



Dental Anthropology Newsletter

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PRESIDENTIAL ADDRESS

What's In A Name

Once again, our representation at the annual meetings of the American Association of Physical Anthropologists, in San Diego this past April, was gratifying to behold. The two symposia sponsored by the DAA were well attended in spite of the fact that the first one ran head to head with one of the always-popular sessions on paleoanthropology. Hats off to Daris Swindler and Gloria y'Edynak for assembling such a solid roster of papers.

And like last year again, there were enough volunteered papers to fill a whole contributed session in Dental Anthropology. This also conflicted with a session of contributed papers in paleoanthropology and more than a few conference goers spent Friday afternoon shuttling back and forth between the two.

I remember thinking after the meetings a year ago that our young association might have gotten more recognition if we had been identified as sponsor of the other major symposium in dental anthropology, but our Secretary/Treasurer, Holly Smith, reminds me that the AAPA may have reached the point where the phenomenon of the sponsored symposium threatens to squeeze the volunteered paper entirely out of existence. It is a good point, and, much as we can take pride in the high profile of the DAA at the meetings these last two years, it is clear that there is no dearth of interest in dental anthropology whether we sponsor it or not. The individual, independent, volunteered presentation is an essential component of the scholarly enterprise. It would be a major loss if such were squeezed out of existence by the proliferation of officially sanctioned symposia.

Along with expressions of satisfaction in our continued good health as an association, the most signal accomplishment to emerge from our annual business meeting was the adoption of the recommendation by our New Zealand colleague, Dr. R. M. S. Taylor, that we modify the name of our association. In the discussion that preceded the vote, our founding president, Yasar Iscan, noted that the name, Dental Anthropological Association, was modeled on the senior anthropology aggregation in the U.S.A., namely the American Anthropological Association. It was duly noted that the latter could not be the American Anthropology Association because that would indicate that its members only were interested in (American) anthropology. By calling it the American Anthropological Association, this indicates that is an

association of Americans who study anthropology. As Dr. Taylor correctly observed in his note, Dental Anthropological Association suggests an association of dental practitioners who study anthropology.

The nuances of implication created by altering the sequences of adjectives and nouns is understood well enough by most of us, although we often find it less easy to explain. I can recall on my first visit to Asia wondering why I felt uncomfortable about the official title of one of the institutions I was visiting, the National Taiwan University. Eventually I realized that, to a native English speaker, this suggested a national university dedicated to the study of Taiwan. In Chinese, however, it is simply a string of nouns ordered by the magnitude of their scope with the most encompassing being the first in line.

There are no particles in Chinese so one cannot say, for example, the National University of Taiwan, or to use my own example, the University of Michigan. In Chinese, Michigan University is the only way it can be rendered since the state is obviously a more encompassing noun than a university. Confusion can be the consequence if these nuances are not translated well, and one of the results of such a slip-up some years ago occurred when President Gerald Ford, a graduate of the University of Michigan, first visited China. At the formal arrival ceremony, he was greeted by a band playing the Michigan State University fight song. The Chinese had completely missed the distinctions inherent in the adjective-noun ordering in English and, translating my school's name into the only possible Chinese rendition --Michigan University -- had gone and looked up the Michigan University school song and gotten the only possible representative which of course was the wrong one.

If Chinese were the language of communication for our group, we might wind up being called "Anthropology Tooth Association." However, since most of our membership is more comfortable in English, we have had to do our best to come up with a proper English language designation for ourselves. Although our discussion reflected a less than thorough formal grasp of the rules of English phrasing, I think our instincts were basically sound. The straw vote was unanimous, and we all left the meeting feeling comfortable that our designation is now properly the Dental Anthropology Association. Not a matter of momentous scholarly significance, perhaps, but it is nice to have the issue of our name settled so that now we can turn our attentions to the reasons that brought us together in the first place.

C. Loring Brace

A NOTE FROM THE EDITOR

As I suggested in the last issue of DAN and the DAA business meeting in April, I think that this Newsletter would be improved by the establishment an "Editorial Board" composed of dental anthropologists with a wide range of interests. This is being taken under consideration for next year and will require a "constitutional amendment" to become official. In this issue,

Alan Goodman has graciously provided two excellent examples of the type of contribution the editorial board members (and for that matter, ANY member) should make. I'd like to others take the initiative of submitting reports or research suggestions or anything else that would be of interest.

Please note that Secretary/Treasurer Holly Smith has designed a new membership/renewal form that I have included on the last page. She wanted to emphasize that dues be sent to her (not the Editor) and should be made out to the DAA.

Susan R. Loth

1990 AAPA AND DAA ANNUAL MEETING

By now, all AAPA members should have received their 1990 meeting packets. The next meeting of the AAPA and Dental Anthropological Association will take place April 4-7 at the Omni International Hotel in Miami, FL. For those of you who are interested, the Paleopathology Association (April 4-5) and the Human Biology Council (April 5) meet immediately prior to the start of the AAPA meeting. This year's DAA meeting facilitator, Marc Kelley, will be able to provide any information you might need.

If a non-AAPA or foreign member wishes to attend the Dental Anthropology meetings, contact the Local Arrangements Chair: Dr. M. Yasar Iscan, Dept. of Anthropology, Florida Atlantic University, Boca Raton, FL, tel. (407) 367-2257.

1989 DENTAL ANTHROPOLOGY SESSIONS AND SYMPOSIA

As usual, the DAA meeting and symposia will be held in conjunction with the American Association of Physical Anthropologists (AAPA) meeting on April 4-7, 1990. The 1989 sessions were extremely successful thanks in large part to the efforts of Program Chair Gloria y'Edynak.

This year's program chair is Mark Skinner. Please get in touch with him if you have any ideas for symposia or would like to give a paper in a DAA sponsored session. Symposium proposals must be received by AAPA Program Chair Dr. Michael Little postmarked by August 23, 1989. The completed package deadline is September 20th. Therefore, you must make arrangements with Mark well before these dates. Abstracts for contributed sessions are also due September 20th.

REVISION OF GENERAL GUIDELINES AT NIDR: THE LONG RANGE RESEARCH PLAN FOR THE NINETIES

The purpose of this brief note is to bring to general attention the up-coming publication of the National Institute of Dental Research's (NIDR) Long Range Plan for the Nineties. I was involved in drafting the nutrition section of this report. In the process of doing so, I have gained optimism about the possibility funding opportunities for anthropologists involved in dental research, and specifically in dental research areas

related to nutrition. The NIDR "guideline" is due to be published around the end of 1989. I strongly recommend getting a copy. It should be free or "close to free."

The Guideline is to be comparable in style to "Challenges for the Eighties," a very useful and popular monograph. The new book is to be divided into a number of research direction sections, including such areas as craniofacial malformations, dental caries, fluorides, nutrition, orofacial pain, oral health promotion, AIDS, and epidemiology. Some of these areas are focused on pathologies, others are method related, and still others focus on a particularly relevant causal agent.

Each section is to include, among other things, summaries of the most important advances in the past decade and the most important issues and problems to be studied in the next decade. This essentially sets the research agenda for the 1990s! In addition, a number of issues have been specifically recommended as important cross-cutting issues. Aging now seems to be in increased favor at NIDR, and, relevant to anthropological interests, there is an increased focus on international study and collaboration. The latter is particularly interesting as it had been previously thought (At least I had been told!) that it was extremely difficult to get NIH funding for international research.

The nutrition panel met in February, 1989 in Bethesda. The current state of nutrition funding at NIDR is low, less than 3% of the budget. I think I was invited to NIDR because I have a small grant from them for work in Mexico, one of only a few active nutrition-related projects funded at NIDR. Despite the paucity of existing funds, I was delighted with the commonalty in thought and commitment to giving nutrition a greater portion of NIDR funding. There is now substantial interest in nutrition and diet research at NIDR that extend beyond the fermentable carbohydrate-carries connection. This is most tangible in the study of bone loss, caries etiology, and the development and metabolism of oral tissues.

I cannot say how well this new report will address (and support) research into dental genetics, or other areas of importance to dental anthropologists. My only recommendation is to get the report and read it. I predict that many of us will be pleased by NIDR's increased focus in such topics as education, epidemiology, international collaboration and nutrition.

Alan Goodman, Hampshire College

A REPORT FROM THE NEW ZEALAND CONFERENCE ON
DENTAL DEVELOPMENTAL DEFECTS

by

Alan Goodman, Hampshire College

The purpose of this brief note is to report on an interesting conference on enamel developmental defects that took place last February in Rotorua, New Zealand. This meeting may have historic significance as it was reportedly the first conference to focus on enamel developmental defects. About 40

researchers attended, of which almost all were dentist or dental researchers specializing in enamel development and developmental defects. Papers ranged from epidemiology and clinical studies to reports based on nuclear microprobe analysis, x-ray micro-analysis, and crystallography. Three anthropologists attended: Pamela Bumsted, Mark Skinner, and myself. The proceedings of the conference, including many of the papers, are now in press as a issue of Advances in Dental Research. Publication is expected around the end of 1989.

The conference, splendidly organized by Terry Cutress and the Dental Research Unit of New Zealand, was held in honor of the retirement (and the seminal research) of Dr. Grace Suckling. Dr. Suckling has intensively studied the epidemiology of dental defects in humans, but her animal experimental work is probably most exemplary. Among many other things, she has found that the prevalence of enamel hypoplasias in sheep follows a rough dose-response relationship with parasite load (Arch oral Biol. 28: 393-9, 1983; 31:427-39, 1986). This is the type of research that is infrequently pursued but is critical to forming our paleopathological speculations on the cause and meaning of enamel defects. Unfortunately, Grace's project has stopped with her retirement. Would not this experimental work make a terrific dissertation?

It is difficult to summarize current thinking on normal enamel development and the etiology of developmental enamel defects. One point, however, now seems clear: the two stage model of enamel formation (matrix formation and calcification/maturation) is far too simplistic. Dr. Suga is suggesting at least three stages of calcification. Finally, Suckling finds that she can induce a hypocalcification during matrix formation. These studies call into question efforts at estimating an age at formation for a hypocalcification, as they suggest that hypocalcifications could form at anytime between matrix formation to late calcification.

The majority of papers and discussions at the meeting concerned the epidemiology of these defects in humans. What is clear is that there has been a recent upsurge in interest in these defects. As nearly as I can tell, this is due mainly to the international debate(s) over fluoridation. However, there is also clear evidence for an increased interest in the relationship between enamel defects and general life stresses.

A great deal of discussion centered on whether one could reliably identify fluoride induced defects (fluorosis) versus idiopathic opacities or dental mottling. Those who have conducted surveys of fluorosis naturally seem to think so, but many others are skeptical. I find defects similar to what they call fluorosis (mainly diffuse opacities) in my rural Mexican sample from a very low fluoride area where one should not find "fluorosis." No consensus was reached on the diagnosis of dental fluorosis. Because fluoride is so prevalent in the contemporary food chain, this debate might be best resolved by findings from prehistoric populations. Does anyone have nice examples of dental mottling from areas that are naturally low in fluoride?

There is a growing amount of interest in the study of enamel defects in prehistory and among contemporary anthropological populations. Mark Skinner presented his research on the relationship between trauma and hypoplastic pits on deciduous canines. I think there is a consensus that deciduous defects have been "under studied." I tried to summarize my work on enamel defects at Dickson Mounds. Many in the audience were surprised by the high prevalence of these defects in a prehistoric population.

A few research groups have begun to focus on the relationship between enamel defects and nutrition/health. For example, J. A. Hargreaves and co-workers have collected data from children of different ethnic background in South African. Not surprisingly, they find a high proportion of defects among urban "blacks" and "colored" children. These researchers are not clear about what aspect of the environment is the causative agent. All agree that more research is needed on the specific etiology of enamel defects. Nonetheless, these data are objective sources of information about the biological affects of apartheid.

In summary, it was a very exciting experience sharing work and ideas for a week with a group of researchers so intimately involved with the study of enamel developmental defects. This was one small way in which dental anthropology and oral biology might forge connections. As usual, more questions were raised than answered. But on the positive side, there is optimism about our ability to answer the most important questions. I predict an increasing upsurge of interest in enamel defects (and general issues of dental development). Dental anthropologists should have an important role in answering some of the many questions that have been raised and will arise in the future.

DAA BUSINESS

Our new Nominations and Election Committee Chairman is Chris Nichol. He would like to remind you that, at the 1990 DAA business meeting in Miami, we will be electing a new President, Secretary/Treasurer, member of the Executive Board and hopefully, appointing a Board of Editors. Please think about whom you might like to see in these positions and send your suggestions to Chris.

We encourage the membership to contribute not only to DAN, but also to contact the appropriate executive Board member with any suggestions or questions you might have. They can be reached as follows:

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1989 MEMBERSHIP DUES

The 1989 dues should be submitted now if you haven't already done so. Rates will remain at \$10.00 for regular members and \$5.00 for students. Also, we would like to continue our policy of sponsoring foreign members. Our Secretary/Treasurer, Holly Smith, suggests that even a partial contribution will be appreciated since even \$5 or \$10 is a great hardship in some parts of the world. We salute those of you have generously given financial support in the past and encourage every member who can to do so. There is a sponsorship section on the membership form on the next page, please fill it out and return it with your own dues. Finally, I'd like to remind you that checks should be made out to the DAA and be sent to Holly Smith at the address listed on the renewal form.