

The Mindlessness of Ostensibly Thoughtful Action: The Role of "Placebic" Information in Interpersonal Interaction

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Three field experiments were conducted to test the hypothesis that complex social behavior that appears to be enacted mindfully instead may be performed without conscious attention to relevant semantics. Subjects in compliance paradigms received communications that either were or were not semantically sensible, were or were not structurally consistent with their previous experience, and did or did not request an effortful response. It was hypothesized that unless the communication occasioned an effortful response or was structurally (rather than semantically) novel, responding that suggests ignorance of relevant information would occur. The predictions were confirmed for both oral and written communications. Social psychological theories that rely on humans actively processing incoming information are questioned in light of these results.

Consider the image of man or woman as a creature who, for the most part, attends to the world about him or her and behaves on the basis of reasonable inference drawn from such attention. The view is flattering, perhaps, but is it an accurate accounting of covert human behavior?

Social psychology is replete with theories that take for granted the "fact" that people think. Consistency theories (cf. Abelson et al., 1968), social comparison theory (Festinger, 1954; Schachter, 1959), and attribution theory (Heider, 1958; Jones et al., 1972; Kelley, 1967), for example, as well as generally accepted explanations for phenomena like bystander (non)intervention (Darley & Latané, 1968), all start out with the underlying assumption that people attend to their

world and derive behavioral strategies based on *current* incoming information. The question raised here is not whether these formulations are correct, nor is it whether people are capable of thoughtful action. Instead, we question how often people outside of the laboratory are actually mindful of the variables that are relevant for the subject and for the experimenter in the laboratory, and by implication, then, how adequate our theories of social psychology really are.

This article questions whether, in fact, behavior is actually accomplished much of the time without paying attention to the substantive details of the "informative" environment. This idea is obviously not new. Discussions of mind/body dualism by philosophers and the consequences that different versions of this relation have on its status as an isomorphic, deterministic, or necessary relationship between the two are part of psychology's heritage. However, the extent of the implications of this idea has not been fully appreciated nor researched. How much behavior can go on without full awareness? Clearly, simple motor acts may be overlearned and performed auto-

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matically, but what about complex social interactions?

The class of behavior of greatest interest here is not that which is commonly understood to be automatic, such as walking or typewriting, but rather that which is commonly assumed to be mindful but may be, in fact, rather automatic. We shall refer to it here as mindless behavior—mindless in the sense that attention is not paid precisely to those substantive elements that are relevant for the successful resolution of the situation. It has all the external earmarks of mindful action, but new information actually is not being processed. Instead, prior scripts, written when similar information really was once new, are stereotypically reenacted. Berne (1964) discussed the idea of *scripts* in a popularized way, and Abelson (1976) rigorously elaborated the concept in generating a computer simulation of belief systems. To Abelson, a script is a “highly stylized sequence of typical events in a well-understood situation, . . . a coherent sequence of events expected by the individual, involving him either as a participant or as an observer.” (p. 33) (See *Author's note*, p. 642.)

The notion of a script was used to describe a study by Langer and Abelson (1972), where it was argued that asking a favor had certain script dimensions and that the success of getting compliance depended on the specific syntax of the request rather than on the specific content of the statement. In that study, the words making up the request were held constant, while the order of the words spoken was varied. The opening words determined which script was followed, and compliance varied accordingly. Similar to the notion of script is Goffman's (1974) concept of *frames*, Harré and Secord's (1973) idea of *episode*, Thorngate's (1976) idea of *caricature*, Miller, Galanter, and Pribram's (1960) notion of *plans*, and Neisser's (1967) concept of *preattentive processing*. Each of these formulations speaks to the individual's ability to abide by the particulars of the situation without mindful reference to those particulars.

However, while Abelson has come closest to delineating the structure of scripts, no one has yet experimentally determined the minimum requirements necessary to invoke a par-

ticular script, nor has scripted behavior really been demonstrated to be mindless. While the former issue is not addressed in the present article, the latter is the article's main concern, and we may shed some light on the requirements for script learning and enactment once the mindlessness of ostensibly thoughtful actions has been demonstrated. This suggests that the essence of a script may not lie in recurring semantics but rather in more general paralinguistic features of the message. When we speak of people *organizing* incoming information, it is as important to take into account what they systematically ignore as it is to take into account what they systematically process. And when we speak of people *ignoring information*, it is important to distinguish between information that is ignored because it is irrelevant and information that is ignored because it is already known. It is known because it has been seen many times in the past, and aspects of its structure that *regularly* appear indicate that this time is just like the last. Thus, what is meant by mindlessness here is this specific ignorance of relevant substance.

This article reports three field experiments undertaken to test the mindlessness of ostensibly thoughtful action in the domains of spoken and written communication. It was hypothesized that when habit is inadequate, thoughtful behavior will result and that this will be the case when either of two conditions is met: (a) when the message transmitted is structurally (rather than semantically) novel or (b) when the interaction requires an effortful response.

Experiment 1

Method

The first experiment was conducted in the context of a compliance paradigm, where people about to use a copying machine were asked to let another person use it first. The study utilized a 3×2 factorial design in which the variables of interest were the type of information presented (request; request plus “placebic” information; request plus real information) and the amount of effort compliance entailed (small or large).

Subjects. The subjects were 120 adults (68 males and 52 females) who used the copying machine at the Graduate Center of the City University of New

York. Each person who approached the machine on the days of the experiment was used as a subject unless there was a line at the machine when the experimenter arrived or a person came to use the machine immediately after a subject had been approached. (There was a minimum wait of 5 minutes between subjects). Half of the experimental sessions were conducted by a female who was blind to the experimental hypotheses, and the remaining sessions were run by a male experimenter who knew the hypotheses.

Procedure. Subjects were randomly assigned into one of the groups described below. The experimenter was seated at a table in the library that permitted a view of the copier. When a subject approached the copier and placed the material to be copied on the machine, the subject was approached by the experimenter just before he or she deposited the money necessary to begin copying. The subject was then asked to let the experimenter use the machine first to copy either 5 or 20 pages. (The number of pages the experimenter had, in combination with the number of pages the subject had, determined whether the request was small or large. If the subject had more pages to copy than the experimenter, the favor was considered small, and if the subject had fewer pages to copy, the favor was taken to be large). The experimenter's request to use the machine was made in one of the following ways:

1. *Request only.* "Excuse me, I have 5 (20) pages. May I use the xerox machine?"

2. *Placebic information.* "Excuse me, I have 5 (20) pages. May I use the xerox machine, because I have to make copies?"

3. *Real information.* "Excuse me, I have 5 (20) pages. May I use the xerox machine, because I'm in a rush?"

Once the request was made and either complied or not complied with, the experimenter returned to the table and counted the number of copies the subject made. The dependent measure was whether subjects complied with the experimenter's request.

If subjects were processing the information communicated by the experimenter, then the rate of compliance should be equivalent for Groups 1 and 2, since the amount of information conveyed is the same for both of these groups, but it might be different for Group 3, since this group received additional information. If, however, subjects are responding to the situation on the basis of a prior script that reads something like "Favor X + Reason Y \rightarrow Comply," then the rate of compliance should be the same for Groups 2 and 3 (placebic and real information) and greater than for Group 1 (request only). It was predicted that the latter result would obtain. Thus, while the information given to Group 2 was redundant in an information

Table 1

Proportion of Subjects Who Agreed to Let the Experimenter Use the Copying Machine

Favor	Reason		
	No info.	Placebic info.	Sufficient info.
Small	.60	.93	.94
<i>n</i>	15	15	16
Big	.24	.24	.42
<i>n</i>	25	25	24

theory sense (Shannon & Weaver, 1949), it was predicted to be necessary, and thus not redundant, in a script sense.

As stated earlier, it was assumed that people would not behave in this pseudothinking way when responding was potentially effortful. Then, there is sufficient motivation for attention to shift from simple physical characteristics of the message to the semantic factors, resulting in processing of current information. Thus, it was predicted that as the favor became more demanding, the placebic-information group would behave more like the request-only group and differently (yielding a lower rate of compliance) from the real-information group.

Results and Discussion

The proportion of subjects who complied in each group was computed, and a $3 \times 2 \times 2$ (Request \times Effort \times Experimenter) analysis of variance was performed using 0 and 1 as scores (complied vs. did not comply). This analysis yielded three main effects: communication, $F(2, 108) = 3.02, p < .05$; effort, $F(1, 108) = 43.40, p < .001$; and experimenter, $F(1, 108) = 6.67, p < .01$. The proportions of subjects who complied with the different requests are presented in Table 1. Not surprisingly, the female experimenter had a higher rate of compliance than the male experimenter, but since there were no interactions between this variable and the others, the data are combined in the table for ease of reading. A contrast analysis using planned, orthogonal comparisons was performed. The contrast analyses that were performed set the small effort/placebic-information group and the small effort/sufficient-information group

as equal to each other but distinct from the small effort/no-information group; the large effort/sufficient-information group was contrasted with the large effort/placebic-information group and the large effort/no-information group. These contrasts reflect the hypothesis that when there was small effort involved, the placebo-information group would be similar to the sufficient-information group but that when effort was large, the placebo-information group would be similar to the no-information condition. It was found that for the small-effort contrast, the means of the placebo- and sufficient-information conditions were virtually identical and significantly different from the no-information condition, $F(1, 114) = 6.35, p < .05$. For the contrast comparing the more effortful favor, the no-information and placebo-information groups were identical and tended to be different from the sufficient-information group, $F(1, 114) = 2.83, .10 < p > .05$.

Also, and not surprisingly, for requests of the same type, small requests result in greater compliance than larger requests.

The results support the hypothesis that an interaction that appears to be mindful, between two people who are strangers to each other and thus have no history that would enable precise prediction of each other's behavior, and in which there are no formal roles to fall back on to replace that history, can, nevertheless, proceed rather automatically. If a reason was presented to the subject, he or she was more likely to comply than if no reason was presented, even if the reason conveyed no information. Once compliance with the request required a modicum of effort on the subject's part, thoughtful responding seemed to take the place of mindlessness, and the reason now seemed to matter. Under these circumstances, subjects were more likely to comply with the request based on the adequacy of the reason presented.

Experiment 2

The next two experiments attempted to extend the results of Experiment 1 to the domain of written communications, since it is our contention that pseudothinking behavior is more the rule than the exception for prac-

tically all verbal behavior as well as nonverbal behavior. The more one participates in any activity, the more likely it is that scriptlike qualities will emerge. Through repeated exposure to a situation and its variations, the individual learns to ignore and remain ignorant of the peculiar semantics of the situation. Rather, one pays attention to the scripted cue points that invite participation by the individual in regular ways.

In Experiments 2 and 3, we sought to engage subjects in an activity that would have for them scripted qualities. Specifically, the activity we chose involved receiving and responding to letters and memoranda that were sent through either the U.S. Mail or inter-office mail, depending on the study. As in Experiment 1, it was assumed that ostensibly thoughtful action would proceed mindlessly as long as the structure of the activity involved remained consistent with its scripted character.

Following this assumption, we expected that individuals who received mail that asked for a response would return what was requested if the communication was structurally phrased so as to follow the commonly expected script for mail. The return of the response would serve as evidence of the fact that the person had read the material and engaged in the activity of correspondence through the mail. If the communications to the subject were semantically senseless and yet fulfilled the script requirements for written communication, we could safely assume that the return of the mail signified that we had engaged the subject in mindless behavior—that he or she had not “thought about” the material but had returned it merely because it satisfied the structural requisites for a habitual behavior. To make the case more strongly, we sent to the subjects communications that were equally senseless semantically but which varied in their adherence to the structural requirements of communications. If the responses varied directly with the adherence to structural consistency expected in communications, we could infer that the behavior that led to the subjects' returns was of a scripted character—entirely habitual, despite the fact that, on the face of it, if we observed the behavior we

would assume it was thoughtfully processed in character.

In Experiment 2, subjects were mailed a meaningless, five-item questionnaire. The cover letter either demanded or requested the return of the questionnaire and was either signed (e.g., "Thank you for your help, George L. Lewis") or unsigned. It was assumed that signed requests and unsigned demands were more congruent with the structure of most written communications than unsigned requests and signed demands and therefore would be more conducive to sustaining mindless behavior. The cover letter had no letterhead and could not possibly, with thought, be construed as representing a legitimate authority. Therefore, "thoughtful" processing of the cover letter would not uncover any rational reasons for returning the questionnaire.

In order to test whether habitual responding was taking place, rather than merely polite compliance, two groups of subjects were selected who were assumed to vary in their experience with written communications. It was predicted that the more experienced subjects (who were also the more educated subjects) would be more likely to return the questionnaire when the structure of the request/demand was consistent with their past than the less experienced subjects, for whom congruency was not expected to matter.

Method

Subjects. Forty subjects were selected randomly from the Manhattan telephone directory and constituted the random-status group. Another 40 subjects were chosen randomly from the "Physicians" section of the Manhattan Yellow Pages and constituted the high-status group.

Procedure. Each subject received a questionnaire in the U.S. Mail consisting of the five following questions:

1. The subway or bus is the more enjoyable mode of public transportation?
2. Movies or plays are the more enjoyable form of public entertainment?
3. Libraries or parks are the more enjoyable form of free public entertainment?
4. Forests or playgrounds are the more enjoyable public places to spend time?
5. Cash or credit cards is the more efficient form of public exchange of goods?

All subjects received the questionnaire at their residence. Along with the questionnaire, the subjects

Table 2
Proportion of Subjects Who Returned the Questionnaire

Condition	Status	
	High	Random
Congruent	.55	.20
<i>n</i>	20	20
Incongruent	.32	.37
<i>n</i>	19	19

received a stamped envelope addressed to a post office box, as well as a cover sheet that varied in one of the following four ways:

1. *Congruent conditions.* (a) *Request/personal*—"I would appreciate it if you would fill out the attached questionnaire and return it in the enclosed envelope to me by September 10. Thank you for your help, George L. Lewis." (b) *Demand/personal*—"The attached questionnaire is to be filled out and returned by September 10."

2. *Incongruent conditions.* (a) *Request/impersonal*—"I would appreciate it if you would fill out the attached questionnaire and return it in the enclosed envelope to me by September 10." (b) *Demand/personal*—"The attached questionnaire is to be filled out and returned in the enclosed envelope by September 10. Thank you for your help, George L. Lewis."

Thus, the study was a 2 (random vs. high status) \times 2 (request vs. demand) \times 2 (personal vs. impersonal) factorial design. Again, it was predicted that high-status subjects who received congruent communications would be more likely to comply than the other groups.

Results and Discussion

Table 2 presents the proportion of subjects who returned the questionnaire, by congruence and status.¹ An analysis of variance was performed using 0 and 1 scores. Although there were no main effects, a contrast that set the high-status congruent group as different from the remaining groups, which in turn were equal to each other, was significant at $p < .05$, $F(1, 74) = 5.91$. The congruent and incongruent cells of Table 2 are broken down for examination in Table 3. The analyses of variance of these data were not significant. However, there was a trend for a three-way interaction, $F(1, 70) = 3.48$, $p < .08$, which indicates again that the congruency effect

¹ Two of the original letters were returned with the notice that the addressee no longer lived at the address. Hence, there were 78 subjects in the study.

Table 3
Proportion of Subjects Who Returned the Questionnaire

Condition	High status		Random status	
	Personal	Impersonal	Personal	Impersonal
Demand	.33	.40	.44	.20
<i>n</i>	9	10	9	10
Request	.70	.30	.20	.30
<i>n</i>	10	10	10	10

tends to be modified by status. It appears that our notion of what is congruent was correct only for people like ourselves, who have had an abundance of certain kinds of written communications and not others. That is, instead of there being a general script for written communications, there are probably several scripts peculiar to individuals in their relation to social institutions. In fact, on second thought, it seems that communiqués sent from employer to employee, or from manager to office worker (the latter two probably comprised much of the random-status group), would more than likely be either of the demand/personal or request/impersonal sort, since these forms allow the sender to maintain his or her status while still observing a modicum of civility.

Experiment 3 was undertaken to test again, more rigorously, the mindlessness of ostensibly thoughtful actions in regard to written communications. However, for this study, the script was first determined empirically and then tested.

Experiment 3

Method

Eighty-three memoranda were collected from the wastepaper baskets of 20 secretaries of various departments at the Graduate Center of the City University of New York. Sixty-eight percent of these had the request/impersonal form described earlier. While varying in content, each of these communications requested rather than demanded that the secretary do something (e.g., "Please make 20 copies of this"), and none were signed at the bottom of the request. Thus, for this group of people, the communication most congruent with their experience would be request/impersonal. Even though in these instances the receiver in all likelihood knew who the sender was, this kind of communication is still con-

sidered impersonal, since it stands in contrast to those communications where the sender also is known but where the memo is signed just the same. The distinction between signed and unsigned memos is being drawn, in spite of the fact that in both cases the sender is known, because small structural differences of this kind are predicted to either cue in a script or not, depending upon one's past experience. The remaining 32% of the memos were virtually equally distributed among the other categories. With this in mind, 40 secretaries at the Graduate Center were sent, through interoffice mail, a senseless memorandum that was either congruent with their experience or incongruent. In order to allow for comparisons with Experiment 2, the same four forms of written communication that were used previously were randomly sent to these subjects. However, now there were one congruent form (request/impersonal) and three incongruent forms (request/personal, demand/personal, demand/impersonal):

Request. "I would appreciate it if you would return this paper immediately to Room 238 through interoffice mail."

Demand. "This paper is to be returned immediately to Room 238 through interoffice mail."

Half of each of these messages were signed ("Sincerely, John Lewis"), and half were unsigned and merely had a number (R374021-A) at the bottom of the message.

Nothing more was written on the memo. Subjects were simply asked to return a piece of paper that asked them only to return that paper to Room 238. The designated room did not exist in the building. The mailroom attendants put the returned letters aside for us.

Thus, the study utilized a 2 (request vs. demand) \times 2 (personal vs. impersonal) factorial design, with 10 subjects in each cell.

Results and Discussion

Table 4 presents the proportion of subjects who returned the letters as a function of the various conditions. To test the hypothesis that mindless behavior will result when script requirements are met, the proportions of subjects who returned the memo in the congruent condition (.90) and the incongruent conditions (.60) were compared. Using 0 and 1 scores, the analysis showed them to be significantly different from each other, $t(38) = 1.78$, $p < .05$. It should be noted that what we are calling congruent was determined by sampling a fraction of the secretaries' past experience with written communications. Sixty-eight percent of the memos fell into the request/impersonal condition. Quite possibly, if we had mapped out first what was congruent for each secretary and then sent the appropriately structured-for-congruence memo

to her or him, the compliance might have reached 100%.

Experiments 2 and 3 provide support for the mindlessness hypothesis in regard to written communications. It would seem that thoughtful processing of the information communicated to these subjects would have resulted in a nonresponse from them. Nevertheless, when the script was congruent with subjects' experience, 55% of the physicians and 90% of the secretaries complied with the meaningless communication.

Conclusions

These studies taken together support the contention that when the structure of a communication, be it oral or written, semantically sound or senseless, is congruent with one's past experience, it may occasion behavior mindless of relevant details. Clearly, some information from the situation must be processed in order for a script to be cued. However, what is being suggested here is that only a minimal amount of structural information may be attended to and that this information may not be the most useful part of the information available. While the authors do in fact believe that people very often negotiate their interpersonal environments mindlessly, studies like these may simply demonstrate that subjects are not thinking about what one thinks they are thinking about (i.e., what is relevant), rather than demonstrating that their minds are relatively blank. If we knew all of the things subjects could be thinking about, we could use the present experimental paradigm to at least test this alternative. However, since there are an infinite number of thoughts subjects may be thinking, this strong hypothesis will have to remain at the level of conjecture until other experimental methods are devised. The difficulty of inventing such a methodology should not preclude efforts in that direction, since if mindlessness is the rule rather than the exception, many of the findings in social psychology would have to be reformulated (see Langer, 1978, for a more detailed discussion of this point).

While these studies may be open to alternative interpretations, they suggest that per-

Table 4
Proportion of Subjects Who Returned the Memo

Condition	Memo type	
	Personal	Impersonal
Demand	.60	.50
Request	.70	.90

Note. $n = 10/\text{cell}$.

haps there has been misdirected emphasis on people as rational information processors. Instead of viewing people as either rational or irrational, it would seem wise to at least consider the possibility that their behavior may be arational and yet in some way systematic. These studies then raise questions about the inferential processes traditionally assumed by cognitive social psychology. This has been alluded to by Bem (1972) and more recently by Dweck and Gilliard (1975). It may not be that a person weighs information and then proceeds but that he or she more often just proceeds on the basis of structural cues that occasion further *regular* participation in the interaction. To the extent that this script domination is typical of daily interaction, corrections must be made in our accounts of how individuals behave.

When does this mindless activity take place? If the interpretation offered for these studies is correct, then it would suggest that the occurrence may not be infrequent nor restricted to overlearned motoric behavior like typewriting. Instead, if complex verbal interactions can be overlearned, mindlessness may indeed be the most common mode of social interaction. While such mindlessness may at times be troublesome, this degree of selective attention, of tuning the external world out, may be an achievement (cf. Langer, 1978) and perhaps should be studied as such. At least it would seem that both the advantages and disadvantages should be investigated, as the boundaries of the phenomenon are delimited. At present, however, we may be in the uncomfortable position of overgeneralizing our laboratory findings for reasons not yet mentioned by laboratory-research critics. Once an individual is brought into the laboratory he or she is likely to be self-conscious.

This self-consciousness may be thought provoking and habit inhibiting. Thus, we may be left with the situation where we are studying the responses of thinking subjects and then generalizing to successfully nonthinking people.

Author's note. Since the Langer and Abelson (1972) paper was published, there have been diverging uses of the term *script* which did not become apparent until after this manuscript was prepared. The clarification of the present distinction lies in the degree of active information processing implied by the word *script*. Abelson's use of the term *script* seems to allow a range of cognitive activity. In our formulation, the use of *script* signifies only relative cognitive inactivity. To avoid confusion, the word *script* as it appears in this article should be read as "mindlessness."

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