Tjeerd Pot

For many years, Tjeerd Pot worked in Utrecht on analysis and restoration of archaeological finds. His special expertise was in working with human skeletons, particularly the dentitions. He had been trained as a dentist and for 14 years he worked in his private clinical practice. Thereafter he occupied a research position for nearly ten years until ill-health forced his retirement. His subsequent dental anthropological research covered samples from a number of locations throughout Holland.

In the following pages Trinette Constandse-Westermann provides details on the life and work of Tjeerd Pot.



http://www.utrecht.nl/erfgoed/publicaties/boekpublicaties/boekpublicatie-verleden-medemens/ http://www.utrecht.nl/erfgoed/archeologie-en-bouwhistorie/

About Tjeerd Pot

By Trinette Constandse-Westermann

Tjeerd Pot was born in 1923 in the then Dutch colony "Nederlands Indië" (now Indonesia). He died in Utrecht, in 2006. During his lifetime he fulfilled many functions, some of which prepared him in the most excellent way to become a "paleo-odontologist", a qualification of his own invention, for the last ca 25 years of his life.

He received his primary and secondary school education in The Netherlands, whereto his family had moved. The final exam took place in 1942, in a hotel, as the school building had already been claimed by the German occupiers of The Netherlands. All universities had been closed by then, therefore he inscribed to a three-year course at the College for Colonial Agriculture (Middelbare Koloniale Landbouw School) a training for functions in the Dutch Colonies. He received his diploma just after the War, in December 1945, after a study period which was interrupted during several short and one long period (over a year), during which all male Dutchmen had to hide if they wanted to escape deportation to Germany for work in the war-industry.

After the Second World War the possibilities in the Dutch Colonies were virtually non-existent, and an education to become a dental technician was chosen (1946-48). During this period he worked mainly in the laboratory, but he also had his first experience with live human dentistry, working in the dental practice of his brother. A full dental education at Utrecht University followed (1948-56), including the biological basics, demanded from all students in the medical field, and an assistantship in the Clinic for Patho-Histology of the Oral Cavity.

From the beginning of his studies Tjeerd was fascinated by research, but during the years 1956-1970 the family income was based on his private dental practice. However, in the last month of 1969 a function became available in the Netherlands Organization for Applied Scientific Research (Nederlandse Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek TNO). In 1970 he could start as scientific officer, and after two years as head of the Cariës Research Unit (Werkgroep Tand- en Mondziekten) of that organization. He was involved in epidemiological research, mainly transversal and longitudinal surveys of the developing dentitions of 6 to 16 year-old schoolchildren and cariës prevention, the latter especially by fluoridation of the drinking-water.

Already during this period he was attracted by archeological research. He sometimes assisted in excavations and thereby he got more and more involved with the activities of the municipal archeological workers (Archeologisch en Bouwhistorisch Centrum Utrecht). As a matter of course his opinion was asked when human skeletal remains were excavated. In that same period (1975) he contacted the Institute of Human Biology (Instituut voor Antropobiologie) of the Utrecht University, where he became a very welcome guest. He started systematic research of its various collections and contributed to several publications.¹ In these years the basis was laid for his refinement of Brothwell's scheme for age determination (link) and for his dental registration form (link), which was much more detailed than the form which was used by regular dentists.² He did all this work in his free time, as he was fully employed by TNO.

Although limited to The Netherlands, the above made his role in the field of dental research of excavated human skeletal remains an important one. In fact, he was one of the very few investigators in the field who was actually educated to be a dentist. As to age estimation he used more detailed and better defined criteria than Brothwell and he included the attrition of the incisors, canines and premolars in his evaluation. As to registration, the form he created offered the possibility to register for each tooth the degree of attrition, the exact surface where cariës, if present, had originated, the condition of the roots and the alveoles, *ante mortem* tooth loss, and the possibility of including deciduous and/or exfoliating dentitions. It also provided sufficient space to register specific conditions, *e.g.* tartar formation, genetic disorders, hypoplasia, ilnesses influencing the dental development, abcesses, bone lesions, tumors, traumata, *etc.* One of the main advantages of the use of the form was that teeth with anomalous attrition (*e.g.* by a missing antagonist, pipe smoking, deviant

mastication patterns, *etc.*) could be immediately identified, so that these did not interfere with the age determinations. These innovations, combined with his great accuracy, make his observations extremely valuable. To Tjeerd, the dentition was a history book wherein one could read the "dental history", and to a smaller extent also the life history of its owner.

In 1979 his life changed drastically, for the worse as well as for the better. His health deteriorated in such a way that he was no longer fit to be employed in a regular job. However this allowed him, after several months of rehabilitation and convalescence, to dedicate all his time and energy to the activities he really loved: archeology and research. He became editor-in-chief of the journal of the Dutch Archeological Working Group (Archeologische Werkgemeenschap Nederland) and participated in excavations in Utrecht (where he lived) and Italy (Satricum, 1982-1984). Every work-day he could be found at his desk in the offices of the Municipal Archeological Service. His dental work extended itself to all human skeletal remains excavated in Utrecht and in Satricum and included many other Dutch skeletal populations (link).³ In addition he volunteered for all tasks for which the regular archeologists did not find sufficient time, be it typing documentation, cleaning potsherds or, especially, restoration. The latter he did with the same accuracy as he gave to his dental observations and with the technical skills he had learned during his dental education. Few details escaped his attention and the archeologists with whom he cooperated could profit. His activities led to a series of small booklets, describing the details of e.g. a well-succeeded restoration or a remarkable item within a specific find-category. As a researcher he was trying to obtain insight in the broader outline, specifically diachronic trends, as a human being he was always looking for the "petit histoire". Several times his attentiveness led to remarkable results, e.g. the discovery of errors in earlier interpretations of specific finds, or the revealing of so far unknown details of a specific production process. He even spotted a few instances where the original producer of an object had made small mistakes during the production process, for which he/she put in corrections in a later stage.

Needless to say that the Utrecht archeologists were very happy with his dedication to their work. For himself this was the happiest time of his life. He was a modest man, content with doing what he was good at, especially the dental research. To him, the excavated skeletons represented people who suffered from illnesses during childhood or adolescence and from tooth-aches and the corresponding infections in their later life, who were smoking their pipes or who had trouble chewing their food due to tartar formation or extreme pain. He always spoke about them with compassion. The recognition and appreciation of his colleagues for this attitude is clearly shown by the title of the publication, offered to him after 20 years of work for the Municipal Archeological Service:

"In Search of our Past Fellow-Men" (Op Zoek naar de Verleden Medemens).

¹ Due to the fact that I have known Tjeerd only during the last ca 30 years of his life, and due to his modesty about earlier accomplishments, it is not possible to provide a full bibliography . However, his most important dental works are all mentioned in the papers included in the underlying website.

² During the years of dental research, small refinements in the original scoring procedure were introduced by Pot himself as well as by W.H.M. Bouts and T.S. Constandse-Westermann.

³ In addition to the skeletal populations listed in the link, the following collections were examined by Pot: Cemetery Augustinian Nuns' Convent, Utrecht ($15^{th}-16^{th}$ century AD, n << 100); Graves of Frisian Terp Dwellers ($4^{th}-5^{th}$ century AD, n < 100); Graves of Plague Victims Zierikzee (16^{th} century AD??, n > 100); Cemetery Swifterbant (4220-4040 CalBC, n << 100) and from Mali (Africa) the dentitions of the Tellem population, living around the Bandiagara escarpment between ca the 11^{th} and the 16^{th} centuries AD. Most of these were present in the Institute for Human Biology at Utrecht. In Rome he studied the cemetery Campo Verde ($14^{th}-15^{th}$ century AD, n < 100) and the Necropole Volsci Satricum ($5^{th}-3^{rd}$ century BC, n << 100). Unfortunately, most of these data are not available any more.