

Some Conditions of Obedience and Disobedience to Authority

STANLEY MILGRAM¹

THE SITUATION in which one agent commands another to hurt a third turns up time and again as a significant theme in human relations. It is powerfully expressed in the story of Abraham, who is commanded by God to kill his son. It is no accident that Kierkegaard, seeking to orient his thought to the central themes of human experience, chose Abraham's conflict as the springboard to his philosophy.

War too moves forward on the triad of an authority which commands a person to destroy the enemy, and perhaps all organized hostility may be viewed as a theme and variation on the three elements of authority, executant, and victim.² We describe an experimental program, recently concluded at Yale University, in which a particular expression of this conflict is studied by experimental means.

In its most general form the problem may be defined thus: if *X* tells *Y* to hurt *Z*, under what conditions will *Y* carry out the command of *X* and under what conditions will he refuse. In the more limited form possible in laboratory research, the question becomes: if an experimenter tells a subject to hurt another person, under what conditions will the subject go along with this instruction, and under what conditions will he refuse to obey. The laboratory problem is not so much a dilution of the general statement as one concrete expression of the many particular forms this question may assume.

One aim of the research was to study behavior in a strong situation of deep consequence to the participants, for the psychological forces operative in powerful and lifelike forms of the conflict may not be brought into play under diluted conditions.

This approach meant, first, that we had a special obligation to protect the welfare and dignity of the persons who took part in the study; subjects were, of necessity, placed in a difficult predicament, and steps had to be taken to ensure their

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2. Consider, for example, J. P. Scott's analysis of war in his monograph on aggression:

'... while the actions of key individuals in a war may be explained in terms of direct stimulation to aggression, vast numbers of other people are involved simply by being part of an organized society.

'... For example, at the beginning of World War I an Austrian archduke was assassinated in Sarajevo. A few days later soldiers from all over Europe were marching toward each other, not because they were stimulated by the archduke's misfortune, but because they had been trained to obey orders.' (Slightly rearranged from Scott (1958), *Aggression*, p. 103.)

wellbeing before they were discharged from the laboratory. Toward this end, a careful, post-experimental treatment was devised and has been carried through for subjects in all conditions.³

TERMINOLOGY

If *Y* follows the command of *X* we shall say that he has obeyed *X*; if he fails to carry out the command of *X*, we shall say that he has disobeyed *X*. The terms *to obey* and *to disobey*, as used here, refer to the subject's overt action only, and carry no implication for the motive or experiential states accompanying the action.⁴

To be sure, the everyday use of the word *obedience* is not entirely free from complexities. It refers to action within widely varying situations, and connotes diverse motives within those situations: a child's obedience differs from a soldier's obedience, or the love, honor, and *obey* of the marriage vow. However, a consistent behavioral relationship is indicated in most uses of the term: in the act of obeying, a person does what another person tells him to do. *Y* obeys *X* if he carries out the

3. It consisted of an extended discussion with the experimenter and, of equal importance, a friendly reconciliation with the victim. It is made clear that the victim did not receive painful electric shocks. After the completion of the experimental series, subjects were sent a detailed report of the results and full purposes of the experimental program. A formal assessment of this procedure points to its overall effectiveness. Of the subjects, 83.7 per cent indicated that they were glad to have taken part in the study; 15.1 per cent reported neutral feelings; and 1.3 per cent stated that they were sorry to have participated. A large number of subjects spontaneously requested that they be used in further experimentation. Four-fifths of the subjects felt that more experiments of this sort should be carried out, and 74 per cent indicated that they had learned something of personal importance as a result of being in the study. Furthermore, a university psychiatrist, experienced in outpatient treatment, interviewed a sample of experimental subjects with the aim of uncovering possible injurious effects resulting from participation. No such effects were in evidence. Indeed, subjects typically felt that their participation was instructive and enriching. A more detailed discussion of this question can be found in Milgram (1964).

4. *To obey* and *to disobey* are not the only terms one could use in describing the critical action of *Y*. One could say that *Y* is cooperating with *X*, or displays conformity with regard to *X*'s commands. However, *cooperation* suggests that *X* agrees with *Y*'s ends, and understands the relationship between his own behavior and the attainment of those ends. (But the experimental procedure, and, in particular, the experimenter's command that the subject shock the victim even in the absence of a response from the victim, preclude such understanding.) Moreover, *cooperation* implies status parity for the co-acting agents, and neglects the asymmetrical, dominance-subordination element prominent in the laboratory relationship between experimenter and subject. *Conformity* has been used in other important contexts in social psychology, and most frequently refers to imitating the judgements or actions of others when no explicit requirement for imitation has been made. Furthermore, in the present study there are two sources of social pressure: pressure from the experimenter issuing the commands, and pressure from the victim to stop the punishment. It is the pitting of a common man (the victim) against an authority (the experimenter) that is the distinctive feature of the conflict. At a point in the experiment the victim demands that he be let free. The experimenter insists that the subject continue to administer shocks. Which act of the subject can be interpreted as conformity? The subject may conform to the wishes of his peer or to the wishes of the experimenter, and conformity in one direction means the absence of conformity in the other. Thus the word has no useful reference in this setting, for the dual and conflicting social pressures cancel out its meaning.

In the final analysis, the linguistic symbol representing the subject's action must take its meaning from the concrete context in which that action occurs; and there is probably no word in everyday language that covers the experimental situation exactly, without omissions or irrelevant connotations. It is partly for convenience, therefore, that the terms *obey* and *disobey* are used to describe the subject's actions. At the same time, our use of the words is highly congruent with dictionary meaning.

prescription for action which *X* has addressed to him; the term suggests, moreover, that some form of dominance-subordination, or hierarchical element, is part of the situation in which the transaction between *X* and *Y* occurs.

A subject who complies with the entire series of experimental commands will be termed an *obedient* subject; one who at any point in the command series defies the experimenter will be called a *disobedient* or *defiant* subject. As used in this report, the terms refer only to the subject's performance in the experiment, and do not necessarily imply a general personality disposition to submit to or reject authority.

SUBJECT POPULATION

The subjects used in all experimental conditions were male adults, residing in the greater New Haven and Bridgeport areas, aged 20 to 50 years, and engaged in a wide variety of occupations. Each experimental condition described in this report employed 40 fresh subjects and was carefully balanced for age and occupational types. The occupational composition for each experiment was: workers, skilled and unskilled: 40 per cent; white collar, sales, business: 40 per cent; professionals: 20 per cent. The occupations were intersected with three age categories (subjects in 20s, 30s, and 40s, assigned to each condition in the proportions of 20, 40, and 40 per cent respectively).

THE GENERAL LABORATORY PROCEDURE⁵

The focus of the study concerns the amount of electric shock a subject is willing to administer to another person when ordered by an experimenter to give the 'victim' increasingly more severe punishment. The act of administering shock is set in the context of a learning experiment, ostensibly designed to study the effect of punishment on memory. Aside from the experimenter, one naïve subject and one accomplice perform in each session. On arrival each subject is paid \$4.50. After a general talk by the experimenter, telling how little scientists know about the effect of punishment on memory, subjects are informed that one member of the pair will serve as teacher and one as learner. A rigged drawing is held so that the naïve subject is always the teacher, and the accomplice becomes the learner. The learner is taken to an adjacent room and strapped into an 'electric chair'.

The naïve subject is told that it is his task to teach the learner a list of paired associates, to test him on the list, and to administer punishment whenever the learner errs in the test. Punishment takes the form of electric shock, delivered to the learner by means of a shock generator controlled by the naïve subject. The teacher is instructed to increase the intensity of electric shock one step on the generator on each error. The learner, according to plan, provides many wrong answers, so that before long the naïve subject must give him the strongest shock on the generator. Increases in shock level are met by increasingly insistent demands from the learner that the experiment be stopped because of the growing discomfort to him.

5. A more detailed account of the laboratory procedure can be found in Milgram (1963). A similar and independently evolved experimental procedure, employing a shock generator, victim, and learning task, was reported by Buss (1961). Buss used the technique for studying aggression, not obedience, and did not make use of the fundamental measure employed in the present study: break-off points. His investigation promises to be a useful complement to the present research.

However, in clear terms the experimenter orders the teacher to continue with the procedure in disregard of the learner's protests. *Thus, the naïve subject must resolve a conflict between two mutually incompatible demands from the social field. He may continue to follow the orders of the experimenter and shock the learner with increasing severity, or he may refuse to follow the orders of the experimenter and heed the learner's pleas. The experimenter's authority operates not in a free field, but against ever-mounting countervailing pressures from the person being punished.*

A few technical points need to be considered before the findings of the study are described. For the purpose of delivering shock, a simulated shock generator is used, with 30 clearly marked voltage levels that range from 15 to 450 volts (and each activated by one of 30 individual lever switches set in a horizontal line). The naïve subject is given a sample shock of 45 volts to convince him of the authenticity of the instrument. The generator bears verbal designations that range from 'Slight Shock' to 'Danger: Severe Shock'.

The responses of the victim are standardized on tape, and each protest is coordinated to a particular voltage level on the shock generator. Starting with 75 volts the learner begins to grunt and moan. At 150 volts he demands to be let out of the experiment. At 180 volts he cries out that he can no longer stand the pain. At 300 volts he refuses to provide any more answers to the memory test, insisting that he is no longer a participant in the experiment and must be freed. In response to this last tactic, the experimenter instructs the naïve subject to treat the absence of an answer as equivalent to a wrong answer, and to follow the usual shock procedure. The experimenter reinforces his demand with the statement: 'You have no other choice, you must go on!' (This imperative is used whenever the naïve subject tries to break off the experiment.) If the subject refuses to give the next higher level of shock, the experiment is considered at an end. A quantitative value is assigned to the subject's performance based on the maximum intensity shock he administered before breaking off. Thus any subject's score may range from zero (for a subject unwilling to administer the first shock level) to 30 (for a subject who proceeds to the highest voltage level on the board). For any particular subject and for any particular experimental condition the degree to which participants have followed the experimenter's orders may be specified with a numerical value, corresponding to the metric on the shock generator.

This laboratory situation gives us a framework in which to study the subject's reactions to the principal conflict of the experiment. Again, this conflict is between the experimenter's demands that he continue to administer the electric shock, and the learner's demands, which become increasingly more insistent, that the experiment be stopped. The crux of the study is to vary systematically the factors believed to alter the degree of obedience to the experimental commands, to learn under what conditions submission to authority is most probable, and under what conditions defiance is brought to the fore.

PILOT STUDIES

Pilot studies for the present research were completed in the winter of 1960; they differed from the regular experiments in a few details: for one, the victim was placed behind a silvered glass, with the light balance on the glass such that the victim could be dimly perceived by the subject (Milgram, 1961).

Though essentially qualitative in treatment, these studies pointed to several

significant features of the experimental situation. At first no vocal feedback was used from the victim. It was thought that the verbal and voltage designations on the control panel would create sufficient pressure to curtail the subject's obedience. However, this was not the case. In the absence of protests from the learner, virtually all subjects, once commanded, went blithely to the end of the board, seemingly indifferent to the verbal designations ('Extreme Shock' and 'Danger: Severe Shock'). This deprived us of an adequate basis for scaling obedient tendencies. A force had to be introduced that would strengthen the subject's resistance to the experimenter's commands, and reveal individual differences in terms of a distribution of break-off points.

This force took the form of protests from the victim. Initially, mild protests were used, but proved inadequate. Subsequently, more vehement protests were inserted into the experimental procedure. To our consternation, even the strongest protests from the victim did not prevent all subjects from administering the harshest punishment ordered by the experimenter; but the protests did lower the mean maximum shock somewhat and created some spread in the subject's performance; therefore, the victim's cries were standardized on tape and incorporated into the regular experimental procedure.

The situation did more than highlight the technical difficulties of finding a workable experimental procedure: it indicated that subjects would obey authority to a greater extent than we had supposed. It also pointed to the importance of feedback from the victim in controlling the subject's behavior.

One further aspect of the pilot study was that subjects frequently averted their eyes from the person they were shocking, often turning their heads in an awkward and conspicuous manner. One subject explained: 'I didn't want to see the consequences of what I had done.' Observers wrote:

... subjects showed a reluctance to look at the victim, whom they could see through the glass in front of them. When this fact was brought to their attention they indicated that it caused them discomfort to see the victim in agony. We note, however, that although the subject refuses to look at the victim, he continues to administer shocks.

This suggested that the salience of the victim may have, in some degree, regulated the subject's performance. If, in obeying the experimenter, the subject found it necessary to avoid scrutiny of the victim, would the converse be true? If the victim were rendered increasingly more salient to the subject, would obedience diminish? The first set of regular experiments was designed to answer this question.

IMMEDIACY OF THE VICTIM

This series consisted of four experimental conditions. In each condition the victim was brought 'psychologically' closer to the subject giving him shocks.

In the first condition (Remote Feedback) the victim was placed in another room and could not be heard or seen by the subject, except that, at 300 volts, he pounded on the wall in protest. After 315 volts he no longer answered or was heard from.

The second condition (Voice Feedback) was identical to the first except that voice protests were introduced. As in the first condition the victim was placed in

an adjacent room, but his complaints could be heard clearly through a door left slightly ajar, and through the walls of the laboratory.⁶

The third experimental condition (Proximity) was similar to the second, except that the victim was now placed in the same room as the subject, and 1½ feet from him. Thus he was visible as well as audible, and voice cues were provided.

The fourth, and final, condition of this series (Touch-Proximity) was identical to the third, with this exception: the victim received a shock only when his hand rested on a shockplate. At the 150-volt level the victim again demanded to be let free and, in this condition, refused to place his hand on the shockplate. The experimenter ordered the naïve subject to force the victim's hand onto the plate. Thus obedience in this condition required that the subject have physical contact with the victim in order to give him punishment beyond the 150-volt level.

Forty adult subjects were studied in each condition. The data revealed that obedience was significantly reduced as the victim was rendered more immediate to the subject. The mean maximum shock for the conditions is shown in *Figure 1*.

Expressed in terms of the proportion of obedient to defiant subjects, the findings are that 34 per cent of the subjects defied the experimenter in the Remote condition, 37.5 per cent in Voice Feedback, 60 per cent in Proximity, and 70 per cent in Touch-Proximity.

How are we to account for this effect? A first conjecture might be that as the victim was brought closer the subject became more aware of the intensity of his suffering and regulated his behavior accordingly. This makes sense, but our evidence does not support the interpretation. There are no consistent differences in the

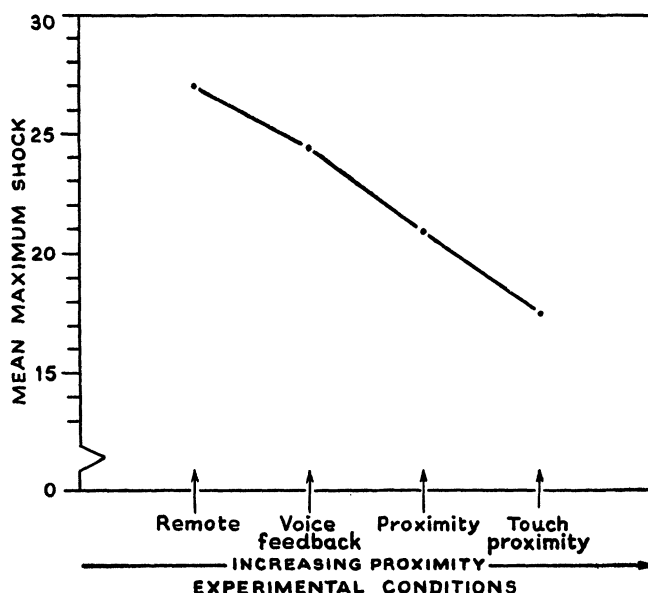
6. It is difficult to convey on the printed page the full tenor of the victim's responses, for we have no adequate notation for vocal intensity, timing, and general qualities of delivery. Yet these features are crucial to producing the effect of an increasingly severe reaction to mounting voltage levels. (They can be communicated fully only by sending interested parties the recorded tapes.) In general terms, however, the victim indicates no discomfort until the 75-volt shock is administered, at which time there is a light grunt in response to the punishment. Similar reactions follow the 90- and 105-volt shocks, and at 120 volts the victim shouts to the experimenter that the shocks are becoming painful. Painful groans are heard on administration of the 135-volt shock, and at 150 volts the victim cries out, 'Experimenter, get me out of here! I won't be in the experiment any more! I refuse to go on!' Cries of this type continue with generally rising intensity, so that at 180 volts the victim cries out, 'I can't stand the pain', and by 270 volts his response to the shock is definitely an agonized scream. Throughout, he insists that he be let out of the experiment. At 300 volts the victim shouts in desperation that he will no longer provide answers to the memory test; and at 315 volts, after a violent scream, he reaffirms with vehemence that he is no longer a participant. From this point on, he provides no answers, but shrieks in agony whenever a shock is administered; this continues through 450 volts. Of course, many subjects will have broken off before this point.

A revised and stronger set of protests was used in all experiments outside the Proximity series. Naturally, new baseline measures were established for all comparisons using the new set of protests.

There is overwhelming evidence that the great majority of subjects, both obedient and defiant, accepted the victims' reactions as genuine. The evidence takes the form of: (a) tension created in the subjects (see discussion of tension); (b) scores on 'estimated pain' scales filled out by subjects immediately after the experiment; (c) subjects' accounts of their feelings in post-experimental interviews; and (d) quantifiable responses to questionnaires distributed to subjects several months after their participation in the experiments. This matter will be treated fully in a forthcoming monograph.

(The procedure in all experimental conditions was to have the naïve subject announce the voltage level before administering each shock, so that—independently of the victim's responses—he was continually reminded of delivering punishment of ever-increasing severity.)

FIGURE 1 MEAN MAXIMA IN PROXIMITY SERIES



attributed level of pain across the four conditions (i.e. the amount of pain experienced by the victim as estimated by the subject and expressed on a 14-point scale). But it is easy to speculate about alternative mechanisms:

Empathic cues. In the Remote and to a lesser extent the Voice Feedback condition, the victim's suffering possesses an abstract, remote quality for the subject. He is aware, but only in a conceptual sense, that his actions cause pain to another person; the fact is apprehended, but not felt. The phenomenon is common enough. The bombardier can reasonably suppose that his weapons will inflict suffering and death, yet this knowledge is divested of affect, and does not move him to a felt, emotional response to the suffering resulting from his actions. Similar observations have been made in wartime. It is possible that the visual cues associated with the victim's suffering trigger empathic responses in the subject and provide him with a more complete grasp of the victim's experience. Or it is possible that the empathic responses are themselves unpleasant, possessing drive properties which cause the subject to terminate the arousal situation. Diminishing obedience, then, would be explained by the enrichment of empathic cues in the successive experimental conditions.

Denial and narrowing of the cognitive field. The Remote condition allows a narrowing of the cognitive field so that the victim is put out of mind. The subject no longer considers the act of depressing a lever relevant to moral judgement, for it is no longer associated with the victim's suffering. When the victim is close it is more difficult to exclude him phenomenologically. He necessarily intrudes on the subject's awareness since he is continuously visible. In the Remote conditions his existence and reactions are made known only after the shock has been administered. The auditory feedback is sporadic and discontinuous. In the Proximity conditions his inclusion in the immediate visual field renders him a continuously salient element for the subject. The mechanism of denial can no longer be brought into play. One subject in the Remote condition said: 'It's funny how you really begin to forget that there's a guy out there, even though you can hear him. For a long time I just concentrated on pressing the switches and reading the words.'

Reciprocal fields. If in the Proximity condition the subject is in an improved position to observe the victim, the reverse is also true. The actions of the subject now come under proximal scrutiny by the victim. Possibly, it is easier to harm a person when he is unable to observe our actions than when he can see what we are doing. His surveillance of the action directed against him may give rise to shame, or guilt, which may then serve to curtail the action. Many expressions of language refer to the discomfort or inhibitions that arise in face-to-face confrontation. It is often said that it is easier to criticize a man 'behind his back' than to 'attack him to his face'. If we are in the process of lying to a person it is reputedly difficult to 'stare him in the eye'. We 'turn away from others in shame' or in 'embarrassment' and this action serves to reduce our discomfort. The manifest function of allowing the victim of a firing squad to be blindfolded is to make the occasion less stressful for him, but it may also serve a latent function of reducing the stress of the executioner. In short, in the Proximity conditions, the subject may sense that he has become more salient in the victim's field of awareness. Possibly he becomes more self-conscious, embarrassed, and inhibited in his punishment of the victim.

Phenomenal unity of act. In the Remote conditions it is more difficult for the subject to gain a sense of *relatedness* between his own actions and the consequences of these actions for the victim. There is a physical and spatial separation of the act and its consequences. The subject depresses a lever in one room, and protests and cries are heard from another. The two events are in correlation, yet they lack a compelling phenomenological unity. The structure of a meaningful act—*I am hurting a man*—breaks down because of the spatial arrangements, in a manner somewhat analogous to the disappearance of phi phenomena when the blinking lights are spaced too far apart. The unity is more fully achieved in the Proximity conditions as the victim is brought closer to the action that causes him pain. It is rendered complete in Touch-Proximity.

Incipient group formation. Placing the victim in another room not only takes him further from the subject, but the subject and the experimenter are drawn relatively closer. There is incipient group formation between the experimenter and the subject, from which the victim is excluded. The wall between the victim and the others deprives him of an intimacy which the experimenter and subject feel. In the Remote condition, the victim is truly an outsider, who stands alone, physically and psychologically.

When the victim is placed close to the subject, it becomes easier to form an alliance with him against the experimenter. Subjects no longer have to face the experimenter alone. They have an ally who is close at hand and eager to collaborate in a revolt against the experimenter. Thus, the changing set of spatial relations leads to a potentially shifting set of alliances over the several experimental conditions.

Acquired behavior dispositions. It is commonly observed that laboratory mice will rarely fight with their litter mates. Scott (1958) explains this in terms of passive inhibition. He writes: 'By doing nothing under . . . circumstances [the animal] learns to do nothing, and this may be spoken of as passive inhibition . . . this principle has great importance in teaching an individual to be peaceful, for it means that he can learn not to fight simply by not fighting.' Similarly, we may learn not to harm others simply by not harming them in everyday life. Yet this learning occurs in a context of proximal relations with others, and may not be generalized to that situation in which the person is physically removed from us. Or possibly, in the past, aggressive actions against others who were physically close resulted in retaliatory punishment which extinguished the original form of response. In contrast, aggression against others at a distance may have only sporadically led to retaliation. Thus the organism learns that it is safer to be aggressive toward others at a distance, and precarious to be so when the parties are within arm's reach. Through a pattern of rewards and punishments, he acquires a disposition to avoid aggression at close quarters, a disposition which does not extend to harming others at a distance. And this may account for experimental findings in the remote and proximal experiments.

Proximity as a variable in psychological research has received far less attention than it deserves. If men were sessile it would be easy to understand this neglect. But we move about; our spatial relations shift from one situation to the next, and the fact that we are near or remote may have a powerful effect on the psychological processes that mediate our behavior toward others. In the present situation, as the victim is brought closer to the man ordered to give him shocks, increasing numbers of subjects break off the experiment, refusing to obey. The concrete, visible, and proximal presence of the victim acts in an important way to counteract the experimenter's power and to generate disobedience.⁷

CLOSENESS OF AUTHORITY

If the spatial relationship of the subject and victim is relevant to the degree of obedience, would not the relationship of subject to experimenter also play a part?

There are reasons to feel that, on arrival, the subject is oriented primarily to the experimenter rather than to the victim. He has come to the laboratory to fit into the structure that the experimenter—not the victim—would provide. He has come less to understand his behavior than to *reveal* that behavior to a competent scientist, and he is willing to display himself as the scientist's purposes require. Most subjects seem quite concerned about the appearance they are making before the experimenter, and one could argue that this preoccupation in a relatively new and strange setting makes the subject somewhat insensitive to the triadic nature of the social situation. In other words, the subject is so concerned about the show he is putting on for the experimenter that influences from other parts of the social field do not receive as much weight as they ordinarily would. This overdetermined orientation to the experimenter would account for the relative insensitivity of the subject to the victim, and would also lead us to believe that alterations in the relationship between subject and experimenter would have important consequences for obedience.

In a series of experiments we varied the physical closeness and degree of surveillance of the experimenter. In one condition the experimenter sat just a few feet away from the subject. In a second condition, after giving initial instructions, the experimenter left the laboratory and gave his orders by telephone; in still a third condition the experimenter was never seen, providing instructions by means of a tape recording activated when the subjects entered the laboratory.

Obedience dropped sharply as the experimenter was physically removed from the laboratory. The number of obedient subjects in the first condition (Experimenter Present) was almost three times as great as in the second, where the experimenter gave his orders by telephone. Twenty-six subjects were fully obedient in the first condition, and only 9 in the second (Chi square obedient vs. defiant in the two conditions, 1 d.f. = 14.7; $p < .001$). Subjects seemed able to take a far stronger stand

7. Admittedly, the terms *proximity*, *immediacy*, *closeness*, and *salience-of-the-victim* are used in a loose sense, and the experiments themselves represent a very coarse treatment of the variable. Further experiments are needed to refine the notion and tease out such diverse factors as spatial distance, visibility, audibility, barrier interposition, etc.

The Proximity and Touch-Proximity experiments were the only conditions where we were unable to use taped feedback from the victim. Instead, the victim was trained to respond in these conditions as he had in Experiment 2 (which employed taped feedback). Some improvement is possible here, for it should be technically feasible to do a proximity series using taped feedback.

against the experimenter when they did not have to encounter him face to face, and the experimenter's power over the subject was severely curtailed.⁸

Moreover, when the experimenter was absent, subjects displayed an interesting form of behavior that had not occurred under his surveillance. Though continuing with the experiment, several subjects administered lower shocks than were required and never informed the experimenter of their deviation from the correct procedure. (Unknown to the subjects, shock levels were automatically recorded by an Esterline-Angus event recorder wired directly into the shock generator; the instrument provided us with an objective record of the subjects' performance.) Indeed, in telephone conversations some subjects specifically assured the experimenter that they were raising the shock level according to instruction, whereas in fact they were repeatedly using the lowest shock on the board. This form of behavior is particularly interesting: although these subjects acted in a way that clearly undermined the avowed purposes of the experiment, they found it easier to handle the conflict in this manner than to precipitate an open break with authority.

Other conditions were completed in which the experimenter was absent during the first segment of the experiment, but reappeared at the point that the subject definitely refused to give higher shocks when commanded by telephone. Although he had exhausted his power via telephone, the experimenter could frequently force further obedience when he reappeared in the laboratory.

Experiments in this series show that the physical *presence* of an authority is an important force contributing to the subject's obedience or defiance. Taken together with the first experimental series on the proximity of the victim, it would appear that something akin to fields of force, diminishing in effectiveness with increasing psychological distance from their source, have a controlling effect on the subject's performance. As the victim is brought closer, the subject finds it harder to administer shocks to him. When the victim's position is held constant relative to the subject, and the authority is made more remote, the subject finds it easier to break off the experiment. This effect is substantial in both cases, but manipulation of the experimenter's position yielded the more powerful results. Obedience to destructive commands is highly dependent on the proximal relations between authority and subject.

TENSIONS

The description of final scores does not fully convey the character of the subjects' performance, and it would be useful to interrupt our reporting of quantitative relationships to remark on the subjects' general reaction to the situation.

One might suppose that a subject would simply break off or continue as his conscience and temperament dictated. Yet this is very far from what happened. There were powerful reactions of tension and emotional strain in a substantial proportion of the participants. Persons were observed to sweat, tremble, stutter, bite their lips, and groan as they found themselves increasingly implicated in the experimental conflict. Some sense of the subjects' mood can be gotten from a transcript of their remarks at break-off point. Here are the remarks of two defiant subjects:

8. The third condition also led to significantly lower obedience than this first situation, in which the experimenter was present, but it contains technical difficulties that require extensive discussion.

Is he banging? . . . Is he hurt out there? Well, I don't want to be responsible for anything that happens to him. No, I can't go on with it. I don't know whether he's all right or not. I mean he may have a heart condition or something; I wouldn't feel right doing it. He's banging for help. He's evidently in trouble or he wouldn't bang . . . I don't see any sense to this—to knocking him out or something. I just can't see it.

(Subject refuses to administer shocks)

[Subject 0108]

The man is banging. He wants to get out . . . I'm sorry. If the man wants to get out I'd just as soon stop . . . I don't want to administer any more [extremely excited] . . . I will gladly refund the check, but I will not harm this man . . . I'm sorry, I will not give him any more if he obviously wants to get out. There is no money in the world that will make me hurt another individual. *[Subject 010X]*

And here is a transcript from an obedient subject. He began the experiment calmly, but became increasingly tense as the experiment proceeded. After administering the 150-volt shock, he began to address the experimenter in agitated tones:

150 volts delivered. You want me to keep going?

165 volts delivered. That guy is hollering in there. There's a lot of them here. He's liable to have heart condition. You want me to go?

180 volts delivered. He can't stand it! I'm not going to kill that man in there! You hear him hollering? He's hollering. He can't stand it. What if something happens to him? . . . I'm not going to get that man sick in there. He's hollering in there. You know what I mean? I mean I refuse to take responsibility. He's getting hurt in there. He's in there hollering. Too many left here. Geez, if he gets them wrong. There's too many of them left. I mean who is going to take responsibility if anything happens to that gentleman?

[The experimenter accepts responsibility.] All right.

195 volts delivered. You see he's hollering. Hear that. Gee, I don't know. *[The experimenter says: 'The experiment requires that you go on.']*—I know it does, sir, but I mean—hugh—he don't know what he's in for. He's up to 195 volts.

210 volts delivered

225 volts delivered

240 volts delivered. Aw, no. You mean I've got to keep going up with the scale? No sir. I'm not going to kill that man! I'm not going to give him 450 volts! *[The experimenter says: 'The experiment requires that you go on.']*—I know it does, but that man is hollering in there, sir . . .

Despite his numerous, agitated objections, which were constant accompaniments to his actions, the subject unflinchingly obeyed the experimenter, proceeding to the highest shock level on the generator. He displayed a curious dissociation between word and action. Although at the verbal level he had resolved not to go on, his actions were fully in accord with the experimenter's commands. This subject did not want to shock the victim, and he found it an extremely disagreeable task, but he was unable to invent a response that would free him from *E*'s authority. Many subjects cannot find the specific verbal formula that would enable them to reject the role assigned to them by the experimenter. Perhaps our culture does not provide adequate models for disobedience.

One puzzling sign of tension was the regular occurrence of nervous laughing fits. In the first four conditions 71 of the 160 subjects showed definite signs of nervous laughter and smiling. The laughter seemed entirely out of place, even bizarre. Full-blown, uncontrollable seizures were observed for 15 of these subjects. On one occasion we observed a seizure so violently convulsive that it was necessary to call a halt to the experiment. In the post-experimental interviews subjects took pains to point out that they were not sadistic types and that the laughter did not mean they enjoyed shocking the victim.

In the interview following the experiment subjects were asked to indicate on a 14-point scale just how nervous or tense they felt at the point of maximum tension (Figure 2). The scale ranged from 'Not at all tense and nervous' to 'Extremely tense

FIGURE 2 LEVEL OF TENSION AND NERVOUSNESS

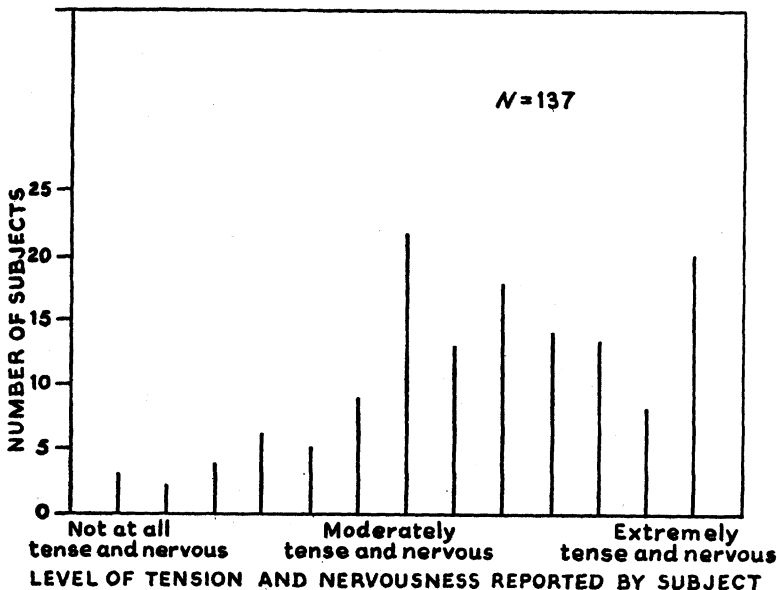


Figure 2 shows the self-reports on 'tension and nervousness' for 137 subjects in the Proximity experiments. Subjects were given a scale with 14 values ranging from 'Not at all tense and nervous' to 'Extremely tense and nervous'. They were instructed: 'Thinking back to that point in the experiment when you felt the most tense and nervous, indicate just how you felt by placing an X at the appropriate point on the scale.' The results are shown in terms of mid-point values.

and nervous'. Self-reports of this sort are of limited precision, and at best provide only a rough indication of the subject's emotional response. Still, taking the reports for what they are worth, it can be seen that the distribution of responses spans the entire range of the scale, with the majority of subjects concentrated at the center and upper extreme. A further breakdown showed that obedient subjects reported themselves as having been slightly more tense and nervous than the defiant subjects at the point of maximum tension.

How is the occurrence of tension to be interpreted? First, it points to the presence of conflict. If a tendency to comply with authority were the only psychological force operating in the situation, all subjects would have continued to the end and there would have been no tension. Tension, it is assumed, results from the simultaneous presence of two or more incompatible response tendencies (Miller,

1944). If sympathetic concern for the victim were the exclusive force, all subjects would have calmly defied the experimenter. Instead, there were both obedient and defiant outcomes, frequently accompanied by extreme tension. A conflict develops between the deeply ingrained disposition not to harm others and the equally compelling tendency to obey others who are in authority. The subject is quickly drawn into a dilemma of a deeply dynamic character, and the presence of high tension points to the considerable strength of each of the antagonistic vectors.

Moreover, tension defines the strength of the aversive state from which the subject is unable to escape through disobedience. When a person is uncomfortable, tense, or stressed, he tries to take some action that will allow him to terminate this unpleasant state. Thus tension may serve as a drive that leads to escape behavior. But in the present situation, even where tension is extreme, many subjects are unable to perform the response that will bring about relief. Therefore there must be a competing drive, tendency, or inhibition that precludes activation of the disobedient response. The strength of this inhibiting factor must be of greater magnitude than the stress experienced, else the terminating act would occur. Every evidence of extreme tension is at the same time an indication of the strength of the forces that keep the subject in the situation.

Finally, tension may be taken as evidence of the reality of the situations for the subjects. Normal subjects do not tremble and sweat unless they are implicated in a deep and genuinely felt predicament.

BACKGROUND AUTHORITY

In psychophysics, animal learning, and other branches of psychology, the fact that measures are obtained at one institution rather than another is irrelevant to the interpretation of the findings, so long as the technical facilities for measurement are adequate and the operations are carried out with competence.

But it cannot be assumed that this holds true for the present study. The effectiveness of the experimenter's commands may depend in an important way on the larger institutional context in which they are issued. The experiments described thus far were conducted at Yale University, an organization which most subjects regarded with respect and sometimes awe. In post-experimental interviews several participants remarked that the locale and sponsorship of the study gave them confidence in the integrity, competence, and benign purposes of the personnel; many indicated that they would not have shocked the learner if the experiments had been done elsewhere.

This issue of background authority seemed to us important for an interpretation of the results that had been obtained thus far; moreover it is highly relevant to any comprehensive theory of human obedience. Consider, for example, how closely our compliance with the imperatives of others is tied to particular institutions and locales in our day-to-day activities. On request, we expose our throats to a man with a razor blade in the barber shop, but would not do so in a shoe store; in the latter setting we willingly follow the clerk's request to stand in our stockinged feet, but resist the command in a bank. In the laboratory of a great university, subjects may comply with a set of commands that would be resisted if given elsewhere. *One must always question the relationship of obedience to a person's sense of the context in which he is operating.*

To explore the problem we moved our apparatus to an office building in

industrial Bridgeport and replicated experimental conditions, without any visible tie to the university.

Bridgeport subjects were invited to the experiment through a mail circular similar to the one used in the Yale study, with appropriate changes in letterhead, etc. As in the earlier study, subjects were paid \$4.50 for coming to the laboratory. The same age and occupational distributions used at Yale, and the identical personnel, were employed.

The purpose in relocating in Bridgeport was to assure a complete dissociation from Yale, and in this regard we were fully successful. On the surface, the study appeared to be conducted by RESEARCH ASSOCIATES OF BRIDGEPORT, an organization of unknown character (the title had been concocted exclusively for use in this study).

The experiments were conducted in a three-room office suite in a somewhat run-down commercial building located in the downtown shopping area. The laboratory was sparsely furnished, though clean, and marginally respectable in appearance. When subjects inquired about professional affiliations, they were informed only that we were a private firm conducting research for industry.

Some subjects displayed skepticism concerning the motives of the Bridgeport experimenter. One gentleman gave us a written account of the thoughts he experienced at the control board:

... Should I quit this damn test? Maybe he passed out? What dopes we were not to check up on this deal. How do we know that these guys are legit? No furniture, bare walls, no telephone. We could of called the Police up or the Better Business Bureau. I learned a lesson tonight. How do I know that Mr Williams [the experimenter] is telling the truth ... I wish I knew how many volts a person could take before lapsing into unconsciousness ...

[Subject 2414]

Another subject stated:

I questioned on my arrival my own judgment [about coming]. I had doubts as to the legitimacy of the operation and the consequences of participation. I felt it was a heartless way to conduct memory or learning processes on human beings and certainly dangerous without the presence of a medical doctor.

[Subject 2440 V]

There was no noticeable reduction in tension for the Bridgeport subjects. And the subjects' estimation of the amount of pain felt by the victim was slightly, though not significantly, higher than in the Yale study.

A failure to obtain complete obedience in Bridgeport would indicate that the extreme compliance found in New Haven subjects was tied closely to the background authority of Yale University; if a large proportion of the subjects remained fully obedient, very different conclusions would be called for.

As it turned out, the level of obedience in Bridgeport, although somewhat reduced, was not significantly lower than that obtained at Yale. A large proportion of the Bridgeport subjects were fully obedient to the experimenter's commands (48 per cent of the Bridgeport subjects delivered the maximum shock vs. 65 per cent in the corresponding condition at Yale).

How are these findings to be interpreted? It is possible that if commands of a potentially harmful or destructive sort are to be perceived as legitimate they must occur within some sort of institutional structure. But it is clear from the study that it need not be a particularly reputable or distinguished institution. The Bridgeport experiments were conducted by an unimpressive firm lacking any credentials; the laboratory was set up in a respectable office building with title listed in the building directory. Beyond that, there was no evidence of benevolence or competence. It is possible that the *category* of institution, judged according to its professed function, rather than its qualitative position within that category, wins our compliance. Persons deposit money in elegant, but also in seedy-looking banks, without giving much thought to the differences in security they offer. Similarly, our subjects may consider one laboratory to be as competent as another, so long as it is a scientific laboratory.

It would be valuable to study the subjects' performance in other contexts which go even further than the Bridgeport study in denying institutional support to the experimenter. It is possible that, beyond a certain point, obedience disappears completely. But that point had not been reached in the Bridgeport office: almost half the subjects obeyed the experimenter fully.

FURTHER EXPERIMENTS

We may mention briefly some additional experiments undertaken in the Yale series. A considerable amount of obedience and defiance in everyday life occurs in connexion with groups. And we had reason to feel in the light of many group studies already done in psychology that group forces would have a profound effect on reactions to authority. A series of experiments was run to examine these effects. In all cases only one naïve subject was studied per hour, but he performed in the midst of actors who, unknown to him, were employed by the experimenter. In one experiment (Groups for Disobedience) two actors broke off in the middle of the experiment. When this happened 90 per cent of the subjects followed suit and defied the experimenter. In another condition the actors followed the orders obediently; this strengthened the experimenter's power only slightly. In still a third experiment the job of pushing the switch to shock the learner was given to one of the actors, while the naïve subject performed a subsidiary act. We wanted to see how the teacher would respond if he were involved in the situation but did not actually give the shocks. In this situation only three subjects out of forty broke off. In a final group experiment the subjects themselves determined the shock level they were going to use. Two actors suggested higher and higher shock levels; some subjects insisted, despite group pressure, that the shock level be kept low; others followed along with the group.

Further experiments were completed using women as subjects, as well as a set dealing with the effects of dual, unsanctioned, and conflicting authority. A final experiment concerned the personal relationship between victim and subject. These will have to be described elsewhere, lest the present report be extended to monographic length.

It goes without saying that future research can proceed in many different directions. What kinds of response from the victim are most effective in causing disobedience in the subject? Perhaps passive resistance is more effective than vehement protest. What conditions of entry into an authority system lead to

greater or lesser obedience? What is the effect of anonymity and masking on the subject's behavior? What conditions lead to the subject's perception of responsibility for his own actions? Each of these could be a major research topic in itself, and can readily be incorporated into the general experimental procedure described here.

LEVELS OF OBEDIENCE AND DEFIANCE

One general finding that merits attention is the high level of obedience manifested in the experimental situation. Subjects often expressed deep disapproval of shocking a man in the face of his objections, and others denounced it as senseless and stupid. Yet many subjects complied even while they protested. The proportion of obedient subjects greatly exceeded the expectations of the experimenter and his colleagues. At the outset, we had conjectured that subjects would not, in general, go above the level of 'Strong Shock'. In practice, many subjects were willing to administer the most extreme shocks available when commanded by the experimenter. For some subjects the experiment provides an occasion for aggressive release. And for others it demonstrates the extent to which obedient dispositions are deeply ingrained, and are engaged irrespective of their consequences for others. Yet this is not the whole story. Somehow, the subject becomes implicated in a situation from which he cannot disengage himself.

The departure of the experimental results from intelligent expectation, to some extent, has been formalized. The procedure was to describe the experimental situation in concrete detail to a group of competent persons, and to ask them to predict the performance of 100 hypothetical subjects. For purposes of indicating the distribution of break-off points judges were provided with a diagram of the shock generator, and recorded their predictions before being informed of the actual results. Judges typically underestimated the amount of obedience demonstrated by subjects.

In *Figure 3*, we compare the predictions of forty psychiatrists at a leading medical school with the actual performance of subjects in the experiment. The psychiatrists predicted that most subjects would not go beyond the tenth shock level (150 volts; at this point the victim makes his first explicit demand to be freed). They further predicted that by the twentieth shock level (300 volts; the victim refuses to answer) 3.73 per cent of the subjects would still be obedient; and that only a little over one-tenth of one per cent of the subjects would administer the highest shock on the board. But, as the graph indicates, the obtained behavior was very different. Sixty-two per cent of the subjects obeyed the experimenter's commands fully. Between expectation and occurrence there is a whopping discrepancy.

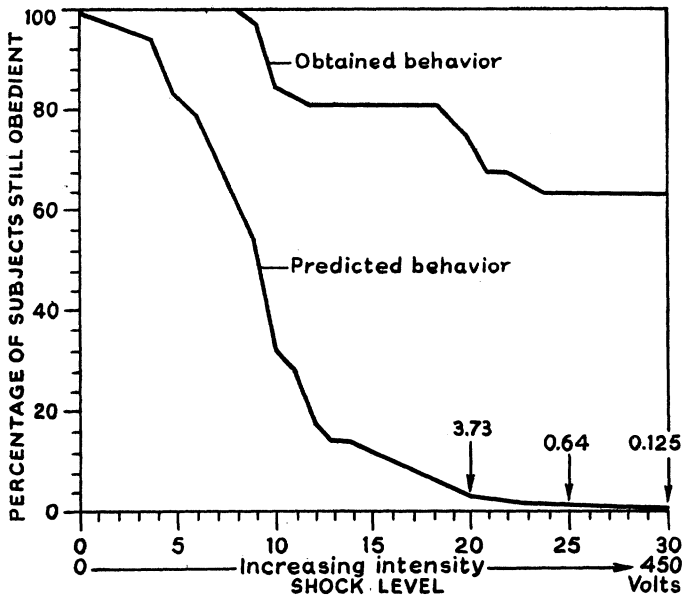
Why did the psychiatrists underestimate the level of obedience? Possibly, because their predictions were based on an inadequate conception of the determinants of human action, a conception that focuses on motives *in vacuo*. This orientation may be entirely adequate for the repair of bruised impulses as revealed on the psychiatrist's couch, but as soon as our interest turns to action in larger settings, attention must be paid to the situations in which motives are expressed. A situation exerts an important press on the individual. It exercises constraints and may provide push. In certain circumstances it is not so much the kind of person a man is, as the kind of situation in which he is placed, that determines his actions.

Many people, not knowing much about the experiment, claim that subjects

who go to the end of the board are sadistic. Nothing could be more foolish as an overall characterization of these persons. It is like saying that a person thrown into a swift-flowing stream is necessarily a fast swimmer, or that he has great stamina because he moves so rapidly relative to the bank. The context of action must always be considered. The individual, upon entering the laboratory, becomes integrated into a situation that carries its own momentum. The subject's problem then is how to become disengaged from a situation which is moving in an altogether ugly direction.

The fact that disengagement is so difficult testifies to the potency of the forces that keep the subject at the control board. Are these forces to be conceptualized as

FIGURE 3 PREDICTED AND OBTAINED BEHAVIOR IN VOICE FEEDBACK



individual motives and expressed in the language of personality dynamics, or are they to be seen as the effects of social structure and pressures arising from the situational field?

A full understanding of the subject's action will, I feel, require that both perspectives be adopted. The person brings to the laboratory enduring dispositions toward authority and aggression, and at the same time he becomes enmeshed in a social structure that is no less an objective fact of the case. From the standpoint of personality theory one may ask: What mechanisms of personality enable a person to transfer responsibility to authority? What are the motives underlying obedient and disobedient performance? Does orientation to authority lead to a short-circuiting of the shame-guilt system? What cognitive and emotional defenses are brought into play in the case of obedient and defiant subjects?

The present experiments are not, however, directed toward an exploration of the motives engaged when the subject obeys the experimenter's commands. Instead, they examine the situational variables responsible for the elicitation of obedience. Elsewhere, we have attempted to spell out some of the structural properties

of the experimental situation that account for high obedience, and this analysis need not be repeated here (Milgram, 1963). The experimental variations themselves represent our attempt to probe that structure, by systematically changing it and noting the consequences for behavior. It is clear that some situations produce greater compliance with the experimenter's commands than others. However, this does not necessarily imply an increase or decrease in the strength of any single definable motive. Situations producing the greatest obedience could do so by triggering the most powerful, yet perhaps the most idiosyncratic, of motives in each subject confronted by the setting. Or they may simply recruit a greater number and variety of motives in their service. But whatever the motives involved—and it is far from certain that they can ever be known—action may be studied as a direct function of the situation in which it occurs. This has been the approach of the present study, where we sought to plot behavioral regularities against manipulated properties of the social field. Ultimately, social psychology would like to have a compelling *theory of situations* which will, first, present a language in terms of which situations can be defined; proceed to a typology of situations; and then point to the manner in which definable properties of situations are transformed into psychological forces in the individual.⁹

POSTSCRIPT

Almost a thousand adults were individually studied in the obedience research, and there were many specific conclusions regarding the variables that control obedience and disobedience to authority. Some of these have been discussed briefly in the preceding sections, and more detailed reports will be released subsequently.

There are now some other generalizations I should like to make, which do not derive in any strictly logical fashion from the experiments as carried out, but which, I feel, ought to be made. They are formulations of an intuitive sort that have been forced on me by observation of many subjects responding to the pressures of authority. The assertions represent a painful alteration in my own thinking; and since they were acquired only under the repeated impact of direct observation, I have no illusion that they will be generally accepted by persons who have not had the same experience.

With numbing regularity good people were seen to knuckle under the demands of authority and perform actions that were callous and severe. Men who are in everyday life responsible and decent were seduced by the trappings of authority, by the control of their perceptions, and by the uncritical acceptance of the experimenter's definition of the situation, into performing harsh acts.

What is the limit of such obedience? At many points we attempted to establish a boundary. Cries from the victim were inserted; not good enough. The victim claimed heart trouble; subjects still shocked him on command. The victim pleaded that he be let free, and his answers no longer registered on the signal box; subjects continued to shock him. At the outset we had not conceived that such drastic procedures would be needed to generate disobedience, and each step was added only as the ineffectiveness of the earlier techniques became clear. The final effort to establish a limit was the Touch-Proximity condition. But the very first subject in

9. My thanks to Professor Howard Leventhal of Yale for strengthening the writing in this paragraph.

this condition subdued the victim on command, and proceeded to the highest shock level. A quarter of the subjects in this condition performed similarly.

The results, as seen and felt in the laboratory, are to this author disturbing. They raise the possibility that human nature, or—more specifically—the kind of character produced in American democratic society, cannot be counted on to insulate its citizens from brutality and inhumane treatment at the direction of malevolent authority. A substantial proportion of people do what they are told to do, irrespective of the content of the act and without limitations of conscience, so long as they perceive that the command comes from a legitimate authority. If in this study an anonymous experimenter could successfully command adults to subdue a fifty-year-old man, and force on him painful electric shocks against his protests, one can only wonder what government, with its vastly greater authority and prestige, can command of its subjects. There is, of course, the extremely important question of whether malevolent political institutions could or would arise in American society. The present research contributes nothing to this issue.

In an article titled 'The Dangers of Obedience', Harold J. Laski wrote:

'... civilization means, above all, an unwillingness to inflict unnecessary pain. Within the ambit of that definition, those of us who heedlessly accept the commands of authority cannot yet claim to be civilized men.

'... Our business, if we desire to live a life, not utterly devoid of meaning and significance, is to accept nothing which contradicts our basic experience merely because it comes to us from tradition or convention or authority. It may well be that we shall be wrong; but our self-expression is thwarted at the root unless the certainties we are asked to accept coincide with the certainties we experience. That is why the condition of freedom in any state is always a widespread and consistent skepticism of the canons upon which power insists.'

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BIOGRAPHICAL NOTE

STANLEY MILGRAM conducted cross-national experiments in the Institute for Social Research, Oslo, and the Laboratoire de Psychologie Sociale, Sorbonne, in 1957–59. He spent a year at the Institute for Advanced Study, Princeton, and received a Ph.D. in Social Psychology from Harvard University in 1960. He completed the experiments described here while an assistant professor of psychology at Yale University. Subsequently, he joined the Department of Social Relations faculty at Harvard, where he teaches experimental social psychology.

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