

NORTHWEST ANTHROPOLOGICAL CONFERENCE

Western Washington State College
 Bellingham, Washington

April 9-10, 1965

Friday, April 9

Registration: Haggard Hall, 215 8:00-9:00

Salutation: Herbert C. Taylor, Jr. 9:00
 Associate Dean, Research Lecture Hall 1

MORNING SESSIONS

Session I - Prehistory: Northwest Coast and Southern Alaska 9:00
 Chairman: Robert Greengo Lecture Hall 1

EXCAVATION OF A SITE ON THE PACIFIC COAST OF THE ALASKA PENINSULA, 1964
 Harvey Rice, University of Oregon

GENERAL CHRONOLOGY OF SITES ON THE PACIFIC COAST OF SOUTHWESTERN ALASKA
 Michael Nowak, University of Oregon

DESCRIPTION OF AN APPARENT BARRIER TO PREHISTORIC CULTURAL MOVEMENT ON
 THE ALASKA PENINSULA
 Don Dumond, University of Oregon

ARCHAEOLOGY OF GLACIER BAY
 Robert E. Ackerman, Washington State University

Session II - Physical Anthropology 9:00
 Chairman: Marshall Newman Lecture Hall 4

SOME HISTOLOGICAL ASPECTS OF THE THYROID GLAND OF THE RHESUS MACAQUE
 David McCoillum, University of Washington

A RE-EVALUATION OF THE TAXONOMY AND PHYLOGENY OF THE HOMINOIDEA,
 BASED UPON BIOCHEMICAL AND CYTOGENETIC EVIDENCE
 Michael H. Crawford, University of Washington

POPULATION DENSITY AND ENDOCRINE FUNCTION: SOME SPECULATION ON
 PRIMATE BEHAVIOR
 Robert S. Helgoe and Richard Araway, Western Washington State College

LUNCH 12:00-1:30

AFTERNOON SESSIONS

Session III - Prehistory: Northwest Coast and Southern Alaska (Cont'd) 1:30
Lecture Hall 1

AN ARCHAEOLOGICAL SITE ON VANCOUVER ISLAND
Donald N. Abbot, British Columbia Provincial Museum

GEOARCHAEOLOGICAL CHRONOLOGY OF THE LOWER FRASER CANYON
Charles E. Bordon, University of British Columbia

Session IV - QUANTITATIVE METHODS IN ARCHAEOLOGY: A DISCUSSION
OF THE PRESENT STATE OF AFFAIRS 2:30
Hu 110
Chairman: Albert Spalding
(Discussants invited.)

Session V - Physical Anthropology (Cont'd) 1:30
Haggard Hall 348

MATURATION, NUTRITION, AND SELECTION
Laura Newell, University of Washington

THEORETICAL ASSESSMENT OF HUMAN WORK LOAD CAPACITY
Shirley Keith, University of Washington

PRACTICAL ASSESSMENT OF HUMAN WORK LOAD CAPACITY IN THE FIELD
Eric Viel, Portland, Oregon

Reports from Participating Institutions 4:30-5:30
Hu 103

COCKTAILS in the Florentine Room, Bellingham Hotel 6:00-7:00
(Compliments of unidentified Bellingham gentry.)

BANQUET in the Florentine Room
Tickets must be purchased at time of registration for the Conference,
between 8:00-9:00, Haggard Hall 215.

Banquet Speaker: Dr. Frederick Thieme
Vice President, University of Washington

Note: Official duties may prevent Dr. Thieme's appearance.

Saturday, April 10

MORNING SESSIONS

Session VI - SYMPOSIUM ON HIGHLAND NEW GUINEA

8:30

Hu 103

Chairman: Kenneth E. Read

Opening remarks: James B. Watson, University of Washington

Participants:

Nancy Bowers, Washington State University

"Agricultural Practices and Successional Vegetation in the
Upper Kaugel Valley, Western Highlands"

Ernest Brandewie, University of Washington

On residential patterns among the Medlpa-speaking people of
the Western Highlands

Madeleine Leininger, University of Washington

"Ecological Behavior Variability: Cognitive Images and
Socio-Cultural Expressions in Two Gadsup Villages"

Robert A. Littlewood, Washington State University

"Isolate Patterns in the Eastern Highlands"

Kerry Pataki, University of Washington

On ecological zones in the Eastern Highlands

James B. Watson, University of Washington

(Title to be announced.)

Discussants:

Lew L. Langness, University of Washington

Bryan H. Farrell, University of Victoria

Session VII - Prehistory: Northwest Interior

8:30

Hu 109

Chairman: Carling Malouf

ETHNOHISTORY AND ARCHAEOLOGY IN WELL'S RESERVOIR

Garland F. Grabert, University of Washington

DISTRIBUTION OF THE CASCADE POINT IN OREGON RELATIVE TO CLIMATIC CONDITIONS

Thomas Newman, Portland State College

REPORT ON THE ARCHAEOLOGY OF WASHINGTON STATE HIGHWAYS

Robert Kidd, University of Washington

MORNING SESSIONS (Cont'd)

Session VIII - Social and Cultural Anthropology

8:30
Hu 104

Chairman: W. H. Dunning

THE PHONEMICS OF CUYONON: A VISAYAN DIALECT OF PALAWAN, PHILIPPINES
Colin Tweddell, Western Washington State College

CONCEPTUAL BASIS OF ESKIMO MASKS
Dorothy Jean Ray, Seattle

QUERIES ON THE DYNAMIC ASPECT OF ESKIMO KINSHIP SYSTEMS
David Stevenson, University of British Columbia

HALKOMELEM AND STRAITS — LINGUISTIC RELATIONS AND PREHISTORY
Wayne Suttles, University of Nevada

LUNCHEON in the South End of the Viking Commons 12:00-2:00

Luncheon Speaker: Allen H. Smith, Anthropology Section,
National Science Foundation, Washington, D.C.

AFTERNOON SESSIONS

Session IX - SYMPOSIUM ON HIGHLAND NEW GUINEA (Cont'd)

2:00
Hu 103

Session X - Prehistory: Northwest Interior (Cont'd)

2:00
Hu 109

THE LOCHNORE-NESIKEP CREEK LOCALITY SEQUENCE
David Sanger, University of Washington

AN ANALYSIS OF MICROBLADES AND MICROCORES FROM SOUTH-CENTRAL
BRITISH COLUMBIA
David Wyatt, University of Washington

PERISHABLE AND LITHIC MATERIALS FROM 45SN100, AN ARCHAEOLOGICAL
SITE ON THE SNOQUALMIE RIVER
David Rice, Washington Archaeological Society

Session XI - Social and Cultural Anthropology (Cont'd)

2:00
Hu 104

ACCULTURATION AND THE INCIDENCE OF BELIEF IN IMMANENT JUSTICE AND
ANIMISM AMONG CHILDREN ON THE FLATHEAD-SALISH RESERVATION,
WESTERN MONTANA
Samuel V. Lang, Jr., University of Montana

THOUGHTS ON THE NOOTKA CANOE
Wilson Duff, British Columbia Provincial Museum

WRITING AS A UNIFYING FACTOR IN CHINESE CULTURE
Donald Hueber, Gonzaga University

PROGRAM ADDENDUM

Session VII - Prehistory: Northwest Interior

- x CORRELATION OF GLACIER PEAK AND MOUNT MAZAMA VOLCANIC
EJECTA BY REFRACTIVE INDEX: A CRITICAL EVALUATION

Virginia Steen, Washington State University

Session XI - Social and Cultural Anthropology

SOME SOCIAL FUNCTIONS OF TORTURE

Harry L. Arthur, Western Washington State College

BM 321
15th

ABSTRACTS OF PAPER PRESENTED AT THE
EIGHTEENTH ANNUAL NORTHWEST ANTHROPOLOGICAL CONFERENCE,
9-10 APRIL 1965 -- WESTERN WASHINGTON STATE COLLEGE, BELLINGHAM

18th Annual Northwest
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[P. 13]

Application of Geochronological Research to Archaeological Problems:

CORRELATION OF GLACIER PEAK AND MOUNT MAZAMA VOLCANIC EJECTA

BY REFRACTIVE INDEX: A CRITICAL EVALUATION

(Abstract)

Growing scientific recognition and use of layers of volcanic ejecta in the Pacific Northwest has focused attention on stratigraphic marker horizons attributed to eruptions of Glacier Peak in the northern Cascade Range of Washington (ca. 12,000 years BP).^{*} Correlation of these ash layers (Powers and Wilcox, 1964; Fryxell, 1965 in Science) for either geological or archaeological purposes is based on characteristic stratigraphic and physiographic occurrences reflecting differences in their ages, and on the stability of characteristic ranges observed in index of refraction (n) of the volcanic glasses. Because these layers of ejecta are distributed over widely divergent geographic and climatic areas, continued use of optical properties for identification must depend on the stability of refractive index values under extremes of weathering environment. To assess the influence of divergent weathering environments on these volcanic glasses, more than 25,000 detailed (n) measurements have been made.

Samples of lump pumice from the main eruptions Glacier Peak and Mount Mazama were collected from various soil horizons in sites ranging from cool, wet alpine meadows to hot, dry desertic flats. No apparent correlation exists between refractive index (n) of pumice glass and type of weathering environment, although limited differences in modal n exist between samples collected from major soil horizons at the same sample site. Range of modal n of physically-cleaned samples collected from the B and C soil horizons is 1.501 (+)-1.504 for Glacier Peak glass and 1.510-1.512 for Mazama glass. Mazama pumice glass collected from the A2 soil horizon has a modal index of 1.506.

Thus it may be concluded that for purposes of correlation, ash samples should be collected from horizons other than the pedologic A₂. Because ash layers seldom occur in this position in association with archaeologically significant deposits, confidence in use of n values for identifying these marker horizons is greatly increased and the characteristic value ranges are essentially stable.

Virginia C. Steen
Laboratory of Anthropology
Washington State University
Pullman, Washington

* and of Mount Mazama at Crater Lake, Oregon
(ca 6,500 years B.P.)