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## Egonomics, or the Art of Self-Management

By T. C. Schelling $^*$ 

One of the sophisticated financial arrangements available at your neighborhood bank is "Christmas Savings." In this plan you are committed to regular weekly deposits until some date in November when all the money is there with accumulated interest to spend for Christmas. It doesn't accumulate quite as much interest as regular savings. The reason people accept less interest on Christmas savings is that the bank protects these funds a little more than it protects ordinary savings. Regular savings are reasonably well protected against robbery, embezzlement and insolvency; and insurance takes care of what protection cannot do. But there is one predator against whose ravages the bank is usually impotent-you. With a Christmas account, the bank assumes an obligation to create ceremonial and administrative barriers to protect your account from yourself.

Some people cheat on the withholdingtax forms they fill out for their employers. They understate their dependents, so that the Internal Revenue Service takes more than it deserves all year—a free loan from the taxpayer—in return for which the taxpayer gets a reduced shock the following April.

Many of us have little tricks we play on ourselves to make us do the things we ought to do or to keep us from the things we ought to foreswear. Sometimes we put things out of reach for the moment of temptation, sometimes we promise ourselves small rewards, and sometimes we surrender authority to a trustworthy friend who will police our calories or our cigarettes. We place the alarm clock across the room so we cannot turn it off without getting out of bed. People who are chronically late set their watches a few minutes ahead to deceive themselves. I have heard of a corporate dining room in which lunch orders are placed by telephone at 9:30 or 10:00 in the morning; no food or liquor is then served to anyone except what was ordered at that time, not long after breakfast, when food was least tempting and resolve was at its highest. A grimmer example of a decision that can't be rescinded is the people who have had their jaws wired shut. Less drastically, some smokers carry no cigarettes of their own, so they pay the "higher" price of bumming free cigarettes.

In these examples, everybody behaves like two people, one who wants clean lungs and long life and another who adores tobacco, or one who wants a lean body and another who wants dessert. The two are in a continual contest for control; the "straight" one often in command most of the time, but the wayward one needing only to get occasional control to spoil the other's best laid plan.

As a boy I saw a movie about Admiral Byrd's Antarctic expedition and was impressed that as a boy he had gone outdoors in shirtsleeves to toughen himself against the cold. I resolved to go to bed at night with one blanket too few. That decision to go to bed minus one blanket was made by a warm boy; another boy awoke cold in the night, too cold to retrieve the blanket, cursing the boy who had removed the blanket and resolving to restore it tomorrow. The next bedtime it was the warm boy again, dreaming of Antarctica, who got to make the decision, and he always did it again.

I didn't realize then how many contests of that kind, some pretty serious, I would eventually have with myself, trying to stop smoking, to exercise, to study for an examination, to meet a deadline, or to turn off an old movie on TV. At a gathering like the annual meeting of the American Economic Association most of us are exquisitely aware of that form of academic delinquency that is probably our greatest occupational hazard: We cannot make ourselves write those papers, articles, and dissertations

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that we know we must write, the impediment being greater the more important the thing we have to write. In the end it is often deadlines, sometimes deliberately contrived for the purpose, that enhance our desperation to the point where the risk of failure can no longer keep us from trying. Some of my colleagues have told me of the artful ways they contrive to make themselves get started on that paper, or how they break a frightening large task into small pieces with a rule that one piece must be done each day.

Some of our contrivances are ingenious and successful. If told by a doctor we'd live longer if we'd get out in a cement covered yard and jump up and down for an hour, most of us would settle for shorter lives; but if we get a ball and something to hit it with, and somebody to hit it back, and make rules to convert the jumping into a contest, the activity becomes quite engaging. (Indeed, some even become excessively engaged.) I run for exercise and, I believe like most people, I dislike it; I keep waiting for the inventor of that mechanical rabbit at the dog races to contrive something that adds comparable zest on a people's course.

Many sophisticated people use unsophisticated budgeting devices, like weekly spending allowances and special funds for self-indulgent expenditures, often using two or three savings accounts, sometimes in separate banks, to achieve self-control through self-intimidation. They cannot casually erode a boundary they have put around certain expenditures if they have to violate a categorical rule or walk into a separate bank to steal their own money. Recently Henry Rowen and Jess Marcum have offered an interpretation of betting in lottery-like games with very long odds. "For people who play these games, savings would be a more reliable way of amassing some money," because of the actuarial unfairness of the odds; but if these are people who cannot discipline themselves to accumulate large sums through a protracted period of savings, and will never have a lump sum with which to escape from their lowcapital life style, "such games might seem to offer the only hope of accumulating a lump sum." And a good part of the rationale for social security and mandatory retirement plans has been that people will be better off if they are obliged to do what they would usually wish to do but for which they would suffer occasional disastrous lapses of morale and self discipline. Sidney Alexander once told me, after leading a research project for several years, that he had finally learned what an entrepreneur is: a person who spends most of his time getting people to do what they said they would do. And the rest of us spend a good part of our time trying to get ourselves to do what we already decided to do.

Surveys in America and in England indicate that most people who smoke—by no means everybody, but a majority—have at some time tried to stop. The Surgeon General has been warning people for two decades that smoking is bad. Just about everybody knows it. If there were some way that cigarettes could be reliably put beyond reach, and people could vote on whether they would like that done, it is a fair guess that a majority of the smokers would elect to deny themselves any possibility of lighting another cigarette.

Hardly anybody thinks it could be done, and neither experience with alcohol in the 1920's nor marijuana in the 1960's makes the effort look promising. Those who didn't want the cigarette ban would offer a market for contraband cigarettes; nobody has a good idea how to suppress such a market; and, once the market is there, the smokers who favored the ban will be little more able to resist cigarettes than they used to be. And even if the abolition were unanimously approved by all smokers, people would know that if they could sneak in a few cigarettes people would buy them; there would be a black market and most of the people who wished the market didn't exist would patronize it.

Smoking is only one of several addictive or habitual behaviors that people engage in, but it is the best example of one that is widespread, meets no known physical need

(except for people who have already acquired the habit), is known to be harmful but only in the statistical long run, is hard to quit, and one that most people might like to quit, especially if they could be relieved of withdrawal difficulties but even if they had to suffer if only they were assured of success. Overeating is second in the number of people who wish they could control their behavior better than they do; and alcohol has a large absolute number, whether or not it comes close to being a majority who would quit altogether if only they could, as the only way of bringing their consumption under control. There are also people who gamble and wish they didn't, or watch too much television. The phenomenon of addiction is widespread, and by no means should all addictions be deplored, nor are all those we deplore necessarily candidates for any kind of action. (If people are addicted to exercise it may be great for them, though it infuriates their friends.)

It is not clear with marijuana, as opposed to tobacco, that a large part of the participants are convinced usage is bad for them, wish they could quit, and can't. I am distinguishing the drugs on one side and the food, tobacco, and possibly alcohol on the other, because they represent altogether distinct issues in "social control." Nearly everybody who wants heroin suppressed is not an addict. And not many people who take heroin are pleading to be deprived of it. But tens of millions of people wish they could smoke less, or quite smoking, and the primary constituency for social action against cigarettes is probably not among the nonsmokers, but among those who smoke. (This undoubtedly includes some who smoke but are more concerned about their children than about themselves.)

There is a recent innovation that we can watch with interest. In some cities you can now go to a shopping mall and subscribe to a commercial program to help you stop smoking. The idea makes sense: most of us have little knowledge of the ways that people bring a habit or addiction under control; help would be worth money. (Even the savings on cigarettes alone are more than enough to pay for the course.)

Actually, all is not hopeless. Since the Surgeon General's findings were first made public in the 1960's, the number of cigarettes per capita stopped increasing and has decreased slightly. The tar content has declined markedly. In my own census group, males 45 to 65, the proportion that smokes is declining by 4 percent a year. In this age group, white male professionals have most strikingly discontinued smoking. You can verify that by looking around you at the annual meeting of the American Economic Association: cigarette butts per capita in the ashtrays is a small fraction of what it was ten years ago, and if you check the brands you will find tar and nicotine down another half.

Little is known about how these people stopped smoking-and stop they did, at least many of them, because there were not only fewer smokers but more "former smokers" among those middle aged males. (The figures can be confusing: among women the smokers are still increasing while former smokers are increasing almost as rapidly; and among middle aged women smokers are increasing slightly and former smokers are increasing much more rapidly.) We have a little information on how many cigarettes per day the smokers smoke, but no information on how many times the "former smokers" have quit and started again, or even how many of them just hadn't had a cigarette for a whole day when the interviewer rang the bell.

What is it worth to quit smoking? Suppose there were a reliable way to quit, and to quit wanting to smoke, without torment or suspense or loss of dignity or any physical side effects. What would it be worth to those 50 million smokers, and to those 30 million former smokers of whom some are going to need it and a few could use it right now? Let me conjecture an immediate market of 30 million customers. If those who would like to quit, smoke just as much as those who are not interested, these 30 million smokers spend about \$10 billion per year on cigarettes. (A third of this is a transfer, by the tax system, to nonsmokers and to each other, so our remedy for smoking is also a tax relief device.) If smokers

expect, in the absence of relief, to smoke another fifteen years or more, and if they discount future savings at somewhere from 8 to 12 percent per year, and if at a minimum they would value relief from smoking the way they would value the fuel oil savings from warmer weather, we can put a minimum valuation somewhere from \$75 to \$100 billion. (There will be some "producer's surplus" in this figure farmers and retailers to whom reduced sales would represent a net loss, so the net social saving after taxes will be somewhat more than half what the consumers save.)

We can only guess what people would pay to be relieved of the nonfinancial cost associated with smoking-better health, freedom from a "habit," cleaner teeth, or cleaner ashtrays-and what people would pay to help spouses, children, parents, and friends to be rid of what is usually considered an unhealthful addiction. We don't know because they don't know. (Some of "us" are among "them" and we still don't know.) Many of them, furthermore, prefer not to face the question, especially as the guaranteed torment-free treatment is not now for sale. Moreover some would probably insist on stopping (or failing) on their own, and not by the procurement of artificial support for their self control.

An alternative question is how much smokers would pay for something that, with little impairment of their smoking pleasure, would make the habit perfectly safe, and certified so by that Surgeon General who otherwise tells us that smoking is dangerous.

My conjecture, which you may compare with your own, is that the worth to consumers of being free of smoking, or free of the consequences of smoking, is greater that the gross financial savings. Then the total "consumer's surplus" from suspensefree torment-free nonconsumption of cigarettes, discounted to the present for today's smoking population, is in the neighborhood of a quarter trillion dollars.

I want to draw the conclusion that this is an anomaly in consumer theory, consumers getting negative satisfaction out of something they spend a lot of money to consume. But life is full of expensive things that we want, the relief of wanting which would save us lots of money; and wishing that we didn't want to smoke may not be different from wishing we didn't get cold or wishing we didn't need sunburn lotion or novocaine. Even the argument that smoking is an addictive habit that people acquire thoughtlessly or irresponsibly, and that they would be better off had they been denied the opportunity to become addicted, is not altogether different from the argument that people have bad teeth and gums because they were thoughtless and irresponsible about dental hygiene earlier in life and might be better off had they been compelled to incur the nuisance of oral hygiene.

To establish the anomaly, I must conjecture a stronger proposition, one that I believe could be demonstrated but has not been: among those interested customers seeking a way to stop smoking, most of them would settle for a technique that guaranteed that cigarettes would not be available when they wanted to smoke. This technique would be suspense free but not torment free. All the withdrawal symptoms except those arising in doubt, indecision, suspense, and guilt would be accepted. Something that would make cigarette smoking instantly painful-as in an alternative system children's teeth might become instantly painful upon failure to brush them properly-would be accepted by people for themselves, according to my proposition, as the other might be accepted by parents for their children's teeth.

I'll go further and offer an expectation not part of the proposition that I ask you to entertain—that the reluctance of some of our potential customers to face the pains of cigarette starvation would diminish rapidly as they discovered, through the experience of others, that even the withdrawal symptoms were not all that bad unless aggravated and prolonged by doubt, indecision, or occasional relapses. (There is some observation that people who discover that they absolutely *must* quit smoking and who know that therefore they *will* quit smoking find the withdrawal difficulties of less intensity and shorter duration, sometimes dramatically less, than even their own experience had led them to expect.)

Meanwhile, with no visible encouragement from the Surgeon General, cigarette companies in their advertising are engaged in a spectacular competition for the low-tar market, a market that may actually be expanding explosively only because, still without quite admitting that tar may cause cancer, cigarette companies are beginning to treat "tar" as though it is a pollutant. Compared with the puny commercial efforts to merchandise courses on how to stop smoking at the local shopping mall, the several hundred million dollars a year spent competitively advertising cigarettes in newspapers, magazines and billboards may end up doing more to reduce the harmful effects of smoking than consumers have been able to do for themselves.