

TRANSPORTATION NOISE AND ITS EFFECT ON BLIND AND VISUALLY-HANDICAPPED TRAVELLERS

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1. INTRODUCTION

Blind and visually-handicapped travellers rely heavily on their sense of hearing to find their way on the Underground. Noise can be both an aid and a disturbance to them. This paper discusses some of the issues and is accompanied by recordings to explain some of the points in more detail.

2. DISTURBANCE FROM MECHANICAL NOISE

Blind travellers rely on their sense of hearing to find their way and to tell what is happening around them. They must keep their ears finely attuned for audible cues which sighted people would ignore: indeed that sighted people may not even be aware of. This means that mechanically-generated noise can cause disturbance and even distress to blind travellers. A good example of this is the wheel-squeal at Bank Station, which seems to have been exacerbated following the introduction of new rolling-stock.

3. MAN-MADE DISTURBANCE

When negotiating the underground passages between platforms and escalators, it is necessary to listen for stairways, corners and junctions to locate the route. The guide dog can manage journeys that it knows, but it needs some prompting. Most importantly, the dog must not go on an escalator because of the risk of injury to its paws, so it is necessary to find the ordinary stairs.

It can therefore be very disorientating to have musicians playing in the Underground, especially as they tend to position themselves at busy places such as at passageway junctions and near to escalators. These are places where the traveller has to make a decision about the route to take, and therefore where aural cues are especially important. The authorities could do more to stop these musicians, or to ensure that they are not positioned at critical junctions or in other difficult areas. The musicians themselves could help by stopping when a blind person is coming past.

Proceedings of the Institute of Acoustics

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4. THE USE OF NOISES TO AID LOCATION

Noises outside the train help travellers to locate themselves, so that they can tell when they have arrived at their destination. The simplest method of location is by counting the stops, but of course trains stop in tunnels to allow other trains to cross their path, or because they are delayed by trains ahead of them. Therefore it is also necessary to be able to hear the change of acoustic when entering a station. Other important cues are the existence of rail junctions and points, changes of direction of the train, and even the time taken to travel between stations.

Some newer trains now have automatic voice announcements which are very helpful in finding the destination, but newer trains also have a disadvantage: the doors have to be opened by pressing a button. This is not so problematic when inside the train, as it is not too difficult to learn where the buttons are, but when outside the train, it is much more difficult. The guide dog can find the door, but it is still difficult to locate the button. One easy solution would be for a small bleeper to be fitted adjacent to the button.

5. STATION ANNOUNCEMENTS

Station announcements are often unclear. It is unhelpful to turn up the volume until clipping occurs, as this simply distorts the sound. The announcement may then be very loud, but still quite unintelligible.

Announcers often speak too quickly and without sufficient gaps between words. They need to speak more slowly and to keep the message short and succinct. This means that they should omit unnecessary information and superfluous words such as 'Please'. For example, *Mind the gap* is a clear message and does not need the word 'please'. Announcers with strong accents are much less clear. Greater use of good-quality recorded announcements would resolve many of these difficulties.