



The Significance of Physical Size in Nike Air Force One Footwear Impression Comparisons

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with special thanks to Herb Hedges at Nike

Introduction

Footwear cases involving Nike Air Force One shoes are frequently submitted to the laboratory for footwear comparisons.

It is not uncommon to encounter footwear cases with partial footwear impressions and footwear impressions that are obscured or distorted. Often these cases have been documented at the scene with less than desirable photographic techniques: poor lighting, single photographs, or the scale is not properly placed in the frame.

When attempting to associate class characteristics this can be of particular interest in terms of the physical size of the impression.

The purpose of this research is to determine how physical size affects the level of association and final conclusion in footwear comparisons. Can more than one size shoe of the same tread design and shape, lacking wear, be associated with photographs of the unknown impressions?

Materials

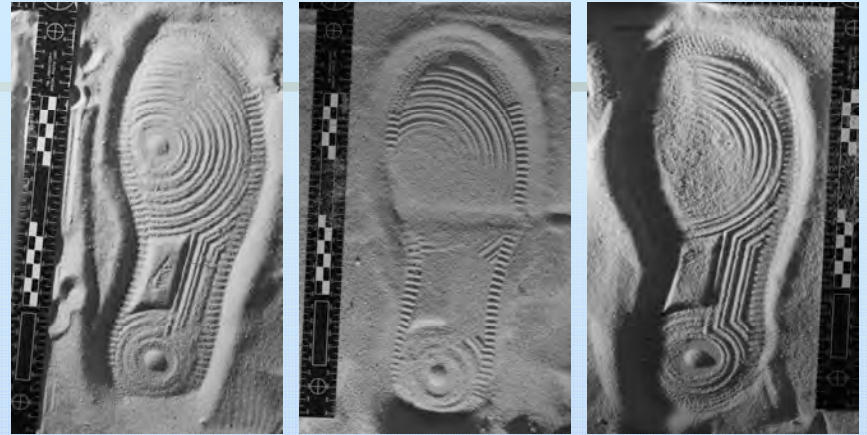
Seven different size Nike Air Force One outsoles: the range included size 8, 8.5, 9, 9.5, 10, 10.5 and 11 outsoles.

Sand box with sugar sand, white gel lifts, black gel lifts

Methods

Footwear impressions were left in sand. A measuring device was placed next to the footwear impressions at the lowest depth of the footwear impression. The footwear impressions were then photographed with a Nikon digital camera using a tripod and oblique lighting.

Footwear impressions were left on a counter top. Black and white gel lifts were used to record the footwear impressions. The gel lifts were photographed with a scale placed next to the footwear impressions present on the gel lifts.



Results

The preliminary results to this research indicate that there is potential to associate more than one Air Force One shoe as the source of a single footwear impression based on several factors:

- the impression is three dimensional and captured photographically only
- the impression is a partial or less than a heel to toe impression
- the impression is distorted

Continuing research is currently being conducted.

