# FOOD IN MOTION AS A VISUAL RHETORIC IN ADVERTISEMENTS

**MOTY AMAR**

Ono Academic College, 104 Zahal Street, Kiryat Ono 55000,
E-mail: Israel. motyamar.ma@gmail.com

**Abstract** - Many food advertisements show food in motion. For instance, fish are seen swimming, milk or juice is seen poured, hotdogs dancing, and cornflakes flying. This article inquires why foodstuffs in advertisements are often imbued with attributes of motion they do not possess. Two studies reveal that this constitutes a form of visual rhetoric, results in enhanced consumer taste evaluations mediated by judgment of freshness. The theoretical, managerial, and public policy implications of the findings are discussed.

**Keywords** - Food, Motion, Detriment, Visual Rhetoric

## I. INTRODUCTION

Many food advertisements feature motion. For instance, fish are portrayed swimming, juices are poured, hotdogs dance, and cornflakes fly. The use of motion in advertising may constitute a deliberate rhetorical device used by food marketers. This study examined why advertisers choose to endow foods with motion, and what effects it may have on consumers' product perception. We suggest and demonstrate that motion improves anticipated food taste by improving perceptions of food freshness.

The prevalence of motion in food ads suggests that the use of motion is unlikely to be coincidental. Costly commercials are thoroughly planned by teams of top advertising professionals. Accordingly, showing food in motion (hence for thfim) may be a deliberate decision rather than a spurt of random intuitive creativity. Marketers' preference for displaying fimimplies that advertisements of food products exhibiting movement may be more effective.

Different reasons may account for the preference of showing fim. One simple explanation is that moving objects attract viewers' attention and may be more entertaining for the target audience to watch than motionless objects. Research has shown that moving or blinking objects attract more attention than motionless objects because of their visual salience (e.g., Cropper & Evans, 1968); that marketers make massive use of moving, surfing, flying, coloring and flashing objects/text (e.g., Davenport & Beck, 2013), and that the use of web animation is considered "cool," "engaging," and "entertaining" (e.g., Rewick, 2001).

We claim that ads featuring fim are indeed more effective but for a reason that goes beyond increased attention. We posit that motion increases the perceived freshness and taste of food. We hypothesized that fim is actually a form of visual rhetoric cause the expected taste of fimin advertisements to be rated as better than that of the same food shown without motion; and that the underlying mechanism is the perceived freshness of the food implied by motion.
Visual rhetoric figure is entrain consumers to learn a particular response to an irregular imagery template – the response desired by the advertiser (Phillips & McQuarrie, 2004).

Food is rarely in motion when served on a plate. Thus, presenting moving food in advertisements conflicts with the way food is typically presented and eaten. However, it may be that consumers do not interpret this deviation as an error, because they have seen the template of moving food products so frequently in advertisements that they have become accustomed to it. Thus, fimmay be taken as a deviation that appears as a normal template, consistent with the definition of visual rhetoric.

Observing fimis an effective way of generating a sense of freshness(Gvili et al., 2015). Motion may even affect products for which the association between motion and freshness does not naturally occur. Therefore, using the visual rhetoric of fimin advertisements may enable marketers to implicitly enhance perceptions of freshness without resorting to more direct claims that may elicit doubt and counter-argumentation. Generally, using indirect, vs. direct persuasion can reduce counter argumentation and promote more effective persuasion (Lee & Olshavsky, 1995).

Overall, we posit that in *advertising fim is a form of visual rhetoric.* This *visual rhetoric* increases the perceived taste of the food by influencing the perceived food freshness. Two experiments were conducted to test these hypotheses.

## II. DETAILS EXPERIMENTAL

### 2.1 EXPERIMENT 1

This study examined whether advertising messages depicting fimcomply with the definition of visual rhetoric. Specifically, examined whether individuals who are exposed to such ads perceive fimas deviating

from reality, but do not interpret this deviation as an error. If this is indeed the case, the use of motion in ads can empirically be shown to meet the definition of a type of visual rhetoric**.**

**2.1.1 Method.** Eighty-six Israeli undergraduate students (53% female, mean age 26), completed the IRB-approved study for course credit. They were presented with a typical cereal advertisement which shows flying pieces of cereal (see figure 1). All marketing cues were removed from the advertisement. After viewing the advertisement, participants responded to questions on a 9-point Likert scale. The questions measured the three key attributes of visual rhetoric.

Participants were asked about the templates in the advertisement in a general sense, without mentioning or pointing to any particular aspect of the message to assess identification of a three dimensions: how typical the template is, how standard the advertisement is, and how natural the ad appears. Then, participants were asked an open-ended question on whether they had noticed any irregular elements in the advertisement, and asked to describe them. Measuring in the reverse order would make it harder to detect visual rhetoric; after subjects report deviating visual elements, they are less likely to report that the ad as a whole looks natural. Next, the extent of repeated encounters with the template was measured by one item: "Have you seen similar advertisements in the past…" (not at all / many times). Finally, perceived deviation of the image from reality was measured by the following four items: normality of color, normality of shape, movement ("To what extent does the movement of the cereal displayed in the advertisement seem natural?", not naturalat all/very normal), and normality of packaging.

**2.1.2 Results and Discussion.** A one-sample t-test (5-midpoint of the scale) revealed that participants had often seen similar advertisements ($M = 6.97$, $SD = 1.68$, $t(84) = 10.75$, $p < .001$), perceived the advertisement as typical ($M = 7.36$, $SD = 1.56$, $t(84) = 14.00$, $p < .001$), standard ($M = 7.29$, $SD = 1.62$, $t(84) = 13.15$, $p < .001$) and natural ($M = 5.66$, $SD = 1.78$, $t = 3.45$, $p < .01$). Likewise, the color ($M = 6.64$, $SD = 2.16$, $t(84) = 7.03$, $p < .001$), shape ($M = 6.81$, $SD = 2.28$, $t(84) = 7.37$, $p < .001$), and packaging ($M = 6.86$, $SD = 2.29$, $t(84) = 7.49$, $p < .001$) of the cereal were considered natural.

In response to the open question, 31% explicitlymentioned that flying cereal was unnatural. When asked directly, participants perceived the cereal in motion to be significantly unnatural ($M = 3.36$, $SD = 1.90$, $t(84) = -7.96$, $p < .001$).

Although participants were aware of the unnaturalness of moving food, they perceived the overall advertisement as natural and to adhere to a standard identifiable template. This strengthens our claim that ads presenting food products in motion constitute a type of visual rhetoric.

**2.2 EXPERIMENT 2**

The objectives of the current experiment were to examine whether the visual rhetoric of fim enhances taste perception, and whether this effect is mediated by consumers' sense of freshness.

**2.2.1 Method.** Sixty undergraduate students (51% female, mean age 27) were sampled from the same population pool as in Experiment 1 and completed the study for course credit.They were presented with a print advertisement of Yogurt (see figure 2). Brand name and other identifying cues were removed. Participants were randomly divided into two experimental conditions: motion and motionless. Both conditions were identical, except that the ad in the motionless condition included an image of a still yogurt, while the ad in the motion presented the very same image of a yogurt poured into a glass.

After viewing the advertisement, participants were asked to evaluate the freshness of the yogurt shown in the advertisement on a scale of 1 (= not fresh at all) to 9 (= very fresh).Additionally, we measured perceived taste on a scale of 1 (= not tasty at all) to 9 (= very tasty).

**2.2.2 Results and Discussion.** As predicted, a one-way ANOVA revealed that participants rated the yogurt as tastier when presented in motion ($M = 6.03$, $SD = 1.97$) rather than motionless ($M = 5.00$, $SD = 1.86$; $F(1, 58) = 4.36$, $p < .05$). Also, and consistent with the previous results, the yogurt was perceived as fresher when depicted in motion ($M = 6.20$, $SD = 1.42$) rather than still ($M = 5.31$, $SD = 1.02$), $F(1, 58) = 7.75$, $p < .01$).

Furthermore, perceived food freshness mediated the relationship between the motion condition and perceived food taste. The indirect effect of motion on perceived food taste through perceived freshness was positive and significant ($a \times b = 1.04$, $z = 2.68$, $p < .01$). Presenting fim had a significant effect on perceived freshness ($a = .89$, $t = 2.78$, $p < .01$). This, in turn, significantly increased anticipated taste ($b = 1.18$, $t = 8.79$, $p < .001$). In addition, the direct effect of fim on perceived food taste was positive and significant ($c = 1.03$, $t = 2.09$, $p < .05$). However, when the indirect effect was accounted for, this direct effect became non-significant ($c' = -.01$, $t = -.03$, $p > .05$). A bootstrap analysis with 5,000 resamples revealed that the 95% confidence intervals for the significant indirect effect excluded zero (from .33 to 1.85). These results supports the notion that perceived freshness mediates the effects of motion on taste.

That is, food motion increases participants' perceptions of freshness. This increase in perceived freshness due to motion is what in turn increased perceived taste.

## III. CONCLUSIONS

The findings provide an indication that food advertisements that present food in motionconstitute a form of visual rhetoric, resulting in enhanced consumer taste evaluations mediated by judgment of freshness.




**Figure 1: Image of cereal presented in Experiments 1**

Food presented still Food presented in motion



**Figure 2: Images of yogurt presented in Experiments 2**

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| **Purpose** | **Method** | **Statistical Test** | **Results** | **Conclusions** |
|---|---|---|---|---|
| **Experiment 1:** To examine whether advertising messages depicting fim comply with the definition of visual rhetoric | Participants were presented with a typical cereal advertisement that shows flying pieces of cereal (see figure 1). After viewing the advertisement, participants responded to questions on a 9-point Likert scale. The questions measured the three key attributes of visual rhetoric. | A one-sample t-test (5-midpoint of the scale) | participants had often seen similar advertisements (M = 6.97, SD = 1.68, t (84) = 10.75, p < .001), perceived the advertisement as typical (M = 7.36, SD = 1.56, t (84) = 14.00, p < .001), standard (M = 7.29, SD = 1.62, t (84) = 13.15, p < .001) and natural (M = 5.66, SD = 1.78, t= 3.45, p < .01). Likewise, the color (M = 6.64, SD = 2.16, t (84) = 7.03, p < .001), shape (M = 6.81, SD = 2.28, t (84) = 7.37, p < .001), and packaging (M = 6.86, SD = 2.29, t (84) = 7.49, p < .001) of the cereal were considered natural. In response to the open question, 31% explicitlymentioned that flying cereal was unnatural. When asked directly, participants perceived the cereal in motion to be significantly unnatural (M = 3.36, SD = 1.90, t (84) = -7.96, p < .001). | Although participants were aware of the unnaturalness of moving food, they perceived the overall advertisement as natural and to adhere to a standard identifiable template. This strengthens our claim that ads presenting food products in motion constitute a type of visual rhetoric. |
| **Experiment 2:** **a -** To examine whether the visual rhetoric of fim enhances taste perception<br><br>**b -** To examine whether this effect is mediated by consumers' sense of freshness. | Participants were presented with a print advertisement of Yogurt. Participants were randomly divided into two experimental conditions: motion and motionless. Both conditions were identical, except that the ad in the motionless condition included an image of a still yogurt, while the ad in the motion presented the very same image of a yogurt poured into a glass. After viewing the advertisement, participants were asked to evaluate the freshness and tastiness of the yogurt | **a -** one-way ANOVA<br><br>**b –** mediation analysis | **a -** participants rated the yogurt as tastier when presented in motion (M = 6.03, SD = 1.97) rather than motionless (M = 5.00, SD = 1.86; F(1, 58) = 4.36, p < .05). Also, and consistent with the previous results, the yogurt was perceived as fresher when depicted in motion (M = 6.20, SD = 1.42) rather than still (M = 5.31, SD = 1.02), F(1, 58) = 7.75, p < .01).<br>**b** –The indirect effect of motion on perceived food taste through perceived freshness was positive and significant (a × b = 1.04, z = 2.68, *p*< .01). Presenting fim had a significant effect on perceived freshness (a = .89, *t* = 2.78, *p*< .01). This, in turn, significantly increased anticipated taste (b = 1.18, *t* = 8.79, *p*< .001). In addition, the direct effect of fim on perceived food taste was positive and significant (c = 1.03, *t* = 2.09, *p*< .05). However, when the indirect effect was accounted for, this direct effect became non-significant (c' = -.01, *t* = -.03, *p*> .05). A bootstrap analysis with 5,000 resamples revealed that the 95% confidence intervals for the significant indirect effect excluded zero (from .33 to 1.85). | The perceived freshness mediates the effects of motion on taste. That is, food motion increases participants' perceptions of freshness. This increase in perceived freshness due to motion is what in turn increased perceived taste. |

**Table 1: Summary of results**