Functional Attitude Theory

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Oratory is the art of enchanting the soul, and therefore he who would be an orator has to learn the differences of human souls—they are so many and of such a nature, and from them come the differences between man and man.

Plato, "Phaedrus" (360 BCE/1993 CE, p. 84)

lato proposed that a speaker who wishes to persuade others effectively must not assume that the same persuasive appeal works for everyone. He asserted that each person had a particular type of soul and that to change attitudes, persuasive efforts must be tailored to each. This concept of tailoring persuasive appeals to the needs of individual audience members finds modern expression in a group of persuasion theories identified as functional theories of attitudes.

In the 1950s, two groups of scholars developed attitude theories proposing that attitudes serve different functions (Katz, 1960; Smith, Bruner, & White, 1956). They posited that people develop attitudes in order to serve their goals, and that although any particular attitude might serve multiple functions, it would generally serve

one more than the others. They theorized that although two people might have an attitude with the exact same valence, that attitude might serve very different functions for each person. For example, Varda might have a positive attitude toward BMWs because they are sturdily built vehicles that help her save money on car repairs, whereas Clover might have a positive attitude toward BMWs because he thinks they will help him impress women.

Smith et al. (1956) focused on trying to understand the relationships between attitudes and personality. Taking a clinical perspective, they conducted in-depth interviews to try to understand the personality of 10 men based on their attitudes toward the Soviet Union. From the interviews they then derived inductively their typology of attitude functions.

Working independently, and from the thendominant perspectives in psychology (psychoanalysis and behaviorism), Katz (1960) and colleagues (Katz, Sarnoff, & McClintock, 1956; Sarnoff & Katz, 1954) derived attitude functions deductively. Katz's goal was to define attitude functions as a means of increasing the effectiveness of persuasive appeals. He reasoned that if a persuasive appeal targeted the function that an attitude served for a particular person, then that persuasive appeal would be much more likely to change, shape, or reinforce the attitude in the direction that the speaker desired. For example, if a car salesperson, Craig, was trying to sell a new BMW to Varda, he would be more likely to make the sale if he emphasized the reliability of the car rather than how attractive people thought it was. On the other hand, if Clover was looking at cars, Craig would do well to point out how attractive the car was rather than bore him with statistics about gas mileage.

An implication of these positions is that understanding attitude functions allows influencing agents to tailor messages to audience members rather than merely target messages to an audience. Miller and Steinberg (1975) argued that communication varies along a dimension of the quantity of individuating information persons have and use about those with whom they are communicating. Rather than targeting culturallevel information about the audience (e.g., country of origin) or sociological level information (e.g., profession or SES), influencing agents who understand the function(s) that an attitude serves for a particular target can tailor their persuasive approach. Such an approach was conjectured to have a higher probability of success than alternative approaches.

After the first wave of functional research by Katz (1960) and Smith and colleagues (1956) to explicate functional attitude theories, these theories were "in a state of hibernation for some two decades" (Snyder & Debono, 1985, p. 597). Beginning in the 1980s, these theories underwent a revival and have subsequently inspired a great deal of empirical work on matching persuasive messages to functions in a second wave of functional attitude research. This chapter examines different approaches to using functional theories to understand persuasion by first examining the initial typology of functions constructed by Katz (1960) and Smith et al. (1956) in the first wave of functional attitude theory research. Then the contemporary approaches that attempt to determine attitude functions for the purposes of targeting persuasive messages that represent a second wave will be explored. Finally, a third wave of functional attitude research that conceives of the attitude functions as processes to be modeled in order to help determine which functions should be considered separate functions will be discussed before turning to suggestions for future research.

The Initial Set of Attitude Functions

Despite the fact that the two groups of scholars worked independently, both Katz (1960) and Smith et al. (1956) derived similar lists of functions. They generally used different terms, but there was considerable conceptual overlap in their ideas. Most theorists identify five unique functions. In these formulations, the concept of an attitude function is that of a qualitative variable (i.e., attitude function) with each function being conceived as a value of that variable (e.g., ego-defensive, utilitarian, etc.) in much the same way as one would think of a qualitative variable such as religious preference having various different values (Judaism, Islam, Christianity, Hinduism, Buddhism, etc.). Although Katz and Smith et al. discussed the possibility of an attitude serving multiple functions, nevertheless, these values of the variable (functions) still are conceived as mutually exclusive. To extend the analogy with religious preference, an attitude that serves multiple functions for a person might be akin to someone who lists more than one religious preference. Such a person might be unusual; nevertheless, such a response is not impossible. The five functions are described next.

Utilitarian Attitudes

Attitudes that serve a utilitarian function (termed object appraisal by Smith et al., 1956) are formed and held in order to provide persons

with an efficient way to distinguish objects that bring pleasure and objects that produce pain (Katz, 1960). Hence, utilitarian functions serve to help people maximize utility. These attitudes are rooted in a desire to satisfy personal needs and desires. For example, Varda's attitude toward BMWs has a utilitarian function because she is focused on the practical aspects of the car, such as its reliability and the money she might save on repairs. If influencing agents wanted to tailor messages to an audience whose target attitude serves a utilitarian function, they would emphasize the ways in which that which is advocated improves the audience's life. For example, politicians who emphasize the number of jobs they secure through defense contracts are targeting a utilitarian function.

Social-Adjustive

Although Katz discussed the application of social influences to a variety of functions, he did not include it as a separate function. On the other hand, Smith et al. (1956) described the social-adjustive function as a means of regulating relationships. Attitudes serving a social-adjustive function facilitate the ability to interact with desirable social group members or to impress attractive others. In the BMW example, Clover's attitude toward BMWs serves a social adjustive function because he is concerned with whether or not his car will make him attractive to women. A politician who wanted to target an audience's social-adjustive function might emphasize a descriptive norm that is both shared by the audience's peer group and that supports her position on a pivotal issue.

Value-Expressive

Attitudes with a value-expressive function facilitate the expression of people's abstract values (Katz, 1960). A value-expressive attitude facilitates a person's ability to voice and remain

consistent with their values. Unlike utilitarian attitudes, they do not provide direct, concrete rewards or punishments. And, unlike socialadjustive attitudes, a value-expressive attitude does not promote the needs of fitting in with a group or impression management. Valueexpressive functions differ from utilitarian or social goals because one does not derive any benefit, construed narrowly, from having such attitudes, save a sense of satisfaction that one has been consistent with one's principles. If a car salesperson wanted to sell a BMW to an environmentalist whose attitude(s) toward BMWs served a value-expressive function, the salesperson might focus on the BMW Corporation's efforts to support green technology. Of course, in addition to knowing that an attitude serves a value-expressive function, one must also know which value is being served by the attitude in order to target a persuasive message (Maio & Olson, 2000). Even if an attitude toward BMWs serves a value-expressive function, mentioning the corporation's efforts to use green technology might not be persuasive if the audience's BMW attitude is anchored to values concerned with equality and fair labor practices rather than environmentalism.

Ego-Defensive

According to Katz (1960), attitudes that serve an ego-defensive function (externalization for Smith et al., 1956) allow people to avoid acknowledging unpleasant aspects of self or of the external world. Ego-defensive attitudes can promote protecting self-esteem. Threats to self-esteem can include personal failings or poor behavior. Katz argued that such attitudes often involved rationalizing and other defense mechanisms. One scenario in which an attitude toward BMWs serves an ego-defensive function would be one in which someone had a positive attitude toward BMWs because of frustration resulting from an inability to earn occupational advancement. The car could instill a feeling of importance despite

being passed over for promotion. Katz's research in this area focused on those who held negative attitudes toward minority groups as a means of increasing their own self-esteem. He and his colleagues argued that these attitudes might be changed by helping the audience gain self-insight into the defense mechanisms supported by these attitudes (Stotland, Katz, & Patchen, 1959).

Knowledge

Attitudes that serve a knowledge function help people gain greater understanding of the structure and operation of their world (Katz, 1960). Katz noted that the world that people inhabit is extremely complex, and that attitudes might facilitate making sense of that world without serving needs other than understanding. Herek (1987) argued that Smith and colleagues' (1956) object appraisal function represents a combination of both Katz's utilitarian and the knowledge functions because Smith et al. argued that people organize the world for the purpose of reaching utilitarian goals. Other scholars propose that the knowledge function drives attitudes that serve for no purpose other than learning about the world as an end in itself, predicated on a basic need to know (Locander & Spivey, 1978). Someone might have an attitude about candidates in a presidential election in Bolivia not because it affects their interests or expresses their values but because they try to make sense of South American politics. Similarly, an attitude toward BMWs may emerge because of an interest in the auto industry. Katz argued that these attitudes can be changed by explaining how an audience's understanding of the world is inadequate and how a different attitude provides a more accurate world view.

Summary

It is important to emphasize that although this list contains the most commonly described attitude functions, it may not be comprehensive. Both Katz (1960) and Smith et al. (1956) hint at the existence of functions that they did not identify. In this spirit, Clary, Snyder, Ridge, Copeland, Stukas, Haugen, and Miene (1998) suggest that the ego-defensive function may be divided into attitudes that defend self-esteem from attacks and attitudes that promote self-esteem. Furthermore, Locander and Spivey (1978) attempted to measure Katz's functions and found that there were people whose attitude toward some objects did not serve any of the functions mentioned previously. Although both Katz (1960) and Smith et al. (1956) suggested the possibility of an attitude serving multiple functions, this possibility was not investigated systematically until techniques of measuring and inducing the various functions were developed in order to successfully target functions with persuasive messages. The second wave of theory and research that developed methods of identifying functions for the purpose of matching messages to functions to increase message persuasiveness is discussed next.

Functions as Variables

Some scholars argue that the study of attitude functions was neglected for two decades because the seminal initial work (Katz, 1960; Smith et al., 1956) failed to supply useful methods of studying the phenomenon (Snyder & Debono, 1985). Specifically, Smith et al. (1956) conducted lengthy interviews, and such a methodological approach does not lend itself to empirical investigations with samples sufficient to provide precise estimates of effects. Moreover, it is viewed commonly as being more subjective than required for a rigorous study of the phenomenon. Katz and colleagues attempted to explore the ego-defensive function using authoritarianism as an indicator of the ego-defensive function (Katz et al., 1956; Sarnoff & Katz, 1954). These studies yielded inconsistent results, and perhaps for that reason others did not pursue this line of inquiry. One influential attempt at remedying this state of affairs was Herek's (1986) neofunctional approach, and it involved reconceptualizing attitude functions in a way that would encourage empirical investigation.

Herek's Neofunctional Approach

Herek (1986) proposed that the concept of attitude functions should be expanded beyond the personality centered-approach of Smith et al. (1956) and the categorical approach discussed by Katz (1960). In his reconceptualization of attitude functions each function is construed as a quantitative dimension such that any attitude serves all functions to varying degrees. Thus, for Herek, attitudes serve multiple functions and the extent to which each attitude serves multiple functions can be measured. Consequently, the relationships among attitude functions can be investigated empirically and quantitatively.

Herek (1986) also proposed a new typology of attitude functions. Specifically, he posited that conceptual clarity may be gained by distinguishing two categories of attitude functions. The first category includes the evaluative functions, which are associated with gaining rewards and avoiding punishments. These attitude functions provide people with a means of organizing objects and events by self-interest. Herek distinguished three types: experiential and specific, experiential and schematic, and anticipatory-evaluative. Experiential and specific attitudes are formed by and directed at a single object of a category of attitude objects based on one or more encounters with that specific object. Varda might encounter a poorly maintained BMW driven by her friend Erin, and from that experience Varda might develop an experiential and specific negative attitude toward Erin's BMW as a means of assisting her in avoiding accepting rides in dangerous and unreliable automobiles. On the other hand, Varda's attitude toward Erin's BMW would not necessarily generalize to all BMWs. If Varda formed a positive view of BMWs based on having driven and ridden in many others that she found to be safe and dependable, she would have developed an experiential-schematic attitude.

Such attitudes represent the inductive development of an attitude toward a category of attitude objects based on personally encountering and evaluating many specific cases of the attitude object. In contrast, the anticipatory-evaluative function serves to inform people concerning the rewards or punishments that might accompany attitude objects, but they do not arise from any actual experience with these objects. Instead, one estimates the rewards and punishments, and the extent of them, that would result from an encounter with an attitude object. If Varda had never encountered a BMW, but had she heard positive reviews of its safety and reliability from trusted sources, she might develop a positive attitude that functions in an anticipatory-evaluative manner. Notably, these three functions that are grouped under the evaluative category are all similar to Katz's (1960) utilitarian function.

The other category of attitude functions identified by Herek (1986) is termed "expressive." They include the social-adjustive, the valueexpressive, and defensive functions identified by other theorists. Specifically, the social-adjustive and the value-expressive functions are similar to those to which Katz (1960) attaches the same labels, and the defensive function is similar to Katz's ego-defensive function. The expression to others of these attitudes, rather than the utilitarian character of attitudes that serve evaluative functions, provides benefit for those who hold them. Herek's use of this categorization scheme to understand more clearly the attitudes persons have toward those with AIDS is a particularly useful application of this set of distinctions (see Herek, 2000 for a review).

In addition to conceiving of the functions as quantitative variables and providing an original classification scheme, Herek (1986) rejected the idea that functions are stable within individuals but across contexts. He argued that functions may be related to personality variables, and thus, that certain personality characteristics would be associated with a higher likelihood of an attitude serving a particular function. For example, Snyder and Debono (1985) proposed that people who

are likely to engage in extensive self-monitoring are also likely to have attitudes that serve a socialadjustive purpose. Moreover, Herek extended the personality approach by proposing that characteristics of the attitude topic might influence the likelihood that a particular topic would be associated with a particular function. For example, Shavitt (1990) found that attitudes toward airconditioners were most likely to serve utilitarian functions. Finally, Herek (1986) argued that situations could also make particular attitude functions salient. For example, he argued that socialadjustive functions were likely to predominate with attitudes toward one's friends. In one application of this approach, Shavitt, Swan, Lowrey, and Wanke (1994) found that particular functions can be primed. These various approaches that conceive of attitude functions as variables have been used to craft tailored messages. The tailoring research using these methods will be examined next.

The Functional Matching Hypothesis

Katz (1960) argued that an important application of research on attitude functions is tailoring messages to functions. He believed that knowing what function an attitude served would enable the persuader to focus suasory effort on arguments relevant to the needs of the audience. His proposal has come to be known as the functional matching hypothesis. Since the 1980s, a great deal of research has been conducted examining the effectiveness of matching messages to functions using strategies based on three methods of targeting attitude functions identified by Herek (1986).

Personality

The most common method of targeting attitude functions began with Smith and colleagues' (1956) assumption that attitude functions are associated with personality. The earliest research

in this area was done by Katz and his colleagues (Katz, McClintock, & Sarnoff, 1957; Stotland et al., 1959), and their work attempted to measure authoritarianism using a variety of measures (California F-Scale, MMPI conformity items, thematic apperception tests, and sentence completion measures). They believed that those who were more authoritarian would be more likely to have ego-defensive attitudes toward racial minority groups. The variety of tests did not offer convergent validity of their construct; some were consistent with the effectiveness of targeting ego-defensive attitudes and some were not.

More consistent results have been found using self-monitoring as an indicator of social-adjustive attitudes (see Debono, 2000, for a review). Initially, it is worth noting that the self-monitoring scale (Snyder, 1974; Snyder & Gangestead, 1986), the primary means of assessing the trait, lacks construct and content validity (Dillard & Hunter, 1989). Despite these measurement problems, a number of studies have used the scale to predict attitude functions. Snyder and Debono (1985) conducted the initial experiment, arguing that because self-monitoring is a personality construct that is associated with adapting oneself to gain the social approval of others, those high in this trait would be more likely to have highly social-adjustive attitudes. They hypothesized that those low in self-monitoring would hold more value-expressive attitudes because low self-monitors tend to look inward for their attitudes rather than to the expectations of others. They used scores on the self-monitoring scale to create two groups, one high in self-monitoring and one low in self-monitoring. They found that for low self-monitors, advertising messages that focused on product quality were substantially more persuasive than those that focused on social status; but that for high self-monitors, advertising that focused on social status was more persuasive than advertising that focused on product quality.

Following their seminal work, a number of studies have used self-monitoring to explore the types of messages that match social-adjustive and value-expressive attitudes (e.g., Debono, 1987; Debono & Rubin, 1995; Debono & Snyder, 1989). Debono and Rubin (1995) found that high self-monitors preferred cheese from France to cheese from Kansas regardless of taste, but that low self-monitors preferred the cheese with superior flavor, being relatively uninfluenced by the country of origin. They argued that high selfmonitors responded to the country of origin because imported cheese was perceived to be of higher status than domestic cheese, whereas low self-monitors were influenced by their reaction to the cheese's taste. Debono and Snyder (1989) found that high self-monitors preferred an attractive automobile, whereas low self-monitors preferred an ugly automobile. They reasoned that the high self-monitors had social-adjustive attitudes and therefore chose their automobiles based on what would impress others. They claimed that the low self-monitors chose the less attractive car because they associated less attractive cars with more reliable cars.

Although it makes intuitive sense that high self-monitors would be more likely to have social-adjustive attitudes, it is less clear what to expect from low self-monitors. Most scholars investigating self-monitoring and attitude functions argue that low self-monitors will be more likely to have value-expressive functions (Debono, 1987; Debono & Harnish, 1988; Debono & Telesca, 1990; Petty & Wegener, 1998; Snyder & Debono, 1985). Yet, these studies target value-expressive attitudes with utilitarian appeals that focus on the quality of products rather than on an abstract value. Given the results that most investigators have reported using utilitarian appeals with low self-monitors, some (Dutta-Bergman, 2003, Shavitt, Lowrey, & Han, 1992) have argued that low self-monitors' attitudes are more likely to be utilitarian than value-expressive. On the other hand, Lavine and Snyder (1996) were able to show that for low self-monitors a value-based appeal was more successful than an image-based appeal. It appears that although high self-monitors are consistently able to be persuaded using messages targeting the

social-adjustive function, the functions of attitudes served by low self-monitors are both conceptually and empirically less clear. Furthermore, Hullet and Boster (2001) found that measures of value-expressive functions and social-adjustive functions were uncorrelated. This finding suggests that there are people who are able to possess attitudes that are both social-adjustive and value-expressive, one but not the other, or neither. Additionally, as noted previously, Herek's (1986) neofunctional approach emphasized the possibility of multifunctional attitudes.

Attitude Objects

Although the personality approach to studying attitude functions remains the most popular, some have examined Herek's (1986) suggestion that attitudes toward some topics or objects are inherently likely to serve single functions. For example, Shavitt and colleagues have pursued this path (Shavitt, 1990; Shavitt, Lowrey, & Han, 1992). Shavitt noted that in Snyder and Debono's (1985) self-monitoring studies, there were several consumer products that did not produce the results predicted by the functional matching hypothesis. She proposed that some objects (e.g., aspirin) are likely to serve, and only serve, a utilitarian function; whereas, other objects (e.g., automobiles) might serve a variety of functions, at which point one's personality might be more likely to predict attitude functions. She reasoned that for unifunctional objects, persuasive messages that matched those functions would be more persuasive than those that did not. After using a thought-listing task coupled with questionnaire data to identify the predominant function served by various objects, she gave subjects the task of reading advertisements for some of those objects. The advertisements either matched or mismatched the objects' function. Results indicated that the typical functional matching effect occurred; the advertisements were more persuasive when they matched the functions associated with their products. In subsequent experiments, Shavitt et al. (1992) found that self-monitoring

exerted a strong effect on the type of functions associated with particular consumer products only when the product was multifunctional. It appears that personality differences are only useful for predicting attitudes for products that are likely to serve multiple functions. No matter how high one might score on the self-monitoring scale, one wants aspirin to alleviate a headache, not to impress friends.

Situation

Some investigators have attempted to determine if situations can be structured to increase the salience of attitude functions. Shavitt, Swan, Lowry, and Wänke (1994) administered a survey that either highlighted sensory experiences or social concerns in order to induce either utilitarian functions or social-adjustive functions. Utilitarian functions were primed by asking the subjects to rate how good or bad a variety of experiences made them feel on scales ranging from "makes me feel very bad" to "makes me feel very good" (p. 143). Social-adjustive functions were primed by asking the subjects to rate a number of events based on how good of an impression the event would make on hypothetical observers of the event. They found evidence consistent with a functional matching effect for the functions they primed.

Katz (1960) noted, "The most general statement that can be made concerning attitude arousal is that it is dependent upon the excitation of some need in the individual, or some relevant cue in the environment" (p. 176). Following Katz, Julka, and Marsh (2005) argue that the best way to induce any specific attitude function is to heed Katz's (1960) suggestion that attitudes change when the need that the operative attitude function serves is frustrated. Rather than attempting to measure pre-existing functions, they suggest frustrating the operative attitude function, and then providing a persuasive message (organ donation in this case) that would allow the audience to satisfy the need that had been frustrated. To induce a need to express attitudes consistent with their values, some subjects were given a rigged values survey that indicated that they were not living up to their values. The investigators believed that this tactic would increase their motivation to couple their attitudes and their values. To induce the knowledge function, some subjects were given confusing instructions for a card game. They found evidence consistent with the functional matching effect such that targeting messages at the value function was more persuasive for those who had value-expressive motivation induced than those who had knowledge motivation induced. Alternatively, the knowledge targeted message was more persuasive for those who had the knowledge motivation induced than those who had the value-expressive motivation induced. Furthermore, they found this functional matching effect was stronger for the conditions in which these functions were frustrated than other conditions in which these functions were merely made salient by using a simple values survey with no feedback (value-expressive functions were salient but not aroused) or giving them easy to understand instructions for a card game (knowledge function were salient but not aroused).

Measuring Functions

Several scholars (Clary & Snyder, 1992; Clary, Snyder, Ridge, Copeland, Stukas, Haugen, & Miene, 1998; Clary, Snyder, Ridge, Miene, & Haugen, 1994) have tested the functional matching hypothesis using Herek's (1987) method of measuring attitude functions by self-report. Clary and Snyder's (1992) work provides an example. Their volunteer functions inventory (VFI) was designed to assess five different motivations for engaging in volunteerism based on the five previously described functions. They tested the functional matching effect with five different videotaped messages promoting volunteerism that were each designed to target one of the five functions. They used the subjects' scores on the VFI to assign a message to them that either matched the function with which their

attitude was most associated or the function with which their attitude was least associated. If the message matched the function identified by one's highest score on the VFI, then it was more persuasive than if it matched their lowest score. Subsequently, they replicated this effect for brochures. Clary et al. (1994) conducted a similar study using the VFI to measure the primary function served by the subjects' attitudes. They found that functional matching was also associated with higher ratings of trustworthiness toward the source of the message and a stronger belief that the message addressed their individual goals. These studies are unique in that they created messages to target all five of the previously elucidated functions rather than targeting a subset of the traditional five functions (e.g., using the self-monitoring scale to target either the social-adjustive functions or utilitarian function, Snyder & Debono, 1985). Although the VFI is a promising tool for targeting messages supporting volunteering, in order to use the functional measurement approach to tailor messages in other contexts, a more general instrument is needed, one that is not specific to a particular attitude object.

Several attempts have been made to produce such a measure. Herek's (1987) items are topic specific, Herek making the argument that although his measure can be adapted to other domains, the wording may need to be changed from topic to topic to reflect the specifics of that domain. Alternatively, Locander and Spivey (1978) produced evidence consistent with the validity of a general measure of Katz's (1960) four functions, but their measure was developed assuming that the only source of an attitude function is personality, this instrument being an attempt to measure features of personality thought to be linked with particular functions. Thus, the instrument neglects the influence of the attitude object and the situational features that also impact attitude function. Franc and Brkljačić (2005) also present a general measure, but it is limited in that it assesses only the utilitarian, social-expressive, and value-expressive

functions. Consequently, it provides a foundation on which to build indicators of the knowledge function and the ego-defensive function. If attitude functions can be measured effectively, the influence of personality, object, and situation can be estimated and theory developed to explain their varying effects.

Explanations for the Functional Matching Hypothesis

The majority of studies examining the functional matching hypothesis have found evidence consistent with its predictions regardless of the source of the attitude function. Although the effect appears robust, explanations for it remain uncertain. Lavine and Snyder (1996) argued that the effect arises because of biased processing. Specifically, when the audience receives a functionally matched message, they are predicted to perceive the message as of higher quality and to produce more favorable message-relevant thoughts than when they are exposed to a mismatched message. Furthermore, Lavine and Snyder predicted that perceptions of message quality would mediate the relationship between functional matching and attitudes, and they found evidence consistent with these hypotheses in two studies examining attitudes toward voting.

The elaboration likelihood model (ELM; Petty & Cacioppo, 1986) has also been used to explain the functional matching hypothesis results. There is inconsistency, however, in deriving predictions from the ELM. Snyder and Debono (1985) propose that functional matching operates as a peripheral cue such that those who are not processing centrally employ the heuristic cue that matched arguments are better regardless of quality. If a message produces attitude change via means other than message content, it follows from the ELM that peripheral processes are operative. Debono (1987, study 2) found that evidence consistent with this reasoning. Specifically, functional matching increased the persuasiveness of a message even when the speaker produced no actual arguments.

Alternatively, Debono and Harnish (1988) argued that functional matching increases depth of processing so that mismatched messages are processed peripherally and matched messages are processed centrally. They found, consistent with ELM predictions, that when a message provided a functional match, argument strength had a stronger impact on the persuasiveness of the message than when the message did not provide a functional match. Furthermore, consistent with the ELM-based hypothesis of increased processing, they found that the ratio of positive to negative thoughts generated by their subjects was associated strongly with post-message attitudes when the message matched functions but not when the message failed to match functions. This latter effect was not replicated, however, by Debono (1987).

In their second study, Petty and Wegener (1998) found evidence consistent with the ELM explanation as the effects of argument strength and functional matching were limited to those low in need for cognition. They argued that if the audience is motivated strongly to process arguments carefully and thoroughly (in this case, those who chronically process centrally due to their high need for cognition), functional matching will not affect the depth of processing the message. Functional matching is anticipated to increase the effect of argument strength for only those low in need for cognition (i.e., for those for whom the default is limited processing). On the other hand, in their first study in this article, Petty and Wegener (1998) found that functional matching did increase the persuasiveness of strong arguments and decrease the persuasiveness of weak arguments. Yet, there was also a strong main effect for functional matching such that matched arguments were less persuasive than mismatched arguments. Thus, this experiment failed to replicate functional matching hypothesis predictions that matching is expected to increase the persuasiveness of the arguments. Given the inconsistency of these results, the ELM may not be adequate as an explanation of this phenomenon (cf., Stiff & Boster, 1987).

Others have offered a provocative alternative derived from the unimodel (Thompson, Kruglanski, & Spiegel, 2000). The unimodel posits that the functional matching effect results from functionally matched messages providing information that is relevant to the audience. According to Thompson et al., attitude functions serve to determine what kind of information is relevant to the audience's goals. Information that is irrelevant is ignored just as easily as information from bad arguments. No studies have been published reporting a critical test of this unimodel prediction as compared to the various ELM predictions, but Hullett (2002, 2004) has found consistently that the functional matching effect is mediated by the perception that the message is relevant to one's values.

Structure of Attitude Functions

Katz (1960) and Smith et al. (1956) produced similar lists of functions. Herek (1986) divided them up somewhat differently but other than expanding the types of utilitarian functions and dropping the knowledge function, he produced a similar list. More recent scholarship has begun to question the adequacy of that list (Hullett & Boster, 2001; Maio & Olson, 2000; Watt, Maio, Haddock, & Johnson, 2008).

Maio and Olson (2000) argued that utilitarian attitudes are not conceptually distinct from value-expressive attitudes because attitudes that are based on maximizing utility require some value to determine what is good and bad for the individual. They found that their subjects' attitudes toward attending a proposed music festival immediately before finals were substantially correlated with utilitarian values related to enjoyment and negatively related to utilitarian values related to achievement. They found that just as responses to appeals based on other values more commonly associated with value-expressive attitudes were substantially related to the specific values that were targeted, targeting utilitarian

values operated the same way. It is also worth noting that these investigators were following up on an important point they had made previously (Maio & Olson, 1994); namely, that knowing that an attitude is value-expressive does not allow functional matching in and of itself. Rather, one must know the specific targeted value. One could determine that the target of a message has a value-expressive function for that attitude, but if the message was not targeted at the correct value, it would fail to persuade.

Although Maio and Olson (2000) argued that utilitarian attitudes may simply be value-expressive attitudes with a particular utilitarian value, Hullett and Boster (2001) make a similar argument such that social-adjustive attitudes are a particular type of value-expressive attitudes. They argued that people with social-adjustive attitudes are simply pursuing an other-directed value (the extent to which the individual's values conform to the wishes of others). They found that when the message was based on supporting conformity, the degree to which the target had other-directed values was related directly to agreement with the message.

The bulk of the research that has demonstrated a successful functional matching effect in the second wave of functional attitude research has been conducted on utilitarian, social-adjustive, or value-expressive attitudes (see Clary & Snyder, 1992 and Julka & Marsh, 2006 for exceptions). If utilitarian, social-adjustive, and value-expressive attitudes are all simply value-expressive attitudes, all this line of research has demonstrated is that it is more effective to target the value that the individual associates with the attitude than to target a value the audience either does not support or does not associate with the attitude being targeted. In order to determine if any given proposed function is actually a separate function, it would be helpful to return to Katz's (1960) original purpose of delineating functions; namely, to determine if the processes by which attitudes change differ based on the function. In an early statement of functional attitude theory, Katz and

Stotland (1959) discussed the possibility of attitude functions varying based on the intervening variables between the function and the attitude. The third wave of functional attitude research examines the different types of cognitive processes that occur when different attitude functions predominate or are salient (Hullett, 2002; 2004; 2006, Hullett & Boster 2001; La France & Boster, 2001; Lapinski & Boster, 2001). These studies can be used to demonstrate which functions produce the same cognitive processes, and thus could be profitably combined, and which produce different cognitive processes and should therefore be distinguished.

Although the ego-defensive function produced the most research in the initial phase of functional attitude research (e.g. Katz, McClintock, & Sarnoff, 1957; Katz, Sarnoff, & McClintock, 1956), it is the most understudied function in the second wave of functional attitude theory research, a wave ushered in by the extensive use of the self-monitoring scale (Snyder & Debono, 1985). Lapinski and Boster (2001) sought to address this lacuna by employing causal modeling to understand the cognitive processes that occur when an ego-defensive attitude is challenged. Rather than exploring how to target ego-defensive attitudes, they modeled the process by which egodefensive attitudes become more resistant to change, focusing on how people defend their ego from a message that attacks a pivotal aspect of their self-image. In addition to the inherent benefit of studying resistance to persuasion, their work suggests future work focusing on reducing the processes that cause resistance. They found evidence consistent with a causal chain in which the degree to which a message is ego-threatening produces predominantly negative thoughts in the audience. The production of negative thoughts leads to message discounting and then source derogation. Finally, increasing source derogation resulted in an increasingly negative attitude. This model describes a serial process that people experience in order to protect their ego from a message that suggests a discrepancy between their

behavior and their self-image. This process is different from the processes identified by Hullett (Hullett, 2002, 2004; Hullett & Boster, 2001) concerning value-expressive, social-adjustive, and utilitarian functions.

Hullett and Boster (2001) examined messages that targeted the social-adjustive and valueexpressive functions. When the message advocated conformity, the relationship between the extent to which the audience valued conformity and their agreement with the message was mediated by perceptions of message quality (although the extent to which they valued other-directedness did have a direct effect on message acceptance). When they used a message that advocated selfdirection (values associated with independence and following one's own desires), the relationship between that value and message acceptance was again mediated by perceptions of message quality. Lavine and Snyder (1996) found a similar effect for social-adjustive and value-expressive functions such that perceptions of message quality mediated the relationship between the functional match of the message and message acceptance.

Hullett (2002) expanded this process-oriented approach by measuring the extent to which targets of a value-expressive message actually held that value and the extent to which the message was relevant to the basis of their attitude. Hullett found that the extent to which the audience held a value influenced the extent to which they viewed the message targeting that value as relevant to their attitudes, which then increased their perceptions of message quality. His analysis suggests a process in which the audience initially determines if a message is relevant to the values associated with their attitudes, and then the extent to which the message is relevant determines the audience's subjective determination of the quality of the message. As before, message quality perceptions directly influence message acceptance. Hullett (2004) went on to demonstrate that this process occurs for other-directed values (similar to the basis of the social-adjustive function) and self-centered values (similar to the

basis of the utilitarian function), suggesting that regardless of the value that is targeted, the same process occurs. Hullett also found that regardless of which value the persuasive message targeted, if the message was perceived to be relevant to one's reasons for holding the attitude, it was associated with guilt arousal, which increased message acceptance independent of the impact of message relevance on perceptions of message quality.

These studies on the cognitive processes underlying different functions are consistent with the perspective that value-expressive, utilitarian, and social-adjustive attitudes all seem to be changed via the same processes (Hullett, 2002, 2004; Hullett & Boster, 2001) and thus may not represent different functions. On the other hand, the research by Lapinski and Boster (2001) on the unique processes associated with ego-defensive attitudes, suggests that this function may be a theoretically distinct attitude function. The remaining function of the original five, the knowledge function (Katz, 1960), has only been the focus of a small number of studies (Clary et al., 1998; Clary et al., 1994; Clary & Snyder, 1992; Julka & Marsh, 2006). The studies by Clary and colleagues have all been basic functional matching studies that did not investigate whether or not the knowledge function was associated with a different process. Julka and Marsh's (2006) study did not investigate the process by which attitudes with a knowledge function change, but they did find that the knowledge function could be induced similarly to how the value-expressive function could be induced (e.g., by causing the audience to feel that they had failed to reach the goal associated with each function). It remains to be seen whether the processes associated with the knowledge function simply represent another value and could be subsumed as another type of value-expressive attitudes or if there are unique cognitive processes associated with the knowledge function that would require a unique message strategy as the ego-defensive function seems to require.

Challenges

Theoretical Challenges

Hullett (2002, 2004) found evidence consistent with the perspective that value-relevant, socialadjustive, and utilitarian functions all engage similar, serial cognitive processes. Critical tests are needed to compare some of the ELM predictions with the more complex causal processes Hullett examined. In general, not enough attention has been paid to the cognitive processes that generate the functional matching effect. Unless and until functional attitude scholars advance from focusing on mere functional matching effects to trying to understand the causal processes associated with the different functions as initiated by the third wave of functional attitude research, progress will not be made toward a comprehensive functional theory of attitudes.

As with much persuasion research, the studies that emerge from viewing attitude functions as a process are cross-sectional, and have the corresponding limitations in the strength of the causal inferences that can be drawn from this method of data collection. And, although future research would profit from longitudinal data collection, it would profit even more if longitudinal data sets emerged from designs derived from dynamic theories. Meeting this condition would require that the structural equations implicit in Hullett and Boster's (2001) and Lapinski and Boster's (2001) papers be replaced by change equations or differential equations detailing the processes by which each variable in these cross-sectional models change. Theory of this level of sophistication would then dictate many features of design and data collection, as well as provide straightforward tests of the model (cf., Boster, Mayer, Hunter, & Hale, 1980; Boster, Hunter, Mongeau, & Fryrear, 1982).

Several investigators have also found that messages can be used to make attitudes more relevant to particular functions. La France and Boster (2001) found that the attitude functions in their study changed to become more experiential schematic and less experiential specific after exposure to a message that targeted the attitudes associated with the functions they measured. Hullett (2004) found that messages explicitly linking a particular attitude to a value can increase the value-relevance of a particular attitude. Theories integrating both the effects of functions on message processing and the effects of messages on the function(s) served by attitudes would formalize functional attitude theory and provide a degree of specificity and theoretical precision that would move it beyond being a mere approach to understanding attitudes.

Practical Challenges

Functional attitude theories suggest that in order to persuade someone, influencing agents must plot the cognitive structure of an attitude, determine the function(s) that the attitude serves, and tailor a message accordingly. The theory and technology necessary to perform these tasks effectively remain elusive. Cognitive structure is difficult to access; mapping it will prove more challenging. Advances in the technology of tailoring messages to the individual (Maibach, Maxfield, Ladin, & Slater, 1996) require that targets respond to lengthy questionnaires. Despite these difficulties, targeted research projects have the potential to enhance understanding of these features of the persuasion process.

Targeting functions provides a more precise means of tailoring messages to targets than previous approaches. Miller and Steinberg (1975) argue that to adapt a message to an audience one can use information about them that exists along a continuum ranging from broad cultural-level knowledge to individuating information about the target. A recent review of the tailoring research (Hawkins, Kreuter, Resnicow, Fishbein, & Dijkstra, 2008) suggests that the ideal way to tailor to the audience is to use individuating information and calls for more research on the

processes involved that can make tailoring more effective. Research using attitude functions to tailor messages allows message targeting at more individuated level information.

The majority of the experiments that identify attitude functions as a means of tailoring persuasive messages examine attitude formation (e.g. Snyder & Debono, 1985). A small number have examined attitude change (e.g., Lavine & Snyder, 1996). None, however, have pursued attitude functions as a means of making attitudes more resistant to suasory appeals. Maio and Olson (1995) report that valueexpressive attitudes have stronger value-attitude links than do attitudes that serve other functions (cf., Blankenship & Wegener, 2008). It may be that particular functions confer stronger resistance than others, for example, Katz (1960) suggested that ego-defensive attitudes may be particularly resistant to change because these functions are tied to one's sense of self-esteem, which people are strongly motivated to protect. Research exploring the functions most likely to produce resistance, or the conditions under which any given function is most likely to result in decreased yielding, coupled with the means of changing those functions has the potential to provide a unique means of increasing resistance to persuasion.

Conclusion

A logically coherent, comprehensive, and empirically predictive functional attitude theory remains one of the unfulfilled goals of early persuasion research. Although the theoretical and technical hurdles can be daunting, substantial conceptual and empirical progress has been made in the last two decades. Sustaining and building on these recent successes is pivotal if the promise of Smith and colleagues' (1956) seminal work and Katz's (1960) work is to be realized, and the study of the functional theory of attitudes is to become a linchpin of persuasion

theory. Future advances of this sort would fulfill Plato's recommendation that orators adapt their messages to the soul of their listener.

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