha's Style of Meditation: Phase VIII

Researcher: Ayodhaya Prasad Pradhan

Study of Nepali Women in Prison

Researchers: Sudha Paneru  
Surendra Amatya

Objectives:  
- To learn the nature of crimes for which Nepali women are in prison  
- To analyse the seriousness of crime of their alleged crime  
- To identify whether or not the alleged crimes are sex-related  
- To assess the nature of crime in relation to socio-economic status of the female prisoners  
- To analyse relationship between the variation and nature of the crime.

Survey of Folk Culture of Mid-western Region of Nepal

Researcher: Purna Prakash Yatri, Folklorist

Objective: To survey society and culture

Nepal and China: The Dialectics of Two Opposite Cultures (Phase II)

Researcher: Govind Bhatta

Objective: To provide a comparative study of the two different world views as revealed in the national politics and ideology of Nepal and China.

*CNAS/UNESCO RESEARCH PROJECT

The Study of the Folk Ballads of Seti Zone (Western Nepal)

Researcher: Harihara Prasad Bhattarai, Project Chief  
Ganesh Man Gurung, Research Assistant
Objectives:
- to preserve the disappearing folk ballads
- to identify the socio-cultural values such as mores, norms, old laws, folk-beliefs and customs
- to trace the historical characters and events
- to throw light on the state of language and literature
- to make people aware of their cultural eradication
- to help disseminate elements of the oral tradition through the mass media and social units as vital parts of the educational system and as an positive and integral factor in the socio-cultural evolution of the Seti Zone.

*RESEARCH PROJECTS AT CENTER FOR ECONOMIC DEVELOPMENT AND ADMINISTRATION*

Management System in Private Industrial Enterprises — A Study of Dhaka Products with Primary Focus to Cap Making Industry of Palpa and Kaski Districts

Researcher: Susil Babu Aryal

Objectives: (1) To see and analyse the existing management system like production, marketing personnel, finance etc. of these industries. (2) To study and identify the management problems in these industries. (3) To provide necessary suggestion and recommendation.

Cottage Industry in Nepal — A Study of Dhankuta District

Researcher: Rajeshwar Acharya

Objectives: (1) To assess the development pattern of cottage industry as envisaged in various plan periods. (2) To assess the institutional support provided for the development of cottage industry sector in Dhankuta district. (3) To examine the role played by this sector in the generation of income and employment in the study area. (4) To investigate the causes of those cottage industries which were duly registered but did not go in operation in the study area. (5) To find out the problems hindering the growth of this sector in Dhankuta district. (6) To recommend policy measures which are to be considered for the development of cottage industry in future.

Role of Bureaucracy in Development Area of Hill and Terai (Dhankuta and Parsa District)

Researcher: Abullaish

Objectives: (1) To analyse the working procedures of local Panchayat (District Panchayat) with references to (a) Institutional effectiveness with respect to popular support for development activities, (b) extent of participation in formulation and implementation of development programmes. (2) To assess the programmes that have been implemented successfully and find out the major source of difficulties in the implementation of the programmes. (3) To identify the factors that may influence the orientation of the government officials towards their job with reference to their working conditions, aspiration, job satisfaction and role commitments. (4) To evaluate the existing pattern of district bureaucrats and their linkage with higher ups and public leaders at local level, and their activities to seek cooperative responses with public within the changing social and economic environments. (5) To make suggestions and policy recommendations.

Nepal in Regional Cooperation: A Quest for a More Equitable Relationship

Researcher: Lok Raj Baral

Objectives: (1) To explain the role of regional and extra regional power. (2) To examine the interaction and motivation of the historical, economic, socio-cultural and political dimensions of Nepal's proposal to declare itself as a zone of peace.

Marketing Practices in Nepal

Researcher: Ramesh Chandra Chitrakar
Objectives: (1) To analyse the marketing environment of Nepal. (2) To analyse the existing marketing practices strategies and policies of Nepalese manufacturing enterprises. (3) To make comparative evaluation of marketing policies between public and private manufacturing enterprises. (4) To make suggestions and recommendations.

Employment in Hotel Industry of Nepal
Researcher: Narendra L. Kayastha

Objectives: (1) To examine the employment pattern in different hotels of Nepal by component. (2) To study the trend and dependency towards non-Nepalese manpower in the hotel industry. (3) To assess the socio-economic implications of non-Nepalese manpower in the hotel industry. (4) To suggest appropriate measures to generate employment in the hotel industry in general and replacement of non-Nepalese manpower in particular.

Nepal's Zone of Peace — A Study of Peace and Development
Researcher: Jitendra Dhoj Khand

Objectives: (1) An attempt will be made to give a basic structure of zone of peace. (2) Try to give the meaning of peace and its impacts and development.

An Econometric Analysis of Some Selected Cash Crops in Nepalese Agriculture
Researcher: Arun Kumar Lal Das

Objectives: (1) To estimate the production function of the selected cash crops in Nepal. (2) To estimate the marginal value product and partial elasticities of the major inputs used in the selected crops. (3) To estimate demand and supply functions of the selected crops. (4) To study the variation in pricing and its relation with the production in different years. (5) To make projections up to 2000 A.D. for production demand and supply of the crops. (6) To make policy level recommendations.

The Evaluation of Development Activities of Nagar Panchayat — A Case Study of Dhanusa to Palpa Nagar Panchayat
Researcher: B.C. Malla

Objectives: (1) To evaluate the performance of Nagar Panchayat in the country. (2) To underline the constraint faced by Nagar Panchayats in formulating and implementing the plans and programmes and make policy recommendation. (3) To assess the authority and responsibilities assigned to them.

Study of Custom Duties in Nepal
Researcher: Hari Dhoj Pant

Objectives: (1) To assess the revenue elasticities of various import and export sector in Nepal with a view to determine the implication of change in import and export policies on revenue generation. (2) To make comparison of custom duties with other indirect taxes as a source of government revenue. (3) To see the contribution of custom in district, zonal and region wise basis and to compare revenue from other southern custom office to northern Bhot Bhanar (Tibet customs). (4) To find out the effect of custom duties on export promotion and import substitution. (5) To see the price effect of custom duties in Nepal.

Fertilizer Subsidy in Nepal
Researcher: Tika P. Pokhrel

Objectives: (1) To examine the present system of fertilizer subsidy. (2) To estimate the real cost of fertilizer and the cost subsidized directly or indirectly. (3) To assess the system of
distributing subsidized fertilizer and its effect on distribution. (4) To suggest policy alternative.

Low Cost Travel Modes (Kathmandu, Dhaka, Trivandrum)
Researcher: Arjun Jung Shah
Objectives: (1) To evaluate the role of low cost travel modes, such as walking, bicycles, cycle-rickshaws, auto-rickshaws, tangas, minibuses. (2) To evaluate the role of mass transport services in serving the transport needs at the urban poor and the level of operational feasibility vis-a-vis operational costs. (3) To develop a methodology incorporating the requirements of the urban poor in the urban transport planning process for adoption in developing countries.

Women's Employment in Higher Rank Jobs in His Majesty's Government
Researcher: Neeru Shrestha
Objectives: (1) To assess the extent and composition of women in higher level jobs in different sectors. (2) To analyse and identify the problems of growth for women in higher rank. (3) To assess the scope for women in higher rank employment. (4) To recommend suggestions.

Intra Urban Movement of Population in Kathmandu
Researcher: Chandra Bahadur Shrestha
Objectives: (1) To analyse the trend of intra urban movement of population. (2) To make an estimate of the magnitude of movement. (3) To assess the causes of movement. (4) To explore characteristics of movement. (5) To identify problems emanating from movement. (6) To suggest measures to overcome the problems.

Financial Management Pattern in Nepalese Private Industrial Enterprises
Researcher: Rajendra Prasad Shrestha
Objectives: (1) To analyse the different financial components of Nepalese enterprises. (2) To assess cost of different financial components. (3) To analyse the average position of these enterprises. (4) To highlight the present practices of financial decision making and the role of financial managers in it. (5) To identify the implication of His Majesty's Government and other financial institution policy on the capital structure of these enterprises. (6) To make suggestion and policy recommendation.

Comparative Evaluation of Planned and Unplanned Settlement in Nepal
Researcher: Mrigendra Lal Singh Suwal
Objectives: (1) To evaluate the performance and impact of planned resettlement projects in consonance with the government's objectives and policies. (2) To assess the impact of planned resettlement on spontaneous migration. (3) To examine and compare the change in the socio-economic status of planned and spontaneous settlers before and after migration. (4) To identify causes of success or failure of planned and spontaneous settlements. (5) To study the effect of planned and spontaneous migration on the demographic and economic statuses of communities in the Terai region. (6) To recommend policy measures for improving land settlements and regulating spontaneous migration in the Terai.

Implementing Mechanism of KHRDEP
Researcher: Mukund Prasad Upadhyaya
Objectives: (1) To study the organisational mechanism for implementing programme. (2) To review and evaluate the progress made by KHRDEP. (3) To identify the basic
problems and constraints in the implementation of programme. (4) To suggest some measures to improve the programme.

A Case Study of Cottage Shoe Making Industry in Kathmandu Valley

Researcher: Kalyan Prasad Upadhyaya

Objectives:
1. To assess the level of employment in it and to analyse its future employment prospect.
2. To ascertain the problem of employment associated with the cottage shoe making industry.
3. To suggest policy measures for the promotion of employment in cottage shoe making industry.

*RESEARCH CENTRE FOR EDUCATIONAL INNOVATION AND DEVELOPMENT
(A BRIEF DESCRIPTION)

The Research Centre for Educational Innovation and Development (CERID) is a national level research centre for undertaking research, evaluative and innovative activities in the broad field of education in Nepal.

The Centre was established in 1976 and has been part of Tribhuvan University since 1979.

Objectives

The objectives of the Centre are:
1. To undertake high level research, evaluative and innovative activities in various aspects of school and higher level education.
2. To carry out action research projects in the context of linking education to development.
3. To disseminate by holding seminars, making publications etc. new ideas and information that might be useful for educational improvement in Nepal.

Areas of Research Activity

(a) Curriculum and Instruction, (b) Education and Rural Development, (c) Educational Technology, (d) Manpower and Educational Planning (e) Educational Evaluation.

Structure and Activities

The Centre is under the University's Research Centre Managing Committee chaired by the Vice-Chancellor. The Executive Director, who is the chief of the Centre is responsible for its day-to-day activities. The Centre has four main units -- Planning and Programming, Research, Publication and Documentation and Administration.

Staff

The Centre has, excluding the executive director and administrative officers and supporting staff, a core staff of 8 deputy research officers, 5 assistant research officers and 10 research assistants. Two experts are on deputation from the Ministry of Education. The Centre also employs whenever necessary, experts, specialists, research workers, etc. on a contract basis.

Collaboration

The Centre works in collaboration with various educational and development-oriented agencies in Nepal. It is a member of APEID and ADIPA. It has relationship with UNICEF (Paris), PACT (New York), World Education (USA), ASPBAE (Australia), IDRC (Canada), NCERT (India), NIER (Japan), IIS (Stockholm), etc.

Publications and Projects

CERID has published 8 annual journals entitled "Education and Development" and more than 30 research and evaluative reports.
The Centre has five regular projects on hand for this year. Besides, it is also operating IDRC-funded "Instructional Improvement in Primary Schools", PACT-funded "Income-Generating Programme for Chepang Women and Youth", and National Planning Commission/Nepal-sponsored "Effectiveness of Primary Education."

(Courtesy Dr. G.M. Shrestha, Executive Director)

*RESEARCH PROJECTS AT CENTER FOR EDUCATIONAL INNOVATION AND DEVELOPMENT, TRIBHUVDAN UNIVERSITY, LAZIMPAT*

Development of Instructional Package on Environment and its Utilization for Rural Community

**Researcher:** H.R. Bajracharya

**Objectives:**
1. To study the level of awareness among the rural community on the environment, its importance and exploitation. 
2. To develop instructional packages to improve knowledge on environment. 
3. To implement the instructional package in a selected village.

Development of Reading Material for Neo-literate

**Researcher:** Shree Ram Lamichhane

**Objectives:**
1. To assess learning needs of the neo-literate with particular reference to the design and development of post literacy follow up materials. 
2. To design and develop various follow-up literacy materials based on the analysis of the data and information collected through needs assessment activity. 
3. To carry out a test of these follow-up literacy materials in different geographic regions and cultural settings. 
4. To judge the effectiveness of these materials and suggest to the implementing agency responsible for the operation of the functional literacy programme about the usefulness of such materials for the retention as well as enhancement of literacy skills of the neo-literate.

Study on the Linkage Between Secondary School Curriculum and Higher Education Curriculum

**Researcher:** Badri Dev Pandey

**Objectives:**
1. To find out the curriculum construction practices at the secondary and the higher education levels. 
2. To determine the linkage between secondary level and higher education curricula. 
3. To find out determinates of establishing relationships of concerned organizations.

A Study on the Cognitive Development of Primary School Age Children in Nepal

**Researcher:** Bharat Bilas Pant

**Objectives:**
1. To determine the pattern of cognitive development as in the reasoning ability of primary school age children — 6 to 10 years of age. 
2. To relate the children's cognitive development to age, sex, geographical location and socio-economic status with respect to schooling and non-schooling children. 
3. To derive implications of cognitive development status for the design of primary school curriculum. 
4. To derive implications for improving the training procedure of primary school teachers which involve the development of instructional materials and the methods for effective teaching.

Instructional Improvement in Primary School in Nepal

**Researcher:** Gajendra Man Shrestha, Surya Bahadur Shrestha, Sunita Malakar

**Objectives:**
1. To prepare teachers for implementing student-centered and activity-oriented techniques of teaching in primary school classroom. 
2. To orient parents to techniques of encouraging and facilitating student's learning efforts at home. 
3. To design and develop a set of learning materials for primary school students.
Development of Personnel Profile and Training Plans with Special Reference to Local Leadership and Participation in School Management

Researchers: Gajendra Man Shrestha, Bharat Bilas Pant

Objectives: 
(1) To identify organizational arrangements/profiles required for the implementation of policy of decentralization of the organization and local management of educational institutions. 
(2) To prepare new profiles of different categories of personnel who are expected to fulfill new responsibilities in the changed context. 
(3) To prepare training plans.

Provision of Moral Education in Grades IV-VII: A Status Survey

Researchers: Bijaya Kumar Thapa, Bidya Nath Koirala

Objectives: 
(1) To assess the nature and the scope of moral education as reflected in the objectives and the textbook. 
(2) To collect the views of teachers and guardians with regard to the importance, nature and the contents of moral education. 
(3) To trace out the practical problems in the instruction and evaluation of moral education. 
(4) To draw implications for improving the design and the instructional strategies of moral education.

*PROJECT: DETERMINANTS OF EDUCATIONAL PARTICIPATION IN RURAL NEPAL*

Research by: CERID, under the guidance of Dr. Gajendra M. Shrestha

The last three decades in the educational scene of Nepal are characterized by a rapid quantitative growth in student enrollment at all levels of education, especially at the primary school level. However, in spite of the considerable efforts made at the national level to provide basic level education to the people in the country, more than 30 per cent of the primary school age children still remain unenrolled in school and almost 50 per cent of the students enrolled at the first grade either drop out or repeat the same grade. In this situation, a study designed to identify the various factors for non-participation in education especially by children in rural areas, where 93 per cent of the country's population lives, is called for. To this end, the Research Centre for Educational Innovation and Development (CERID) undertook, in collaboration with World Education Inc/USA under a grant provided by USAID, a three-year study project entitled "Determinants of Educational Participation in Rural Nepal."

The study, which was completed in March 1984, was conducted with aims to determine child-related, household-related and school-related factors affecting school participation. The procedures adopted included interviews of a nationwide sample representing the mountains, hills and the terai of more than 4650 school-age children and heads of over 2300 households in the rural areas of seven districts of the Kingdom and detailed information on 120 schools from the sampled areas was also taken.

The project's most striking findings in regard primary school-age children's participation in education in rural Nepal are as indicated below.

Child-related Factors

1. The single most important predictor of educational participation is sex. Boys have 33 per cent higher participation rate than girls.

2. Greater distance of the school from home discourages parents from sending children to school. Children's educational participation rate decreases by 2.5 per cent for every kilometer's distance.

3. A high proportion of children in all primary grades are over age. A year's increase in age enhances the chance of educational participation by 4 per cent.

4. A child's chance of participating in formal education is reduced by 33 percent if he is engaged in earning activity and by 9.3 per cent if he has to help with the household work.
Household-related Factors

1. The educational status of adults in a family was the strongest predictor of rural children's educational participation. One year's increase in their average educational status raises the children's school participation rate by 4.5 per cent.

2. The attitude of the household head towards modern standards was found to influence educational participation of their children to a great extent.

3. The probability of a Nepali-speaking child's participation in education was higher, especially in hill areas.

4. The higher the income of a family is, the greater is the chance of the children's going to school.

5. Educational participation rate of children of households engaged in cottage industry and labor decreased by 6.7 percent.

School-related Factors

1. Ethnic similarity between teacher and students was a strong factor in enhancing educational participation, especially in the hills.

2. The availability of qualified and trained teachers and of better physical facilities in a school helped increase educational participation.

Regional, Sex-wise and Level-wise Divergences

1. Distance of school from home affect educational participation by school age children mostly in the hills and the mountains.

2. In the terai and inner-terai regions where girls' enrollment is lowest, father's educational status exerts a great influence.

3. The rate of girls leaving school after the age of 12 or 13 is exceedingly high.

Factors Affecting School Attendance

1. "Grade continued" or the number of grades a student completes contributed to the regular attendance of school-going children.

2. The multiplicity of classes in a school was found to be negatively associated with school attendance.

3. Greater distance to school and a high student-teacher ratio had an adverse effect on the attendance of school-going children.

4. Improved physical facilities (like a playground) and instructional resources (like teaching materials and library) had a significant positive effect on the attendance of children.

Recommendations

Keeping in view these major findings, the study makes the following recommendations for maximizing educational participation by rural children.

1. Adopting alternative structures and methods to increase access to education -- the industrial model of setting up a school centrally is not very practical in the mountains and parts of the hills where the settlement pattern is sparse and scattered. Hence, it is recommended that alternative structures of primary education (such as mini-schools and annex classes) and non-formal approaches be adopted to increase rural children's access to education.
2. Reducing pressure of domestic work on children: Approaches, such as child-care centres and co-ops to look after the cattle and to fetch wood/fodder, should be taken to disengage children from certain household duties so that they can take part in schooling.

3. Raising the level of people's awareness and commitment: Literacy and non-formal education programmes should be intensified and an educational campaign launched to exert a subtle social pressure on rural parents to send their children to school.

4. Adopting discriminatory policy of supporting education for the most needy: In spite of free primary education many families cannot still send their children to school because of incidental expenses and the loss of labour at home. Equity in education requires giving a greater need-based share to the most indigent. It is therefore necessary to provide special support and incentive mechanism for the economically and socially disadvantaged children.

5. Increasing educational relevance to rural needs: Steps must be taken to raise the extent of relevance of school education to rural needs, schools should not stand as islands of academic institutions.

6. Improving physical and instructional facilities in school: To increase attractiveness of the school for the children, the physical as well as the instructional facilities of the schools need to be considerably improved.

7. Recruiting teachers of similar ethnic background and providing continuing education to them: As far as possible local teachers should be recruited whose ethnic background is similar to that of most of the students and they should be given opportunities to have continuing education.

8. Lessening inequalities: In view of the regional and socio-ethnic differences in educational participation, educational planning should also address itself to resolving imbalances in educational opportunities.

9. Promoting research and development efforts for increasing participation in education — Concerted research and experiments should be conducted to explore innovative strategies (like alternative structures and methods) and supportive programmes (like primary preparatory classes) for achieving universalization of primary education.

10. Bringing about effective partnership between local participation and government efforts — Synchronization of the government's and the people's efforts is necessary for promotion of educational participation. The government inputs for educational development should be in harmony with local efforts and plans.

*THE NEPAL RESEARCH PROGRAMME OF THE DEUTSCHE FORSCHUNGSGEMEINSCHAFT (GERMAN RESEARCH COUNCIL, F.R.G.)*

The programme was initiated in 1980 with the ultimate aim to elucidate, within the framework of a rather pragmatic multidisciplinary cooperation, the origin, development and interpenetration of different traditions in select areas and historical periods of Nepal. The attention thus focuses on religion, literature, oral tradition, law, arts and material culture, with particular emphasis on the processes of "Hinduization." A few among the individual projects primarily serve the purpose of documentation and collect data which are to provide a basis for later analyses of tradition-formation.

So far, the G.R.C. has sponsored the following projects:

— Ethno-demographic survey of select areas (W.A. Frank);
— Linguistic survey of the languages of Nepal and their geographical distribution (W. Winter, A. Weidert);
— Topographic map of Gorkha (W. Haffner);
— Land use and traditional methods of soil conservation among different population groups in the area of Gorkha. (W. Haffner et al.);
— Comprehensive glossary of traditional Newari technical terms relative to architecture and construction (B. Kolver, N. Gutschow, I. Shresthacharya);
The musician castes (Damai, Kusle, Kulul), with particular emphasis on their drumming techniques (G.M. Wegner);

Iconography of Hindu temples and its relations to India (A. Gail);

Documents of the Malla period on administration and traditional Indian law (B. Kolver);

Interrelations between monasteries (bahal) and laymen in Kathmandu and Patan (S. Lienhard);

Vedic rituals (M. Witzel);

Architecture of the palace compound at Gorkha and its ritual functions (B. Kolver, N. Gutschow);

Great, regional and local traditions in the development of sanctuaries and cults in the Gorkha and Jumla areas (G.D. Sontheimer, G. Unbescheid);

Classical and folk literature in Mustang (D. Schuh et al.);

Oral ritual texts of the Tamang in Central Nepal (A. Hofer);

Anthropology of the Kham Magar, with particular emphasis on shamanism (M. Opopitz).

The projects have been carried out under the coordinatorship of B. Kolver (University of Kiel). Recently, the participants in the programme convened at a symposium to evaluate the results hitherto achieved. The forthcoming publication of their contributions will be noted in the HRB. It is planned to start on a second term of the programme from 1985.

*PROJECT: ROCKCARVINGS AND INSCRIPTIONS ALONG THE KARAKORUM HIGHWAY*

Researchers: Prof. Dr. Karl Jettmar, Dr. Volker Thewalt

South Asia Institute
Heidelberg University


The research project was suggested by Prof. Jettmar's observations during ethnological expeditions in the Northern Areas of Pakistan (formerly "Gilgit Agency") in 1955, 1958, 1964, 1971, 1973, 1975, 1978, 1979. The existence of rockcarvings in the Gilgit Agency was already known much earlier, in fact, far more than a hundred years. Essential work, however, was done or organized only by Sir Aurel Stein shortly before the end of British rule (and his own death in 1943).

During his travels in the area Jettmar saw many carvings and several inscriptions which turned out to be unpublished. (Alam Bridge was later studied by G. Fussman). When he prepared his volume on the "Religions of the Hindukush" (printed in German 1975), he was confronted with problems of the pre-Islamic history and became convinced that systematic recording of the inscriptions would render the clue to many unsolved problems.

But fieldwork was not feasible before 1978 when the construction of the Karakorum Highway had been finished by a common effort of Pakistan and China. Afterwards the restrictions to foreigners travelling in the "Northern Areas" were suspended. Places inaccessible so far could be visited for the first time as bridges were built and pacification of previously unadministered valleys went on.

1979 was the year of the basic discoveries. Jettmar made an exploring trip together with Prof. A.H. Dani (University of Islamabad). Immediately after their arrival in Hunza they were shown the petroglyphs at Haldeikish, a major part of them evidently once made by foreigners travelling between South Asia and the Tarim Basin. The inscriptions (in Kharoṣṭhī, Brāhmī, one in Bactrian, one in Sogdian, one in Chinese) were made between the 1st and the 6th centuries A.D. Most of the animal figures were produced by picking with a sharp stone and belonged to a much later time. This material was systematically studied in 1980 by a joint expedition in the frame of the "Pak-German Study Group for Anthropological Research in the Northern Areas." In the meantime the Group was established by a formal act of the Government of Pakistan which issued a permit to Jettmar for several years. An archaeological license was granted as well. Therefore in the Group linguists, anthropologists and geographers are included besides the archaeological team. The Pakistani counterparts are Prof. Dani acting as coordinator, Director Qamar as representative of the Department of Archaeology and Museums, Director U. Mufti as Head of the National Institute of Folk Heritage. The German members consist of Dr. V. Thewalt (art historian), collaborating specialists, e.g., the Indologist Prof. O. von Hinüber, technical assistants changing in different years, and Prof. Jettmar.

In 1981 the archaeological team of the Pak-German Study Group started systematic documentation of petroglyphs in the Indus valley, where Jettmar literally had found a "fairy-land of rockcarvings" in...
1979. (The local belief is that the somewhat demoniac fairies of the mountains have made the graffiti.)

Smaller sites are situated east of Chilas. Around Chilas there is an imposing concentration, more than 20 sites, some of them very extensive. From here onwards down to Shatial there is a chain of rockcarvings on the southern (left) bank of the Indus. The main clusters are near Thor, on the mouth of the Minar valley, and at Shatial Bridge. Some interesting sites were found on the northern (right) bank, especially opposite of the Thor valley. In this way a veritable "Province of Rock Art" (Anati) was revealed. Expeditions in the years 1981, 1982, 1983 were busy there. The report has primarily to deal with this material.

Each carving seen by the members of the team was documented. Photographs in colour turned out to be most rewarding, plaster casts were necessary only in a few cases. In the Indus valley many rocks are covered by desert varnish in brown or bluish tints, sometimes extremely dark, changing according to the quality of stone and exposure.

The ancient masters preferred rocks polished by the river which transported enormous quantities of sand and gravel. The valley had been filled by sediments at several geological periods. Remainders are to be seen on the slopes, even on very high levels. Rocks forming the edges of ancient terraces were uncovered during later periods when the river was cutting down again. Sometimes its main course had changed, so ridges were created, polished on both sides, with recesses deeply carved out. Early men had a special pre-dilection to decorate such niches, evidently they were used as sanctuaries.

Even a minor lesion of the patina by hammering or engraving (with sharp stones or metal implements) is visible from far distance. Repatination is a slow process, only completed where we could assume according to other criteria a date not later than Early Bronze Age. That brings us to the main problem: to organize this enormous body of material in a preliminary chronological system.

1. The Middle Period: Buddhism.

We have special premises for the first step. During the time when Buddhism prevailed in the area, carvings of religious meaning including stūpas, Buddhas, Bodhisattvas, even sophisticated Jātaka scenes were supplemented by inscriptions in the well-known scripts Kharoṣṭhī, Brāhmī, and late (angular) Brāhmī also called proto-Sarada. Mostly the text is in Buddhist hybrid Sanskrit. The contents are consecrating formulas and names of the consigners and executants. Similar names occur in the colophones of the famous Gilgit Manuscripts discovered in the thirties; the same scripts are used there.

1.1 Referring to comparative iconography and palaeographic arguments, the Buddhist sites can be classified into an early group using Kharoṣṭhī (Chilas II) dated in the first century A.D., and into a later one comprising all other sites starting in the late 4th century A.D. and ending in the 8th century. The time in between is poorly represented — this makes the difference to sites like Hunza-Haldeikish and Alam Bridge. Brāhmī and proto-Śāradā are the typical scripts of the later period.

Names of different origin as well as stylistic diversity prove the presence of foreigners. We may assume that among them there were merchants, pilgrims, warlike adventurers, maybe also refugees. But not all of them came from far-away countries. Somewhere in the Indus valley was a famous sanctuary with a huge wooden statue of Maitreya. The place was called "Tal-li-lo" by Chinese travellers. In the 11th century Biruni mentions an idol situated in "Shamil", certainly in the same part of the Indus valley. Therefore we may reckon also with pilgrims from the immediate neighbourhood.

In any case the ethnic diversity is astonishing. Besides men and women with Sanskritic names (maybe locals) we find Iranians of different origin as well as tribals, Khasa and Jāts (in the earliest form of this name: jaṭṭa). Several names cannot be explained. An affinity to the "Wild Men" mentioned in the "Inquiry of Vimalaprabhā" — a Tibetan text translated by F.W. Thomas — is possible.

1.2 A group of quite special character is evident in the western segment of the site Shatial Bridge. There is a cluster of inscriptions in Sogdian script and language. More than 200 of them have been studied by Prof. Humbach, mostly "Names and patronymics of the authors to which sometimes clan names and places of origin are added. Many of the names are theophoric and thus shed a glimmer of light on the religious conditions in Sogdiana." There is a smaller
concentration of this kind in Thor, Northern Bank. Some isolated specimens occur in other places, even in Hunza-Haldeikish. It should be added that at least a party of the Sogdians fostered anti-Buddhistic feelings. Perhaps people could express them in places where they had camps under the protection of a foreign power, almost certainly the Hephthalite state. Its ruling elite was not Buddhistic. Without the cover of this state, trade between Sogdiana and the regions in the South would have been hardly possible in the late 5th or 6th centuries, the time when most of the inscriptions were made. This dating is confirmed by interspersed Brāhmī inscriptions.

The other languages and scripts cannot be dealt with explicitly here. Envoys of the Great Wei Dynasty passed through the Hunza valley. Chinese characters were observed also elsewhere. Later than the main stock are names and patronyms of biblical character written in the Hebrew quadrangular script of the 9th century A.D. It is an interesting illustration of the fact that Jewish merchants were considered as neutrals and took over the trade in the period of heavy fighting between Muslim and non-Muslim powers.

We must presume a more complicated interethnic system than that observed when Dogras and Britishers conquered the area. One of the arguments is that there are minor sites where non-Buddhist motifs including hunting scenes and enigmatic symbols prevail, even in periods when Buddhist carvings were made nearby. Hunters and herdsmen remain often outsiders to the Buddhist communities. The same may have happened here. Even Buddhist communities had preserved a considerable share of indigenous elements and had the tendency to interpret the stūpa as mountain symbol or even as a demoniac giant.

2. Pre-Buddhist Carvings.

By contrast we can discern a considerable group of carvings which was made before Buddhism was preached in the valleys.

2.1 A small part of them has thematic and stylistic relations to cultures well-studied outside the mountains. So their appearance along the Indus must be explained by immigration and cultural diffusion. One group consists of animal drawings following the rules of Scythian Animal Style. Maybe such carvings were made by Saka tribes, nomads of the Central Asiatic steppes, who were on the way to India. A bronze plaque with the characteristic traits of their art was obtained by Jettmar in the Kandia valley.

The other group is an offshoot of Achaemenid art. It was certainly imported by immigrants from the West. There is a sacred place where both groups, Sakas and West Iranians, made their graffiti side by side, the "Altar Rock" at Thalpan. In other sites such carvings were found surrounded by the usual Buddhist engravings and inscriptions. Evidently the pre-Buddhist foundation of local sanctuaries was due to such immigrants.

2.2 There are more parallels between heavily re-patinated carvings here and in other parts of Asia, especially the Pamirs and the mountains north of them. Strange motifs, e.g., human masks, also occur on stone slabs used for building graves and on monoliths erected by the people of the Okunev culture in Southern Siberia. A part of the earliest settlers brought horned cattle with them. Again we find several traditions meeting each other in one place. We cannot explain why they have chosen a barren terrace opposite of Chilas for the display of their rock art.

3. The Late Horizon: Post-Buddhist Carvings.

3.1 Primitive drawings of animals mostly representing goats or wild goats were apparently made during a long time, some of them quite recently. The re-patination is insignificant. Popular belief implying interpretation of petroglyphs mostly is concerned with this kind of carvings. It contains reminiscences that they were made during fertility rites. The task was to increase the offspring of wild and domestic goats. In fact during the winter festival of the still pagan Kalash in Chitral, soot drawings were made on the inner walls of the houses as well as dough figures of animals for such reasons.

In the Indus valley positive explanations of this kind were never heard. Evidently the local population was convinced that no human beings could produce such an enormous wealth of perfect and beautiful but incomprehensible carvings. Therefore everybody was kept in awe, no damage was done to them. It is a great pity that the tradition of respect was broken by the
road-builders. They did not only blast many carvings — they added their names, even the Chinese did so, near to the names of their ancestors.

3.2 On the other hand there is a coherent group of carvings seemingly later than the Buddhist complex and made in a quite different attitude. We could call them warlike and aggressive; they dominate and cross out earlier inscriptions and images. But the producers were certainly not Muslims. Already in his first report Jettmar suspected this late group has something to do with the heavy fighting in the plains where the Sāhīs of Kabul and Waihand repelled the Muslims in the name of Hinduism, until they finally succumbed to Māmūd of Ghazni in the 11th century A.D. However a part of the motifs integrated in this complex has local roots, so the image of an ithyphallic man with extended arms and straddled legs may be a local deity. Even circular discs with many kinds of decoration have a prototype in earlier stūpa carvings which show the anda replaced by a decorated wheel. Ibex figures with two long horns extended over the whole body fit well in the pictorial tradition of the mountaineers. On the other hand we have so far unexplained new topics, e.g., peculiar axes and the image of a deity standing on a horse. Sometimes axe, bow, or shield appear in the hands of this figure, we can even discern the reins. Dani explained this complex by the invasion of warriors which he called "battle-axe people" presuming that they brought Hinduistic beliefs and symbols. To Jettmar the situation seems more complex. No carving shows one of the later Hinduistic deities. In the Indus valley only the immediate neighborhood of Chilas was affected by this impact. However decorated circles were observed on rocks in the Gilgit valley and in Indus Kohistan. What is more important, some of the related motifs survived up to the present day. We can recognize them when we study the elaborate wood carvings decorating old-fashioned mosques in Indus Kohistan. The same type of battle-axe was recently used for ceremonial purposes not only in the Northern Areas of Pakistan but also in Chitral and Kafiristan (now called Nuristan). The background for the formation of this complex was certainly the political events since the middle of the 8th century A.D. Tibet, for a while predominant in Central Asia, had incorporated not only Great Bolor (Baltistan), but also the Gilgit valley (Little Bolor). Interventions by China and Kashmir had no lasting results. Certainly the statelets and tribes along the Indus were also affected. The intense connections with far-away countries were suspended forever. This must have been a great spiritual shock leading to aggressive reaction.

From the 10th century onwards a large state evolved in the westernmost Himalayas on the ruins of Tibetan power, the Kingdom of the Daradas. It merged in some way with Bolor where the royal house had survived thanks to intermarriage with the dynasty of Tibet. The chronicle of Kashmir helps us to get an idea of the history of the Daradas who for a while were quite rapacious neighbours.

Very little is known of the cultural developments. Buddhism still remained the dominant religion as indicated by rock reliefs connected with similar monuments in Baltistan and Ladakh. The Gilgit Manuscripts written under the kings of Bolor were then enshrined near Gilgit, the new residence. They were hidden as powerful spells (as nobody could read them) in a hollow stūpa.

4. Further Tasks.

The research team established in the frame of the Heidelberg Academy of Sciences is now confronted with the following problems:

4.1 Graffiti and inscriptions known so far must be recorded with all necessary informations, by photographs (in black and white and/or in colour), drawings, rubbings and plaster casts. Together they form the archives kept under the custody of the Academy mentioned above. In the Department of Archaeology and Museums, Karachi, copies of the files must be available.

4.2 The location of the petroglyphs in the sites, the relation among the sites themselves must be captured by sketches and maps. Mr. Kauper is in charge of this task. He needs photogrammetric equipment.

4.3 Geochemical studies of desert varnish and re-patination of the graffiti are necessary in order to control the proposed (relative) chronology.

4.4 The data contained in the archives are to be arranged in order to feed them into a computer.

4.5 The publication will need two series. One of them has to contain the annual reports, the observations of the specialists as well as the first attempts to present a scholarly synthesis. The
other one has to present the material explicitly enough for general use. Collaboration with the Corpus Inscriptionum Iranicarum is planned.

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Ahmad Hasan Dani
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Volker Thewalt


AREA OF FIELDWORK

done by the Pak-German Study Group 1980 - 1983

--- Karakorum Highway

...... Local tracks now partly replaced by jeep-roads or the Karakorum Highway

Major sites of petroglyphs and inscriptions:

H - Hunza-Haldeikish  
A - Alam Bridge  
1 - Thalpan  
2 - Ziyarat  
3 - Hodar  
4 - Thor, Northern Bank  
5 - Thor  
6 - Minar-gah  
7 - Shatial Bridge

The many sites near Chilas, Southern Bank, are not indicated

(V. Thewalt, after Wiche 1958)