

**O**n January 1, 1971, the Marlboro Man rode across the television screen one last time. At midnight a congressional ban on broadcast advertising of cigarettes went into effect, and the smoking cowboy was banished to the frozen land of billboards and print ads. With the deadline looming, bleary-eyed, hung-over viewers across the country woke to a final burst of cigarette celebration. "Philip Morris went on a \$1.25-million ad binge New Year's Day on the Dick Cavett, Johnny Carson and Merv Griffin shows," *The New York Times* reported. "There was a surfeit of cigarette ads during the screening of the bowl games." And then they were gone. American TV viewers would no longer be confronted by happy smokers frolicking on the beach or by hapless smokers losing the tips of their extra-long cigarettes between cymbals and elevator doors. They would no longer have to choose between good grammar and good taste.

This was widely considered an important victory for consumers. The *Times* wondered whether the ad ban was "a signal that the voice of the consumer, battling back, can now really make itself heard in Washington." A *New Yorker* article tracing the chain of events that led to the ban concluded, "To an increasing degree, citizens of the consumer state seem to be perceiving their ability to turn upon their manipulators, to place widespread abuses of commercial privilege under the prohibition of laws that genuinely do protect the public, and, in effect, to give back to the people a sense of controlling their own lives."

As these comments suggest, supporters of the ban viewed advertising not as a form of communication but as a mysterious

# Cowboys, Camels, and Kids

Does advertising turn people  
into smokers?

By Jacob Sullum

force that seduces people into acting against their interests. This was a common view then and now, popularized by social critics such as Vance Packard and John Kenneth Galbraith. In *The Affluent Society* (1958), Galbraith argued that manufacturers produce goods and then apply "ruthless psychological pressures" through advertising to create demand for them. In *The Hidden Persuaders* (1957), Packard described advertising as an increasingly precise method of manipulation that can circumvent the conscious mind, influencing consumers without their awareness. He reinforced his portrait of Madison Avenue guile with the pseudoscientific concept of subliminal messages: seen but not seen, invisibly shaping attitudes and actions. The impact of such ideas can be seen in the controversy over tobacco advertising. The federal court that upheld the ban on broadcast ads for cigarettes quoted approvingly from another ruling that re-

PETER BENNETT



Camel Dropping: Long-pilloried by anti-smoking activists, the press, and politicians, R.J. Reynolds announced last July that their infamous dromedary had walked his last mile.

ferred to “the subliminal impact of this pervasive propaganda.”

Eliminating TV and radio commercials for cigarettes, of course, did not eliminate criticism of tobacco advertising. In 1985 the American Cancer Society, which decades earlier had called for an end to cigarette ads through “voluntary self-regulation,” endorsed a government ban on all forms of tobacco advertising and promotion. The American Medical Association, the American Public Health Association, the American Heart Association, and the American Lung Association also began advocating a ban. Beginning in the mid-’80s, members of Congress introduced legislation that would have prohibited tobacco advertising, limited it to “tombstone” messages (black text on a white background), or reduced its tax deductibility. None of these bills got far.

In the ’90s, since Congress did not seem inclined to impose further censorship on the tobacco companies, David Kessler, commissioner of the Food and Drug Administration, decided to do it by bureaucratic fiat. Reversing the FDA’s longstanding position, he declared that the agency had jurisdiction over tobacco products. In August 1996 the FDA issued regulations aimed at imposing sweeping restrictions on the advertising and promotion of cigarettes and smokeless tobacco. Among other things, the regulations prohibited promotional items such as hats, T-shirts, and lighters; forbade brand-name sponsorship of sporting events; banned outdoor advertising within 1,000 feet of a playground, elementary school, or high school; and imposed a tombstone format on all other outdoor signs, all indoor signs in locations accessible to minors, and all print ads except those in publications with a negligible audience under the age of 18.

The tobacco companies challenged the regulations in federal court, and in April 1997 U.S. District Judge William L. Osteen ruled that the FDA had no statutory authority to regulate the advertising and promotion of “restricted devices,” the category in which the agency had placed cigarettes and smokeless tobacco. Under the nationwide liability settlement proposed last summer,

however, the tobacco companies agreed not only to the FDA rules but to additional restrictions, including bans on outdoor ads, on the use of human or cartoon figures, on Internet advertising, and on product placement in movies, TV shows, or video games. Congress is considering that proposal now, and any legislation that emerges will dramatically change the way tobacco companies promote their products. Not content to wait, cities across the country, including New York, Chicago, and San Francisco, are imposing their own limits on cigarette signs and billboards. Elsewhere, the European Union plans to ban almost all forms of tobacco advertising by 2006.

These restrictions are based on the premise that fewer ads will mean fewer smokers—in particular, that teenagers will be less inclined to smoke if they are not exposed to so many images of rugged cowboys and pretty women with cigarettes. As a PTA official put it in 1967, “The constant seduction of cigarette advertising...

gives children the idea that cigarettes are associated with all they hold dear—beauty, popularity, sex, athletic success.” For three decades the debate over tobacco advertising has been driven by such concerns. Yet there is remarkably little evidence that people smoke because of messages from tobacco companies. The ready acceptance of this claim reflects a widespread view of advertising as a kind of magic that casts a spell on consumers and leads them astray.

Today’s critics of capitalism continue to elaborate on the theme that Vance Packard and John Kenneth Galbraith got so much mileage out of in the ’50s and ’60s. Alan Thein Durning of the anti-growth Worldwatch Institute describes the “salient characteristics” of advertising this way: “It preys on the weaknesses of its host. It creates an insatiable hunger. And it leads to debilitating over-consumption. In the biological realm, things of that nature are called parasites.” When combined with appeals to protect children, this perception of advertising as insidious and overpowering tends to squelch any lingering concerns about free speech.

### Busting Joe Camel’s Hump

In 1988 R.J. Reynolds gave the anti-smoking movement an emblem for the corrupting influence of tobacco advertising. Introduced with the slogan “smooth character,” Joe Camel was a cartoon version of the dromedary (known as Old Joe) that has appeared on packages of Camel cigarettes since 1913. Print ads and billboards depicted Joe Camel shooting pool in a tuxedo, hanging out at a nightclub, playing in a blues band, sitting on a motorcycle in a leather jacket and shades. He was portrayed as cool, hip, and popular—in short, he was like a lot of other models in a lot of other cigarette ads, except he was a cartoon animal instead of a flesh-and-blood human being. Even in that respect he was hardly revolutionary. More than a century before the debut of Joe Camel, historian Jordan Goodman notes,

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the manufacturer of Bull Durham smoking tobacco ran newspaper ads throughout the country depicting the Durham Bull "in anthropomorphic situations, alternating between scenes in which the bull was jovial and boisterous and those where he was serious and determined."

But Joe Camel, it is safe to say, generated more outrage than any other cartoon character in history. Critics of the ad campaign said the use of a cartoon was clearly designed to appeal to children. *Washington Post* columnist Courtland Milloy said "packaging a cartoon camel as a 'smooth character' is as dangerous as putting rat poison in a candy wrapper." In response to such criticism, R.J. Reynolds noted that Snoopy sold life insurance and the Pink Panther pitched fiberglass insulation, yet no one assumed those ads were aimed at kids.

The controversy intensified in 1991, when *The Journal of the American Medical Association* published three articles purporting to show that Joe Camel was indeed a menace to the youth of America. The heavily promoted studies generated an enormous amount of press coverage, under headlines such as "Camels for Kids" (*Time*), "I'd Toddle a Mile for a Camel" (*Newsweek*), "Joe Camel Is Also Pied Piper, Research Finds" (*The Wall Street Journal*), and "Study: Camel Cartoon Sends Kids Smoke Signals" (*Boston Herald*). Dozens of editorialists and columnists condemned Joe Camel, and many said he should be banned from advertising.

In March 1992 the Coalition on Smoking or Health, a joint project of the American Cancer Society, the American Heart Association, and the American Lung Association, asked the Federal Trade Commission to prohibit further use of the smooth character. Surgeon General Antonia Novello and the American Medical Association also called for an end to the campaign. In August 1993 the FTC's staff backed the coalition's petition, and a month later 27 state attorneys general added their support. In June 1994, by a 3-to-2 vote, the FTC decided not to proceed against Joe, finding that the record did not show he had increased smoking among minors. (During the first five years of the campaign, in fact, teenage smoking actually declined, starting to rise only in 1993.) In March 1997, after several members of Congress asked the FTC to re-examine the issue, the commission's staff again urged a ban, citing new evidence that R.J. Reynolds had targeted underage smokers. This time the commission, with two new members appointed by the Clinton administration, decided to seek an order instructing RJR not only to keep Joe out of children's sight but to conduct a "public education campaign" aimed at deterring underage smoking.

The two dissenting commissioners were not impressed by the new evidence, which failed to show that Joe Camel had actually encouraged kids to smoke. One wrote, "As was true three years ago, intuition and concern for children's health are not the equivalent of—and should not be substituted for—evidence sufficient to find reason to believe that there is a likely causal connection between the Joe Camel advertising campaign and

smoking by children." But the FTC's action turned out to be doubly irrelevant. R.J. Reynolds, along with its competitors, agreed to stop using cartoon characters as part of the proposed nationwide settlement, and last July it announced that it was discontinuing the "smooth character" campaign, replacing it with one that makes more subtle use of camels.

Although the *JAMA* articles were widely cited by Joe's enemies, including the FTC and President Clinton, they proved much less than the uproar would lead one to believe. In the first study, researchers led by Paul M. Fischer, a professor of family medicine at the Medical College of Georgia, asked preschoolers to match brand logos to pictures of products. Overall, about half the kids correctly matched Joe Camel with a cigarette. Among the 6-year-olds, the share was 91 percent, about the same as the percentage who correctly matched the Disney Channel logo to a picture of Mickey Mouse.

But recognizing Joe Camel is not tantamount to smoking, any more than recognizing the logos for Ford and Chevrolet (which most of the kids also did) is tantamount to driving. The researchers seemed to assume that familiarity breeds affection, but that is not necessarily the case. A subsequent study, funded by R.J. Reynolds and published in the Fall 1995 *Journal of Marketing*, confirmed that recognition of Joe Camel rises with age and that most 6-year-olds correctly associate him with cigarettes. Yet 85 percent of the kids in this study had a negative attitude toward cigarettes, and the dislike rose with both age and recognition ability. Among the 6-year-olds, less than 4 percent expressed a positive attitude toward cigarettes.

### Animal Magnetism

In the second *JAMA* study, Joseph R. DiFranza, a researcher at the University of Massachusetts Medical School, led a team that showed Joe Camel ads to samples of high school students and adults. They found that the teenagers were more likely to recognize Joe Camel, to recall the ads, and to evaluate them posi-

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tively than the adults, whose average age was about 40. Since R.J. Reynolds contended that the Joe Camel campaign was aimed at young adults, these results were hardly surprising. Based on such comparisons, it is impossible to distinguish between an ad aimed at 16-year-olds and an ad aimed at 18-year-olds (or 21-year-olds).

DiFranza et al.'s most striking claim was that the Joe Camel campaign had caused a huge shift in brand preferences. Using data from seven surveys conducted in three states between 1976 and 1988, they estimated that 0.5 percent of underage smokers preferred Camels before the campaign began. By comparison,

33 percent of the teenage smokers in their study, conducted during 1990 and 1991, said they smoked Camels—a 66-fold increase. “Our data demonstrate that in just 3 years Camel’s Old Joe cartoon character had an astounding influence on children’s smoking behavior,” the researchers wrote. But the pre-1989 surveys and the *JAMA* study were not comparable, and neither used random samples of the national population, so it’s doubtful that the results are representative of American teenagers in general. Data from the Centers for Disease Control and Prevention’s Teenage Attitudes and Practices Survey, which does use a nationwide sample, suggest a much less dramatic (though still sizable) shift toward Camels. In 1993, 13.3 percent of the TAPS respondents said they usually bought Camels, compared to 8.1 percent in 1989.

The third *JAMA* article presented data from a 1990 California telephone survey. The researchers, led by John P. Pierce, head of the University of California at San Diego’s Cancer Prevention and Control Program, reported that teenagers were more likely than adults to identify Marlboro or Camel as the most advertised brand. The survey also found that Marlboro’s market share increased with age until 24, when it started to decline gradually. Camel, on the other hand, was considerably more popular among teenagers than among young adults. Comparing the California data to the results of a national survey conducted in 1986, Pierce et al. concluded that the market shares for both Marlboro and Camel had increased among adults (the 1986 survey did not include minors). Camel’s increase was bigger, particularly among adults under the age of 30 (i.e., the segment R.J. Reynolds claimed to be targeting).

Taken together, these studies suggested that 1) most children know Joe Camel has something to do with cigarettes and 2) the Joe Camel campaign helped increase the brand’s market share, especially among young smokers. Since most smokers pick up the habit before they turn 18, it seems likely that the tobacco companies would take an interest in the brand choices of teenagers, and that inference is supported by internal documents. In 1974, for example, Philip Morris hired the Roper Organization to interview young smokers about their brand choices, and more than a third of the 1,879 respondents were described as 18 or younger. “To ensure increased and longer-term growth for Camel filter,” said a 1975 RJR memo, “the brand must increase its share penetration among the 14-24 age group, which have a new set of more liberal values and which represent tomorrow’s cigarette business.” Last year, as part of an agreement settling state lawsuits, the Liggett Group said tobacco companies have deliberately targeted underage smokers.

The other companies continued to deny that charge. R.J. Reynolds maintained that Joe Camel was aimed at 18-to-24-year-olds, although the company had no way of assuring that he would not also appeal to people younger than 18. In response, David Kessler told ABC’s Peter Jennings, “Tell me how you design an advertising campaign that affects only 18-year-olds.” Which is sort of the point. If cigarette companies have to avoid any ad that might catch the eye or tickle the fancy of a 16-year-old, they might as well not advertise at all (which would suit Kessler fine). In any case, the important question is whether advertising encourages teenagers to smoke, not whether it steers

them toward Camels instead of Marlboros.

In each of the Joe Camel studies, the researchers’ conclusions (and the subsequent press coverage) went beyond what the data indicated. Fischer et al., whose comparison between Joe Camel and Mickey Mouse got the most attention, were relatively cautious: “Given the serious health consequences of smoking, the exposure of children to environmental tobacco advertising may represent an important health risk and should be studied further.” DiFranza et al. said, “A total ban of tobacco advertising and promotions, as part of an effort to protect children from the dangers of tobacco, can be based on sound scientific reasoning.” Pierce et al. flatly concluded that “[c]igarette advertising encourages youth to smoke and should be banned.” These are all statements of opinion that have little to do with what the studies actually showed.

Information that came to light in a lawsuit challenging the Joe Camel campaign (a case that R.J. Reynolds settled for \$10 million in September) suggests that at least some of the researchers may have prejudged the issue. In a letter he wrote to a co-author before the research began, DiFranza complained that he had not been able to give reporters “proof that the tobacco companies are advertising to children. I can’t point to any one piece of evidence as a smoking gun and say ‘here, this proves it.’ Well I have an idea for a project that will give us a couple of smoking guns to bring to the national media.” He explained, “I am proposing a quick and easy project that should produce... evidence that RJR is going after kids with their Camel ads.” Toward the end of the letter, he said, “There, the paper is all ready, now all we need is some data.”

## Switching Arguments

Neither DiFranza’s “smoking gun” nor the other studies provided any evidence about the impact of advertising on a teenager’s propensity to smoke, which is the crux of the issue. When critics complain that advertising encourages people to smoke, the tobacco companies reply that it encourages smokers to buy particular brands. Strictly speaking, these claims are not mutually exclusive. In principle, advertising can promote an industry’s overall sales as well as drum up business for a specific company. An ad for a Compaq portable computer might encourage people to buy a Compaq (the company certainly hopes so), or it might get them thinking about laptops generally. But the tobacco companies argue that the U.S. market for cigarettes is mature, meaning that the product is universally familiar, like toothpaste or deodorant, and attempts to boost overall consumption are no longer cost-effective. Indeed, with smoking rates declining, the tobacco companies are fighting for pieces of a shrinking pie. Tobacco’s opponents say this trend makes cigarette manufacturers all the more desperate to maintain their profits; they need advertising like the Joe Camel campaign to attract replacements for smokers who quit or die.

Advocates of an advertising ban contend that brand competition does not adequately explain the industry’s spending on advertising and promotion, which totals about \$5 billion a year. In 1995, the most recent year for which the Federal Trade Commission has reported figures, coupons, customer premiums

(lighters, key chains, clothing, etc.), and allowances to distributors accounted for about 80 percent of this money. Cigarette companies spent about \$900 million on newspaper, magazine, door, transit, direct-mail, and point-of-sale advertising.

According to a widely cited article published in the Winter 1987 *Journal of Public Health Policy*, "A simple calculation shows that brand-switching, alone, could never justify the enormous advertising and promotional expenditures of the tobacco companies." Anti-smoking activist Joe B. Tye and his co-authors started with an estimate, based on marketing research, that about 10 percent of smokers switch brands each year. Then they calculated that the industry's spending on advertising and promotion in 1983 amounted to nearly as much per switcher as a typical smoker would have spent on cigarettes that year. They also noted that, since each cigarette maker produces various brands, smokers who switch are not necessarily taking their business to another company.

"Thus," the authors concluded, "advertising and promotion can be considered economically rational only if they perform a defensive function—retaining company brand loyalty that would otherwise be lost to competitors who promote their products—of if they attract new entrants to the smoking marketplace, or discourage smokers from quitting." If defending market share were the only aim, Tye et al. added, the tobacco companies should support a ban on advertising and promotion, which would eliminate the threat from competitors. On the other hand, "If advertising and promotion increase cigarette consumption, then less than two million new or retained smokers—5.5 percent of smokers who start each year or try to quit (most failing)—alone would justify the annual promotional expenditure."

There are several flaws in this argument. To begin with, the estimate for the number of brand switchers does not include people who usually smoke, say, Benson & Hedges but occasionally smoke Camels. Based on its own marketing surveys, R.J. Reynolds reports that about 70 percent of smokers have a second-choice brand that they smoke now and then. About 25 percent regularly buy more than one brand each month. Even smokers who don't have a second favorite sometimes try other brands because of coupons, premiums, and promotional offers.

Another problem is that, in estimating the value of brand switchers, Tye et al. did not take into account the continuing revenue from a new customer; they considered only the money he spends on cigarettes in one year. By contrast, when they estimated the gain from getting someone to start smoking or keeping a smoker who otherwise would have quit, they used the net present value of the additional profit over a 20-year period, which they calculated as \$1,085, more than three times a year's revenue.

— Most important, Tye et al. did not acknowledge that tobacco companies could be competing for new smokers without actually creating them. Although the companies deny that they target minors in any way, building brand loyalty among teenagers is

still not the same thing as making them into smokers.

Tye et al. considered the industry's opposition to an advertising ban prima facie evidence that tobacco advertising increases total consumption. But the tobacco companies might also have opposed a ban because it would help delegitimize the industry, opening the way to other kinds of regulation and defeats in product liability suits. Furthermore, a company's attitude toward restrictions on advertising (and brand competition in general) depends on its market position. Philip Morris and R.J. Reynolds, the market leaders, might well be less worried about an advertising ban than their competitors. Tellingly, these were the companies that spearheaded the settlement talks, and they included dramatic restrictions on advertising and promotion in their opening offer.

In any case, it is not clearly foolish for the tobacco companies to spend so much money on advertising and promotion, even without the hope of market expansion. More evidence is necessary to support the claim that tobacco advertising increases consumption. Broadly speaking, there are three ways of investigating this issue. You can look at the historical relationship between changes in advertising and changes in smoking. You can compare smoking trends in places with different levels of advertising. And you can ask people questions in the hope that their answers will suggest how advertising influences attitudes and behavior. None of these approaches has yielded consistent or definitive results. Each has limitations that leave plenty of room for interpretation. The state of the research was aptly, if unintentionally, summed up by the subtitle of a 1994 article in the *International Journal of Advertising* that made the case for a causal link: "The Evidence Is There for Those Who Wish to See It."

### Does Life Imitate Ads?

Some analyses of historical data have found a small, statistically significant association between increases in advertising and

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increases in smoking; others have not. In a 1993 overview of the evidence, Michael Schudson, professor of communication and sociology at the University of California at San Diego, wrote, "In terms of a general relationship between cigarette advertising and cigarette smoking, the available econometric evidence is equivocal and the kind of materials available to produce the evidence leave much to be desired." This sort of research is open to challenge on technical grounds, such as the time period chosen and the methods for measuring advertising and consumption. There is also the possibility that advertising goes up in response to a rise in consumption, rather than the reverse. Industry critics

I really don't know  
if I should smoke...

...but my buddies and my sweet-  
heart smoke, and it does give me a  
lot of pleasure.  
Women begin to smoke, as they tell  
me, just about the time they begin  
to vote, and that's hardly a reason  
for banning smoking. I guess I just  
don't smoke that's all.  
It is because that I smoke CIG-  
ARETTES. They seem to be milder  
and they have a very pleasing taste.



The Cigarette that's Milder

The Cigarette that's Even Milder

You've Come a Long Way, Baby?: A 1933 ad for the *Saturday Evening Post*. Critics cite increases in smoking by women in the 1920s and late '60s-early '70s as evidence of advertising's power. But in both cases, the ad campaigns followed rather than preceded the boost in smoking rates.

often cite the increases in smoking by women that occurred in the 1920s and the late '60s to early '70s as evidence of advertising's power. "Yet in both cases," Schudson noted, "the advertising campaign followed rather than preceded the behavior it supposedly engendered." In other words, the tobacco companies changed their marketing in response to a trend that was already under way.

International comparisons have also produced mixed results. There is no consistent relationship between restrictions on advertising and smoking rates among adults or minors. In some countries where advertising is severely restricted, such as Sweden, smoking rates are relatively low. In others, such as Norway, they are relatively high. Sometimes smoking drops after advertising is banned; sometimes it doesn't. It is hard to say what such findings mean. Countries where smoking is already declining may be more intolerant of the habit and therefore more likely to ban advertising. Alternatively, a rise in smoking might help build support for a ban. Furthermore, advertising bans are typically accompanied by other measures, such as tobacco tax increases and restrictions on smoking in public, that could be expected to reduce cigarette purchases. The one conclusion it seems safe to draw is that many factors other than advertising affect tobacco consumption.

The best way to resolve the issue of advertising's impact on smoking would be a controlled experiment: Take two groups of

randomly selected babies; expose one to cigarette advertising but otherwise treat them identically. After 18 years or so, compare smoking rates. Since such a study would be impractical, social scientists have had to make do with less tidy methods, generally involving interviews, questionnaires, or survey data. This kind of research indicates that the most important factors influencing whether a teenager will smoke are the behavior of his peers, his perceptions of the risks and benefits of smoking, and the presence of smokers in his home. Exposure to advertising does not independently predict the decision to smoke, and smokers themselves rarely cite advertising as an important influence on their behavior.

Critics of the industry have been quick to seize upon studies indicating that teenage smokers disproportionately prefer the most advertised cigarette brands. But such research suggests only that advertising has an impact on brand preferences, which the tobacco companies have conceded all along. Several studies have found that teenagers who smoke (or who say they might) are more apt to recall cigarette advertising and to view it favorably. Such findings do not necessarily mean that advertising makes adolescents more likely to smoke. It is just as plausible to suppose that teenagers pay more attention to cigarette ads after they start smoking, or that teenagers who are inclined to smoke for other reasons are also more likely to have a positive view of cigarette ads.

In reporting on research in this area, the mainstream press tends to ignore such alternative interpretations. Consider the coverage of a 1995 study published in the *Journal of the National Cancer Institute*. The study, co-authored by John Pierce, found that teenagers who scored high on a "receptivity" index—which included "recognition of advertising messages, having a favorite advertisement, naming a brand [they] might buy, owning a tobacco-related promotional item, and willingness to use a tobacco-related promotional item"—were more likely to say they could not rule out smoking in the near future. Such "receptivity" was more strongly associated with an inclination to smoke than was smoking among parents and peers.

According to *The New York Times*, these results meant that "[t]obacco advertising is a stronger factor than peer pressure in encouraging children under 18 to smoke." Similarly, *The Boston Globe* reported that the study showed "cigarette advertising has more influence on whether adolescents later start smoking than does having friends or family members who smoke." The Associated Press went even further: "Of all the influences that can draw children into a lifelong habit of smoking, cigarette advertising is the most persuasive." In reality, the study showed only that teenagers who like smoking-related messages and merchandise are more receptive to the idea of smoking—not exactly a startling finding.

A study reported last December in *Archives of Pediatric and Adolescent Medicine* received similar treatment. The researchers surveyed about 1,200 students in grades six through 12 and found that kids who owned cigarette promotional items such as jackets and backpacks were four times as likely to smoke as those who did not. "Tobacco Gear a Big Draw for Kids," announced the headline in *The Boston Globe*. The story began, "If tobacco manufacturers hope to promote smoking by produc-

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ing clothing or accessories emblazoned with cigarette logos, research by Dartmouth Medical School suggests that the tactic works well." Under the headline, "Study: Logos Foster Smoking," *Newsday* reported that "children who own cigarette promotional items...are far more likely to smoke."

Yet as the researchers themselves conceded, "The finding of an association between CPI [cigarette promotional item] ownership and being a smoker could easily be an expression of an adolescent who acquired these items after having made the decision to become a smoker." Later in the article, they wrote, "Our study and others published to date are subject to the usual limitations inherent in cross-sectional studies, in that we are unable to infer a direction between the exposure (ownership of a CPI) and smoking behavior, limiting our ability to invoke a causal relationship between CPI ownership and smoking." Translation: We would like to say that promotional items make kids smoke, but our study doesn't show that. This shortcoming did not stop the authors from concluding that "all CPI distribution should end immediately."

## Marginal Effects

Overall, the evidence that advertising plays an important role in getting people to smoke is not very convincing. In 1991 the economist Thomas Schelling, former director of Harvard's Institute for the Study of Smoking Behavior and Policy, said: "I've never seen a genuine study of the subject. Most of the discussion that I hear—even the serious discussion—is about as profound as saying, 'If I were a teenage black girl, that ad would make me smoke.' I just find it altogether unpersuasive. I've been very skeptical that advertising is important in either getting people to smoke or keeping people smoking. It's primarily brand competition." The 1989 surgeon general's report conceded that "[t]here is no scientifically rigorous study available [to the public] that provides a definitive answer to the basic question of whether advertising and promotion increase the level of tobacco consumption. Given the complexity of the issue, none is likely to be forthcoming in the foreseeable future." The 1994 surgeon general's report, which focused on underage smoking, also acknowledged the "lack of definitive literature."

It's possible, of course, that tobacco advertising has an effect that simply cannot be measured. The 1989 surgeon general's report concluded that, while "the extent of the influence of advertising and promotion on the level of consumption is unknown and possibly unknowable," the weight of the evidence "makes it more likely than not that advertising and promotional activities do stimulate cigarette consumption." The 1994 report, based on suggestive evidence, said "cigarette advertising appears to increase young people's risk of smoking." Similarly, Michael Schudson—who says "[a]dvertising typically attempts little and achieves still less"—argues that cigarette advertising "normally has only slight effect in persuading people to change their at-

titudes or behaviors." But he adds, "It is reasonable to believe that some teens become smokers or become smokers earlier or become smokers with less guilt or become heavier smokers because of advertising."

Serious critics of tobacco advertising do not subscribe to a simple stimulus-and-response theory in which kids exposed to Joe Camel automatically become smokers. They believe the effects of advertising are subtle and indirect. They argue that the very existence of cigarette ads suggests "it really couldn't be all that bad, or they wouldn't be allowed to advertise," as Elizabeth Whelan of the American Council on Science and Health puts it. They say advertising imagery reinforces the notion, communicated by peers and other role models, that smoking is cool. They say dependence on advertising revenue from tobacco companies discourages magazines from running articles about the health consequences of smoking. They do not claim such effects are sufficient, by themselves, to make people smoke. Rather, they argue that at the margin—say, for an ambivalent teenager whose friends smoke—the influence of advertising may be decisive.

Stated this way, the hypothesis that tobacco advertising increases consumption is impossible to falsify. "Fundamentally," writes Jean J. Boddewyn, a professor of marketing at Baruch College, "one cannot prove that advertising does *not* cause or influence smoking, because one cannot scientifically prove a negative." So despite the lack of evidence that advertising has a substantial impact on smoking rates, tobacco's opponents can argue that we should play it safe and ban the ads—just in case.

The problem with this line of reasoning is that banning tobacco advertising can be considered erring on the side of caution only if we attach little or no value to freedom of speech. If cigarette ads are a bad influence on kids, that is something for parents and other concerned adults to counter with information and exhortation. They might even consider a serious effort to enforce laws against cigarette sales to minors. But since we clearly are not helpless to resist the persuasive powers of Philip Morris et al.—all of us see the ads, but only some of us smoke—

**Banning tobacco advertising, as tobacco critics want, can be considered erring on the side of caution only if we attach little or no value to freedom of speech.**

it is hard to square an advertising ban with a presumption against censorship. Surely a nation that proudly allows racist fulminations, communist propaganda, flag burning, nude dancing, pornography, and sacrilegious art can safely tolerate Marlboro caps and Joe Camel T-shirts. ♦

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This was widely considered an important victory for consumers. The *Times* wondered whether the ad ban was "a signal that the voice of the consumer, battling back, can now really make itself heard in Washington." A *New Yorker* article tracing the chain of events that led to the ban concluded, "To an increasing degree, citizens of the consumer state seem to be perceiving their ability to turn upon their manipulators, to place widespread abuses of commercial privilege under the prohibition of laws that genuinely do protect the public, and, in effect, to give back to the people a sense of controlling their own lives."

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into smokers?

By Jacob Sullum

force that seduces people into acting against their interests. This was a common view then and now, popularized by social critics such as Vance Packard and John Kenneth Galbraith. In *The Affluent Society* (1958), Galbraith argued that manufacturers produce goods and then apply "ruthless psychological pressures" through advertising to create demand for them. In *The Hidden Persuaders* (1957), Packard described advertising as an increasingly precise method of manipulation that can circumvent the conscious mind, influencing consumers without their awareness. He reinforced his portrait of Madison Avenue guile with the pseudoscientific concept of subliminal messages: seen but not seen, invisibly shaping attitudes and actions. The impact of such ideas can be seen in the controversy over tobacco advertising. The federal court that upheld the ban on broadcast ads for cigarettes quoted approvingly from another ruling that re-

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Camel Dropping: Long-pilloried by anti-smoking activists, the press, and politicians, R.J. Reynolds announced last July that their infamous dromedary had walked his last mile.

ferred to “the subliminal impact of this pervasive propaganda.”

Eliminating TV and radio commercials for cigarettes, of course, did not eliminate criticism of tobacco advertising. In 1985 the American Cancer Society, which decades earlier had called for an end to cigarette ads through “voluntary self-regulation,” endorsed a government ban on all forms of tobacco advertising and promotion. The American Medical Association, the American Public Health Association, the American Heart Association, and the American Lung Association also began advocating a ban. Beginning in the mid-’80s, members of Congress introduced legislation that would have prohibited tobacco advertising, limited it to “tombstone” messages (black text on a white background), or reduced its tax deductibility. None of these bills got far.

In the ’90s, since Congress did not seem inclined to impose further censorship on the tobacco companies, David Kessler, commissioner of the Food and Drug Administration, decided to do it by bureaucratic fiat. Reversing the FDA’s longstanding position, he declared that the agency had jurisdiction over tobacco products. In August 1996 the FDA issued regulations aimed at imposing sweeping restrictions on the advertising and promotion of cigarettes and smokeless tobacco. Among other things, the regulations prohibited promotional items such as hats, T-shirts, and lighters; forbade brand-name sponsorship of sporting events; banned outdoor advertising within 1,000 feet of a playground, elementary school, or high school; and imposed a tombstone format on all other outdoor signs, all indoor signs in locations accessible to minors, and all print ads except those in publications with a negligible audience under the age of 18.

The tobacco companies challenged the regulations in federal court, and in April 1997 U.S. District Judge William L. Osteen ruled that the FDA had no statutory authority to regulate the advertising and promotion of “restricted devices,” the category in which the agency had placed cigarettes and smokeless tobacco. Under the nationwide liability settlement proposed last summer,

however, the tobacco companies agreed not only to the FDA rules but to additional restrictions, including bans on outdoor ads, on the use of human or cartoon figures, on Internet advertising, and on product placement in movies, TV shows, or video games. Congress is considering that proposal now, and any legislation that emerges will dramatically change the way tobacco companies promote their products. Not content to wait, cities across the country, including New York, Chicago, and San Francisco, are imposing their own limits on cigarette signs and billboards. Elsewhere, the European Union plans to ban almost all forms of tobacco advertising by 2006.

These restrictions are based on the premise that fewer ads will mean fewer smokers—in particular, that teenagers will be less inclined to smoke if they are not exposed to so many images of rugged cowboys and pretty women with cigarettes. As a PTA official put it in 1967, “The constant seduction of cigarette advertising...

gives children the idea that cigarettes are associated with all they hold dear—beauty, popularity, sex, athletic success.” For three decades the debate over tobacco advertising has been driven by such concerns. Yet there is remarkably little evidence that people smoke because of messages from tobacco companies. The ready acceptance of this claim reflects a widespread view of advertising as a kind of magic that casts a spell on consumers and leads them astray.

Today’s critics of capitalism continue to elaborate on the theme that Vance Packard and John Kenneth Galbraith got so much mileage out of in the ’50s and ’60s. Alan Thein Durning of the anti-growth Worldwatch Institute describes the “salient characteristics” of advertising this way: “It preys on the weaknesses of its host. It creates an insatiable hunger. And it leads to debilitating over-consumption. In the biological realm, things of that nature are called parasites.” When combined with appeals to protect children, this perception of advertising as insidious and overpowering tends to squelch any lingering concerns about free speech.

### Busting Joe Camel’s Hump

In 1988 R.J. Reynolds gave the anti-smoking movement an emblem for the corrupting influence of tobacco advertising. Introduced with the slogan “smooth character,” Joe Camel was a cartoon version of the dromedary (known as Old Joe) that has appeared on packages of Camel cigarettes since 1913. Print ads and billboards depicted Joe Camel shooting pool in a tuxedo, hanging out at a nightclub, playing in a blues band, sitting on a motorcycle in a leather jacket and shades. He was portrayed as cool, hip, and popular—in short, he was like a lot of other models in a lot of other cigarette ads, except he was a cartoon animal instead of a flesh-and-blood human being. Even in that respect he was hardly revolutionary. More than a century before the debut of Joe Camel, historian Jordan Goodman notes,

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the manufacturer of Bull Durham smoking tobacco ran newspaper ads throughout the country depicting the Durham Bull "in anthropomorphic situations, alternating between scenes in which the bull was jovial and boisterous and those where he was serious and determined."

But Joe Camel, it is safe to say, generated more outrage than any other cartoon character in history. Critics of the ad campaign said the use of a cartoon was clearly designed to appeal to children. *Washington Post* columnist Courtland Milloy said "packaging a cartoon camel as a 'smooth character' is as dangerous as putting rat poison in a candy wrapper." In response to such criticism, R.J. Reynolds noted that Snoopy sold life insurance and the Pink Panther pitched fiberglass insulation, yet no one assumed those ads were aimed at kids.

The controversy intensified in 1991, when *The Journal of the American Medical Association* published three articles purporting to show that Joe Camel was indeed a menace to the youth of America. The heavily promoted studies generated an enormous amount of press coverage, under headlines such as "Camels for Kids" (*Time*), "I'd Toddle a Mile for a Camel" (*Newsweek*), "Joe Camel Is Also Pied Piper, Research Finds" (*The Wall Street Journal*), and "Study: Camel Cartoon Sends Kids Smoke Signals" (*Boston Herald*). Dozens of editorialists and columnists condemned Joe Camel, and many said he should be banned from advertising.

In March 1992 the Coalition on Smoking or Health, a joint project of the American Cancer Society, the American Heart Association, and the American Lung Association, asked the Federal Trade Commission to prohibit further use of the smooth character. Surgeon General Antonia Novello and the American Medical Association also called for an end to the campaign. In August 1993 the FTC's staff backed the coalition's petition, and a month later 27 state attorneys general added their support. In June 1994, by a 3-to-2 vote, the FTC decided not to proceed against Joe, finding that the record did not show he had increased smoking among minors. (During the first five years of the campaign, in fact, teenage smoking actually declined, starting to rise only in 1993.) In March 1997, after several members of Congress asked the FTC to re-examine the issue, the commission's staff again urged a ban, citing new evidence that R.J. Reynolds had targeted underage smokers. This time the commission, with two new members appointed by the Clinton administration, decided to seek an order instructing RJR not only to keep Joe out of children's sight but to conduct a "public education campaign" aimed at deterring underage smoking.

The two dissenting commissioners were not impressed by the new evidence, which failed to show that Joe Camel had actually encouraged kids to smoke. One wrote, "As was true three years ago, intuition and concern for children's health are not the equivalent of—and should not be substituted for—evidence sufficient to find reason to believe that there is a likely causal connection between the Joe Camel advertising campaign and

smoking by children." But the FTC's action turned out to be doubly irrelevant. R.J. Reynolds, along with its competitors, agreed to stop using cartoon characters as part of the proposed nationwide settlement, and last July it announced that it was discontinuing the "smooth character" campaign, replacing it with one that makes more subtle use of camels.

Although the *JAMA* articles were widely cited by Joe's enemies, including the FTC and President Clinton, they proved much less than the uproar would lead one to believe. In the first study, researchers led by Paul M. Fischer, a professor of family medicine at the Medical College of Georgia, asked preschoolers to match brand logos to pictures of products. Overall, about half the kids correctly matched Joe Camel with a cigarette. Among the 6-year-olds, the share was 91 percent, about the same as the percentage who correctly matched the Disney Channel logo to a picture of Mickey Mouse.

But recognizing Joe Camel is not tantamount to smoking, any more than recognizing the logos for Ford and Chevrolet (which most of the kids also did) is tantamount to driving. The researchers seemed to assume that familiarity breeds affection, but that is not necessarily the case. A subsequent study, funded by R.J. Reynolds and published in the Fall 1995 *Journal of Marketing*, confirmed that recognition of Joe Camel rises with age and that most 6-year-olds correctly associate him with cigarettes. Yet 85 percent of the kids in this study had a negative attitude toward cigarettes, and the dislike rose with both age and recognition ability. Among the 6-year-olds, less than 4 percent expressed a positive attitude toward cigarettes.

### Animal Magnetism

In the second *JAMA* study, Joseph R. DiFranza, a researcher at the University of Massachusetts Medical School, led a team that showed Joe Camel ads to samples of high school students and adults. They found that the teenagers were more likely to recognize Joe Camel, to recall the ads, and to evaluate them posi-

**Although the 1991 *Journal of the American Medical Association* studies on Joe Camel and teen smoking were widely cited, they proved much less than the uproar would lead one to believe.**

tively than the adults, whose average age was about 40. Since R.J. Reynolds contended that the Joe Camel campaign was aimed at young adults, these results were hardly surprising. Based on such comparisons, it is impossible to distinguish between an ad aimed at 16-year-olds and an ad aimed at 18-year-olds (or 21-year-olds).

DiFranza et al.'s most striking claim was that the Joe Camel campaign had caused a huge shift in brand preferences. Using data from seven surveys conducted in three states between 1976 and 1988, they estimated that 0.5 percent of underage smokers preferred Camels before the campaign began. By comparison,

33 percent of the teenage smokers in their study, conducted during 1990 and 1991, said they smoked Camels—a 66-fold increase. “Our data demonstrate that in just 3 years Camel’s Old Joe cartoon character had an astounding influence on children’s smoking behavior,” the researchers wrote. But the pre-1989 surveys and the *JAMA* study were not comparable, and neither used random samples of the national population, so it’s doubtful that the results are representative of American teenagers in general. Data from the Centers for Disease Control and Prevention’s Teenage Attitudes and Practices Survey, which does use a nationwide sample, suggest a much less dramatic (though still sizable) shift toward Camels. In 1993, 13.3 percent of the TAPS respondents said they usually bought Camels, compared to 8.1 percent in 1989.

The third *JAMA* article presented data from a 1990 California telephone survey. The researchers, led by John P. Pierce, head of the University of California at San Diego’s Cancer Prevention and Control Program, reported that teenagers were more likely than adults to identify Marlboro or Camel as the most advertised brand. The survey also found that Marlboro’s market share increased with age until 24, when it started to decline gradually. Camel, on the other hand, was considerably more popular among teenagers than among young adults. Comparing the California data to the results of a national survey conducted in 1986, Pierce et al. concluded that the market shares for both Marlboro and Camel had increased among adults (the 1986 survey did not include minors). Camel’s increase was bigger, particularly among adults under the age of 30 (i.e., the segment R.J. Reynolds claimed to be targeting).

Taken together, these studies suggested that 1) most children know Joe Camel has something to do with cigarettes and 2) the Joe Camel campaign helped increase the brand’s market share, especially among young smokers. Since most smokers pick up the habit before they turn 18, it seems likely that the tobacco companies would take an interest in the brand choices of teenagers, and that inference is supported by internal documents. In 1974, for example, Philip Morris hired the Roper Organization to interview young smokers about their brand choices, and more than a third of the 1,879 respondents were described as 18 or younger. “To ensure increased and longer-term growth for Camel filter,” said a 1975 RJR memo, “the brand must increase its share penetration among the 14-24 age group, which have a new set of more liberal values and which represent tomorrow’s cigarette business.” Last year, as part of an agreement settling state lawsuits, the Liggett Group said tobacco companies have deliberately targeted underage smokers.

The other companies continued to deny that charge. R.J. Reynolds maintained that Joe Camel was aimed at 18-to-24-year-olds, although the company had no way of assuring that he would not also appeal to people younger than 18. In response, David Kessler told ABC’s Peter Jennings, “Tell me how you design an advertising campaign that affects only 18-year-olds.” Which is sort of the point. If cigarette companies have to avoid any ad that might catch the eye or tickle the fancy of a 16-year-old, they might as well not advertise at all (which would suit Kessler fine). In any case, the important question is whether advertising encourages teenagers to smoke, not whether it steers

them toward Camels instead of Marlboros.

In each of the Joe Camel studies, the researchers’ conclusions (and the subsequent press coverage) went beyond what the data indicated. Fischer et al., whose comparison between Joe Camel and Mickey Mouse got the most attention, were relatively cautious: “Given the serious health consequences of smoking, the exposure of children to environmental tobacco advertising may represent an important health risk and should be studied further.” DiFranza et al. said, “A total ban of tobacco advertising and promotions, as part of an effort to protect children from the dangers of tobacco, can be based on sound scientific reasoning.” Pierce et al. flatly concluded that “[c]igarette advertising encourages youth to smoke and should be banned.” These are all statements of opinion that have little to do with what the studies actually showed.

Information that came to light in a lawsuit challenging the Joe Camel campaign (a case that R.J. Reynolds settled for \$10 million in September) suggests that at least some of the researchers may have prejudged the issue. In a letter he wrote to a co-author before the research began, DiFranza complained that he had not been able to give reporters “proof that the tobacco companies are advertising to children. I can’t point to any one piece of evidence as a smoking gun and say ‘here, this proves it.’ Well I have an idea for a project that will give us a couple of smoking guns to bring to the national media.” He explained, “I am proposing a quick and easy project that should produce... evidence that RJR is going after kids with their Camel ads.” Toward the end of the letter, he said, “There, the paper is all ready, now all we need is some data.”

## Switching Arguments

Neither DiFranza’s “smoking gun” nor the other studies provided any evidence about the impact of advertising on a teenager’s propensity to smoke, which is the crux of the issue. When critics complain that advertising encourages people to smoke, the tobacco companies reply that it encourages smokers to buy particular brands. Strictly speaking, these claims are not mutually exclusive. In principle, advertising can promote an industry’s overall sales as well as drum up business for a specific company. An ad for a Compaq portable computer might encourage people to buy a Compaq (the company certainly hopes so), or it might get them thinking about laptops generally. But the tobacco companies argue that the U.S. market for cigarettes is mature, meaning that the product is universally familiar, like toothpaste or deodorant, and attempts to boost overall consumption are no longer cost-effective. Indeed, with smoking rates declining, the tobacco companies are fighting for pieces of a shrinking pie. Tobacco’s opponents say this trend makes cigarette manufacturers all the more desperate to maintain their profits; they need advertising like the Joe Camel campaign to attract replacements for smokers who quit or die.

Advocates of an advertising ban contend that brand competition does not adequately explain the industry’s spending on advertising and promotion, which totals about \$5 billion a year. In 1995, the most recent year for which the Federal Trade Commission has reported figures, coupons, customer premiums

(lighters, key chains, clothing, etc.), and allowances to distributors accounted for about 80 percent of this money. Cigarette companies spent about \$900 million on newspaper, magazine, door, transit, direct-mail, and point-of-sale advertising.

According to a widely cited article published in the Winter 1987 *Journal of Public Health Policy*, "A simple calculation shows that brand-switching, alone, could never justify the enormous advertising and promotional expenditures of the tobacco companies." Anti-smoking activist Joe B. Tye and his co-authors started with an estimate, based on marketing research, that about 10 percent of smokers switch brands each year. Then they calculated that the industry's spending on advertising and promotion in 1983 amounted to nearly as much per switcher as a typical smoker would have spent on cigarettes that year. They also noted that, since each cigarette maker produces various brands, smokers who switch are not necessarily taking their business to another company.

"Thus," the authors concluded, "advertising and promotion can be considered economically rational only if they perform a defensive function—retaining company brand loyalty that would otherwise be lost to competitors who promote their products—of if they attract new entrants to the smoking marketplace, or discourage smokers from quitting." If defending market share were the only aim, Tye et al. added, the tobacco companies should support a ban on advertising and promotion, which would eliminate the threat from competitors. On the other hand, "If advertising and promotion increase cigarette consumption, then less than two million new or retained smokers—5.5 percent of smokers who start each year or try to quit (most failing)—alone would justify the annual promotional expenditure."

There are several flaws in this argument. To begin with, the estimate for the number of brand switchers does not include people who usually smoke, say, Benson & Hedges but occasionally smoke Camels. Based on its own marketing surveys, R.J. Reynolds reports that about 70 percent of smokers have a second-choice brand that they smoke now and then. About 25 percent regularly buy more than one brand each month. Even smokers who don't have a second favorite sometimes try other brands because of coupons, premiums, and promotional offers.

Another problem is that, in estimating the value of brand switchers, Tye et al. did not take into account the continuing revenue from a new customer; they considered only the money he spends on cigarettes in one year. By contrast, when they estimated the gain from getting someone to start smoking or keeping a smoker who otherwise would have quit, they used the net present value of the additional profit over a 20-year period, which they calculated as \$1,085, more than three times a year's revenue.

— Most important, Tye et al. did not acknowledge that tobacco companies could be competing for new smokers without actually creating them. Although the companies deny that they target minors in any way, building brand loyalty among teenagers is

still not the same thing as making them into smokers.

Tye et al. considered the industry's opposition to an advertising ban prima facie evidence that tobacco advertising increases total consumption. But the tobacco companies might also have opposed a ban because it would help delegitimize the industry, opening the way to other kinds of regulation and defeats in product liability suits. Furthermore, a company's attitude toward restrictions on advertising (and brand competition in general) depends on its market position. Philip Morris and R.J. Reynolds, the market leaders, might well be less worried about an advertising ban than their competitors. Tellingly, these were the companies that spearheaded the settlement talks, and they included dramatic restrictions on advertising and promotion in their opening offer.

In any case, it is not clearly foolish for the tobacco companies to spend so much money on advertising and promotion, even without the hope of market expansion. More evidence is necessary to support the claim that tobacco advertising increases consumption. Broadly speaking, there are three ways of investigating this issue. You can look at the historical relationship between changes in advertising and changes in smoking. You can compare smoking trends in places with different levels of advertising. And you can ask people questions in the hope that their answers will suggest how advertising influences attitudes and behavior. None of these approaches has yielded consistent or definitive results. Each has limitations that leave plenty of room for interpretation. The state of the research was aptly, if unintentionally, summed up by the subtitle of a 1994 article in the *International Journal of Advertising* that made the case for a causal link: "The Evidence Is There for Those Who Wish to See It."

### Does Life Imitate Ads?

Some analyses of historical data have found a small, statistically significant association between increases in advertising and

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increases in smoking; others have not. In a 1993 overview of the evidence, Michael Schudson, professor of communication and sociology at the University of California at San Diego, wrote, "In terms of a general relationship between cigarette advertising and cigarette smoking, the available econometric evidence is equivocal and the kind of materials available to produce the evidence leave much to be desired." This sort of research is open to challenge on technical grounds, such as the time period chosen and the methods for measuring advertising and consumption. There is also the possibility that advertising goes up in response to a rise in consumption, rather than the reverse. Industry critics

I really don't know  
if I should smoke...

...but my buddies and my sweet-  
heart smoke, and it does give me a  
lot of pleasure.  
Women begin to smoke, as they tell  
me, just about the time they begin  
to vote, and that's hardly a reason  
for banning smoking. I guess I just  
don't smoke that's all.  
It is because that I smoke CIG-  
ARETTES. They seem to be milder  
and they have a very pleasing taste.



The Cigarette that's Milder

The Cigarette that's Even Milder

You've Come a Long Way, Baby?: A 1933 ad for the *Saturday Evening Post*. Critics cite increases in smoking by women in the 1920s and late '60s-early '70s as evidence of advertising's power. But in both cases, the ad campaigns followed rather than preceded the boost in smoking rates.

often cite the increases in smoking by women that occurred in the 1920s and the late '60s to early '70s as evidence of advertising's power. "Yet in both cases," Schudson noted, "the advertising campaign followed rather than preceded the behavior it supposedly engendered." In other words, the tobacco companies changed their marketing in response to a trend that was already under way.

International comparisons have also produced mixed results. There is no consistent relationship between restrictions on advertising and smoking rates among adults or minors. In some countries where advertising is severely restricted, such as Sweden, smoking rates are relatively low. In others, such as Norway, they are relatively high. Sometimes smoking drops after advertising is banned; sometimes it doesn't. It is hard to say what such findings mean. Countries where smoking is already declining may be more intolerant of the habit and therefore more likely to ban advertising. Alternatively, a rise in smoking might help build support for a ban. Furthermore, advertising bans are typically accompanied by other measures, such as tobacco tax increases and restrictions on smoking in public, that could be expected to reduce cigarette purchases. The one conclusion it seems safe to draw is that many factors other than advertising affect tobacco consumption.

The best way to resolve the issue of advertising's impact on smoking would be a controlled experiment: Take two groups of

randomly selected babies; expose one to cigarette advertising but otherwise treat them identically. After 18 years or so, compare smoking rates. Since such a study would be impractical, social scientists have had to make do with less tidy methods, generally involving interviews, questionnaires, or survey data. This kind of research indicates that the most important factors influencing whether a teenager will smoke are the behavior of his peers, his perceptions of the risks and benefits of smoking, and the presence of smokers in his home. Exposure to advertising does not independently predict the decision to smoke, and smokers themselves rarely cite advertising as an important influence on their behavior.

Critics of the industry have been quick to seize upon studies indicating that teenage smokers disproportionately prefer the most advertised cigarette brands. But such research suggests only that advertising has an impact on brand preferences, which the tobacco companies have conceded all along. Several studies have found that teenagers who smoke (or who say they might) are more apt to recall cigarette advertising and to view it favorably. Such findings do not necessarily mean that advertising makes adolescents more likely to smoke. It is just as plausible to suppose that teenagers pay more attention to cigarette ads after they start smoking, or that teenagers who are inclined to smoke for other reasons are also more likely to have a positive view of cigarette ads.

In reporting on research in this area, the mainstream press tends to ignore such alternative interpretations. Consider the coverage of a 1995 study published in the *Journal of the National Cancer Institute*. The study, co-authored by John Pierce, found that teenagers who scored high on a "receptivity" index—which included "recognition of advertising messages, having a favorite advertisement, naming a brand [they] might buy, owning a tobacco-related promotional item, and willingness to use a tobacco-related promotional item"—were more likely to say they could not rule out smoking in the near future. Such "receptivity" was more strongly associated with an inclination to smoke than was smoking among parents and peers.

According to *The New York Times*, these results meant that "[t]obacco advertising is a stronger factor than peer pressure in encouraging children under 18 to smoke." Similarly, *The Boston Globe* reported that the study showed "cigarette advertising has more influence on whether adolescents later start smoking than does having friends or family members who smoke." The Associated Press went even further: "Of all the influences that can draw children into a lifelong habit of smoking, cigarette advertising is the most persuasive." In reality, the study showed only that teenagers who like smoking-related messages and merchandise are more receptive to the idea of smoking—not exactly a startling finding.

A study reported last December in *Archives of Pediatric and Adolescent Medicine* received similar treatment. The researchers surveyed about 1,200 students in grades six through 12 and found that kids who owned cigarette promotional items such as jackets and backpacks were four times as likely to smoke as those who did not. "Tobacco Gear a Big Draw for Kids," announced the headline in *The Boston Globe*. The story began, "If tobacco manufacturers hope to promote smoking by produc-

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ing clothing or accessories emblazoned with cigarette logos, research by Dartmouth Medical School suggests that the tactic works well." Under the headline, "Study: Logos Foster Smoking," *Newsday* reported that "children who own cigarette promotional items...are far more likely to smoke."

Yet as the researchers themselves conceded, "The finding of an association between CPI [cigarette promotional item] ownership and being a smoker could easily be an expression of an adolescent who acquired these items after having made the decision to become a smoker." Later in the article, they wrote, "Our study and others published to date are subject to the usual limitations inherent in cross-sectional studies, in that we are unable to infer a direction between the exposure (ownership of a CPI) and smoking behavior, limiting our ability to invoke a causal relationship between CPI ownership and smoking." Translation: We would like to say that promotional items make kids smoke, but our study doesn't show that. This shortcoming did not stop the authors from concluding that "all CPI distribution should end immediately."

## Marginal Effects

Overall, the evidence that advertising plays an important role in getting people to smoke is not very convincing. In 1991 the economist Thomas Schelling, former director of Harvard's Institute for the Study of Smoking Behavior and Policy, said: "I've never seen a genuine study of the subject. Most of the discussion that I hear—even the serious discussion—is about as profound as saying, 'If I were a teenage black girl, that ad would make me smoke.' I just find it altogether unpersuasive. I've been very skeptical that advertising is important in either getting people to smoke or keeping people smoking. It's primarily brand competition." The 1989 surgeon general's report conceded that "[t]here is no scientifically rigorous study available [to the public] that provides a definitive answer to the basic question of whether advertising and promotion increase the level of tobacco consumption. Given the complexity of the issue, none is likely to be forthcoming in the foreseeable future." The 1994 surgeon general's report, which focused on underage smoking, also acknowledged the "lack of definitive literature."

It's possible, of course, that tobacco advertising has an effect that simply cannot be measured. The 1989 surgeon general's report concluded that, while "the extent of the influence of advertising and promotion on the level of consumption is unknown and possibly unknowable," the weight of the evidence "makes it more likely than not that advertising and promotional activities do stimulate cigarette consumption." The 1994 report, based on suggestive evidence, said "cigarette advertising appears to increase young people's risk of smoking." Similarly, Michael Schudson—who says "[a]dvertising typically attempts little and achieves still less"—argues that cigarette advertising "normally has only slight effect in persuading people to change their at-

titudes or behaviors." But he adds, "It is reasonable to believe that some teens become smokers or become smokers earlier or become smokers with less guilt or become heavier smokers because of advertising."

Serious critics of tobacco advertising do not subscribe to a simple stimulus-and-response theory in which kids exposed to Joe Camel automatically become smokers. They believe the effects of advertising are subtle and indirect. They argue that the very existence of cigarette ads suggests "it really couldn't be all that bad, or they wouldn't be allowed to advertise," as Elizabeth Whelan of the American Council on Science and Health puts it. They say advertising imagery reinforces the notion, communicated by peers and other role models, that smoking is cool. They say dependence on advertising revenue from tobacco companies discourages magazines from running articles about the health consequences of smoking. They do not claim such effects are sufficient, by themselves, to make people smoke. Rather, they argue that at the margin—say, for an ambivalent teenager whose friends smoke—the influence of advertising may be decisive.

Stated this way, the hypothesis that tobacco advertising increases consumption is impossible to falsify. "Fundamentally," writes Jean J. Boddewyn, a professor of marketing at Baruch College, "one cannot prove that advertising does *not* cause or influence smoking, because one cannot scientifically prove a negative." So despite the lack of evidence that advertising has a substantial impact on smoking rates, tobacco's opponents can argue that we should play it safe and ban the ads—just in case.

The problem with this line of reasoning is that banning tobacco advertising can be considered erring on the side of caution only if we attach little or no value to freedom of speech. If cigarette ads are a bad influence on kids, that is something for parents and other concerned adults to counter with information and exhortation. They might even consider a serious effort to enforce laws against cigarette sales to minors. But since we clearly are not helpless to resist the persuasive powers of Philip Morris et al.—all of us see the ads, but only some of us smoke—

**Banning tobacco advertising, as tobacco critics want, can be considered erring on the side of caution only if we attach little or no value to freedom of speech.**

it is hard to square an advertising ban with a presumption against censorship. Surely a nation that proudly allows racist fulminations, communist propaganda, flag burning, nude dancing, pornography, and sacrilegious art can safely tolerate Marlboro caps and Joe Camel T-shirts. ♦

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