

Smoking Policy: Law, Politics, and Culture

Edited by

ROBERT L. RABIN

STEPHEN D. SUGARMAN

New York Oxford

OXFORD UNIVERSITY PRESS

1993

10

Symbols and Smokers: Advertising, Health Messages, and Public Policy

Michael Schudson

It is widely believed that Madison Avenue is enormously successful in persuading the public to buy what it wants to sell. This belief in the power of advertising is vigorously championed by the advertising industry as it awards itself prizes for creative advertising, as it promotes its services to prospective clients, and as ancillary firms in market research urge their expertise upon the advertising agencies themselves. Cultural critics who mistake the surface glitter of advertising for the heart of what makes a consumer society tick also encourage popular confidence in advertising's efficacy. In the popular view, advertising has almost magical potency (Schudson 1991).

But there is reason to question whether commercial advertising has found a direct route to the hearts and minds of consumers. The clearest testimony to the difficulties of successful advertising is that most advertisers organize their advertising expenses to minimize the amount of *persuading* they expect the advertisements to do. That is, most advertisements are directed to target audiences who already use the product in question; the advertisement tries simply to interest the consumer in an alternative brand of a product they already use. Moreover, most advertising aims to reach especially heavy users of a particular product category. It also seeks to reach consumers at moments when they are most likely to want to use a particular product: soups are advertised in winter, iced tea in summer, toys before Christmas.

Within these limits—that advertisers direct advertising primarily to people who already use a product, particularly people who use a product heavily, especially at times culturally sanctioned as periods of appropriate use—what do advertisers expect to achieve with advertising campaigns? Not very much. They may seek by advertising not to lose their share of a market, or they may hope to modestly increase their share of the market. For example, most new cigarette brands come and go within months. It is not easy to develop a successful new brand for a mature market. In the world of cigarettes, a company needs to gain roughly 0.5 percent of the cigarette market to establish a new brand (Loeb 1983, p. 27). If 50 percent of a population of four hundred people smokes cigarettes, then for a firm to create a successful new cigarette brand it can ignore the two hundred people who do not smoke at all and try simply to convince one of the two hundred smokers to switch to

the new brand. But most commercial by the best Madison Avenue agencies advertising typically attempts little a

The skeptical view of advertising mythology about Madison Avenue, b standing that sticks and stones break t that "the pen is mightier than the sw gruous. Certainly in public policy b education seems less forceful than t prosecutions or the carrots and sticks 1984). Automobile safety belt usage ties for not wearing seat belts but bare service announcements urged people awareness programs have been less groups than expected (Hornik 1988). be less effective than taxation in di (Raftery 1989, p. 1246; Daynard 198 pp. 474–543). Educational efforts al minors, in one two-year trial, until (Feighery et al. 1991).

Even so, public health advocates a that mass-media public-health camp that bans on alcohol and tobacco adv there is strong reason to believe th information campaigns are modest, harmful effects of smoking and the general population have over the pas decline in smoking. Moreover, optir pragmatic. It is normally easier to s public than to enact coercive regulato ing automatically operated seat belts. Optimism is also based on faith in h to influence behavior. If this optim different public policies: restricting c or designing public-health promotion of commercial advertising.

Without denying that there may b public-health messages, I want to qu advertising is a highly effective activ initiatives. I want to suggest that com other products normally has only slig attitudes or behaviors. I want to sugg smoking normally face a different se advertising. Efforts both to restrict cig education make sense if the expecta realistically modest.

Advertising, Health Public Policy

Madison

ormously successful in persuading
belief in the power of advertising is
stry as it awards itself prizes for
o prospective clients, and as ancil-
ise upon the advertising agencies
urface glitter of advertising for the
o encourage popular confidence in
tising has almost magical potency

mmercial advertising has found a
ers. The clearest testimony to the
advertisers organize their advertis-
ing they expect the advertisements
o target audiences who already use
mply to interest the consumer in an
oreover, most advertising aims to
ct category. It also seeks to reach
o want to use a particular product:
er, toys before Christmas.

vertising primarily to people who
se a product heavily, especially at
ropriate use—what do advertisers
ot very much. They may seek by
or they may hope to modestly
most new cigarette brands come
successful new brand for a mature
ds to gain roughly 0.5 percent of a
b 1983, p. 27). If 50 percent of a
ettes, then for a firm to create a
two hundred people who do not
two hundred smokers to switch to

the new brand. But most commercial advertising and marketing campaigns designed by the best Madison Avenue agencies fail to achieve just that (Schudson 1984). Advertising typically attempts little and achieves still less.

The skeptical view of advertising I am suggesting here runs counter to popular mythology about Madison Avenue, but it is consistent with the conventional understanding that sticks and stones break bones but words will never hurt us. The saying that "the pen is mightier than the sword" is arresting precisely because it is incongruous. Certainly in public policy battles for health and safety, the pen of public education seems less forceful than the sticks and stones of legal prohibitions and prosecutions or the carrots and sticks of tax exemptions and taxes (Adler and Pittle 1984). Automobile safety belt usage increased sharply when states imposed penalties for not wearing seat belts but barely inched up over the many years when public service announcements urged people to "buckle up" (U.S. Congress 1985). AIDS awareness programs have been less effective in changing the behavior of targeted groups than expected (Hornik 1988). Health messages in the mass media appear to be less effective than taxation in discouraging alcohol and tobacco consumption (Raftery 1989, p. 1246; Daynard 1988, p. 10; U.S. DHHS, Surgeon General 1989, pp. 474–543). Educational efforts alone did little to reduce illegal tobacco sales to minors, in one two-year trial, until coupled with stepped-up legal enforcement (Feighery et al. 1991).

Even so, public health advocates and government officials often have high hopes that mass-media public-health campaigns will promote public understanding and that bans on alcohol and tobacco advertising will promote public health. Certainly there is strong reason to believe that, even when the effects of isolated health-information campaigns are modest, the growth of medical knowledge about the harmful effects of smoking and the growing diffusion of this knowledge in the general population have over the past several decades been the key reason for the decline in smoking. Moreover, optimism about informational campaigns is partly pragmatic. It is normally easier to sell educational efforts to legislatures or to the public than to enact coercive regulatory measures: closing gay bathhouses or requiring automatically operated seat belts in cars or restricting smoking in public places. Optimism is also based on faith in human rationality and the power of information to influence behavior. If this optimism is justified, it reasonably leads to two different public policies: restricting or banning advertising for dangerous products or designing public-health promotional messages for the mass media on the model of commercial advertising.

Without denying that there may be important reasons to use the mass media for public-health messages, I want to question the underlying premise that commercial advertising is a highly effective activity and an appropriate model for public-health initiatives. I want to suggest that commercial advertising for cigarettes as well as for other products normally has only slight effect in persuading people to change their attitudes or behaviors. I want to suggest, further, that public-health messages about smoking normally face a different set of problems and prospects than commercial advertising. Efforts both to restrict cigarette advertising and to counter it with health education make sense if the expectations of policy-makers about these efforts are realistically modest.

The Effectiveness of Commercial Advertising

If the role of advertising is generally as circumscribed as I have suggested, why do big corporations with good accountants and eyes on the bottom line spend so much money on advertising? There are several answers to this. The first and most important answer is: they don't. In most product areas, advertising expenses represent a very small percentage of total expenses in producing and marketing a product. In many product lines, including cigarettes, advertising expenses represent well less than half of the total marketing and sales-promotion expenses. In 1990, tobacco companies spent about four cents (4.2) in advertising for every dollar in cigarette sales. This was more than some familiar advertisers—the advertising-to-sales ratio was 2.8 percent for department stores, but about the same as electric housewares (4.5 percent) and greeting cards (4.1 percent) and household furniture (4.0 percent) and just a little less than hospitals (5 percent) ("Advertising-to-Sales Ratios" 1990, p. 24). To consumers, advertisements are generally the most visible and memorable part of the sales efforts of major corporations, but they are rarely the most important.

The second answer is that corporations believe that the small difference advertising and promotion can make in defending market share and in shifting people among brands of a given product is important. In a large market, a percentage point or two of market share is a large enough difference to have major consequences for bottom-line profits. It may be of little consequence in the greater scheme of things if Coca-Cola's market share grows from 24 percent to 25 percent, but that is a difference of great significance to Coca-Cola. Major advertising for a well-known cigarette brand like Virginia Slims yields it "only" 3 percent of the cigarette market, but that is more than enough for a profitable brand.

A third answer is that corporations do not know why they spend money on advertising. They may be fearful of what might happen if they failed to. They also may derive a set of important indirect and unmeasurable benefits from advertising. Advertising, even if it does not affect the mind of a consumer, may affect the mind of an investor. Investors at annual meetings like to see the latest reel of slick, national television advertisements for products their company produces. Company employees—particularly the company sales force—also are impressed by highly visible national advertising campaigns, and the sales force feels itself supported in the field when national advertising makes their company a household name. And if retailers believe, rightly or wrongly, in the power of advertising, they then stock widely advertised products and brands, consumers then buy what they find in stock, and the retailers' superstitious belief in the power of advertising is in their minds confirmed. These indirect powers of advertising may be a very important consequence of advertising, although they operate regardless of whether consumers are moved by an advertisement to change their way of life. Other indirect influences of advertising could also have significant influence on consumer behavior. For instance, the evidence is now very strong that tobacco advertising in magazines, particularly in popular women's magazines, has swayed editors to avoid publishing articles on the topic of the health dangers of smoking (Warner 1986). These may also be factors that lead tobacco companies to vigorously defend their freedom to

advertise because they are factor with major marketing capacities

With respect to cigarettes s about the effectiveness of advertic studies, from our own and c from what can be inferred from industry and the character of cig

Econometric Studies

A large number of econometric tising on aggregate tobacco sale 1972; Schneider et al. 1981; U.S a long story short, these studies f ing and sales or a small, statistica debates in the literature between notably the tobacco industry, w advertising, and those who war health advocates who seek to bu advertising. Whether the results relationship does not seem to m relationship between cigarette econometric evidence is equivoca evidence leave much to be desir

Evidence from Advertising Bans

A second approach to gathering c tion is to turn to evidence from t as well as evidence from more c

In the period 1968 through along with anticigarette advertisi removed from television. In stud the result was at first astonishing declining since 1966, soon afte Report, leveled off and then in advertising ban. The most wide the antismoking commercials we mercials. According to this stud creased per capita consumption 1950 to 1970 while the anticigar per capita consumption 507 cig concur that the ban, by eliminati tobacco consumption in the short effects may be (Schneider et al.

Defenders of tobacco advert

Commercial Advertising

scribed as I have suggested, why do
 es on the bottom line spend so much
 rs to this. The first and most impor-
 as, advertising expenses represent a
 ducing and marketing a product. In
 rtising expenses represent well less
 motion expenses. In 1990, tobacco
 ertising for every dollar in cigarette
 isers—the advertising-to-sales ratio
 ut the same as electric housewares
 nd household furniture (4.0 percent)
 'Advertising-to-Sales Ratios" 1990,
 ally the most visible and memorable
 but they are rarely the most impor-

ve that the small difference advertis-
 market share and in shifting people
 n a large market, a percentage point
 nce to have major consequences for
 nce in the greater scheme of things if
 cent to 25 percent, but that is a
 Major advertising for a well-known
 y" 3 percent of the cigarette market,
 and.

know why they spend money on
 happen if they failed to. They also
 easurable benefits from advertising.
 of a consumer, may affect the mind
 like to see the latest reel of slick,
 their company produces. Company
 rce—also are impressed by highly
 sales force feels itself supported in
 company a household name. And if
 ver of advertising, they then stock
 rs then buy what they find in stock,
 ver of advertising is in their minds
 g may be a very important conse-
 regardless of whether consumers are
 of life. Other indirect influences of
 ce on consumer behavior. For in-
 tobacco advertising in magazines,
 swayed editors to avoid publishing
 moking (Warner 1986). These may
 vigorously defend their freedom to

advertise because they are factors that help give a lock on the market to companies with major marketing capacities.

With respect to cigarettes specifically, there are several sources of evidence about the effectiveness of advertising. I will review what is known from econometric studies, from our own and other nations' experience of advertising bans, and from what can be inferred from general knowledge about both the advertising industry and the character of cigarette consumption.

Econometric Studies

A large number of econometric studies try to model the effects of aggregate advertising on aggregate tobacco sales or consumption (Schmalensee 1972; Hamilton 1972; Schneider et al. 1981; U.S. DHHS, Surgeon General 1989, p. 503). To make a long story short, these studies find either no overall relationship between advertising and sales or a small, statistically significant positive relationship. There are long debates in the literature between those who would like to find no relationship, notably the tobacco industry, which wants to prevent government limitations on advertising, and those who want to find a positive relationship, notably public-health advocates who seek to build a case for government restrictions on tobacco advertising. Whether the results turn out to be no relationship or a small positive relationship does not seem to me a matter of great moment. 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.¹

Evidence from Advertising Bans and Limitations

A second approach to gathering data on the role of advertising in cigarette consumption is to turn to evidence from the American ban on television tobacco advertising as well as evidence from more comprehensive advertising bans in other countries.

In the period 1968 through 1970, cigarette advertising appeared on television along with anticigarette advertising. Beginning in 1971, all tobacco advertising was removed from television. In studies of the effect of the ban on tobacco consumption, the result was at first astonishing: per capita cigarette consumption, which had been declining since 1966, soon after the publication of the 1964 Surgeon General's Report, leveled off and then increased in the first few years after the television advertising ban. The most widely cited study of the effects of the ban explains that the antismoking commercials were much more powerful than the prosmoking commercials. According to this study by James Hamilton, procigarette advertising increased per capita consumption of cigarettes 76 cigarettes per year over the period 1950 to 1970 while the anticigarette advertising from 1968 through 1970 decreased per capita consumption 507 cigarettes per year (Hamilton 1972, p. 401). Others concur that the ban, by eliminating the powerful antismoking commercials, boosted tobacco consumption in the short run, whatever its long-run and more indeterminate effects may be (Schneider et al. 1981; Warner 1979).

Defenders of tobacco advertising point out that in countries with little or no

advertising, people smoke. In communist countries, the growth in cigarette consumption has sometimes been much greater than in the West. This is a telling point against advertising bans only if proponents of advertising bans argue that advertising is the *sole* cause or *primary* cause of smoking. No responsible antitobacco activist holds this view. On the other hand, antitobacco activists who point to downward trends in smoking where advertising bans have been enacted (Norway) are equally unpersuasive. No country with enough political clout to pass an advertising ban has used an advertising ban exclusive of other measures against tobacco consumption (Warner 1986, p. 372). The advertising bans, then, though on the surface offering a natural experiment, provide evidence as difficult to evaluate as econometric data.

Inferences from General Knowledge

In the absence of definitive evidence from econometric studies or evaluation of advertising bans, we can still make reasonable inferences from what is generally known about advertising effects and what is specifically known about how people take up the cigarette habit.

A major issue between the tobacco industry and its opponents is whether advertising is designed to affect a company's market share by stealing consumers of other brands to the company's own brand or whether it is designed to attract new smokers. The tobacco industry regularly claims that advertising affects market share, not the size of the total market, and that advertisements are designed to influence current smokers, not to attract new ones. Opponents of tobacco advertising say this is patently absurd on both empirical and logical grounds (Chapman 1989, p. 1266). Empirically, it is plain that tobacco advertising is placed in media where teenagers and preteens see it. Since almost all smokers begin smoking before they are out of their teens, this seems an obvious attempt to "get them while they're young." Logically, the tobacco market, like any market, has to be renewed as consumers who use the product die off. Since tobacco smoking kills people, the rate of turnover caused by death is higher in this market than in most markets, and so the need to attract new, young consumers is accelerated.

Moreover, opponents of tobacco say, relatively few smokers switch brands in a given year. Luk Joossens, a Belgian researcher and consumer activist writes, "Brand-switching among adult smokers is very limited: the market share of the different brands differs annually, in general, less than 1 percent. Smokers show strong brand loyalty. Adults' smoking habits are well established and their addictive behaviour makes them less receptive to advertising messages" (Joossens 1989, p. 1279). American researchers Joe Tye, Kenneth Warner, and Stanton Glantz write, "In the cigarette business, actual brand-switching is very limited. Cigarettes enjoy one of the most tenacious brand loyalties of any consumer product; in a given year only about 10 percent of smokers switch brands" (Tye et al. 1987, p. 493). Even at that, since just two major cigarette manufacturers in the United States control the lion's share of the market, and each of them produces multiple brands, there is a strong likelihood that brand switching will be between brands produced by the same manufacturer (Tye et al. 1987, p. 494).

The question raised here is whether a modest behavioral change of brand-switching can produce in a consumer the more significant result of perhaps stalling a resolve to quit. It is not possible to ultimately resolve the matter, but the evidence strongly suggests that, as a general rule, advertising has more importance in reinforcing existing social norms than in producing change. It appears that advertising has produced more change than it has in fact only reinforced and symbolized. Some examples may help put this in perspective. In the 1920s to attract women to smoking, the advertising campaign begun in 1968 have been held responsible for producing a dramatic increase in smoking cases—and these are some of the most successful advertising—the advertising campaign supposedly engendered.

Cigarette Sales in the 1920s

In the 1920s, large numbers of women were represented only 10 to 15 percent of women before World War I had smoked in public, so the change was a dramatic one. It had been pictured in cigarette advertising as onlookers who might enjoy the air of intimacy, at most, that women the editor of a tobacco trade journal wrote smoking so novel that "it would not be of interest to stir a particle toward or against had nothing to do and whose end, if any, was (192). In 1926, an advertising trade journal noted the increasing importance of women's prohibition-like response if it advertised feared stirring up reformers and precisely

This changed dramatically within a few years. Women of respectable social status were used. Lucky Strike used famous women of recommending cigarettes and testified in 1928, Lucky Strikes were advertised as "Reach for a Lucky instead of a sweet relations agent Edward L. Bernays are "torches of freedom," and he gloating his public relations triumphs that this was stories and photographs.

But Bernays was no genius in reaching onto the news pages. Women smoking

tries, the growth in cigarette consumption in the West. This is a telling point. Advertising bans argue that advertising causes smoking. No responsible antitobacco activists who point to bans that have been enacted (Norway) have the political clout to pass an advertising ban, then, though on the evidence as difficult to evaluate as

ometric studies or evaluation of inferences from what is generally known about how people

and its opponents is whether advertising is designed to attract new smokers or to influence current smokers. Tobacco advertising says this is not true (Chapman 1989, p. 1266). Advertising is placed in media where teenagers are smoking before they are out of "get them while they're young." Advertising has to be renewed as consumers die, the rate of turnover is high in most markets, and so the need to

few smokers switch brands in a year and consumer activist writes, "The market share of the tobacco industry is less than 1 percent. Smokers show little interest in advertising messages" (Joossens 1989, p. 1266). Varner, and Stanton Glantz write, "The market share of the tobacco industry is very limited. Cigarettes enjoy a high turnover rate as a consumer product; in a given year, 10 percent of the brands are replaced" (Tye et al. 1987, p. 493). Even at the time when multiple brands are produced by the same

The question raised here is whether advertising has only the power to effect the modest behavioral change of brand-switching or else an influence great enough to produce in a consumer the more significant behavioral change of initiating smoking or perhaps stalling a resolve to quit. How is this question to be settled? It may not be possible to ultimately resolve the matter, but I do think the weight of evidence strongly suggests that, as a general rule, advertising is more likely a factor of importance in reinforcing existing social habits than in stimulating new ones. When it appears that advertising has produced a large behavioral change, chances are that it has in fact only reinforced and symbolized social trends already underway. Some examples may help put this in perspective. The advertising campaign in the late 1920s to attract women to smoking cigarettes and the Virginia Slims cigarette campaign begun in 1968 have been heralded as cases where advertising was largely responsible for producing a dramatic shift in consumer behavior. Yet in both cases—and these are some of the most dramatic examples used to tout the power of advertising—the advertising campaign followed rather than preceded the behavior it supposedly engendered.

Cigarette Sales in the 1920s

In the 1920s, large numbers of women began smoking cigarettes. While their usage represented only 10 to 15 percent of all cigarette consumption by the early 1930s, women before World War I had smoked rarely and had scarcely ever smoked in public, so the change was a dramatic one (Bonner 1926, p. 21). While women had been pictured in cigarette advertising before the late 1920s, they had been pictured as onlookers who might enjoy the aroma of the man's cigarette but there were only intimations, at most, that women themselves might smoke. As late as 1924 the editor of a tobacco trade journal wrote that the industry found the habit of women smoking so novel that "it would not be in good taste for tobacco men as parties in interest to stir a particle toward or against a condition with whose beginnings they had nothing to do and whose end, if any, no one can foresee" (Schudson 1984, p. 192). In 1926, an advertising trade journal held that the tobacco industry was aware of the increasing importance of women in the smoking market but feared a prohibition-like response if it advertised directly to them. Tobacco manufacturers feared stirring up reformers and precipitating a backlash (Bonner 1926).

This changed dramatically within a few years, once the cigarette habit among women of respectable social status was reasonably well established. By 1927, Lucky Strike used famous women opera singers and actresses in advertisements recommending cigarettes and testifying that they were soothing to the throat. By 1928, Lucky Strikes were advertised as a diet-conscious alternative to eating candy: "Reach for a Lucky instead of a sweet." In New York's 1929 Easter Parade, public relations agent Edward L. Bernays arranged for ten women to light up cigarettes as "torches of freedom," and he gloatingly recalls in his autobiographical account of his public relations triumphs that this created a storm of interest and front-page news stories and photographs.

But Bernays was no genius in realizing he could get women smoking in public onto the news pages. Women smoking in public had been on the news pages,

without any public relations impresario at work, for nearly a decade. Several developments made this possible. First, World War I brought women into new roles and new situations: Women war-workers took up the cigarette habit overseas and women working in factories at home took up the habit, too. Second, the war cut off supplies of Turkish tobacco, and milder blends, easier for inexperienced smokers to get used to, began to dominate the market. Third, there was a visible women's movement in the 1920s and women's right to smoke in public became an important symbol of women's equality. Fourth, news coverage of the women's movement, including its battles on the cigarette front, was prominent. Conspicuously placed *New York Times* stories on skirmishes over smoking rules at women's colleges (a topic also very well covered in college newspapers) or front-page stories on conflicts over women smoking on railroad trains, streetcars, or ocean liners were common several years before tobacco companies began picturing women smokers in their ads.

The increasing attention tobacco companies paid to women after 1927 no doubt helped legitimate women's smoking, but did it "cause" women to smoke? The tobacco marketers took advantage of a social change well underway.

Virginia Slims 1968–Early 1970s

Joe Tye, Kenneth Warner, and Stanton Glantz among many others in the public health field, have suggested the Virginia Slims advertising campaign may be related to increased smoking among young women, pointing out that Virginia Slims was introduced to the market in 1968 and began its vigorous and widely noted advertising campaign ("You've come a long way, baby") at the very time (1968–1974) when smoking among teenage girls was increasing. This was especially suspicious because smoking among teenage boys in those same years was decreasing. While Tye, Warner, and Glantz do not assert unequivocally that the Virginia Slims advertised caused the increase in teenage girls' smoking, they certainly leave the implication that they believe it a strong contributing factor (Tye et al. 1987, p. 500). Is this right?

Probably not. Between 1955 and 1966, cigarette smoking increased among American women of all ages from 24.5 percent of all women to 32.3 percent, at a time when smoking decreased among men from 54.2 percent to 50 percent. Using figures for 1968 instead of 1966, the comparison would be a drop for men from 54.2 percent to 47 percent and an increase for women from 24.5 percent to 31.2 percent (U.S. DHHS, Surgeon General 1988, p. 566). Any tobacco marketers reading the evidence of the Public Health Service or their own market reports would have wanted by the mid-1960s to find a way to target women, because women, not men, were the leading edge of growth in the domestic cigarette market. The Virginia Slims campaign followed a growth in cigarette smoking among women, including teenage women. It took advantage of a trend already begun.

The Virginia Slims campaign and the campaigns for several other brands aimed at women attracted some controversy and some protests, especially from feminist groups. More recently, the Virginia Slims sponsorship of athletic events has occasioned public controversy, too. But did Virginia Slims advertising and promotion

increase smoking among young women introduction coincided? Perhaps. I had shocked, indeed, if such a widely noted be equally surprised to find the Phillip like the effect of the larger social force. These include:

- An increase in women's labor force from 40.8 percent in 1970 to 47.7 percent in 1980. The paid labor force smoke in larger numbers. It may be a significant factor at least for the 1980s (p. 74).
- Generally increasing affluence and education.
- Gradual liberalization of morals, attitudes toward parents, and more egalitarian attitudes toward women.
- Rapid rise and attention to the women's movement period, 1968 to 1974, a movement led by women first. As late as 1967, few women were in social movement circles, but with the 1970s it became possible (Chafe 1991, p. 205). A Gallup poll said they did not think the 1970s were a time of change. In 1974, two-thirds said they were (Chafe 1991, p. 222).

More women entered science and engineering and entered traditionally male professions (Chafe 1991, p. 222). In the 1970s, opinion about women's roles was changing. In the 1950s and 1960s, less than 10 percent of students in schools was female; by the mid 1980s, 50 percent of students sent 10 percent of doctorates awarded (Chafe 1991, p. 222).

All these features of women as a market for the tobacco industry. Marketers became aware of significant marketing opportunities, and they pursued their efforts accordingly (Ernst 1985, p. 3). Their success, but it seems to be again a case of the wave of powerful social trends.

Charles Ramond, one-time editor of *Advertising Age*, viewed the literature on the relation of advertising on sales "is always less than that of other marketing variables." He adds, "The opinions I express here, however, are based on advertising research, and I think they are valid." They are adapted from the mainstream of advertising research, and I think they are valid. Commercial advertising is not a

ork, for nearly a decade. Several devel-
ar I brought women into new roles and
the cigarette habit overseas and women
it, too. Second, the war cut off supplies
r for inexperienced smokers to get used
re was a visible women's movement in
public became an important symbol of
the women's movement, including its
Conspicuously placed *New York Times*
women's colleges (a topic also very well
stories on conflicts over women smok-
ers were common several years before
smokers in their ads.
ies paid to women after 1927 no doubt
did it "cause" women to smoke? The
al change well underway.

ntz among many others in the public
is advertising campaign may be related
, pointing out that Virginia Slims was
its vigorous and widely noted advertis-
baby") at the very time (1968-1974)
easing. This was especially suspicious
ose same years was decreasing. While
ivocally that the Virginia Slims adver-
oking, they certainly leave the implica-
factor (Tye et al. 1987, p. 500). Is this

, cigarette smoking increased among
ent of all women to 32.3 percent, at a
rom 54.2 percent to 50 percent. Using
son would be a drop for men from 54.2
men from 24.5 percent to 31.2 percent
5). Any tobacco marketers reading the
their own market reports would have
get women, because women, not men,
nestic cigarette market. The Virginia
tte smoking among women, including
d already begun.

ppaigns for several other brands aimed
ome protests, especially from feminist
ponsorship of athletic events has occa-
ginia Slims advertising and promotion

increase smoking among young women? Did it stimulate the trend with which its introduction coincided? Perhaps. I have no evidence that it did not. I would be shocked, indeed, if such a widely noted campaign had no effect at all. But I would be equally surprised to find the Phillip Morris promotional efforts to have anything like the effect of the larger social forces leading women to smoke in this period. These include:

- An increase in women's labor force participation from 35.5 percent in 1960 to 40.8 percent in 1970 to 47.7 percent in 1980. Since women employed in the paid labor force smoke in larger numbers than housewives, this would seem to be a significant factor at least for women eighteen and older (U.S. DHHS 1980b, p. 74).
- Generally increasing affluence and family income through 1973.
- Gradual liberalization of morals and manners, less control of teenagers by parents, and more egalitarian attitudes toward young people, especially women.
- Rapid rise and attention to the "women's movement" in exactly the same period, 1968 to 1974, a movement that seems to have influenced younger women first. As late as 1967, feminist concerns were ridiculed in left-wing social movement circles, but within a very short time thereafter this would not be possible (Chafe 1991, p. 205). In 1962, two-thirds of American women in a Gallup poll said they did not think they were victims of discrimination. In 1974, two-thirds said they were (Chafe 1991, p. 211).

More women entered science and engineering fields and many more women entered traditionally male professions of law, business, and medicine. In the early 1970s, opinion about women's roles was transformed on college campuses. In the 1950s and 1960s, less than 10 percent of entering classes in these professional schools was female; by the mid 1980s, more than 40 percent was. Women represented 10 percent of doctorates awarded in 1971 and 30 percent by the 1980s (Chafe 1991, p. 222).

All these features of women as a market for cigarettes did not go unnoticed by the tobacco industry. Marketers became well aware that women offered them significant marketing opportunities, and they adjusted their product lines and marketing efforts accordingly (Ernster 1985, p. 337). Virginia Slims has been a marketing success, but it seems to be again a case where success comes to marketers who ride the wave of powerful social trends.

Charles Ramond, one-time editor of the *Journal of Advertising Research*, reviewed the literature on the relation of advertising to sales, and concluded that the effect of advertising on sales "is always less than that of population, income and other environmental variables." He adds, "Advertising's effect on sales is almost always less than that of other marketing forces" (Schudson 1984, p. 88). I agree. The opinions I express here, however distant from popular views, are not unusual. They are adapted from the mainstream opinion of economists and others engaged in advertising research, and I think they are almost irresistible given the evidence we have. Commercial advertising is not a sure-fire way to sell an idea or change a

behavior, even a small behavior. Advertising is unpredictable; notably successful advertising campaigns are rare and even these typically result from supporting or reinforcing existing social trends.

Then what is all that advertising for? As Kenneth Warner has observed, it may achieve ends other than the extremely difficult one of initiating new smokers. It may affect people more open to prosmoking messages and more attentive to them than nonsmokers typically are. It may encourage former smokers to start again. It may encourage current smokers to smoke more. It may weaken current smokers' resolve to quit (Warner 1986, pp. 59-60). For smoker and nonsmoker alike, it may help create a sense of the social acceptability of smoking. It is evidence, after all, of the social acceptability of smoking. It indicates that smoking can be done legally and publicly. Compare this, for example, to the furtive advertising of condoms or sexual aids. The public advertising of cigarettes greases the cultural skids for smoking.

There is one important feature of cigarette smoking that these general considerations do not confront: almost all smokers become smokers as teenagers. About 85 percent of smokers begin smoking while children or teenagers (Pierce 1991, p. 390). The adult nonsmoker is relatively invulnerable to cigarette advertising. Past the usual point of initiation and past many of the usual reasons for taking up smoking, the adult nonsmoker is likely to be very inattentive to the ads around him or her. (This argument is weaker for nonsmokers who are *former* smokers.) For adults, there is little doubt that cigarette advertisers are indeed seeking to find brand-switchers or to keep their own customers brand-loyal or in other ways to strengthen smokers' allegiance to smoking. They are not proselytizing for new smokers.

But the case with teenagers and younger children may be different. Teenagers are typically less secure in their identities than most groups in the population, and their age-appropriate task is in part to experiment with different adult identities. They are more subject to social pressure and more attuned to advertising than most groups in the population. A Belgian study found that teenagers noticed advertisements more often than adults and were more familiar with cigarette brands than adults (Rombouts and Fauconnier 1988). Teenagers buy the most heavily promoted cigarette brands disproportionately (McNeill et al. 1985, pp. 271-72). It seems likely that advertising helps contribute to the fact that adolescents think a large majority of people their age smoke when, in fact, it is 15 to 30 percent (U.S. DHHS 1980b, p. 285). They "exaggerate the prevalence of smoking, believing smoking is the norm" (Silvis and Perry 1987, p. 369). Almost all adolescents believe smoking is a health hazard but "few believe it is a threat to *their health*. Since most adolescents believe that they can stop smoking whenever they wish, chronic diseases are not seen as a threat" (Silvis and Perry 1987, p. 363).

Tobacco companies insist that their advertising is exclusively directed to maintaining or increasing market share. Critics find this claim preposterous. It is and it isn't. Market share could logically justify cigarettes' substantial promotional budget. At the same time, the industry dies unless children and teenagers start to smoke. The best face one can put on the industry's behavior is that they are seeking to encourage in teens an emotional attachment to a cigarette brand but are hoping they will not start smoking until their eighteenth birthday (and that they will not wait

a day longer). If tobacco firms do not will have to attempt the harder task another later on.

No one knows for sure how big to smoke. That tobacco companies large concentrations of teenagers a Recent studies showing that even Camel cigarettes and that Camel has smokers certainly suggests some (Pierce 1991; Pierce et al. 1991). The best believes advertising to youths has would not become smokers without duces for new smokers the "market some given percentage of teens will advertising to teens can be defended given brand.

This is a dubious but not an absurd most teens who choose to smoke will

However, can it be asserted with smoke would do so with or without reasonable to believe that some teens become smokers with less guilt or blame. For some teens, surely advertising smoke.

How many is "some"? Twenty tenths of a percent? No one knows. An important contributing factor to a hundred teens who become smokers detrimental to the health prospects of a million minors take up smoking in (Pierce 1991, p. 390). Suppose that advertising is a cost two of every *one thousand* teens who represents a significant health danger not do what it can to protect these teens a year, or these twenty thousand or two from the dangers of tobacco?

Toward a Rationale for I

If advertising can lead smokers to sn backsliders or if it legitimates smoking place at the right time to coax vulnerable advertising lure smokers to smoke less or delegitimize smoking? or be at the teenagers?

is unpredictable; notably successful ones typically result from supporting or

enneth Warner has observed, it may be one of initiating new smokers. It may be more attentive to them than former smokers to start again. It may weaken current smokers' resolve and nonsmoker alike, it may help smoking. It is evidence, after all, of that smoking can be done legally and the advertising of condoms or sexual uses the cultural skids for smoking. Smoking that these general considerations smokers as teenagers. About 85 children or teenagers (Pierce 1991, p. erable to cigarette advertising. Past of the usual reasons for taking up rry inattentive to the ads around him rkers who are former smokers.) For ertisers are indeed seeking to find rkers brand-loyal or in other ways to hey are not proselytizing for new

children may be different. Teenagers most groups in the population, and ment with different adult identities. ore attuned to advertising than most nd that teenagers noticed advertise-familiar with cigarette brands than gers buy the most heavily promoted t al. 1985, pp. 271-72). It seems fact that adolescents think a large t, it is 15 to 30 percent (U.S. DHHS ce of smoking, believing smoking is most all adolescents believe smoking t to their health. Since most adoles- ever they wish, chronic diseases are . 363).

ing is exclusively directed to main- this claim preposterous. It is and it rettes' substantial promotional bud- ness children and teenagers start to y's behavior is that they are seeking to a cigarette brand but are hoping birthday (and that they will not wait

a day longer). If tobacco firms do not win the loyalty of people in their teens, they will have to attempt the harder task of weaning them away from one brand to another later on.

No one knows for sure how big a factor cigarette advertising is in leading teens to smoke. That tobacco companies locate advertising in media they know reach large concentrations of teenagers and children is clear, despite industry denials. Recent studies showing that even six-year-olds are familiar with advertising for Camel cigarettes and that Camel has become one of the leading brands for first-time smokers certainly suggests some connection (DiFranza et al. 1991; Fischer et al. 1991; Pierce et al. 1991). The best that could be said for the industry is that it believes advertising to youths has no effect in attracting to smoking people who would not become smokers without advertising. The advertising then simply reproduces for new smokers the "market share" strategy. If the industry assumes that some given percentage of teens will become smokers regardless of advertising, then advertising to teens can be defended as simply an effort to get the teens to adopt a given brand.

This is a dubious but not an absurd argument. It is reasonable to assume that most teens who choose to smoke would do so with or without advertising.

However, can it be asserted with equal assurance that *all* teens who choose to smoke would do so with or without advertising? That would seem rash indeed. 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. For some teens, surely advertising is a contributing factor to their decision to smoke.

How many is "some"? Twenty percent of teen smokers? Two percent? Two-tenths of a percent? No one knows. But let us assume that cigarette advertising is an important contributing factor to a decision to smoke in just two of every one hundred teens who become smokers. That would mean that advertising is seriously detrimental to the health prospects of twenty thousand minors a year, since about a million minors take up smoking in the United States each year (Pierce 1991, p. 390). Suppose that advertising is a contributing factor to a decision to smoke in just two of every *one thousand* teens who become smokers. That still means advertising represents a significant health danger to two thousand minors a year. Should society not do what it can to protect these two thousand or twenty thousand children this year, or these twenty thousand or two hundred thousand children in the next decade, from the dangers of tobacco?

Toward a Rationale for Public Health Mass-Media Efforts

If advertising can lead smokers to smoke more or if it can turn former smokers into backsliders or if it legitimates smoking or if its power is to be present at the right place at the right time to coax vulnerable teenagers over the edge, then can counter-advertising lure smokers to smoke less? or keep former smokers securely abstinent? or delegitimize smoking? or be at the right place at the right time for the vulnerable teenagers?

Advertising may be efforts to persuade behavior, they are not truly parallel health message in ways that com- This is so in three respects.

Addressed to consumers already favor- while health and safety messages are ed to listen to their message" (Adler sement for a cigarette, for instance, dy addicted to cigarettes. A "smok- so addressed to people addicted to his audience works in favor of the he success of the health message. desire to quit; this desire is at least smokers and may make smokers a than one would otherwise imagine

ctiveness of commercial and public- for the commercial advertising is rely possible to isolate the effect of eared costs of advertising are more e ad campaign is a winner. If this percent, the ad campaign has suc- other hand, that led 1 percent of the recycle their garbage, or dispose alarms, or inspect their homes for hemically sprayed apples, or weigh would no doubt be judged a failure. affect a substantial segment of the failures? Not if the costs of the s saved and health improved and y spent in some other way.)

of psychological advantage over ertising takes the side of the con- s consumer benefits when they are consumer. Everyone would like a y differ as to how important this is. r that tastes good or any advertise- e consumer money flatters a senti- ssumer is asked simply to consider positions. The ad does not ask the

fferent in this respect. The health that the communicator claims is in ue—seat belts save lives, smoking tek long lives. But the communica- ssumer's interests, and this is neces-

sarily paternalistic or preachy, no matter how cautiously it is presented. The commercial advertisement is more often saying "try this, you'll like it" than "do this, it's good for you." It therefore does not have to overcome the resistance that a paternalistic approach will automatically arouse.

Not all differences between commercial advertising and public-health communication make public-health communication the harder task. Messages have greater influence when communicators themselves are highly credible with their audience. Commercial advertising is widely distrusted. Health messages coming from civic organizations or government agencies with strong track records for reliability are more likely to be believed than messages from commercial firms. Nevertheless, the ambitions in public-health messages for changing behavior are so much greater than in commercial advertising that the analogy between the persuasive task of commercial advertising and that of public-health messages is not a good one.

William DeJong and Jay Winsten have argued that pessimism about public-health mass-media campaigns is based on evidence of media campaigns that were too short, that a small proportional success rate may still mean a large numerical success because of the large size of the audience reached, and that recent research suggests media campaigns are successful when properly designed. This means they should carefully identify their target audience, design campaign materials carefully in accord with research on the target audience, key the messages to the audience's current levels of knowledge and existing needs and motives, and make commitments to long-term programs (DeJong and Winsten 1989). Brian Flay's review of antismoking media campaigns supports this view. Flay reviewed a wide range of mass-media antismoking campaigns and concluded that mass-media campaigns, especially using broadcast media, "have produced changes in the smoking behavior of statistically and socially significant, though small, portions of the smoking population" (Flay 1987, p. 1). This is consistent with the apparent success of counteradvertising on television from 1968 to 1970. Flay concludes that mass-media campaigns can create knowledge, attitude, and behavior change; that the more intensive the publicity, the better. A recent public-health campaign in Australia provides support for the view that a well-planned antismoking media campaign can make a difference (Pierce et al. 1990).

Public-health media campaigns may work, but they may also be worth undertaking even without evidence of direct effectiveness. Warning labels may be merited even if there is no easy way to measure effectiveness, even if the effectiveness of the symbols in and of themselves cannot ever be measured, even in principle. This, it seems to me, is the presumption behind most educational efforts. We know, in the end, when education works when, by education, we mean some evident behavioral change: a person learns or fails to learn to swim, a person stops smoking or does not stop smoking. But it is rarely possible to know, even in something so simple as a swimming class, what particular effort or what cumulation of efforts does the trick, overcomes the child's fear of the water or teaches the brain or muscles that a certain pattern of fluttering and floating and floundering can sustain a body aloft in the water. One thing works for one child, another thing works for another child. This is not to say there is no point to general instruction, only that general instruction by itself will not necessarily "take." What does take and when? If swim instructors

knew that, this would be a much easier matter than it is. But does the inefficiency of swim instruction mean that it should be abandoned? More people would drown this way. Fewer people would learn to swim.

Public-health advertising may be worth undertaking not because it is especially effective but because it is inexpensive. It is a bargain-basement strategy in several respects. Relative to other possible interventions, it costs little. It is inexpensive in terms of the time and energy required to arrange it. There are highly qualified professionals at advertising agencies to design an advertising campaign and place the ads in the medium most likely to be cost-effective. An advertising campaign requires no long-term investments. It has very little in the way of sunk costs. It is an intervention that, once begun, can be easily terminated. It can be terminated with little visible human cost, unlike, say, hiring and then having to fire a corps of health-outreach workers.

Health advertising may also be a likely strategy because it may have similar indirect advantages for people in the health professions that commercial advertising has for people in the business world. It gives them a sense of feeling noticed and important. It bucks them up with a sense of their public prominence. It motivates them.

Third, public-health media campaigns do (or can) provide information. They are potentially educational, whether they persuade people to change behavior or not. At a time when the vast majority of the population, including the vast majority of smokers, recognizes that smoking endangers health, the educational value of health advertising would seem limited. But, in fact, people who believe cigarettes are, in general, dangerous may still have very little specific information about what precisely the dangers of cigarettes are. There is evidence that large proportions of the population underestimate the role of smoking in heart disease, do not know that lung cancer is more common now in women than in breast cancer, do not know the dangers of smoking during pregnancy, and underestimate the risks of cigarette consumption relative to other environmental health risks. There remains a large educational job, one that I think the recent glitzy advertising campaign in California did not take into consideration. Even if people do not act on the information they gain from a media campaign, the information gain is not thereby trivial. Many more people believe they should stop smoking than in fact quit successfully, but it is not trivial that their friends and children and other people around them learn from them that they believe their habit to be harmful and would like to give it up. It does not seem to me wise, ever, in a society committed to democratic values, to be overly skeptical of the worth of education.

Policy Options: The Question of an Advertising Ban

An alternative public-health strategy is not to create health messages but to restrict or ban commercial messages that promote dangerous products. Advertising bans have been on the public agenda in one form or another at least since the television advertising ban in 1971. The American Medical Association endorsed a ban on all tobacco promotion in 1985 and the American Cancer Society and American Heart

Association followed suit in 1986 (proposals besides those for a ban, prohibition on models, slogans, music, allowing only a simple statement, a display of the package. This would shift more of their marketing dollars to either of these proposals. Indeed, excited a wave of grass-roots interest).

I am persuaded that normally First Amendment values should ordinarily be inclined to see the First Amendment. Amos et al. 1991; Minkler et al. 1991. The discovery of the value of the First Amendment muscle to discourage free discussion in magazines is an astonishingly shameful decision seems to leave the real questions of free speech deserve serious

The Supreme Court in the past has protected in part, not in full, to come generally good reasons. In the *Central Hudson* test to determine when government speech. The *Central Hudson* test is (a) activity and is not misleading or fraudulent, (b) government's interest in doing so is substantial, (c) government interest attain its interest, and (c) no less restrictive means as well.³

The *Posadas* case turned this into a right to prohibit advertising of gambling. To operate, the Court specifically has not been found to have the power to regulate "such as cigarettes, alcoholic beverages, including not only outright bans on advertising, but also "stimulation of its demand."⁴ Justice Brandeis said that there is no reason to provide constitutional protection of speech "where . . . the government has a strong interest in order to deprive consumers of accurate information. This dissent would offer some hope for a "set of restrictions rather than a ban."

In the case of tobacco, the evidence provides overwhelming justification for a ban. Ever doubts one may have about how to regulate and legitimating smoking, it is point advertising would make no difference save some lives. Whether there are ways to improve public health with respect

than it is. But does the inefficiency of
ned? More people would drown this

ertaking not because it is especially
bargain-basement strategy in several
s, it costs little. It is inexpensive in
nge it. There are highly qualified
an advertising campaign and place
effective. An advertising campaign
ttle in the way of sunk costs. It is an
minated. It can be terminated with
then having to fire a corps of health-

ategy because it may have similar
essions that commercial advertising
them a sense of feeling noticed and
eir public prominence. It motivates

can) provide information. They are
people to change behavior or not. At
on, including the vast majority of
alth, the educational value of health
people who believe cigarettes are, in
pecific information about what pre-
edence that large proportions of the
n heart disease, do not know that
n is breast cancer, do not know the
derestimate the risks of cigarette
health risks. There remains a large
advertising campaign in California
do not act on the information they
n is not thereby trivial. Many more
fact quit successfully, but it is not
ople around them learn from them
ould like to give it up. It does not
o democratic values, to be overly

an Advertising Ban

ate health messages but to restrict
erous products. Advertising bans
mother at least since the television
Association endorsed a ban on all
ancer Society and American Heart

Association followed suit in 1986 (Warner et al. 1986, p. 379). There are other proposals besides those for a ban. One is for "tombstone advertising," that is, a prohibition on models, slogans, music, or lifestyle depictions in tobacco advertising, allowing only a simple statement of what the product and brand is and perhaps a display of the package. This would do little good if it led tobacco firms to simply shift more of their marketing dollars to promotion rather than advertising. Another proposal calls for counteradvertising. There are no serious constitutional objections to either of these proposals. Indeed, I see no objections at all. But neither has excited a wave of grass-roots interest.

I am persuaded that normally more speech is better than less, and that First Amendment values should ordinarily prevail. Some in the public-health community are inclined to see the First Amendment issue as a "smoke screen" (Warner 1985; Amos et al. 1991; Minkler et al. 1987). Certainly the tobacco industry's sudden discovery of the value of the First Amendment after decades of using their advertising muscle to discourage free discussion of the dangers of tobacco in popular magazines is an astonishingly shameless hypocrisy. And the Supreme Court's *Posadas* decision seems to leave the road clear to advertising bans on cigarettes.² Still, questions of free speech deserve serious consideration.

The Supreme Court in the past two decades has extended First Amendment protection in part, not in full, to commercial speech and has done so, I believe, for generally good reasons. In the *Central Hudson* case, the Court established a sensible test to determine when government can legitimately infringe on commercial speech. The *Central Hudson* test is that if the commercial speech concerns a lawful activity and is not misleading or fraudulent, then it can only be restricted if (a) the government's interest in doing so is substantial, (b) the restrictions help the government attain its interest, and (c) no less-restrictive remedy would serve that interest as well.³

The *Posadas* case turned this around. In finding that Puerto Rico was within its rights to prohibit advertising of gambling casinos even while permitting the casinos to operate, the Court specifically mentioned that governmental jurisdictions have been found to have the power to regulate products or activities deemed harmful "such as cigarettes, alcoholic beverages, and prostitution" in a wide range of ways, including not only outright bans on the product or activity but restrictions on "stimulation of its demand."⁴ Justice Brennan offered an eloquent dissent, holding that there is no reason to provide commercial speech less protection than other types of speech: "where . . . the government seeks to suppress commercial speech in order to deprive consumers of accurate information concerning lawful activity."⁵ This dissent would offer some hope to those who would prefer a "tombstone advertising" set of restrictions rather than an outright ban on advertising.

In the case of tobacco, the evidence of the health consequences of smoking provides overwhelming justification of a legitimate governmental interest. Whatever doubts one may have about how effective tobacco advertising is in encouraging and legitimating smoking, it is pointless to argue that restricting or banning tobacco advertising would make *no* difference at all. Banning tobacco advertising would save some lives. Whether there are better measures than an advertising ban to improve public health with respect to smoking is a harder question. Would legisla-

tion requiring tobacco advertisers to contribute a percentage of their advertising budgets to a fund for the production of antitobacco advertisements be a better direction? The evidence on the effectiveness of counteradvertising in 1968 to 1970 is not settled, but it tends to suggest that the counteradvertising was more effective than the commercial advertising. Or it may be that the interaction is exactly what mattered: that the mix of advertising and counteradvertising showed up the hypocrisy of the commercial advertising or simply kept alive a running debate. Since that running debate has plenty of social and cultural support now that it did not have in 1968, it is unlikely that ads and counterads would have the same kind of effect today. The lessons of 1968-1970 (even if they were clear) may not be transferable. Still, it is at least arguable that this is a case where the rule that "more speech is better than less" applies. Counteradvertising may be not only a less restrictive means than an advertising ban to achieve a legitimate governmental objective but it may be more effective.

If we compare the policies of an advertising ban, the provision of counteradvertising, and tombstone advertising regulations, their desirability varies according to what criterion we are applying. In terms of providing the least challenge to First Amendment doctrines, counteradvertising (more speech is better than less) would be the best policy, tombstone advertising next best, and an advertising ban the least desirable. In terms of achieving a governmental objective of public health, we do not have evidence adequate to say whether counteradvertising would prove more effective than an advertising ban or less effective; we could reasonably, but not certainly, presume that tombstone advertising regulations would be somewhat less effective than the alternatives. In terms of the convenience, economy, and effectiveness of enforcement, a total advertising ban would be easier to administer than tombstone advertising regulations or counteradvertising efforts. In terms of political feasibility, I suspect that tombstone advertising regulations would be the easiest to pass, since tombstone advertising offers no significant First Amendment problems, unlike a ban, and, unlike counteradvertising, requires no public expenditure of funds or complicated financial scheme to ensure that the tobacco industry underwrites counterads.

Any of these strategies, I think, would make good public policy, given that the public health is of overriding importance and the restrictions these remedies impose on free speech apply only to commercial speech for a product that kills people when used as directed. There may be a slope here to other products or services (alcohol is the next case to look at), but I do not think it is a very slippery one.

It may be that the advertising ban is the best strategy because its simplicity and boldness may attract and motivate public support. Alternatively, the public may be more effectively mobilized if the symbolic aspects of smoking policy are disaggregated. Instead of one general effort for advertising bans, waged at the federal level and with the First Amendment as a major issue, efforts at state and local advertising restrictions might make more strategic sense. Tobacco advertising on billboards, for instance, represents 13 percent of outdoor advertising revenue in 1989, down from 40 percent in 1979 (Outdoor Advertising Association of America, May 28, 1991 press release). But why should it exist at all? Surely it is a form of advertising easily available to minors that should be entirely eliminated. Since this would be a restriction on speech of the "time, place, and manner" sort, it has smoother sailing on

constitutional grounds. Or consider locations accessible to minors. That and legislated. What about banning Each of these separate efforts takes health workers and their supporters seriousness of the battle at stake.

Because cigarette advertising is a think, banning it is not likely to smoking. Even so, advertising is of ages children and adolescents to st efforts to find public policy remedi

Conceptually, the advertising is issues. Talking about a cigarette or one into the hands of a consumer. B wavy and there is a gradation from t of the same part of a company's bud is not exclusively a symbolic activ without significant symbolic dimen ways action is not, commercial spe to an act of selling than it is to a s distinction the Federal Trade Com over the tobacco companies' "free

If advertising is less powerful t ignore it, and if health education me for despair. There is good evidenc smoking in 1953 and the Surgeon very large effects on smoking beha about the dangers of smoking (parti not accept tobacco advertising) led who still smoked, a sharp swing publicity led to a sharp decline in s rock of addiction are not always convincing, newsworthy evidence defensive maneuvers, the tobacco are no panacea, either by themsel measures, but there are good groun education.

1. There are overwhelming difficul *Time-lag problems*. Might the effect unfortunately, is recalcitrant to measu

a percentage of their advertising tobacco advertisements be a better counteradvertising in 1968 to 1970 counteradvertising was more effective that the interaction is exactly what advertising showed up the hypocrisy alive a running debate. Since that support now that it did not have in could have the same kind of effect (were clear) may not be transferable. here the rule that "more speech is may be not only a less restrictive mate governmental objective but it

ban, the provision of counteradvertising their desirability varies according to providing the least challenge to First speech is better than less) would ist, and an advertising ban the least objective of public health, we do counteradvertising would prove more ive; we could reasonably, but not gulations would be somewhat less convenience, economy, and effective- could be easier to administer than ertising efforts. In terms of political gulations would be the easiest to ficant First Amendment problems, requires no public expenditure of e that the tobacco industry under-

good public policy, given that the restrictions these remedies impose for a product that kills people when her products or services (alcohol is a very slippery one.

strategy because its simplicity and t. Alternatively, the public may be ts of smoking policy are disaggre- ng bans, waged at the federal level efforts at state and local advertising tobacco advertising on billboards, for ising revenue in 1989, down from ation of America, May 28, 1991 ily it is a form of advertising easily ated. Since this would be a restric- " sort, it has smoother sailing on

constitutional grounds. Or consider the placement of cigarette vending machines in locations accessible to minors. That is another issue that can be separately lobbied and legislated. What about banning the distribution of free samples of cigarettes? Each of these separate efforts takes work, but each is a vivid reminder to public-health workers and their supporters of the hypocrisy of the tobacco industry and the seriousness of the battle at stake.

Conclusions

Because cigarette advertising is a less powerful marketing tool than many people think, banning it is not likely to have a dramatic impact on the prevalence of smoking. Even so, advertising is one of the factors in the environment that encourages children and adolescents to start smoking, and there is ample justification for efforts to find public policy remedies that attack cigarette advertising.

Conceptually, the advertising issue has been separated from other public policy issues. Talking about a cigarette or picturing a cigarette is not the same as thrusting one into the hands of a consumer. But the line between advertising and promotion is wavy and there is a gradation from the billboard to the free sample that all comes out of the same part of a company's budget. On the public-health side, public education is not exclusively a symbolic activity, nor are more coercive or regulatory efforts without significant symbolic dimensions. Even at law, where speech is protected in ways action is not, commercial speech is far from absolutely protected. It is closer to an act of selling than it is to a speech act of advocacy, judging from the tricky distinction the Federal Trade Commission has made in considering its jurisdiction over the tobacco companies' "free speech" ads.

If advertising is less powerful than its critics usually claim, this is no cause to ignore it, and if health education meets with only limited success, this is no grounds for despair. There is good evidence that the American Cancer Society report on smoking in 1953 and the Surgeon General's Report on smoking in 1964 both had very large effects on smoking behavior (Schneider et al. 1981). In 1953, publicity about the dangers of smoking (particularly in *Reader's Digest*, a magazine that does not accept tobacco advertising) led to a decline in smoking and, among the many who still smoked, a sharp swing toward the use of filtered cigarettes. In 1964, publicity led to a sharp decline in smoking. Educational efforts to chip away at the rock of addiction are not always slow. In these instances, dramatic, legitimate, convincing, newsworthy evidence greatly affected both smokers and, in elaborate defensive maneuvers, the tobacco industry. Educational efforts in the mass-media are no panacea, either by themselves or in conjunction with other tobacco control measures, but there are good grounds for a measured, continued faith in the uses of education.

Notes

1. There are overwhelming difficulties in specifying the econometric models. *Time-lag problems.* Might the effect of advertising be delayed? This seems plausible but, unfortunately, is recalcitrant to measurement. Should the model estimate the relation of

advertising spending at time t to sales at $t +$ one day? Or $t +$ three months? Or a certain percentage of $t + 1$ and a different percentage of $t + 2$ and yet another percentage of $t + 3$? We know very little about how quickly the effect of advertising "wears out" or whether there might be a "sleeper effect" of advertising or whether "wear out" depends on the quality of the advertisement, the novelty of the product, the season of the year, or what.

Marginal rate problem. Kenneth Warner and colleagues have pointed out that econometric modeling is designed to estimate the value of the next marginal increase or decrease in the independent variable (advertising) on the dependent variable (sales). This may not provide useful information for public policy, especially as the question of banning all tobacco advertising outright is considered (Warner et al. 1986, p. 371). The existing studies that estimate the relationship between advertising and consumption based on data from a time period of relatively high levels of both advertising and consumption are not designed for extrapolation to a time period in which there is no advertising at all. Moreover, if advertising is designed both to affect market share and to increase market size, then "the rational level of advertising expenditure will exceed that which increases aggregate consumption" (Warner 1986, p. 68). If the marginal advertising dollar affects market share, not market size, then any statistical relationship between aggregate advertising and aggregate consumption will be reduced.

Direction of causation problem. Just what is the dependent variable and what is the independent variable? Econometric modeling does not ordinarily sort this out but operates on the common-sense assumption that advertising, designed to have an effect on sales, is the independent variable. Is it? Studies of how businesses actually establish advertising budgets indicate that the actual, real-world relationship is that last year's sales volume may be used as a standard for determining this year's advertising budget (Schudson 1984, p. 17). When business is good, advertising budgets grow; when business is slow, advertising contracts (Horowitz 1991). Thus increases in sales over the years will lead to increases in advertising budgets over the years and a positive relationship will turn up without any evidence that advertising stimulates sales (Boddeyn 1989, p. 1256).

Measurement problems. Do advertising expenditures, invariably accepted in econometric models as an appropriate measure of consumer advertising exposure, fairly represent public exposure to advertising? All models of cigarette advertising and smoking take advertising expenditure to be a plausible index of advertising effectiveness. It may be. But it may not be. It leaves out quality differences, of course. Not all advertising is equally effective; some advertising may even be counterproductive (Warner 1986, p. 67). It also takes no account of the medium of advertising. In the United States since the television advertising ban in 1971, tobacco companies have increased their advertising budgets, moving to larger outlays in magazines, newspapers, and billboards. Still, for this increased expense they reach fewer people than they did with television ads and they reach them in less dramatic and focused ways. "Advertising expenditure" is no more adequate a proxy for advertising reach than it is for advertising quality.

Of course, notice of cigarettes has returned to television in the increased popularity of "movie channels" in cable television that show films where people smoke and in the television broadcast of sporting events at stadiums that have prominent cigarette billboards or in the television broadcast of sporting events sponsored by cigarette companies or cigarette brands. According to one estimate, on NBC's ninety-three-minute 1989 Marlboro Grand Prix, there were 4,997 images of Marlboro signs, 519 of Marlboro billboards, 249 of the Marlboro car, making the brand name visible forty-six of the ninety-three minutes of the telecast (Will 1990). But does this kind of background exposure have less, as much, or more effect than the horde of sixty-second commercials that used to appear on prime-time television before the ban? We have no measure of this.

"Advertising" as opposed to "advertising and promotion," is not, in any event, the

variable that should be measured, Tobacco expenses among media but have shifted sales promotion that do not use normal not only an image of a product but includes the distribution of free samples display a cigarette brand advantage of sponsoring of contests and give-aways firms, like other companies, may also brand in a film. While advertising expenditures for cigarettes in 1975, Advertising—United States, 1988" 19

There is also a problem in measuring measure the total number of cigarettes tobacco people consume. Public-education 1964, can be shown to have had more tobacco, rather than total number of c

2. Posadas de Puerto Rico Assoc.

3. Central Hudson Gas & Elec. Co. (1980).

4. Posadas de Puerto Rico, 478 U.S.

5. *Id.* at 350 (Brennan, J., dissenting)

? Or $t + 3$ months? Or a certain and yet another percentage of $t + 3$? Advertising "wears out" or whether there "wear out" depends on the quality of the of the year, or what.

gues have pointed out that economet-xt marginal increase or decrease in the variable (sales). This may not provide question of banning all tobacco adver-1). The existing studies that estimate based on data from a time period of ion are not designed for extrapolation. Moreover, if advertising is designed then "the rational level of advertising e consumption" (Warner 1986, p. 68). , not market size, then any statistical ate consumption will be reduced.

dependent variable and what is the ordinarily sort this out but operates on ned to have an effect on sales, is the actually establish advertising budgets ast year's sales volume may be used as dget (Schudson 1984, p. 17). When usiness is slow, advertising contracts s will lead to increases in advertising ll turn up without any evidence that).

es, invariably accepted in econometric ising exposure, fairly represent public ertising and smoking take advertising iveness. It may be. But it may not be. dvertising is equally effective; some 86, p. 67). It also takes no account of he television advertising ban in 1971, budgets, moving to larger outlays in s increased expense they reach fewer ch them in less dramatic and focused a proxy for advertising reach than it is

levision in the increased popularity of where people smoke and in the televi-rominent cigarette billboards or in the garette companies or cigarette brands. nute 1989 Marlboro Grand Prix, there o billboards, 249 of the Marlboro car, y-three minutes of the telecast (Will less, as much, or more effect than the r on prime-time television before the

omotion," is not, in any event, the

variable that should be measured. Tobacco companies have not only redistributed advertising expenses among media but have shifted advertising dollars to promotion, that is, to forms of sales promotion that do not use normal media channels and generally provide the audience not only an image of a product but some tangible reward. Promotion thus prominently includes the distribution of free samples, promotional discounts provided to retailers to display a cigarette brand advantageously, the provision and redemption of coupons, the sponsoring of contests and give-aways, or the sponsorship of public entertainment. Tobacco firms, like other companies, may also pay movie producers for prominently displaying their brand in a film. While advertising represented 75 percent of all advertising and promotional expenditures for cigarettes in 1975, it represented only 32 percent by 1988 ("Cigarette Advertising—United States, 1988" 1990, p. 263).

There is also a problem in measuring tobacco consumption. Most studies use as their measure the total number of cigarettes people consume, but an argument has been made that the better measure, with very different implications for public policy, is the total amount of tobacco people consume. Public-education efforts, notably the Surgeon General's report of 1964, can be shown to have had much greater impact on consumption if one uses total tobacco, rather than total number of cigarettes, consumed (Schneider et al. 1981, p. 609).

2. *Posadas de Puerto Rico Assoc. v. Tourism Co. of Puerto Rico*, 478 U.S. 328 (1986).
3. *Central Hudson Gas & Elec. Corp. v. Public Serv. Comm'n*, 447 U.S. 557, 564 (1980).
4. *Posadas de Puerto Rico*, 478 U.S. at 346.
5. *Id.* at 350 (Brennan, J., dissenting).