

Photo-FIT—The Penry Facial Identification Technique

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A description of Photo-FIT if given and its value as a police aid discussed.

The human face is so highly individual and the human brain so developed, that faces may be remembered for years. Yet to convey recognizable descriptions without the direct aid of a camera is almost impossible.

In police investigations it has long been desirable to communicate accurate likenesses of wanted, suspect, or missing persons, or those required for the purposes of elimination from enquiries. In a good many of these cases photographs are, unfortunately, not available. The use of sectional photographs in an attempt to solve the problem was first proposed by Bertillon near the end of last century (Rhodes, 1956). His *portrait parlé* consisted of a collection of photographs of foreheads, noses, lips, mouths, ears and hairstyles mounted side by side for comparison. Numerous examples were given in full face and profile and careful study of these, it was claimed, allowed a sufficiently accurate description of a subject to be made for him to be recognized by those who had never seen him before.

For almost half a century Bertillon's work was not substantially developed, then, in post-war years, identification systems based upon superimposed line-drawings were introduced in France, the United States and the United Kingdom. These were of limited value, however, due to the fundamental difficulty of achieving a good likeness with a drawing, and in 1968 the Home Office commissioned an alternative approach which had been suggested 18 years earlier (Simpson, 1955).

Using police photographic records, Mr. Jacques Penry was asked to provide a collection of sectional photographs which could be assembled, jig-saw fashion, to produce a range of portraits. These were to be frontal and profile and the collection was to be sufficiently comprehensive to allow the representation of a good cross-section of the white male faces normally encountered in the United Kingdom (Penry, 1970).

The work culminated in Photo-FIT (available from John Waddington Ltd., see Fig. 1), which became available in 1970 and was immediately found to be more valuable than its predecessors. Presently available are photographs of 162 pairs of eyes, 151 noses, 159 mouths, 112 chin and cheek outlines and 261 foreheads, with variations of moustaches, beards, spectacles and headwear. The portraits are assembled in a frame (Fig. 2) and the number of faces which it is possible to construct by combination of the components is in excess of 12,000 million.

Each photograph is code numbered so that when either a frontal or profile portrait is obtained its counterpart may also be readily assembled (Fig. 3). For location of moles, warts or scars, a transparent grid is provided. The coding system also allows rapid communication of results between police forces, obviating the need for physical transmission of the portrait. Future development is expected to include the provision of facial sections of females, of other ethnic groups, and of such hairstyles as are necessary to accommodate the changing whims of fashion.

The success of any identification technique depends, apart from the quality and number of components of the system, upon the capability of witnesses to remember and describe the faces and the skill of the operator in manipulating

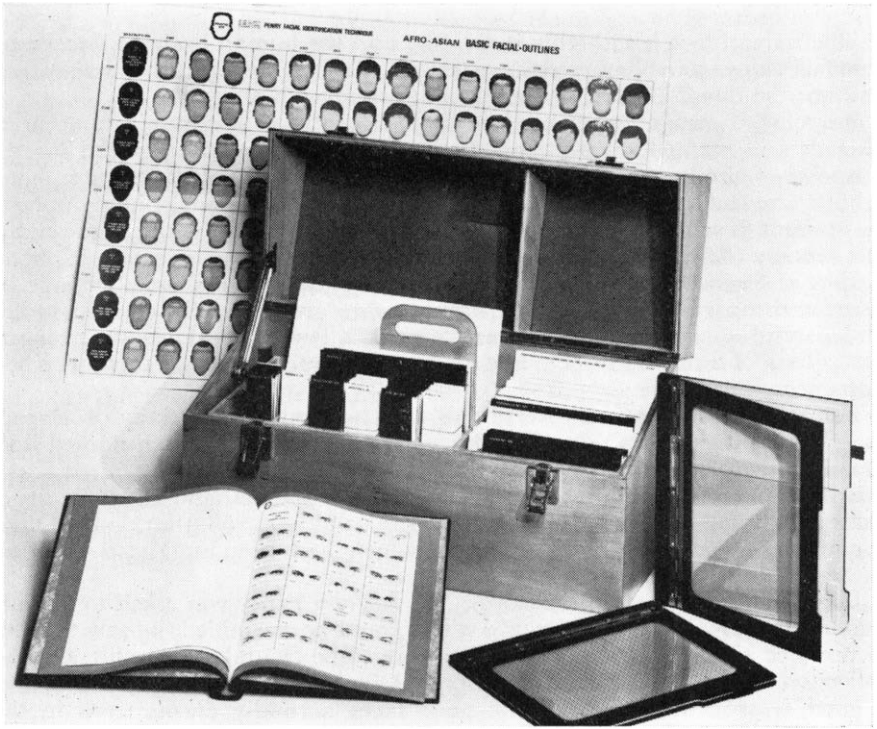
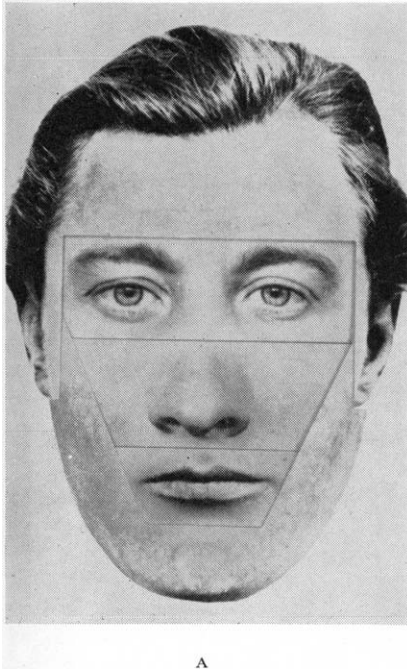


Fig. 1. Complete Photo-FIT kit incorporating Afro-Asian and Caucasian basic facial types.



Fig. 2. Stages of make up of Photo-FIT portrait.



A

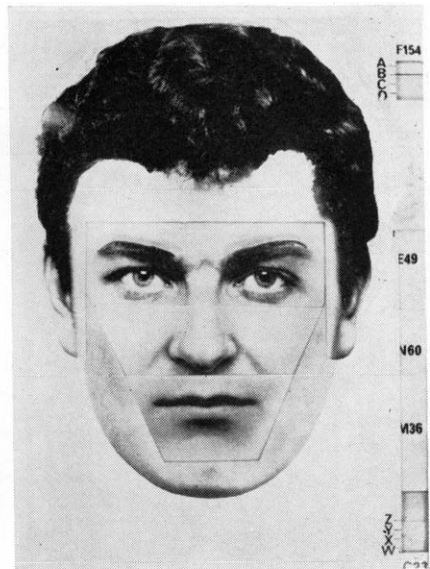


B

Fig. 3. Frontal Photo-FIT portrait (A) and its profile counterpart (B).



A



B

Fig. 4. Photo-FIT picture (B) made up from a photograph (A) of a subject.

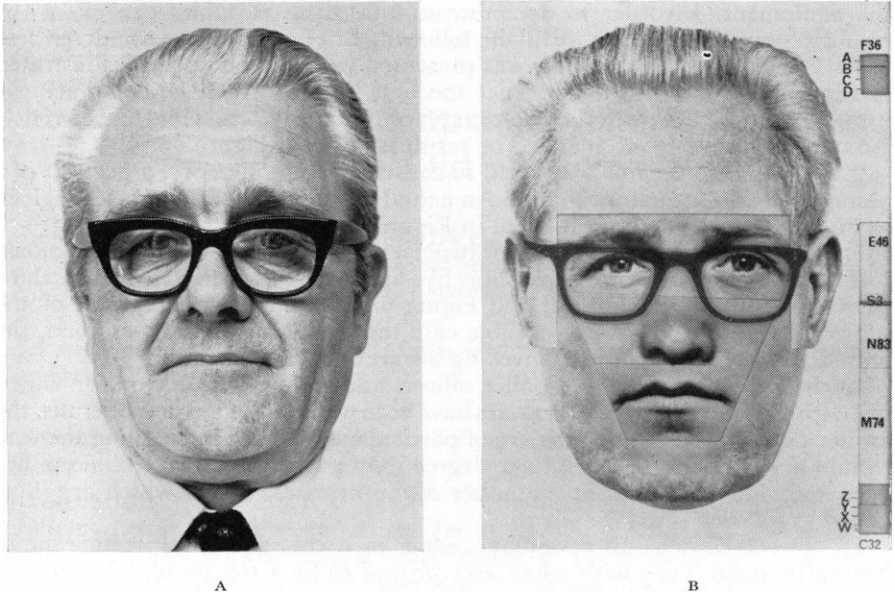


Fig. 5. Photo-FIT picture (B) made up by operator from memory of person known by him. Actual photograph of subject (A).

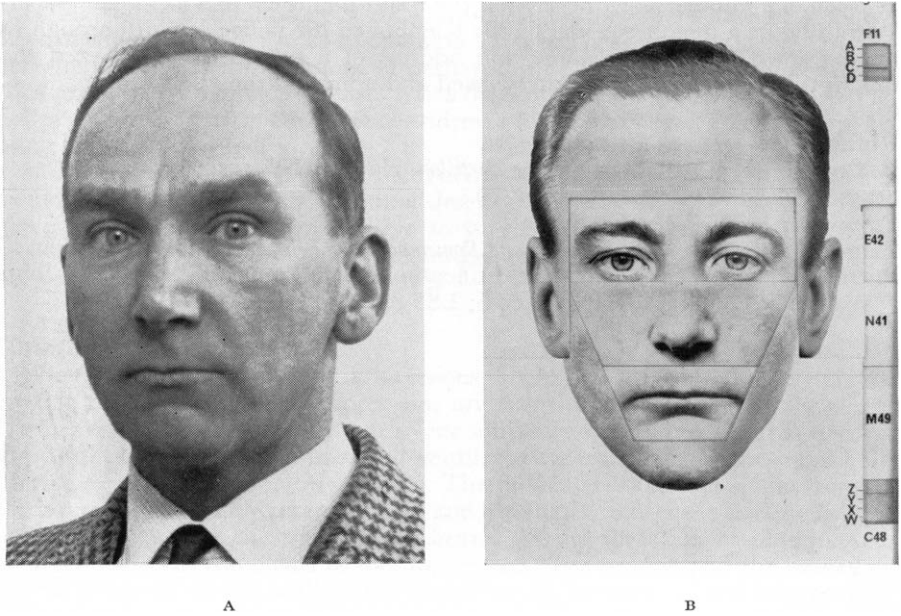


Fig. 6. Photo-FIT picture (B) of person not known by operator but described to him by a second person. Actual photograph of described person (A).

the equipment. In order to demonstrate how these variables can effect the results obtained with Photo-FIT the following brief experiments are described.

1. An experienced operator was presented with the photograph illustrated in Figure 4A and asked to construct the best likeness which he could achieve using Photo-FIT and with the photograph continuously beside him for reference. No other stipulation was made. The result is given in Figure 4B.

2. The same operator was asked to construct, from memory, a portrait of a named person, well known to him. An actual photograph of the subject is given in Figure 5A and the result is given in Figure 5B.

3. The operator was asked to construct a portrait of a subject quite unknown to him from a description given him by, and under the direction of, a third person. Figure 6B is the result and Figure 6A is an actual photograph of the subject. Even in this least favourable case the likeness achieved was good, the only difficulty being that of conveying an accurate age likeness.

In the author's experience, police officers and public who have been called upon to compile Photo-FIT likenesses have been well satisfied with the results, the former noting that the pictures are of particular assistance in enabling them to eliminate suspects to a much finer degree than previously. The technique has been successfully applied in a number of recent cases, two of which are illustrated as follows:

1. Two men held up a woman cashier in a counter-service restaurant in Newcastle upon Tyne with what later proved to be a toy pistol. The woman screamed, one of the men hit her, and then they both left. A Photo-FIT picture of the gunman was compiled with the help of the cashier, this being published in the local evening newspaper, and later the same evening a publican informed the police that he recognized the wanted person. On arrest the gunman said that he had seen the picture and thought that it was a good likeness.

2. A number of cases of obtaining property by deception had occurred in the Stokesely (Yorkshire) area. A Photo-FIT picture was compiled from the description of a number of witnesses and the result published in a local newspaper. Within hours a member of the public telephoned the police at Guisborough (a nearby town) giving the name and address of a person who answered the description. The person was interviewed and admitted the offence.

References

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PHOTO-FIT, The Penry Facial Identification Technique, available from John Waddington Ltd., Kirkstall, Leeds, LS5 3AJ.