Is Symmetrical Communication Ethical and Effective?

Yi-Hui Huang

ABSTRACT. The purpose of this paper is to explore two questions: (1) Is symmetrical communication in public relations practice inherently ethical? (2) Does symmetrical communication contribute to public relations effectiveness and organizational effectiveness? Three surveys are undertaken to test seven research hypotheses for the purpose of cross-validating research findings. The results suggest that symmetrical communication is inherently ethical. Moreover, symmetrical communication indeed contributes to several performance measures, which include positive market performance, overall organizational effectiveness, conflict resolution, crisis management, favorable organizational reputation, and positive media exposure, with the last two measures only partially supported.

KEY WORDS: symmetrical communication, public relations, ethical communication, public relations effectiveness, organizational effectiveness

Purpose

Public relations professionals, in their roles as organizational boundary spanners and communication

Yi-Hui Huang is a professor at the Department of Advertising of the National Chenchi University in Taiwan. She holds a Ph.D. of mass communication from the University of Maryland, USA. Dr. Huang's research interests include communication management, public relations research, conflict management and cross-cultural communications. She won the Fulbright Visiting Scholar Program Award for 2003–2004 and joined the Program on Negotiation at Harvard Law School as a visiting scholar. Her research has been awarded internationally and domestically, which included the PRIDE Awards in 2001 (the Best Article Award in Public Relations Scholarship, awarded by the National Communication Association, USA), five Top Paper Awards in various international conferences, and the Distinguished Research Award given by the National Science Council in Taiwan in 2002.

managers (Grunig and Hunt, 1984; Grunig et al., 1992), often help organizations manage their responses when communicating with their constituencies in order to cope with rapid changes in the environment (White and Dozier, 1992). In such roles, however, public relations has sometimes been branded an unethical practice on two accounts. First, research has revealed a ''personal influence'' pattern in public relations practice in an international setting (Grunig et al., 1995) which has been perceived as being asymmetrical and unethical (Grunig and Grunig, 1996). Second, it has been asserted that public relations are a way in which people attempt to exert control over their symbolic environment. Miller (1989), for example, argues that persuasion and public relations are ''Two 'Ps' in a Pod'' – that communication and persuasion are associated inextricably.

Several scholars, adopting a rhetorical perspective, have argued against the idea that persuasion might be inherently unethical (Heath, 1992a). For example, Nelson (1994) raised the question: When is persuasion unethical? Bivins (1987) distinguished between the ethics of *counselors* as symmetrical practitioners and *advocates* as asymmetrical practitioners. He suggested that advocacy leads public relations practitioners to act only in the client organization's self-interest, but that an ethical standard can be met if a public relations practitioner reveals the motives (reasons) that underlie his or her asymmetrical publicity. Likewise, Heath (1992b, pp. 46–57) wrote that persuasion could be ethical if it meets three rhetorical principles: standards of truth and knowledge, good reasons, and perspectivist criticism. The debate on ''when is persuasion unethical'' holds open the possibility of the coexistence of persuasion and ethical communication.

In response to the claim of unethical implications, the literature of public relations suggests the need for two-way symmetrical communication between

organizations and their constituencies (Anderson, 1992; Grunig, 1992b; Grunig and Grunig, 1992; Huang, 1994; Pavlik, 1989). Grunig and Hunt (1984) defined communication as symmetrical when the public has some effect on it; that is, when the communicator is willing to initiate changes from his or her side. Grunig (1989) and Grunig and Grunig (1992) assert that the two-way symmetrical communication model provides the normative ideal and will result in effective public relations for most situations.

Symmetrical communication arouses more fervent debate than most other concepts in the generic theory of public relations. This debate has two facets:

(1) *The nature of symmetrical communication.* Is symmetrical communication inherently ethical? Several scholars contend that the personal–influence model can be practiced ethically or unethically; what makes the difference is the practitioner's ''worldview'' (Grunig, 2001, p. 26). The extent to which ''symmetry'' is employed determines whether the practice of public relations is ethical or unethical; extensive use of symmetrical communication is considered ethical (see Grunig, 1992a). If this position is accepted, then the next logical and important question would be: Is symmetrical communication actually inherently ethical?

(2) *The effect of symmetrical communication.* Here there are three main problems:

(a) *Effectiveness with activists.* Although the literature appears to support the use of symmetrical communication between organizations and activists (Anderson, 1992; Grunig, 1992b; Huang, 1994; Pavlik, 1989), this support comes primarily from negative evidence showing that the three most commonly used models of public relations – press agentry, public information, and two-way asymmetrical – appear to be ineffective in dealing with activism (Huang, 2001a). Little evidence has demonstrated the direct, positive effects of symmetrical communications.

(b) *The ''one-best style''.* Leichty and Springston (1993) questioned the effectiveness of an organization consistently using the same public relations model across stakeholders over time. They contended that public relations models should be measured at ''the relational level'' rather than being aggregated ''across publics and relational stages and globally characterized as an organization's overall public relations practice'' (p. 334).

(c) *Is symmetrical communication normative or both normative and descriptive?* Sun (1994) and Van der Meiden (1993) argued that the two-way symmetrical model only prescribes what an organization should do, without actually representing the reality. Likewise, Sun (1994) pointed out the slim possibilities for an organization to actually practice a symmetrical model. Murphy (1991), equating the two-way symmetrical communication model to a pure cooperation model in game theory, held that symmetrical communication is difficult to find in the real world. Along the same lines, Van der Meiden (1993) criticized a symmetrical worldview as unrealistic, inasmuch as it disconnects an organization's ''communicative activities from its immediate or removed interests'' (quoted in Grunig and Grunig, 1996, p. 15).

Reflecting the twofold discussion above, the purpose of this paper is twofold: (1) to explore the nature of symmetrical communication – whether or not symmetrical communication is inherently ethical, and (2) to investigate the effects of symmetrical communication in terms of public relations effectiveness and organizational effectiveness.

Conceptualization

This section will first conceptualize the notions of symmetrical communication and ethical communication. The relationship of these two concepts will then be explored, followed by an investigation of the effects of symmetrical communication. The research proposition and research hypotheses are developed in the course of the conceptualization.

Symmetrical communication

Grunig and Hunt (1984) defined public relations as ''the management of communication between an organization and its publics'' (p. 6). Two approaches can be taken. Organizations with a symmetrical worldview see communication as interactive behavior in which two or more systems construct cognitions and attitudes together so that they behave in ways that are either ''synergistic or symbiotic'' (Grunig, 1989, p. 13). The following concepts underlie the symmetrical worldview: holism, interdependence, an open system, a moving equilibrium, equality, autonomy, innovation, responsibility,

conflict resolution, and communication as a path to understanding (Grunig and White, 1992). On the other hand, organizations with asymmetrical worldviews see communication as a tool with which to change the cognitions, attitudes, or behaviors of another person, organization, or system. Concepts germane to the asymmetrical worldview include internal orientation, closed system, and efficiency (Grunig and White, 1992).

Thus, an organization's intent to initiate internal change is the key to symmetrical communication. If an organization is willing to make changes from its side, or actually has done so already, then the theoretical presuppositions underlying the symmetrical worldview have been achieved.

Ethical communication

Ethical communication is defined as involving the following three concepts: teleology, disclosure, and social responsibility.

Teleology

Debate on ethical theories falls into two camps: utilitarianism or teleology on the one hand and Kant's categorical imperative or deontology on the other. Grcic (1989) explained the differences between teleology and deontology:

> Teleological theories hold that the ultimate criterion of moral goodness is either the sum total of good over evil consequences that the action brings about or whether it promotes individual functioning and development. A teleologist holds that an action is moral if it is a means to the appropriate moral good. A deontological approach, however, holds that the morality of an action is not primarily determined by its consequences but by certain intrinsic features of the intention or mental aspect of the contemplated action. A deontologist emphasizes doing one's duty and the nature of our motives and intentions, not the consequences that may result from our actions. (p. 4)

In a similar manner, Grunig and Grunig (1996) equated teleological theories as consequentialist theories and deontological theories as non-consequentialist theories. In other words, public relations practitioners should consider the impact of their communication behaviors on their colleagues, clients, organizations, and the larger society, but should

also follow deontological rules to be honest, truthful, and sincere when communicating (also see Reinsch, 1990).

Disclosure

According to Bok (1989), having secrets and having access to information gives one more power. Disclosure, on the other hand, facilitates power symmetry. As indicated above, Bivins (1987) pointed out that advocacy has been the public relations practitioner's primary job. Advocacy, by driving public relations practitioners to act purely in the client organization's interest, encourages an imbalance of power between the organization and the public, with the consequent opportunities for unethical activity. Bivins (1987) suggested that revealing the motives (reasons) of asymmetrical communication can secure ethical standards. In essence, the concept of disclosure is related to the basic right that Sullivan advocates human beings should have: possessing information and participating in decision-making (quoted in Grunig and Grunig, 1996, p. 22).

The obligation to preserve secrets is repeatedly set forth, often with a "ritualistic" tone, in professional codes of ethics (Bok, 1989). Bok offers an explanation for professional secrecy, stating that the premises are not usually separated and evaluated in the context of individual cases or practice. Adopting a different perspective, Jaksa and Pritchard (1994) caution against "blind acceptance" of professional codes and legal determinations, arguing that they should give way to moral considerations (p. 203).

Social responsibility

Scholars maintain that public relations practitioners should perform their social roles and functions in a socially responsible manner (Grunig and Grunig, 1992). In this sense, public relations professionals, spanning the boundaries between organizations and the outside world, would be the right actors to take into account the impact (or consequences) of all public relations activities on their publics and to discharge corporate social responsibility for an organization.

Applying Donaldson's concepts of "minimal duty" and "maximal duty" (1989) to the field of public relations, public relations professionals should meet the bottom-line standards of "minimal duty" for organizational stakeholders such as the community, employees, and consumers, and then further

endeavor to fulfill the "maximal duty" as an act of good corporate citizenship. He specified the "minimal duty" for multinational corporate social responsibility as "enhancing the welfare of consumers and employees, respecting the rights and justice of the people in the society, and minimizing harm or other negative effects such as misuses of power or depletion of natural resources" (quoted in Amba-Rao, 1993, p. 5). The "maximal duty," on the other hand, would be an act of good corporate citizenship, such as supporting Third World development programs or economic aid.

In a similar vein, Naor (1982) suggested that social responsibility satisfies social needs and promotes public welfare. Sethi (1975) also maintained that, in the highest phase of responsibility − social responsiveness − a corporation takes anticipatory actions with a commitment towards social goals (Sethi, 1975, cited in Amba-Rao, 1993). In Carrol's (1991) pyramid of corporate social responsibility, the highest level is "philanthropic responsibilities," which suggests being a good corporate citizen, making contributions to the community, and improving its people's quality of life. Donaldson's (1989) notions of "minimal duty" and "maximal duty" correspond to the idea of "teleology" as suggested in Grunig and Grunig (1996), which emphasized that an organization should consider the impact of its communication behaviors on its constituencies and the larger society. On the other hand, the idea of "public interests" seems to be a focal concept in Naor's (1982), Sethi's (1975) and Carrol's (1991) conceptualizations of social responsibility. Moreover, "disclosure" is another aspect of communication ethics (Bok, 1989). I adopt these focal concepts in order to develop the measures of ethical communication used in this study.

The relationship between symmetrical communication and ethical communication

The public relations literature offers two opposing positions on the relationship between symmetrical communication and ethical communication. The first view postulates that ethical communication and symmetrical communication often coexist. For example, Grunig and his colleagues contended that the two-way symmetrical model reformulates public relations as a more ethical practice. Specifically, Grunig and Grunig (1996) held that "public relations

will be inherently ethical if it follows the principles of the two-way symmetrical model" (p. 40). They further wrote that it is possible to practice public relations both asymmetrically and ethically, but this combination is very difficult. Grunig and Grunig (1992) even contended that the two-way symmetrical model avoids the dilemma of ethical relativism inasmuch as it specifies ethics as a process of public relations rather than as an outcome. Likewise, Pearson (1989) noted, "it is a moral imperative to improve the quality of these communication relationships, that is, to make them increasingly dialogical [symmetrical]" (quoted in Grunig and Grunig, 1996, p. 40). The empirical research actually demonstrates that the symmetrical presuppositions of an organization can contribute to achieving several ethical characteristics of public relations, such as the concerns of ethics and social responsibility, and the empowerment of public relations in the dominant coalition (Karlberg, 1996; Lauzen and Dozier, 1994). Likewise, Culbertson (1995) suggested that three principles stand out to help define and explain truly effective public relations around the world: two-way symmetrical practice, well-trained and educated practitioners, and the empowerment of public relations in the dominant coalition.

The opposing view, however, considers symmetrical communication and ethical communication as two different conceptual dimensions (Grunig, 2001). Different from his previous argument, Grunig (2001) maintained that, although a symmetrical model should be inherently ethical, other models could be ethical, too, depending on the rules used to ensure ethical practice. He thus separated ethical communication and symmetrical communication as two different dimensions. Grunig's (2001) later argument is the basis for this paper's first Research Hypothesis.

Research Hypothesis 1. Ethical communication and symmetrical communication are fundamentally distinguishable, but inter-correlated, factors representing public relations practice.

Public relations effectiveness

The literature suggests that measuring public relations performance is complex, due to its multidimensional nature (see Hon, 1997; Huang, 2002). In order to provide a comprehensively analytical

framework of public relations performance, this paper first consults Huang's (2002) three direct-level measures of public relations effectiveness and then Heath's (2001) two paradigms of public relations values representing organizational effectiveness.

Huang (2002) used the following three measures to represent direct-level public relations effectiveness: organizational reputation (Grunig, 1993; Kim, 2001), communication effects (Bissland, 1990; Lindenmann, 1988, 1993, 1995), and organization–public relationships (Grunig and Huang, 2000; Huang, 2001b). Given the extensive and fruitful research that has already been conducted over the last two decades on the organization–public relationship, this paper will focus on exploring the other two performance measures of public relations effectiveness: organizational reputation and media exposure.

Organizational reputation

To date, public relations effectiveness has been investigated from the perspective of reputation management. Some published works have revealed that the ultimate aim of public relations is to communicate the reputation of the organization (e.g., Hon, 1997; Kim, 2001). Grunig (1993) considered reputation as representing the behavioral relationships of an organization with its publics. This paper adopts Grunig's (1993) and Huang's (2002) conceptualization and defines corporate reputation as the aggregate perception of an organization (Marken, 1990), which leads to Research Hypothesis 2.

Research Hypothesis 2. Symmetrical communication contributes to favorable organizational reputation.

Media exposure

Researchers have long investigated the communication effects of public relations with respect to (1) measures of communication output or media exposure, e.g., quantity of output, number of media contacts, and quality and quantity of media placements (see Bissland, 1990; Dozier and Ehling, 1992; Lindenmann, 1988; 1993; 1995), and (2) measures of communication effects, generally assumed to be awareness, interest, cognition, attitudes, or behavior (see Grunig, 1993; Hon, 1997). The basic assumption of examining the effect of public relations from the perspective of communication effects is that communicated messages should cause changes in knowledge, attitudes, and behavior among the targeted publics. In academia, measures of communication effect are more commonly used, whereas in the field of practical public relations, the most frequently used evaluation measures are communication outputs and media exposure (Bissland, 1990). In this study, the latter measure is investigated and this focus leads to Research Hypothesis 3.

Research Hypothesis 3. Symmetrical communication contributes to positive media exposure.

Revenue-generation effects of public relations value

Heath (2001) investigated the value of public relations from the perspective of organizational effectiveness, using two paradigms to define the value of public relations to organizations: revenue generation and cost reduction. He emphasized that public relations practitioners are interested in a revenue-generating paradigm, while scholars are interested in a cost-reducing paradigm so that the values that are often invisible would be accounted for. In this study, the measures of market input and overall organizational effectiveness are used to represent the revenue-generating paradigm, while conflict resolution and crisis management are adopted as measures for the cost-reducing paradigm.

Market input

With respect to the revenue-generating paradigm, the area encompassing marketing effects has been especially emphasized. Kim (2001) made it evident that public relations exert influence on organizations by increasing financial performance and company revenue. Kim (1997) also provided empirical evidence of the positive relations between a company's public relations and organizational returns across different industries and companies. Based upon the above discussion, Research Hypothesis 4 is posited.

Research Hypothesis 4. Symmetrical communication contributes to positive market performance.

Overall organizational effectiveness

Several published works have demonstrated that public relations positively influence organizational effectiveness in various ways (Huang, 2001a, b; Kim, 2001). Huang (2002) concluded that the wide

variety of measures of overall organizational effectiveness can be divided into those pertaining to long-term performance and short-term performance. In this research, the measure of *overall* organizational effectiveness, regardless of any specific aspect, is investigated. The basic assumption is that, as long as goals of the organization are achieved, whether long-term or short-term goals, then the overall organizational effectiveness of the activity being measured is demonstrated. Since most organizations consider the bottom line as an indication of the attainment of their corporate goals, achieving overall organizational effectiveness is categorized as a variable in the assessment of the revenue-generation affects of public relations value. The above discussion leads to Research Hypothesis 5.

Research Hypothesis 5. Symmetrical communication contributes to positive overall organizational effectiveness

Cost-reduction effects of public relations value

Conflict resolution

Grunig et al. (1997) maintained that excellent public relations contribute to organizational effectiveness by managing conflict and by reducing the costs of conflict that result from regulation, pressure, and litigation. Moreover, the literature seems to suggest the need for two-way symmetrical communication between organizations and activists (Anderson, 1992; Grunig, 1992b; Huang, 1994, 1997, 2001a; Pavlik, 1989). For example, Huang (1997) demonstrated that symmetrical communication could lead to cooperation from the organization's constituency in a conflict situation. Huang (2001a) further demonstrated that public relations could indeed reduce the conflicts between an organization and its stakeholders through favorable organization–public relationships that result from symmetrical communication. The above discussion leads to Research Hypothesis 6.

Research Hypothesis 6. Symmetrical communication contributes to conflict resolution.

Crisis management

Research has revealed that public relations contribute to organizational effectiveness via crisis management and crisis communications (Marra, 1998).

Appropriate response strategies help organizations pass through the challenges of media pressure and public criticism during crisis situations (Benoit and Brinson, 1999; Hearit, 1996). After the sudden death of Princess Diana, there was a popular perception that the British Royal Family did not fully share in the public's evident grief. The enormous public relations problem which resulted provoked the Queen of England to give an unprecedented speech. Benoit and Brinson (1999) investigated this highly public illustration of royal public relations and found the Queen's efforts to have been generally well conceived and effective in terms of crisis management. Therefore, Research Hypothesis 7 is posited.

Research Hypothesis 7. Symmetrical communication contributes to crisis management.

Method

Samples

Three surveys were undertaken to test the seven research hypotheses. The surveys, conducted on three independent samples, were designed to cross-validate the research findings. Information was collected from working public relations practitioners and their constituencies, not from student samples. The three survey data sets include (1) 301 questionnaires answered by legislators and their assistants in the Second Plenary Session of the Third Legislative Yuan in Taiwan from April to June in 1997,[1] (2) an island-wide survey of 1087 Taiwan residents on the issue of the construction of the fourth nuclear power plant, and (3) a survey of 326 public relations practitioners, from Taiwan's Top 500 companies and from PR agencies, concerning public relations practice.

To enhance the generalizability of the research findings, the three studies cover a variety of issues reflecting public relations practice, i.e., an executive – legislative relationship important to government public relations, a nuclear issue important to a public utility company's public relations practice, and generic aspects of public relations – such as organizational reputation, media exposure, and market input – important for corporate public relations practice. It should be noted that the above-mentioned research design ensures that the perspectives of goal attainment

(Mark et al., 1997) and strategic constituencies (Grunig, 1992a; Stone and Cutcher-Gershenfeld, 2002) are both included in this paper. The first and second data sets, which will be discussed later, were conducted in order to represent the perspective of strategic constituency, while the third data set is related to the organization's goal attainment.

Study 1

Legislators and their assistants in the Second Plenary Session of the Third Legislative Yuan in 1997 in Taiwan were surveyed, from the perspective of strategic constituency, in order to test the role of symmetrical communication in executive-legislative relations. All 758 legislative members and their assistants were contacted, of whom 301 returned valid questionnaires. The survey yielded a 0.45 response rate for all respondents and a 0.54 rate for legislative assistants. Forty-nine percent of the respondents were male, 51% were female. The educational level ranged from some high school to a doctoral degree. Political parties were represented in this sample in close proportion to their representation in the Second Plenary Session of the Legislative Yuan.

Study 2

An island-wide telephone survey addressed the controversy over the planned construction of Taiwan's fourth nuclear power plant and the proposed Taiwan Power Company (TPC). A random sample of Taiwan residents, aged 20 and above, was selected from a computer-generated randomized list, using the method of stratification according to cities, townships, and villages. 1495 residents were contacted by telephone in June of 1999, using the computer-assisted telephone interviewing (CATI) design. Four hundred and eight turned down the interview, yielding an effective sample of 1087 respondents. The response rate was 72.7%, with a sampling deviation of ±3.0% at a confidence level of 95%. Forty-eight percent were male, and the educational levels ranged from high school to a master's degree. This sample appears to have been representative of the island's population in terms of gender, age, and residential area, and to have captured the full range of TPC's constituencies' opinions, so as to represent the perspective of strategic constituency. Therefore, an investigation into TPC's activities in the area of public relations can provide valuable insight into the public relations effectiveness of symmetrical communication.

Study 3

In contrast to the previous two studies, Study 3 represents the organizational perspective. Three hundred and twenty six public relations practitioners, drawn from Taiwan's Top 500 companies and from public relations agencies, were surveyed. Sixty-six percent held bachelor's degrees and another 25% had achieved a graduate degree. The average age of the respondents was 36.61 years (SD = 10.28); 61% were female. Seventy percent served as in-house public relations representatives, while 30% were in public relations agencies. The average tenure of respondents in the Top 500 companies fell in the 0–6 years range (68.8%) and in the 0–4 years range (73.2%) for those in PR agencies.

Survey instrumentation

In Study 1, legislative members and their assistants were instructed to think about public relations activities conducted by the public relations practitioners in the governmental department which they contact most frequently. The respondents were then asked to indicate the statement that best described their perception of the public relations practice of that department. Similarly, the respondents in Study 2 were asked to assess the public relations practices employed by the TPC, particularly those connected with the nuclear issue. Thus, for the first and second studies, the survey instruments primarily evaluate an organization's perspective of public relations practice. In Study 3, public relations practitioners from agencies and Top 500 companies were asked to assess their own public relations practice and their contribution to the organization.

The judgmental measure – asking informants for their assessments of public relations practice – was used. It is worth noting that judgmental measures have been widely viewed as valid in many fields (Deshpande et al., 1993; Jaworski and Kohli, 1993) because significant evidence exists to indicate a close association between objective and perceptual measures of business performance (e.g., Dess and Robinson, 1984; Jaworski and Kohli, 1993; Pearce et al., 1987; Venkatraman and Ramanujam, 1987).

Symmetrical communication and ethical communication

A Likert-type scale − (1) *never*, (2) *seldom*, (3) *sometimes*, and (4) *often* − is used in the symmetrical and ethical communication measures. Measurement items are adopted from previously published, established scales (Dozier et al., 1995; Grunig, 1984; Huang, 1999). In Study 1, the items related to *symmetrical communication* are: (1) They not only tried to change our attitude and behavior, but also tried to change the attitude and behavior of the management at said department; (2) They tried to change their department's behaviors and policies after considering our opinions; (3) They consulted those influenced by their policies during decision making; and (4) Their main goal was to get us to do what they want.

The questions related to *ethical communication* are: (1) They considered how their public relations influenced us; (2) They provided us with accurate information; (3) They considered the public interest more than their own individual interests; (4) They considered the public's interests more than their own department's interests; (5) They engaged in open lobbying; (6) They engaged in private lobbying; and (7) They told us their motives and reasons for their actions.[2]

Performance variables

As previously mentioned, this paper tries to provide a comprehensive picture, reflecting as many aspects of public relations performance as possible. Six performance variables are investigated. Due to time and space limits on the three surveys, one item instead of a multi-item scale is used for measuring each outcome construct. Given that deficiency, the similar format of question wording for all performance measures is adopted so that a comparison across measures can be made.

The question for measuring *organizational reputation* in Study 2 is "Please rate the overall corporate image of the TPC on a 0–100 scale." In Study 3, the question is "Please rate the extent to which public relations contributes to the reputation of your organization (or clients) on a 0–100 scale?"[3]

The questions for measuring *media exposure* are "Please rate the TPC's overall communication per-

formance involving the nuclear issue in the mass media on a 0–100 scale" in Study 2, and "Please rate the extent to which public relations contributes to media coverage and exposure for your organization (or clients) on a 0–100 scale?" in Study 3.

To measure *market input*, the question asked in Study 2 is "Given a chance, would you change to a different utility company?" It should be noted that, since the item is negatively worded, the corresponding responses are reversed for statistical calculation. The discussion of results later in this paper will be based on reversed scores. The question posed in Study 3 to the public relations practitioners is "Please rate the extent to which public relations contributes to the market sales for your organization (or clients) on a 0–100 scale."

With the regard to *overall organizational effectiveness*, respondents in Study 2 were asked, "How acceptable do you find the continued construction of Taiwan's fourth nuclear power plant?" The major reason for asking this question is that the controversy over the proposed fourth nuclear power plant has gone on for over 30 years, and continuing with the construction of that plant is TPC's organizational mission. In Study 3, the question for measuring overall organizational effectiveness is "Please rate the extent to which public relations contributes to the achievement of goals for your organization (or clients) on a 0–100 scale."

Conflict resolution and *crisis management* are difficult to measure from the constituencies' perspective as designed in Study 2. Thus, questions are posed specifically involving the nuclear issue. The item for measuring conflict resolution is "Generally speaking, I am satisfied with TPC's problem definition and decision making on the nuclear issue," based upon the assumption that, given such a satisfaction, the possibility of protest would be reduced. On the grounds that trust is the essential component in crisis communication involving a nuclear issue (Fitchen, et al., 1987; Krimsky and Plough, 1988; National Research Council, 1989), the question posed is "Generally, how much do you trust TPC's ability to operate a nuclear power plant"? In Study 3, the questions posed for the measure of conflict resolution and crisis management are "Please rate the extent to which public relations contribute to conflict resolution for your organization (or clients) on a 0–100 scale" and "Please rate the extent to which

TABLE I

Mean and standard deviations of the items of symmetrical/ethical communication in the three data sets

Data set	Items	Mean	Standard deviation
Data set 1	B7: Considering the impact on us	2.75	0.81
	B8: Trying to change management	2.34	0.80
	B9: Consulting those influenced during decision making	2.38	0.86
	B10: Considering public interest	2.62	0.90
Data set 2	T9: For decisions about the interests of the public, TPC and the public have equal influence during communications.	2.72	0.91
	T21: When communicating about nuclear power, TPC took into account the public's opinions.	2.42	0.91
	T22: During the decision-making process, TPC consulted the public's opinions.	1.95	0.86
	T23: The public has enough channels to express opinions about the impact of nuclear power on them.	1.94	0.96
Data set 3	A13: We consulted those influenced by our policies and opinions during decision making.	3.36	0.77
	A14: During communication, we took into account the possible negative impact on the public.	3.69	0.57
	A15: We considered both their and our opinions and positions during communication.	3.81	0.44
	A16: We considered how our public relations influenced them.	3.76	0.48

public relations contribute to crisis management for your organization (or clients) on a 0–100 scale.''

In order to enhance *face validity*, a group of expert judges, including nine TPC public relations practitioners and 22 corporate public relations practitioners, were interviewed, before the three formal surveys were conducted, to explore the pertinence and accuracy of the initial pool of items intended to measure ethical communication and symmetrical communication.

Results and discussion

The first research hypothesis posits that ethical communication and symmetrical communication are fundamentally distinguishable, but inter-correlated, factors representing public relations practice.

Appendix 1 contains all measure scales testing performance measures in the studies 2 and 3. Table I provides an overview of construct means, standard deviations, and correlations. The items concerning symmetrical communication and ethical communication used for testing hypothesis 1 are first tested in Study 1 and then cross-validated in Studies 2 and 3. Factor analyses are adopted for testing this hypothesis, revealing that the four items measuring symmetrical communication are separated into two groups with B8, B9, and C7 grouped together, while Bl has singled itself out. Item C7 is then removed from the factor due to its low factor loading (Table II). Moreover, item B1 is also discarded, because it seems to belong to a different factor from the other items.

With regard to ethical communication, statistical results also reveal that two factors are extracted from

TABLE II
Factor loadings for symmetrical communication from data set 1

Variables	Loadings	
	Factor 1	Factor 2
B8: Trying to change management	0.84	0.13
B9: Consulting those influenced during decision making	0.78	0.05
C7: Getting us to do what they want (R)[a]	0.62	−0.55
B1: Trying to change management and us[a]	0.20	0.89
Eigenvalue	0.173	0.112
Percentage variance accounted for	43.40	28.10

R − indicates the item was reverse-scored.
[a] The item eventually was removed from the factor.

the seven items. Items A14 and A15 are fused together as one factor, and the other five are grouped as another. Items A14 and A15, which address lobbying, are removed first, inasmuch as they might be considered by the respondents to reflect the behaviors of lobbying itself, rather than the moral aspect of public relations that I am interested in investigating. Items Cl and C8 are also discarded, because of their low factor loadings, which leaves items B6, B7, and BIO in the factor (Table III).

As suggested in the Conceptualization section above, ethical communication and symmetrical communication often coexist. Therefore, in order to test the relationship between these two dimensions, a factor analysis is conducted to combine the remaining two items on symmetrical communication (B8 and B9) and the three items on ethical communication (B6, B7, B10) (see Table IV). The results show that, indeed, only one factor is extracted. After taking the theoretical propositions into account, these stated items are included in one factor and renamed as "symmetrical/ethical communication." This new factor is further tested for its reliability and validity across Study 2 and Study 3. The following criteria are tested: uni-dimensionality, internal consistency of items, and construct reliability.

Uni-dimensionality

For the purpose of testing the uni-dimensionality of symmetrical/ethical communication, further factor

TABLE III
Factor loadings for ethical communication from data set 1

Variables	Loadings	
	Factor 1	Factor 2
B7: Considering the impact on us	0.78	0.04
B10: Considering public interest more than individual interest	0.76	−0.11
B6: Disclosing their motives and reasons	0.75	−0.02
Cl: Providing accurate information[a]	0.60	−0.38
C8: Considering public interest more than department interest[a]	0.55	−0.18
A15: Private lobbying[a]	0.23	0.86
A14: Open lobbying[a]	0.24	0.84
Eigenvalue	2.53	1.63
Percentage variance accounted for	36.20	23.30

[a] The item eventually was removed from the factor.

TABLE IV
Factor loadings for symmetric/ethical communication
from data set 1

Variables	Loadings
	Factor 1
B7: Considering the impact on us	0.78
B10: Considering public interest	0.75
B8: Trying to change management	0.74
B9: Consulting those influenced during decision making	0.70
B6: Disclosing their motive and reasons[a]	0.69
Eigenvalue	2.68
Percentage variance accounted for	53.68

[a] The item eventually was removed from the factor.

analyses are conducted in Studies 2 and 3. These analyses indicate that this new dimension remains as one factor (Table V) across two independent samples. Moreover, the exploratory factor analyses demonstrate that the overall goodness of fit (Table VI) supports uni-dimensionality (Steenkamp and van Trijp, 1991). The CFIs of this factor across the three consecutive studies are 0.87, 0.99, and 0.98, respectively.

Internal scale consistency and construct reliability

The internal consistency of the items in the factor is measured by Cronbach's alpha and construct reliability. The Cronbach's alpha values in the first, second, and third studies are 0.75, 0.72, and 0.71. The construct reliabilities that result from dividing the amount of total standardized variance/covariances explained by a factor by the total amount of standardized variance/covariances, are 0.75, 0.74, and 0.76, respectively. A generally accepted benchmark for adequate internal consistency reliability is 0.80 (Nunally, 1978). On the other hand, having a construct reliability over 0.70 is generally considered to indicate "good" reliability (Miller, 1995). Of these two reliability tests, construct validity was relied upon more, because the statistical assumption underlining Cronbach's alpha is less applicable in this study. In summary, except for a comparatively low Cronbach's alpha in the second sample, which is of a nationwide, cross-sectional nature, the scale measure of symmetrical/ethical communication has acceptable and satisfactory uni-dimensionality, internal consistency of items, and construct reliability across three studies.

Validity

As previously stated, a group of expert judges, including nine TPC public relations practitioners and 22 corporate public relations practitioners, were interviewed to test the pool of items used to assure face validity. These interviews ensure that the measurement is comprehensible and each question can elicit a valid response. Moreover, convergent validity is supported by the fact that all factor loadings are significant ($p < 0.01$) and nearly all R^2 exceed 0.50 (Hildebrandt, 1987) (Table V).

Discussion

The empirical data across three studies suggest that two concepts, *teleology* and *symmetrical worldview*, play essential roles in the factor of symmetrical/ethical communication. In Study 1, the notion of an organization's willingness to make changes (symmetrical worldview) underlies items B8 and B9. Items B7 and B10 reflect the Ideological (or consequentialist) theory that suggests an organization should consider the impact of communication behavior on its constituencies and on the larger society (Grunig and Grunig, 1996). The notion of symmetrical/ethical communication is replicated in Studies 2 and 3. In summary, the attempt to differentiate symmetrical communication from ethical communication has been proven to be in vain. The empirical data show that the two factors, although hypothesized to be separate, end up grouped as one. The fusion of these two factors supports Grunig and Grunig's (1996) argument that "public relations will be inherently ethical if it follows the principles of the two-way symmetrical model" (p. 40). It is worth noting that the notion of disclosure (Bok, 1989), which is measured by the item "We explained our motives and reasons for our actions to them," is finally excluded in the measurement, due to its instability, demonstrated by the fact that its factor loading is borderline in Study 1, and by the fact that it is grouped in a different factor with the others items in Study 3.

TABLE V
Factor loadings and reliability test in the first, second and third data sets

Dimension	Items			Factor loadings		
	First data set	Second data set	Third data set	First data set	Second data set	Third data set
Symmetrical/ethical communication	B9: Consulting those influenced during decision making	T22: During the decision-making process, TPC consulted the public's opinions.	A13: We consulted those influenced by our policies and opinions during decision making.	0.75	0.83	0.55
	B10: Considering public interest	T9: For the decisions about the interests of the public, TPC and the public have equal influence during communications.	A14: During communication, we took into account the possible negative impact on the public.	0.77	0.53	0.76
	B8: Trying to change management	T21: When communicating about nuclear power, TPC took into account the public's opinions.	A15: We considered both their and our opinions and positions during communication.	0.79	0.82	0.84
	B7: Considering the impact on us	T23: The public has enough channels to express opinions about the impact of nuclear power on them.	A16: We considered how our public relations influenced	0.71	0.77	0.88
Construct reliability				0.75	0.74	0.76
Alpha				0.75	0.72	0.71
Eigenvalue				2.30	2.23	2.36
Percentage variance accounted for				57.50	55.81	58.90

TABLE VI

Summary of model-fit statistics for symmetrical/ethical communication

Data Set	χ^2	df	p-value	CFI	AGFI
First data set	18.111	1	<0.001	0.938	0.726
Second data set	10.289	1	<0.01	0.991	0.953
Third data set	6.921	1	<0.01	0.983	0.895

CFI = comparative fit index; AGFI = adjusted goodness-of-fit index; AIC = Akaike information criterion.

Having taken into account the appropriate properties of reliability and validity of symmetrical/ethical communication, the new dimension is used for hypothesis tests. Research Hypotheses 2 and 3 measure the public relations effectiveness of symmetrical communication involving favorable organizational reputation (H2) and positive media exposure (H3). These two hypotheses are partially supported. As shown in Table VII, the data indicate divergent results across two studies. In Study 3, symmetrical/ethical communication is an influential predictor of favorable organizational reputation and positive media exposure ($\beta = 0.181$, $p = 0.002$, and $\beta = 0.201$, $p = 0.001$, respectively). However, such significant relationships do not appear in Study 2.

Research Hypotheses 4 and 5 measure the revenue-generating effects of public relations value; that is, whether symmetrical communication contributes to market input (H4) and overall organizational effectiveness (H5). These two hypotheses are fully supported. The results indicate that symmetrical/ethical communication effectively predicts market input and overall organizational effectiveness across two independent samples. In Study 2, the results

reveal that symmetrical/ethical communication is a predictor of market input ($\beta = 0.363$, $p < 0.001$) and favorable agreement on the construction of the fourth nuclear power plant ($\beta = 0.365$, $p < 0.001$). The results of Study 3 are used to cross-validate the findings from Study 2. The results demonstrate that the respondents' self-assessed symmetrical/ethical communication have substantial power in predicting market sales ($\beta = 0.120$, $p = 0.042$) and overall organizational effectiveness ($\beta = 0.120$, $p = 0.040$).

Research Hypotheses 6 and 7 explore the cost-reducing effects of public relations value; that is, whether symmetrical communication contributes to conflict resolution (H6) and crisis management (H7). These two hypotheses are also fully supported across two samples. In Study 2, symmetrical/ethical communication effectively predicts the capacity for conflict resolution, which is demonstrated by the fact that the public is satisfied with TPC's problem definition and decision making on the nuclear issue ($\beta = 0.479$, $p < 0.001$). Symmetrical/ethical communication also has predictive power for crisis management, because the public trusts TPC's ability to operate a nuclear power plant ($\beta = 0.481$,

TABLE VII

Regression analyses of symmetrical/ethical communication on performance measures in data sets 2 and 3

Performance measures	Second data set					Third data set				
	R	R^2	β	t	sig	R	R^2	β	t	sig
Organization reputation	0.068	0.005	0.068	1.302	0.194	0.181	0.033	0.181	3.133	0.002
Media exposure	0.066	0.004	0.066	1.276	0.203	0.201	0.040	0.201	3.488	0.001
Market performance	0.363[a]	0.132	0.363[a]	7.090	0.000	0.120	0.015	0.120	2.041	0.042
Overall effectiveness	0.365	0.134	0.365	7.392	0.000	0.120	0.014	0.120	2.059	0.040
Conflict resolution	0.479	0.229	0.479	9.299	0.000	0.131	0.017	0.131	2.023	0.044
Crisis communication	0.481	0.231	0.481	10.218	0.000	0.136	0.018	0.136	2.097	0.037

[a] The item is negatively worded. The corresponding responses are reversed for statistical calculation.

$p < 0.001$). In Study 3, symmetrical/ethical communication can effectively predict the respondents' self-assessment that the conflicts between organizations and their stakeholders can be resolved ($\beta = 0.131$, $p < 0.05$) and that crises can be managed ($\beta = 0.136$, $p < 0.05$). The causal paths from symmetrical/ethical communication to conflict resolution and crisis management are both statistically significant at the 0.05 level. In summary, the results indicate that symmetrical/ethical communication has a mild to moderate influence, across two studies, on these two cost-reduction measures which are theoretically important for the effectiveness of public relations (Heath, 2000).

Discussion for Research Hypotheses 2–7

The effects of symmetrical/ethical communication on performance measures can be discussed from two standpoints. First, there are convergent and divergent findings in the two studies. The convergent results are that the respondents perceive an organization's use of symmetrical communication as inherently ethical, and that it positively affects their assessment of market intentions or market sales, the overall organizational performance, and the organization's capacity for conflict resolution and crisis management. On the other hand, the divergent results reveal that symmetrical/ethical communication was a predictor of positive organizational reputation and media coverage in Study 3, but not in Study 2, which suggests that such hypothesized relationships should be considered suggestive rather than conclusive. The factor contributing to the insignificant associations in Study 2 may be due to the specific context. The construction plan for the fourth nuclear power plant has been postponed for more than 30 years; so many years of heated controversy and public antagonism may have resulted in the public's negative stereotype and the media's negatively inclined coverage of the proposed entity, the TPC.

Second, comparing the path strengths in two studies, most of the paths in Study 2 are of moderate size, while those in Study 3 are mild. Specifically, in Study 2, the paths ranged between 0.3 and 0.4, i.e., conflict resolution ($\beta = 0.479$, $p < 0.001$) and crisis management ($\beta = 0.481$, $p < 0.001$), followed by two revenue-generating measures, i.e., overall

organizational effectiveness ($\beta = 0.365$, $p < 0.000$) and market input ($\beta = 0.363$, $p < 0.000$). In Study 3, however, except for media exposure, for which the path is over 0.2, and organizational reputation, for which the path reaches 0.2, all the other paths remain under 0.15. The divergent results of path strengths between the studies might result from two factors. The first factor is the nature of the questions posed. The questions in Study 2 are directed to a specific issue, the nuclear power issue, while those in Study 3 are general and non-focused. Public relations practices exert more evident effects on specific, focused issues than on general ones. The second factor also is concerned with the nature of measurement. Study 2 is investigated from the perspective of constituencies while Study 3 is investigated from the perspective of organizations. The difference between these two approaches deserves more future research.

Conclusion

Summary of the findings

The relationship between symmetrical communication and ethical communication

In this study, factor analyses are conducted in response to the question: Is symmetrical communication inherently ethical? Symmetrical communication is conceptualized by focusing on the organization's intent to initiate changes, in contrast to merely trying to change the cognitions, attitudes, or behaviors of the publics. The conceptualization of ethical communication includes three focal concepts: teleology, disclosure, and social responsibility. The attempt to differentiate symmetrical communication from ethical communication, however, proves to be in vain. Although hypothesized to be separate, the empirical data show that the two factors eventually are grouped as one. The fusion of these two factors supports Grunig and Grunig's (1996) argument that "public relations will be inherently ethical if it follows the principles of the two-way symmetrical model" (p. 40). The focal notions underlying the items in the resultant factor "symmetrical/ethical communication" include symmetrical worldview and teleology.

The effects of symmetrical/ethical communication on performance measures

The second purpose of this paper is to explore the effects of symmetrical communication, which are tested in Study 2 and Study 3. Table VII indicates that across two independent samples, the significant relationships between symmetrical/ethical communication and all performance variables are in the hypothesized, positive direction, except media exposure (H2) and organizational reputation (H3), which are only partially supported. These results provide strong empirical evidence for the cross-validation of the hypotheses posited in the Conceptualization section, which is especially noteworthy given that the samples examined differ considerably in their demographic, economic, and issue dimensions, and in their goal-attainment and strategic-constituency perspectives. After examining H4 to H7, which explicate the associations between symmetrical communication and two revenue-generation-related variables as well as two cost-reducing measures, consistent patterns of effects exist across two independent samples, i.e., symmetrical communication has more predictive power with respect to conflict resolution and crisis management, i.e., two cost reducing measures than market input and overall organizational effectiveness, i.e., two revenue-generation-related variables.

Implications for theory

Five theoretical implications of these results stand out.

First, the results replicate the findings of Grunig and White (1992) and Grunig et al. (1997) in that symmetrical/ethical communication, a critical component of excellent public relations, indeed contributes to several performance measures. Specifically, from the perspectives of both organizations and their constituencies, an organization's use of symmetrical/ethical communication can predict most of the positive performance outcomes proposed in this study.

Second, the empirical evidence of this study challenges the criticism that the symmetrical worldview is unrealistic (Van der Meiden, 1993), by revealing that symmetrical communication actually serves organizations' interests.

Third, this study also shows that the relationship between the *generic* principle of public relations, i.e., symmetrical communication, and its effect is indeed universal and generic to different cultures, replicating the findings of the Excellence Study (Grunig et al., 1997). In Taiwan, as in the United States, Canada, and the United Kingdom, symmetrical communication appears to contribute to various aspects of public relations effectiveness and organizational effectiveness. These findings support Culbertson's (1995) assertion that a symmetrical practice helps define and explain truly effective public relations.

Fourth, following the suggestion of Grunig and Grunig (1996), this study moves beyond the four static public relations models and uses a continuous dimension – symmetrical communication – to represent public relations strategies. A series of factor analyses and reliability tests further demonstrate the viability of using symmetrical communication to describe an organization's public relations practice.

Fifth, the empirical result involving H6 helps to demonstrate the relationship between symmetrical communication and conflict resolution, contradicting previous work (Grunig, 1992b; Huang, 1994, 2001a) by demonstrating that symmetrical/ethical communication can directly lead to conflict resolution.

Implications for future studies

This study has sought a systematic understanding through the inclusion of several performance measures and has tested their relationships with symmetrical/ethical communication. This attempt is guided by a theoretical framework and comprehensive conceptualization, and has been tested on three independent samples. I believe it can serve as an adequate starting point for further research to investigate the variables involved and the relationships considered. The following future research directions are suggested.

First, the critical next step should be qualitative research to explore in-depth contextual information as the basis for further data interpretation (Marshall and Rossman, 1995; McCracken, 1988). As suggested in Sypher (1990), qualitative research can "bring to life the nuances of work life and talk"

(pp. 3–4). The findings should generate insight by exploring questions drawn from this study: What is the role of cultural factors on symmetrical communication and ethical communication? Does they play any role in the fusion of these two factors?

Second, replication procedures are critical in order to further cross-validate the results obtained in this study. Concepts and relationships could be tested on different samples and cultures.

Third, the findings concerning the effects of symmetrical/ethical communication on media coverage and organizational reputation should be viewed as being suggestive rather than conclusive, because only one study confirms the hypothesized relationships. A replication of other studies could help to ensure the generalizability of the findings.

Fourth, as stated before, the concept of disclosure is not included in the measure, because of its unstable factor properties. Future research could explicate this notion conceptually and operationally. Moreover, the cultural implications of the notion of disclosure are also worth additional exploration, because of the discrepancy between the Oriental and Western views of the fundamental purpose and nature of communication. Chinese communication style tends to be high-context, in contrast to the Western low-context style (Gao and Ting-Toomey, 1998; Gudykunst et al., 1996). On the other hand, Scollon and Scollon (1994) suggest that, in Western cultures, the purpose of communication is information exchange. By contrast, people in Asian cultures communicate for the purpose of relationship building and maintenance; they emphasize relationships over communication. It is therefore logical to question whether cultural difference is the factor that results in the exclusion of disclosure from symmetrical/ethical communication in this paper. The role of culture on the relationship between disclosure and symmetrical/ethical communication is worth further exploration.

Lastly, it is worth noting that comparisons among the path strengths of regression tests reveal, surprisingly, that the effect sizes from constituencies' perspective (Study 2) are higher than those from organizations' perspective (Study 3). Does this mean that symmetrical/ethical communication is more valued by the constituencies than by the organizations themselves? Or is symmetrical/ethical communication undervalued from a goal-attainment perspective? Such questions may also deserve special attention in future research.

Acknowledgements

Appendix 1

Items testing performance measures in Study 2 and Study 3

Study 2
Organizational reputation
   Please rate the overall corporate image of TPC on a 0–100 scale.
Media exposure
   Please rate TPC's overall communication performance involving the nuclear issue in
   the mass media on a 0–100 scale.
Market input[a]
Given a chance, would you change to a different utility company?
Overall organizational effectiveness
   How acceptable do you find the continued construction of Taiwan's fourth nuclear power plant?
Conflict resolution
   Generally speaking, I am satisfied with TPC's problem definition and decision making on the nuclear issue.

Appendix 1. (*Continued*)

Crisis management

Generally, how much do you trust TPC's ability to operate a nuclear power plant?

Study 3

Organizational reputation

Please rate the extent to which public relations contributes to the reputation of your organization (or clients) on a 0–100 scale.

Media exposure

Please rate the extent to which public relations contributes to the media coverage and exposure for your organization (or clients) on a 0–100 scale.

Market input

Please rate the extent to which public relations contributes to the market sales for your organization (or clients) on a 0–100 scale.

Overall organizational effectiveness

Please rate the extent to which public relations contributes to the achievement of goals for your organization (or clients) on a 0–100 scale.

Conflict resolution

Please rate the extent to which public relations contribute to conflict resolution for your organization (or clients) on a 0–100 scale.

Crisis management

Please rate the extent to which public relations contribute to crisis management for your organization (or clients) on a 0–100 scale.

[a] Since the item is negatively worded, the corresponding responses are reversed for statistical calculation.

Notes

[1] The data was collected for and reported in Huang's (1997) unpublished dissertation. Partial statistical results of the PRSA scale, such as reliability efficiencies and the model CFI were presented at the 1998 AEJMC conference (Huang, 1998).

[2] The respondents in the pre-tests maintained that the concept of moral responsibility was ambiguous. Thus, I use "engaging in public lobbying" and "engaging in private lobbying" to clarify the concept. Likewise, pre-test respondents indicated that they did not understand the notion of social responsibility. After having it tested in three pre-tests, I eliminated the item involving social responsibility and instead use two items involving public interest to measure this similar notion.

[3] The questions addressing the clients are specifically directed to those respondents working in public relations agencies.

References

Amba-Rao, S. C.: 1993, 'Multinational Corporate Social Responsibility, Ethics, Interactions and Third World Governments: An Agenda for the 1990s', *Journal of Business Ethics* **12**, 553–572.

Anderson, D. S.: 1992, 'Identifying and Responding to Activist Publics: A Case Study', *Journal of Public Relations Research* **4**, 151–165.

Benoit, W. L. and S. L. Brinson: 1999, 'Queen Elizabeth's Image Repair Discourse: Insensitive Royal or Compassionate Queen?', *Public Relations Review* **25**(2), 29–41.

Bissland, J. H.: 1990, 'Accountability Gap: Evaluation Practices Show Improvement', *Public Relations Review* **10**, 3–12.

Bivins, T. H.: 1987, 'Applying Ethical Theory to Public Relations', *Journal of Business Ethics* **6**, 195–200.

Bok, S.: 1989, *Secrets on the Ethics of Concealment and Revelation* (Vintage Books, New York).

Carrol, A. B.: 1991, 'The Pyramid of Corporate Social Responsibility Toward the Moral Management of Organizational Stakeholders', *Business Horizons* **34**, 39–48.

Culbertson, H.: 1995, 'Introduction', in H. Culbertson and N. Chen (eds.), *International Public Relations: A Comparative Analysis* (Lawrence Erlbaum Associates, Mahwah, NJ), pp. 1–16.

Deshpande, R., J. U. Farley and F. E. Webster Jr.: 1993, 'Corporate Culture, Customer Orientation, and Innovativeness', *Journal of Marketing* **57**(1), 23–27.

Dess, G. G. and R. B. Robinson: 1984, 'Measuring Organizational Performance in the Absence of Objective Measures: The Case of the Privately Held Firm and Conglomerate Business Unit', *Strategic Management Journal* **5**, 265–273.

Donaldson, T.: 1989, *The Ethics of International Business* (Oxford University Press, New York).

Dozier, D. M. and W. P. Ehling: 1992, 'Evaluation of Public Relations Programs: What the Literature Tells Us About Their Effects', in J. E. Grunig (ed.), *Excellence in Public Relations and Communications Management* (Lawrence Erlbaum Associates, Hillsdale, NJ), pp. 159–185.

Dozier, D. M., L. A. Grunig and J. E. Grunig: 1995, *Manager's Guide to Excellence in Public Relations and Communication Management* (Lawrence Erlbaum Associates, Hillsdale, NJ).

Fitchen, J. M., J. S. Hearth and J. Ressenden-Raden: 1987, 'Risk Perception in Community Context: A Case Study', in B. B. Johnson and V. T. Covello (eds.), *The Social and Cultural Construction of Risk: Essays on Risk Selection and Perception* (D. Reidel Association, Dordrecht, Holland), pp. 31–50.

Gao, G. and S. Ting-Toomey: 1998, *Communicating Effectively with the Chinese* (Sage, Thousand Oaks, CA).

Grcic, J.: 1989, *Moral Choices: Ethical Theories and Problems* (West Publishing, St. Paul, MN).

Grunig, J. E.: 1984, 'Organizations, Environments, and Models of Public Relations', *Public Relations Research & Education* **1**, 6–29.

Grunig, J. E.: 1989, 'A Situational Theory of Environmental Issues, Publics, and Activists', in L. A. Grunig (ed.), *Environmental Activism Revisited: The Changing Nature of Communication Through Organizational Public Relations, Special Interest Groups and the Mass Media* (The North American Association for Environmental Education, Troy, OH), pp. 50–82.

Grunig, J. E. (ed.): 1992a, 'Communication, Public Relations, and Effective Organizations: An Overview of the Book', *In Excellence in Public Relations and Communication Management* (Lawrence Erlbaum Associates, Hillsdale, NJ), pp. 1–30.

Grunig, L. A.: 1992b, 'Toward the Philosophy of Public Relations', in E. L. Toth and R. L. Heath (eds.), *Rhetorical and Critical Approaches to Public Relations* (Lawrence Erlbaum Associates, Hillsdale, NJ), pp. 65–91.

Grunig, J. E.: 1993, 'Image and Substance: From Symbolic to Behavioral Relationships', *Public Relations Review* **19**(2), 121–139.

Grunig, J. E.: 2001, 'Two-way Symmetrical Public Relations: Past, Present, and Future', in R. L. Heath (ed.), *Handbook of Public Relations* (Sage, Thousand Oaks, CA), pp. 11–30.

Grunig, J. E. and L. A. Grunig: 1992, 'Models of Public Relations and Communicatio', in J. E. Grunig (ed.), *Excellence in Public Relations and Communication Management* (Lawrence Erlbaum Associates, Hillsdale, NJ), pp. 285–325.

Grunig, J. E. and L. A. Grunig: 1996, 'Implications of Symmetry for a Theory of Ethics and Social Responsibility in Public Relations', in Public Relations Interest Group (International Communication Association, Chicago, IL).

Grunig, J. E. and Y. H. Huang: 2000, 'From Organizational Effectiveness to Relationship Indicators: Antecedents of Relationships, Public Relations Strategies, and Relationship Outcomes', in J. Ledingham and S. D. Bruning (eds.), *Public Relations as Relationship Management: A Relational Approach to the Study and Practice of Public Relations* (Lawrence Erlbaum Associates, Mahwah, NJ), pp. 23–53.

Grunig, J. E. and T. Hunt: 1984, *Managing Public Relations* (Holt, Rinehart, Winston, New York).

Grunig, J. E. and J. White: 1992, 'The Effect of Worldviews on Public Relations Theory and Practice', in J. E. Grunig (ed.), *Excellence in Public Relations and Communication Management* (Lawrence Erlbaum Associates, Hillsdale, NJ), pp. 31–64.

Grunig, L. A., J. E. Grunig and W. P. Ehling: 1992, 'What is an Effective Organization?', in J. E. Grunig (ed.) *Excellence in Public Relations and Communication Management: Contributions to Effective Organizations* (Lawrence Erlbaum Associates, Hillsdale, NJ), pp. 65–89.

Grunig, J. E., L. A. Grunig, K. Sriramesh, Y. H. Huang and A. Lyra: 1995, 'Models of Public Relations in an International Setting', *Journal of Public Relations Research* **7**(3), 163–187.

Grunig, L. A., J. E. Grunig and D. Vercic: 1997, 'Are the IABC's Excellence Principles Generic? Comparing Slovenia and the United States, the United Kingdom and Canada', *Journal of Communication Management* **2**, 335–356.

Gudykunst, W. B., Y. Matsumoto, S. Ting-Toomey, T., Nishida, K. S. Kim and S. Heyman: 1996, 'The Influence of Cultural Individualism–Collectivism, Self Construals, and Individual Values on Communication Styles Across Cultures', *Human Communication Research* **22**, 510–543.

Hearit, K. M.: 1996, 'The Use of Counter-Attack in Apologetic Public Relations Crises: The Case of

General Motors vs. Dateline NEC', *Public Relations Review* **22**(3), 233–248.

Heath, R. L.: 1992a, 'The Wrangle in the Marketplace: A Rhetorical Perspective of Public Relations', in E. L. Toth and R. L. Heath (eds.), *Rhetorical and Critical Approaches to Public Relations* (Lawrence Erlbaum Associates, Hillsdale, NJ), pp. 17–36.

Heath, R. L.: 1992b, 'Critical Perspectives on Public Relations', in E. L. Toth and R. L. Heath (eds.), *Rhetorical and Critical Approaches to Public Relations* (Lawrence Erlbaum Associates, Hillsdale, NJ), pp. 37–64.

Heath, R. L.: 2000, 'A Rhetorical Perspective on the Values of Public Relations: Crossroads and Pathways Toward Concurrence', *Journal of Public Relations Research* **12**(1), 49–68.

Heath, R. L. (ed.): 2001, 'Shifting Foundations: Public Relations as Relationship Building', in *Handbook of Public Relations* (Sage, Thousand Oaks, CA), pp. 1–10.

Hildebrandt, L.: 1987, 'Consumer Retail Satisfaction in Rural Areas: A Reanalysis of Survey Data', *Journal of Economic Psychology* **8**, 19–42.

Hon, L. C.: 1997, 'What Have You Done for Me Lately? Exploring Effectiveness in Public Relations', *Journal of Public Relations Research* **9**(1), 1–30.

Huang, Y. H.: 1994, *Ke chi feng hsien yu huan pao kang cheng: Tai-wan min chung feng hsien jen chih ke an yen chiu* [*Technological Risk and Environmental Activism: Case Studies of Public Risk Perception in Taiwan*] (Wunan, Taipei) (in Chinese).

Huang, Y. H.: 1997, 'Public Relations, Organization–Public Relationships, and Conflict Management', Unpublished doctoral dissertation, (University of Maryland, College Park, MD).

Huang, Y. H.: 1998, 'Public Relations Strategies and Organization–Public Relationships', in Association for Education in Journalism and Mass Communication, Baltimore, MD, USA, August 5–8, 1998.

Huang, Y. H.: 1999, 'The Effects of Public Relations Strategies on Conflict Management', in 49th Annual Conference of the International Communication Association, San Francisco, CA, May 27–31, 1999.

Huang, Y. H.: 2001a, 'Values of Public Relations: Effects on Organization–Public Relationships Mediating Conflict Resolution', *Journal of Public Relations Research* **13**(4), 265–301.

Huang, Y. H.: 2001b, 'OPRA: A Cross-Cultural, Multiple-Item Scale for Measuring Organization–Public Relationships', *Journal of Public Relations Research* **13**(1), 61–91.

Huang, Y. H.: 2002, 'The Impact of Public Relations Effectiveness on Organizational Effectiveness: A Case Study in Taiwan', in Chinese Communication Division, the Association for Education in Journalism and Mass Communication. Baltimore, Miami Beach, FL, August 7–10.

Jaksa, A. A. and M. S. Pritchard: 1994, *Communication Ethics: Methods of Analysis* (Wadsworth, Belmont, CA).

Jaworski, B. J. and A. K. Kohli: 1993, 'Market Orientation: Antecedents and Consequences', *Journal of Marketing* **57**(3), 53–70.

Karlberg, M.: 1996, 'Remembering the Public in Public Relations Research: From Theoretical to Operational Symmetry', *Journal of Public Relations Research* **8**(4), 263–278.

Kim, Y.: 2001, 'Measuring the Economic Value of Public Relations', *Journal of Public Relations Research* **13**(1), 3–26.

Krimsky, S. and A. Plough: 1988, *Environmental Hazards: Communicating Risks as a Social Process* (Auburn House, Massachusetts).

Lauzen, M. L. and D. M. Dozier: 1994, 'Issues Management Mediation of Linkages Between Environmental Complexity and Management of the Public Relations Function', *Journal of Public Relations Research* **6**(3), 163–184.

Leichty, G. and J. Springston: 1993, 'Reconsidering Public Relations Models', *Public Relations Review* **19**(4), 327–339.

Lindenmann, W. K.: 1988, 'Beyond the Clipbook', *Public Relations Journal* **44**(12), 22–26.

Lindenmann, W. K.: 1993, 'An Effectiveness Yardstick to Measure Public Relations Success', *Public Relations Quarterly* **38**(1), 7–9.

Lindenmann, W. K.: 1995, 'Measurement: It's the Hottest Thing These Days in PR', speech given to the PRSA Counselors Academy, Key West, FL. (Available from Ketchum Public Relations, 220 East 42nd Street, New York, NY 10017).

Mark, B. A., J. Salyer and N. Geddes: 1997, 'Outcomes Research-Clues to Quality and Organizational Effectiveness?', *Nursing Clinics of North America* **32**(3), 589–601.

Marken, G A.: 1990, 'Corporate Image: We All Have One, But Few Work to Protect and Project It', *Public Relations Quarterly* **35**(1), 21–23.

Marra, F. J.: 1998, 'Crisis Communication Plans: Poor Predictors of Excellent Crisis Public Relations', *Public Relations Review* **24**(4), 461–474.

Marshall, C. and G. B. Rossman: 1995, *Designing Qualitative Research*, 2nd edition (Sage, Thousand Oaks, CA).

McCracken, G: 1988, *The Long Interview* (Sage, Beverly Hills, CA).

Miller, G. R.: 1989, 'Persuasion and Public Relations: Two "Ps" in a Pod', in C. H. Botan and V. Hazleton (eds.), *Public Relations Theory* (Lawrence Erlbaum Associates, Hillsdale, NJ), pp. 45–66.

Miller, M. B.: 1995, 'Coefficient Alpha: A Basic Introduction From the Perspective of Classical Test Theory and SEM', *Structural Equation Modeling* **2**, 255–273.

Murphy, P.: 1991, 'The Limits of Symmetry: A Game Theory Approach to Symmetric and Asymmetric Public Relations', in L. A. Grunig and J. E. Grunig (eds.), *Public Relations Research Annual*, Vol. 3 (Lawrence Erlbaum Associates, Hillsdale, NJ), pp. 115–131.

Naor, J.: 1982, 'A New Approach to Multinational Social Responsibility', *Journal of Business Ethics* **1**, 219–225.

National Research Council: 1989, *Improving Risk Communication* (National Academy, Washington, DC).

Nelson, R. A.: 1994, 'Issues Communication and Advocacy: Contemporary Ethical Challenges', *Public Relations Review* **20**, 225–231.

Nunally, J. C.: 1978, *Psychometric Theory,* 2nd Edition (McGraw-Hill Book Co., New York).

Pavlik, J. V.: 1989, *Public Relations: What Research Tells Us* (Sage, Newbury Park, CA).

Pearce, J., K. Robbins and R. Robinson: 1987, 'The Impact of Grand Strategy and Planning Formality on Financial Performance', *Strategic Management Journal* **8**, 125–134.

Pearson, R.: 1989, 'Beyond Ethical Relativism in Public Relations: Coorientation, Rules, and the Idea of Communication Symmetry', in J. E. Grunig and L. A. Grunig (eds.), *Public Relations Research Annual,* Vol. I (Lawrence Erlbaum Associates, Hillsdale, NJ), pp. 67–86.

Reinsch, N. L.: 1990, 'Ethics Research in Business Communication: The State of the Art', *Journal of Business Communication* **27**(3), 251–272.

Scollon, R. and S. W. Scollon: 1994, 'Face Parameters in East-West Discourse', in S. Ting-Toomey (ed.), *The Challenge of Facework* (State University of New York Press, New York), pp. 1–14.

Sethi, S. P.: 1975, 'Dimensions of Corporate Social Performance: An Analytical Framework', *California Management Review* **12**, 58-64.

Steenkamp, J. B. E. M. and H. C. M. van Trijp: 1991, 'The Use of LISREL in Validating Marketing Constructs', *International Journal of Research in Marketing* **8**, 283–299.

Stone, M. M. and S. Cutcher-Gershenfeld: 2002, 'Challenges of Measuring Performance in Non-Prof it Organizations', in V. A. Hodgkinson and P. Flynn (eds.), *Measuring the Impact of the Non-Profit-Sector* (Jossey-Bass, San Francisco, CA).

Sun, H. H.: 1994, 'Huan Bao Tuan Ti De Gong Gong Guan Xi Ce Lua Zhi Tan Tao [Revisiting the Public Relations Strategies of Environmental Protection Group]', *Journal of Advertising and Public Relations* **3**, 159–185, in Chinese.

Sypher, B. D.: 1990, *Case Studies in Organizational Communication* (Guilford, New York).

Van der Meiden, A.: 1993, 'Public Relations and "Other" Modalities of Professional Communication: Asymmetric Presuppositions for a New Theoretical Discussion', *International Public Relations Review* **16**(3), 8–11.

Venkatraman, N. and V. Ramanujam: 1987, 'Measurement of Business Economic Performance: An Examination of Method Congruence', *Journal of Management* **13**(1), 109–122.

White, J. and D. M. Dozier: 1992, 'Public Relations and Management Decision Making', in J. E. Grunig (ed.), *Excellence in Public Relations and Communication Management* (Lawrence Erlbaum Associates, Hillsdale, NJ), pp. 91–107.

Department of Advertising,
National Cheng-Chi University,
64, Sec. 2, Chi-Nan Rd. Wen Shan,
116 Taipei,
Taiwan, ROC
E-mail: yhuang@nccu.edu.tw