

Originally published in The Autocar 5 January 1951

THE AUTOCAR,

"The eyes must reach out": At 30 m.p.h. the focal point is about 50 yards ahead of the bonnet, at which point in this photograph the pedestrian is standing.

TWO JUMPS

GOOD DRIVING ALWAYS CALLS

THE farther I drive the more I am convinced that safe motoring depends on the ability of the driver to think ahead. In the simplest form this ability is evinced in the glance under the chassis of a stationary bus in order to see if intrusive feet betray a pedestrian who is about to step from behind the bus in front of you. You have thought far enough ahead to envisage the possibility of a thoughtless pedestrian. So far so good.

But that is by no means far enough for continuous and

But that is by no means far enough for continuous and complete safety, especially at high speed. In this sort of motoring you must be two jumps ahead at least, and the farther you can think ahead of actual events the better driver you will become (unless the terrifying aspect of the future so intimidates you that you refuse to exceed 20 m.p.h.).

In the first place the eyes must reach out. At 30 m.p.h. they are usually focused on a spot about fifty yards ahead of the car while still providing useful vision back to the bonnet and also over about twenty-five yards beyond the focal point. If something untoward happens beyond that distance (75 yards), there is an interval of time that is appreciable before anything drastic can happen to you—6.8 sec at 30 m.p.h., for instance, if the crisis occurs 100 yards away. Therefore one tends to drive at "limit" speeds scanning the field in the immediate vicinity of the car, as it were. The immediate vicinity is of little use, however, at say, 70 m.p.h. Fifty yards at this speed are covered in just over 1.4 sec, and in that time there is no period that can be reserved for decisions as to emergency action. In grimmer terms, if a dog runs out at fifty yards there is not much that you can safely do about it at 70 m.p.h.

m.p.h.

The eyes, therefore, focus farther ahead, probably at a point about one hundred yards beyond the bonnet. And where the distance up to that point was all-important before, it is only the farther section of it—from fifty to one hundreds yards, say—that registers consciously on your

retina now. Most of your attention is concentrated on the scene beyond the one hundred yards focal point, for you need to observe what is happening well ahead, your instinct telling you that at this speed it will take at least one hundred yards in which to stop (about 320 feet on an average surface and with good brakes).

The eyes having gone off on their own, as it were, the driver is quite happy on the road that can be seen to be empty over a long distance. While such conditions pertain, he should not be capable of "coming unstuck." But really open road conditions rarely persist for more than a few minutes in this country, so that no driver should rest content with eyes that have successfully coped with high speed. Imagination must help, and knowledge of human nature and vehicles, the whole adding up to intelligent anticipation.

Just One Lorry

Let us see how intelligent anticipation applies to typical hazards. Take a simple one. You are driving along a straight road at 70 m.p.h. In the distance a lorry is coming towards you. What are the possibilities?

The worst is that the lorry may not hold its course. An eight-wheeled leviathan, loaded to the skies, may safely be relied on to do so, because such vehicles cannot be thrown about like a dodge 'em car; moreover, they are driven by the best of drivers. Safe enough, therefore, unless the lorry's steering goes or the driver has heart failure. This is where nightmares start, and there is little need to go that far. Accordingly you meet it safely at 70 m.p.h. (combined speed probably 100 m.p.h.!) and that is that

But if the lorry is a ramshackle one, loaded with household effects and with three kiddies sitting on top of the chest of drawers, you might consider it wiser to slow down. Bill Smith, who is driving, may have borrowed it from the local greengrocer, and he and his wife may be in the driving

Over the brow: Single-stage anticipation will foresee the car that comes over the top, and the erring driver who is overtaking it at the same time. But what is to be done? Is the road wide enough for three abreast? Is the bank capable of providing an escape? Or would it be best to slow down, just in case? Second-stage anticipation must give the answer.



For speeds in the neighbourhood of 70 m.p.h. the focal point must be much farther ahead—at about 100 yards, the point at which the oncoming walker can be seen.

AHEAD

FOR INTELLIGENT ANTICIPATION

cab. Bill isn't used to the lorry, and his wife is "nattering" that the new cottage has no electric light, and Bill is getting angry. His attention wanders, and with it the lorry. Unlikely, but there you are. Better come down to

There need not be a lorry, or even any vehicle in sight. Away ahead you see a side road coming in at right-angles. Here is fun. What can happen?

You glance to the left, and across the hedges you see the reassuring outline of a Halt sign on the joining road. Going to risk it? I shouldn't. If you remember your local paper, you will call to mind the police court news, and a paragraph therein that usually reads: "The following were fined \$2 for failing to observe Halt signs. . . ." There might be that kind of motorist coming up the minor road, so let your imagination go on the possibilities.

The other car may stop, while its driver looks to the right and sees you coming. But you are a long way away, and he has not the faintest idea that you are doing 70 m.p.h. His car won't put in a single mile above 35 m.p.h. and his subconscious therefore says to him, "There's plenty of time; it would take me three minutes to cover that distance.

I'll easily do it.'

Whew! Boy, hand me the sweat rag.

The possibilities are infinitely variable. The driver of car B may be that dear little Mrs. So-and-so, only just taught by her husband, the vicar, to drive the 1935 Minor on parish visits. Timidly, Mrs. So-and-so has come up to the corner. Not being very good at this sort of thing, she has stopped short, and her vision is worth only 150 yards down your stretch of the road. "Ah," thinks Mrs. S., the road is clear, I'm sure. In any case, I just can't bear having to let in that nasty clutch twice in ten yards. I'll risk it.

She emerges—in fits and starts because beginners' clutches operate that way. Her eye catches sight of you coming up h. for I. on the right. Paralysis, and the 1935 Minor rolls to a



stop, fair and square across the road. This eventuality is not in the nightmare class, and the least you might do is to give a long blast on the horn, pull over to the centre of the road opposite the junction (provided that the main road is clear from the other direction) and thus give at least some room for manœuvre.

If you really want a nightmare to suit the situation, consider the timber bob pulled by two horses in tandem, the driver sitting on the shafts. He doesn't even see round the corner for the space of two horse-lengths, and then he finds that Dapple and Grey can't get round without a reverse. By this time your brake drums are red hot. All right, call it a nightmare and forget it.

Enter Tony

Let's have more frantic fun. The road bends ahead in a fast right-hand curve and you are approaching it. There has been quite a bit of traffic, but everyone is moving smartly and you are quite happy at high speed. appraise the line of the curve by the telegraph poles going round the corner. Yes, 65 m.p.h. will see you safely round. You brake slightly, the needle comes back to 60 m.p.h. and you accelerate hard into the corner. Best practice; full

Unfortunately you forgot to reckon on Tony Hotshot coming the other way in his Superdiehard. Tony also decided on 65 m.p.h., and he is on the inside of the bend. It is true that he noticed the shine on the road surface, and remembered that his back tyres were a bit smooth, but he cheerfully and nitwittedly decided that he had the rest of the road to skid in. You catch sight of him as his back end decides to part tracks with the front. Horrified, you throw out the anchors, and your back end does likewise It is a great pity that you did not foresee that 65 m.p.h. left you no margin for braking in the corner, because the centrifugal force at 65 m.p.h. was already taxing the tyre

"Everybody's doing It ": If a driver, at present invisible, decides to overtake the lorry, the oncoming driver must act quickly. The bank offers no escape, except into a deep ditch and through the railings. In any case, the kerb is a "tipper-over." Reduce speed so that instant braking can be applied (with results) the moment such an emergency threatens.





"The reassuring outline": But in spotting signs over the hedges it should be remembered that a triangle and circle do not always mean that the word "Halt" appears underneath. If it is only a "Slow" sign there is no obligation on the approaching driver to stop.

TWO JUMPS AHEAD

continued

adhesion to the utmost, and when the shoes took hold and wrapped themselves round the drum you lost that adhesion.

Again, not in the nightmare class; and also not in that class is the driver who decides to overtake a lorry on such a bend. (Did I hear someone whistling "Everybody's doing It?")

All this, as the man said as he folded up the morning paper, is pretty desperate stuff. But intelligent anticipation is useful in far less hectic circumstances. Here is an example. You have come up to a town cross-roads guarded by traffic lights. Stopped at the white line ahead of you is a bus, leaving just room for you to squeeze in between it and the centre island. Should you go up alongside and pull away abreast of the bus?

Appraisal

Have a look at the conditions. Also waiting at the lights, and coming in the opposite direction, is an Allard, its direction indicator showing that it is going to turn right across your path; indeed, the front wheels are already half locked over. The driver is giving the engine a rev up every few seconds, Grand Prix style—you can just hear the exhaust response.

Better not go up alongside the bus. But why not?

The Allard has terrific acceleration; the bus hasn't. The Allard driver is, therefore, probably calculating that he can make his turn and get across ahead of the bus, thus neatly clearing everyone's path. But the bus driver will be getting away from standstill at that moment, and the sight of the Allard crossing ahead of him will almost certainly make him haul over instinctively to the right a little in order to skirt the Allard's tail as it disappears. The bus driver may remember you, but he may not, and as a result you may

get badly squeezed. The possibility does not arise if you rest content with the position behind the bus.

Now the foregoing examples might be described as singlestage anticipation. You have envisaged possibilities that may happen any day on the road. Now you must proceed to two-stage anticipation, where the eventuality is accepted and you proceed to work out your own course of action.

Take Tony Hotshot coming round that fast bend. Tony skidded, having cluelessly decided that, as he was on the inside of the bend, he had the rest of the road to play in. He forgot that you or someone else might, not unreasonably, require that side of the road. Your single-stage anticipation has seen Tony coming round the bend in a steady slide and drifting over to your side of the road, and your two-stage anticipation must work out your avoidance.

Take a look at the outside bank; is there any way out there? In view of the substantial telegraph poles you decide not, although the kerb is not high. You are left with two main alternatives. If Tony appears you may be able to accelerate hard enough to clear him by going round his nose, although fairly certainly you will go into a skid yourself as a result. But getting out of a skid on your own is nicer to contemplate than involvement with the Superdiehard. All set, then, for "steering out of trouble."

Cutting-in

The second alternative can also be foreseen. Tony will be drifting across the road to the outside of the bend, and if he corrects his slide he must go over towards the outside even more quickly. That means that the space between the Superdiehard and the inside bank will be increasing all the time, and if you do not go into the corner too fast you will be able to haul round on a sharper line and cut between Tony and the inside bank, swerving to the outside immediately afterwards, in case anyone is following Tony into the bend. This is the worst danger in this course of avoidance but you note that the curve is a gentle one, enabling you to see some distance round it, and you also decide that anyone behind Tony, seeing his gyrations, will brake in order to avoid becoming involved with insurance companies.

So you take the bend ready for anything, and neither Tony Hotshot, nor Bill Smith and the lorry, nor the vicar's wife, appear. Dash it, you could have got round at 70 after all.

I have treated this subject lightly, because the self-confessed know-all (a cruel definition of a journalist) can speedily become tedious. Likewise I have taken fairly extreme examples. But the idea is, I hope, clear enough. We must think ahead all the time, and the faster we are travelling, the farther ahead we must think. Doing so is quite absorbing, and periodically, as the eventualities which you foresee really do happen, with yourself primed to deal with them, you feel a great satisfaction at your contribution to road safety. I would go so far as to say that such intelligent anticipation is the duty of every driver who decides to go fast, because the hard truth is that his vehicle is the potentially lethal one. The jay-walking pedestrian may cause accidents, but the fast-moving vehicles involved are the ones most likely to inflict injury on limb. M. B.

Signals at green: But would you take this country cross-roads at speed? The author would not, the reasons being that the crossing road is blind, the area is not notable for police supervision, and countryfolk are not too meticulous about obeying such city-fangled devices. He remembers only too well, also, that his foresight at this particular junction once resulted in a youthful cyclist being spared to err again.

