





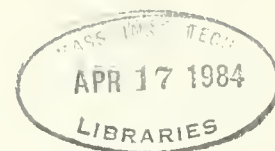




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CRIME PERCEPTIONS IN A NATURAL  
SETTING BY EXPERT AND NOVICE SHOPLIFTERS<sup>1</sup>

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March 1984

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## Abstract

Deterrence theories rest on assumptions of how criminals think about crime opportunities. We studied the thought processes of seventeen expert shoplifters and seventeen novices during consideration of actual crime opportunities. Subjects individually walked through retail stores with instructions to "think aloud." One-half of each subject type was additionally instructed to form an intention to shoplift during their "shopping trip." The verbal protocols were taperecorded, transcribed, and coded. Expert shoplifters were more strategic, efficient and schematic than nonshoplifters in their shoplifting considerations. Deterrents to shoplifting for novices included fear, guilt and the possibility of being caught. Experts were deterred by strategic difficulties, e.g., size of the item. Experts tended to treat deterrents such as store personnel and security devices as obstacles they could overcome, whereas novices decided against shoplifting in the presence of any deterrent.



Crime Perceptions In a Natural Setting  
by Expert and Novice Shoplifters

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Assumptions about how potential criminals assess crime opportunities underly crime control strategies (Henschel & Carey, 1975). Attempts to deter crime rely on an increase in either the severity of penalties or the certainty of their imposition to reduce crime by those directly sanctioned (special deterrence) and by the threat posed to the population at large (general deterrence) (Blumstein, Cohen, & Nagin, 1978).

The deterrence strategy for crime control is consistent with economists' view of crime as a rational act resulting when individuals evaluate the expected utility of both criminal and noncriminal opportunities, and then choose the alternative with the highest utility (e.g., Becker, 1968). If a crime has a higher utility than not committing the crime, i.e., an acceptable risk of being caught and a desirable amount to gain, then the individual should decide in favor of committing the crime.

An alternative to the rational view of criminal behavior proposed by economists has been offered by Carroll (1978, 1982). Drawing upon information-processing approaches to decision making (Ebbesen, Parker, & Konecni, 1977; Newell & Simon, 1972; Payne, Braunstein, & Carroll, 1978), Carroll suggests that the rationality of judgments about criminal opportunities is severely limited (see also Cook, 1981). In essence, potential criminals make "reasoned" judgments but would not be expected to combine information about crime opportunities according to the "rational" expected utility rule. Consistent with this view, research that manipulated

the amount of gain, likelihood of gain, severity of punishment and likelihood of punishment in hypothetical crime situations found that subjects but do not combine these variables into the interaction terms representing expected risks and payoffs that are necessary for computing expected utility (Carroll, 1978; Feldman, 1977; Krauss, Robinson, Janzen, & Cauther, 1972; Rettig, 1964; Rettig & Rawson, 1963; Stefanowicz & Hannum, 1971). Nor do potential criminals acquire the information about crime (the certainty and severity of objective sanctions) implied by rational models. For example, the Assembly Committee on Criminal Procedure (1975) studied knowledge of criminal penalties and concluded, "It appears that knowledge of penalties can not act as deterrents since these are unknown until after a person has committed a crime or become a prisoner" (p. 78).

If potential criminals are not acquiring and evaluating information in the ways posed by deterrence and economic theories, it suggests that many deterrence strategies will be ineffective. The evidence regarding deterrence strategies is inconsistent and incomplete (Blumstein et al., 1978; Cook, 1981). The study of criminal thought processes may suggest new approaches to deterrence and identify what aspects of deterrence strategies have the most impact on potential criminals.

#### Risk Perceptions as Expertise

Interviews with experienced criminals suggest that risks are seen as controllable aspects of the environment (Inciardi, 1975; Letkemann, 1973). Criminals tend to perceive themselves as more immune from arrest than do noncriminals and, among criminals, those who commit more crimes perceive a lesser certainty of punishment (Claster, 1967; Henshel & Carey, 1975; Kraut, 1976; Teevan, 1975; Waldo & Chiricos, 1972). In short, experienced criminals may not know the legal sanctions but they know how to avoid getting caught.

As expressed by Henshel & Carey, 1975; p. 57), "deterrence, when and if it exists, is a state of mind." It is the perception of sanctions rather than the sanctions themselves that leads to deterrence (Anderson, 1979; Pasternoster, Saltzman, Waldo & Chiricos, 1982). Criminals may therefore be considered as "experts" who assess situations in order to adjust their behavior so as to minimize risks.

This view of criminals as experts in their "field" suggests that, in comparison to noncriminal novices, criminals are able to analyze crime opportunities faster and better, because they utilize past knowledge organized systematically and strategically (Adelson, 1981; Chase & Simon, 1973; Johnson, Note 1; Larkin, McDermott, Simon & Simon, 1980; Simon & Simon, 1980). We would expect that experienced criminals will perceive crime opportunities using a large set of perceptual patterns that serve to index not only factual knowledge, but also information about strategies and actions (cf., Larkin et al., 1980). As a result, novices may respond only to obvious crime opportunities and spend considerable time thinking them over since each opportunity is novel. Experienced criminals should more actively and rapidly search out and develop crime opportunities (Cook, 1981).

#### An Approach to Studying Risk Perception and Judgments in a Natural Setting

In order to study the thought processes involved in criminal behavior, the most valid approach would require actual criminals, considerations of actual crime opportunities, and a method for measuring perceptions and judgments. In order to achieve a uniform and practical real-life crime situation with actual criminals, we selected the crime of shoplifting. Shoplifting is frequent, non-violent, public and observable, as well as a serious concern.

It has been estimated that between 2% and 8% of customers engage in shoplifting (Aster, 1970; Barmash, 1971; Rosenbaum, Baumer, Bickman, Kudel, Carroll & Perkowitz, 1980; Shave, 1978). Faria (1977) estimates that retail store theft accounts for 25% of all dollar crime loss in the United States, and shoplifting accounts for about one-half of that amount (Shave, 1978).

Little systematic data exists regarding the specific cues potential shoplifters use when making judgments about crime opportunities in a store setting. Although Kraut (1976) found that respondents who shoplifted the most saw the least risk associated with shoplifting, there is no indication of how risk is assessed. The methods that have been used to study shoplifting, e.g., interviews, may provide inadequate and/or biased information because they collect opinions about past thought processes in response to questions by an interviewer (Ericsson & Simon, 1980; Nisbett & Wilson, 1977; Orne, 1972). A more valid method for obtaining a detailed portrayal of ongoing mental operations in naturalistic settings is the collection of verbal protocols (Ericsson & Simon, 1980; Newell & Simon, 1972; Payne et al., 1978), a procedure in which subjects provide continuous verbal reports by "thinking aloud" about their perceptions, thoughts and feelings while performing the behavior of interest. Verbal protocols have been used in both laboratory settings (e.g., Ericsson & Simon, 1980; Payne et al., 1978), and in such real world settings as stock portfolio selection (Clarkson, 1962), consumer behavior (Payne & Ragsdale, 1978), and medical diagnosis (Johnson et al., 1982).

Thus, the basic approach of this research is to investigate shoplifter thought processes using the verbal protocol methodology in real-life shopping situations. Examination of thought processes will reveal shoplifters' perceptions about items, people and security devices, and how these



characteristics are evaluated and combined. Additionally, a comparison of expert shoplifters and novices will provide insight into the knowledge of crime opportunities and strategies developed through experience. We hypothesize that experts are faster and more strategic than novices and that they are deterred less by the risk of being caught. The rich source of data provided in this study will enhance our understanding of criminal behavior in a manner that clarifies the deterrence process and thereby increases our capacity to deter crime.

## METHOD

### Design

The study was designed as a 2 x 2 factorial experiment using as factors: (a) shoplifting expertise (novice vs. expert shoplifter) and (b) instructional condition (shopping vs. shoplift intention). A subject was considered an expert shoplifter if he/she had shoplifted either: a) 20 times or more ever, or b) 5 times in the past year, or c) 10 times ever and at least once in the past year. Subjects who did not meet any of these qualifications were considered novices. Subjects were randomly assigned to either the shopping or the shoplift intention condition. Those in the shopping condition were simply asked to go on a shopping trip. Subjects in the shoplift intention condition were additionally asked to form an intention to shoplift sometime during their shopping trip. This manipulation was incorporated to simulate situations in which shoplifting would be planned rather than precipitated by being in the store.

## Subjects

Subjects were recruited from the Chicago area through newspaper advertisements asking for paid volunteers, both nonshoplifters and shoplifters, to participate in a study of shoplifting. Anonymous self-reports of shoplifting activity were solicited from persons responding by telephone. Respondents were offered \$8.00 plus travel reimbursement to participate in the study. All 31 available experts were asked to participate, and a sample of 28 novices were contacted. Some subjects declined or failed to report for the study.

From the pool of volunteers, 17 novices and 17 expert shoplifters actually participated. The expert shoplifters claim to have shoplifted a median of 100 times in their lives and at least 10 times in the past year. The median novice had not shoplifted at all. There were 20 males and 14 females in the sample. Subjects did not differ in gender across shoplifting expertise, or condition,  $F$ 's 1.0. The mean age was 27.2 years with a range from 18 to 62 years. Age differed neither across expertise nor condition,  $F$ 's 1.0.

## Procedure

Subjects were met by an experimenter of the same gender. Six graduate students (three male, three female) served as experimenters. Subjects were first given practice in the verbal protocol procedure using a booklet of store advertisements. They were asked to "think aloud" regarding what they saw, read, thought about, and thought of doing as they looked at the ads. Instructions were also given on how to use the tape recorders, which were micro-cassette SONY recorders with lapel microphones.

Following this practice session, subjects were asked to take the experimenter on a shopping trip, preferably to a store or stores in which they



normally shopped. Upon arriving at the store, subjects were reminded of the "think aloud" procedure. In addition, 10 expert shoplifters and 8 novices (randomly chosen) were asked to form an intention to shoplift, but were cautioned not to actually remove anything without paying for it. The tape recorder was concealed in the subject's clothing. Subjects were allowed to walk through the stores for as long as they wished, which was usually about one hour. Neutral prompts from a prepared list were given to subjects when pauses between verbalizations were too long (e.g., "Say what you are thinking now").

As subjects walked through stores, the experimenter coded each department visited on a number of characteristics. These characteristics included security devices (e.g., mirrors, cameras), store layout (e.g., height of aisles), item characteristics (e.g., locked cases, chained items), and people (e.g., number of salesclerks). At the completion of the experiment the subject was debriefed, paid for his/her participation, and reimbursed for any travel expenses incurred.

## RESULTS

### Protocol Coding

Subjects' protocols were first broken down into short phrases, each consisting of a single idea or thought (Newell & Simon, 1972; Payne et al., 1978). The intercoder reliabilities for pairs of coders were between 81% and 91%.<sup>2</sup> A content coding scheme was developed to categorize these phrases, resulting in four major categories: perceptual, motivational, judgmental, and extraneous. Perceptual subcategories consisted of comments about people (store personnel, security guards and shoppers), physical security (store layout and security devices), and item characteristics (name, size, and

price). For example, the phrase "They have a couple of mirrors in the back" was coded as a perceptual statement about security devices. Motivational subcategories consisted of the subjects' examination of, need for, or attraction to the item, e.g., "I like that shirt." Assessments of risk, shoplifting methods, the feasibility of taking an item, and decisions to take or not take an item were considered judgmental statements. An example of a risk statement was, "Sometimes I wonder about the consequences of what would happen to me if I got caught" (see Table 1 for a complete list of categories). Extraneous phrases, consisting of 21% of all statements, were dropped from all subsequent analyses. Intercode reliabilities for all categories were over 80%.

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INSERT TABLE 1 ABOUT HERE  
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In addition to the content coding, coders also provided two other codes for statements related to shoplifting. First, coders identified shoplifting thought sequences by bracketing relevant sequences of statements. Second, statements were evaluated as to whether they related to the store, department, or item level. Discrepancies in protocol breakdown and coding were resolved by the first author.

The results of this study are organized into the following areas: (a) content of shoplifting statements, (b) strategies for evaluating crime opportunities, and (c) environmental influences on shoplifting thoughts.

#### Content of Shoplifting Statements

Protocols (deleting extraneous statements) ranged in length from 64 to 945 statements. There were no differences across expertise or condition,  $\chi^2(3) = 1.0,^3$  suggesting that the amount of verbalization was not biased by the manipulations of this study.

Initial comparisons of expert and novice<sup>4</sup> shoplifting considerations yielded predictable results. Expert shoplifters devoted a median of 40.8% of their protocols to shoplifting, significantly more than the median of 1.1% by novices,  $\chi^2(3)=11.12$ ,  $p .05$ . They also considered a larger number of items to shoplift than did novices,  $\chi^2(3)=9.89$ ,  $p .05$ . Shoplifters considered a median of 7 items whereas novices considered a median of 2 items (see Table 2). More interestingly, novices in the shoplift condition had a median of 11.25 statements for each shoplifting consideration, twice as many as the median of 5.66 statements made by the experts,  $\chi^2(2)=7.96$ ,  $p .05$ . Expert shoplifters made more rapid, i.e., shorter, evaluations of shoplifting considerations than did novices.

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INSERT TABLE 2 ABOUT HERE  
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The content of shoplifting statements was examined separately within perceptual, motivational and judgmental categories. The number of statements of each type differed by expertise,  $\chi^2(2)=30.74$ ;  $p .01$ . Experts made proportionately more perceptual statements than did novices (32% vs. 11%), whereas novices had a greater proportion of motivational statements than did experts (33% vs. 21%). Perceptual statements, which reflect the salient features of shoplifting opportunities, did not differ across subcategories by expertise,  $\chi^2(4)=2.26$ , ns. 45% of all perceptual statements were directed toward the item, e.g., size, name, color. Approximately 35% of perceptual statements dealt with store security and layout, and the remaining 20% of statements were perceptions of people. Experts also tended to name the items they examined more often than did novices (42% of items vs. 33%, respectively;  $\chi^2(2)=5.64$ ,  $p .07$ ).

Motivational statements were examined to determine whether experts and novices were differentially motivated to shoplift. The difference was not significant,  $X^2(6)=.20$ , ns. Both experts and novices were motivated by either an attraction to the item (62%) or a need/use for the item (21%).

Finally, to determine what types of judgments and decisions subjects made on the basis of their perceptions of the situation, judgmental statements were examined. These statements exhibited strong differences,  $X^2(8)=51.68$ ,  $p .01$ . However, these differences were due to instructional conditions (experts in shop vs. shoplift  $X^2(4)=46.03$ ,  $p .01$ ), rather than to expertise (experts vs. novices in shoplift conditions,  $X^2(4)=6.4$ , n.s). Experts in the shop condition considered the feasibility of shoplifting over twice as often as did experts in the shoplift condition (44% and 20%, respectively). Conversely, experts in the shoplift condition considered risks approximately twice as often as the remaining experts (23% and 12%). Finally, experts asked to consider shoplifting made more decisions to take or not take an item than experts in the shop condition (21% and 13%).

### Strategies for Evaluating Crime Opportunities

Evaluations of crime opportunities were assessed by examining hierarchical processing and subjects' perceptions of deterrents. Shoplifting thoughts were usually directed at either the store, a department within a store (e.g., shoe department), or a particular item. Levels of shoplifting thoughts were inspected to determine whether any hierarchical processing occurred, i.e., whether subjects mentioned characteristics of the store, then the department, and lastly, a specific item, in sequence. Nonshoplifters made a total of only 7 statements specifically directed at either the store or department. As a result there was no evidence of hierarchical processing. Experts did direct their thoughts to the department and store, and there was evidence supporting

hierarchical thought processing of shoplifting considerations. Experts first assessed the feasibility of shoplifting in the store or department<sup>5</sup> and then considered specific items within the store or department. Sixty-six percent (n=82) of the items considered by experts were preceded closely by an assessment of either the store or department. Often, more than one item was considered within a specific hierarchical assessment.

Experts' specific thoughts were examined at both the department and store levels to determine whether the processing of information differed by instructional condition. Experts did not differ in either the number ( $\chi^2(1) = 1.0$ ), or type, ( $\chi^2(2) = 3.20$ , n.s.) of statements made at the store and department levels. At the store level, experts usually made reference to security devices (29% of total store level shoplifting statements) and to the risks involved (17%) when shoplifting in a particular store. Statements made at the department level were predominately judgments involving feasibility, risks, and strategy for shoplifting (46% of department statements were judgment statements). Although these findings are tentative, the overall picture suggests that shoplifters assess stores for the feasibility of shoplifting prior to considering specific items.

In addition to hierarchical processing, subjects often mentioned what would and would not deter them from deciding to take an item. Deterrents included security devices, item inaccessibility (e.g., too large), the possibility of being observed and caught, and negative feelings such as guilt. The lack of these deterrents, as well as store layout conducive to shoplifting, e.g., high counters, were considered facilitators to



shoplifting. There was a significant difference across condition in what were mentioned as deterrents,  $\chi^2(10)=24.61$ ,  $p < .01$ ; these differences were due to expertise  $\chi^2(5)=16.41$ ,  $p < .01$ . Experts considered security devices (32%) and item inaccessibility (38%) as primary deterrents to shoplifting. The primary deterrents for novices were the possibility of being observed (39%) and their feelings of guilt and fear (13%) (see Table 3).

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Subjects appeared to have strategies for deciding whether or not to shoplift<sup>6</sup> that differed between experts and novices. Novices always mentioned one facilitator but no deterrents when they decided to take an item (N=6). However, when they decided not to take an item (N=5), they always mentioned at least one deterrent along with facilitators. Thus, one deterrent was sufficient to stop nonshoplifters from taking an item regardless of the number of facilitating factors present. The following excerpt from a nonshoplifter serves to illustrate this strategy:

This would be the kind of place. There's no cameras that you can see, doesn't look like there's any 2-way mirrors. There's too many people to handle. The only thing that would stop me probably is that it just doesn't seem like it's worth the risk to put something that only costs a dollar in your pocket. On the other hand, if it was really expensive, it wouldn't be worth the risk 'cause you could get in real trouble.

Novices decided in favor of taking an item only if no perceived deterrents were present. Their rule was: "If a deterrent is present, do not take the item."

Experts relied on a different rule. They considered both deterrents and facilitators before making a decision to either take (N=72) or not take (N=63) an item. The mention of a deterrent was often followed by mention of a

facilitator. In effect, experts discounted deterrents (e.g., mirrors, salesclerk) by talking about how to get around them. The following excerpt illustrates this strategy:

Belts, leather. It's got denim running through it, yeah. Once again I would say if there would be any attempt I think something like this would be sufficient, and probably relatively simple to do. It's only a saleslady around, and she's not paying that much attention anyhow.

The rule for experts involved balancing deterrents and facilitators; if the deterrents could be discounted or balanced by facilitators, experts made the decision to shoplift.

Another interesting finding was that expert shoplifters often talked about possible strategies for shoplifting, divorced from the consideration of specific items. Five of the seven experts (71%) in the shop condition and 50% (5 out of 10) of the experts in the shoplift condition disclosed strategies they have used in the past or might use in the future for shoplifting. Novices made no mention of shoplifting strategies outside the context of considering a specific item.

Strategy statements usually consisted of a set of shoplifting methods to use in certain contexts, or strategies that tend not to work. The following example suggests a strategy not to use:

I, ah, you know, I back away from bagging things.  
That's real obvious. That's real familiar. You know security is very familiar with that technique. You're roaming through the store with a bag, you're going to be watched.

### Environmental Influences on Shoplifting Thoughts

A final set of analyses was designed to examine what features of the store environment influence shoplifting thoughts. Characteristics of each store

including the number of mirrors and cameras, and height of aisles, were recorded by experimenters and converted into a shoplifting feasibility score. The numbers of salesclerks and shoppers present, and the presence or absence of security personnel were recorded. A visibility index was used to indicate what percent of the time the subject was visible to others (1=visible 80-100% of the time to 5=visible 20% or less). Additional predictor variables included store type, time of day, and the age, gender and shoplifting experience of the subject. Three indices of shoplifting activity were identified: (1) the number of items considered for shoplifting; (2) the proportion of thoughts devoted to shoplifting; and (3) the final decision to shoplift. A series of multiple regressions were computed using store and subject characteristics to predict indices of shoplifting activity.

The only significant predictor of the number of items a subject considered for shoplifting was the type of store, accounting for 25% of the variance,  $F(2,59)=9.86$ ,  $p .011$ . The number of items considered in department and drug stores ( $X=2.59$ ) was greater than the number considered in grocery and other stores ( $X=0.93$ ). This was also true when only expert shoplifters were examined,  $F(2,34)=7.09$ ,  $p .001$ . Experts considered a mean of 3.24 items in department and drug stores and a mean of 0.68 items in grocery and other stores.

The proportion of thoughts devoted to shoplifting was best predicted by gender, the visibility of salesclerks, past shoplifting experience, age and time of day. These accounted for 51% of the variance,  $F(5,56)=11.82$ ,  $p .051$ . Males devoted more of their protocols to shoplifting than females (36% vs. 4%); the proportion of protocol devoted to shoplifting decreased as salesclerk visibility increased; and the more experienced the subject was, the more he/she mentioned shoplifting. Younger subjects and those run in the evening thought more about shoplifting. Similar results were found when only experts



were examined,  $F(2,35)=10.53$ ,  $p .011$ . Salesclerk visibility and gender accounted for 38% of the variance among experts.

Finally, the best determinants of the proportion of items subjects decided to take was store type, accounting for 19% of the variance,  $F(1,60)=13.67$ ,  $p .0011$ . Subjects decided to take a higher proportion of items in department stores than all other stores ( $X=0.61$  and  $0.28$ , respectively). Similarly, experts decided to take items more often in both department and drug stores than in other stores ( $X=0.51$  vs.  $0.13$ ). Store type accounted for 31% of the variance among experts ( $F[2,35]=8.03$ ,  $p .01$ ).

## DISCUSSION

The major purpose of this research was to provide a detailed portrayal of expert criminal thought processes and decision making in a naturalistic situation. This was accomplished through the analysis of shoplifting evaluations made in retail stores. Verbal protocols generated by expert and novice shoplifters furnished information about which features of the situation are salient, which features serve as deterrents to shoplifting, and how individuals make evaluations of crime opportunities. The discussion will concentrate on three major areas: the evaluation of potential crime opportunities, deterrence, and the validity of this study.

### Evaluation of Potential Crime Opportunities

The content of subjects' shoplifting considerations suggests that crime perceptions were made on the basis of a few salient dimensions. Both experts and novices based their evaluations on simplified versions of situations as was suggested by the reasoning model of criminal behavior (Carroll, 1978). Salient features included item characteristics, (e.g., size), store security,

layout, and people. Usually one or two of these characteristics were taken into account in a shoplifting consideration. Motivated by either attraction to or need for an item, subjects made an assessment of risks and then made a decision to take or not take the item based on their assessment. Neither experts nor novices made a thorough assessment of the potential risks involved, but rather focused on very salient aspects.

Experts and novices differed in what was considered an effective deterrent. Perceptions of the likelihood of sanctions, i.e., being observed and caught, were the strongest influences on novices' thoughts. The perception of a single deterrent was sufficient to prohibit shoplifting. Apparently, some type of deterrent effect is operating for novices. Experts, on the other hand, were deterred by strategy-specific problems such as item size, security devices, and the chance of being observed. These deterrents are proximal to the crime opportunity. Few experts considered distal consequences of shoplifting--arrest, trial, fines, jail. These findings are consistent with the literature on crime perceptions (e.g., Claster, 1967; Kraut, 1976; Waldo & Chiricos, 1972). Furthermore, the experts relied on a rule in which they attempted to balance out deterrents with facilitators or simply discounted them in planning their strategies. These findings, along with previous research, suggest that experts perceive the risks of being detected and caught as under their own control because they can rely on their expertise to avoid detection. Their expertise enables them to shoplift with minimal risk.

Environmental influences also dictated subjects' thoughts. The more visible sales personnel were, the less frequently shoplifting thoughts were verbalized. Store personnel are dynamic and can change their behavior to interfere with shoplifters' strategies. Indeed, sales personnel are considered effective deterrents of shoplifting behavior that stores can

control (e.g., Bickman et al., 1979). Other deterrents such as mirrors, cameras, and store layout are static; shoplifters can adjust their strategies to overcome them.

The results provide a fairly clear indication that expert shoplifters not only verbalize more shoplifting thoughts than do novices, but also think differently when evaluating a shoplifting opportunity. Experts were much more efficient in their strategies, making rapid and orderly evaluations of items for shoplifting. They averaged fewer than six statements per consideration. Novices had a difficult time making a decision. The efficiency of these experts and novices is consistent with research showing that even when experts and novices use similar decision rules, experts are faster (Johnson, note 1).

The higher-level sophistication of experts' strategies in comparison to those of novices is seen in their tendency to assess the department and store for the feasibility of shoplifting prior to examining specific items. Shoplifters focused attention on the evidence of security devices, the physical layout of the store, and the number of people present. They also mentioned shoplifting strategies independent of specific item consideration. Indeed, expert shoplifters told only to shop made many statements about the feasibility of taking items in the store, although they did not focus as directly upon shoplifting as did those experts told to form an intention to shoplift. The latter group made more statements about tactics, risks, and decisions to take or not take an item. Thus, shoplifting appears to be frequently on the minds of experienced shoplifters. In contrast, nonshoplifters rarely ascertained the feasibility of the store for shoplifting. Nor did they think about shoplifting unless instructed to do so. Their considerations appeared to be triggered by a specific object they liked or needed and the hint from the researcher, rather than directed from within. This is strongly supportive of Cook's (1981) discussion of degree of

involvement in crime whereby novices respond to opportunities but experienced criminals search out and develop opportunities.

These results are consistent with the idea that experts have a procedural schema (Hastie, 1981) for thinking about shoplifting. Procedural schemas are high-level mental representations that direct the search for information and the formation of plans of action. Shoplifters' feasibility assessment of the security set-up of the store or department are indicative of a procedural schema. At a lower level are the template schemas (filing systems for classifying incoming information), and prototypes (organization of information by item-type) of particular items (Hastie, 1981). The fact that expert shoplifters more frequently named the item they were considering suggests the evocation of a template or prototype. Although novices became interested in specific items, they had to reason out shoplifting "from scratch" for each item and thus took longer for each shoplifting consideration. Since schemas contain information that does not have to be regenerated each time similar items are considered, processing time is decreased.

### Deterrence

The implications for these results for deterring potential criminals are therefore very different for novices and experienced criminals. Novices can be deterred by almost anything, but busy stores and store employees seem to engender a fear of being observed that is particularly effective. However, this may not even be necessary since novices hardly think about shoplifting and experience guilt and fear quite readily when they do. Credible threats should deter novices, but less believable admonitions may just prompt shoplifting thoughts that could be counterproductive if the store has any desirable opportunities. Novices will shoplift if they think of it, they want the item, and there are no apparent risks.



Experienced shoplifters seem more like wolves when compared to the sheep-like novices. They act against the environment, bringing in knowledge about shoplifting tactics and opportunities, and developing means for negating deterrents. There seems to be a pitched battle in the aisles between experienced shoplifters and retailers. The front-line for retailers is held by the store employees. Their activity and commitment seem much more important than what police or courts may threaten. This and the other strategies retailers use such as cameras, large packages, and inaccessibility of items, help create an overall atmosphere of difficulty associated with the store that should reduce shoplifting.

### Validity

Evaluating the extent to which these results provide valid insights about shoplifting is a difficult process. Some indications of validity are that the deterrent effect of sales personnel, the prevalence of shoplifting thoughts in department and drug stores, and the perceptions of risks mentioned are in accord with other accounts of shoplifting activity (e.g., review by Bickman et al., 1979; Kraut, 1976). For example, Morton (1975) found that department stores account for 41% of total retail sales in the United States but account for 61% of all crimes. Drug stores represent 6% of all crimes, but claim 10% of all losses due to crime, and grocery stores make up 42% of all sales, but only experience 21% of all criminal losses. One possible explanation is that department and drug stores have more items that are both desirable and easy to shoplift than other stores. The expected differences between experts and novices, and the general impression obtained by the experimenters that subjects were serious and motivated augments the perception of validity.

There are, however, some indications that demand characteristics influenced subjects to say what they thought was expected. All subjects knew

the study related to shoplifting because the advertisements specifically mentioned shoplifting. Many shoplifters seemed motivated to impress the experimenters with their expertise, and a few were disappointed when they learned that they would not actually steal anything. The fact that novices only spoke of shoplifting when instructed to do so weakens any simple interpretation in terms of demand. Additionally, the effect of sales personnel may have resulted in an inhibition of shoplifting verbalization rather than shoplifting thoughts. At this time, there is no truly convincing argument one way or another.

There was an obvious difference in the percentage of protocol devoted to shoplifting by males and females, although gender did not influence the number of items considered for shoplifting. This may be a reflection of the particular social situation. Male shoplifters may have been trying to impress their (male) experimenters and/or the females may have been inhibited from revealing socially unacceptable behavior.

In conclusion, this study provides some preliminary information about how expert and novice shoplifters make shoplifting decisions. The verbal protocol methodology was successful in revealing criminal thought processes including information salience and decision strategies. It also created useful information about the strategies and knowledge of experienced criminals and the environmental determinants of criminal thought processes. The fact that the results obtained by this method are consistent with previous findings using other approaches provides some indication of validity. The results have both practical and theoretical significance. Retailers can improve on the strategies they use to deter shoplifters (e.g., behavior of sales personnel). Deterrence theory in general could be developed more fully, with theories drawn from current psychological frameworks as well as from classical economics or clinical psychology (Carroll, 1978; Cook, 1981).

A more systematic analysis of shoplifter decision making is now warranted. For example, expert shoplifters could be presented with potential shoplifting situations (either in written form or in actual stores) in which elements of the situation are manipulated. The type and number of deterrents might be manipulated, as well as the types of items available for potential shoplifting. Experts would be asked to appraise the situation, assess the feasibility of shoplifting, and make a decision whether they would shoplift under such circumstances. An examination of criminal decision making with less problematic demand characteristics is also desirable.





TABLE 1

Number and Percentage of Shoplifting Statements Made for Each  
Statement Type by Condition

<u>Shoplifter Type and Instructional Condition</u>			
<u>Statements</u>	<u>Expert/Shoplift</u>	<u>Expert/Shop</u>	<u>Novice/Shoplift</u>
<u>Perceptual</u>			
Store personnel	18 ( 2.2)	10 ( 2.0)	0 ( 0)
People	8 ( 1.0)	6 ( 1.2)	5 ( 3.2)
Security guards	19 ( 2.0)	23 ( 4.8)	0 ( 0)
Security devices	38 ( 4.6)	44 ( 9.1)	0 ( 0)
Store layout	6 ( 0.7)	15 ( 3.1)	0 ( 0)
Size of item	15 ( 1.8)	17 ( 3.5)	3 ( 2.0)
Price of item	8 ( 1.0)	18 ( 3.7)	3 ( 2.0)
Naming item	77 ( 9.3)	50 (10.4)	4 ( 2.6)
Orienting/location	31 ( 3.8)	15 ( 3.1)	2 ( 2.0)
<u>Motivational</u>			
Attraction	65 ( 7.9)	34 ( 7.0)	21 (13.5)
Use/need	49 ( 5.9)	14 ( 3.0)	8 ( 5.1)
Examination of item	50 ( 6.0)	21 ( 4.4)	15 ( 9.6)
Price too high	1 ( 0.1)	5 ( 1.0)	3 ( 2.0)
Store service/policy	3 ( 0.4)	2 ( 0.4)	0 ( 0)
Intention to shoplift	13 ( 1.6)	4 ( 0.8)	2 ( 2.0)
Searching for item	12 ( 1.4)	3 ( 0.6)	1 ( 0.6)
Shopping method	0 ( .0)	3 ( 0.6)	2 ( 2.0)
<u>Judgmental</u>			
Feasibility (takeable)	84 (10.2)	87 (18.0)	14 ( 9.0)
Tactic/method	140 (17.0)	61 (12.7)	29 (18.6)
Risks	96 (11.6)	24 ( 5.0)	21 (13.5)
Justifications	7 ( 0.8)	0 ( 0)	6 ( 3.8)
Take/Not take	<u>85</u> (10.3)	<u>26</u> ( 5.4)	<u>17</u> (10.9)
TOTAL	825	482	157

Note: Percentages of column total are in parentheses.

TABLE 2

Shoplifting Statements by Condition

<u>Instructional</u> <u>Set</u>	<u>Expert</u>		<u>Novice</u>	
	<u>Shoplift</u>	<u>Shop</u>	<u>Shoplift</u>	<u>Shop</u>
# of Subjects	10	7	8	9
Mdn. Protocol length (statements)	241.5	304.0	293.0	321.0
Mdn. % of protocol devoted to shop- lifting*	41.5%	40.8%	4.9%	0%
Mdn. # of items considered to shoplift*	7.0	7.0	2.0	0
Mdn. # of statements made per item con- sidered for shop- lifting*	6.1	5.4	11.2	-

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\*  $p < .05$

TABLE 3

Number and Percentage of Shoplifting Statements Referring to  
Deterrents and Facilitators by Condition

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	<u>Shoplifter Type and Instructional Condition</u>		
	<u>Expert/Shoplift</u>	<u>Expert/Shop</u>	<u>Novice/Shoplift</u>
Security devices	33 (33.0)	28 (27.2)	3 ( 9.7)
Item accessibility	36 (36.4)	37 (35.9)	7 (22.6)
Store personnel	12 (12.0)	7 ( 6.8)	2 ( 6.4)
Being observed/caught	8 ( 8.0)	25 (24.3)	12 (38.7)
Store layout	6 ( 6.0)	5 ( 4.8)	4 (12.9)
Negative feelings	4 ( 4.0)	1 ( 1.0)	3 ( 9.7)
	<hr/>	<hr/>	<hr/>
TOTAL	99	103	31

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$$\chi^2(10) = 24.61, p < .01$$

Note: Percentage of column total are in parentheses.



### Footnotes

1. Support for this research was provided by the Graduate School of Business, University of Chicago, while the second author was a visiting faculty member. Requests for reprints should be addressed to John S. Carroll, Sloan School of Management, M. I. T., 50 Memorial Drive, Cambridge, MA 02139.
2. Reliabilities were calculated by dividing the total number of agreements among 5 pairs of coders by the average number of phrases coded by each coder pair.
3. As a result of the wide variation in length of protocols, much of the data violated homogeneity of variance assumptions (Bartlett's test; Winer, 1971, p. 208). Therefore, Chi squares and median tests were used instead of more sophisticated analyses.
4. Novices in the shop condition were not included in the remaining analyses since they did not consider any items for shoplifting.
5. Many of the stores did not have distinct departments, so there were few progressions from store to department. Most of the statements went from a store assessment to an item consideration.
6. These analyses rely on items where a decision was verbalized.

REFERENCE NOTES

1. Johnson, E. J. Expertise in admission judgments. Unpublished dissertation. Carnegie-Mellon University, August, 1980.

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