

**29th ANNUAL
NORTHWEST
ANTHROPOLOGICAL
CONFERENCE**

APRIL 8-10, 1976

**CENTRAL WASHINGTON
STATE COLLEGE**



**29th ANNUAL NORTHWEST ANTHROPOLOGICAL
CONFERENCE**

APRIL 8, 9 & 10, 1976

**CENTRAL WASHINGTON STATE COLLEGE
ELLENSBURG, WASHINGTON**

GENERAL INFORMATION

All activities, with the exception of the Banquet (see below) will be held in Samuelson Union Building (SUB). See Campus Map (centerfold) and Floor Plan (p. 25-26).

Films will be shown in SUB 104; titles and schedules will be listed on a separate handout. Coffee will be served at 10:00 a.m. and 2:00 p.m. in the Lounge Area (SUB 2nd floor, last lobby).

The Banquet will be held at 7:00 p.m., Thursday, in Holmes Dining Hall. The keynote address will be presented by Dr. Erna Gunther.

A "beer-n-boogie" session will start at 8:00 p.m., Friday, in SUB 108 (fountain area of the cafeteria).

For those on reservations, meals will be served in Holmes Dining Hall as follows: Breakfast, 7-8 a.m., Thur., Fri., and Sat.; Lunch, 12-1 p.m., Thur., Fri., and Sat.; Dinner, 5-6:15 p.m., Sat.

Those planning to go on the Yakima River "float" should make reservations by Friday, and meet at Munson Hall at 1:00 p.m. on Saturday.

THURSDAY, APRIL 8

MORNING

- X HELL'S CANYON NATIONAL RECREATION AREA --
CULTURAL RESOURCES AND THE MANAGEMENT PLAN:
AN INFORMAL DISCUSSION.

9:00 SUB 110

Coordinator: Leslie E. Wildesen
(U.S. Forest Service)

HISORICAL ARCHAEOLOGY (PART I) SUB 214
(Symposium)

Coordinator: George R. Mead (ISU)

- X X 9:00 Herb Beals (Oregon Archaeological Society)
*"Chinese Coins and Pacific Northwest Archaeology,
1644-1911"*
- X X 9:30 Harvey W. Steele (Oregon Archaeological Society)
*"The European Sale Shop at Fort Vancouver,
1829-1860"*
- X X 10:00 Karl Roenke (UI)
*"Window Glass Thickness: A Study in Distribution
Patterns and Temporal Fluctuations, ca.
19th century"*
- X X 10:30 Timothy Jones (UI)
*"Classification of Kanaka Village Metal, ca. 19th
century"*
- X X 11:00 William H. Adams (WSU)
"Trade Networks: A View from Silcott Washington"

THURSDAY, APRIL 8

MORNING

LITHIC TECHNOLOGY (PART I) (Symposium) SUB 202

Coordinator: Jerry R. Galm (WSU)
Glenn D. Hartmann (WSU)

- 9:00 Guy R. Muto (Northwestern U.)
*"An Analytic Model for Close Order Articulation
of Information and Association"*
- 9:30 J. Jeffrey Flenniken (WSU)
*"Re-evaluation of the Lindermeier Folsom: A
Replication Experiment in Lithic Technology"*
- 10:00 Robert Lee Sappington (UI)
*"Correlations between Flake Mass and Distance
from Quarry Source within a Paleo-Indian
Lithic System"*
- 10:30 J. Brantley Jackson (WSU)
*"Plane Sense: A Technological and Functional
Analysis of a Stone Tool Category"*
- X 11:00 Jerry R. Galm (WSU)
*"A Technological Analysis of Projectile Points
from the Cox's Pond Site, Washington"*
- 11:30 Daniel G. Roberts (ISU) *Mark B. Sent*
"Technological Parameters of the Teshoa"

THURSDAY, APRIL 8

MORNING

POLITICS AND KINSHIP: NORTHWEST COAST AND
ELSEWHERE (Volunteered Papers) SUB 208

Discussant: Catherine J. Sands (CWSC)

- 9:00 Kenneth M. Ames (BSU)
*"The Evolution of Chiefdoms on the Northwest
Coast: A First Approximation"*
- 9:30 Timothy G. Baugh (OSU)
*"The Marriage and Political Structure of the
Tlingit Indians"*
- 10:00 James Daniel Vaughan (UW)
*"Tlingit and Haida Potlatch and Society: Further
Testings of a Structural Analysis"*
- 10:30 Ann Drake (TCC)
*"An Ethnographic Test of Leach and Douglas in
Respect to Myth and Kinship Structures"*

THURSDAY, APRIL 8

MORNING

SYMBOLISM IN ANTHROPOLOGY (Symposium) SUB 204-5

Coordinators: Mark S. Fleisher (WSU)
Dennis C. Shaw (WSU)

- 9:00 Robert Goedecke (CWSC)
"Synechdoche, Metonymy, and Anthropology"
- 9:30 Dennis Connor Shaw (WSU)
*"The Synthetic Operator: The Epistemology of
Claude Levi-Strauss"*
- 10:00 Louis A. Hieb (WSU)
*"Cultural Categories and Architectural Form:
Some Semantic Aspects of the American
Home"*
- 10:30 Sally J. McBeth-Galm (WSU)
*"Systems of Classification among the Northern
Paiute"*
- 11:00 Patrick D. Brown (WSU)
*"Potlatch Symbolism: The Kwakiutl of British
Columbia"*
- 11:30 Mark S. Fleisher (WSU)
*"Symbolism in Coast Salish Mythology: A
Jungian Perspective"*

THURSDAY, APRIL 8

MORNING

MELANESIA (PART I) (Symposium) SUB 206-7

Coordinators: Robert L. Welsh (UW)
George D. Westmark (UW)

9:30 Carolyn Henning Brown (UW)
*"Throw the Indians Out": Recent Developments
in Fijian-Indian Relations"*

10:00 Dana E. Keil (WSU)
*"Traditional Social Organization and Modern
Cooperatives"*

10:30 Leslie Conton (UO)
*"Women's Verbal Roles: Politics of the Officially
Powerless in Usino, Papua, New Guinea"*

11:00 James B. Watson (UW)
"Pik i Samting Tru"

11:30 David Eister (UO)
*"Stability and Change in a New Guinea
Lowland Political System"*

THURSDAY, APRIL 8

AFTERNOON

PROBLEMS OF ARCHAEOLOGICAL RESOURCE
MANAGEMENT: AN INFORMAL DISCUSSION.

1:00 SUB 103

Coordinator: James M. Alexander (CWSC)

FAUNAL ANALYSIS (Symposium) SUB 204-5

Coordinator: Edward I. Friedman (WSU)

1:00 Edward I. Friedman (WSU)
*"Utilization of Avian Fauna in Makah Territory,
Washington"*

1:30 Gay Boehm (B.C. Provincial Museum)
*"Faunal Remains as Evidence of Non-material
Aspects of Past Cultural Systems"*

2:00 James C. Chatters (WSU)
*"The Definition of Artifact and the Distinction
of Cultural from Non-Cultural Bone in
Archaeological Contexts"*

2:30 Audrey L. Murray (UM)
*"Bison Procurement and Processing in North-
Central Montana: The Use of Mandibular
Tooth Eruption as an Indicator of
Seasonality in Site Utilization"*

3:00 Gary Wessen and Frank Ruddy (WSU)
*"Neutron Activation Analysis and the
Characterization of Archaeological Bone:
A Progress Report"*

THURSDAY, APRIL 8

AFTERNOON

LITHIC TECHNOLOGY (PART II) (Symposium) SUB 202

Coordinators: Jerry R. Galm (WSU)
Glenn D. Hartmann (WSU)

- 1:00 Glenn D. Hartmann (WSU)
*"The Raw and the Cooked: A Preliminary Analysis
of Thermal Pretreatment of Various Tool-Stones"*
- 1:30 Phillip Shelley (WSU)
*"A Different View of Crescentic Artifacts:
Preliminary Report of Opal Phytolith Deposition"*
- × 2:00 Ruthann Knudson (UI)
*"Prichard Argillite, the Harvey Mountain Quarry,
and Lithic Resource Identification"*
- 2:30 James C. Haggarty & J. Jeffrey Flenniken (WSU)
*"Trampling as an Agency in the Formation of
Edge Damage: An Experiment in Lithic
Technolgy"*
- 3:00 Henry T. Irwin (WSU)
"Geofacts and Artifacts"
- 3:30 Terry Del Bene, Gerald Holley & Phil Shelley (WSU)
"Lithic Replication: A Critical Review"

THURSDAY, APRIL 8

AFTERNOON

MELANESIA (PART II) (Symposium) SUB 206-7

Coordinators: Robert L. Welsch (UW)
George D. Westermark (UW)

- 1:00 Dan Jorgensen (UBC)
*"The Telefolmin Village: Now You See It, Now
You Don't"*
- 1:30 George D. Westermark (UW)
"Sorcery and Exchange"
- 2:00 Kenneth E. Read (UW)
"Gahuku Beliefs and Practices"
- 2:30 R. Tonkinson (UO)
"The Church and Sorcery in Southeast Ambrym"
- 3:00 Robert L. Welsch (UW)
"The Taro Cult: A Reinterpretation"
- 3:30 Robert B. Lane (UV)
*"Melanesian Native Movements: Some
Reconsiderations of Reflections of a
Participant Observer"*
"New Hebrides ground drawings"

THURSDAY, APRIL 8

AFTERNOON

ENVIRONMENT, ECOLOGY, ECONOMY.
(Volunteered Session)

SUB 208

Discussants: Clayton C. Denman (CWSC)
Kathleen J. Adams (CWSC)

- 1:00 Lucile Kempers Housley (CWSC)
"The Bontanist as Anthropologist: An Unusual View"
- 1:30 Marilyn D. Couture (PSU)
"The Status of Recent Foraging Practices Among the Burns Northern Paiute"
- 2:00 James P. Green (WSU)
"Shoshonean Cultural Ecology: Another Perspective"
- 2:30 William W. Speth (CWSC)
"The Forgotten Side of Ecological Anthropology: the Contribution of Carl Ortwin Sauer (1889-1975)"
- 3:00 H. Max Drake (PLU)
"Another Approach to the Formalist-Substantivist Controversy in Economic Anthropology"

FRIDAY, APRIL 9

MORNING

PACIFIC NORTHWEST PREHISTORY (PART I) SUB 117
(Symposium)

Coordinator: William C. Smith (CWSC)

- X X 9:00 Frans Lamers (UV)
"The Horse Among the Sahlshian Speakers of Sothern British Columbia"
- X 9:30 William C. Smith (CWSC)
"Pacifism, Conflict and Defense in the Columbia Plateau: The Emergence of Plateau Culture"
- X 10:00 Susan Kent (WSU)
"Pacifism and Hostile Relations on the Plateau"
- X 10:30 David G. Rice (UI)
"Prehistory of the Western Columbia Basin: A Critical Review"
- X 11:00 Keith D. Gehr (PSU)
"The Archaeology of Hihium Lake, British Columbia: An Areal Extension of the Nesikep Tradition into a New Ecologic Zone"
- X 11:30 Wayne Choquette (UI)
"Insights into the Emergence of Prehistoric Kootenay Culture"

FRIDAY, APRIL 9

MORNING

PREHISTORY OF THE LOWER COLUMBIA AND WILLAMETTE VALLEYS (PART I)
(Symposium) SUB 204-5

Coordinators: James C. Chatters (UW)
Sarah K. Campbell (UW)

- X 9:00 James C. Chatters (UW)
"The Schulta Marsh Site: A Multi-Component, Seasonal Round Occupation in the Lower Columbia River Uplands"
- X 9:30 Sarah K. Campbell (UW)
"Preliminary analysis of the Kersting Site, 45-CL-21, Clark County, Washington"
- X 10:00 Mary Ann Duncan (UW)
"Salvage Excavations at 45-SA-5, North Bonneville, Skamania County, Washington"
- X 10:30 Judy Starkey
"Archaeological Reconnaissance of the Portland, Oregon - Vancouver, Washington Area"
- X 11:00 Janet Rafferty and Mary Ann Duncan (UW)
"Design and Evaluation of a Stratified Random Sampling Strategy for a Single Site"
- X 11:30 Richard M. Pettigrew (UO)
"Chronological Ordering of Lower Columbia Projectile Point Styles"

FRIDAY, APRIL 9

MORNING

HISTORICAL ARCHAEOLOGY (PART II)
(Symposium) SUB 214

Coordinator: George R. Mead (ISU)

- X X 9:00 Timothy B. Riordan (WSU)
"The Archaeology of the Migrant Laborers of Silcott, 1920-1958"
- X X 9:30 Harvey W. Steele (Oregon Archaeological Society)
"Historic Materials from Lady Island (45-CL-48), 1850-1910"
- X X 10:00 Gerald H. Grosso (WARC)
"Ozette Imported Ceramics: What? Why? When? How? ... A Preliminary Report"
- X X 10:30 Karl Roenke and Robert Weaver (UI)
"A Call for a Cooperative Effort in Historic Preservation: Architecture, History, and Archaeology"
- X X 11:00 Roderick Sprague (UI)
"Oral Myth in Historical Archaeology, ca. 1968-1970"

FRIDAY, APRIL 9

MORNING

AMERICAN CULTURE: MALE AND FEMALE SUB 202
(Symposium)

Coordinators: Ann Lee (WSU)
Judy Giniger (WSU)

Discussant: Ann S. Denman (CWSC)

- 9:00 Judith Preston-Burnham (WSU)
*"Personality Trait Differences between Male
and Female Police Science Students"*
- 9:30 Donna Brians (WSU)
*"American Male Participation in the Rearing of
Young Children: A Look at Role Models in
Homes and on TV"*
- 10:00 Judith Giniger (WSU)
"Male and Female: The Way it is in Cartoons"
- 10:30 Barbara Jacobs (CWSC)
"Marriage Encounter in Cultural Perspective"
- 11:00 Ann Lee (WSU)
"Pornography: The Ideal Woman"
- 11:30 Catherine Sands (CWSC)
*"The Physically Abused Child: A case in
point, Florida"*

FRIDAY, APRIL 9

MORNING

MODELS FOR ANTHROPOLOGISTS SUB 206-7
(Symposium)

Coordinator: Sally McBeth-Galm (WSU)

- 8:00 Sally J. McBeth-Galm (WSU)
*"A Systems Analysis of Aboriginal Movements
and Socio-Cultural Change in the Chequamegon
Bay Area of Wisconsin"*
- 8:30 Dennis Connor Shaw (WSU)
"Marriage in the New Guinea Highlands"
- 9:00 Elwyn C. Lapoint (EWSC)
*"Escalation of Factional Conflict: A Case
from Village India"*
- 9:30 Richard L. Berg, Jr. (ISU)
"Rethinking Peasantry"
- 10:00 Laura L. Appleton (CWSC)
*"The Hutterites: A Social Movement
Perspective"*
- 10:30 Timothy Peter Mills (WSU)
*"The Application of Ritual Paradigms to
Social Movements"*
- 11:00 Philip H. Jacobs (CWSC)
"Energetics and Cultural Change"

FRIDAY, APRIL 9

AFTERNOON

X PROBLEMS OF INTEGRATIVE UNIT NOMENCLATURE
IN PLATEAU PREHISTORY: AN INFORMAL DISCUSSION.

1:00

SUB 103

Coordinator: William C. Smith (CWSC)

PREHISTORY OF THE LOWER COLUMBIA AND
WILLAMETTE VALLEYS (PART II) (Symposium) SUB 204-5

Coordinators: James C. Chatters (UW)
Sarah K. Campbell (UW)

- X 1:00 C. Melvin Aikens and Rick Minor (UO)
*"Assemblage Variation and Activity Loci at Coffee
Pot Flat, South-Central Oregon"*
- X 1:30 Sarah K. Campbell and Dennis E. Lewarch (UW)
*"Preliminary Salvage Excavations at 45-SA-12,
Hamilton Island, Skamania County,
Washington"*
- X 2:00 James L. Petersen and Frances M. Philipek (PSU)
"A ^{Spear} Pear Thrower from the Oregon Coast"
- X 2:30 Robert D. Shaw (WSU)
*"The Martin Site (45-PC-7) Revisited: A
Multi-Component Site of the Southwestern
Washington Coast"*

FRIDAY, APRIL 9

AFTERNOON

ARCHAEOLOGICAL METHODS
(Volunteered session)

SUB 206-7

Discussant: Manfred E. Jaehnig (CWSC)

- X 1:00 William S. Dancy (Ohio SU)
*"Surface Collecting in Central Washington: An
Evaluation of Technique"*
- 1:30 Manfred E. Jaehnig (CWSC)
*"Environmental Reconstruction: The Use of
Gastropods in Archaeology"*
- 2:00 Charlotte Benson (UW)
"Research Oriented Contract Archaeology"
- 2:30 Stephan R. Samuels (WSU)
*"Archaeological Applications of Computer
Graphics"*
- 3:00 Darrel L. Thiel (WSHS)
"Function and Planning of an Exhibit"
- 3:30 W. Morlin Childers (Imperial V. C. Museum)
"Ridge-Back Tools of the Colorado Desert"
- X 4:00 Ellen Robinson
*"Charles E. Borden - his formulation and
testing of archaeological hypotheses."*

FRIDAY, APRIL 9

AFTERNOON

AMERICAN INDIAN LINGUISTICS (Symposium) SUB 208

Corrdinator: Raleigh J. Ferrell (WSU)

- 1:00 Norman A. Bowers (WSU)
"Past and Present Tense in Hidatsa"
- 1:30 Mark S. Fleisher (WSU)
"Proto-Salish Phonology"
- 2:00 Raleigh Ferrell (WSU)
"C:V Alternation and Canonical Form in Northwest Coast Languages"
- 2:30 Patricia Stanley (WSU)
"Enclitic, Word, and Word Order in Yuchi"
- 3:00 Grover S. Krantz (WSU)
"Language Geography of the Northwest Coast"

FRIDAY, APRIL 9

AFTERNOON

AMERICAN CULTURE II.
(Symposium)

SUB 202

Coordinators: Ann Lee (WSU)
Judy Giniger (WSU)

Discussant: Marco G. Bicchieri (CWSC)

- 1:00 John R. Nelson (WSU)
"Double Identity and Research Paradigms Among U.S. Ethnic Groups"
- 1:30 David E. Kaufman (CWSC)
"Harte Centre: A 'Communications' Model of Increasing Scale and Value Transformations"
- 2:00 Jody Gentles (CWSC)
"Using Local Data in Ethnography of Small Towns"
- 2:30 William W. Pilcher (Gonzaga)
"Cab Drivers and Other Poor People"
- 3:00 B. Raymond Druian (WSU)
"The Front Lawn as a 'Sacred Cow' "
- 3:30 Roberta L. Hall (OSU) & James Haggerty (WSU)
"How to Pass as Canadian/American if you are American/Canadian: a Sociolinguistic, Participant observers view"
- 4:00 Jeffrey T. Burdick (WSU)
"Report on research being conducted on racial differences in autonomic nervous system responses to alcohol."

SATURDAY, APRIL 10

MORNING

PREHISTORY OF OZETTE (Symposium) SUB 202

Coordinator: Richard D. Daugherty (WSU)

- ✓ 9:00 Richard D. Daugherty (WSU)
"An Introduction to Ozette Prehistory"
- ✗ 9:30 Janet P. Friedman (WSU)
"Ozette Woodworking: Types of Wood Used"
- ✓ 10:00 Paul F. Gleeson (WSU)
"Ozette Woodworking Technology"
- ✓ 10:30 Jeffrey E. Mauger (WSU)
"The Prehistoric Houses at Ozette"
- ✗ 11:00 Edward I. Friedman (WSU)
"Makah Camps and Villages"
- ✗ 11:30 Dale R. Croes (WSU)
"Ozette Basketry, Matting, and Cordage"

SATURDAY, APRIL 10

MORNING

SNAKE RIVER PREHISTORY (Symposium) SUB 214

Coordinator: Frank C. Leonhardy (WSU)

- ✗ 9:00 Hallett H. Hammatt (WSU)
*"Geological Processes and Apparent Settlement
Densities Along the Snake River: A
Geo-Centric View"*
- ✗ 9:30 Martha Yent (WSU)
*"Definition of Archaeological Components at
the Wawawai Locality (45-WT-39), Lower
Snake River Region"*
- ✗ ✗ 10:00 William H. Adams (WSU)
*"Ethnoarchaeology of Silcott, Washington:
An Overview"*
- ✗ 10:30 David R. Brauner (OSU)
"The Houses of Alpowai"
- ✗ 11:00 R. Lee Lyman (WSU)
*"Prehistoric Social Organization from Faunal
Remains"*
- ✗ ✗ 11:30 Timothy B. Riordan (WSU)
*"The Archaeology of Migrant Laborers:
The Orchard Workers of Silcott, 1920-1958"*

SATURDAY, APRIL 10

MORNING

PACIFIC NORTHWEST PREHISTORY (PART.II) SUB 117
(Symposium)

Coordinator: Astrida R. Onat (SCCC)

- X 9:00 Astrida R. Onat (SCCC)
"45-JE-16 - Indian Island"
- X 9:30 Stephen C. Cassidy (SFU)
"The Geography of Archaeological Sites in the
Southwest of the Gulf of Georgia"
- X 10:00 Bruce Womack (WSU)
"The Stockhoff Basalt Quarry (35-UN-52)"
- X X 10:30 Mavis A. Loscheider (UM)
"An Archaeological and Ethnohistorical
Investigation of Selected Areas in Kootenai
National Forest, Northwestern Montana"
- X 11:00 Stan Copp (SFU)
"Excavations in the Okanogan Valley"
- X X 11:30 Not Washington
The dominance of 'TsuKalotesa' (Lomatium coryi)
in central Washington aboriginal diets.

SATURDAY, APRIL 10

MORNING

PERSPECTIVES ON RELIGION (Symposium) SUB 206-7

Coordinators: Roger Harmon (UW)
Pamela Amoss (UW)

Discussant: Theodore Stern (UO)

- 8:30 Paul G. Hiebert, (UW)
"Religion: A Redefinition of the Concept"
- 9:00 Jay Miller (UW)
"The Delaware Big House Rite"
- 9:30 Pamela Amoss (UW)
"Potlatching Backwards and Forwards"
- 10:00 Stevan Harrell (UW)
"Ethno-functionalism: Why some Taiwanese
villagers say they're doing what they're
doing, even when they don't believe they're
doing what some people say they're doing"
- 10:30 Roger E. Harmon (UW)
"Dharmic Ambassadors: Debate Over the
Secular Involvement of the Monk in
Contemporary Thai Society"
- 11:00 James B. Pruess
"The Sacred Dimension: The Social Use of
Space at a Buddhist Shrine"
- 11:30 Robert R. Reed (EWSC)
"Bhakti, Buddhism and the Bhagavad-Gita"
- Constance E. Hawkins (Shoreline)
"The Economics of Religion: The Black church and civil rights
movement."
- Henry S. Sharp (SFU)
"Nature's Culture: Huichol women, an examination of the magical system
of the Chipecoyan."

SATURDAY, APRIL 10

MORNING

TEACHING ANTHROPOLOGY (Symposium) · SUB 204-5

Coordinator: James M. Alexander (CWSC)

- 9:00 Lynn D. Patterson (Evergreen)
*"Dreamers and Drones: Role of Anthropologists
in Interdisciplinary Education"*
- 9:30 Zaher Wahab (Lewis and Clark)
*"American Perspectives on Swedish Culture and
Society: The Impact of Cross-Cultural
Experiences"*
- 10:00 William W. Pilcher (Gonzaga)
*"Teaching Anthropology in Non-Traditional
Contexts"*
- 10:30 Frans Lamers (UV)
*"Intro Anthropology in a Maximum Security
Prison"*
- 11:00 Linda M. Klug (CWSC)
"An Ethnographic Film for Grade School Use"

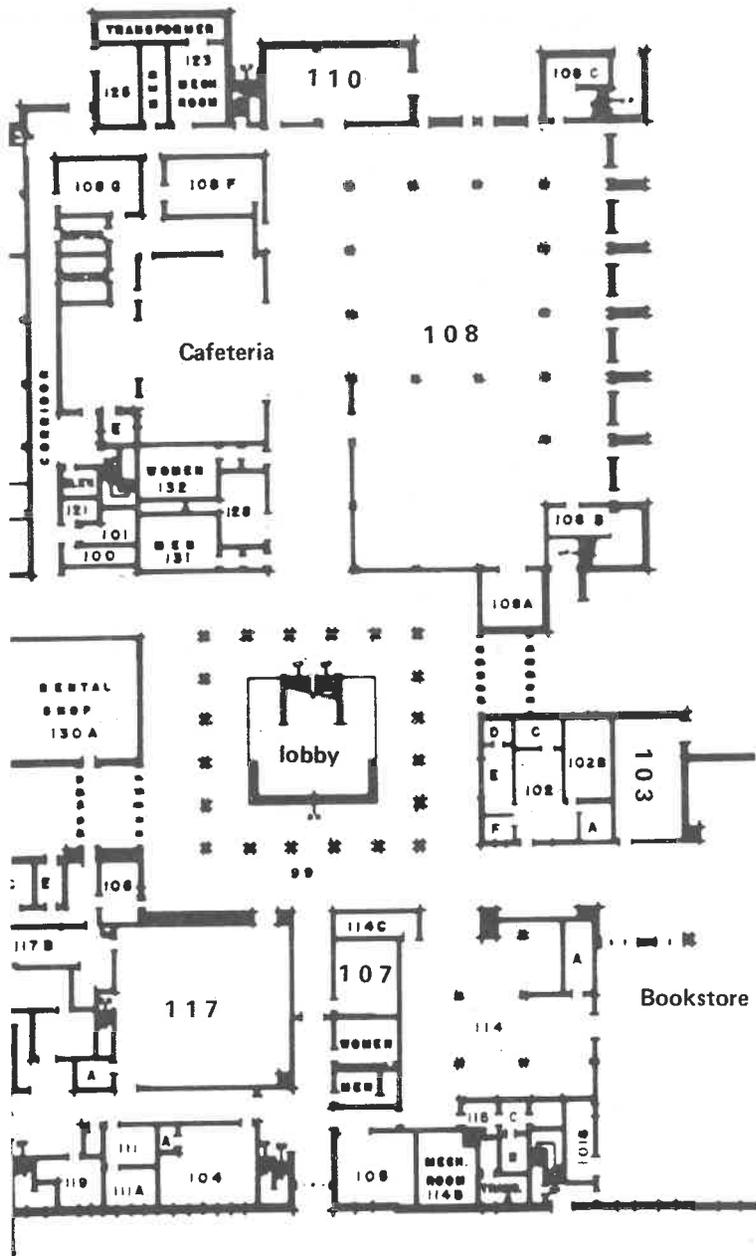
SATURDAY, APRIL 10

MORNING

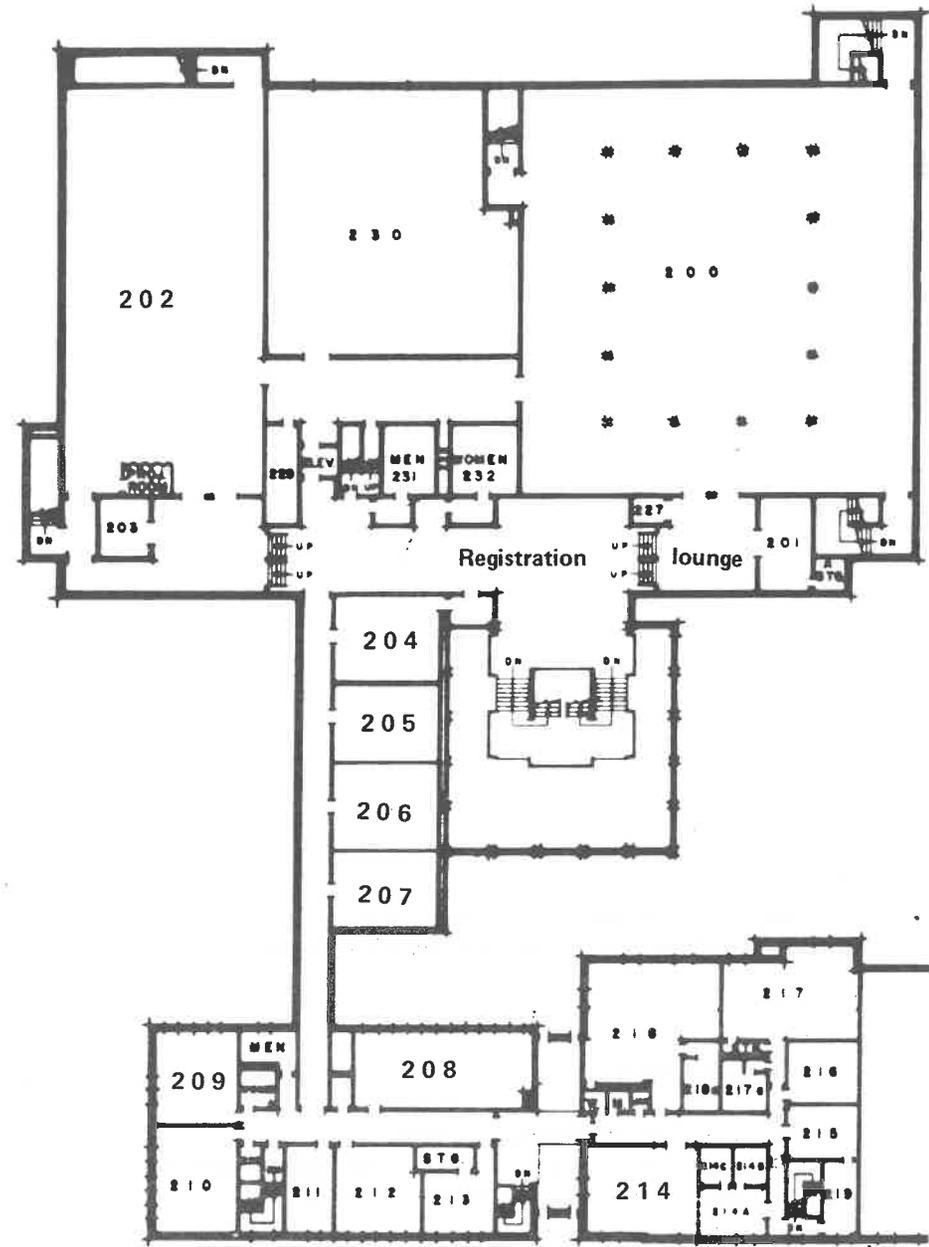
POTPOURRI (Volunteered papers) ^{Cancelled} SUB 103

Coordinator: Linda M. Klug (CWSC)

- ~~10:00 Harlow Short (CWSC)
"A Cross-Cultural Look at Aesthetics"~~
- ~~10:30 Terry Bonjorni (CWSC)
"Ethnomusicology Today"~~
- ~~11:00 Lynn McKenna (CWSC)
"Presentation of 'Patterns of Samal Childhood' "
A Film by Linda M. Klug~~
- ~~11:30 Jeffrey T. Burnham (UW) ?
*"Report on Research Being Conducted on Racial
Differences in Autonomic Nervous System
Response to Alcohol"* see Am. Cult. II~~



SAMUELSON UNION BUILDING – FIRST FLOOR



SAMUELSON UNION BUILDING – SECOND FLOOR

Conference Chairman: Catherine J. Sands
Program Chairmen: Linda Klug, William C. Smith

Acknowledgments:

Elaine Wright (Scheduling Center)
Darwin Davis & Stephanie Hoare (AV Media Production)
Ron Linville, Auxiliary Services Publication
Central Jazz Group

ABSTRACTS OF PAPERS PRESENTED AT THE 29TH
ANNUAL NORTHWEST ANTHROPOLOGICAL CONFERENCE
8-10 April 1976, Central Washington State College,
Ellensburg, Washington

Socio-Cultural Anthropology

*The evolution of chiefdoms on the Northwest Coast:
a first approximation*

KENNETH M. AMES
Boise State University

Littoral hunting and gathering adaptations have supported chiefdom level societies on the Northwest Coast and perhaps coastal Peru. Currently available models of chiefdom evolution are based upon agricultural societies. The processes at work in coastal societies may be different. On the Northwest Coast these processes included a specialized procurement system, and environmental circumscription, as well as redistributive exchange. The first two processes acted as positive feedback, amplifying changes initiated by the appearance of modern environmental conditions on the coast, as suggested by Fladmark. The exchange systems acted to reduce the damaging effects of the positive feedback loops on the system by moving food and people.

Potlatching backwards and forwards

PAMELA AMOSS
University of Washington

Although a secular institution which cemented political and economic alliances, the potlatch was integrated into Coast Salish religion because without contact with spirits people could not amass the wealth to give a potlatch. The same theme is restated in the Puget Salish eating contest which as a parody of the potlatch reverses the relationship between spirits and production and guests and hosts: eating spirits empower their owners to consume rather than produce, and guests gain prestige by demonstrating power to beggar their hosts rather than hosts gaining prestige by enriching guests.

The Hutterites: a social movement perspective

LAURA L. APPLETON
Central Washington State College

The Hutterites' success in maintaining a sixteenth century communistic lifestyle in modern America has been explained by their practice of controlled acculturation and their particular adaptive strategy. Such factors do not, however, account for the *perpetuation* of a radical world-view, without dilution, for over 100 years. This paper discusses a model of the radical social

movement, wherein the maintenance of a radical doctrine is a product of three factors: the doctrine's ability to influence, the leader's ability to influence, and the commitment of the members.

The marriage and political structure of the Tlingit Indians

TIMOTHY G. BAUGH
Oregon State University

The cultures of the North Pacific Coast have been of great interest to American anthropology for a number of years. Recently Rosman and Rubel have utilized a structural approach to facilitate our understanding of the ranking and potlatch systems as these existed in the Northern and Wakashan provinces of this culture area. This paper is an attempt to clarify some of the issues concerning the structure of Tlingit society as revealed by the recent work of de Laguna and earlier ethnographers. According to Rosman and Rubel, Tlingit society is not stratified. They base this statement on the higher frequency of patrilateral cross-cousin marriages. Even though this observation is accurate for members of the nobility or *anyeti* and commoners, the matrilineage headmen marry matrilocally. But Rosman and Rubel maintain this latter marriage preference has little effect on Tlingit society. On the other hand, all ethnographers who have worked with this culture have recorded the presence of a ranking system. Thus the effect is profound!! Not only is a ranked society created, but a more stable political structure is formed. By comparing the Tlingit with the Kachin of Burma, we find a more cohesive political unit which does not collapse as readily or as frequently.

Rethinking peasantry

RICHARD L. BERG, JR.
Idaho State University

This paper presents a new ideal model for comparing peasantry. Its argument is based on, with modification to, M. G. Smith's treatment of society. The model contends that a peasant community is a specific type of institutional system within a "Heterogeneous Society," and should never be viewed as a "Peasant Society." Two Mesoamerican groups are discussed to demonstrate this thesis: a contemporary highland Zapotec peasantry of Shgosho, Oaxaca, Mexico, and the prehispanic Aztec peasantry.

*American male participation in the rearing of young children:
a look at role models in homes and on television*

DONNA BRIANS
Washington State University

This paper is an exploration of the thesis that male participation in child rearing is an essential factor in the liberation of women. Using the social learning approach of the importance of role modeling, two areas where

young children may learn sex roles are examined: (1) in the home, and (2) from television. Accordingly, the first half is a review of the literature in father-child research. The second half discusses the results of a time-sampling survey of father roles portrayed during the commercial television networks "family viewing time." The results show that "real life" and television are similar in that fathers rarely interact with their children. When they do, the interaction is usually play and discipline rather than caretaking and with male rather than female children.

*"Throw the Indians out": recent developments
in Fijian-Indian relations*

CAROLYN HENNING BROWN
University of Washington

In October 1975 a motion was introduced into the Fiji Parliament that all Indians be repatriated to India. In what was hoped to be a ritual reaffirmation of the multiracial policies of the ruling Alliance Party and of the 1970 constitution, as well as a denunciation of racism in party politics, the motion was debated for seven days. Unexpectedly the debates became a social drama which exposed on the national stage all the conflict themes between Fijians and Indians; deeply undermined the working relationship between the Fijian Prime Minister and the Indian Leader of the Opposition; caused several Indian members to leave the government party, one to start an Indian Nationalist party; and strengthened the Fijian Nationalist Party and its commoner leader who, in striking openly against Indians, also leveled blows at the chiefly authority structure of Fijian society. The course of the debates and the sociopolitical context in which they took place are sketched. The debates are viewed as a struggle to resist redefinition of social reality which fails because of the seductiveness, for Fijians, of a radical ideology which converts economic frustration and repressed sentiments into a new public goal: "Throw the Indians out!" and because, for Indians, that new public goal is the ghostly fear finally congealed into fact, thus confirming the minority definition of reality.

Potlatch symbolism: the Kwakiutl of British Columbia

PATRICK D. BROWN
Washington State University

The potlatch has long been considered an anomalous aspect of Northwest Coast cultures. To integrate this phenomenon into the larger cultural matrix, previous analyses have particularized single functions, e.g., economic, political, ecological. Recent investigators have examined the sociological and/or spiritual implications of potlatch behavior: the potlatch as exemplifying man's relationship to society, to the supernatural. The ensemblé of statements concerning the potlatch does not, however, represent a universe of mutually exclusive theoretical choices. This paper addresses the symbolic value of the potlatch phenomenon from linguistic and non-linguistic data. It incorporates relevant theoretical considerations posited by other authors, and hopefully, brings these together into a meaningful statement.

*Women's verbal roles: politics of the officially powerless in
Usino, Papua New Guinea*

LESLIE CONTON
University of Oregon

First, this paper examines the nonformalized verbal roles of women in the Usino area of the Upper Ramu Valley, Papua New Guinea. A brief introductory overview highlights the impact of preferred marriage arrangements and economic control on women's place in Usino society. Women's informal verbal roles and strategies, particularly techniques of information management, gossip, and other verbal skills, are directed toward political ends. A look at sex differences in who gossips about what, and to what ends, reveals that gossip may be a key to informal political power by those denied access to formal power. Second, this paper reappraises the anthropological material on gossip and its functions in light of recent analyses of women's verbal techniques and control of information.

*The status of recent foraging practices
among the Burns Northern Paiute*

MARILYN D. COUTURE
Portland State University

Native plants including wild roots, berries, seeds, leaves, and stems still play an important part in the lives of some American Indians. This report describes recent foraging practices which persist among the Burns Northern Paiute and is based upon the field experiences of the writer in 1973 and 1974 with members of the tribe, at which time she accompanied informants into traditional habitats for the purpose of gathering wild plants for food and other uses. The traditional seasonal harvest round began with the spring root digging, was followed by the collection of berries and fruits in the summer, the gathering of seeds in the late summer and fall, and ended with the collection of plant materials in late fall for manufacturing useful items. Of these foraging practices all but the seed gathering have endured to some degree. Included in the report is the identification, distribution, and seasonality of plant species and Indian term, as well as a description of plant use, foraging techniques, processing, and preservation.

*An ethnographic test of Leach and Douglas in respect to
myth and kinship structures*

ANN DRAKE
Tacoma Community College

In his article "Rethinking Anthropology" (1961) Leach suggested a method for analyzing relationships between myth and kinship structures to provide a basis for generating broad theoretical statements. As an example, he postulated a correlation between "uncontrolled mystical influence" and relations of alliance, and between "controlled supernatural attack" and relationships of incorporation. In a later study of pollution beliefs (1966), Mary Douglas

rejected the usefulness of Leach's approach because it gives a specific social locus of these beliefs, when instead they are pervasive in the structure of ideas. Ethnography and my fieldwork among the Zambian Chewa provides a means of examining these two views. This paper takes sorcery as controlled supernatural attack and pollution as uncontrolled mystical influence and tests Leach's hypothesis, showing the approach to be very useful for providing insight but insufficient as it stands for explaining all the data. Inadequacies of both Leach and Douglas are mentioned and remedies suggested.

*Another approach to the formalist-substantivist
controversy in economic anthropology*

H. MAX DRAKE
Pacific Lutheran University

The debate between formalists and substantivists in economic anthropology seems little closer to clarity or resolution than when it began. This paper suggests that neither those who speak of the subject matter as the study of maximization or rational economizing behavior, nor those who speak of the economy as the provisioning system or the material basis of society have a definition adequate to focus research. This paper suggests that neither definition is complete without the other and that separately they do not provide a sense of problem adequate to guide research. Unless one assumes that social structures are simply individual behavior writ large, the study of maximizing behavior of individuals cannot explain the structure of opportunities among which choices must be made, i.e., the material and non-material patterns of the society. Obversely, those who see primitive economics as the provisioning of society, though they are aware of the relevant socio-economic patterns, deal less than adequately with the calculus of choice in societies and the consequent interplay of individual choice strategies for the societal structures, including the provisioning structure. Thus, economic anthropology is faced with two problems: (1) finding a definition which provides it with a sense of problem adequate to focus research, and (2) clarifying the role of individual and institutional behavior and their interrelationship. Finally, the paper will suggest that some aspects of Marx's approach are useful in resolving these problems.

The front lawn as a "sacred cow"

B. RAYMOND DRUIAN
Washington State University

The term "sacred cow" is used here as a metaphor. Americans are known to spend a great deal of time and money on their front lawns and yet it is not permissible to put these areas to any practical use. Thus, as with the venerated Indian cattle, a portion of family income, often better spent elsewhere, is put into a non-productive area. It is generally not allowable to utilize this space for even recreational purposes. Although there are some possible functions for this preoccupation with lawn care in the culture, the trait appears to be dysfunctional on the whole and is a waste of resources which could be better employed elsewhere.

*Stability and change in a New Guinea lowland
political system*

DAVE EISLER
Oregon State University

Since contact 40 years ago the political structure of the Usino community has been continually changing. Villagers have given support to the mission, government, cargo cults, and traditional leaders, but support was flexible and as new resources and goals became available, the political system made subsequent adjustments. This paper will examine the villagers' choices of goals and political strategies and their significance in a rapidly changing environment.

*Symbolism in Coast Salish mythology:
a Jungian perspective*

MARK S. FLEISHER
Washington State University

The Clallam (a dialect of Straits Salish) world was once alive with animistic beings which protected, aided, and interfered with everyday life; however, over years of acculturation in European society the numinous symbols which once provided meaning to life have disappeared on (1) the level of the individual and (2) as unifying collective representations in society. Symbols have content or meaning which is not easily identifiable on the conscious level or expressed through language. When a symbol emerges into consciousness it takes on cultural characteristics and is expressed with a system of collective representations. As it is not within the power of an individual or society to consciously attribute meaning to symbols, their affectual content is displayed in individual psychology, e.g., dreams, and myth (a drama of symbols).

Male and female: the way it is in cartoons

JUDITH GINIGER
Washington State University

Cartoons represent a closed system, one which lends itself easily to interpretation and analysis. Using drawings from the New Yorker magazine as data, description and partial analysis of the relationships existing between men and women are attempted. Stereotypical roles and identities are examined, the anomalousness of the single woman and the dualistic thread of continuity in cartoon representation are discussed.

Synechdoche, metonymy, and anthropology

ROBERT GOEDECKE
Central Washington State College

Rhetorical device of moving from part, which is object, to whole, which is "totality," is used by Levi-Strauss in his works on Kinship, the Savage

Mind, studies of the Bororo, and his analysis of Baudelaire's poem, "The Cats." The same sort of symbolic move is used by many tribes and nations in building their sacred buildings or villages, for example, the Sioux and the ancient Babylonians. Metonymy, which is one-to-one relation, or the relation of "next-to," is used by many scientists in analysing their subject matter, and is the basis for empirical cause and effect relation. It is used by subject matter peoples as well as by anthropologists, but it is only one among the symbolic devices which are available to human societies and to students of human societies. Examples and limitations are given. Levi-Strauss tends to move from metonymy to synecdoche. Linguistic methodology is a new tool for anthropology, both as something to be analysed when used by society, and something to be understood when used by anthropologists.

Shoshone cultural ecology: another perspective

JAMES P. GREEN
Washington State University

An evaluation of Shoshonean cultural ecology is undertaken utilizing concepts from systems theory and evolutionary ecology. Social and economic stratagems are viewed as being most fit in maximizing available energy in a heterogeneous habitat. Stability of the Shoshonean pattern is reflected in its diverse base and flexibility. Though perceived by some as simple and primitive, this pattern is as complex and diverse as the system in which it functioned.

*Dharmic ambassadors: debate over the secular involvement
of the monk in contemporary Thai society*

ROGER E. HARMON
University of Washington

Much of the current debate in Thailand concerning the contemporary relevance of Buddhism centers on the proper role of the Buddhist monk. The specific issue considered in this paper is the effect of the participation by monks in a wide range of extra-temple activities. In recent accounts several Western social scientists have argued that Thai monks are advised to reject involvement in contemporary "secular" development activity in their communities. I will argue that their formulations stem from several misunderstandings, including an oversimplified view of the source of the monk's respect and authority, as well as an incomplete understanding of the traditional social role of the monk. I will attempt to show that additional difficulties are due to a lack of concrete data on the part of these critics as to the actual nature of monks' involvement in current "secular" activities. Here I draw on observations in Thailand in 1973 of several programs involving monks and of individual monks' efforts in their communities. Finally, I raise the question--and solicit discussion-- as to just what our knowledge is concerning the relationship in societies with historic religions between secular involvement by religious elites and the threats/possibilities this poses for the religion.

Ethno-functionalism: why some Taiwanese villagers say they're doing what they're doing, even when they don't believe they're doing what some people say they're doing

STEVAN HARRELL
University of Washington

Recent anthropological discourse about religion has included a rather acrimonious debate about the "New Tylooreanism": do participants in ritual really believe the ritual will accomplish its stated supernatural ends, or are they merely using ritual as a metaphor for political or social action, in which case why do they use the ritual metaphor at all? This paper explores a paradoxical situation in which the participants themselves are often skeptical of the supernatural purpose of rituals, but perform them anyway because of explicitly stated psychological, sociological, or moral functions.

The economics of religion: the Black church and the civil rights movement

CONSTANCE E. HAWKINS
Shoreline Community College

The Black church is the major institution owned and operated by Black people in the United States since slavery. While serving its primary role, that of a religious institution, the Black church was and still is in several instances, the major social welfare institution available to Black people. A major focus of the church has been economic development and help for its members. This focus on economic assistance was carried by Black clergymen into the civil rights movement of the 1950s and 1960s. During the 1960s, the Black church and the civil rights movement, in particular, the Southern Christian Leadership Conference (S.C.L.C.), became more involved with economics (i.e., jobs, better wages, upgrading of Blacks in a company's work force, and money inflow and outflow in the Black community). The S.C.L.C. developed an "economic arm" called "Operation Breadbasket," which dealt with issues of economic concern to the Black community. A more recent organization which grew out of the Operation Breadbasket model is Operation PUSH (People United to Save Humanity). Both organizations have had successful efforts in Chicago and its Black community. This paper will examine how the economic concerns of the Black church were carried into the wider arena of the civil rights movement; the development of two organizations which dealt with economic concerns and maintained ties with the Black church. The paper will also examine how the two organizations (PUSH and Breadbasket) used basic Christian concepts and morals, as well as symbols found in the Black community to maintain their programs and win economic gains.

Cultural categories and architectural form: some semantic aspects of the American home

LOUIS A. HIEB
Washington State University

Using both David M. Schneider's mode of analysis and his description of American kinship, this paper extends his findings regard "home" to the "house" as architectural form. It is argued that a significant part of the house form in American society constitutes a "model of" and "model for" (Geertz) the units and rules of American kinship. Using both historical and contemporary materials insight is given into the boundaries that define and differentiate space and the connecting and mediating devices that relate and unify the house/home.

Religion: a redefinition of the concept

PAUL G. HIEBERT
University of Washington

Anthropologists have found it useful to redefine concepts such as "economic" and "political" in terms of the transactional uses of resources and power. Nevertheless, we continue to use old content or structural definitions of "religious" and "philosophical" to analyse our data. A redefinition of these in dynamic terms, as meaning systems, would not only bring them into line with our redefinitions of other areas of culture, but also provide use the framework within which we can include such phenomena as science and the humanities.

The botanist as anthropologist: an unusual view

LUCILE KEMPERS HOUSLEY
Central Washington State College

Earlier studies in the literature which use botany as a tool for archaeology are reviewed briefly. Biological ecology studies do not adequately explain present day distribution of *Opuntia imbricata* (cholla cactus) in New Mexico; however, cultural ecology studies of the early Jemez peoples in New Mexico present evidence that *Opuntia imbricata* was used for food, medicine, and ceremonies. The unnatural distribution of this cholla in the southwest section of the Jemez Mountains of New Mexico suggests that *Opuntia imbricata* is a primary site indicator for pre-Columbian Towa habitation sites. These biological and cultural interrelationships raise questions concerning Towa interaction with nearby Tano and Tewa peoples, and also answer some questions concerning the pre-Columbian society of the Towa people. An argument is made for closer work between the botanists and anthropologists for future studies.

Marriage encounter in cultural perspective

BARBARA JACOBS
Central Washington State College

The encounter technique for studying and affecting interpersonal relationships, has recently been applied to marriage. Attending one such retreat weekend was a unique experience for me in personal terms and also from an anthropological perspective. The major focus of the weekend is the learning of a particular pattern of communication, called dialogue, and examining one's own marriage relationship utilizing this dialogue pattern. The church organization which runs these encounters, views the experience as necessary to this technique on a world wide basis. With the aims of the organization in mind, it would appear that this is a revitalization movement intended to reinforce traditional roles of marriage within American society. This presentation will describe an encounter and discuss its role as a reinforcing agent.

Energetics and cultural change

PHILIP H. JACOBS
Central Washington State College

The fundamental questions of cultural change deal with the laws of thermodynamics and kinetics. These laws are interpreted as a explanation of cultural change. The two chemical concepts deal with energy, its endothermic and exothermic qualities as well as an expression of enthalpy and entropy. The first and second laws of thermodynamics are very important in culture because although "total" energy is constant, usable energy decreases. "Waste" energy must be considered whenever there is reference to energy used in a cultural system because of the laws of thermodynamics. The goal is to introduce these concepts and their interpretation as further explanation of cultural change. As a direct consequence of the second law of thermodynamics, useful energy sources are continually depleted. Although the ultimate outcome seems inevitable, we can control the rate at which it occurs and therefore can exert some control over cultural change.

*The Telefolmin village: now you see it,
now you don't*

DAN JORGENSEN
University of British Columbia

This paper introduces material on the social organization of the Telefolmin of Papua New Guinea. Telefolmin social organization is characterized by: (1) a bilateral kinship system with overlapping non-corporate descent categories; (2) endogamous villages; and (3) an elaborate men's cult. Despite an ideal pattern of village residence, at any one time a large part of the population resides in widely dispersed garden houses. Though this is consistent with the ecological context, the observed pattern is not wholly explicable in these terms. In addition, internal organizational factors--particularly processes of dispute management--militate against

the ideal of continuous village residence. These dispersive processes are mediated by various ideological means, including food tabus, beliefs about illness and misfortune, and men's ritual. The paper concludes with an examination of the relation between settlement and cult organization among some neighboring Mountain Ok peoples.

Harte Centre: a "communications" model of increasing scale and value transformation

DAVID E. KAUFMAN
Central Washington State College

The bond which links community life with prevailing culture, among industrial societies, is called civilization. As the scale of these societies increases, the "territorial integrity" within settlements diminishes and the values held by local inhabitants transform. This paper reports on the effect increasing societal scale has had upon a small valley town in the North-western region of the United States. Statistical data, various social maps, and ethnographic notes are used to test a "communications" model of social change in Harte Centre. Analysis shows that the members of this small town are feeling the impact of complex society. Evidence of value transformation is observed on a number of levels. These include: (1) modifications in civic morals; (2) demands for improved technological conveniences; and (3) a revised social perspective about community development. One recognizes that despite continuing emphasis upon traditional attitudes, limited practical application is possible. The effect of this condition is two-fold. First it has isolated political and economic interests and their constituencies from one another; and second it has promoted an imagery of an externalized culture in which participants appear to be "performing" their roles. To verify the "communications" model used in the study this paper concludes by drawing together other explorations of the effects of increasing scale.

Traditional social organization and modern cooperatives

DANA E. KEIL
Washington State University

Cooperative organizations are highly favored institutions in the attempt to promote economic development at the local level. Scholars, central government planners, and local people themselves often consider cooperatives to have a number of potential advantages over a system of autonomous individuals, particularly in regard to a production system involving cash-cropping by small-holders. There are at least two ways in which a cooperative society may be organized by central government policy. A more or less mandatory association of two or more neighboring villages may be set up, or a voluntary association drawing membership from a wider region may be established. An examination of traditional social, economic, and political organization indicates that the latter type of cooperative would have a much greater chance of success in the Goroka Sub-district of the Eastern Highlands District, Papua New Guinea.

Pacifism and hostile relations on the Plateau

SUSAN KENT
Washington State University

That the Plateau groups can be characterized by pacifism is a widely held myth first advocated by Verne Ray who used the Sanpoil as the area's culture type. Many ethnologists have since written of the pacific nature of the Plateau. A search of the literature was conducted in order to determine whether the Plateau was in fact characterized by pacifism. Aboriginal and historic intergroup conflicts were dealt with as well as internal group hostilities and incursions occurring in the adjacent regions. The Plateau was found to be *not* pacifistic, nor was the Plateau more pacifistic than the bordering culture areas (except for the Plains which had a somewhat more intensive pattern of conflicts). Albeit true warfare was a probable consequence of Euroamerican influences and the reintroduction of the horse, raids and feuds were nevertheless prevalent throughout the area.

*The horse among the Salishan speakers of southern
British Columbia (1750-1850)*

FRANS LAMERS
University of Victoria

This paper examines the influence of the horse on the ecology and social relations of the Salishan speakers of the Fraser River drainage system. It proposes that important changes were taking place before direct contact with the expanding European fur traders. The use of the horse influenced trade relations, hunting methods, wealth accumulation, and frequency of intergroup visiting. The white traders arrived during this period of adaptive transformation, causing more changes in the environment and rapidly monopolizing the trade in the area. It is suggested that the dependency on salmon increased following the introduction of the horse, which was used in the hunting of large game, which formed the minimum resource level.

New Hebrides ground drawings

ROBERT B. LANE
University of Victoria

In the New Hebrides there is an art form which involves the creation of geometric designs on sand or earth surface. The designs are continuous curvilinear tracings done with a finger on pre-drawn grids. Although they have mainly been done for amusement in recent times, some of them do have backgrounds of magical, ritual, and cosmological significance. However, of particular interest is that they are a graphic art form in which the measure of artistic competence lies not in the finished production, but rather in the creation. The test of successful creation is in the uninterrupted and graceful flow of movement in their creation. This is often accompanied by related stories and songs. In sum, the ground drawings were often the ephemeral by-product of what could be, in full elaboration, an essentially performing art.

*Escalation of factional conflict: a case
from village India*

ELWYN C. LAPOINT
Eastern Washington State College

British anthropologist Victor Turner contends that local-level disputes conform to a processual pattern he refers to as a "social drama." Such conflict dramas are said to terminate either in a restoration of peace within the community or a recognition of permanent schism between rival factions. In this paper it is argued that a third outcome is possible--escalation. The original antagonism is redirected into new disputes and, through these contests, the conflict escalates. As a result, factionalism may become endemic in the community. Moreover, the process of escalation follows a definite form. This pattern may be conceptualized in terms of a heuristic model. Instances of factional conflict can be regarded as ranging along a continuum between two polar phases of factionalism: an initial phase of nuclear factionalism leading to a stage of pervasive distributive factionalism. The diagnostic properties of nuclear and distributive factionalism are described. To demonstrate the utility of the model, a case history from village north India is presented. This case history is drawn from the author's own field data. Comparative evidence from other communities and other cultures is discussed. On the basis of this evidence, it is suggested that the model may prove widely useful in analyzing the history of factional conflicts in small-scale societies.

Pornography: the ideal woman?

ANN LEE
Washington State University

This paper will look at the evolution of soft-core pornography in America from 1950 to the present through the images portrayed in Playboy, Penthouse, Viva, and Playgirl and the ways in which the female has been portrayed in making pornography acceptable to the general public. This paper will also examine the recent attempts of the media to produce pornography for women and proposes reasons for its failure. Finally, the possibilities of pornography being supplanted by eroticism are explored.

*A systems analysis of aboriginal movements and sociocultural
change in the Chequamegon Bay area of Wisconsin*

SALLY J. MCBETH-GALM
Washington State University

Chequamegon Bay, on the southwestern shore of Lake Superior, was a significant geographical locale during the early contact and fur trade periods. The sociocultural systems of the aboriginal groups inhabiting this area were affected as a result of contact and the expansion of the fur trade. These sociocultural changes occurring between AD 1650 and 1780 are examined and analyzed through the use of a General Systems model. Ethnohistoric data including

primary documents, archaeological data, oral tradition, and ethnographic information are utilized to determine these changes and their impact on movement into and out of this Upper Great Lakes region.

Systems of classification among the Northern Paiute

SALLY J. MCBETH-GALM
Washington State University

The classification of one's environment introduces an order into apparent chaos. Recognition of this order reveals an underlying structure and serves to underscore Native patterns of conceptualization. These patterns reveal implicit attitudes concerning social and symbolic thought, space, time, and world view. This paper presents an analysis of a system of classification among the Northern Paiute. Northern Paiute bands are classified by terms referring to edible, and locally abundant, plants and animals. This classificatory system is examined along with other Northern Paiute systems of categorization; the central themes inherent in Paiute conceptions of their world are seen to be reflected in the linguistic, mythological, and cosmological data.

The Delaware Big House rite

JAY MILLER
University of Washington

A reconstruction of the major ceremony of the Delaware Indians will be presented. As a brilliant synthesis of much of traditional Tenape culture, this ceremony serves as a lens for viewing the major principles of Tenape religion, social organization, and cosmology.

The application of ritual paradigms to social movements

TIMOTHY PETER MILLS
Washington State University

The prevalent discussion and analysis of social movements has been descriptive and taxonomic, depicting the movements' inherent type and form. The basic fault with the preceding emphasis has been the dearth of attention given to those forces which generate socio-cultural anomie and disorganization. In contrast, a discussion of "deprivation theory" and the ritual paradigm of "separation," "liminality," and "reaggregation" provides the framework through which an understanding of the generative forces can be acquired. Additionally, social movements can be viewed as the counterpoint of physical evolution, enabling socio-cultural systems to transcend their inherent organizational structures during periods of anomie and disorganization.

*Double identity and research paradigms
among U. S. ethnic groups*

JOHN R. NELSON
Washington State University

The focus of this paper will illustrate the apparent dissonance between the preponderance of theory within the social sciences on the one hand and an emergent body of data by third world peoples, themselves, and several social scientists on the other. The perspective of the former has frequently emphasized the "maladaptation" of ethnic groups in the U. S., developing perspectives such as identity crises, self-hate, and low self-esteem; whereas, the latter point of view suggests that researchers working with "oppressed" peoples may be frequently "put-on" by both informants individually, and by the ethnic community at large. Having developed these two attitudes, I will suggest that the latter most accurately depicts the state of social research at the current time. Furthermore, I conclude that a posture of "double identity" has served to foster ethnicity and codify many ethnic groups as discrete cultural entities.

*Dreamers and drones: role of anthropologists
in interdisciplinary education*

LYNN D. PATTERSON
Evergreen State College

This paper describes the role anthropology faculty have played in articulating themes and questions which make interesting foci for interdisciplinary undergraduate coordinated study programs. It also notes ways in which the teaching of anthropology has been facilitated given the non-course, non-department structure of The Evergreen State College. It posits anthropologists as faculty eminently prepared to accept the validity of interdisciplinary approach to any study of the human condition, extremely capable of conceptualizing good programs, but who because of training and perspective play a tiring (to themselves) gadfly role with respect to study programs and the institution as a whole.

*Cab drivers and other poor people: economic strategies
of taxicab drivers and patrons in the
Los Angeles Harbor area*

WILLIAM W. PILCHER
Gonzaga University

This paper will examine some of the factors involved in the motivation of cab drivers for driving a cab rather than engaging in other economic pursuits, and the motivations of cab patrons for using a cab rather than some other form of transportation. The taxicab industry plays an interstitial role in the transportation network of the city. It also provides employment for people who are between jobs and transportation for people who

normally transport themselves in other ways. Surprisingly, however, most cab patrons use cabs as a regular means of transportation and belong to the lowest income strata in the city.

Teaching anthropology in non-traditional contexts

WILLIAM W. PILCHER
Gonzaga University

This paper deals with the problems encountered and techniques used in teaching social problems and race relations courses to New York State correctional officers at Attica and Albion prisons. Little difficulty was encountered in communicating even such difficult social science concepts as "anomie," but my explanations of social problems and minority group behavior were often challenged. This "challenge" was often more apparent than real. Two basic factors are involved here that seldom occur in a normal classroom situation: (1) it was necessary to establish my own credibility and expertise in each of the two prisons, because unlike college students, the guards were not willing to simply accept my explanations because I was a Ph.D. and a professor; and (2) pseudo hostility was often expressed by guards, usually in the form of an assertion that what I had just said was "a bunch of crap;" however this sort of statement, uttered in an angry manner, inevitably turned out to be a demand that I present a clearer and more detailed explanation of the material I was presenting. It was, thus, necessary to always be prepared to back up my arguments in easily understood, "common sense" terms and to understand the true meanings of angry sounding statements in order to reply in an appropriate and effective manner. (Not presented.)

*Personality trait differences between male and female
police science students*

JUDITH PRESTON-BURNHAM
Washington State University

At present there is a great controversy concerning the deployment of women as police patrol officers. Those in favor of their use state that the police image would be changed due to the introduction of a different type of personality into police work. Those opposed argue that a female does not possess the traits necessary to be a successful officer. This report is based on research on the measurement of certain personality traits of a sample of 157 male and female police science students. An analysis of the data is conducted in order to ascertain if there is a difference between the two sexes in these characteristics, the extent of the differences, and how they affect the image of the patrol officer.

*The sacred dimension: the social use of space
at a Buddhist shrine*

JAMES B. PRUESS

Edward T. Hall has coined the term "proxemics" to refer to the study of the culturally-patterned ways in which people perceive and use space. In a recent paper, Jacques Macquet has suggested that the spatial arrangements of a meditation monastery in Sri Lanka express the religious values of Sinhalese Buddhists. In a similar vein, this essay explores the degree to which the social use of space in a man-made religious environment reflects the orientations of those who seek it out as a setting for religious action. The sacred place chosen for attention here is a Theravada Buddhist pilgrimage shrine in northeastern Thailand. It will be argued that while there is an association between patterns of ritual activity and the expressive dimensions of sacred space, not all social behavior within the shrine precincts conforms to the religious ideals symbolically suggested by the spatial arrangements and topographical features of the shrine. This lack of correspondence arises from the public nature of the sacred place, its "community-service" functions as a temple-monastery, and the emphasis upon meeting lay devotional needs rather than the monastic goal of individual salvation.

Religion and/or magic: Gahuku beliefs and practices

KENNETH E. READ
University of Washington

Ethnographic data from the Gahuku of the Eastern Highlands of Papua New Guinea are used to examine the essentially "magical" character of individual and group rites concerned with "cosmic force." The minor role of "supernaturals," beliefs concerning "power," and the poles of "hot - cold" are considered. Some general reflections on New Guinea ideologies are made.

Bhakti, Buddhism, and the Bhagavad-Gita

ROBERT R. REED
Eastern Washington State College

I will present one possible reason for the development of *Bhakti-Marga* in the *Bhagavad-Gita*. This reason is Brahmanic reaction to Buddhism, which at this time was rapidly expanding in India. Also I will show that the *Bhagavad-Gita* only formalized *Bhakti* which previously had been a popular religious tradition.

The physically abused child Florida: a case in point

CATHERINE J. SANDS
Central Washington State College

This paper is concerned with children who suffer physical abuse, abuse so severe, that they are permanently impaired physically or mentally; many

of them die as a result of this abuse. The victims may be viewed as a minority group, who until very recently have had no advocates to speak for them, no rights as equals, and have been so ill-treated that dogs, cats, and other animals have been given preferential treatment under our current legislative and judicial system. This paper examines some of the aspects of the problem of child abuse and offers six recommendations which would, hopefully, move our society toward more humane treatment of these children.

*Nature:culture::man:woman, an examination of the
magical system of the Chipewyan*

HENRY S. SHARP
Simon Fraser University

This paper examines the attributes of male and female in the Chipewyan magical system as an expression of the opposition between nature and culture which is viewed as basic to the Chipewyan symbolic systems. Man is only ambiguously associated with culture, a fact that requires man to be an intermediary between nature and culture and to tap the magical forces of nature. Woman is symbolically treated as unambiguously of culture and this exclusive association with culture precludes her from exercising magical power while simultaneously making her more vulnerable to its action and a threat to the possession and practice of magical power. These symbolic assumptions are demonstrated through an examination of the acquisition, practice, and retention of magical power in Chipewyan culture.

Marriage in the New Guinea highlands

DENNIS CONNOR SHAW
Washington State University

Recent efforts to make the marriage systems of the New Guinea highlands more intelligible have demonstrated much confusion concerning the nature of models and the distinction between elementary and complex structures. Such confusion can be eliminated through careful utilization of the distinctions between the types of models as conceived and presented in the writings of Claude Lévi-Strauss. Such careful analysis will reveal that the marriage systems of the New Guinea highlands are neither elementary nor complex structures, but rather represent an intermediary development which was first proposed by Lévi-Strauss in "The Future of Kinship Studies." A clearer conception of the nature of these marriage systems will aid in our understanding of the total structure of the societies of the New Guinea highlands.

The synthetic operator: the epistemology of Claude Lévi-Strauss

DENNIS CONNOR SHAW
Washington State University

The most succinct and rewarding of the characterizations of Lévi-Strauss's work is Paul Ricoeur's depiction of structuralism as "Kantism without a

transcendental subject." Moreover, this depiction has been accepted by Lévi-Strauss as an accurate statement about his work. The significance of this statement can be understood through an examination of the role Kant plays in the history of philosophy. Such an analysis will reveal that Kant's epistemology represents a synthesis of the polemics of rationalism and empiricism. A comparable synthesis can be found in the writings of Lévi-Strauss. It is strongly apparent in his conception of the semiological approach, history, the nature of models, and human cognitive functions.

*The forgotten side of ecological anthropology: the contribution
of Carl Ortwin Sauer (1889-1975)*

WILLIAM W. SPETH
Central Washington State College

The forgotten side of ecological anthropology involves the material traces left by man on earth and the physical pathologies unleashed by him. Although neglected in anthropology, this aspect of human behavior constitutes the basis of the Berkeley school of geography, founded by Carl Ortwin Sauer. Through his association with Kroeber and Lowie at Berkeley, Sauer's geography was colored by Boasian cultural premise. A persistent theme in Sauer's work is *destructive exploitation*, the process of economic devastation associated with occidental commercial culture. Primarily, the concept entails economic process as cause (e.g., colonial expansion) and physical pathology as consequence (e.g., soil wastage). Man is both selective appraiser and selective abuser of resources; many of his modifications are irreversible. Neither permanent primitive economy (hoe cultivation) nor ancient practice (burning) severely degrade the habitat. Man's terrible destructiveness is an attribute of profit economies, colonial and contemporary. The record of impoverishment includes devastation of native peoples and cultures, loss of biotic species and varieties through extinction, and soil erosion. Sauer infused moral critique with record of deformation; he inveighed against ways that are short-sighted and reckless and called for an ethic and aesthetic under which man may pass on to posterity a good earth.

Function and planning of an exhibit

DARREL L. THIEL
Washington State Historical Society

The modern exhibit is not merely a visible storehouse of objects but is a collection of objects which sets out to tell a concept, idea, or story. This interpretation tells something of the people who created and used the objects plus it can indicate how or why the objects were produced. Thus, the exhibit is a teaching device from which the public can gain knowledge. There are three main ingredients the person planning the exhibit needs in order for the interpretation and presentation of the exhibit to be a success: (1) a thorough knowledge of the concept, idea, or story which is to be told; (2) a thorough knowledge of the objects or artifacts which are to be used to tell it; and (3) a knowledge of design techniques and building materials which will be used to present the story.

The church and sorcery in south east Ambrym

R. TONKINSON
University of Oregon

This paper examines the roles of traditional and Christian influences in the maintenance of social control and the struggle between these forces in the recent history of a New Hebridean people. In a situation of rapid culture change and the abandonment of traditional behaviors and values, certain traditional chiefs in south east Ambrym have used their reputation as controllers of sorcery to withstand what have at times been concerted attacks on their status as leaders in the society. Their principal enemy has been the Church and its local representatives who sought to establish a parallel system of authority based on Christian tenets, some of which conflicted strongly with the old values. The Ambrymese themselves see the conflict between *kastom* and Church as a battle for supremacy between two different powers, one antisocial and fear-inducing, the other (the Holy Spirit) legitimate and superior. Both are considered in this paper as important elements of social control.

*Tlingit and Haida potlatch and society: further testings
of a structural analysis*

JAMES DANIEL VAUGHAN
University of Washington

Inadequacies in the structural analysis of Tsimshian potlatching and social organization as interpreted by Abraham Rosman and Paula Rubel in their work *Feasting with Mine Enemy* were discussed at last year's Northwest Anthropological Conference. These problems and how they are tested for are further pursued into an analysis of Tlingit and Haida potlatching and society. This analysis reveals that Rosman and Rubel have misinterpreted and oversimplified data and have committed a logical fallacy in their methodological analysis. Tlingit and Haida societies do not empirically conform to the theoretical model based on the elementary structure of kinship postulated by them, but rather they might better be viewed in light of some of the complex features characteristic of these and other Northwest Coast societies.

*American perspectives on Sweden: the impact
of cross-cultural experiences*

ZAHER WAHAB
Lewis and Clark College

The paper deals with the following subjects: (1) the experiences of 25 American college students in Sweden (experiential phases of excitement-intrigue, culture shock, immersion, and predeparture); (2) ethnocentrism; (3) world view of American students; (4) the group's perception of the Swedish culture and society; and (5) the impact of cross-cultural experience on personal change.

Pik i samting tru

JAMES B. WATSON
University of Washington

The adoption of the sweet potato as a new crop and its rise to preeminence as regional staple occurred across nearly the entire Central Highlands of New Guinea in a very short time. So rapid and complete a change demands explanation. The change must be considered more revolutionary still if, as recent archaeological work suggests, well-developed, *chinampa*-type systems already existed in CHNG, based on older crops. A possible cause of the change is a competitive escalation of production and exchange. Against alternative explanations, this hypothesis, sometimes termed the Jones Effect, so far seems promising. If this explanation is correct, much of the region has probably undergone a series of economic and social developments in the last two centuries or so, whose consequences may be discernible in the modern reports of the region. Finding such evidence, moreover, may be the most immediate opportunity afforded us to determine the nature and cause of the revolution.

The taro cult: a reinterpretation

ROBERT L. WELSCH
University of Washington

This paper reexamines descriptions of the Orokaiva taro cult by F. E. Williams and other early writers. The effects of contact and pacification upon the religious history of the Orokaiva are discussed. The cult is analyzed in terms of the traditional questions of meaning which it attempted to resolve. Neither contact nor European "cargo" are seen as precipitating factors; rather the recurrent problems of drought and illness provide the impetus for the Orokaiva's innovative resolutions to the ultimate questions of fertility and health. Peter Worsley's explanation of the cult as proto-nationalism and "the beginnings of a political organization entirely separate from traditional structure" is rejected because it fails to deal with the religious questions of meaning which motivate the cult and because the political structure which emerges with the cult is a traditional one.

Sorcery and exchange

GEORGE D. WESTERMARK
University of Washington

The paper uses evidence from several New Guinea societies to examine the correlation between exchange and sorcery. Exchange systems in Melanesian studies have often been cited as the source of extensive networks of social alliance and, therefore, as significant in the political interaction of social units. Sorcery in Melanesia has also been described as an aspect of intergroup political relations. It seems reasonable to suppose that factors which lead to the presence of sorcery are related to exchange.

Linguistics

Past and present tense in Hidatsa

NORMAN A. BOWERS
Washington State University

Linguists studying Hidatsa and related Siouan languages have concluded that neither the past nor the present tense is distinguished in simple declarative or interrogative sentences for, unlike the future tense, there is no overt marker that specifies a sentence as past or present, except for a small number of adverbs indicating time. Although some linguists recognized an accent which affects alternate syllables of words and phrases, they considered it unimportant and did not record it. It is the purpose of this report to show that it is this pattern of alternating accent, however, which specifies past and present tense for sentences. It also specifies whether a thing named by a noun is living or not living.

C:V alternation and canonical form in Northwest Coast languages

RALEIGH FERRELL
Washington State University

Certain types of C:V variation and distribution common to Northwest Coast languages of several different language families call into question traditional linguistic assumptions relative to phonemic canonical form formulae such as "CVCVC." In addition to important implications for phonological theory in general, surface phonological processes common to Northwest Coast languages may be found to lead to unusually rapid obliteration of immediately recognizable phonemic correspondences between related languages. Examination of these processes may lead to new insights and conclusions concerning genetic relationships and time-depth estimates based on apparent divergence among the aboriginal languages of northwestern North America.

Proto-Salish phonology

MARK S. FLEISHER
Washington State University

This paper addresses the problem of relating Proto-Salish systematic phonemes to their surface reflexes through a series of morphophonemic rules. A generative phonological approach applied internally for Clallam (a dialect of Straits Salish) explicates generalities applicable for Coast Salish languages, e.g., Halkomelem.

*How to pass as {Canadian} if you're {American}: a sociolinguistic,
participant-observers' view*

ROBERTA L. HALL
Oregon State University
JAMES HAGGARTY
British Columbia Provincial Museum

In this paper the authors - an American and a Canadian anthropologist, each with participant-observer experience in the neighboring country - present a classificatory key to "Canadianism" and to "Americanism" in a socio-linguistic framework. These short "keys" are discussed semi-humorously with the purpose of aiding the audience to: (1) perceive subtle differences in socio-linguistic patterns of Canadians and Americans; and (2) modify their own styles sufficiently to "pass" as a native of the other cultural group, in the appropriate situation.

Language geography of the Northwest Coast

GROVER S. KRANTZ
Washington State University

Most of the peoples of the Northwest Coast are descendants of a strip of Athapaskan speakers who entered the area 11,200 years ago down the Stikine River and spread along the coast as far south as California. These are now represented by the Tlingit, Haida, Wakashan, Chimakuan, and Pacific Coast Athapaskans (PCA). At the same time Indians from the interior occupied all other areas below the Canadian ice fields. These are the Salish, Penutians, and Hokans, who have all contributed to the Northwest Coast culture area. This reconstruction follows from the principle that once an area is occupied it is almost impossible for another group with a similar economy to displace the first inhabitants. Thus, the PCA must have been the first people on the coast, and unless they flew there, they must be one end of an almost continuous strip of related people extending back to the source. Allowing that Salish and Penutians could have broken the former linguistic continuity in a few places, the rest of the Athapaskan strip must be made up of the other coastal populations. The Penutian affiliation of Tsimshian cannot be correct as there is no way they could have gotten there. The Chinook are easily a commercially based displacement of early Tsimshians. Differential rates of linguistic drift are indicated here. The central section, of Tsimshian, Wakashan, and Chimakuan are expectably unrelatable to each other or to Athapaskan after 11,000 years. The northern section of Tlingit and Haida with less cultural complexity and contacts show some Athapaskan similarities. The southern section of PCA, centering on the Oregon coast, is clearly Athapaskan with a separation date of only 2000 years suggested by some workers. The extraordinarily slow linguistic drift implied here follows from their conservative language type, less complex culture, fewer foreign contacts, and smaller populations.

Enclitic, word, and word order in Yuchi

PATRICIA STANLEY
Washington State University

Previous analyses of the syntax of Yuchi, a language isolate of the southeastern United States, posits relatively free word order, along with a range of affixes of widely varying function and type. This paper will point out some of the problems which arise from such an analysis and propose alternatives which, besides indicating that Yuchi syntax is not as aberrant with regard to neighboring American Indian languages as has been asserted, have better empirical motivation. The new alternatives also represent a firmer theoretical construct for this important language.

Prehistory

*Assemblage variation and activity loci at Coffee Pot Flat,
south-central Oregon*

C. MELVIN AIKENS and RICK MINOR
University of Oregon

Coffeepot Flat is a mountain meadow several miles west of the vast Chewaucan Marsh of south-central Oregon at the western edge of the Great Basin. Intensive survey coverage of the 3½m² area yielded 51 activity loci of varying extent. Projectile point time markers indicate that the meadow was occupied over the past 5000 to 7000 years. Detailed analysis of controlled surface collections suggests activity variants. It is speculated that the Coffee Pot Flat occupation represents the summertime activity patterns of transhumant populations which wintered around the Chewaucan Marsh.

Research oriented contract archaeology

CHARLOTTE L. BENSON
University of Washington

The recent increase in contract-supported fieldwork in archaeology has seen the concomitant growth of a disparity between the goals of archaeological contract work and "pure" research. This widening split in the discipline, and recognition of the fact that the majority of archaeological projects are being done under contract, occasions an evaluation of the need for a research orientation within the contract framework. Regional planning programs, sampling designs, and means for assessing the "significance" of cultural resources are examined. It is suggested that contract archaeology can better contribute to the development of the discipline as well as the conservation of the cultural resource base by the addition of problem-oriented approaches and explicit research designs.

*Faunal remains as evidence of non-material aspects
of past cultural systems*

GAY BOEHM
British Columbia Provincial Museum

The combination of systems theory with cultural ecology has introduced into anthropological interpretation the concept of the procurement system, a sub-system within a complex adaptive system. This concept is a particularly useful analytical tool for archaeological faunal analysis. Use of the procurement system model shifts the interpretive emphasis from the description of faunal remains as relatively discrete sets of data to the explication of interrelations between all types of data relevant to the exploitation and use of a single resource. If this approach is used, it may well be possible in certain archaeological situations to obtain evidence of the non-material aspects of a procurement system through the observation of patterning in the faunal remains, combined with knowledge of the ecology and present distribution of the animals involved, and a knowledge of the ethnographic procurement systems described for the area. An example of how this might work for a complex of Northwest Coast sites is discussed.

The houses of Alpowai

DAVID R. BRAUNER
Oregon State University

The Alpowai project, begun in 1972, was a multifaceted program of archaeology, ethnohistory, and geology. The project's focus was the Alpowai Creek locality situated adjacent to the Snake River eight miles below Clarkston, Washington. Archaeological field work spanned three field seasons, culminating in 1974 with the completion of Lower Granite Dam. Several prehistoric as well as historic Native American and Euro-American sites were excavated. A sequence of occupation spanning the last 8000 years was documented. Included among the data recovered from three sites (45AS82, 45AS80, and 45AS78) was a continuous record of pithouse occupancy encompassing the last 5000 years. Six complete and five partial structures were excavated. The most recent structure was occupied during the 1870s, the earliest house prior to 4000 years ago. Rapid post-abandonment sedimentation sealed most of the floors preserving activity loci and networks in space and time. Delineating the internal structure and, as far as possible, constructional detail through time of the houses at Alpowai are the goals of this presentation.

*Preliminary analysis of the Kersting site,
45CL21, Clark County, Washington*

SARAH K. CAMPBELL
University of Washington

The Kersting site, a lower Columbia floodplain occupation, was excavated by the Department of Anthropology, University of Washington under contract to the State Department of Highways during the summers of 1971 and 1972. A wide

variety of chipped and ground stone artifacts were recovered, as well as evidence of several structures. Analysis has been performed to ascertain the nature of the site in terms of components. A Late Prehistoric component is sporadically represented near the surface, while a second component comprising the bulk of the site includes pithouse structures. This unit fits into Pettigrew's period 1000 BC-AD 500 and is corroborated by radiocarbon dates ranging from 259 BC to AD 167.

*Preliminary salvage excavations at 45SA12, Hamilton Island,
Skamania County, Washington*

SARAH K. CAMPBELL and DENNIS E. LEWARCH
University of Washington

Following preliminary survey and testing of Hamilton Island, Skamania County as part of the North Bonneville Archeological Survey Project, the Department of Anthropology, University of Washington conducted extensive test excavations at 45SA12, a stratified bankside occupation, during the summer of 1975. Work was carried out under a salvage contract from the National Park Service. Functional analysis of artifacts and site topography indicate a predominately fishing oriented occupation. Radiocarbon dates suggest repeated occupations spanning a 400 year period between AD 1260 and 1660. Comparison with other sites in the region places the site within the seasonal round settlement system of the lower Columbia River valley.

*An archaeological and ethnohistorical investigation of
selected areas in Kootenai National Forest,
northwestern Montana*

LISA G. CARLSON and MAVIS A. LOSCHEIDER
University of Montana

In the summer of 1975, during a preliminary archaeological survey of selected areas in the Kootenai National Forest, located in northwestern Montana, ten archaeological sites were recorded. The majority of these sites were located on the terraces of the Kootenai River. These sites vary from surface and buried occupations, to numerous buried firehearth sites, a rockpile site, and a vision quest site. Data from this survey were utilized in conjunction with ethnohistorical data to determine significant aboriginal use of river bench areas in extreme northwestern Montana.

*The geography of archaeological sites in the
southwest of the Gulf of Georgia*

STEPHEN C. CASSIDY
Simon Fraser University

An inventory of the archaeological resources in the Gulf Islands has offered the opportunity to analyze a number of geographical aspects of prehistoric sites. The geographical aspects yield implications as to the past

history of the site environment and also the present rate of erosion and subsequent site loss. This information is of importance in planning the future of the archaeological resource both in terms of the public as well as the archaeological profession. A thorough site inventory as well as subsequent analysis of geographical features should be carried out prior to any intensive site excavation programs.

*The definition of artifact and the distinction
of cultural from non-cultural bone in
archaeological contexts*

JAMES C. CHATTERS
University of Washington

If faunal analysts are to draw valid conclusions on the basis of bone material recovered from archaeological sites, they must first face the question of which of these remains are present as a result of cultural activity and which should be attributed to non-cultural processes. A recent attempt by Thomas to solve this problem is critically evaluated and it is demonstrated that the quantitative method employed by that author is inadequate to the task. The argument is presented that any procedure for distinguishing cultural from naturally-occurring bone may have to be based on arbitrary grounds. It is proposed that, if we consider human-deposited animal bones to be artifacts, then the necessarily arbitrary decision of what is cultural and what is natural bone can be made on the basis of a theoretical definition of artifact. This method is illustrated using recently recovered archaeofaunas from central Idaho.

*The Schultz Marsh site: a multi-component, seasonal round
occupation in the lower Columbia River uplands*

JAMES C. CHATTERS
University of Washington

The study of the Schultz Marsh site (45CL29) constitutes the first thorough investigation of a prehistoric Native-American occupation in the terraced uplands of the Portland-Vancouver region. Artifacts from this systematically-sampled site have been subjected to historical and functional analyses to determine the site's age and position in the local settlement pattern. The site is shown to contain two temporally distinct components, representing Pettigrew's periods 2 and 4 in the lower Columbia local chronology, and it is further demonstrated that both components are representative of the same kind of seasonal occupation. On the basis of these results, the proposition is advanced that the marsh-dotted uplands of this region were exploited in the same manner between 5000 and 700 BP and, further, that a single subsistence-settlement system operated in the area during that period. A surface manifestation, 45CL29 presented the analyst with certain tactical problems. The methods used in the solution of these problems are discussed.

Ridge-back tools of the Colorado desert

W. MORLIN CHILDERS
Imperial Valley College Museum

Knapping experiments and examinations of flaked stone objects distributed throughout portions of southwestern Imperial Valley and northern Baja California indicate that criteria other than presence or absence of percussion bulbs can be used to support the artifactual nature of certain fractured stones. Cultural material referred to in this report as "ridge-back" has been observed, except for isolated pieces, only on older alluvial terraces and fans in the Pinto-Yuha drainage system. The greater portion of the material is restricted to six sites, separated by as much as 40kl. (Not presented.)

Insights into the emergence of prehistoric Kootenay culture

WAYNE CHOQUETTE
University of Idaho

The paper presents settlement data obtained from three archaeological inventory surveys in the Kootenay region of southeastern British Columbia. Results are discussed in terms of their significance to interpretation of the ecological relationships of the region's prehistoric inhabitants.

Excavations in the Okanagan Valley

STAN COPP
Simon Fraser University

During the summer of 1975 a late-prehistoric open campsite was excavated in the Okanagan Valley of British Columbia. Artifact typological comparisons indicate a period of occupation corresponding to the Kamloops and Cassimer Bar phases of the Fraser and Columbia plateaus. Obsidian source analysis reveals ties with the southern or Columbia Plateau region whereas projectile point styles indicate a mixture of northern and southern Plateau attributes. The material culture remains are indicative of an intensive hunting/gathering subsistence with a slight emphasis on fishing.

Ozette basketry, matting, and cordage

DALE R. CROES
Washington State University

Ozette basketry and cordage artifacts have been examined on three analytic levels. First, Ozette basketry and cordage attributes, including construction materials, construction techniques, forms, and sizes, have been analyzed and defined. Second, the results of the attribute (mode) analyses have been synthesized into paradigmatic classifications creating technical/stylistic classes of Ozette baskets, mats, hats, and cordage. And third,

these technical/stylistic classes have been utilized in discussing functional categories of Ozette basketry and cordage as recovered and examined in the Ozette House I context. Computer mapping procedures have been used to trace basketry and cordage items of specific functional categories throughout the House I area. Utilizing the Ozette analysis as a focus, prehistoric basketry and cordage from ten other Northwest Coast water-saturated archaeological sites have been similarly examined. Comparisons of the Ozette and other prehistoric Northwest Coast basketry and cordage on the three analytical levels provided information concerning the development of basketry and cordage technologies on the Northwest Coast for the last 3000 years. These comparisons have provided valuable new information about the development of, and relationships between, different Northwest Coast cultural manifestations through time and space. Examining this kind of material also provided explicit information concerning the activities taking place at different Northwest Coast wet sites. From the above accumulated information it is clear that basketry, in particular, and cordage to some degree will be important analytic artifact categories for establishing sensitive chronologies on the Northwest Coast and for deriving essential information for testing hypothetical cultural interrelationships on the Northwest Coast through time and space.

*Surface collecting in central Washington:
an evaluation of technique*

WILLIAM S. DANCEY
Ohio State University

Projects conducted in the Priest Rapids area in 1970 and the Quilomene Canyon area in 1974 employed exact and grid techniques in the location and recording of surface-exposed lithic tools and debitage. This paper summarizes the technical aspects of these projects and evaluates them in terms of the value and uses of the surface collections obtained.

An introduction to Ozette prehistory

RICHARD D. DAUGHERTY
Washington State University

Until it was abandoned early in the twentieth century, Ozette was one of the five main villages of the Makah Indians. Linguistically related to the Nootka of Vancouver Island, the Makah were noted for their sea mammal hunting, particularly the hunting of fur seals and whales. Ozette was perhaps the most strategic location for sea mammal hunting along the entire Northwest Coast. Archaeological excavations have indicated that the site has been occupied for over 2000 years, and probably twice that long. For the past six years excavations have been conducted on a year-around basis at a location near the center of the village where a series of slides and mud flows in the late prehistoric period smashed into and covered a number of large, shed roof, plank houses. Buried under many feet of wet clay and sand for several hundred years, the houses and their contents are in a near perfect state of preservation, including all of the normally perishable items

such as baskets, mats, bows, arrows, loom and loom parts, clothing, harpoons, art work, and many other categories of artifacts. Over 40,000 items have been recovered to date. At Ozette we have an opportunity to observe in great detail a functioning Northwest Coast community that was stopped at a moment in time.

Lithic replication: a critical review

TERRY DEL BENE, GERALD HOLLEY, and PHIL SHELLEY
Washington State University

Lithic replication enjoys widespread popularity with both professionals and the general public. Both these factions assume replicators have special knowledge about lithics. The esteem of replicators has carried over to the manners in which they analyse their materials. Because of its historical background most replicative studies at least tacitly utilize the typological concept. Yet replicators should have more insight into the fallacies of this approach. Discussion focuses on the three schools presently operating within lithic replication. Further discussions cover the major variables in replicative studies and ethical constraints on these studies. The validity of analytical questions is also covered.

*Salvage excavations at 45SA5, North Bonneville,
Skamania County, Washington*

MARY ANN DUNCAN
University of Washington

Salvage excavations were conducted at 45SA5, North Bonneville, Skamania County under a National Park Service contract with the Department of Anthropology, University of Washington during the summer of 1975. Over 32,000 artifacts were recovered and analyzed both functionally and stylistically. Stylistic analysis indicates a Late Prehistoric occupation, and was corroborated by radiocarbon dates ranging between AD 1220±90 to AD 1550±110. Differential distribution of artifacts and firecracked rock were examined relative to the distribution of pithouses and other features. Computer graphic displays of artifact distributions across the site were utilized in defining the structure of the village occupation and the delineation of activity areas.

*Reevaluation of the Lindenmeier Folsom: a replication
experiment in lithic technology*

J. JEFFREY FLENNIKEN
Washington State University

This paper reports on a continuing study of experimentation and analysis of the stoneworking technology of the Lindenmeier Folsom. Production time, sequential stages of manufacture, and fluting technique are examined and discussed on the basis of extensive replication experimentation and macroscopic analyses of the original Lindenmeier Folsom assemblage. Results of

this study indicate that simplicity of technique along with desired form are crucial factors in the decision-making associated with the production of the Lindenmeier Folsom.

Makah camps and villages

EDWARD I. FRIEDMAN
Washington State University

The Ozette site was a Makah village of major occupation. In order to see Ozette clearly in a meaningful framework, it has been necessary to study the total picture of resource utilization and environmental adaptation. This has been done through analysis of other villages and camps which were occupied by the Makah in their yearly cycle. This study has been an attempt, based upon test excavations, to establish a model for camp versus village occupation; to determine the season of occupation and resource utilization; and to see if differences noted in the ethnographic literature can be documented from archaeological data. Major emphasis has been placed on the analysis of faunal material, including mammals, birds, fish, and shellfish, as well as the present day environmental setting.

Utilization of avian fauna in Makah territory, Washington

EDWARD I. FRIEDMAN
Washington State University

Ethnographic and archaeological literature dealing with central Northwest Coast cultures often has overlooked the aboriginal utilization of avian fauna. Gunther has provided the most complete account of the native knowledge and use of birds for a single group. Underhill in a general way has given a solid account of birds hunted. Archaeology for the same area has provided only six reports that include any avian oestological data. While it is not possible to quantify the importance of birds in the native diet at this point, it does seem reasonable to assume that this resource was far more important than has previously been described in the literature. Forty-three species of birds, ranging in size from the black-footed albatross (*Diomedea nigripes*) to the very small ruddy turnstone (*Arenaria interpres*) have been identified in archaeological sites in Makah territory in northwest Washington state. Year round residents as well as migratory birds were exploited. All species recovered and identified from Makah middens are found in the area today.

Ozette woodworking: types of wood used

JANET P. FRIEDMAN
Washington State University

The total preservation of wood at the Ozette site makes it possible to answer many questions about this important resource in the culture of the prehistoric Ozette. Studies have been conducted in the identification of wood through microscopic analysis. This work has shown that nearly all of

the available wood species were used in the manufacture of a wide range of artifacts. Thousands of objects representing over 30 different categories of artifacts have been sampled thus far. This work has revealed that woods were used selectively, and the special properties of particular woods were employed to meet the requirements of a given class of artifacts. Availability of resources also played an important part in their selection for a given task. Contrary to some ethnographic reports, the Makah depended almost exclusively upon locally available species for their wood.

*A technological analysis of projectile points
from the Cox's Pond site, Washington*

JERRY R. GALM
Washington State University

Salvage excavation at the Cox's Pond site, Douglas County, Washington, revealed artifacts from a burned occupation surface, dating between 4000 and 1000 BP. A sample of 28 projectile points recovered from four discrete cache-like clusters are analyzed in the present study. Unique depositional context, unusual size, and distinctive morphology combine to make this sample especially well-suited to a thorough technological analysis. Projectile point manufacture is described in terms of initial mode of production, flaking sequence, edge morphology, basal preparation, and breakage. Distinctive technological attributes identifiable in the projectile point sample serve to delineate the entire manufacturing process, as well as individual maker habits. It is concluded that recurring manufacturing traits recorded on the majority of points are indicative of personal habits or style, and thus, argue for a single maker.

*The archaeology of Hihium Lake, British Columbia:
an areal extension of the Nesikep tradition
into a new ecologic zone*

KEITH D. GEHR
Portland State University

Hihium Lake lies on high plateau country roughly 45mi northwest of Kamloops at an elevation of 4500ft. The lake is the center of a complex of Indian occupation sites that appear to span a time interval of several millennia. One site that has been tested shows heavy and/or long-term occupation and has yielded artifacts falling in Sanger's Nesikep Tradition. Summer occupancy would seem most likely, especially in view of the severe winters at the site compared with those in the valleys a short distance away. Hihium considerably expands the areal extent of the Nesikep Tradition. Heretofore, it has been associated with riverine sites, primarily in the upper Fraser gorge. This site is far more easily accessible to the interior Plateau than it is to the Fraser River. It thus opens the possibility that the Nesikep people could have eastern or southeastern origins as easily as the northern origins suggested by Sanger.

Ozette woodworking technology

PAUL F. GLEESON
Washington State University

The Ozette site with its remarkable preservation of wood materials provides a startling insight into the relative importance of wooden artifacts on the Northwest Coast. For the first time it is possible to study Northwest Coast woodworking technology on the basis of woodworking tools, detritus, preforms, and complete artifacts, all from the same time and place. The Ozette collections reflect a well developed woodworking technology. Stone mauls and a large number of various styles of wedges indicate that the Ozettes were gathering locally much of the needed raw material. The large woodworking tools, the straight adze and the D adze, are typical of the southern outer coast area. The large amount of fine detritus and small preforms indicate that completion of larger artifacts and the manufacture of smaller artifacts was done extensively within the house and appears to reflect various manufacture loci. The large amount of woodworking information gathered from Ozette has necessitated the development of a nomenclature for Northwest Coast woodworking technology.

*Trampling as an agency in the formation of edge damage:
an experiment in lithic technology*

JAMES C. HAGGARTY and J. JEFFREY FLENNIKEN
Washington State University

Edge modification of flaked stone has received increasing attention over the past few years but relatively little of this attention has focused on edge damage resulting from various processes of an accidental and/or non-cultural nature. This paper is concerned with preliminary results obtained from a controlled experiment in lithic technology designed to isolate examples of edge damage sustained on obsidian flakes as a result of trampling. The degree and nature of edge modification at various morphological levels will be examined and discussed. The results of this study indicate that the process of trampling can influence edge modification considerably and, as a result, bias subsequent morphological and functional interpretation.

*Geological processes and apparent settlement densities along
the lower Snake River: a geo-centric view*

HALLETT H. HAMMATT
Washington State University

A radiocarbon chronology has been developed for the Late Quaternary geological sequence of the lower Snake River. The later part of this sequence is contemporary with the documented span of human occupation. The time and distribution of the earliest occupation may be limited by a late episode of Scabland flooding. The periods of apparent heaviest occupation, the early Cascade Phase (8000-7000 BP) and the Harder Phase (2500-1000 BP)

happen to be contemporaneous with the two major phases of alluvial stability and soil development. The apparent hiatus in the occupation along the Snake River is at the Cascade-Tucannon transition (5000-4000 BP) and corresponds to a period of active alluvial scouring, bank cutting, and deposition. Changes in the relative dominance of different geological processes influence the chances for survival of occupation layers as well as their chances of discovery. These factors should be considered in reconstructing and explaining apparent changes in human settlement densities.

*The raw and the cooked: a preliminary analysis of
thermal pretreatment of various tool-stones*

GLENN D. HARTMANN
Washington State University

A wide range of controlled temperature regimes has isolated the minimum, maximum, and optimum temperatures for the thermal pretreatment of several species of lithic materials. The sample analyzed consists of Hell Gap quartzite, Hell Gap jasper, Alabates flint, Harrison County flint, Snake River basalt, and Glass Buttes obsidian. All materials have been cut into palates, placed in a sand "bath," and subjected to temperatures of 200°C, 400°C, 600°C, and 800°C. Emphasis is placed on quantification of the change within materials. Utilization of the scanning electron microscope and a mechanical static loader have been successful in precise description of changes accompanying thermal alteration. New explanations for increased workability of thermally pretreated lithic materials are explored and criteria for recognition of sub- or supraoptimum heating are discussed.

Geofacts and artifacts

HENRY T. IRWIN
Washington State University

This paper presents preliminary data on the occurrence of naturally flaked stone material gathered over a period of years by the author and Roald Fryxell of Washington State University. Ideas formulated by both investigators prior to Prof. Fryxell's death, and of the current author subsequently, are reviewed. All specimens presented as geofacts come from locations undisputably devoid of human occupation. These are then compared and contrasted with similar lithic materials, demonstrably artifacts, gathered from a variety of sites world wide. Possibilities for differentiation will be examined according to the following general categories: (1) geomorphological context; (2) geometrical attributes; (3) statistical occurrence (frequency within a location or locality); and (4) lithological composition. Conclusions drawn from these studies and an outline for further investigation will follow.

*Plane sense: a technological and functional
analysis of a stone tool category*

J. BRANTLEY JACKSON
Washington State University

Scraper planes are commonly accepted as important tools of the Milling Stone (Horizon) Culture and the San Dieguito Complex in southern California and other prehistoric groups in the southwestern United States and northern Mexico. They are usually assumed to have functioned in the processing of agave leaves for food and/or fiber, either to push the pulp from leaves or to pound the fiber free of the pulp. Other uses for planes have been suggested in the archaeological literature, including scraping hides, roughening metate faces, and planing wooden implements. This paper deals with the technological aspects of manufacture and the functional aspects of use of scraper planes. The analysis is approached by testing a set of hypotheses concerning material, form, technology of manufacture, context, and functions. Statements about technology and function are derived from experiments and micro use-wear studies. Reality and usefulness of the category "scraper planes" is examined.

*Prichard argillite, the Harvey Mountain quarry, and lithic
resource identification and description in Idaho*

RUTHANN KNUDSON
University of Idaho

During the past year the University of Idaho, Laboratory of Anthropology has initiated reconnaissance and materials analysis of the Harvey Mountain quarry (10BY12). The site is a broad field of quarry blocks, excavated adits, and some flaking debitage on the northeast crest of Harvey Mountain (1900m elevation) on the Idaho-British Columbia border. The quarry is undated because of a lack of stylized implements or associated organic materials, but may have been worked from the early Holocene. The focus of the current project is a thorough description and identification of the raw material using several interdisciplinary criteria. Samples of the Precambrian Prichard argillite are being subjected to neutron activation, petrographic, and mechanical analyses, thermal alteration studies, and experimental knapping, and similar rock types are being identified in prehistoric assemblages throughout the Northwest.

Prehistoric social organization from faunal remains

R. LEE LYMAN
Washington State University

In the past, faunal analysis has consisted of examining archaeological faunal remains either from a zoological or anthropological perspective. When analyzed from a zoological perspective, the represented animals are emphasized in order to infer prehistoric environments. When analyzed from an anthropological perspective, the bones are emphasized in order to infer butchering techniques or, the remains are treated as animals to construct

a menu or to calculate available meat. Faunal remains recovered during the Alpowa Project were examined from an anthropological perspective and treated as cultural materials reflecting those human behaviors included within fauna processing. An analytic model of fauna processing is designed from ethnographic and archaeological data, and the Alpowa data examined in light of the model. The resultant inferences suggest that prehistoric fauna processing in the Alpowa Locality included a three step butchering process and several kill sharing patterns. Interestingly, sharing of a carcass consisted of dividing the carcass at a point just posterior to the rib cage. This resulted in the shared halves of the animal consisting of the forequarters and rib cage, and the hindquarters.

The prehistoric houses at Ozette

JEFFREY E. MAUGER
Washington State University

At Ozette, a winter village site of the Makah Indians on the Olympic Peninsula of Washington state, a series of mudslides buried a number of traditional shed roof houses. Waterlogging of the buried cultural materials has allowed the recovery of thousands of structural remains including boards, planks, timbers, sleeping benches, and associated architectural features. To date, two houses have been recovered and two others sampled in an earlier component of the site. These houses represent a segment of the village as it existed in late prehistoric times. The archaeological remains recovered at Ozette allow a detailed reconstruction of the houses and their architecture. Repair and rebuilding techniques can be defined and synchronic variation between the houses may be examined. Additionally, the early and late historic components of the site allow an examination of the innovations in this type of architecture through European contact.

*Bison procurement and processing in north-central Montana:
the use of mandibular tooth eruption as an indicator
of seasonality in site utilization*

AUDREY L. MURRAY
University of Montana

During the 1975 field season the University of Montana Statewide Archaeological Survey conducted test excavations at several sites on Fresno Reservoir, situated on the Milk River in north-central Montana. Among the sites tested were four bison kills. Detailed examination of a large mandible sample obtained from 24HL46; a two component, late prehistoric period bison jump, supplemented by a similar examination of several smaller samples recovered from each of the three other kill sites; suggests a seasonal pattern of site utilization along this portion of the Milk River. The pattern revolved around the procurement and processing of bison in the fall months, with less intensive occupation during the remainder of the year.

*An analytic model for close order articulation
of information and association*

GUY R. MUTO
Northwestern University

Archaeological information is derived from objects and associations. Stone objects are the lowest order of coherent information from which analytic models are constructed. Models for interpretation or analysis should maintain a bias which guarantees the integrity of these coherent data bases. Various recent sorts of models strive to explain a range of phenomena from micro-features on fracture surfaces, through reduction/production strategies, to comprehensive cultural traditions. Even as it behooves us to be careful analysts of these lithic materials, it is even more important to subject our models to close scrutiny. Without proper articulation of concrete fact and abstract fancy we may run the risk of abject failure before we start. I propose a method for evaluation and ranking of models and their information base which will allow for a close order articulation of these features.

45JE16 - Indian Island

ASTRIDA R. BLUKIS ONAT
Seattle Central Community College

Site 45JE16 is located on Walan Point/Spit on the northwest end of Indian Island, Jefferson County, Washington. It is directly southeast of Port Townsend, across Port Townsend Bay. The site is 300 years old and contains a prehistoric and an early historic component. The location was ethnographically assigned to the Chimakum until the 1850s, when it became part of Clallam territory. The site was utilized for gathering clams, fishing, and hunting. The distribution and types of artifacts attest to the specialized nature of the activities. The remains of one structure, a house floor, were recovered. The artifacts show no appreciable change in the activities during the time that the site was occupied, prehistorically or historically.

A spear thrower from the Oregon coast

JAMES L. PETERSEN and FRANCES M. PHILIPEK
Portland State University

An artifact, apparently a spear thrower, has been recovered from the Oregon coast, north of Tillamook, by amateur collectors. The site yielding the spear thrower fragments has been systematically mined by relatives and friends of the owner, and little stratigraphic or associational data are available. No useful records of the main excavations were kept, and the site is largely or completely destroyed. Systematic excavation would be impossible in its present state. Artifacts suggest the site is not particularly ancient and may be attributed to late prehistoric or early historic horizons. The atlatl from Tillamook was compared to spear throwers known from ethnographic accounts and from archaeological records of the Great Basin, California, and the Northwest Coast of North America. At the present

time, our studies are inconclusive, but we have been able to formulate several explanations, which are: (1) the artifact is intrusive, probably dating from the post-contact period; (2) the artifact is a survival form from an earlier period when spear throwers were more widely used on the coast than presently thought; or (3) the artifact is either a modern forgery or has been incorrectly identified as a spear thrower.

Chronological ordering of lower Columbia projectile point styles

RICHARD M. PETTIGREW
University of Oregon

Analysis of the 1973 field season data from the Portland area is now nearly complete. The goal of the season's work was the establishment of a prehistoric cultural sequence, an aim which has been amply realized. From the 7 sampled sites a total of 25 radiocarbon dates were obtained, ranging from historic times back to 3000 years ago. Significant variation in the proportions of the various projectile point styles is observable over the course of the past 2200 years. A firmer footing has now been created for future efforts in lower Columbia archaeology.

*Design and evaluation of a stratified random
sampling strategy for a single site*

JANET RAFFERTY and MARY ANN DUNCAN
University of Washington

Site 45SA5, located near Bonneville Dam on the Columbia River, had been disturbed by both professional and amateur excavations prior to work in 1975. Its large size and a contract stipulation that the site's archaeological significance be evaluated precluded complete excavation. The use of low-level infrared aerial photos, a detailed topographic map produced from the photos, and ground-level maps allowed the design of a stratified random sampling strategy. Soil analysis, computer graphics, and stratigraphic analysis of excavation data make it possible to evaluate the usefulness of the sampling strata and show that knowledge of unexcavated portions of the site has been considerably increased.

Prehistory of the western Columbia Basin: a critical review

DAVID G. RICE
University of Idaho

In this paper an areal survey is made of archaeological studies conducted along the Columbia River basin between the mouth of the Umatilla River in Oregon and the mouth of the Okanogan River in Washington. A culture historical framework is presented based upon critical review of the existing published information. Major study sources pertain to Wells Reservoir, Rocky Reach, Little's Landing, Priest Rapids-Wanapum reservoirs, and the Pasco Basin.

Technological parameters of the teshoa

DANIEL G. ROBERTS and MARK B. SANT
Idaho State University

A series of replicative experiments with regard to the manufacture of teshoas was undertaken. Variants of three modes of production were attempted: the anvil technique, the bi-polar technique, and the direct freehand percussion technique. Evidence is presented which indicates that certain variants of the bi-polar and direct freehand percussion techniques are the most suitable for successful teshoa production. Furthermore, it is suggested that differential technological attributes which manifest themselves on teshoas can serve to distinguish between the two modes of production, thus aiding the archaeologist in the technological analysis of teshoas from known archaeological contexts.

Charles E. Borden: his formulation and testing of archaeological hypotheses

ELLEN W. ROBINSON
Clatsop Community College

An analysis of Borden's papers, including unpublished (to 1975), to discover the logic used to formulate and test hypotheses, and the available data and explanatory patterns are shown. The work is characterized as a search for Northwest Coast chronology with three periods: (1) early (evidence from stratigraphy, geology, historical linguistics, ethnographies, and study of spatial distribution of similar artifacts); (2) middle (application of radiocarbon dating to test and correct earlier hypotheses); and (3) recent (sequences of hypotheses to explain complex, puzzling phenomena involving many basic sciences). Borden's papers are shown to be a series of reproductions, moving from puzzling phenomena to hypotheses from which the phenomena would follow as a matter of course.

Archaeological applications of computer graphics

STEPHAN R. SAMUELS
Washington State University

Initial experimentation with graphic computer input of three dimensional surface representation shows promise for archaeological analysis and large scale three dimensional reconstructions. Graphic input of single surface contour maps such as topographic maps and multiple surface contour maps such as archaeological stratigraphic maps is being explored. Sophisticated computer technology is used to produce varied outputs such as perspective drawings.

*Correlations between flake mass and distance from quarry source
within a Paleo-Indian system*

ROBERT LEE SAPPINGTON
University of Idaho

From the early 1920s until the present day, an amateur archaeologist, Bert Mountain, has been collecting lithic tools and debitage from the 9000-year old Claypool site in northeastern Colorado. Professional excavations, artifact descriptions, and the geological survey of this Paleo-Indian site were reported in *American Antiquity* in 1960, but the Mountain debitage collection was never reviewed. Current analysis of this surface debitage may provide a model for studies elsewhere. One aspect of this analysis is a test of the correlation of raw material (based on macroscopic identification), flake unit mass and number, and distance from quarry source. Data such as these provide a base for understanding various facets of lithic procurement, production, utilization, and material value systems.

*The Martin site (45PC7) revisited: a multi-component site
of the southwestern Washington coast*

ROBERT D. SHAW
Washington State University

The Martin site (45PC7) was excavated for eight weeks in 1974 by participants in an archaeological field school offered through Washington State University. The site is located on North Beach Peninsula in extreme southwest Washington and consists of midden deposits containing two prehistoric and one historic component. Component 3 (the historic occupation) is a trash deposit buildup along a road cut through the site when it was logged in the mid-1950s. Logging operations produced heavy disturbance in the aboriginal deposits. Component 2 consists of a shell midden overlying a 50m wide, inland dune ridge for about 100m. The bulk of cultural materials are assigned to this aboriginal component. Two structural features were identified, but one was destroyed by construction of the logging road and the other is only partially excavated. The charcoal sample from a structure in this component dated 1440 ± 100 radiocarbon years BP. The artifact and faunal inventory indicates a hunting and gathering subsistence base with heavy dependence on shellfish, large land mammals, birds, and sea mammals. Component 1 is a 5-10cm thick paleosol from which one unifacially flaked point, fish vertebra, and charcoal flecks were recovered. Sterile sand up to 1m thick separates it from materials of Component 2. Charcoal from this strata dated 1860 ± 100 radiocarbon years BP.

*A different view of crescentic artifacts: preliminary report
of opal phytolith deposition*

PHILLIP SHELLEY
Washington State University

Previous functional analyses of flaked crescentic stone artifacts associated with playas in the Great Basin and in the Desert West have suggested

their use in the acquisition or preparation of animal resources. Proposed uses range from scrapers to transverse projectile points for waterfowl hunting. I am hypothesizing that crescents were used in procuring the plant resources localized in the playa edge ecotone. If crescents had been repeatedly used in gathering plant resources, opal phytolith deposition would have occurred. A sample of 31 crescents were examined macroscopically for evidence of "sickle sheen;" 7 were further examined with the scanning electron microscope. Scanning electron micrographs of these crescents were compared with scanning electron micrography of "sickle sheen" developed on a Near Eastern Neolithic sickle blade. The extensive opal phytolith deposition exhibited on the Near Eastern specimen was not observed on the crescentics. However, varying localized deposition was noted on three of the seven specimens examined using electron microscopy. Although the sample size is considered inadequate, the results are encouraging. Further research utilizing the scanning electron microscope may delimit the various functions of crescentics and other lithic tools.

*Pacifism, conflict, and defense in the Columbia Plateau:
the emergence of Plateau culture*

WILLIAM C. SMITH
Central Washington State College

Recent archaeological research (specifically, a series of sites which may have been occupied partially for defensive purposes) in the Columbia Basin suggests that the aboriginal utilization of that area may have involved a greater threat of social conflict than has hitherto been suspected. If so, then this possibility has interesting implications for the processual problem of explaining the emergence of the Plateau ethnographic pattern. The objective of this paper is to explore those implications. Charles M. Nelson's "Salishan expansion hypothesis" is reviewed and provisionally accepted; but Nelson's hypothetical causes of Salishan expansion are rejected in favor of an alternative model of Salishan expansion which stresses the probable role of social conflict in that process. It is argued that this alternative model is useful in accounting for Salishan expansion, for the emergence of Plateau culture, and for the existence of possibly defensive sites in the Columbia Basin.

*Archaeological reconnaissance of the Portland, Oregon -
Vancouver, Washington area*

JUDY STARKEY
Oregon Archaeological Society

An archaeological reconnaissance of the Portland-Vancouver area is presently being conducted by the Oregon Archaeological Society. The purpose of the reconnaissance is to accurately locate and map all known sites in the project area. The basic research for this project has many facets including interviews with local collectors, professional archaeologists, and persons knowledgeable of the local history and research of historic maps, field notes, published papers, unpublished papers, theses, and early journals. Experiments with aerial and infrared photography have added new dimensions to this research. The reconnaissance has revealed a vast number of sites ranging from

destroyed to completely untouched and with varying degrees of archaeological information. In the Portland area 75% of the sites were found to be destroyed or considerably disturbed. In the Vancouver area, 55% of the sites were found to be destroyed or disturbed. Ongoing study of the remaining number of known sites is needed to determine their condition. Due to the extent of information learned and yet to be learned, this will be an ongoing project.

Neutron activation analysis and the characterization of archaeological bone: a progress report

GARY WESSEN and FRANK RUDDY
Washington State University

Neutron activation analysis of the trace element content of morphologically distinct recent and archaeological bone is utilized as a basis for non-morphological characterization of the organism represented. Measurement of certain alkaline earth metals in the bones of a variety of marine and terrestrial mammals indicates that characteristic concentrations -- reflecting environment and/or trophic level -- do exist. The examination of such concentrations in collections of bone artifacts thus allows investigation into various aspects of prehistoric economy and technology, particularly with respect to selection in the aboriginal utilization of raw material resources.

The Stockhoff Basalt Quarry (35UN52)

BRUCE WOMACK
Washington State University

The Stockhoff Basalt Quarry site 35UN52 is located along the route of Interstate 80 North ten miles south of La Grande in the Blue Mountains of northeastern Oregon. The Stockhoff Basalt Quarry is characterized by the existence of extensive surface deposits of dense fine grained basalt cobbles which served as a major source of lithic raw materials. Surface collection and excavation resulted in the accumulation of over 700 basalt artifacts which appear to represent all stages of implement manufacture. Both cultural and geological data suggest utilization of the Stockhoff Basalt Quarry from approximately 8000 BP to approximately 3000 BP.

Definition of archaeological components at the Wawawai locality (45WT39), lower Snake River region

MARTHA YENT
Washington State University

Site 45WT39 is located on the lower Snake River at the base of Wawawai Canyon. The archaeological site consists of three areas which were excavated in two field seasons as part of the Lower Granite Salvage Project. An analysis of artifacts and occupation features led to a definition of three components at Area B and a fourth at Area A. Each of these components has been described and defined on the basis of diagnostic artifact forms, occupation

features, and associated cultural activities. These components were then tested for distinctness and their correspondence to the cultural typology developed for the lower Snake River region. Based on the above, Area B was found to consist of a Tucannon Phase component, a Harder Phase with a transition into the Piquin Phase component, and a Numipu Phase (Ethnographic) component. Area A was comprised of only a well-defined late Harder Phase component which was supported by radiocarbon dates. The major component comparison involved the Harder Phase and Numipu Phase components as they were better defined. This comparison involved an attempt to find which aboriginal materials and artifact forms were retained and complemented by Euro-American materials and artifacts as well as which aboriginal artifact forms were not retained.

Historical Archaeology

Ethnoarchaeology of Silcott, Washington: an overview

WILLIAM H. ADAMS
Washington State University

The small farming community of Silcott, Washington has, over the past four years, been the subject of an intensive ethnoarchaeological study. Ethnoarchaeology is the integration of historical, ethnographic, and archaeological approaches in the study of a particular group of people. This paper examines the ethnoarchaeology of Silcott in terms of its objectives, methodologies, and results.

Trade networks: a view from Silcott, Washington

WILLIAM H. ADAMS
Washington State University

The people of Silcott, a small farming community in southeastern Washington, participated in six major trade networks: local, local commercial, area commercial, regional, national, and international. These networks are examined through the ethnographic, historical, and archaeological data. Remarkably, the regional, national, and international networks are best studied through archaeology, whereas the local networks and the area commercial network are best examined through ethnography. These networks bound Silcott into an integrated community, while at the same time they also linked Silcott to the national economy.

Chinese coins and Pacific Northwest archaeology, 1644-1911

HERB BEALS
Oregon Archaeological Society

Chinese coins from six Pacific Northwest archaeological sites are analyzed in terms of identifying mint marks. The six sites (Trojan, 35C01; Decker, 35C02; Gladstone; Mostul; Sullivans Island; and Bridgeport, Washington)

yielded 101 specimens. Most of the coins came from two rather distinct zones within China. One area centers on the North China plain and extends down the northeastern coast to Hang-chou. A second area centers primarily on the southwestern province of Yunnan and includes adjacent Kwangsi and Szechuan. Older coins (pre-1736 K'ang Hsi and Yung Cheng mints) are from northern mints, suggesting transmittal from Siberian trade routes, through Alaska to the British Columbia coast.

Ozette imported ceramics: what? why? when? how?...
a preliminary report

GERALD H. GROSSO
Washington Archaeological Research Center

This paper deals with the ceramic material recovered from the historic unit of 45CA24 during excavation at the Old Ozette Indian Village which have been in progress continually since April 1970. This is a significant historical archaeological site because of its coastal location, relatively long European contact in the region, and because the old village site has not been subjected to bulldozing and such manifestations of progress.

Classification of Kanaka Village metal

TIMOTHY JONES
University of Idaho

This paper is a demonstration that the manner in which artifacts are classified depends upon the end purpose of one's interpretation, and the audience for whom the classification is made. The Kanaka Village report has an obligation to provide a range of pertinent information for individuals from high school students to professionals in archaeology. Types of classifications that can be discussed are: functional, social/economic, technological, descriptive, formal, and selective attribute.

*The archaeology of migrant laborers: the orchard workers
of Silcott, 1920-1958*

TIMOTHY B. RIORDAN
Washington State University

The Alpowa Project, located on the Snake River eight miles downstream from Clarkston, Washington, studied a wide range of cultures over a long time span. This paper deals with the last occupation of the area. The people under study were mostly local residents out to earn some extra money during the harvest season. A combination of archaeology, ethnography, and history has given us some understanding of their life on the river. A short history of the orchard and ethnography of the people is given. The architecture of the shacks they lived in is analyzed to show environmental adaptations. A comparison with sociologically known labor camps in Washington is made; differences and similarities are discussed. The place of the Silcott orchard workers in the American system as a whole is outlined.

*Distribution analysis as an aid to the cultural interpretation
of historical sites: the shack area of the
Silcott orchard*

TIMOTHY B. RIORDAN
Washington State University

This paper deals with the culturally relevant relationships present in an archaeological sample. It does not deal with artifacts as such. By plotting the frequency of artifacts in each excavation unit and relating this to the shacks at the site, living areas and use areas are postulated. The distribution of different classes of artifacts (i.e., tin cans, glass, etc.) are analyzed to demonstrate some cultural patterning in trash disposal. A further analysis of male, female, and child associated artifacts points to some cultural patterns as well as some of the problems inherent in this type of analysis. The use of this method in the study of the orchard workers of Silcott provided some insight to their thought patterns not readily available from any other source.

*Window glass thickness: a study in distribution patterns
and temporal fluctuation*

KARL ROENKE
University of Idaho

The statistical analysis of the thickness of window glass sherds from Kanaka Village, Vancouver, Washington shows a gradual increase in the thickness of window panes during the nineteenth century. Preliminary analysis of window glass sherds from other nineteenth century sites in the Pacific Northwest tends to support this initial study. Major and minor modal distribution can indicate subsequent additions and/or the existence of a number of structures on a particular site through time.

*A call for a cooperative effort in historic preservation:
architecture, history, and archaeology*

KARL ROENKE and ROBERT WEAVER
University of Idaho

With the increased concern in the United States toward the preservation of cultural resources, there is a great potential for interdisciplinary projects undertaken as a combined effort between concerned professionals. Although there has been cooperation in the past between historical archaeologists, historians, and preservation architects, these programs are still in their infancy. There is a need for a combined effort to provide individual services of the highest quality and to further understanding between these professions. A discussion will be presented concerning a series of projects where cooperation was achieved, instances where cooperation was absent, and concepts will be detailed for formulating joint programs in the field of cultural resource preservation.

Oral myth in historical archaeology

RODERICK SPRAGUE
University of Idaho

The two most common myths reported to historical archaeologists working in North America are: (1) the presence of a cache of gold hidden in the site; and (2) the presence of a secret tunnel connecting various parts of the site. In 1968 on Prince Edward Island a passage was found leading from a nineteenth century general store, and on San Juan Island in 1970 a pot of gold was found in the demolition of a historic building in preparation for archaeological investigations. The finding of these two features in two successive summers in two historic sites after having been told of them by local informants suggests that historical archaeologists could profit by paying more attention to the local traditions in the area in which they are working.

The European Sale Shop at Fort Vancouver, 1829-1860

HARVEY W. STEELE
Oregon Archaeological Society

The European Sale Shop at Fort Vancouver was the first retail store in the Oregon Territory. The structure, erected in 1829 to provision employees of the Hudson's Bay Company in the fur trade of the Columbia Department, became, after about 1840, a retail store for settlers coming into the Oregon Territory. The mercantile function supplanted its earlier function and the store was a central institution in the life of the Oregon Territory until about 1853, when a combination of historical factors destroyed its significance. It survived until 1860 when the Hudson's Bay Company vacated Fort Vancouver. The structure was excavated, by the Fort Vancouver staff in 1973, and again in 1974, by the Oregon Archaeological Society (under the supervision of the National Park Service). In the two excavations a total of 98,516 artifacts (or fragments of artifacts) were recovered. Correlated with historic materials, the artifacts reveal the various roles of the Sale Shop: (1) to provide provisions for the fur traders; (2) to provide trade goods for the use of the fur traders; (3) to provide goods for the incoming settlers; and (4) to provide a standard of trade and exchange for all persons in the Oregon Territory, especially between 1840 and 1860.

Historic materials from Lady Island (45CL48), 1850-1910

HARVEY W. STEELE
Oregon Archaeological Society

Excavations at Lady Island, site 45CL48, were commenced in 1975 by the Oregon Archaeological Society, under professional supervision. Historic materials recovered to date include machine-cut sheet nails, wire nails, bottle glass, earthenware fragments, and various other metal objects. On the basis of dating methods and analyses derived from the Fort Vancouver excavations, a suggested date range of 1880-1910 is indicated. Since the first known Euro-American occupation of the site area was about 1850, one

of the problems of site development is to account for the interim 30-year period. Another problem is to contrast the response of the Euro-Americans and the aboriginal population to essentially the same environment. A final problem is to account for the transitional period between the disappearance of the aboriginal population and the coming of the Euro-American settlers.

Physical Anthropology

*Report on research being conducted on racial differences in
autonomic nervous system response to alcohol*

JEFFREY T. BURNHAM
Washington State University

Previous studies have shown a statistically significant difference between Orientals and Caucasians in vasomotor response to alcohol at the ear and face, Orientals being characterized by vasodilation (facial flushing). The goal of research currently being conducted is to clarify this finding by collecting data on heart rate, skin conductance, and surface skin temperature at the finger and cheek from subjects of different racial backgrounds who have been given a controlled amount of alcohol to drink. With such data it should be possible to determine if the flushing response is a specific difference or if it reflects a general difference in autonomic reactivity.

A HOMINOLOGIST'S VIEW FROM MOSCOW, USSR

DMITRI BAYANOV
Darwin Museum

The following comments, kindly offered for publication were received in letter form, July 1976 by one of the editors (RS) in response to copies of *NARN* reprints sent to Dmitri Bayanov and Igor Bourtsev.

Thank you very much for the *NARN* materials you sent to us. Some of the articles - those by Grover Krantz and Wayne Suttles - we received before from other colleagues and discussed at our seminar, while those by Bruce Rigsby and Gordon Strassenburgh are new to us and are scheduled for discussion.

It is also the first time that I have seen and can appreciate your Editorial, which started it all in *NARN*. I must say it is written in the best and noblest tradition of scientific inquiry. Fruits of science can be used to harm man, but the spirit of science, which is revealed in your editorial, can only be of the greatest service to mankind.

It is also gratifying to learn that you were influenced by Green's reference to the editors of *Soviet Ethnography* who found it possible to publish an article by Boris Porshnev (1969) on the problem of relict hominoids. As a Russian poet put it: "We aren't given to divine how our word will echo." The echo in this case turned out to be fine and still reverberating. In fact, it was the only echo of the article that I know of, since those whom Porshnev addressed here with his publications on the subject invariably greeted them with utter silence.

No matter, we have survived, along with the hominoids, and are gaining ground. In this connection, I would like to elaborate on or even correct one statement by Strassenburgh (1975:282), namely "...the surviving Hominoid Problem Seminar, composed of interested laymen who meet at the Darwin Museum in Moscow..." His saying that our seminar is composed of laymen implies contrasting it with a group of professionals. I wonder what professionals Strassenburgh has in mind in this case.

We have many members with higher education (average attendance is 25 people and we meet monthly, except summer vacation time), several are biologists, with zoologists among them. The late Pyotr Smolin (he died last September), the founder of the seminar, was one of the most versatile biologists and eminent zoologists of this country. It is true that physical anthropologists are conspicuous by their absence in our ranks, through no fault of ours. That is why we welcome so much and appreciate Krantz's work on the subject. But does it give ground to say that our seminar is composed of laymen? As Strassenburgh (1975:281) himself has aptly observed, "the majority of scientists who have been quoted in the media regarding the subject simply do not know what they are talking about." Since they do not, and we do, who are the laymen in the field then?