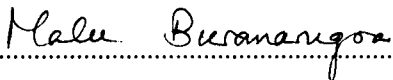
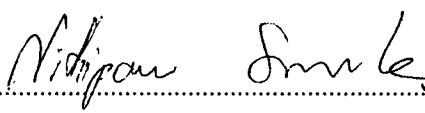


THESIS TITLE : THREE-DIMENSIONAL ANALYSIS OF THAI SKULLS COLLECTED
IN NORTHEAST THAILAND

AUTHOR : MR. ANUCHAR NINPRAPAN

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ABSTRACT

This thesis examines the three dimensional geometry of Thai skulls from Northeast Thailand.

Three dimensional coordinates were recorded for 95 anatomical landmarks on a sample of 32 male and 22 female Thai skulls. Each skull was clamped firmly in an arbitrary position above a sheet of graph paper previously marked with X and Y axes. Using a diagraph, X and Y coordinates of a landmark were obtained by placing the pointer on the landmark and pressing the diagraph pencil down onto the graph. The Z coordinates was obtained from the vertical scale on the diagraph.

The raw coordinates of each skull were mathematically rotated into those appropriate to a standard set of axes. These standard coordinates were then used to calculate inter-landmark distances and angles.

The results were compared with caliper measurements taken independently by another researcher. Excellent agreement was obtained.

In this way a large number of variables were derived for the series of skulls, many of which can not be obtained by normal methods of measurement.