

## **41. Subsistence Practices and the Ways of their Transmission to Future Generations.**

### **16210 - Hunting for subsistence? : Sihan's hunting practice between tradition and modern way of life**

Presentation type: Oral presentation

**Author(s):** *Kato, Yumi (Kyoto University, Kyoto, Japan)*

This research reports the change and continuity of hunting practice in modern way of life. Natural and social environment of hunter-gatherer communities change in these decades. In Malaysian Borneo, forest logging, and plantation development change natural environment. On the other hand, sedentarisation, and market economy affected hunter-gatherer's social environment. Main question of this paper is how people practice current hunting with the balance of traditions and modern way of life. Sihan hunters living in Malaysian Borneo is reported in this paper. Along with environmental changes Sihan shifted their living place from forest camp to settled village, town, and road side resettlement village. This research considers the consequences of current hunting practice in multiple places and in their modern way of life.

## **16170 - Learning subsistence skills among BaYaka children ¿ the examples of nut cracking and coco leaf slicing skills.**

Presentation type: Oral presentation

**Author(s):** *Bombjakova, Dasa (Anthropology, University College London, London, Un. Kingdom / Ver Königr.)*

This paper presents the occurrence of teaching of subsistence skills in one community of Mbendjele BaYaka Pygmies in the rainforest of the northern of Congo. In contrast to traditional questioning methods I conducted long-term focused observations of the interactions between 10 women and children of their community, as well as those among children, for a period of 18 months. My studies reveal that in addition to observational social learning, active teaching is present and most frequently takes the form of correction and demonstration. In addition, I found that teaching occurred through horizontal as well as vertical and oblique transmission. I illustrate these findings with examples of subsistence skills, such as nut cracking and coco leaf slicing. The results of my studies question the validity of questioning methods for enquiring about learning, and stress the need for more long-term observational studies on the interactions of hunter-gatherer children.

## **16143 - Stone, Shell, Scale: Heiltsuk Material Practices and the Making of Places and History on the Central Coast of British Columbia**

Presentation type: Oral presentation

**Author(s):** *Mathews, Darcy (University of Victoria, Brentwood Bay, Canada / Kanada)*

Archaeologists do not often think of complex hunter-gatherers as monumental workers of stone or radical modifiers of landscape, yet over 3000 years, the Heiltsuk peoples of the central coast of British Columbia reshaped the landscape with stone constructions to promote the growth, productivity, accessibility, and predictability of their most economically important intertidal resources. The Heiltsuk produced and maintained hundreds of stone intertidal fish traps throughout the mid to late Holocene in a variety of shapes, sizes, and contexts. Furthermore, they manufactured 'clam gardens'—low intertidal boulder terraces that promoted the growth and abundance of clams and other bivalves. This paper synthesizes existing archaeological and traditional knowledge about these monumental places, and offers new insights based a triangulation between ongoing archaeological fieldwork, community knowledge, and the spatial, temporal, and morphological analyses of these fish traps and clam gardens.

The Heiltsuk and other first peoples of the Northwest Coast were renowned workers of wood on a grand scale—producing longhouses, ocean-going canoes, and totem poles. In contrast to the perishability of their terrestrial wooden counterparts, the intertidal monumental stone constructions have a palimpsest quality that indelibly shaped the Heiltsuk coastlines. Transcending the lifetimes of their builders, these traps continue to temporarily catch fish twice a day in the absence of anyone there to spear them, and the clam gardens continue to serve as humanly created homes for communities of bivalves without anyone residing there to dig them.

While the Heiltsuk peoples became centralized by a colonial reserve system after European Contact, this community is again reengaging these ancestral places in light of present-day questions concerning food security, community identity, and territorial sovereignty. These are places that have never stopped working. These stone constructions are the intentional products of not only ecological management; they are enduring and visible constructions that speak to emergent and changing practices of ownership, tenure, and relationships of power over the past 3000 years. The materiality of Heiltsuk fish traps and clam gardens also makes these sites of resistance to colonialism—they are resilient places anchoring both traditional and novel ways for a community reengaging with the temporarily truncated making of histories and connections to places.

## **16092 - Environmental knowledge transmission among the Agta of San Mariano, the Philippines**

Presentation type: Oral presentation

**Author(s):** Hagen, Renee (Leiden University, Leiden, Netherlands / Niederlande)

Hunting and gathering societies depend on extensive knowledge of their natural environment for their survival. Yet, we know little about what specific knowledge is required by whom, and how such knowledge is transferred between individuals and generations. At the same time, the environmental and social changes that these societies currently experience may well affect both the type of knowledge that is valued for the present and future, as well as the learning systems themselves.

This paper examines valuation and transmission of environmental knowledge among the Agta of the Northern Sierra Madre, the Philippines. The Agta's total population is estimated at around 10,000 individuals, living in small, scattered settlements along the rivers and coasts of the Provinces of Cagayan, Isabela and Aurora. As a consequence of deforestation, immigration and agricultural expansion, over the past 100 years they have had to adjust their hunting and gathering mode of subsistence to a radically altered natural and social environment. Some Agta groups, notably in Aurora, are known to have resettled in road-based sedentary villages, working as tenants or mining company workers. Others have maintained a livelihood strategy consisting of a combination of swiddening and the exploitation of forest and marine products.

We focus our analysis on an Agta population living on the forest frontier in the municipality of San Mariano, Isabela Province. More specifically, we look at around sixty individuals of all ages from Kamasitan and Gab-gab, who make a living from hunting, fishing, subsistence as well as commercial gathering, swidden cultivation and various forms of paid labour. In addition to the conversion of forest in farm land and the rapid growth of the agricultural population in this area, another factor of change is the recent introduction of formal education. Over the past five years, the percentage of Agta children attending elementary school has increased from zero to an estimated 30%.

The study seeks to understand whether and how these changes affect 1) domains of knowledge that Agta parents, children and adolescents consider important, and 2) pathways of learning, that is: how and from whom Agta individuals learn. Data collection took place from January to April 2015, in the transition period from wet to dry season. Research methods include semi-structured and informal interviewing, systematic observation of learning processes, video registration and the collection of life-histories. The study is part of long-term ethnographic research on Agta resilience and vulnerability that has taken place since 2002 and which covers the entire Northern Sierra Madre.

## **16054 - The Influence of plant gathering and agricultural practices on the formation of local identities of Yezidi and Kurdish societies in Armenia**

Presentation type: Oral presentation

**Author(s):** *Melkumyan, Hamlet (Institute of Archaeology and Ethnography, Yerevan, Armenia / Armenien); Hovsepyan, Roman; Harutyunyan, Lili (Institute of Archaeology and Ethnography, Yerevan, Armenia / Armenien); Stepanyan-Gandilyan, Nina (Institute of Botany, Yerevan, Armenia / Armenien)*

This interdisciplinary research project, launched in 2013, focuses on the ethnobotanical practices of Armenian Yezidis and Kurds. The project makes possible the discussion and presentation of economic and cultural transformations in the late Soviet and post-Soviet periods. Earlier, Soviet period studies of Yezidis and Kurds were concerned mainly with the traditions of animal husbandry of these communities and only some of them touched on plant breeding activities in a partial way. The question of plant gathering culture as an aspect of economic activity was left in shadow. Investigations in various regions and communities of Armenia revealed that plant-gathering traditions should be emphasized as one of the important aspect of Yezidis' and Kurds' everyday life and culture. Analysis of the oral histories of elderly representatives of Yezidi and Kurdish communities shows that plant-gathering practices were common within these cultures before Sovietization and were continued during the Soviet era, despite official agricultural policies that discouraged gathering. We observed that plant-gathering skills are currently kept alive through everyday practices. These informal traditions are transferred from older generations to youth without special gender priorities, but mostly elderly women are mentioned as plant-gathering knowledge transmitters. The seasonal transhumant lifestyle, particularly long term stays in vegetation-rich mountains, greatly contributes to the survival and enrichment of gathering traditions. At the present time, plant-gathering traditions are so strong and so valued in Yezidi and Kurdish communities as to have become an element of their cultural identities. Moreover, the gathered plants tend to "migrate" to various countries of Europe and Russia where Yezidi and Kurdish migrants from Armenia themselves settle. Therefore the gathered plants, as well as the foods, condiments, teas, medicaments and other goods made from those plants, become part of the global identity of these cultural communities.

## 16020 - Revisiting "Circumpolar Bear Ceremonialism": Traditions, Transformations and Extinctions

Presentation type: Oral presentation

**Author(s):** *Wiget, Andrew (Visiting Professor, Moscow State University, Moscow, Austria / Österreich); BALALAEVA, Olga (Consultant, Duma Native Assembly, KMAO-Iugra, Moscow, Russian Fed. / Rus Föd.)*

Bear ceremonialism has been taken as a distinctive feature of northern hunter-gatherers since Hallowell's landmark 1926 article. Yet in the nearly ninety years since that article, it has been summarily taken for granted, although both the physical and sociocultural environments of the indigenous peoples whose bear ceremonies were the focus of Hallowell's inquiry have changed dramatically. The perpetuation of these traditions is threatened, including the most elaborate western Siberian form, the Bear Ceremony of the Ob'-Ugrian Khanty and Mansi peoples. The co-authors were engaged by the Native Assembly of the Duma of Khanty-Mansi Autonomous Okrug-Iugra to develop materials for a nomination of the Ob'-Ugrian Bear Ceremony to UNESCO's List of Intangible Cultural Properties Requiring Urgent Protection. As part of this work, and as a complement to their own Siberian field research on the topic, the authors thoroughly reviewed new sources of information, new lines of research and new forms of documentation from Eurasia and North America that have been developed in both English and Russian languages since Hallowell. The resulting analysis of bear ceremonialism, focusing on discrete acts, their organization into component rites, and the combination of these into complex ceremonial structures, is much more finely-grained than Hallowell's. Where possible the authors also directly contacted anthropologists working in Eurasia and North America to assess the viability of bear ceremonialism in the communities where they worked. The authors are also working to develop strategies to support the perpetuation of the tradition. Finally, we have reviewed the present state of archaeological knowledge about antecedents of bear ceremonialism.

This paper presents a number of conclusions from this first comprehensive review of bear ceremonialism since Hallowell supplemented by data from our own fieldwork in western Siberia. First, we demonstrate that the familiar understanding of bear ceremonialism as having two forms--a Pacific (Ainu) form and Siberian (and perhaps North American) form--does not adequately account for the meaningful regional variations to be found in the latter form. Second, a more careful analysis of ethnographic data on bear ceremonialism gathered in the twentieth century after Hallowell reveals that these previously overlooked regional and intraregional variations have significant implications for understanding not only the forms but the historical distribution of bear ceremonialism. Third, the illusion of the viability of bear ceremonialism created by the ethnographic literature is indeed illusory, especially if one distinguishes more complex, occasional bear ceremonials from practices widely associated with hunting in the circumpolar north, such as preserving skulls of harvested animals, and we identify a variety of causative factors for the failure of cultural reproduction.

## **15975 - Explaining livelihood strategies among contemporary Rungus farmers: a return to the household, time and money**

Presentation type: Oral presentation

**Author(s):** PORODONG, Paul (Universiti Malaysia Sabah, Kota Kinabalu, Malaysia)

Among swidden farmers, an ability to negotiate contemporary institutional, infrastructural and technological developments within the limitations imposed by their ecological context plays an important role in shaping their subsistence strategies. This negotiation becomes visible in the way they optimise their labour resources. In this process, demographic characteristics are also a critical consideration in determining the particulars of a household's subsistence strategy. The anthropological research reported here was undertaken to investigate the contemporary circumstances and motivations of Rungus households in Ontolob Village in Kota Marudu, Sabah, East Malaysia in organising and strategising their livelihood activities. A total of 38,304 hours of activities, or 10.4% of one-year, were monitored and recorded from 84 individuals in a time/labour allocation survey. Surveys were also conducted on household income and expenditure, household goods and swidden size and productivity. Despite sharing similar cultural backgrounds and livelihood activities, ethnographic accounts and empirical data show that the contemporary Rungus in Kota Marudu employed a diversity of subsistence strategies that can be loosely grouped under three categories: swiddening, wage labour and swiddening, and wage labour alone. An investigation of these strategies suggests that households are intensively pursuing all available subsistence opportunities, while creatively managing limitations imposed by the specific demographic characteristics of the household, such as sicknesses or absence of both adults and dependents. However, the challenges are far from over; increasing market influence, a greater emphasis on non-farming futures for children and a shortage of land are among the growing concerns that are affecting decisions about future livelihood strategies, decisions that different generations are facing in different ways. This study emphasizes that household strategies are an important aspect of comparative research among today's farming communities, which can explain new economic behaviour such as participation in oil palm plantations. Ultimately, this understanding can be utilized by the community itself in dealing with their future, especially with regard to their relations with wider issues and initiatives such as development and conservation.

## **15890 - A Reassessment of Ainu Subsistence Leading to Revitalization of the Ainu Culture in a "Symbolic Space for Ethnic Harmony"**

Presentation type: Oral presentation

**Author(s):** *Tezuka, Kaoru (Hokkai-Gakuen University, Sapporo, Japan)*

Situated on the boundary between the farming domain and the hunting-gathering domain, Hokkaido has seen the incessant coming and going of people, objects, and technology since ancient times. One well-known example of this is the migration of ancient farmers from northern Honshu to central Hokkaido, changing the way of life of local Epi-Jomon people from nomadic to farming in the latter half of the 8th century, even though this change didn't last long. In recent times, as more archaeological surveys are conducted throughout Hokkaido, more evidence of agricultural sites relevant to the Ainu cultural period has been found. This strongly contradicts the solid hunter-gatherer image of the Ainu constructed from modern ethnography. Both hypotheses remain controversial. Simplistic generalizations based on limited and unreliable evidence can lead us to an incorrect appraisal of the Ainu's subsistence, so a thorough reexamination of past studies is needed. An accurate understanding of Ainu subsistence will greatly contribute to the Ainu people gaining a deep understanding of their own culture in a zone which is to be developed around Lake Proto in Shiraoi, Hokkaido by 2020. In July 2012 the master plan for a "Symbolic Space for Ethnic Harmony" was set by the Japanese Government. The Symbolic Space will consist of two types of areas: the core area (with museums etc.) and related areas. The latter is expected to contain zones for the handing down of and hands-on experiences of Ainu traditions and culture, while regenerating natural resources including traditional agricultural plants. Ideal experiences in both areas will ultimately lead to the revitalization of the Ainu Culture today.

## **15832 - Selkup Folklore on Magic Hunt with Forest Spirits**

Presentation type: Oral presentation

**Author(s):** *Kim-Maloney, Alexandra (Tomsk State University, Tomsk, Russian Fed. / Rus Föd.)*

Hunting was the most important mode of subsistence among the Selkups in Western Siberia until recent time. Selkup stories romanced hunting activities by eliminating borders between sacred and profane. Forest male and female spirits acquired anthropomorphic features while serving as hunting and sexual partners to Selkup men and women who persuaded their hunting luck.