THE OPERATIONAL POTENTIAL OF SUBLIMINAL PERCEPTION

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Perception is demonstrated to have occurred below the threshold of conscious sensory experience when a person responds to a stimulus too weak in intensity or too short in duration for him to be aware of it. Individual behavior without awareness of the stimulus, of which subliminal perception is a subtype, has been a subject of study in psychological laboratories for at least 70 years, and a great deal of technical data has been collected on the subject. Recently it has been associated with some theories of depth analysis and popularized for possible commercial exploitation by the advertising world.

In the most sensational of these popularized experiments, an increase in popcorn sales in a New Jersey movie theater is said to have been stimulated by subliminal interruptions of the feature film with an advertisement urging the patrons to buy popcorn. The exposure time used, a small fraction of a second, was too brief for conscious discrimination by an observer absorbed in the film story but presumably long enough to have some stimulating effect. The advertising men who are currently interested in this phenomenon as a sales technique argue that the short-duration stimulus appeals to a positive motive, for example an appetite for popcorn, without arousing the rational, conscious sales-resistance of the individual, based perhaps on the desire to save money or lose weight.

The argument becomes more complicated with respect to a product which there is no specific preexisting positive motive to acquire. The appeal is now said to be directed to a "deep" underlying motive presumed to be always operating, never satiated, say the sex drive. The masked stimulus arouses some aspect of this ubiquitous sex drive, a drive which can hardly be directly satiated in polite society and one of which the conscious recognition is more or less anxiety-producing. The vague discomfort the individual feels as a result of subconscious stimulation must be allayed by some associated gratification, and this gratification — the advertiser hopes — is the socially

acceptable acquisition of the product which he is trying to promote.

It is evident that there are several mighty leaps in logic in the advertising man's argument, and a great many places where his scheme can go astray. He has taken several psychological phenomena which have been demonstrated to a limited degree in controlled laboratory experiments and strung them together into an appealing argument for a "technique." Because part of what he is promoting is supported by laboratory data, however, it has enough status to warrant serious attention.

The operational potential of other techniques for stimulating a person to take a specific controlled action without his being aware of the stimulus, or the source of stimulation, has in the past caught the attention of imaginative intelligence officers. Interest in the operational potential of subliminal perception has precedent in serious consideration of the techniques of hypnosis, extrasensory perception, and various forms of conditioning. By each of these techniques, it has been demonstrated, certain individuals can at certain times and under certain circumstances be influenced to act abnormally without awareness of the influence or at least without antagonism.

After careful research on each of these methods, however, it has become apparent that although they occasionally produce dramatic results, their lack of reliability and their requirement for extremely precise controls to obtain the desired effect have limited their operational utility to a very few very specialized instances—situations where just the right persons can be put together at just the right moment under closely controlled circumstances. The primary danger observed in connection with this unreliability is that of a "flashback," of inadvertently producing just the opposite effect to that desired. Subliminal perception as a practical control or persuasion technique is prone to the same difficulties.

There are four principal categories of behavior without awareness.

The individual may be unaware of:

a) his behavior itself.

He may be whispering without realizing he is whispering, or he may be moving into a trap without knowing that

the trap is there. A special case here is abnormal behavior in which the individual fails to realize what he is doing because his normal awareness and self-control have been interrupted by disturbing agents such as fear, anxiety, illness, drugs, or hypnotic suggestion.

b) the relation of his behavior to some stimulus.

The individual may be unaware of the fact that his interrogator is influencing him by saying "Right" after certain statements and by remaining noncommittal after others. The process called "operant conditioning" falls into this category.

c) the stimulus itself, because of its slight impact.

The individual may be unaware of a very faint sound or a quick flash of light, unaware in the sense that he lacks the usual visual sensations. Subliminal perception falls into this category.

d) the precise nature of the stimulus, as well as its relation to his behavior, because of inattention.

The individual may be aware of vague sensations, but he is not aware either of the source or of the significant content of the stimulation, although his behavior may change in accordance with changes in the stimulus. This category includes a great deal of perceptual activity affecting ordinary social behavior. A person is often unaware of the specific cues and clues to which he is reacting not because the stimulus is insufficient to reach the consciousness but because the effort to be fully aware of all the cues all the time would create too great a cognitive strain.

In persuading a person to do something he normally or rationally would resist doing an intelligence operative can make use of any one of these categories of psychological processes. Usually the purpose is to produce behavior of which the individual is unaware. The use of subliminal perception, on the other hand, is a device to keep him unaware of the source of his stimulation. The desire here is not to keep him unaware of what he is doing, but rather to keep him unaware of why he is doing it, by masking the external cue or message with subliminal presentation and so stimulating an unrecognized motive.

In order to develop the subliminal perception process for use as a reliable operational technique, it would be necessary a) to



define the composition of a subliminal cue or message which will trigger an appropriate preexisting motive, b) to determine the limits of intensity between which this stimulus is effective but not consciously perceived, c) to determine what preexisting motive will produce the desired abnormal action and under what conditions it is operative, and d) to overcome the defenses aroused by consciousness of the action itself.

As to the composition of the subliminal cue, it cannot be supposed that just any message presented close below the threshold of recognition will be translated into appropriate action. The determination of the right kind of message in terms of content, number and type of words or symbols, grouping of symbols, and so forth has been the object of a great deal of psychological experiment. There is a good deal of lore and a few rather vague principles available, but generally they concern rather trivial areas of action from the viewpoint of the intelligence operative. Since the effectiveness of the procedure depends on not arousing the person's defense mechanisms, and since defense mechanisms are not only peculiar to each individual but hard to discover, it is difficult to specify even what is to be avoided in the composition of the subliminal cue in order not to arouse the defenses.

Thresholds of recognition are variable and difficult to determine. If the intensity of the stimulus is much below an individual's threshold it doesn't get through to even the most automatic areas of his sensorium. But recognition thresholds vary tremendously, not only among individuals, but also in the same individual from one time to another, in accordance with his physical situation, his physiological condition, and above all the degree to which he is psychologically attuned to the particular content of the message. A normal human being is an infinitely more complex receiving instrument than any electronic gadget, and adjusting a stimulus for such a variable receiver is difficult. In most of the laboratory studies on which the current theory of subliminal perception is based 1 there has been a long pretrial period requiring the subject's full cooperation to zero him in on the subliminal signal. Such preparation is clearly not feasible for operational use. The message must

¹ For specifications and data see "Handbook of Experimental Psychology," S. S. Stevens (ed).

therefore be transmitted on a much wider intensity band and may frequently not get through or may on the other hand penetrate to the subject's consciousness and arouse his defenses.

The message once received is presumed to trigger some sensitive subconscious motivation to action. There are numerous psychological theories about such inner functions, but little definitely known about them. If a somewhat homogeneous sample of people is tested a number of times, most of them will be sensitive most of the time to the subliminal cue; but some individuals, for a great variety of reasons we can little more than guess at, will be insensitive. In this minority of instances the individual may do nothing, may do something trivial and irrelevant, or may do the exact opposite of what was intended.

If the subliminal cue is to work by tripping off an existing motive to action, one must know what motives are positive and operant at the moment. The obvious basic drives (e.g. hunger, sex) are sometimes satiated and sometimes subordinated. With a great deal of knowledge about the individual, some predictability can be attained, but it is still a matter of probabilities. The percentage of instances will be high where the opposite motive to that desired will be tripped off.

There appears thus to be such a myriad of factors that even the most simplified empirical tests carried out with the best possible cooperation of the subjects are rarely marked by really significant reliability. Furthermore, with such a large number of variables and relatively low reliability, it is difficult to determine whether the controlled variable or uncontrolled artifacts are producing whatever results one does observe.

Finally, the subliminal device to avoid alerting an individual's defenses by masking the cue and the basic motive does not cover the effect of awareness of the resultant abnormal action itself, with its implications and consequences. Assuming that one could persuade to such action by presenting a cue subliminally, there is no way of effecting the action without awareness and without tripping off defenses and rational resistance. It must be concluded that there are so many elusive variables and so many sources of irregularity in the device of directing subliminal messages to a target individual that its operational feasibility is exceedingly limited.