



## DENTAL ANTHROPOLOGY NEWSLETTER

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### PRESIDENTIAL ADDRESS

Thanks to the diligence of Susan R. Loth as interim editor, this issue of DAN has been produced in time to inform the membership about the DAA activities at the AAPA meeting this month. I am also pleased that the DAA is on the way to becoming a full fledged professional organization as we initially hoped. Already it has generated considerable international interest both within and beyond the fields of dental science and anthropology. This issue highlights the fact that dental anthropology is a very active discipline and constitutes an important part of the annual meeting of the American Association of Physical Anthropologists, soon to be held in Kansas City, MO.

With members from both anthropology and dentistry, there are a number of ideas that we should raise for the future. One of these is the possibility of holding scientific meetings outside of North America jointly with organizations like the European Anthropological Association or the European Paleopathology Association. Another thought is whether we can publish a Journal of Dental Anthropology initially with one or two issues a year. Also, now that we are firmly established we should be reaching out to other scientists interested in dental anthropology to share and consequently enlarge the scope of our activities and interaction.

As you know this is my last year as the president of this organization. I am very honored to be the first to be given this important duty. The upcoming change of leadership brings us to a crucial turning point and it is up to all of us to continue the successful evolution of this organization. I thank all of you, the general membership and especially the executive board for helping me turn my concept into a growing and thriving Dental Anthropological Association.

Mehmet Yaşar İşcan, Ph.D.

### A NOTE FROM THE EDITOR

The continuing rise of the DAA is very impressive. Therefore, it is now more important than ever that the DAN expand and grow to keep up with the organization it represents. Ideally, this publication can become an excellent means of disseminating information, but this will not be possible if we must rely primarily on the creative writing of the editor. The

DAA has great potential, but it can only be reached if the entire membership takes an active role in contributing to it. Until a new editor is appointed, you can continue to send me any pertinent news, information about scholarly activity, papers, reviews or anything else that would be of interest to your colleagues.

#### 1988 DAA ANNUAL MEETING

There is a very full schedule of DAA related activities planned for the 1988 AAPA meeting in Kansas City. First there will be a special symposium honoring the late Dr. Wilton M. Krogman organized by M. Yasar Iscan before the AAPA reception from 6:30-8:00 PM Wednesday, March 23. The DAA is scheduled to convene for a discussion and business meeting beginning at 5:15 pm on Friday, March 24.

As we announced in the last edition, there will be an impressive array of 3 symposia and 2 sessions dealing with dental anthropology at this meeting. Even more impressive is the fact that the symposia were organized by DAA members under the very able leadership of Program Chairman Marc Kelley. They are scheduled as follows:

#### 1988 DENTAL ANTHROPOLOGY SESSIONS AND SYMPOSIA

IN MEMORIAM: PERSONAL TRIBUTES TO DR. WILTON MARION KROGMAN  
(Wednesday, March 23, 6:30-8:00 pm)

Organizer and chair: M.Y. İŞCAN

F.E. JOHNSTON: Remembrances of a graduate student.  
R.M. MALINA: Growth of American Black and White children.  
J.A. GAVAN: Comparative post-natal growth in primates.  
S. KATZ: Maturation: Endocrinological perspectives.  
D.R. SWINDLER: Tooth formation in primates.  
M.Y. İŞCAN: The foundation of forensic anthropology.

DENTAL ENAMEL DEFECTS:  
NEW VISTAS IN METHOD, THEORY, AND APPLICATION  
(Friday, March 26, 8:30 am)

Organizers and chairs: A.H. GOODMAN and M.L. BLAKEY  
Discussant: J. ROSE

K. CONDON: Histological structure of enamel surface defects.  
K.P. JACOBI: Linear enamel hypoplasia classification by subsurface enamel structure: A within and between tooth study.  
M.K. MARKS: Enamel hypoplasia and hypocalcification: Correlation of defects identified by light and scanning electron microscopy.  
D.C. HODGES and R.G. WILKINSON: Determination of chronological distributions from enamel hypoplasias.  
V.J. VITZTHUM and R. WILKANDER: Incidence and correlates of enamel hypoplasia in non-human primates.  
R. STOREY: Prenatal enamel defects in Teotihuacan and Copan.

- M.K. SKINNER: Social and biological correlates of localized enamel hypoplasia of the human deciduous canine tooth.
- D. VAN GERVEN and R. BECK: Patterns of enamel hypoplasia in two Medieval populations from Nubia's Batn el Hajar.
- M.E. MACK, M.L. BLAKEY, and S. CARTER: The significance of dental defect width in relation to growth and developmental indicators in the skeleton.
- A.H. GOODMAN, G.H. PELTO, and L.H. ALLEN: Subeconomic and nutritional status correlates of enamel developmental defects in mild-to-moderately malnourished Mexican children.

TOOTH SIZE REDUCTION IN HOMO SAPIENS SAPIENS  
(Friday, March 26, 2:00 pm)

Organizer and chair: J.M. CALCAGNO

- J.M. CALCAGNO and K.R. GIBSON: Forty-thousand years of tooth size reduction: Evidence, mechanism and controversy.
- C. MEIKLEJOHN and C.T. SCHENTAG: Dental size in two Portuguese Mesolithic series and their implications.
- P. SMITH, J. SOFAR, and T. KAHANA: Changing rates of dental reduction in Homo Sapiens.
- J.R. LUKACS: Dental evolution in prehistoric Baluchistan.
- A. ALEXIS and P. SCIULLI: The absence of phenotypic selection on the incisors of a skeletal sample of hunter-gatherers.
- R. MACCHIARELLI and L. BONDIOLI: From "hunter-gatherers vs. agriculturalists" to "low density dispersed populations vs. higher density central-place systems": Dentition and accelerated structural reduction in anatomically modern humans.
- K.R. GIBSON and J.M. CALCAGNO: Teeth to last throughout the reproductive span: An evolutionary challenge.

HORIZONS OF DENTAL ANTHROPOLOGY  
(Saturday, March 26, 2:00 pm)

Organizer and chair: MARC A. KELLEY  
Discussant: M. YAŞAR İŞCAN

- D.W. OWSLEY: Dental anthropology as part of bioarchaeological research on skeletal collections with limited access.
- P.L. WALKER and G.L. DEAN: Dental dimensions as indices of wear rate and age at death.
- R.A. BENEFER, D.S. EDWARDS, and E.C. SCOTT: Comparisons of an age-independent measurement of dental attrition with other skeletal indicators of diet.
- A. WALKER and M.F. TEAFORD: Dental microwear: What it can tell us about diet and dental function?
- E.J. NEIBURGER: Enamel hypoplasia: A poor indicator of nutritional stress.
- C.S. LARSEN and R. SHAVIT: Dental evidence for change in lifeway quality: A case study from Spanish Florida.
- P. HARTNADY and J.C. ROSE: Rapid tooth loss among the prehistoric inhabitants of the Trans-Pecos region of west Texas.
- E.F. HARRIS and T.F. RATHBUN: Ethnic differences in the

- apportionment of tooth mass.  
 M.A. KELLEY and L.R. POLOUSKI: Contrasting patterns of dental health and attrition in 4 prehistoric Chilean samples.  
 M. FINNEGAN: Estimation of age based on dental histology.  
 C.R. NICHOL: Observational standards for morphological variants of the human dentition.  
 A. DAHLBERG: The intrinsic nature of dental traits.

THE FACE AND DENTITION OF AUSTRALASIAN POPULATIONS  
 (Saturday, March 26, 2:00 pm)

Organizers and chairs: T. BROWN and S. MOLNAR

- T. BROWN: Concepts of occlusion: The Australian evidence.  
 C.L. BRACE, M.L. BRACE, and K.D. HUNT: Australia in craniodental perspective.  
 G.C. TOWNSEND, H. YAMADA, and P. SMITH: Cusp 6 expression on mandibular molar teeth of Australian Aborigines.  
 M. PIETRUSEWSKY: Craniofacial variation in Australia, Melanesia, and the Pacific.  
 J.K. MCKEE: Australian Aborigine masticatory biomechanics: Implications for understanding fossils.  
 C.F. HILDEBOLT and M.W. VANNIER: Validation of measurements taken from skull CT scans and 3-D reconstructions.  
 R.S. CORRUCINI: Changes in arch shape and occlusion among settled Australian Aborigines.  
 N.G. CLARKE: Relationship between periodontal defects and dental pulp disease.  
 L.C. RICHARDS: Tooth wear and temporomandibular joint change.  
 S. MOLNAR and I.M. MOLNAR: Dental arch shape and tooth wear variability.

POSTER SESSION: STUDIES ON DENTITION  
 (Friday, March 26, 1:30 pm)

- S.M. BORGOGNINI TARLI, D. DELLA SANTINA, and E. REPETTO: Dental microwear in the Mesolithic remains from Grotto dell'Uzzo, Sicily.  
 J. BULLINGTON: Dental microwear in an archaeological sample of human juveniles.  
 D.K. CHARLES: Dental cementum layers: A life history of the individual.  
 A.G. COMUZZIE and D.G. STEELE: Maxillary lingual anterior tooth wear in prehistoric hunter-gatherers from the Texas coast.  
 D.A. COPE: Dental variation in three sympatric species of *Cercopithecus*.  
 M.E. DANFORTH: A comparison of health patterns in the Classic and Colonial Maya using microscopic dental indicators.  
 L.M. EMEL and D.R. SWINDLER: Underbite and facial dimensions in colobine monkeys.  
 A.M. HAEUSSLER, C.G. TURNER II, and J.D. IRISH: Concordance of American and Soviet methods in dental anthropology.  
 J.D. IRISH: Dental metric analysis of three skeletal Nubian populations from Semna South, Sudan.

R.T. KORITZER and L.E. ST. HOYME: Correlation between facial and incisor dimensions in gorilla and man.  
M.C. MAAS: The influence of enamel structure on primate dental microwear.  
A.L. PIERMARINI and R.B. ECKHARDT: Interproximal dental grooving in a very early high altitude Peruvian population.  
K.R. ROSENBERG, A. WASHBURN, and J.F. CUSTER: Dental health in a preagricultural Woodland population of Delaware.  
K.N. SCHNEIDER: Odontometric analysis of attrition at the Williams I site (34Lf-24) LeFlore County, Oklahoma.  
B.H. SMITH: New evidence on dental development in Pan troglodytes.  
M.F. TEAFORD and O.J. OYEN: In vivo and in vitro turnover in dental microwear.  
P.S. UNGAR: Early homonid incisor bevelling patterns.

I would again like to remind the membership that Tony Comuzzie, a graduate student at the University of Kansas, has graciously volunteered to serve as the local contact for the DAA at the AAPA meeting. If you need help or have any questions concerning the local aspects of the meetings, contact Tony at the Department of Anthropology, University of Kansas, Lawrence, KA 66045, tel. (916) 864-4172 or send a BITNET note to Dr. David Frayer at KUAAPA@UKANVAX.

#### COMMENTS AND CORRESPONDENCE

Dr. M. Yaşar İşcan has recently returned from the Middle East where he went through two grueling weeks of testimony as an expert witness in the trial of Ivan John Demjanjuk vs. the State of Israel. He was asked to determine if it was possible to make a positive identification by comparing photographs of taken many years apart.

A distinguished elder statesman of dental anthropology from New Zealand, Richard M.S. Taylor, BDS, DDS (NZ), DSc (Auckland), wrote to give us an update of some of his scientific activities. At the 1986 Annual Meeting of the Board of the New Zealand Dental Research Foundation, he delivered a paper emphasizing the importance of an interdisciplinary approach "combining cultural and physical anthropology with the biological background and clinical experience of dentistry" to the interpretation of biological material. He pointed out that it was just such an approach that led him to find conclusive evidence that Piltdown Man was a hoax. Dr. Taylor recounted his observations below:

"In Smith Woodward's restoration of the skull and dentition of Piltdown Man, the canine fragment is placed as a much worn lower tooth which overlaps a hypothetical upper of extraordinary form and wear. I showed that such wear could not have occurred, for the canines were placed end-to-end, a relationship that would have been traumatic and impossible. Moreover, I proved that, morphologically, the canine was an upper tooth and that its wear was incompatible with that of the molars in the mandibular fragment. Therefore, such a dentition

could not have existed. Seventeen years later, new sophisticated tests of bone confirmed the hoax ..."

Dr. Stanley Garn informs us that in 1987 he added 19 new publications to his already staggering record bringing his cumulative total to 777! Most of this work was in the area of growth, nutrition and obesity.

Dr. Ellis "Skip" Neiburger would like interested members to help put together a "Preservation Handbook" intended as a data source for opponents of the Indian reburial movement. He states that this project is "prompted by several requests from individuals ... for immediate help in dealing with on-going reburial actions in their communities." According to Dr. Neiburger, the "Handbook will be financed and published by the Ethnic Minority Council of America," and is planned for Spring, 1988. If you can help, write to E.J. Neiburger DDS, 1000 North Ave., Waukegan, IL 60085.

Skip has also asked us to publish the following announcement: The American Association of Forensic Dentists is an organization of dentists and related professionals interested in teeth, dentistry, forensics and dental anthropology. It has been publishing the Journal of the American Association of Forensic Dentists for the last 10 years. Membership is free to all who apply. To receive the quarterly journal, send 6 business sized, stamped (37 cents), self addressed envelopes to Neiburger at the address listed above.

In this computer age, there have been great advances in communication through electronic mail. Many of us already interact through various networks. At present, the DAA president, and DAN editor can be reached at BITNET nodes ISCANMY@SERVAX AND LOTHSR@SERVAX, respectively.

#### DAA BUSINESS

Elections are only a few weeks away and we would like your input on qualified candidates for the offices of President, secretary/treasurer, and executive board member. The executive board will also be appointing a new editor for DAN. If you are interested or know of someone who is, please submit your suggestions to Nominations and Elections Committee Chairman Dr. Richard Koritzer, 7367 Furnace Branch Rd., Glen Burnie, MD 21027, Tel. (301) 761-3119 or bring it up at the DAA business meeting.

#### 1988 MEMBERSHIP DUES

The 1988 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. We salute those of you have generously given financial support in the past and encourage every member who can to do so.