

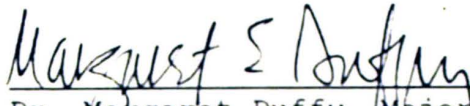
# **SMOKING BEHAVIOR IN POPULAR MOVIES OF 1996**

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**TERRI LYNN BERRESFORD**

To the Graduate Council:

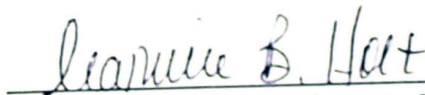
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SMOKING BEHAVIOR IN POPULAR MOVIES OF 1996

A Research Paper  
Presented for the  
Master of Arts  
Degree

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Terri Lynn Berresford

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## ABSTRACT

For this study, quantitative data concerning smoking behavior were collected from the 10 highest-grossing movies of 1996. This behavior was compared to Bandura's (1971) Social Learning Theory to determine if smoking characters in movies might inspire viewers to model their behavior. Major findings of this study include: the majority of smoking characters were white males from 30 to 50 years old; 50% of smoking characters are in positive roles; the majority of smoking characters exhibit characteristics that may make them desirable for modeling; and there is little positive or negative reinforcement of smoking behavior.

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## CHAPTER I

### INTRODUCTION

There is currently a trend in America to change the perception of smoking due to health risks to both smokers and non-smokers, allegations of conspiracy and cover-ups by tobacco industry insiders, and governmental investigations and possible regulation of the tobacco industry (Erickson, 1990, Brownlee, 1994).

Research suggests that film producers have received financial assistance from the tobacco industry in return for portraying smoking as socially desirable and acceptable for adults. "Tobacco companies offer to help underwrite film making costs; in return, the film maker agrees to portray the key characters in the film as smokers" (Weis and Burke, 1986 p. 64), although a recent 60 Minutes investigation was unable to find evidence that this is still happening today. However, motion pictures can have a dramatic impact on their audiences because of the size of the screens and the use of powerful sound systems (Krugman, 1994). Films have the ability to speak to the experience of its audience (Ewen & Ewen, 1982) and because of the transformation from mass entertainment to a specialized form of popular culture (Monaco, 1984), they can be tailored to specific audiences, allowing advertisers to target specific markets.

Because movies are attractive to teenagers and pre-teenagers (Weis and Burke, 1986), the tobacco industry can subtly affect these audiences without appearing to target them, thus creating demand for their product and (they hope) influencing the public to change current attitudes toward smoking consumption and accept smoking again in public.

Popular movies are a part of our culture because they are viewed by many people, often numerous times. This study is based on the premise that the mass media, more specifically films, have the potential to influence attitudes and beliefs about smoking acceptance in society through Bandura's (1971) social learning theory. This study attempts to learn how characters who smoke in films are portrayed and compare the behaviors of the characters to the conditions that Bandura (1971) believes are favorable for modeling.

Bandura's (1971) social learning theory is a stimulus-cognition-response theory that attempts to predict behavior. It is based on the theory that people will observe the behavior of others around them and the consequences of this behavior, then decide whether to incorporate this behavior into their own lives through modeling. Modeling is the imitation of another's behavior.

Modeling has the ability to affect many people through the mass media of television, movies, and print. Several

factors affect modeling. First, people are more likely to model behavior when there is more positive reinforcement than negative. People are more likely to model someone they consider to be like themselves, which is the source of peer pressure. People are more likely to model someone who is competent rather than one who appears crazy or inept. Since we have aspirations of wealth, people are more likely to model someone who has attained that wealth. People are more likely to model someone who is constant in his or her behavior rather than someone who is always changing his or her patterns of behavior, and finally, people are influenced by many role models rather than a single one (Bettinghaus, 1994).

Movies that have smokers as main characters may encourage smoking among children and teenagers because the use is positive (Hazan, Lipton, and Glantz, 1994). Movies do not reflect the reality of smoking. Researchers have found that movie trends show an increase in depictions of risky behavior, such as smoking, drinking, drug use, etc., but few portrayals of the consequences of these behaviors (Terre, Drabman, and Speer, 1991).

Applying social learning theory to mass media portrayals and smoking, one might argue that the mass media have been influential in promoting smoking by making it a normal, and even desirable behavior. The characters in

television shows smoke and, especially in soap operas and situation comedies, and when this behavior is seen, it may be modeled by the viewer to the extent that these characters inspire modeling behavior.



## CHAPTER II

### LITERATURE REVIEW

Movies are a universal form of cheap entertainment that have the ability to stimulate new ideas. The media have used imagery to organize people for "patriotism, for self-denial, and for war" (Ewen & Ewen, 1982, 263). Ewen & Ewen (1982) state:

the ability of film to speak, in various ways, to the experience of its audience provides us with a key to understanding its appeal and power... Film as a component of mass culture became a mediation between a historic uprooting and an unknown and threatening urban society(105).

Research has shown that movies constitute a "shared experience of the society" (Monoco, 1981, 223), although there is some question as to whether they influence or are influenced by society. Ewen & Ewen (1982) comment:

The powerful role played by the mass media in modern life is both a function and a reflection of a society in which customary culture has been dismembered...The various media provide people with a blistered way of understanding, of seeing the world they inhabit... Through the media, we see the most available and imposing panorama of the social world (266-267).

Popular movies become a part of our culture because they are seen by many people, become topics of discussion, and eventually make their way into private homes via videocassettes, cable, or network television. Often, movies are viewed more than once and this repetition may increase potential influence on viewers. Therefore the content of popular movies becomes more important to us.

### Movies and Tobacco

Movies that have smokers as main characters may encourage smoking among children and teenagers because the use is positive (Hazan, Lipton, and Glantz, 1994). Movies do not reflect the reality of smoking. Hazan, Lipton, and Glantz (1994) studied 62 of the top 20 United States films from 1960 through 1990 and found that films usually portray smokers as successful, middle class, attractive white males. They also found that smoking is portrayed to have a social appeal rather than a personal one, smoking is socially acceptable, and that smoking is a stress reducer.

Researchers have found that movie trends show an increase in depictions of risky behavior, such as smoking, drinking, drug use, etc., but few portrayals of the consequences of these behaviors (Terre, Drabman, and Speer, 1991). Cigarettes have been used in movies to introduce people, establish friendly relationships, and as a substitute for sex (Lane, 1994; Mausner & Platt, 1966).

Smoking behavior in movies has been found to be similar to tobacco advertising, with the smoker associated with youthful vigor, good health and looks, and successful or professional appearance (Hazan, Lipton, and Glance, 1994).

### Tobacco Advertising

The tobacco industry uses pathos, an emotional appeal, to influence its audience. Smoking is associated with social success, sexual attractiveness, good health, and fitness (Worsnop, 1995). The industry downplays the risks of smoking and emphasizes the enjoyment of cigarettes. The majority of companies in the tobacco industry denies any association between ill health and smoking, although the recent admission of the Liggett Group, Inc. implies that the industry has known about smoking dangers for over thirty years (Manning, 1997).

Through advertising, tobacco companies try to "distract American smokers from the enormous mound of data confirming cigarette hazards" (Whelan, 1984, p. 109) and they try to induce others to start smoking. In order to distract the smoker from the health risks, they publicly insist that "the case against cigarettes was not proven; that the evidence was purely statistical, [and] that the precise causal mechanism by which cigarettes were alleged to cause cancer has never been identified" (Taylor, 1984, pp. xvii-xviii). Because movies are attractive to teenagers and pre-teenagers



(Weis and Burke, 1986), the tobacco industry can subtly affect these audiences without appearing to target them, thus creating demand for their product and, they hope, influencing the public to change current attitudes toward smoking consumption and accept smoking again in public.

Whelan (1984) cites five major reasons for the public's tolerance of cigarette smoking:

- 1) Cigarettes became an established part of American life before the extent of their harmfulness was apparent;
- 2) Cigarettes are physically addicting and psychologically habit-forming;
- 3) People don't like to be reminded that they are killing themselves;
- 4) The tobacco industry spends enormous amounts of money trying to reassure smokers that smoking is safe, pleasurable, and socially acceptable;
- and 5) The tobacco industry has tremendous political clout. (1-2).

Because of the public's tolerance of cigarette smoking, Mausner & Platt (1966) comment that the best way to discourage smoking was to try to change the public's acceptance of smoking behavior. One way to change attitudes is through the mass media.

### Mass Media Influence

There is an assumption generally accepted by those in control of the media that the media do have the potential to influence viewers. Siegel (1972) notes, "the television



industry exists and reaps its profits from the conviction that television viewing does affect behavior--buying behavior" (635). Advertisers spend billions of dollars per year on television commercials, magazine advertisements, and other advertising venues with this assumption in mind. Due to the acceptance of this effect, there is sufficient reason to believe in the general influencing effects for all mass media.

There is some research that suggests that people are affected by what they view in the movies. This effect is most prominent in children. Siegal (1972) suggests that negative racial portrayals influence the way people feel toward minorities and the way minorities feel about themselves. Gross (1974) studied the effects of television viewing on adults and found that heavy television viewers who watch at least four hours per day overestimated the population proportions of professionals, athletes, entertainers, and law enforcement personnel while light television viewers, who watch less than two hours per day, were more realistic in their estimations.

Research has shown that the mass media can be used to influence adolescents against smoking (Flynn, Worden, Seckner-Walker, Badger, Geller & Costanza, 1992; Flynn, Worden, Seckner-Walker, Pirie, Badger, Carpenter, & Geller, 1994). According to Coleman (1993), the mass media are

likely to influence both social-level risk judgments and personal-level risk judgments. Tyler and Cook (1984) showed that the media were less effective in personal-level risk judgments than at the social-level. Other research indicates that the mass media exert some influence on social level risk judgments but negligible influence on personal level risk judgments (Culbertson and Stemple, 1985; Dunwoody and Neuwirth, 1991; Pilisuk and Acredolo, 1988).

The enormous amount of evidence against smoking and the current allegations about conspiracy and cover-ups by the tobacco industry have begun to shift public opinion about smoking. In a poll cited by Brownlee and Roberts (1994), 73% of those surveyed expressed unfavorable opinions about smoking and 68% expressed support for government regulation of tobacco as a drug (35).

The level of awareness of smoking risks has increased over the past 25 years. The anti-smoking campaign's recent efforts have been to change the social context of smoking rather than the smoking behavior of individuals (Erickson, 1990). Peer pressure is a great influence on smokers, and if smoking is considered unacceptable by the majority of Americans, then the rate of smoking will continue to drop. Research indicates that advertising is a minor influence in promoting cigarette smoking, especially when it is compared to family and peer pressure (McDonald, 1993).

The media are able to increase knowledge about the health matters related to smoking, help change attitudes about the acceptability of smoking, reinforce attitudes and maintain interest in smoking issues, provide cues to action, set social agendas and demonstrate simple skills; however, they do have limitations (Erickson, 1990). The media can only reach their own audience, the limitations on format affect the content of the message and the style in which it is presented, and media messages alone are not enough to motivate change in attitudes about smoking (Erickson, 1990). One way that the media influences people is demonstrated in Bandura's (1971) social learning theory.

### Social Learning Theory

Social learning theory posits that the viewer can associate himself or herself with the actor in the movie, imitate the actor (role playing) and use the product. Tobacco advertising associates smoking with health and having a good time. Bandura's (1971) social learning theory is based upon the assumption that when people observe behaviors, they transform them into symbolic representations of events and store them in their brains. People use these symbols and their informative functions to identify possible positive or negative consequences with the behaviors and will either repeat the behavior if it is associated with something they value or disregard the behavior if it is not.



A central theme in social learning is that human behavior is rule-governed. The rules describe the actions an individual needs to take in order to have a desired outcome and these rules are learned through reinforcement. Reinforcement is "the cognitive ability to perceive the probable outcome of future actions whether they are positive or negative" (Smith, 1982, p. 194).

Julian Rotter (1982) developed seven principles of social learning theory because he believes that Bandura's (1971) theory "does not offer a systematic way to describe or explain relatively stable, generalized aspects of a personality" (p. 4). His social learning theory is a psychological theory that attempts to predict behavior and change behavior in a more efficient manner than Bandura's theory. Both theories agree that the majority of our learning occurs in three ways: direct experience, role-playing, and modeling. Direct experience is the predominant way of learning for children. They attempt an action, experience the consequences, and learn from the experience. Personal experience in a situations helps to create attitudes which will influence us in future, similar situations. Role-playing, or putting oneself into someone else's shoes, can be helpful when a person is trying to mentally experience the same set of circumstances that another is going through in order to better understand that



person. Through this experience, we learn what might happen to us if we were to be in that situation. Modeling is observational learning. We learn what may happen to us by watching someone else. "When we observe, either on a face-to-face basis or by media attendance, that certain behaviors have positive outcomes, we infer that the same consequences hold for us if we act similarly" (Smith, 1982, p. 196).

Modeling has the ability to affect many people through the mass media: television, movies, and print. There are several factors that affect modeling. First, people are more likely to model behavior when there is more positive reinforcement than negative. People are more likely to model someone they consider to be like themselves, which is the source of peer pressure. People are more likely to model someone who is competent rather than one who appears crazy or inept. Since we have aspirations of wealth, people are more likely to model someone who has attained that wealth. People are more likely to model someone who is constant in his or her behavior rather than someone who is always changing his or her patterns of behavior, and finally, people are influenced by many role models rather than a single one (Bettinghaus, 1994).

Applying social learning theory to mass media portrayals and smoking, this study posits that the mass media have been influential in promoting smoking by making

it a normal, and even desirable behavior. The characters in television shows smoke, especially in soap operas and situation comedies, and when this behavior is seen, it could be modeled by the viewer to the extent that these characters inspire modeling behavior (Bandura, 1971).

### Research Questions

1. What are the demographic characteristics of smoking characters in movies relative to age, race, and sex?
2. What types of movie roles are held by smoking characters?
3. Are smokers portrayed in films as characters that are desirable for modeling, and are they competent, financially stable, and in good physical shape?
4. Is there any positive or negative reinforcement of smoking behavior shown in the movies and do other characters make any positive or negative remarks to the smoker about his or her behavior?
5. How much of the movie's time portrays smoking characters and how much time does each character spend smoking on screen?

## CHAPTER III

### METHODOLOGY

The 10 highest-grossing movies of 1996 were viewed and a list of characters who smoked was made. Then the movies were viewed again, one time per smoker, and a character reference sheet was filled out to determine smoking habits. One sheet was filled out per character. Two coders were used for this project in order to test reliability. The coders were trained and viewed the movies independently. Using the Holsti formula, inter-coder reliability was calculated at 85.71%.

If there were no smokers in the movie, then it was noted as having no smokers and viewed only once. Only characters who have speaking parts were counted as they are most likely to be noticed by the viewers and their behaviors are more likely to be modeled.

The character reference sheet included the following demographic information for each character: sex, occupation, income (upper class, middle class, lower class) and age range (under 18, 18 - 29, 30 - 50, 50+). Occupation was noted if the coder was able to determine the occupation of the character with accuracy. Income was estimated as follows: if the character was obviously wealthy or obviously poor, then upper or lower class was selected, respectively. Otherwise the character was noted as middle class. Age



range was noted as close as possible. The factors that affect modeling are: competent or inept behavior, constant or changing behavior, and physical shape (athletic, average, or obese). The character's behavior was be noted as competent if he or she was mostly capable in his or her behavior. The character's behavior was noted as constant if his or her behavior was mostly unchanging. If a male character was obviously athletic (shown participating in athletic events with skill, bulging muscles, etc.,) then his physical shape was noted as athletic. If a female character was obviously athletic (shown participating in athletic events with skill, toned muscles, etc.,) then her physical shape was noted as athletic. If the character was obviously overweight, then he or she was noted as obese. Otherwise the character's physical shape was noted as average.

The character reference sheet also notes if there were any references to smoking, positive or negative, made to the character that smokes. These were listed as positive or negative reinforcement of the behavior. The total minutes and seconds that the character was on screen were counted using a stopwatch as well as the total minutes the character was smoking on screen. The movies were shown in letterbox format in the movie theaters. All 10 movies were reformatted to fit standard television screens, therefore the total number of minutes the characters were on screen in

the theater may be different than the total number of minutes that are listed in this study due to the alteration.

The list of movies was obtained from the Internet site listing the box office receipts ([www.io.org/nodin/cgi/grosses.pl.cgi](http://www.io.org/nodin/cgi/grosses.pl.cgi)) and was last updated on September 29, 1996. If a movie in the top ten has a rating of G, then it was not included in the sample as there is likely to be no smoking in G-rated movies. Animated films were not included in the sample as they are not as likely to inspire modeling due to animation. The movies that were viewed are:

Movies	Domestic Ticket Sales
1. Independence Day	293,617,000
2. Twister	241,101,000
3. Mission Impossible	180,476,000
4. The Rock	133,216,000
5. The Nutty Professor	124,469,000
6. The Birdcage	123,986,000
7. A Time to Kill	104,836,000
8. Phenomenon	101,142,000
9. Eraser	101,104,000
10. Broken Arrow	70,450,000



## Chapter IV

### RESULTS

Of the ten movies viewed, eight were found to have characters that smoke and a total of 24 characters were observed smoking. The two movies without any smoking behavior were Twister and The Nutty Professor.

The data collected with regard to the first research question show that the majority of smoking characters were white males from 30 to 50 years old. Table 1 shows the demographic breakdown of the characters.

Table 1

Number and Percentage of Characters who Smoked in Each  
Demographic Category

Demographic Category	n	Percentage
Age:		
18 - 29	5	21
30 - 50	14	58
50 +	5	21
Race:		
White	22	92
African-American	1	4
Hispanic	1	4
Sex:		
Male	23	96
Female	1	4

The data collected with regard to the second research question show that 50 percent of smoking characters are in the positive roles of hero or supporting hero/heroine, although the role of villain had more characters total.

Table 2

## Roles of Smoking Characters

Role	n	Percentage
Hero	5	21
Supporting Hero/Heroine	7	29
Villain	8	33
Other	4	17

With regard to Social Learning Theory's favorable conditions for modeling, the data collected show that the majority of smoking characters exhibit characteristics that could make them desirable for modeling. Table three shows the number and percentage of the modeling characteristics. In the behavior category, a character's behavior was classified twice; either competent or inept, and either constant or changing.

Table 3

Number and Percentage of Characters in Each Category of Social Learning Theory Conditions for Modeling		
Modeling Characteristic	n	Percentage
Behavior:		
Competent	22	92
Inept	2	8
Constant	20	83
Changing	4	17
Income:		
Upper Class	7	29
Middle Class	17	71
Lower Class	0	0
Physical Shape:		
Athletic	5	21
Average	18	75
Obese	1	4

The majority of smoking characters are competent and constant in their behavior, have middle class incomes, and average builds.

Reinforcement is an important element in modeling behavior. Of the eight movies viewed, three had instances of reinforcement. Table 4 shows the movies that exhibited either positive or negative reinforcement, the type of

reinforcement, and details about the circumstances of the reinforcement.

Table 4

## Reinforcement Details

Movie	Type	Detail
<u>Phenomenon</u>	Negative	Told to stop smoking by doctor.
<u>Broken Arrow</u>	Negative	Told to put out cigarette.
	Negative	Asked not to smoke.
<u>Independence Day</u>	Negative	Says smoking is not healthy.
	Negative	Told smoking is not healthy.
	Positive	Cigar used as "victory dance."
	Positive	Cigar used to celebrate victory.
	Positive	When asked if smoking is healthy, replies "I could get used to it."
	Positive	No coughing when character starts smoking even though he had never smoked before.



The amount of time a character spends on screen is important to modeling because of repetition. Table five shows each smoking character in each movie and compares the time spent on screen with the time send smoking on screen.

Table 5

Movie/Character	Time Spent Smoking on Screen		Percent
	Time on Screen	Time Smoking	
<u>The Birdcage</u>			
Armond	60m 13s	3m 26s	6
Val	34m 12s	3m 12s	9
<u>Phenomenon</u>			
Jimmy	2m 2s	1m 48s	89
Agent	1m 2s	29s	47
<u>Independence Day</u>			
Steven	22m 45s	2m 16s	10
David	25m 42s	2m 16s	9
Julius	8m 51s	56s	10.5
<u>Broken Arrow</u>			
Vic	41m 30s	5m 30s	13.3
<u>The Rock</u>			
Hummel	19m 50s	1m 8s	5.7

m = minutes, s = seconds

Table 5 (continued)

Movie/Character	Time on Screen	Time Smoking	Percent age
<u>Mission: Impossible</u>			
Jim	11m 48s	30s	4.2
Kruegar	15m 50s	1m	6.3
Ethan	49m 54s	1m	.2
<u>A Time to Kill</u>			
Ellen	19m 13s	2m 4s	11.1
James	2m 20s	1m 20s	57.14
Mickey Mouse	1m 54s	24s	21.1
Harry	7m 19s	25s	5.7
Jake	53m 26s	7m 54s	14.8
Freddy	4m 7s	53s	21.5
Jury Foreman	2m 25s	43s	29.7
Rufus	7m 51s	4s	.8
Omar	4m 49s	4s	1.4
<u>Eraser</u>			
Robert	19m 45s	2m	10.1
Tony	1m 52s	1m 33s	83
Marshall	1m 32s	1m 8s	74

M = minutes, s = seconds

## CHAPTER V

### ANALYSIS AND CONCLUSIONS

Some of the results of this study can be compared to the 1994 findings of Hazan, Lipton, and Glantz. In their study of movies over a 31 year period, they found that films portray smokers as successful, attractive white males. In this study, 96 percent of smokers were white, 92 percent male, 100 percent were upper or middle class. Because attractiveness is a subjective variable, it was not included in this study.

Hazan, Lipton, and Glantz (1994) also found that the majority of smokers in movies are portrayed as movie heroes. This study found that 50% of smokers in 1996 were either heroes or supporting heroes/heroines. The role of hero is generally a positive one, which could influence modeling behavior as heroes are often revered.

Many factors affect modeling behavior. Bandura (1971) says that we model the behavior of people we would like to be like. Characters that are often modeled are competent and constant in their actions, have achieved a measure of wealth that others would like to achieve, and are physically fit. This study found that 92% of characters are competent and 83% are constant in their behavior, 100% of smoking characters have middle or upper class incomes, and 96% are in good general shape (average or athletic

shape). These findings suggest that smoking characters are desirable ones for modeling behavior.

Reinforcement is an important aspect of social learning theory and modeling. When a behavior is modeled, a person is more likely to repeat the behavior if there is positive reinforcement and less likely to repeat the behavior if the reinforcement is negative. This study found that there is little reinforcement of any type in movies with regard to smoking behavior. Of the eight movies that had smoking characters, only three had any type of reinforcement. This study found that there were five instances of negative reinforcement and four instances of positive reinforcement.

It is important to look at the type of reinforcement that is shown in movies in order to attempt to understand the possible influence it may have on modeling behavior. In Phenomenon, the character is told to stop smoking by a doctor. This may discourage modeling because a doctor is an important authority figure in our society. In Broken Arrow, the character is told not to smoke by a supervisor and asked not to smoke by an associate. Both characters who provide the negative reinforcement are minor and therefore there may not be any discouragement of modeling behavior. Also, the character makes fun of his associate when he is asked not to smoke, which may further discount the reinforcement.



In Independence Day, smoking is used to celebrate victory over the attacking aliens. The character David provides all of the negative reinforcement, telling his father that smoking is not healthy. However, by the end of the movie, he changes his mind and replies to his father that he could get used to smoking. This may have an important influence on attitudes concerning smoking and may inspire modeling behavior. Also, when David lights up a cigar for the first time, he does not exhibit any physical discomfort from inhaling, such as coughing or gagging, which is common when a person is not used to smoking. This may also inspire modeling behavior, as physical symptoms may discourage people from smoking.

The amount of time that a character is shown smoking may also influence modeling behavior. Of the 24 characters that were observed smoking, 15 were on screen more than five minutes and were observed smoking less than 15% of the time spent on screen. Of the nine characters that were on screen less than five minutes, four smoked over 50% of the time they were on screen and eight smoked over 20% of the time on screen. If a character is not a heavy smoker, then viewers may infer that smoking is not habit forming and can be controlled. This study shows that characters who are on screen for more than five minutes appear to be light smokers who have the habit under control. They are not chain

smokers who always have a cigarette in their hands. This may imply to some people that smoking should be acceptable in our society because most people can handle the behavior.

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