Twenty Years Back

by Brinsley Le Poer Trench

IT is now twenty years since Kenneth Arnold's famous sighting on June 24, 1947, of nine gleaming discs near Mt. Rainier, State of Washington. His subsequent description to reporters of the motion of these objects as " being like saucers skimming over water " caused the press to headline them as " flying saucers " and the name has stuck, for better or worse, ever since.

Most people take the Arnold sighting as the starting point for modern UFO activity. This is not an accurate assessment. The *intensive* observation of our planet by the visitors (whoever they may be) began after the end of World War II and after the atom bomb had gone off in 1945. To set the record straight it really started in 1946.

It is interesting to note that though the concentration of activity was over Denmark and Sweden, there was sporadic activity over Belgium, France, Ireland, Switzerland and the United States.

This, of course, is a familiar pattern that was to be followed in subsequent years. For example, in the latter part of 1954 there was a wave of activity over France and Italy, but at the same period saucers were observed in other parts of the world.

Reports appeared in the press during July, 1946, that the populace of Sweden had been disturbed chiefly at night by bright " meteors " travelling at tremendous speeds across the skies. It was soon to be realised that what the good people of Sweden were seeing could not be classed as meteors. Witnesses described them as products of technology and the objects, according to *L'Aurore* of July 27, indicated that they were guided by remote control.

By August every one in Sweden was talking about the " luminous bombs " flying at low altitudes over the country. No fragments of any bombs or rockets were found and no one was hurt. Jacques Vallée, who has done such splendid research on this opening modern phase of the saucer saga wrote :

" Their range is fantastic, compared with the technological state of development of the time. Still the idea of war is so present and so strong (1946—B. Le P.T.) that all descriptions are made in terms of destructive technology : bombs, shells, rockets. The terminology, however, will slowly change. "

At about this time the phenomenon was spreading to other countries in Scandinavia. The Danish press reported a " rocket " seen by numerous witnesses over Copenhagen and a " rocket-projectile " exploded over the island of Malmoe. Another object, this time a " flying bomb ", exploded over Tammersfors in Western Finland. Yet another " rocket " was seen over Helsinki.

Jaques Vallée commented on the interesting fact that the objects had been reported to land, and quoted from *Epoque,* August 28, as follows :

" Some of the objects are said to change their direction of flight after landing, when they go back towards their place of origin, according to the results of an investigation made by the correspondent of the *Daily Telegraph* in Stockholm." Mark you, I would dearly love to ask that correspondent how he knew they were going back to their place of origin and in what direction it lay.

It is from about August onwards that the UFOs began to appear over countries outside Scandinavia. Vallée quoted *Epoque,* August 29 :

" Other objects have been reported from Switzerland and, a few days ago, from Waterford, Ireland. The objects seen in Sweden left a trail of fire similar to the trail of a comet. Others, on the contrary, have a light in front. The American General James Doolittle has just arrived in Stockholm, officially on a business trip for the Shell Company. In reality he is to conduct an investigation along with the Swedish authorities."

Soon afterwards, the phenomena began to be seen over Belgium and France, as well as over Scandinavia. It was stated by *Le Figaro* that over 2,000 ghost rockets had been seen over Sweden in the previous few months. The newspaper added that the Danish and Swedish military authorities were taking the whole matter very seriously.

All the Scandinavian ghost rockets were reported to be cigar-shaped, so this sighting in early August over the United States is of particular interest . . .

At about 6 p.m. on August 1, Captain Jack E. Puckett was flying a C-47 plane from Langley Field, Virginia, to MacDill Field, Florida.

The aircraft was at 4,000 feet and about 30 miles north-east of Tampa when Captain Puckett and his crew were startled to see a cigar-shaped object hurtling towards them in horizontal flight at the same altitude.

When the cigar was about 1,000 yards distant it swerved to avoid them and as the UFO passed

them the crew could see that the object was twice the size of a B-29 bomber and had luminous portholes.

In addition to Captain Puckett, both his co-pilot Lt. Henry and his engineer witnessed the object. When they landed a full report was given to the Base Operations Section of MacDill Field. A signed report from Captain Puckett's remarkable sighting is on file at NICAP headquarters.

As you can see the flying saucer era had well and truly begun before Arnold's sighting the following year.

SOURCES

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VISUAL PERCEPTION OF UFOs... Part I

by Anthony Durham and Keith Watkins

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THE major part of the evidence so far gathered about UFOs came originally through the human eye. Therefore, as UFO research grows in stature as a serious and systematic scientific study, the process of human visual perception will require close attention. The authors do not pretend to be experts on the subject; rather, we hope to illustrate its vital importance to UFO investigation and to stimulate investigators to go away and read up about it. A cheap and simple book is M. D. Vernon: *The Psychology of Perception* (Penguin, 5/-). More authoritative is R. H. Forgus: *Perception* (McGraw-Hill). Best of all is R. L. Gregory : *Eye and Brain* (World University Library, 14/-)—almost a must for the serious investigator. At the last BUFORA Congress we were very pleased to hear briefly from Dr. Gregory himself on the subject, and for many of the succeeding ideas we are indebted to him. The whole study of perception is rapidly developing and a lot of what is written here has only been learnt recently. Possibly some of it may have been even more recently contradicted. We should be very willing to supply more detailed references to anyone who wishes to pursue the subject further. Many of the effects described are easily verifiable by experiment, without any specialised apparatus.

The human eye may be crudely approximated by a sphere, with a lens near the front and a light-sensitive surface called the Retina, spread out like a photographic plate over the back. The action of the curved front surface of the eye produces an inverted image on the retina, just like a camera, and the lens " accommodates " to keep the image in focus, according as the object is close or far away. From now on the analogy with a camera ceases. Photons with wave-lengths between 4000 and 8000 Angstrom Units falling on specialised receptor cells in the retina, called Rods and Cones, stimulate them to produce nerve impulses, which pass through a series of interconnections and then down nerve fibres to the visual centres of the brain. The important point to be reiterated again and again is that the action of the eye is quite inseparable from that of the brain : in fact, the cells of the retina have grown up in evolution as an outgrowth of the brain. The human brain is really only a particularly special computer, and it is helpful to think of the processing of visual information in the same way as for example the production of a salary cheque by computer. Both systems take in information, which is converted to a string of electrical pulses travelling along nerves or wires, and then process it according to a certain pre-arranged logic. In the case of the computer, this logic is the " software " written in by the designer and in the case of our brains it is the result of our total experience to date. We have to enquire into the workings of our brains when they describe something as a " Flying Saucer " in rather the same way that a cost accountant might start probing if his firm's computer produced unusually large salary cheques.

Interpreting the picture

Given that the picture our eyes receive can only travel to the brain as a limited number of pulses along nerves—how does the brain interpret the picture ? Evolution has had to solve essentially the same problem as the computer designer : how to make the most economical use of all the components and connections available. The compromise adopted by the human brain may be explained as follows. The actual light receptors in the eye are specialised into two main classes. The rods are fairly evenly distributed over the whole retina and are very sensitive to low light intensities after a period of adaption to the dark ; they can receive a broad band of colours, but cannot perceive colour differences ; they have

low powers of discrimination between shapes, but are very sensitive to movement. The cones, in contrast are connected into a central spot, called the Fovea (amongst other names), and can discriminate colours and shapes, but are less sensitive to light. Therefore the cones provide mainly our normal, acute daytime vision, whereas the rods provide our peripheral vision, sensitive to movement (and hence danger), and our vision on a dark night. In fact, this shape and motion discrimination is a product of the interconnections between cells rather than their basic structure, and recent work has emphasised the amount of "data processing" that goes on in cells actually in the retina. For example there are specialised systems that recognise corners, straight lines at various orientations, etc. The predigested information goes down a strictly limited number of nerves to the brain. There it is interpreted in the light of previous experience, preconceived notions and particular physiological factors inherent in the system. The work of the great Russian scientist, Pavlov, emphasised how strangely dogs, and by analogy humans, can behave under stress, and a fine subject for another whole article would be the physiological influences at work on an excited person seeing a UFO. More important here is the way the brain receives only a very little new information about an object and supplies a lot more from past experience. The precise figure for the information-carrying capacity of the sensory pathways into the brain, as so many bits per second, varies according to the situation, but it is remarkably small. Therefore, the amount of detail about an object that is taken in newly is quite small compared with the amount supplied by the brain drawing on its store of previous experience. To illustrate this, consider the fact that a blind man has actually to learn to see things that are ridiculously obvious to other men, if he regains his sight; or the way in which one reads a book, recognising the meaning of sentences without examining all the individual words in detail. All this was applied to everyday happenings, but its relevance to UFO research is obvious. A witness cannot be expected to see a lot of detail in a short time and he may utterly unconsciously interpret it in terms of objects familiar to him, and may quite literally and honestly see things that are not there.

The same may be true of a prolonged sighting too—first impressions are very tenacious. The same sort of process of filling in unperceived details occurs in time as well as space; the brain integrates the information it receives over a period of time to build up a picture of what is going on. It has to do this anyway because the eyes are in continuous motion, never still for more than a few tenths of a second. How many people realise that they have a blind spot, not far off the centre of the field they are looking at? It is effectively filled in by the brain, as a result of the continual motion of the eyes. What sometimes passes for a sixth sense, for example the uncanny way a well-drilled orchestra understand their conductor's every intention, is merely this capacity to integrate the meaning of all his gestures over a period of time, and predict his intentions for the future.

Perception of Colour

The eye perceives colour by having three different kinds of cones, with sensitivities stretching over broad bands of colour centred on red, green and blue respectively. Overall sensitivity is highest for orange. Night vision using rods, however, cannot distinguish colours but is most sensitive in the green colour region of the spectrum. Colour perception may not be accurate under the conditions of many of the less interesting UFO sightings, with dull lights in the sky, when cone vision is only just beginning to operate. Probably red is the first actual colour perceptible as a colour in a very dim light. Colour, like shape, is interpreted in the light of experience. For example a monochrome picture of a landscape, that might be expected to show a range of colours naturally, does indeed appear to have some of them. Certain colours, such as brown, grey, silver or gold, cannot be made up from a simple mixture of the colours of the spectrum, but are a product also of the apparent texture of the object. Furthermore, colours can only be judged relatively, by comparison with some other colour. For example, an ordinary old light-bulb gives a perfectly adequate white light, but the moment you compare it with a "daylight" fluorescent tube, it looks positively yellow. In the same way, a light coloured a sort of sea-green turquoise might be seen as quite blue by one witness and green by another, according to what they looked at last. The number of people who are actually colour-blind is surprisingly high—about 10 per cent for men, but only one hundredth as many women. In the extreme form of colour-blindness, the world is seen as mixtures of only two colours; the commonest such deficiency leads to an inability to distinguish red and green. However, the major proportion of men have only a partial deficiency (which may be unknown to the person himself) and see most shades as only slightly different from what normal people see. Another problem that may be mentioned here is the production of after-images, when the receptors are overloaded by bright lights. Immediately after the stimulus has ceased the receptors carry on reporting to the brain for a brief moment, giving a positive after-image the same colour as the original object. Then fatigue sets in, and the receptors for the colours of the object are worn out while the rest can still function O.K. The result is a negative after-image complementary in colour to the original object. Obviously, just like colour, brightness can only be measured relatively, so that what appears bright by night need not appear so by day. In almost every respect, our sense of sight is incapable of making absolute measurements. Except at the threshold of sensation, only measurements by comparison are possible.

Several fine details of the structure of the eye may be relevant to UFO research. The limit of resolution (i.e. the angular separation of the closest two objects that can be seen as separate) is of the order of one minute of arc (1/30 of the moon's diameter). This limit is imposed mainly by the closeness of the receptors in the retina, but for particularly appropriate objects, the brain manages to improve this to about