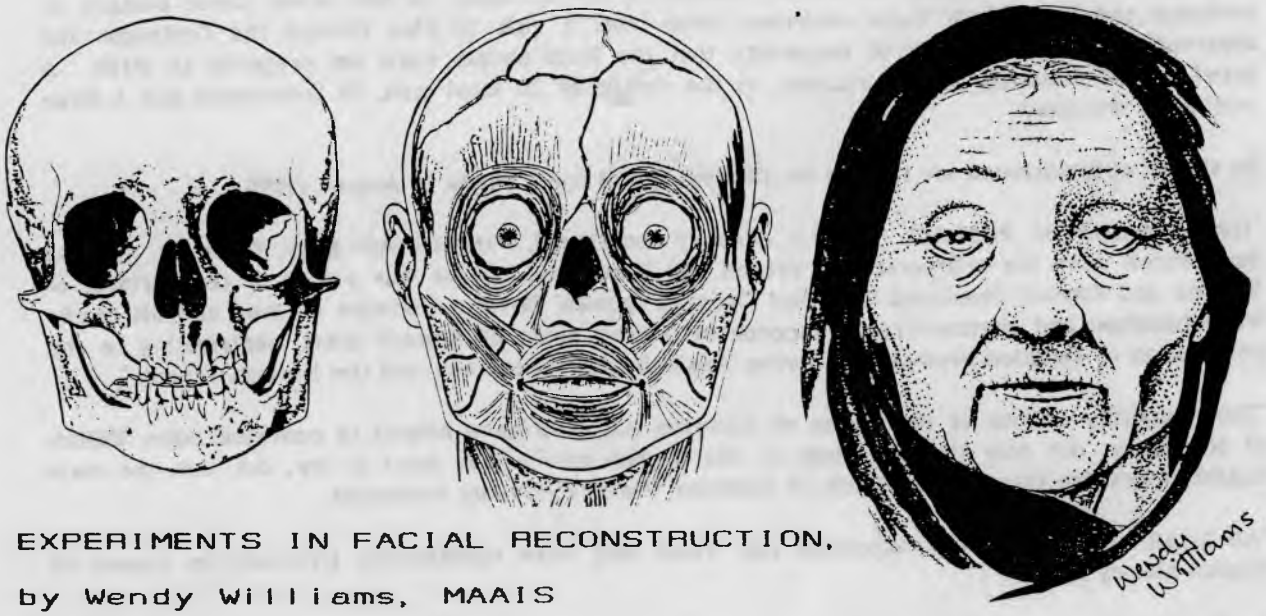
FINDING FACES

—A SPECIAL EXPERIMENT—



EXPERIMENTS IN FACIAL RECONSTRUCTION.

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This face was reconstructed from the skull of a 55-60 year old Anglo-Saxon lady found buried at Eastry in a 7th century AD cemetery during excavations by the Kent Archaeological Rescue Unit. Her skull is small and delicate with large eye sockets. She had suffered from dreadful tooth decay and periodontal disease most of her life, including several abcesses which had errupted through the alveolar bone. She had worn her upper incisors and canines down to the roots, and her gums had receded leaving the roots exposed. Curiously the lower teeth are not so worn, suggesting that the disproportionate wear on her upper teeth may have been caused by some occupational process involving only the upper set. The upper left 2nd incisor and canine are worn into a curious arch which is not seen in the lower teeth. This may have been the result of years of habitually finishing her sewing by snicking threads against these two teeth, so possibly she may have been a weaver or seamstress.

She has been given drooping eyelids because she must have been exhausted by the constant misery of toothache; sunken cheeks because her back teeth were missing and a small, almost Mongoloid nose suggested by the low angle of the nasal bone. As her top teeth were worn away, her upper lip would have been thin and compressed against a more full looking lower lip. She may well have suffered seasonal starvation in a rural Saxon community, and must certainly have had trouble eating due to severe dental caries and abscesses, so I have assumed her to be thin. Suggesting a cloak over her head solved the problem of hair style.

Many years ago I discovered a book by Mikhail Gerasimov called *The Face Finder.* This extraordinary archaeologist from eastern Siberia spent his life developing and perfecting the technique of facial reconstruction from skulls. Using a specific set of measurements for soft facial tissue, he tested his technique by reconstructing faces from the skulls of murder victims. Time after time the results were so accurate that relatives and friends of the deceased were able to recognise the reconstructed portraits instantly. Gerasimov also applied his technique to the skulls of primitive man, giving us life-like portraits of our earliest ancestors.

Ever since reading this book the idea of reconstructing faces has fascinated me. It was with great interest, therefore, that I pondered over and admired the work of Richard Neave - pioneer of the technique in this country. Manchester Mummy No. 1770 was brought to life in all her fragile adolescence, and then Lindow Man, resurrected from his squashed, leathery remains. In December, 1989 Mr. Neave reconstructed the head of a young girl whose remains had been found wrapped in an old carpet in Cardiff. Her portrait in clay appeared in the national newspapers, resulting in her recognition by two people who had known her. Once her dental records had been obtained, the identification was complete. The accuracy of the technique of reconstruction astounded sceptics.

Having once spent three years learning to produce portrait sculpture from clay, the task did not seem impossible, so last year I decided to 'have a go' myself. The first step was to digest books on osteopathology. Learning the hard way is often best, so the next step was to attempt the reconstruction of a crushed skull from a Prehistoric burial. It took many hours of pushing 30-odd bits of bone around with tweezers before the skull was satisfactorily reassembled and a basic understanding of the construction of the human skull achieved. Ageing and sexing also had to be mastered and although not ideal from the skull alone, by comparison it is possible to learn to interpret certain basic tell-tale features. The results are double-checked against the post-cranial bones.

Once the bone structure and facial muscle positions, functions and attachments were understood, it was time to attempt a face. First a technical drawing of the skull was produced from both front and side view (the angle at which the skull is drawn is very important as the facial area must be upright to prevent distortion of the features). Placing a piece of tracing paper over the completed drawing, the eyes were placed in the orbits, the masticatory muscles in their appropriate positions, the inter-pupillary line of the mouth, and the shape of the nose sketched in around the nasal opening. The drawing was then re-traced, this time 'fleshing out' the muscles using tables of average soft tissue depths. During that first attempt I have to admit that the result was quite unnerving as a face took shape and began to stare back at me from the page.

As it is impossible to determine such features as eye and hair colour, blemishes, scars and birthmarks, a reconstructed face probably borders on accuracy in the same way that a look-alike can bear a disturbing resemblance to a well-known personality.

The Roman Painted House Trust has kindly agreed to provide the space and facilities necessary to continue the experiments. Throughout the 1990 season visitors will be able to watch these portraits taking shape every Wednesday, Thursday and Friday morning. By the end of the summer it is hoped that a portrait head in wax, of the now famous medieval 'Crusader' (on permanent display at the Roman House) will have been produced. To my knowledge there are only two other artists who undertake such work in England, and certainly no-one in Kent! Do Come along and watch the work progress!

Operation TIDY 90

Dover Sea Cadets beat Air Cadets by a short (artificial) leg!

Orga nised by the Projects Committee of THE DOVER SOCIETY the litter-clearing project took place on Sunday 11 March in co-operation with Dover District Council and sponsored by McDonald's, Marks & Spencer and Dover Sports Centre.

The Dover cadets took off with great enthusiasm and in 70 minutes picked up over 70 bags of litter thereby actually doing something positive for the improvement of their