Discovery-oriented Consumer Research

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The first years of the Journal of Consumer Research (JCR) were heady times indeed. Initiated by 10 professional associations, JCR was meant to be "an interdisciplinary communications vehicle for theory, empirical research and methodology of the study of consumer behavior" (Frank 1974).

Ronald Frank, JCR's first editor, construed consumer behavior in the broadest of terms:

What do we mean by consumer behavior? For our purposes, consumer behavior is broadly construed to include media and family planning behavior, occupational choices, mobility, determinants of fertility rates, attitudes toward and use of social services and determinants of educational attainment.

Studies of the purchase, consumption or usage of durables or nondurables including financial assets such as stocks, bonds, and insurance, or services such as medical care and police are welcome in JCR as well as studies which focus on brand or package size consumption for a particular product or upon broad aggregates such as total consumer expenditures.

JCR will also include material concerned not only with the behavior of households and individuals but also with other parties in their roles as purchasers, if not consumers, of goods and services such as government agencies, hospitals, manufacturers, retailers and wholesalers. [Frank 1974, pp. i, ii]

Within that wide domain, JCR was to be "the first journal in which professionals sharing an interest in consumer behavior across disciplines send their material" (Frank 1974): no small task.

At about the same time, the new Association for Consumer Research (ACR) announced equally ambitious goals:

1. To provide a forum for exchange of ideas among those interested in consumer behavior research in academic disciplines, in government at all levels from local through national, in private business, and in other sectors such as nonprofit organizations and foundations.

2. To stimulate research focusing on a better understanding of consumer behavior from a variety of perspectives.

3. To disseminate research findings and other contributions to the understanding of consumer behavior through professional seminars, conferences and publications. [ACR Constitution, as quoted in Pratt 1974, p. 4]

The hubris of that era rings through these words by Sheth: "Within a very short period of time, we seem to have firmly laid the foundation for building a distinct discipline of buyer behavior which will neither be a subsystem of marketing nor that of any of the other older social sciences. [An] even more pleasant observation is that we seem to have achieved better with respect to richness of thinking, comprehensiveness of theorizing, and testing of theories in naturalistic and realistic settings than many of the older behavioral science disciplines in their comparative periods of development" (Sheth 1972, pp. 565-566).

Sheth went on to predict: "Within a decade, it is very likely that other disciplines will be actively interested in buyer behavior and consequently borrow from it a set of concepts and research tools [and] sooner or later, the hard sciences are likely to be exposed to, and interested in, buyer behavior. When that happens, it is equally inevitable that they will extensively borrow both the substantive findings and research methodology [of consumer research]" (Sheth 1972, pp. 571, 573).

A key element of this forecast was Sheth's belief that consumer research would address "critical areas of hu-

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man behavior" and that consumer researchers would "test their theories in naturalistic and realistic settings." Real solutions to real problems would prevent the "criterion of relevance" that had harmed the social sciences even then (Sheth 1972, p. 572). With an established intellectual base and with a constituency that included business, government, and foundations as well as both clients and collaborators, the future seemed clear and bright.

It is not that problems were ignored. In a 1972 review, Kollat, Blackwell, and Engel noted that, while 1968-1972 output was "nearly as large as the total body of knowledge that existed at the beginning of the period," consumer research had made "no progress" in standardizing variables or in setting priorities and only "limited progress" in testing theories, establishing a tradition of replication, broadening horizons, or exploiting the advantages of longitudinal designs (Kollat, Blackwell, and Engel 1972, pp. 576, 583).

Four years later, Jacoby decried a litany of sins: misuse of measuring instruments borrowed from other disciplines; lack of attention to reliability and validity; single-shot, nonprogrammatic studies; confusion of correlation with causation; lack of replication; lack of attention to important social issues; overreliance on verbal (as distinguished from behavioral) data; and preoccupation with the antecedents of brand choice.

He was especially critical of research motivated by "the availability of easy-to-use measuring instruments, the existence of more-or-less willing subject populations, the convenience of the computer, and/or the almost toy-like nature of sophisticated quantitative techniques" (Jacoby 1976, p. 2).

These shortcomings led him to declare that "much too large a proportion of the contemporary consumer research literature is not worth the paper it is printed on or the time it takes to read it." (Jacoby 1976, p. 2).

Despite all that, the mood was upbeat. New courses were attracting new students. New textbooks were describing interesting new work. In government and business, consumer research was gaining credibility. It seemed only a matter of time before Kollat, Blackwell, and Engel's reservations, and Jacoby's dark verdict, would seem dated and quaint.

**THIS IS NOW**

After nearly two decades, which of the early goals were met, and which are yet to be achieved? As we now know, Sheth's forecast was a little premature. Consumer research has not "achieved better" than the other social sciences with respect to "richness of thinking, comprehensiveness of theorizing, and testing of theories in naturalistic and realistic settings," and it has not yet become the methodological Mecca to which others turn.

Although JCR and ACR are now cited by outside authors, the flow is far more than out (Cote, Leong, and Cote 1991; Leong 1989). Replication is still rare. Validity is still uncertain. And one-shot studies of more or less willing subject populations are still in vogue. The Journal of Consumer Research has not become a genuinely interdisciplinary journal. And ACR has not become the central forum for consumer behavior broadly defined.

What could change all that? What could broaden our horizons? What could give the discipline its own creative base? What could make JCR the first journal to which professionals sharing an interest in consumer behavior send their material? What could make ACR the catalyst for the next great discovery in consumer research?

A close and critical reading of JCR and of ACR's Proceedings suggests five guidelines that would advance those worthy goals: Leave home. Forsake mythology. Reach out. Start small and stay real. Research backward.

**Guideline 1: Leave Home**

In an analytical discussion of the consumer research agenda, Johan Arndt (1976) noted that consumer decisions have five parts:

I. Problem recognition
II. Search for information to evaluate alternatives
   A. Internal search
   B. External search
III. Implementation of the purchase
IV. Physical consumption
V. Postconsumption activities

He also noted that decisions differ in importance:

I. Acquisition of strategic items
II. Central budget allocation decisions
III. Generic product or service decisions
IV. Variant selection

By "strategic items," Arndt meant items that have life-altering effects—for instance, a college education, a new home, a new child. By "central budget allocation decisions" he meant allocation among important groups of products and services—new furniture for the living room instead of a vacation trip. By "generic product or service decisions" he meant specific purchases within those groups of products and services. And by "variant selection" he meant brand choice.

Cross classifying stages by levels creates a matrix of consumer choice (Fig. 1). As Arndt and others (e.g., Belk 1987, 1991; Holbrook 1985; Jacoby 1976; Kasarjian 1978; Olson 1982; Polly 1972) have noted, academic consumer researchers spend most of their time on the early-stage, low-level decisions in the lower-left-hand corner of this chart.

One way to discover more about consumer behavior would be to move upward and to the right. This territory includes life-altering decisions. It also includes the whole consumption sequence, from preconsideration to ultimate result. Fifteen years later, Elizabeth Hirschman (1991, p. 4) urged us to leave home another way:
As we meet there today, comfortable not only in our attractive surroundings, but in our personal affluence and success, let us not ignore some uncomfortable statistics about other people’s realities as consumers. At the present time, 100,000 homeless people dwell in the cities and towns of America, the wealthiest country on earth. . . . What have we done to help their plight? There are currently 2 to 3 million cocaine and crack addicts in the United States. 375,000 drug-addicted babies were born in 1989, alone. . . . What have we done to help them? . . .

Every year over 10 million American consumers suffer financial losses from their addiction to gambling and over $500,000 file for personal bankruptcy as a result of credit card abuse. . . .

There are currently 10 million alcoholics and 80 million cigarette smokers in the United States. . . . Every year 25,000 people die as a result of alcohol-related traffic accidents; and 20,000 consumers die from the disease of alcoholism, itself. . . .

All of these disturbing and disturbed behaviors result from consumption gone wrong. . . . Consumers could likely recover from these damaging behaviors, if adequate research were conducted into their origin and treatment. We are a bright, and talented, and productive group. How much we could accomplish if we would turn even a portion of our talents toward understanding and ameliorating the dark side of consumer behavior.

Finally, the discipline would surely benefit from more interaction with the world outside the United States. Of the first 23 formal ACR conferences, 21 were in North America, while only two—one in Singapore in 1985 and one in Amsterdam in 1992—were not. Given the sharp regional differences in consumers’ opportunities, resources, and perceptions, it seems obvious that the franchise would be extended and enlightened by more sophisticated appreciation of consumer behavior throughout the world (Fornell 1992; Graham et al. 1988; McCracken 1986, 1988; Mehta and Belk 1991; Takada and Jain 1991; Wallendorf and Arnould 1988; Zandpour, Chang, and Catalano 1992).

One does not need to believe that Arndt’s categories are comprehensive or mutually exclusive to know that major discoveries lie upward and to the right. One does not need to be a seer to know that effective response to Hirschman’s challenge would avert any “crisis of relevance” that might otherwise take place. And one does not need international experience to know that world-wide purviews would increase our range and depth.

Academic research on consumer behavior would be stronger, more creative, more interesting, and more valuable if researchers would pay attention to consumer behavior more broadly defined.

Guideline 2: Forsake Mythology

Consumer research has its own myths, inherited from the past. These myths isolate researchers from reality and impede discovery of how real things really work.

Students Represent Consumers. As everyone knows, students are not typical consumers. When we ignore this fact we can easily be incorrect. Robert Ferber, JCR’s second editor, was absolutely clear on this point: “It is not sufficient to say something like, ‘the subjects for this study were 83 students at Lower Slobovia State University’ and then proceed to formulate and test highly sophisticated behavior models. If the researcher cannot justify the use of that group in terms of [relevance to the problem and representativeness of the sample] there is no reason why the GIGO principle should not be applied immediately, namely, ‘garbage in, garbage out’ ” (Ferber 1977, pp. 57–58).

Nine years later, David Sears hit the same mark:

Undergraduates usually come from a very narrow age range and are concentrated at the upper levels of educational background.
Their social and political attitudes tend to be considerably less crystallized at this stage than later in life. They also tend to be substantially more egocentric than older adults. They have a stronger need for peer approval, manifested in dependency, conformity and overidentification with peers. They have been carefully preselected for having unusually adept cognitive skills. They have also been selected for compliance to authority. They have greater geographical and social mobility, and later entry into the work force and family life. [Sears 1986, p. 521]

These differences affect research outcomes in many ways. Age and education—and variables correlated with age and education—get inadequate attention, and other less important variables get too much weight. Students’ cognitive skills, peer relationships, family relationships, and family responsibilities mediate a wide range of independent variables. These powerful interactions place student-based conclusions at substantial risk. And, possibly most important, overuse of students focuses research content on products that students buy, like CDs, soft drinks, and ballpoint pens. This restriction highlights the lowest portion of Arndt’s diagram and obviates the tasks that Hirschman challenged us to undertake.

This is not to say that findings based on students are always wrong. It is only to say that findings based on students are always suspect. Our findings would be substantially more credible if students were not so often the first and only choice.

The Laboratory Represents the Environment. The laboratory misrepresents the real world in several important ways. First, it permits control that is impossible outside. When that control produces laboratory-only circumstances, generalizations to the real world can be wrong.

Here is one example: in the laboratory, very interesting television programs interact with cognitive processing of the commercials they contain (Schumann and Thorson 1990). This finding has led to suggestions that very interesting programs might be very poor carriers of advertising.

Yet field studies show that very interesting television programs are very good carriers of advertising (Clancy and Kwaskin 1971; Home Testing Institute 1963; Priemer 1983). The explanation for the contradiction is that laboratory conditions create an artificial, even level of attention, while normal in-home viewing conditions do not. Under normal in-home viewing conditions, very interesting programs attract and hold high levels of attention. Increased attention carries over to the advertising and swamps any decrement that interference might take away (Thorson 1990). Thus, a finding that was valid in the laboratory led to spurious generalization to the world outside.

A second difference between the laboratory and the environment is in the content of “schemer schema”: “When someone encounters a sales message or promotional or pricing move . . . the response strategy they select is contingent on . . . their working hypotheses about selling or marketing tactics. To be sure, their schema about [the specific product] per se is activated. But the control schema—‘what I believe about likely persuasion and promotion strategies’—is first activated, and that guides the situation-specific process of response” (Wright 1986, p. 2).

Schemer schema also operate in the laboratory; but, in the laboratory, the schemer is the experimenter. When subjects encounter sales messages or pricing or promotional moves in the laboratory, their responses are contingent on their working hypotheses about the intentions of the experimenter. To the degree that these working hypotheses are unique, so also are the “situation-specific processes of response.”

In the real world, consumers know that the schemer is a stranger who may do them harm. They also know that their choices may have long-range consequences and that they must be vigilant in their own defense.

In the laboratory, subjects know that the schemer is an experimenter who is seeking “truth.” They believe (correctly) that the experimenter will not intentionally harm them and that the experiment is intended to have no permanent effect. To the extent that these “working hypotheses” are laboratory specific, the laboratory misrepresents real-world response. This misrepresentation is not a mere “demand effect” that can be evaded with “manipulation checks.” It is a distinction that cannot be erased.

A third difference between the laboratory and the real world is that an experiment has a sudden beginning and a sudden end. As economists continually remind us, most nontrivial consumer behavior is contingent on current or expected changes in life circumstances and mid- to long-range expectations as to how long these changes will last. When experiments focus on instant action, they starkly underestimate these critical effects.

The differences between the laboratory and the environment are so powerful that extrapolations are always problematic. Maybe the laboratory findings will have external validity, and maybe they will not.

We have inherited a myth that says that internal validity is adequate and external validity, if any, is up to someone else. That myth is distinctly inappropriate for consumer research. Consumer research promises to increase our knowledge of consumer behavior. No matter how elegantly fabricated, an experiment does not add to that knowledge until its limits have been tested in the world outside.

Finally, the laboratory is hindered by an inverse correlation between importance and control. Like overuse of student subjects, this inverse correlation directs disproportionate resources to the lowest portion of Arndt’s matrix of consumer choice.
The laboratory has one exclusive asset: it is the best way to separate cause from effect. But neither that unquestioned asset nor the trappings of "science" should blind us into thinking that everything is straightforward. That is why Sheth believed that "realistic and naturalistic settings" would be so vital to the future of our work.

**Statistical Significance Confers Real Significance.** It is easy to see why managers misunderstand "statistical significance." After all, if a finding has passed all that official-looking certification, it ought to be right. It is not easy to see why researchers make the same mistake. Although researchers know better, they often conclude that "significant" relationships are also strong: "Everyone knows that all [statistical significance] means is that the effect is not nil, and nothing more. Yet how often do we see such a result to be taken to mean, at least implicitly, that the effect is significant, that is, important, large. If a result is highly significant, say \( p < .001 \), the temptation to make this misinterpretation becomes all but irresistible." (Cohen 1990, p. 1307).

This mistake is particularly dangerous in theoretical work. Most theories imply strong relationships among variables. When findings are statistically significant, the theory is said to be "confirmed." But of course, a statistically significant relationship might be a strong relationship, or it might be very weak. (Chow 1988; Cohen 1965; Cooper 1981; Rezeboom 1960; Sawyer and Peter 1983); \( p < .05 \) does not indicate a strong effect.

Furthermore, a great many experiments compare one "experimental" group with one "control" group. If the difference between the groups is significant at \( p < .05 \), the (unstated) conclusion is that the effect goes on and on forever, in the same direction and at the same rate. But many kinds of consumer behavior follow the law of diminishing returns: a little makes a big difference, and a little more does not. Others follow the Three Bears' law: too little is too little, too much is too much, and just enough is just right. Under those circumstances, an assumption of infinite linearity makes little sense.

Critics have noted the weak (and sometimes missing) correspondence between theories of consumer behavior and the behavior of real consumers in the real world. How can that correspondence ever increase when we ask no more than whether effects are nil? How can we discover the true nature of consumer behavior if we ignore effect size and shape?

**When Sutably Disguised, Correlation Becomes Cauaison.** Elementary textbooks warn against assuming that correlation means causation. They explain that \( X \) may have caused \( Y \), \( Y \) may have caused \( X \), or both may have been caused by something else. More advanced textbooks say exactly the same thing. How are we to know which, if any, variables enter the picture, an insidious change takes place. In multiple regression, for example, a set of \( X \)'s "predict" \( Y \), even when all the variables were measured at the same time. And each \( X \) receives a weight that indicates "importance" or "influence." Suddenly—even though \( Y \) may have caused all the \( X \)'s, something else may have caused the whole works—the \( X \)'s have become causes, and the weights have become degrees of effect (Henderson and Denison 1989).

In path analysis, LISREL, and other "causal" models, the illusion becomes more complete. Now the \( X \)'s "influence" each other and jointly "influence" \( Y \)—and the data are all hidden in the model’s inner parts. If the model "fits," it is said to describe "causal" pathways. If it does not quite fit, post hoc explanations keep it safe. Test-retest reliabilities are not usually investigated, nor are alternative explanations of the observed events. What is needed is a return to the assumption that \( X \) may have caused \( Y \), \( Y \) may have caused \( X \), and both may have been caused by something else. What is also needed is return to the basic requirement that competing explanations be taken seriously and given reasonable amounts of mental space. The more complex the model, the more critical are these cautions to the credibility of our work.

**Mentioning Limitations Makes Them Go Away.** Many journal articles conclude with sections on "limitations." If taken seriously, the limitations would invalidate the findings. It is surprising to outsiders that the authors then go on to state broad, general conclusions—as though the limitations had vanished on being confessed.

This practice leads to "knowledge" that consists of dubious conclusions, and it breeds waste and disappointment in subsequent research. When Jacoby (1976, p. 2) declared that "too large a proportion of the contemporary research literature is not worth the paper it is printed on or the time it takes to read it," this was part of what he meant.

**Five Myths.** So here we have five myths that cultivate the "crisis of relevance" that Sheth hoped we would avoid: Students represent consumers. The laboratory represents the environment. Statistical significance confers real significance. Correlation means causation. And limitations, once mentioned, simply go away.

We can and should forsake these myths. They do more harm than good. The next three guidelines outline strategies for doing that and for establishing conditions in which discoveries can take place.

**Guideline 3: Reach Out.**

To judge from Table 1, consumer research is a branch of marketing or a branch of social psychology. Yet both Arndt's diagram and Frank's initial editorial suggest that other academic disciplines have much to add.

Here is one example. In JCR's first issue, Jean Crockett—an economist—noted that expectations affect every choice.
### TABLE 1

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychology (%)</td>
<td>26.8</td>
</tr>
<tr>
<td>Marketing (%)</td>
<td>20.4</td>
</tr>
<tr>
<td>Consumer research (%)</td>
<td>18.0</td>
</tr>
<tr>
<td>Economics (%)</td>
<td>5.6</td>
</tr>
<tr>
<td>Mathematics and statistics</td>
<td>4.2</td>
</tr>
<tr>
<td>Sociology (%)</td>
<td>4.1</td>
</tr>
<tr>
<td>Communication and journalism</td>
<td>3.8</td>
</tr>
<tr>
<td>Family and home economics</td>
<td>1.9</td>
</tr>
<tr>
<td>Business (general) (%)</td>
<td>1.7</td>
</tr>
<tr>
<td>Social science (general) (%)</td>
<td>1.6</td>
</tr>
<tr>
<td>Anthropology (%)</td>
<td>1.5</td>
</tr>
<tr>
<td>Medicine (%)</td>
<td>1.2</td>
</tr>
<tr>
<td>Culture, humanities, and the arts (%)</td>
<td>1.0</td>
</tr>
<tr>
<td>Other (%)</td>
<td>8.2</td>
</tr>
<tr>
<td>Total citations (n)</td>
<td>6,867</td>
</tr>
</tbody>
</table>

Source: —Data are from Leong (1989).

Even in the pre-Keynesian age economists were aware that expectations are important, not only as to their content but also in terms of the certainty with which they are held.

An observed change in an economic variable may sometimes generate an expectation of return toward the previous level (when the change is believed to result from purely temporary factors) or an expectation that the new level will be maintained (when the change is due to a one-shot shift in structure, establishing a new equilibrium which is promptly attained) or an expectation of further change in the same direction (when the causal factors are continuing to shift or when the full effects of a shift are realized only gradually over time). [Crockett 1974, p. 9]

These comments remind us that expected change and expected permanence of change play pivotal roles in consumer behavior. Yet many of our current models omit expectations altogether, and most experiments attempt to rule them out. When we discount expectations—and other economic concepts (Becker 1976; Deaton and Muellbauer 1980; Murphy and Staples 1979)—we ignore causes that have powerful effects.

Sociologists understand many of the forces that influence consumers. Not the least of these forces are the profound effects of cultural and ethnic background, age, and social class (Coleman 1983; Katz and Lazarsfeld 1955; Martineau 1957, 1958). With more acute awareness of sociological models and sociological methods, consumer researchers would see new approaches to old problems. And they would not build universal theories on student-based results.

In the 1980s, ideas from anthropology and ethnography generated healthy controversy, new vitality, and new and important ways of thinking about consumer behavior (Belk 1991; Hirschman 1989; McCracken 1986, 1988). In one sense these imports are radical. In another, they revisit our roots. Realistic and naturalistic settings, attention to important choices, focus on the real behavior of real consumers, and willingness to experiment with unusual methods are squarely in line with the aspirations that brought ACR and JCR to life. Still in the offing, and possibly just as evocative, are imports from historical analysis (Nevett 1991) and from humanities and the arts (Deighton, Romer, and McQueen 1989; Harris et al. 1986; Stern 1989, 1991; Stern and Gallagher 1991).

The great value of outsiders is of course their outside point of view. Often, when a problem seems intractable, an outside insight shows it can be solved: “For many years physiologists could not understand the purpose of the long loops in the kidney tubules: it was assumed that the loops had no special function and were a relic of the way the kidney had evolved. Then one day an engineer looked at the loops and at once recognized that they could be part of a counter-current multiplier, a well-known engineering device for increasing the concentration of solutions. In this instance, a fresh look from outside provided an answer to something that had been a puzzle for a long time” (De Bono 1968, p. 148).

Neighboring disciplines harbor concepts, data, and problem-solving strategies that expand horizons, heighten creativity, and increase validity in consumer research. By participating in these disciplines—learning their models and their methods and enlisting them as partners—consumer researchers can bring new power to their work.

**The More Distant Neighbors.** The founders of ACR wanted to mix academia, business, government, and foundations because they thought each sector had perspectives that the others lacked.

At first this vision seemed right. Joel Cohen, ACR’s first president, was then a member of National Analysts, a commercial research firm. Robert Pratt, ACR’s second president, was a General Electric research executive. Researchers from Procter & Gamble and the Leo Burnett Company were on ACR’s first program committee. A Federal Trade Commission staff member was on ACR’s first board.

The first Proceedings of ACR included articles by researchers from AT&T, General Electric, Standard Oil, Procter & Gamble, the Ford Motor Company, Leo Burnett, Bozell and Jacobs, Westat Research, National Analysts, Market Facts, Elrick & Lavidge, the Consumer Research Institute, the Consumer Federation of America, the U.S. Department of Agriculture, the Food and Drug Administration, the U.S. Department of Commerce, the Federal Trade Commission, and the National Science Foundation (Venkatesan 1972). These articles provoked controversy, offered methods and substance, and furnished food for thought.

In the decade that followed, government-based researchers presented articles on surveys as legal evidence.
taste-test methods, reactions to advertising, energy conservation, driver behavior, consumption segmentation, economic effects of information, random-coefficient models, and consumer information systems.

Industry-based researchers discussed trade-off analysis, multidimensional scaling, computerized content analysis, trinode factor analysis, survey reliability, group interview methods, life-style and psychographics, the consumer life cycle, brand adoption models, children's influence on adults' purchases, consumers' reactions to sex in advertising, changing tastes in popular music, and estimates of the demand for style. These articles energized discussion and propagated diverse points of view. Much of their substance and many of their methods reappeared in later scholarly research.

But as time went on, industry participation lessened, and government and foundations all but disappeared. As consumer research entered the 1990s, about nine of 10 ACR members, and more than nine of 10 JCR authors, were business school faculty. The discipline was turning inward. Academic, government, and industry neighbors were dropping out.

In part, this introversion was a symptom of success. When ACR was newborn, it needed outside support. But as ACR prospered, its academic leaders realized that it could stand by itself.

Some of ACR's academic leaders argued that scholars should be wary of outsiders, especially outsiders wearing business suits. In debating the benefits and hazards of consulting—and being deliberately provocative—Holbrook said: "Business executives tend to approach training programs with a resolute bias against scholarship and science. For them, 'conceptual' is a pejorative term, 'theory' virtually a dirty word" (Holbrook 1985, p. 146). Holbrook and others believed that scholars should be shielded from outside influences that might contaminate their work.

The opposing argument is that industry and government researchers command data, concepts, and methods that have much to contribute to academic consumer research. Consider data first. Government data have supported many influential academic publications: Anderson and Shugan (1991), Fournier, Antes, and Beaumier (1992), Garner and Wagner (1991), and Sinha and Chandrashekaran (1992) are just a few. Industry data have inspired journal articles and books: Aaker and Stayman (1990), Adams and Blair (1992), Biel and Bridgwater (1990), Deighton et al. (1989), Greenleaf (1992), Mayhew and Winer (1992), Novak, de Leeuw, and MacEvoy (1992), Pechmann and Stewart (1991), Schlinger (1979), Simonson and Winer (1992), Stewart and Purse (1986), Wells, Leavitt, and McConville (1971), Young and Robinson (1992), and many more.

To make use of such resources, academic consumer researchers must overcome two barriers. The first is a knowledge barrier. They must know that the information exists and perceive its relevance to their own work. The second is an administrative and mechanical barrier. They must gain access to the data base itself. When industry, government, and academic researchers meet in person, opportunities to break both barriers greatly increase.

On the conceptual side, government and industry researchers have broadened the discipline's construct base. "Involvement," a key construct if there ever was one, came from Krugman's (1965) industry-based analysis of advertising effects. Benefit segmentation and means-end analysis began in the research department at Grey Advertising (Haley 1968; Young and Feiglin 1975). Occasion-based segmentation (Greenberg 1982) came from National Analysts, and the Lavidge-Steiner model (Lavidge and Steiner 1961) came from Elrick and Lavidge—both commercial research firms. Researchers at Foote, Cone and Belding developed the PCB Grid (Vaughn 1980). This set of constructs has been important in its own right and has inspired influential later work (Rossiter and Percy 1987; Rossiter, Percy, and Donovon 1991). Researchers at corporations, research companies, and advertising agencies made valuable contributions to life-style and psychographic research (Wells 1972).

Multidimensional scaling and trade-off analysis began in industry (Fiedler 1972; Johnson 1972), as did telephone and central location interviewing, and many of the most significant advances in advertising copy testing and focus group research (Goldman and McDonald 1987; Haley and Baldinger, 1991; Schlinger 1979).

While contributions from academia, government, and industry are hard to separate, the record shows that government and industry inputs have expanded, enriched, and enlivened academic consumer research. It seems most reasonable to assume that more interaction among industry, government, and academia would cause more of this desirable effect.

Most fundamentally, the argument against introversion is that introversion threatens intellectual integrity. Introversion insulates myths from logic and offers reassurance that outsiders must be irrelevant, incompetent, or morally perverse.

What is needed is more, not less, outreach—both to scholars in other academic disciplines and to researchers who deal directly with the real world. Outsiders' goals and customs may be different, and they may well denounce what they do not like. On the other hand, they advance the enterprise with new data and new perspectives. And, like the engineer who saw that kidney loops were countercurrent multipliers, they increase the probability that discoveries will take place.

Guideline 4: Start Small and Stay Real

Here is how things are supposed to work: a theory is at first a rough approximation. Objective scientists
theory, the presence of demand artifacts in the original or replicated data, sampling effects, and laboratory effects.” They added: “Laboratory effects involve differences across experiments in such context-specific factors as physical and temporal conditions, experimenters, and procedures. It is hard to control or even assess the magnitude of laboratory effects” (Shimp et al. 1991, p. 276).

In a sample of 1,120 empirical papers from the major marketing journals, Hubbard and Armstrong (1991) found no exact replications, and only 20 extensions of earlier work. Of the 20 extensions, 12 contradicted the earlier findings, and only three fully confirmed the original results.

If findings are that capricious, any Theory “test” that fails to support the Theory can be written off as spurious. And given the ego forces that defend Theories, it is far more likely that Theorists will discount disconfirmation than that they will admit their ideas were wrong.

Do Theories Get Corrected? Third, do Theories get corrected? The Theory-oriented account of scientific progress holds that even when Theorists remain obdurately close to a theory as a whole corrects mistakes. Through “rigorous falsification,” the discipline eliminates invalid propositions and “supports” others, which stay in place (Calder et al. 1981). Do theory tests correct mistakes? In a review of Theory tests in psychotherapy, Maher concluded:

“I know of no established theory of psychotherapy that declared bankruptcy because of research that failed to confirm, disconfirmed, or falsified its theoretical propositions and network of theoretical assumptions; nor is there a logical necessity for that to occur.”

Theories of psychotherapy wax and wane because of considerations that have virtually nothing to do with the testing of hypotheses bearing on their theoretical propositions. “It is simply a sad fact that in soft psychology theories rise and decline, come and go, more as a function of baffled boredom than anything else.” [Maher 1988, p. 694; internal quote from Meehl (1978), p. 807]

Maher explained:

“The space between a theory of psychotherapy and a derived or deduced testable hypothesis is so extensive, loose, and filled with implicit and explicit clauses and conditions that the theory is in no grave danger from whatever findings are obtained. . . . Not only are firm believers easily able to refute and discount unfriendly findings of hypothesis-testing research, always managing to stay safely out of range, but their research lieutenants can inevitably be counted on to generate counterbalancing friendly studies. . . . I suggest that hypothesis testing is essentially unable to fulfill its self-assigned mission of confirming or disconfirming psychotherapeutic propositions or theories. Indeed, in the field of psychotherapy, the mission itself is fruitless. [Maher 1988, pp. 695–696]”

Does consumer research fare better? Consider the Theory of cognitive dissonance. In 1976, Cummings and Venkatesan reviewed 23 studies that had “exam-

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ined empirically the arousal and reduction of cognitive dissonance in the context of consumer behavior.” In
agreement with earlier reviews, Cummings and Ven-
katesan concluded that the theory of cognitive disso-
nance was “not proven.” However, they then went on
to conclude that, despite numerous disconfirmations
and despite methodological and conceptual flaws in all
of the research they had studied, “the evidence in favor
of dissonance theory in the consumer behavior literature
looks good” (Cummings and Venkatesan 1976, p. 307).
What could have made the evidence look bad?
Or consider the Fishbein attitude model. This model
has been the object of more “tests” than any other
model in all of consumer research. Despite a long and
complex list of mutually contradictory findings (Ahtola
1975; Lutz and Bettman 1977; Mazis, Ahtola, and
Klippe1975; Sampson and Harris 1970; Wilkie and
Pesserier1973) the original model stands as stated.
Interest in “testing” it has now faded—another victim
of “balled boredom” in consumer research.

Do Consumer Behavior Theories Predict Real-World
Events? Does the process work as advertised? A fourth
element of that basic question is, Do consumer behavior
Theories predict real-world events?
In their overview of the research process, McGrath
and Brinberg (1983, p. 118) described three stages. Stage
1 is “groundwork”—“development, clarification, and
selection of elements and relations” to be used in an
investigation. Stage 2 is execution of the investigation
itself. Stage 3 is “following up the findings of stage 2,
by replication and by a systematic search for both the
range and limits of those findings.”
Although Theory-oriented consumer researchers
have been brilliant in extending stages 1 and 2 of the
research process, they have systematically evaded stage
3. As we have already seen, replication almost never
happens. And, as McGrath and Brinberg (1983, p. 122)
pointed out, “Not only do researchers in our fields seldom
deliberately set out to search for the boundaries of their
findings, but when they do encounter such dis-
confirmations . . . they generally regard them as nega-
tive findings to be explained away.”

But if consumer behavior Theories are to predict be-
behavior in the real world, stage 3—replication and sys-
tematic search for range and limits—is absolutely es-
ential. Replication is essential because findings must
be known to be reliable. If findings cannot predict
themselves, they cannot possibly predict anything else.
Systematic search for range and limits is essential be-
cause spurious generalization leads to “inverted exper-
tise.” That is, presumed experts who overgeneralize can
be less accurate than novices: “Experts overestimate the
diagnosticity of their knowledge and intuitions be-
cause of the accessibility of abstract representations of
the phenomena to be predicted. In contrast, as novices
rely on concrete surface features, they perceive the re-
trieved information to be less diagnostic [and] engage
in more detailed processing. . . . Experts, in contrast
to novices, rely on a host of irrelevant or weak cues that
they perceive as predictive in problem solving. . . .
Experts not only overestimate the diagnosticity of the
information, but rely on irrelevant cues/factors, which
leads to a truncation of mental effort and erroneous

“Inverted expertise” has appeared in banking, engi-
neering, clinical psychology, and marketing (Mahajan
1992). It has also appeared in consumer research. Arm-
strong (1991) asked JCR Editorial Board members to
predict how accurately ACR members would “predict
the results of 20 already published JCR studies. On the
assumption that JCR contained a reliable body of
knowledge and that ACR members would use that
knowledge, the board predicted that accuracy would be
about 80 percent. The actual accuracy was 51 percent,
significantly worse than chance, and marginally worse
than predictions made by high school students and
business executives.

This example of “inverted expertise” does not in-
crease confidence that our present body of knowledge
can predict real-world events. If the present body of
knowledge, employed by presumably knowledgeable
members of the discipline, cannot predict consumer
behavior within the friendly confines of JCR, it cannot
possibly predict the real behavior of real consumers in
the real world.

The roots of this problem may well lie in systematic
evasion of stage 3 of the research process. When findings
are not replicated and when their range and limits re-
main untested, we have no way of knowing which—if
any—will explain or predict.

So here we have four counts against Theory-oriented
consumer research. Ego-involved Theorists persevere
indefinitely in the face of Theory-disconfirming results.
Theory “tests” are so imperfect that they can always be
written off. When consumer behavior Theories are
“tested,” they do not get better or even change. And,
Theory-oriented consumer researchers neither replicate
their findings nor systematically investigate the range
and limits of their work. In the absence of this essential
segment of the research process, the “body of knowl-
edge” cannot be expected to explain or predict real-
world events.

The fault is not with individual researchers, who pur-
sue their craft with skill and dedication. The fault is
with the system. Presently accepted practices do not
work as advertised. They are not science. They are sci-
cence fiction.

This fiction is not harmless. When the system fails
to work as advertised, it breeds distrust and doubt. Re-
searchers turn to other matters, and knowledge is di-
minished by the absence of the contributions they could
make.

An Alternative. An alternative would be to start
small and stay real—to forsake pursuit of high-level,
abstract representations and seek ground-level generalizations that actually work. These generalizations might be called "theories" with a small 't' (Olson 1982); but they would always refer to real events.

This strategy would ask "so what?" about every outcome of every investigation. Instead of ascertaining to the notion that any "contribution to Theory" is a contribution to knowledge, it would ask, "all kidding aside, what does this really mean?"

The answer to the "so what?" question need not be a "managerial implication." It might be a public policy implication or an implication that individual consumers could put to use. It might be, "Here is a powerful new method," "Here is a confirming replication," "Here is a convincing contradiction of a strongly held opinion," or "Here is a useful insight from reanalysis of earlier work." But, by definition, the answer to "so what?" would have external validity. It would always tell us something about how real consumers really behave.

The "so what?" strategy differs from the Theory-oriented version of scientific progress in four important ways. First, as already noted, it seeks theories with a small 't' valid, ground-level generalizations about real events. The finding that very interesting television programs are very good carriers of advertising would be one example of a theory with a small 't'.

Second, the "so what?" strategy asserts that the laboratory is neither necessary nor sufficient for scientific research. Instead, it endorses "full-cycle" problem solving, which starts with real-world behavior, tests abstractions from that behavior in the laboratory as appropriate, submits the laboratory results to external validation, returns to the laboratory for further analysis, submits the new analysis to external validation, and continues this cycle until the reliability, range, and limits of the findings are well understood (Cialdini 1980; Lutz 1991; Ray 1975).

The key element of this strategy is that it starts with real-world behavior and returns to the real world every time. It does not devote resources to " falsification" of abstract Theories, and it insists that—in consumer research—findings are not contributions to knowledge until their boundaries have been ascertained and reconfirmed outside.

Third, the "so what?" strategy does not stop at p < .05. Instead of quitting with a verdict of "not nil," it demands that investigators find out whether the effect is large enough to be important and whether it is curved or straight. To the p < .05 test of statistical significance, the "so what?" strategy adds the more rigorous test of real significance: "What does this finding really mean?"

And fourth, the "so what?" strategy highlights stage 3 of the research process. It does not admit unreplicated findings. And it insists that range and limits be determined before generalizations are made.

When the topic is an abstract, universal Theory, these standards cannot be met (Calder et al. 1981). But when the topic is a useful, ground-level generalization, researchers—and their successors and their critics—have every incentive to recheck stability and to find out when and where they can depend on what was found. Granted, this strategy will not generate high-level Theories any time soon. But it will prevent "inverted expertise," and it will generate a reliable body of knowledge about how real consumers really behave.

The next and final guideline depicts a knowledge-generating process that has "so what?" at its base.

Guideline 5: Research Backward

In a perceptive article on method, Alan Andreasen (1985) proposed that research be conducted backward. "Backward" research proceeds as follows (Andreasen 1985, pp. 176–180):

1. Determine how the research results will be implemented.
2. To ensure the implementation of the results, determine what the final report should contain and how it should look.
3. Specify the analyses necessary to "fill in the blanks" in the research report.
4. Determine the kind of data that must be assembled to carry out these analyses.
5. Scan the available secondary sources and/or syndicated services to see whether the specified data already exist or can be obtained quickly and cheaply from others.
6. If no such easy way out presents itself, design instruments and a sampling plan that will yield the data to fit the analyses you have to undertake.
7. Carry out the field work, continually checking to see whether the data will meet your needs.
8. Do the analysis, write the report, and watch it have its intended effect.

In applied research, these steps have led to findings that decision makers use and trust. In academic settings, they encourage researchers to be proactive about the meaning of their work.

Backward research contrasts sharply with Theory "testing" in all the ways described above. It also contrasts sharply with "looking at," "playing with," or "finding out as much as possible about" a topic—open-ended undertakings that are all too liable to have no definite result.

Backward research starts with an answer to the "so what?" question. Regardless of setting, it follows one clear route:

1. Determine how the research will be implemented. What will anyone do with the findings? Will the findings be useful for solving a specific applied problem? If so, what is the problem and how will the findings be used? Will the findings be useful for settling a theoretical dis-
pute? If so, what is the dispute? Will the findings really settle it? Will the findings set limits on an accepted proposition? If so, who will be interested in the outcome, and how will it add to what we already know?

In commenting from his perspective as JCR editor, Richard Lutz (1990, p. ii) observed: "Conducting a piece of research and only later considering the audience for it is a classic example of the sales orientation (i.e., a product in search of a market). Instead, research, like a product, should be designed with a constituency in mind, whether it be managers, public policy officials, or other academic researchers."

The backward strategy seconds that advice. Ironically, some who lecture on the folly of the sales orientation return to their offices and commit that very error in their own research. Instead of asking "so what?" from the beginning, they proceed on the assumption that their customers will value whatever they happen to make.

2. To ensure implementation of the results, determine what the final report should contain and how it should look.

In a continuation of his emphasis on the audience, Lutz (1990, p. ii) recommended that research designs be "test-marketed": "Many futile researcher hours could be saved if authors were to 'test-market' their intended contributions and research designs before executing the research. Many of the more successful authors in our field routinely test-market their manuscripts via a peer review process, but the idea-generation and research-design stages of projects are not generally subjected to the same degree of scrutiny. Taking this simple step . . . would greatly increase the potential yield of our collective research efforts."

To this valuable suggestion, backward research adds three explicit steps: (1) look ahead to a reasonable range of possible outcomes, (2) commit those outcomes to paper, and (3) ask yourself—and colleagues and critics—about each outcome, "all kidding aside, what would this really mean?" If no outcome would mean anything to anyone, the contribution question has been answered, and the answer is "nothing."

3. Specify the analyses necessary to "fill in the blanks" in the research report, and determine the kind of data that must be assembled to carry out these analyses. As obvious as these steps may sound, they are rare in academic consumer research.

Without clear objectives, researchers generate enormous quantities of data only to discover that they cannot locate what they need. When they do get the data organized, they find—too late—that something vital was left out. Had they started with an incomplete report, they would have known which data would, and which would not, fill in the blanks.

By starting with an incomplete report, backward research encourages "triangulation." Many conclusions require more than one kind of evidence. Prespecification shows which combinations of which data and which methods will be needed to make the case.

5. Scan the available secondary sources and/or syndicated services to see whether the specified data already exist or can be obtained quickly and cheaply from others. In consumer research, the "secondary source and/or syndicated services" extend beyond the local literature. Here is where "reach out" pays off.

6. If no such easy way out presents itself, design instruments and a sampling plan that will yield the data to fit the analysis you have to undertake. As Jacoby (1976), Kollat et al. (1972), and many other critics have noted, instruments designed for one task seldom fit another. In backward research, the researcher defines the job, and only then selects or—more usually—designs the tools that will be needed to complete the work.

The same principle applies to all other elements of the investigation, including the sample. In backward research, the researcher thinks first about conclusions and only then about the sample needed to establish credible support. Foresight is the best possible safeguard against Ferber's verdict: "garbage in, garbage out."

7. Carry out the fieldwork, continually checking to see whether the data will meet your needs. In backward research, data are not collected until they "come out right." They are collected until they "settle down." Small samples—samples of the size used in many JCR experiments—stop the investigation while chance factors still have too much impact on the findings (Cohen 1990, 1992; Wilcox 1992). On the other hand, excessive samples spend resources well beyond diminishing returns.

When the strength of the relationship and the amount of variability in the data can be estimated, power analysis (Cohen 1990, 1992; Sawyer 1982) can yield a rough forecast as to where the settling-down point might be. But, even then, a close watch on what is happening as data accumulate provides the best view of where more data will not be worth the extra cost.

8. Do the analysis, write the report, and watch it have its intended effect. In the context of Andreasen's original proposal, the "intended effect" was real-world implementation. In the present context, the "intended effect" is a consequential contribution to our understanding of consumer behavior.

In discussing the slow progress of marketing research, an American Marketing Association task force (1988) lamented "burnouts"—promising academic researchers who turn to other pursuits because they believe that no one cares much about their work. Backward research prevents burnout because it is designed from the beginning to produce outcomes that audiences need and want.

Three Routes to Discovery. If backward research starts with conclusions, how can it produce discoveries? If it starts with limited objectives, how can it expand the field?
In backward research, step 1 sets the creative goal. Instead of advocating "falsification" of some abstract construct, instead of suggesting that investigators should "look at," "play with," or "find out as much as possible about" some general idea, step 1 initiates a process that directs resources toward a definite result.

This strategy is not without precedent. When Watson and Crick set out to find the structure of DNA, they did not start by "falsifying" a high-level Theory, or by "looking at," "playing with," or "finding out as much as possible about" molecules. Instead, they oriented all their efforts toward one limited, specific, and important end (Weisberg 1986, chap. 6).

In backward research, step 2 promotes discovery via test market. Step 2 asks research planners to specify a range of outcomes and then ask themselves and colleagues, "If this were to be the outcome, who would care?" If the answer to that question is "everyone," the outcome is a discovery by definition. If the answer is "no one," the planner needs a different plan.

And finally, like every other kind of research, backward research benefits from sheer good luck. But, unlike less planful procedures, it establishes cognitive structures that interpret unforeseen results. These observations are not intended to imply that the backward approach is the only way to make discoveries. As we all know, discovery takes many routes. They are intended to assert, however, that creative solutions to complex problems are most likely to occur when problem solvers start with clear ideas of where they must come out.

**SUMMARY**

The Journal of Consumer Research and ACR aspired to leadership in a rapidly accelerating academic and applied field. Over the years, that plan has faltered. Now, JCR and ACR turn inward, toward a less ambitious set of issues and a less expansive set of goals.

Five guidelines would change all that.

1. Leave home. Consumer behavior starts with the antecedents of decisions and ends with ecological effects. Consumer choices run from life-altering options to brands of gum. In the past, too much effort has been spent on the least important intersections of those two dimensions. Consumer researchers who move upward and to the right will add value to their work.

2. Forsake mythology. Five myths impede progress: Students represent consumers. The laboratory represents the environment. Statistical significance confers real significance. When suitably disguised, correlation becomes causation. And, once mentioned, limitations simply go away. These myths do more harm than good. They can and should be given up.

3. Reach out. Business, government, and foundations—and adjacent academic disciplines—command data, constructs, methods, and perspectives that can enrich our work. Consumer researchers who participate in these resources gain sophistication, range, and depth.

4. Start small and stay real. Search for abstract, universal Theories has not increased our understanding of consumer behavior. Consumer researchers who ask "so what?" about every investigation will fulfill the promise that authenticates the field.

5. Research backward. The surest route to an important discovery is to start with a definite objective and work backward. Researchers who work backward conserve resources, maintain motivation, and produce valuable results.

**Benefits**

These guidelines offer different benefits to different groups.

**Early Career Researchers.** To early career researchers, the guidelines offer direct aim at the real behavior of real consumers. This is no trivial concern. Consumer behavior is important in its own right, and it has extensive consequences throughout American society and throughout the world.

The guidelines do not reject science. They reject only blind submission to conventions that have short-circuited contact with reality. The guidelines do not reject theory. They reject only the notion that high-level abstractions are dependable when critical decisions must be made.

The guidelines urge seriousness of purpose. They insist that internal validity is not enough and that external validity is too important to be postponed. They urge directed, focused effort against important problems, and they hold that innovative, valuable solutions to those problems can be found.

In a few years, present early career researchers will be the pacemakers of the field. Now is not too soon to start.

**Current Cadre of Established Researchers.** To the current cadre of established researchers, the guidelines offer renewal. They say, "Open doors. Expand and elevate the discipline. Increase its credibility. Be even more creative than in the past 20 years."

Unquestionably, ACR is a "bright and talented and productive group." And JCR is the most prestigious journal in the field. What is needed now is a creative integration that will both preserve those values and import resources from outside. What is also needed is more attention to the dark side of consumer behavior and to Sheth's early insight that credibility is worth the hardships of real-world research.

As role models, gatekeepers, and active contributors, the current cadre can advance the discipline in those directions, or they can defend the status quo. As between innovation and defense, innovation promises broader
horizons, more opportunities to source important find-
ing, and greater stature—both within the academic community and throughout the outside world.

Academic Leaders of ACR. To ACR'S academic leaders, current and future, the guidelines offer growth. The guidelines say, "Turn outward, not inward. Recruit outsiders. Fulfill the vision of the early years."

A larger role in fashioning the conference program would invite outsiders in. External validity would bring outsiders back each year. The result would be better understanding of consumer behavior. It would also be less confidence, more agitation, more controversy, and more ferment—just as ACR'S founders had hoped.

JCR'S Editors and Reviewers. To JCR'S editors and reviewers, the guidelines offer opportunities to make the journal more important and more widely used. The guidelines seek less willingness to settle for stages 1 and 2 of the research process and more serious attention to the rigors of stage 3. The guidelines do not ask that JCR become a managerial journal. They ask only that JCR disseminate what intelligent outsiders would regard as knowledge—serious conclusions about how real consumers really behave.

The intention behind the founding of JCR was to create a store of insight into consumer behavior, broadly defined. Were it to become that, it would become the journal to which professionals sharing an interest in consumer behavior across disciplines send their material, and it would be of greater value to anyone with any interest in the field.

Department Heads and Deans. To administrators, the guidelines offer opportunities to grow a world-class discipline. This objective would require closer contact with other segments of the university and more constructive use of ideas and material resources from outside. It would also require vigorous support of innovative programs and unwavering conviction that horizons can and must exceed their current bounds.

The rewards would be substantial. In this field, credible discoveries have worldwide implications. And intrinsic interest brings first-rate faculty—and first-rate students—into the fold. The discipline's potential is outlined in JCR'S first editorial and ACR'S constitution. The right incentives would lead to fulfillment of those worthy goals.

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