Gender Displaying Television Commercials: A Comparative Study of Television Commercials in the 1950s and 1980s[1]

By: Kenneth Allan[2] and Scott Coltrane

Abstract:

Recent researchers have argued both that there has been change in the way gender is portrayed in television commercials and that gender images have remained stereotypical. Comparing television commercials from the 1950s/early 1960s to commercials from the 1980s, this study explores the issue of how much, if any, change has occurred in gender images. Additionally, the study focuses on the gender display of main characters and the circumstances under which it varies. Results indicate that there has been change in the images of women but not men. The activity that women are pictured in significantly changed from the 1950s to the 1980s, and a change in activity has the strongest effect on the display of gender.

Article:

> What the human nature of males and females really consists of . . . is a capacity to learn to provide and to read depictions of masculinity and femininity and a willingness to adhere to a schedule for presenting these pictures .... One might just as well say there is no gender identity. There is only a schedule for the portrayal of gender. (Erving Goffman, 1979, p. 8)

Adults and children are exposed to gender depictions from a multitude of sources, but perhaps the most ubiquitous and stereotyped portrayals come
from television. Since its introduction in the 1940s, television has become so pervasive in the United States that it is preeminent among current purveyors of popular cultural imagery. Over 90 million homes, or 98% of all U.S. households, now have a television set, and over three quarters of those have multiple sets (Comstock, 1991; Kellner, 1990; Signorielli, 1991). The average U.S. household has at least one television "on" for almost seven hours every day (Signorielli & Lears, 1992) and the typical adult viewer watches over 30 hours of television each week (Bred & Cantor, 1988). Since over 20% of the typical broadcast hour consists of commercials, an average American could watch over 30,000 commercials in a year, or over 2,000,000 in a lifetime (Bred & Cantor, 1988; Comstock, 1991).

While dramatic in its own right, this familiar litany of figures on exposure to television imagery captures only a part of the pervasive and profound impact of commercial advertising on American society. Both critics and industry insiders acknowledge that the primary purpose of television programming is to create an audience to

watch commercials. Advertisers and their clients buy time on television in order to sell products and services to targeted audiences. Television programming, although typically conceived of as entertainment, and occasionally characterized as "art," essentially provides a backdrop for an attractive display of consumer goods. In a direct and fundamental way, television shows are shaped to facilitate a favorable impression of manufacturer, brand, and product (Bagdikian, 1987; Comstock, 1991; Kellner, 1990). Not surprisingly, the images of gender presented in television shows tend to conform to the "pictures" of gender presented in commercials. Thus, investigating gender depictions in television commercials tells us something about gender portrayal in the larger medium. Because television "dominates the symbolic environment of modern life," and cultivates common perspectives, documenting trends in television imagery also gives us insight into the shifting meanings of gender in popular culture (Signorielli & Lears, 1992, p. 161; Saco, 1992).

Content Analyses of Gender Imagery on Television
Two decades of research on television imagery has produced consistent support for the idea that the medium perpetuates rigid gender distinctions. In general, men and women are shown in different settings, performing different activities, and displaying different character traits. Male characters in television shows tend to outnumber female characters by two or three to one, and women tend to be shown as passive, emotional, and dependent on men. Men tend to play more diverse roles on television and male characters tend to have greater depth and complexity than female characters. Most men are pictured as powerful, successful, unemotional, and prone to decisive action (Canton, 1990; Miller, 1989; Fejes, 1992; Signorielli, 1989; Tuchman, 1979).

Findings are similar for commercials, with conventional gender images found to be even more common than in television programming. Commercials present condensed typifications of gender relations, with men typically shown as active and dominant, and women shown as passive and dependent. Male voice-overs in commercials are the rule, and, as in programming, men characters far outnumber women characters. Men in commercials are often pictured on the job, or if at home, are frequently the recipients of women's care or labor. When pictured with products, men are usually shown as acknowledgeable and authoritative. In contrast, women in commercials are often pictured as wives or mothers. As sex objects and potential mates, women tend to be pictured as preoccupied with their physical beauty and attractiveness. Women are also usually younger than the men they are pictured with, and if shown as members of the work force, they often occupy lower status "women's jobs," and are typically pictured in the presence of a male superior (Bred & Cantor, 1988; Courtney & Whipple, 1974, 1982; Dominick & Rauch, 1972; Fejes, 1992; Ferrante, Haynes, & Kingsley, 1988; Lovdal, 1989; Signorielli,1989, 1992; O'Donnell & O'Donnell, 1978).

Although these stereotypes have persisted, researchers analyzing commercials from the late 1980s indicate that there has been improvement in the presentation of women since the 1970s. Some recent studies demonstrate that more female characters are present, more women are shown in occupational roles, and more women are pictured in high status professions (Brett & Cantor, 1988; Lovdal, 1989; Signorielli, 1991). Recent research also shows that men are somewhat less likely to be portrayed in stereotypical fashion, though television commercials for beer or for boy's toys seem to have changed little (Fejes, 1992; Ferrante et al., 1988).

Studies conducted in the past two decades have also suggested that stereotyped and conventional portrayals of gender on television have some important impacts on children and adults (Signorielli & Morgan, 1990). One of the most common findings from media and cultivation studies is that increased television viewing is associated with more stereotypical views, especially about gender (Gerbner, Gross, Morgan, & Signorielli, 1986; Huston et al., 1992; Kimball, 1986; Lovdal, 1989; McGhee & Frueh, 1980; Morgan, 1987; Signorielli & Lears, 1992). Children tend to learn about jobs and work settings from television, and more exposure leads to gender-stereotyped views of occupations among young people. In contrast, both children and adults exposed to counterstereotypical gender portrayals on television tend to hold more egalitarian views about gender (Signorielli, 1989, 1991). Television commercials have also been shown to have an impact on traditional/nontraditional gender role perceptions among elementary school age children (O'Bryant & Corder-Bolz, 1978). In general, then, televised gender imagery molds cultural ideals of appropriate behaviors for men and women. Being exposed to consistent and repeated stereotypical gender images shapes cognitive structures,

or gender schemes (Bern, 1981), and subsequently influences peoples' perceptions of themselves and of others. Nonstereotypical media depictions of men and women also have the potential for providing cognitive maps, visual models, and linguistic resources for resisting or creating new patterns of gender relations (e.g., Goffman, 1979; Barthel, 1988; Schudson, 1984).

RESEARCH QUESTIONS

Whereas most previous content studies of gender in television commercials have focused primarily on women, our research gives equal attention to images of both men and women. Like previously analysts, we are interested in documenting changes in gender imagery that have occurred in the past few decades. Has there been a significant weakening of gender stereotypes since the 1950s, or are conventional portrayals as common as before? As noted above, some researchers have argued that television advertising has improved and that it now presents "a less sexist and more equal view of the roles of men and women in society" (Bred & Cantor, 1988, p. 607). In contrast, others have focused attention on the continuity in imagery and suggested that conventional gender portrayals remain the norm (e.g., Lovdal, 1989).

One of our research objectives is therefore to explore the issue of how much, if any, change has occurred in television commercial gender images. We compare variables that recur in the literature: the frequency of representation, the gender of the narrator, the activity of the main character (occupation, parenting, housework), and product type. In addition, we also include a variable that measures stereotypical gender display. We analyze commercials from the 1950s and the 1980s, comparing our findings to earlier research.

This type of analysis allows us to document recent changes in gender imagery but it tells us little about the interconnections between important factors. To extend the analysis, we focus on the gender display of various characters, investigating the circumstances under which it varies. We are primarily interested in interrelations among gender display and three variables: sex of character, activity of character, and era of images. Is gender display essentially linked to biological sex? What influence, if any, does a change in activity have upon the presentation of gender? Apart from the
effects of sex and activity, what influence does historic change have on gender display?

Stated explicitly the questions guiding our research may be summarized as follows:
1. To what degree has change occurred in the presentation of gender in television commercials between the 1950s and the 1980s?
2. Under what circumstances does the display of gender vary? What are the effects of sex, activity, and era on the presentation of gender in television commercials?

METHOD

One of the limitations of past research has been an inability to directly compare commercials of one era to commercials of another. Through archival research we located approximately comparable samples of award winning commercials from the 1950s and early 1960s and from each year between 1982 and 1989. The data for the early commercials (classics) were compiled from two sources: Classic Commercials, a set of 41 commercials assembled by the Television Bureau of Advertising, New York; and the 1st International Broadcasting Awards, 1959, awarded by the Hollywood Advertising Club, UCLA Film Archive. Eliminating foreign entries and removing duplicates resulted in a total number of commercials for the classics data set of 70 with 70 main characters coded.[3] These commercials represent some of the best work produced during this era, as judged by leading marketing professionals in the largest media centers of the United States. These commercials tend to be those with wide national exposure.

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[3] Main characters are defined as adults involved in a verbal or nonverbal interaction that was the central focus of the commercial. Up to three adults were coded per commercial. Some commercials had no main characters.

The data for the 1980s came from Advertising Age, the leading trade journal in advertising. The journal gives yearly awards for the best commercials based on increased market share and product recognition. For this reason, the award winners can be considered representative of national and large regional advertising campaigns conducted through network television during the 1980s. The 576 commercials receiving awards from 1982 to 1989 were used, with 610 main characters coded. Neither the classics nor the 1980s commercials are a random sample, though they represent some of the best efforts of the industry. Because the commercials from both time periods were highly successful, we make the assumption that audiences were generally receptive to the gender and family portrayals within them and that the commercials represent broad indicators of popular cultural ideology of the time.

Three undergraduate research assistants coded commercials independently. The research assistants were trained by the authors in the operational definition of the variables but were unaware of the specific research questions guiding the project. We computed percentage agreement reliability coefficients, reported below, based on Miles and Huberman (1994).

The Variables
We report a total of eight variables from our study: sex of the main character, narrator, activity (parenting/working), type of occupation, housework, era, product, and gender display. Gender display was originally conceived as a set of ten dichotomous, nominal variables. The set was constructed using various sex role inventories (Broverman, 1972; Bern, 1974; Spence & Helmreich, 1978). Ten variables were chosen from the lists that best represented stereotypical traits for men and women. The "masculine" traits included the following: (1) Leader—authoritative, dominant, directive, instructive, passes judgment, gives punishment or approval, etc.; (2) Respected—one with high status, honor, admiration, gets special treatment, etc.; (3) Independent—autonomous, self-directed, secure, separate, decisive, self-confident, assertive, etc.; (4) Aggressive—bold, forceful, competitive, boastful, antagonistic, angry, rough, possessive; (5) Instrumental—calculating, cold, unemotional, self-serving, selfish, rational, goal oriented, etc. (interrater reliability = .83). The "feminine" traits included the following: (1) Follower—takes orders, receives advice, asks questions, follows instructions, listens to authority, etc.; (2) Deferential—submissive, shows deference and respect (serves, bows, averts eyes, etc.); (3) Dependent—other directed, insecure, indecisive, needs support, confirmation, or encouragement; (4) Passive—gentle, kind, loving, merciful, nonaggressive, peaceful, negotiator, etc.; (5) Emotional—sensitive, cries easily, shows feelings, verbal self disclosure, expressive (interrater reliability = .83).

An additive index was then created from these masculine and feminine variables by assigning a negative score to any indicator marked as present that was considered no stereotypical for the sex of the character coded and a positive score for any indicator present that was stereotypical. Thus, a cumulative positive score indicates more stereotypical traits and a negative score indicates more nonstereotypical traits. For the purposes of this analysis, gender display is treated as a dichotomous-nominal variable: all negative scores were collapsed into nontypical, all positive scores were collapsed into typical, and all zero scores were coded as missing.[4]

We used standard U.S. Department of Labor "Bureau of Labor Statistics" job codes grouped into seven occupational categories: (1) professional and technical, (2) managers and proprietors, (3) clerical and sales, (4) craftworkers and line supervisors, (5) operatives, (6) service workers, and (7) laborers (interrater reliability = .80). Products were originally coded in the following categories: food, beer and wine, soft drinks, health care, beauty aids, sportsware, general apparel, retailers, leisure/entertainment, restaurants, hotel and travel, automotive, technology and communication, financial services, public service announcements, cleaning and home care, and miscellaneous (interrater reliability = .98). For ease of comparison, the data were collapsed into food products (food, beer and wine, soft drinks, restaurants); body products (health care, beauty aids, sportsware, general apparel); home products (retailers, cleaning and home care); away products

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[4] 4Collapsing was done to reduce the number of zero cells and for ease of interpretation.

(leisure/entertainment, hotel and travel, automotive, technology and communication, financial services); and other (public service announcements, miscellaneous).

Activity is conceptualized as a main character pictured in any work role (dressed for or performing paid labor and not parenting), doing any type of parenting behavior (paying attention to, playing with, giving physical affection to, or physically caring for a child), or none (neither parenting nor working; interrater reliability = .92). The remaining variables are dichotomous-nominal: sex is the sex of the main character, whether male or female; housework is whether a main character is pictured performing any inside housework (e.g., vacuuming, laundry, cooking, washing dishes, setting the table; interrater reliability = .92); narrator is the off-screen voice-over of the commercial, male/female (interrater reliability = .90); and era is the time period in which the commercial appears, classics or 1980s.

RESULTS

There are two levels of analysis. At the commercial level we report era and narrator. For the main character we report sex, gender display, activity, occupation, product,[5] and housework. The frequency of presentation changes little from the classics to the 1980s. In our classics data, 38.6% of the main characters are female; this compares to 32.8% in the 1980s; 61.4% of the main characters are male in the classics, and in the 1980s, 67.2% The percentage of female main characters decreases and the percentage of male characters increases from the classics to the 1980s by 5.8%. The sex of the narrator changes little as well. Our classic period data reveal

Table I. Distribution of Character Variables by Sex and Era[a]

		Female		Male	
		Classics	1980s	Classics	1980s
Product	Food	25.9% (7)	35.5% (71)	30.2% (13)	35.4% (145)
	Body	18.5 (5)	13.5 (27)	4.7 (2)	7.6 (31)
	Home	22.2 (6)	9.5 (19)	4.7 (2)	7.6 (31)
	Away	29.6 (8)	35.5 (71)	44.2 (19)	43.4 (178)
	Other	3.7 (1)	6.0 (12)	16.2 (7)	6.1 (25)
	Total	99.9% (27)	100% (200)	100% (43)	100.1% (410)
		Chi-square = 5.05(4 df, p < .30)		Chi-square = 6.90(4 df, p < .20)	
Occupa-tion	None	85.2% (23)	79.0% (158)	53.5% (23)	62.2% (255)
	Laborer			2.3 (1)	.2 (1)
	Service		3.0 (6)	9.3 (4)	4.4 (18)
	Operator		1.0 (2)	7.0 (3)	1.7 (7)
	Craft		.5 (1)	2.3 (1)	3.7 (15)
	Clerical	7.4 (2)	4.0 (8)	4.7 (2)	2.9 (12)
	Manager		2.5 (5)	4.7 (2)	8.5 (35)
	Professional	7.4 (2)	10.0 (20)	16.3 (7)	16.3 (67)
	Total	100% (27)	100% (200)	100.1% (43)	99.9% (410)
		Chi-square = 2.80(6 df, p < .90)		Chi-square = 1.23(6 df, p < .10)	
Activity	Worker	14.8% (4)	21.0% (42)	46.5% (20)	37.8% (155)
	Parent	33.3 (9)	8.5 (17)	6.9 (3)	9.7 (40)
	Other	51.9 (14)	70.5 (141)	46.5 (20)	52.4 (215)
	Total	100% (27)	100% (200)	99.9% (43)	99.9% (410)
		Chi-square = 14.49(2 df, p < .001)		Chi-square = 1.35(2 df, p < .30)	
Gender display	Nontrad	10.5% (2)	38.4% (63)	20.0% (8)	10.8% (39)
	Traditional	89.5 (17)	61.6 (101)	80.0% (32)	89.2 (323)
	Total	100% (19)	100% (164)	100% (40)	100% (363)
		Chi-square = 5.78(1 df, p < .02)		Chi-square = 292(1 df, p < .10)	
House-work	Yes	29.6% (8)	5.5% (11)	7.0% (3)	2.0% (8)
	No	70.4% (19)	94.5 (189)	93.0 (40)	98.0 (402)
	Total	100% (27)	100% (200)	100% (43)	100% (410)
		Chi-square = 18.05(1 df, p < .001)		Chi-square = 4.14(1 df, p < .05)	

aNumbers in parentheses are raw data; discrepancies in percentage total are due to rounding.

that 93% of the commercials have male narrators, 7% female, and the 1980s data have 91% male narrators and 6% female.[6]

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[5] While product type is a quality of the commercial, we analyze it in terms of its association with the characters.
[6] The remaining 3% in the 1980s have both male and female narrators, an attribute not present in our classic data.

The depiction of the activity of women changes dramatically between the classics and the 1980s (see Table I). In the classics era, about 50% of both men and women are pictured in either a job or parenting. In the 1980s, about 50% of all men continue to appear in work or parent activity but the percentage of women depicted in either activity drops to 30%. In the 1980s, 70% of women are pictured as "free-floating" consumers with no referent to work or family activity. Of those women pictured in an activity, there is a statistically significant change in representation: in the classics, 69.2% of the women pictured in an activity are shown parenting whereas in the 1980s the percentage of women parenting drops to 28.3%, and the percentage of women working increases to 71.1%.[7] When women are depicted in a job activity, they are shown in a greater variety of occupations in the 1980s than in the classics: in the classics women are represented in 2 out of 7 occupation categories and in the 1980s 6 out of 7 (women are not pictured as laborers). Additionally, the representation of women doing housework significantly decreases from 29.6% of all images of women in the classics to 5.5% in the 1980s.

Overall there was little change in the activity of male characters between the classics and the 1980s. The images of men parenting increases only slightly from 7.1 in the classics to 9.9% in the 1980s and the images of men at work decreases from 45,2 to 37.5%. Diversity of occupation remains the same for men, 7 out of 7 occupations in both eras, though there is a slight shift toward higher status occupations. Additionally, the portrayal of men performing housework significantly decreases from 7.0 to 2.0%.

When the data for the two time periods are collapsed, the association between the type of product advertised and the sex of the main character fits stereotypical expectations. Generally, women are almost twice as likely to be pictured with body products than are men (14.1 and 7.3%) and women are less likely to be pictured with away products than men (34.8 and 43.5%). The difference in home products is slight (11.0% women and 7.3% men) and in food products almost nonexistent (34.4 and 34.9%) Stereotypical expectations are more apparent in the classics when controlling for era. In the classic era women are almost four times more likely to be pictured with body products than are men (18.5 and 4.7%) and almost five times more likely to be pictured with home products than men (22.2 and 4.7%). Men were almost 1½ times more likely to be pictured with away products than are women (29.6% women and 44.2% men). But in the 1980s data the associations are not as dramatic. Women are still more likely to be pictured with body products and home products than men, but difference in percent drops from 13.8 to 5.9% and 17.5 and 1.9%, respectively. And men are still more likely to be pictured in the 1980s with away products than women but the difference in percent drops from 14.6 to 7.9%.

As Table II indicates, the relationship between era and gender display is statistically significant for women but not for men ($p < .05$ and $p < .10$, respectively). The direction of the change is different for men and women:

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[7] Statistical significance reflects the minimum amount of potential error because the sample is not random

Table II. Gender Display by Era Controlling for Sex[a]

Female (N = 183)

Gender display	Era			
	Classic		1980s	
Nontypical	10.5%	(2)	38.4%	(63)
Typical	89.5	(17)	61.6	(101)
Total percent	100%	(19)	100%	(164)

Chi-square = 5.78 (1 df, $p < .05$)

Male (N = 402)

Gender display	Era			
	Classic		1980s	
Nontypical	20.0%	(8)	10.8%	(39)
Typical	80.0	(32)	89.2	(323)
Total percent	100%	(40)	100%	(362)

Chi-square = 2.97 (1 df, $p < .10$)

[a]Numbers in parentheses are raw data.

nontypical gender display decreased by 9% for men, from the classics to the 1980s, while nontypical gender display increased for women by almost 28%.

Log-Linear Analysis
We used log-linear analysis as an exploratory data-analysis strategy. The reason for using this form of exploratory analysis is twofold. First, log- linear analysis is a form of contingency table analysis that is suited for analyzing complex tables of three or more variables. Its strength is that simultaneous statistical analysis can be performed on subjects that are cross-classified on more than two variables (Kennedy, 1983). Thus, log-linear allowed us to consider the effects of the four variables of interest together (sex, activity, era, gender display). Second, the reason our analysis is exploratory is that the theoretical relationships between biological sex, historical change, individual activity, and gender display have not been specified precisely enough in previous research for true theory testing.

In exploratory log-linear analysis, a statistic model is sought that best fits the data and the implications of the model are explored. We used a procedure referred to as forward selection: beginning with the most simple model, further effects are added until the statistically best fitting model is determined (Gilbert, 1981). Log-linear analysis compares the log of the expected cell frequencies that are generated under hypothetical models with the observed cell frequencies using goodness-of-fit statistics. Hierarchical

Table III. Observed Frequencies of the Four Variables for Log-Linear Analysis[a]

Sex	Activity	Era	Gender display		Total
			Nontypical	Typical	
Female	Work	1980s	24	14	38
		Classics	1	1	2
		Total	25	16	40
	Parent	1980s	1	10	11
		Classics	0	7	7
		Total	1	17	18
Male	Work	1980s	15	132	147
		Classics	3	16	19
		Total	18	148	166
	Parent	1980s	3	27	30
		Classics	0	3	3
		Total	3	30	33

[a]Total number of observations: 257.

models can be compared to examine if adding, or deleting, terms significantly improves the fit of the model. The accepted model is the parsimonious model that represents a satisfactory fit and has a straightforward and theoretically sound interpretation (Kennedy, 1983; Ishii-Kuntz, 1994).

The goodness-of-fit of a model is described by a likelihood-ratio chi- square (LRx^2). Generally, the smaller the LRx^2 and the larger the probability value, the better the fit. The LRx^2 can also be used to test for the significance of nested models. To test the null hypothesis that one model has a better fit than another, the test statistic is the difference in LRx^2 values. The difference is treated as a chi-square statistic with degrees of freedom (df) equal to the difference in df for the two models (Agresti & Finlay, 1986).[8]

The computer program BMDP 4F was used to fit all possible new models by adding terms, first simple and then multiple, to the "all marginals only" model: S, E, A, G, where S is sex, E is era, A is activity, and G is gender display. The program identifies as the best model the one with the test of significance of the difference that is most significant. In other words, the program adds terms to the simpler model until a significantly better fitting model is determined. This process continues for a specified number of steps, in this case five, or, until the test of fit of the best model and the test of the difference are no longer significant. Table III shows the observed frequencies used in the log-linear analysis. There are two zero cells in the table (13% of the total number of cells). These zero cells cannot legitimately be considered structural zeros.[9] Following Goodman (1970), a constant of .05 was added to all cells to compensate for the zeros.

We compared the proposed models for a significant improvement in fit: a rejected null hypotheses indicates that the more complex model gives a better fit to the data. The top half of Table IV shows the fit of various proposed models. The second part of Table IV reports the differences in goodness-of-fit between the models.

Specifically, BMDP 4F tested the following null hypotheses with regards to the models:

 Hl: There is no relationship between the sex and gender display of the eharacter (SG = 0).
 H2: There is no relationship between the sex and activity of the character (SA = 0).
 H3: There is no relationship between the activity and gender display of the character (AG = 0).
 H4: There is no relationship between the sex, activity, and gender display of the character (SAG = 0).
 H5: There is no relationship between the era and the activity in which the character is depicted (EA = 0).
 H6: There is no relationship between the sex, era, and the activity in which the character is depicted (SEA = 0).
 H7: There is no relationship between the era, sex, and gender display of the character (ESG = 0).

Table IV indicates that (SEA)(SAG) represents the best fitting statistical model ($LRx^2 = 1.59$; df = 4; probability = .8109). Thus, the null hypothesis is rejected for H1, H2, H3, H4, H5, and H6. As noted earlier, it is desirable to have a high probability level with a low LRx^2. Since (SEA)(SAG) is a hierarchical model, it contains the bivariate relations between sex and era, gender display and activity, era and activity, sex and gender display, activity and gender display, and the three-way interactions between sex, activity, and gender display, and between sex, era, and activity. The relationship between era and gender display is not statistically significant and it is therefore excluded from the model. In other words, a change in sex or activity would affect a change in gender display regardless of whether that change was pictured in the classics or the 1980s.

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[8] 8For a more detailed description of what is entailed in a log-linear analysis, please see Gilbert, 1981; Kennedy, 1983; Agresti, 1990; Ishii-Kuntz, 1994.

[9] Structural zeros refer to a cell whose probability of containing an outcome is known to be zero.

Table IV. Comparison of Proposed Models with Models of Added Parameters

Models	Parameters Added	df	$LR\chi^2$	Probability Value
1. E, A, S, G		11	64.74	0.0000
1a. E, A, SG	SG	10	33.91	0.0002
1b. E, SA, SA	SA	9	27.31	0.0012
1c. E, AG, AS, SG	AG	8	20.57	0.0084
1d. E, SAG	SAG	7	12.50	0.0051
1e. EA, SAG	EA	6	7.55	0.2729
2. E, A, S, G		11	64.74	0.0000
2a. E, A, SG	SG	10	33.91	0.0002
2b. E, SAG	SAG	7	12.50	0.0051
2c. SEA, SAG	SEA	4	1.59	0.8109
2d. ESG, SEA, SAG	ESG	2	0.01	0.9934

Hypotheses	df	$LR\chi^2$	Probability Value	Rejected[a]
H1: SG = 0 (1 vs. 1a)	1	30.83	Prob < .001	Yes
H2: SA = 0 (1a vs. 1b)	1	6.60	.001 < Prob < .01	Yes
H3: AG = 0 (1b vs. 1c)	1	6.67	.01 < Prob < .02	Yes
H4: SAG = 0 (1c vs. 1d)	1	13.01	Prob < .001	Yes
H5: EA = 0 (1d vs. 1e)	1	4.95	.02 < Prob < .05	Yes
H6: SEA = 0 (1e vs. 2c)	2	5.96	.01 < Prob < .02	Yes
H7: ESG = 0 (2c vs. 2d)	2	1.58	.20 < Prob < .30	No

[a]Critical prob value for rejecting hypothesis is prob < .05.

Interpretation of "Effects"

According to our prior analysis, the depiction of women has significantly changed from the classics to the 1980s while the representation of men has not. Therefore, in considering the effects of the parameters, we will be focusing on women. Tables V and VII contain the values of the multiplicative parameter estimates of the model (SEA)(SAG). The first odds ratios considered is the interaction term SEA (Table V). The odds of being a female, pictured in the 1980s, as compared to the classics, working

Table V. Estimated Values of the Multiplicative Parameters for Interaction SEA

Sex	Era	Activity	
Female	1980s	Work	1.257
		Parent	0.795
	Classics	Work	0.795
		Parent	1.257
Male	1980s	Work	0.795
		Parent	1.257
	Classics	Work	1.257
		Parent	0.795

Table VI. Estimated Values of the Multiplicative Parameters for Interaction SAG

Sex	Activity	Gender display	
Female	Work	Nontypical	1.361
		Typical	0.735
	Parent	Nontypical	0.735
		Typical	1.361
Male	Work	Nontypical	0.735
		Typical	1.361
	Parent	Nontypical	1.361
		Typical	0.735

as compared to parenting, is represented by the equation [SEA(111)/ SEA(112)]/[SEA(121)/SEA(122)][10] For women, the effect of era upon the chances of being pictured in a work role is 2.50: women are two and a half times more likely to be pictured in the 1980s working rather than parenting. Computing in the odds of a male being pictured in the 1980s working, the effect (odds ratios) of sex and era upon role is 6.25. This can be

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[10] The remaining odds and odds-ratios are similarly computed. Only the effects of the interaction terms will be estimated. The effects of the bivariate relationships are not estimable (see Long, 1984).

interpreted as the odds that a woman, compared to a man, will be pictured in the 1980s, as compared to the classics, working rather than parenting. In other words, if a woman is pictured rather than a man, she is 6 times more likely pictured working rather than parenting in the 1980s than she was in the classics.

From Table VI, SAG, the odds that a woman pictured working, as compared to parenting, will have nontypical gender display rather than typical is 3.43. When the same odds for a male are computed, the effect of sex and activity on gender display is 11.75. This can be interpreted as the odds ratio that a woman, compared to a man, will be pictured in a work activity, as compared to parenting, having nontypical gender display. In other words, if a woman, rather than a man, is pictured at work instead of parenting, she is approximately 12 times more likely to be depicted having nontypical gender display.

DISCUSSION

While our study is designed to stand on its own as a comparison between commercials in the 1950s and the 1980s, there are several points of comparison with other studies. The single most stable finding in past research has been the sex of the narrator. Relating data from four studies
that took place between 1971 and 1973, Courtney and Whipple (1974) reported that men represented approximately 88% of all voice-overs. From data collected in 1976, O'Donnell and O'Donnell (1978) reported that 93% of the narrators were male. Recently, Lovdal (1989) found that of those commercials with voice-overs, 90% were male, and Bretl and Cantor (1988) reported 91% male narrators. Our classic period data reveal that 93% of the commercials have male narrators and the 1980s data 91% male narrators. Thus, the male bastion of authoritative voice continues unscathed.

Previous reports about frequency of representation by sex are mixed. McArthur and Resko (1975) analyzed prime-time data from 1971 and noted that females accounted for 30% of the central characters. Gilly (1988), working with 1984 data, indicated that females accounted for 56% of character representation. Using 1985 data, Bretl and Cantor (1988) recorded 46% female representation. Our study documents little change from the classics to the 1980s. The classics data reveal 38.6% female representation and the 1980s data 32.8%. Based on a comparison of six studies, Bretl and Cantor (1988) claimed that "(m)ales and females now occur approximately equally often as primary characters in prime-time television advertisements..." (p. 606). Bretl and Cantor's approximately equal representation is based on an increase in female representation from earlier studies; our data indicate that female representation is not increasing. Since our sample represents award winning commercials, it is possible that the difference between our study and others is due to a greater amount of time, effort, and money being invested in the award winning commercials. If so, then men continue to be over represented at the "elite" level of commercials.

Studies from 1970s indicate a fairly consistent percentage of women portrayed in work settings: Dominick and Rauch (1972), 22%; Scheibe (1979), 21%; Marecek et al. (1978), 25%; Schneider and Schneider (1979), 18%. Similarly, using data from the mid-1980s, Bretl and Cantor (1988) reported 20% of women character portrayed in work settings. Our data indicate the same low percentage for women employed in the 1980s (20.7%) but even lower in the classics (14.8%). There was a steady movement of women out of the household and into the work force between the 1950s and the 1980s. The commercial images we studied reflect that movement and our analysis estimates the strength of the change in cultural representation: women characters were 6 times more likely to be pictured working in the 1980s than parenting. Additionally, when women were pictured in a work activity, the gender display changed dramatically: they were twelve times more likely to be shown displaying stereotypically masculine traits.

The types of occupations in which women were pictured also changed since earlier representations. From mid-1970s data, Scheibe (1979) reported that the number of occupations women were found had increased. Marecek et al. (1978) reported a trend study (1972, 1973, 1974) that indicated an increase in the number of occupations in which women were pictured and a statistically significant increase in the representation of women in managerial/professional occupations. Our data also reveal an increase in the number of occupational categories for women and a decreasing likelihood that women would be shown as mothers or performing housework. Thus,

while the cultural representation of occupational diversity for women has increased over time, the cultural roles of mother and homemaker have become less prevalent.

In answer to our first research question about recent changes in media imagery, we concur with other researchers that there has been a shift in the depictions of women in commercials. Although not increasing proportionately, women in commercials are much more likely to be pictured in job-related activity and in more diverse occupations than before. When depicted in an occupation, female main characters tend to demonstrate non-stereotypical gender-linked behaviors.

In contrast, we found that images of men had changed little. Based on a comparison of six studies Bred and Cantor (1988) reported that the portrayal of men as parents and spouses was on the rise. Our measures are more specific and thus are not directly comparable, but contrasting the classics with the 1980s, we found only a slight increase in the images of men parenting and an unexpected decrease in the images of men portrayed performing housework. Thus, while there may be a general increase in the number of men seen as parents and spouses, as indicated by other research, our data describe a change that is complex and contradictory (also see Coltrane & Allan, 1994). Recent changes are neither dramatic nor statistically significant when viewed in their entirety. Stereotypical gender display actually increased for men from the classics to the 1980s, suggesting that commercial imagery has done little to change traditional expectations for masculine gender display.

Our second research question asks what factors are important in influencing gender display. The character's sex and activity had the strongest influence upon gender display. Thus, the implicit cultural argument presented to television viewers is that the form of activity influences the form of gender presentation. In other words, if a woman is pictured in a "male" occupation, she tends to be perceived as more assertive and "masculine" than is traditionally expected. Conversely, if a man is pictured parenting, he is perceived as more sensitive and "feminine" than is traditionally expected. This is so in spite of the fact that there was little overall change in the activities of male characters in commercials between the 1950s and the 1980s.

Our measure of gender display focuses on passable typifications of gender. These typifications are framed in commercials and other media and are generally accepted as "normal" by the viewing public. Research has indicated that these typifications help us to construct gender (Morgan, 1987; Huston, et al., 1992; Gamson, Croteau, Hoynes, & Sasson, 1992; Gerbner et al., 1978). Much of what we do with gender display in social interaction is "boundary work:" we create and reaffirm group boundaries and construct differences between males and females (Thorne, 1986). The more boundary work we do around gender, the higher the salience of gender in interaction. The higher the salience, the greater the tendency to re/create gender hierarchy and inequality (see Ridgeway, 1993). Generally, in the TV commercials we studied, men were depicted as reinforcing group boundaries and women were shown breaking them down. While there may be small changes in the relative number of men parenting and some larger changes in the relative number of women working, our research indicates that the culture of gender that reflects and reinforces these changes is not changing equally for both men and women. This type of inequality may be a danger signal: unless cultural representations of both genders change along with the social roles and activities, any movement toward gender equality may be unstable.

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