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## Public relations communication through corporate websites: Towards an understanding of the role of interactivity.

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Petter Alexander Gustavsen  
Bond University  
&  
Elspeth Tilley  
Bond University & University of Queensland

*This paper examines the use of interactivity in corporate web sites. It has frequently been argued that today's designers and developers are not taking full advantage of the Internet unless they emphasise interactivity. In public relations communication in particular, "interactive" has become a "buzzword" (Whitaker, Ramsey, & Smith, 2000, p. 350; Wilcox, 2001, p. 388). Public relations writing textbook chapters on online communication emphasise "making the site interactive" because this is "a unique characteristic...which traditional mass media does not offer" (Wilcox, 2001, p. 387). Rarely, however, is the concept defined, which makes determining strategies and establishing measurements for interactive online public relations difficult. This article overviews different theories of interactivity before selecting a definition that offers six practical components - user control, responsiveness, real time interaction, connectedness, personalisation, and playfulness - that might provide clear pathways for and measures of interactivity in online public relations. These six components are then used to analyse 16 corporate web sites for interactive features. The low levels of interactivity identified in the sites may suggest that online public relations is not as interactive as it could be or, alternatively, that it's already as interactive as it needs to be. Either way, the 'buzz' of the terminology is not translating into the reality of today's corporate sites. The finding points to the need for further investigation and clarification of how public relations effectiveness and interactivity are identified and measured on the web.*

Profound announcements about the importance of interactivity have become commonplace, both in academic and industry

circles. Jankowski and Hansen argue that interactivity is "widely considered one of the core concepts in theorizing about new communication technology" (Hansen, Jankowski & Etienne, 1996, p. 9). Advertising executive Peter Georgescu told an industry magazine that, "In a relationship-driven world, the key ingredient to successful media will be interactivity" (Georgescu, cited in Leckenby & Li, 2000, n.p.). Holzschlag (2001) argues that, while most web developers have good knowledge of usability, interface design, and web design, few pay enough attention to interactivity. Despite this depth of feeling about interactivity, however, there is no consensus about precisely what the term means (Hannon & Atkins, 2002; Holzschlag, 2001; Jensen, 1999). Many different definitions exist, none of which cover all types of interactivity (Pavlik, 1998). Heeter (2000) argues that "the word interactivity and its derivatives are used to represent so many different meanings that the word muddles rather than clarifies the speaker's intent" (n.p.).

Multiple definitions of interactivity make practical application of the concept difficult. Particularly in the arena of online public relations, where content is likely to be the province of the specialist public relations practitioner and design under the control of the web builder, miscommunication about what constitutes interactivity can be a real barrier to producing a website that serves its PR objectives. Fleming (1998) suggests that one of the most common misunderstandings of interactivity is its conflation with usability. Usability measures how easy a site is to operate (e.g. find information within, navigate) and how helpful a site is in "completing the goals at hand" (Fleming, 1998, p. 234; Spool, Scanlon, Schroeder, Snyder, & DeAngelo, 1999).

Interactivity refers (in various ways) to the levels of reciprocity provided by a site during the process of using it. A well designed highly interactive site may sometimes also be more useable but the two are not synonymous. To assist public relations practitioners and web designers to speak the same language when discussing interactivity, this article provides an overview of interactivity theory and suggests a definition that both parties might find useful.

Various descriptions and taxonomies of interactivity have been constructed during the past 20 years. In 1983 Bretz described three criteria that must be fulfilled for a system to be interactive:

First, a message must be conveyed from communicator A to another communicator B; second, there must be a response from B intended for A and based on what A already said. Finally, there must be a response or reaction from A to B, based on B's earlier response. (Bretz, 1983, p. 13)

Bretz (1983) defines a communicant as "either a human or a sophisticated machine" (p. 137). The definition would include, then, internet technology found on a server hosting web sites, in which the most basic of three-step cause-effect chains occurred. For example, a user clicked on a link, was taken to a specific page in response to the interpretation by the host server of that link-click as a request for specific information, and then, to fulfil Bretz's (1983) third criteria, the user clicked again on another new link now visible on the new page. Hyperlink technology of this kind has led to the web being described as an 'interactive medium'. In common web parlance, however, hyperlink technology is usually thought of as simple functionality, not the more sophisticated responsiveness implied by current usage of the term 'interactivity'. As Meikle (2002) points out, the website that only provides hyperlinks is "no more interactive than a jukebox; the selections are predetermined and we simply click on our choice" (2002, p. 29).

Another theoretical conceptualisation of interactivity comes from Durlak (1987), who

studied "the intentions" of "interactive media systems" developers (p. 744). He identifies three main objectives: (1) simulate face-to-face communication, (2) maintain the illusion, and (3) create new possibilities for communication (Durlak, 1987, p. 745). Turing also emphasises 'face to face' criteria for interactivity. In order for a system to pass his test of interactivity it has to convince users that they are "interacting with a human being rather than a machine" (Straubhaar & LaRose, 2000, p. 19). Most web sites, by this definition, would not be interactive. Williams, Rice, and Rogers (1988), define interactivity as "the degree to which participants in a communication process have control over, and can exchange roles in, their mutual discourse" (p. 10). Mutual discourse is taken to mean that communication builds on some prior communication episode (Rogers & Allbritton, 1995; Tannenbaum, 1998), a notion closely related to Bretz's (1983) definition. Exchange of roles means that a person "has the ability to take the place of" the other communicator (Tannenbaum, 1998, p. 288); i.e. to switch between giving and receiving the communication. Lastly, 'control', the item that distinguishes Williams et al.'s (1988) definition from Bretz's (1983), means that it is possible to choose "timing", "content", and "the order in which various parts of the episode occur" (Tannenbaum, 1998, p. 288).

Rafaeli's (1988) definition of interactivity is said to be one of the most popular (Devos, 2000; Van Dijk & De Vos, 2001). He defines interactivity as:

An expression of the extent that in a given series of communication exchanges, any third (or later) transmission (or message) is related to the degree to which previous exchanges referred to even earlier transmissions. (Rafaeli, 1988, p. 111)

Rafaeli (1988) makes a distinction between three different levels of communication: (1) two-way (non-interactive), (2) reactive (quasi-interactive), and (3) fully interactive (Rafaeli, 1988, p. 120). Complete interactivity "demands both sides react to each other" (Hansen et al.,

1996, p. 63). Using a hyperlink, then, would be quasi-interaction; a triangular pattern of responses, such as an exchange of email messages between user, webmaster, and user again, is still necessary for 'full' interactivity in the way that Bretz (1983) first described. Meikle (2002), drawing on earlier work by Jensen (1999), also describes different levels of interactivity, but identifies four categories. Transmissional interactivity allows users choices over what is "otherwise a chronologically fixed or programmed information flow", e.g. subscribing to a regular email alert (Meikle, 2002, p. 30) (choosing to visit or not visit a site in the first place would also seem to qualify as basic transmissional interactivity); registrational interactivity tracks user information (e.g. site logs); consultational interactivity allows a user to select from predetermined choices, e.g. the user clicks the mouse on a hyperlink and is taken to a page with the information of interest but cannot edit or alter that information (p. 31); and conversational interactivity allows "two-way communication flow, with both partners producing and inputting their own information; and, often more than this, working to *create* something" (p. 31). We will return to Meikle (2002) later, as his discussion of what each level can facilitate is particularly useful and relevant to interactivity in public relations.

Among the most influential commentators on interactivity is Heeter (1989). Her 1989 article collates various previous definitions to define six dimensions of interactivity; choice and selectivity, effort, responsiveness, monitoring, addition of information, and facilitation of interpersonal communication (see Massey & Levy, 1999, for discussion of Heeter's six dimensions). In later work, Heeter develops her emphasis on the social dimension of interactivity. Combining Reeves and Nass's (1996) media equation, according to which humans are perceived, albeit counter-intuitively, to interact interpersonally with machines, with Cooper's (1999) criteria for 'polite interfaces', Heeter argues that successful interactivity will model positive interpersonal exchanges: "when the Internet's bandwidth is less limited, latency will improve and new, richer sensory channels

of interaction will be possible... Emerging communication technology will bring more socially complete exchanges" (Heeter, 2000, n.p.).

Steuer (1992), defines interactivity as "the extent to which users can participate in modifying the form and content of a mediated environment in real time" (p. 84). He names three factors that contribute to interactivity: (1) speed, (2) range, and (3) mapping (Steuer, 1992). Speed "refers to the rate at which input can be assimilated into the mediated environment" (p. 85). Range refers to "the number of possibilities for action at any given time" (Steuer, 1992, p. 85). Mapping is "the ability of a system to map its controls to changes in the mediated environment in a natural and predictable manner" (Steuer, 1992, p. 86). Steuer's discussion is based on the technology of multimedia and computer science and is, therefore, directly relevant to the issue of website interactivity (Tannenbaum, 1998).

Mok (1996) refers to the four Cs of successful interactive design: "control, consistency, context, and corroboration" (p. 132). First, Mok (1996) argues that "users should have some level of control over an experience" (p. 132). In a web site environment this means that users should have control over where they are going, how to get there, and how easily they can stop and start the experience (Mok, 1996). Second, the experience should be consistent (Mok, 1996). For example the use of fonts, graphics, and layout should be the same throughout the web site. (With this second criteria, Mok (1996) begins to conflate interactivity with usability.) Mok's third criteria is that the interactivity created on the site should be there for some reason; it should have a meaningful context for the user (Mok, 1996). Lastly, interactivity should support the content of the web pages (Mok, 1996). If videos are being used as a medium on a web site, for example, they should help the user understand the content of the page, and not be something that distracts from the information given on a web page. From a design perspective, Mok argues that good interactive sites have all of the four attributes mentioned (Mok, 1996). The minimum requirement however, according to

Mok (1996), is 'control' along with one other attribute. To summarise it can be said that the more Cs being fulfilled the more interactive the website is (Mok, 1996).

Jensen (1999) divides the many definitions of interactivity into three categories (Devos, 2000); (1) prototype, (2) criteria, and (3) continuum (Jensen, 1999). Definitions in the prototype category, such as Durlak's, offer little information (Devos, 2000) and are of limited use because they do not "point out which traits qualify a given media as interactive" (Jensen, 1999, p. 39). Those interactivity definitions that require certain traits or features to be fulfilled are categorised as criteria-based (Jensen, 1999, p. 40). Bretz's definition could be seen to fit this category, because he gave the essential criteria that a response must be based on something that has happened before (i.e. a prior situation), however his definition does not allow for gradations of interactivity. The third category includes definitions where interactivity is seen as something that can be "present in varying degrees" (Jensen, 1999, p. 42), for example Mok's (1996).

In one of the potentially most practical discussions of interactivity for public relations web design to date, Dholakia, Zhao, Dholakia, and Fortin (2000) satisfy all three definition types, plus provide some clear variables for measurement of interactivity.

### **A working definition**

Dholakia et al. (2000) cite Fortin's prototype/continuum definition of interactivity as:

the degree to which a communication system can allow one or more end users to communicate alternatively as senders or receivers with one or many other users or communication devices, either in real time or on a store-and-forward basis, or to seek and gain access to information on an on-demand basis, where the content, timing, and sequence of the communication is under control of the end user, as opposed to a broader

basis. (Fortin, cited in Dholakia, Zhao, Dholakia, & Fortin, 2000, p. 4)

Interactive websites then, according to Dholakia et al. (2000), are those that offer a perception of social presence "through the availability of open channels allowing for two-way communication" (p. 10). They give six criteria for online interactivity; user control, personalisation, responsiveness, connectedness, real time interaction, and playfulness. Dholakia et al. base their selection of these six on an extensive review of earlier definitions of interactivity, including Heeter (1989), Rafaeli (1988 & 1990), and Steuer (1992), and a subsequent identification of repeatedly mentioned features that could be "described as critical to the construct of interactivity" (Dholakia et al., 2000, p. 6). They discuss the six-part framework's usefulness in achieving three objectives for websites; reach (hits), stickiness (time per visit), and frequency (repeat visits) (Dholakia et al., 2000). They argue that these are the three major challenges facing all websites, and that fulfilling the six interactivity criteria will dramatically improve results in all three areas for any site.

For corporate websites fulfilling a public relations function, however, these objectives should not necessarily be assumed to be standard. Kent and Taylor (1998) argue for Internet PR communication to include "the 'personal touch' that makes public relations effective" (p. 322). Their use of the term interactive seems to encompass Heeter's (2000) idea of interactivity as providing a social dimension, and to parallel her call for a "participant-centered perspective on interactivity" (n.p.). Kent and Taylor (1998) also see interactivity as a continuum. They consider the basic concept of interactivity to be synonymous with Grunig's notion of two-way communication; "Two-way communication's theoretical imperative is to provide a procedural means whereby an organisation and its publics can communicate interactively" (Kent & Taylor, 1998, p. 322). This is in line with Meikle's argument that, "for a website to be interactive in any meaningful sense, it has to be designed with two-way input as a goal" (2002, p. 30). Like

Meikle, however, who points out that even with basic interactivity many websites “are designed to preserve the one-sided advantages of the broadcast model, with promotion, persuasion and propaganda as the goals” (2002, p. 30), Kent and Taylor (1998) see higher levels of interactivity as correlating with more ethical, democratic, and effective public relations communication. Kent and Taylor (1998) endorse two-way communication as a minimum standard for online public relations, but also call for interactive strategies that go beyond simple two-way exchange to the more complex level of dialogic relationship formation. Sites should be “interactive enough to allow users to pursue further informational issues and dialogic relationships” (Kent & Taylor, 1998, p. 326). They list five criteria for successful online relationship building; the dialogic loop, useful information, generation of return visits, ease of interface, and conservation of visitors, each of which has sub-criteria. Not all of Kent and Taylor’s (1998) criteria relate to interactivity criteria (ease of interface, for example, is clearly referring to useability). Most do correspond, however, suggesting that consideration of Dholakia et al.’s (2000) six interactivity criteria is useful not only for achieving simple hits, sticks, and returns as they argue, but will also contribute to building the long-term, mutually responsive relationships that Kent and Taylor (1998) recommend.

### **Method**

The 16 analysed sites were selected from those used by Nielsen and Tahir in their 2002 book ‘Homepage usability: 50 websites deconstructed’. Nielsen and Tahir chose the sites “because they were prominent in some way: Most sites came from top-10 lists of most-visited sites” (Nielsen & Tahir, 2002, p. 55), although they also added in some from “the world’s largest companies ... prominent government agencies and some well-run small companies and non-profit institutions” (p. 55). Not all sites were necessarily “prominent” in terms of hits, sticks, and returns, then. This study does not assess the success of Dholakia et al.’s (2002) criteria in terms of achieving

website “prominence”; only in terms of achieving public relations objectives.

There are many categories of web sites, such as communication/corporate, information/news, financial, e-commerce/shopping, entertainment, educational, personal, and governmental (Zhang, von Dran, Blake & Pipithsuksunt, 2001; Dholakia et al., 2000; Raine, 2002). Neilsen and Tahir’s (2002) book contains web sites in a variety of categories, but only corporate sites were selected for analysis in this study, as they are the site category to which PR techniques have most applicability. A corporate site typically contains information about the respective company such as services offered and economic results (O’Leary, 2002; Petravick, 1999). Its primary function is usually reputation management, via communication of “the firm’s strategic positioning, brand and product promotion and management philosophy/direction” (Marken, 2002), rather than to sell a specific product or service.

Each site was entered through the homepage then navigated through for approximately 30 minutes. In a similar study testing for useability, Paul (2001), only evaluates sites’ homepages. She defends her method by saying that “most web site visitors base their decision about browsing further into the site on the impressions they get of the home page, which often tends to offer an indication of the contents of internal pages” (Paul, 2001, Method, para. 1). This is a valid contention when analysing for usability. However, it was decided that, when assessing interactivity, it was necessary to check the content of different hyperlinks and sections of a web site in order to overcome poor usability (e.g. not all site features being clearly identified on the home page). Pages were therefore explored in more detail, within a given time limit.

All sites were analysed based on Dholakia et al.’s six interactivity dimensions. In line with Mok’s (1995) argument that interactivity is a continuum, i.e. “the success of a project’s interactivity diminishes as the number of attributes decreases” (p. 132), the sites were then ranked on an interactivity scale relative to how many of the six dimensions were fulfilled (see Figure 2).

## User control

Dholakia et al.'s user control criteria refers to "the extent to which an individual can choose the timing, content, and sequence of a communication" (2000, p. 6). Most websites allow users to move between pages at their own pace, choose which pages to visit, and choose the order of page visits. At some sites, however, visitors can also choose between different versions (i.e. text only or text with animations and pictures); languages (e.g. English or French); or can "use a search engine to find" relevant information within the site (Dholakia et al., 2000, p. 6). Kent and Taylor (1998) specify that, to build relationships, users should be able to select between "basic" or "supercharged" site versions: "The idea of 'choice' is key here because it allows publics to interact with organisations on their own terms and does not engender a feeling of inadequacy or intimidation" (p. 326). Dholakia et al. argue that control of timing, content, and sequence will positively enhance users' perception of empowerment (2000, p. 10). Since almost all web sites fulfil this criterion, the sites analysed were only scored as satisfying user control interactivity if they also offered text only versions, choice of language, or search engines. Even so, this type of user control remains a basic level of interactivity; it would be classified as quasi-interactivity by Rafaeli (1988, p. 120), or consultational interactivity under Jensen's schema (Meikle, 2002, p. 31). On its own, it would seem unlikely to develop dialogic relationships in the way that Kent and Taylor (1998) recommend. Meikle argues that, of the four types of interactivity, only conversational interactivity has the potential to open up the internet as a tool for democracy; the other three relate "to a closed system, to a vision of Internet use as consumerism" (2002, p. 31). Although strictly speaking it is interactive, user control on its own is not the kind of strategic interactivity sought in Kent and Taylor's (1998) conception of best practice online public relations.

Thirteen of the 16 analysed web sites (or 81%) gave the user some kind of 'control', either via a site search, different types of text, or

different languages. The same score was awarded if the site contained one, two, or three control features. Most sites did only provide one of these, and just one corporate web site gave all three. Only three sites (19%) had no control criteria. Basic consultational interactivity, then, was commonplace on these corporate websites.

## Personalisation

According to Dholakia et al. (2000), personalisation "reflects the degree to which information is tailored to meet the needs of the individual user" (p. 8). Again, this corresponds directly to one of Kent and Taylor's online PR requirements; that information be not only "generally useful" (1998, p. 324) but also "audience-specific" (p. 395). Often people have a need to be "treated as single individuals" (Pickup, 2000, p. 394). It can be a huge task to make a web site fit all types of visitors. According to Chase (1998), one should rather concentrate on specific target audiences, as it is impossible to satisfy all people's needs. However, it is possible to provide information on a site that suits the most important users. First, however, those needs must be identified, for example by providing questionnaires (Dholakia et al., 2000). It's not possible to even begin to attempt two-way communication without first assessing publics' natures and needs. Yet questionnaires of themselves are still a basic level of interaction, or what Meikle classifies as registrational interactivity; "recruiting and capture strategies" (2002, p. 46). Personalisation can move beyond registration (although not as far as conversation) by showing evidence of meeting, as well as assessing, individual needs, for example a high level of personalisation can be indicated on a site by the maintenance of different sections for different groups of people (Chase, 1998). An example of a web site that uses high levels of personalisation is Amazon.com (Dholakia et al., 2000; Fleming, 1998). The site recommends products such as books, based on users' previous searches or purchases (Dholakia et al., 2000). To be accredited for 'personalisation' in this study, a web site needed to have different parts of the site allocated for different audiences.

The study found that 43% (7/16) of the corporations allowed for some personalisation of the sites.

### Responsiveness

Responsiveness “is the relatedness of a response to earlier messages” (Dholakia et al., 2000, p. 7). An example is changes in a web site based on something a user has expressed; some kind of input (Dholakia et al., 2000; Tannenbaum, 1998). This has similarities with Steuer’s (1992) expression of speed, which captures how a system gives output based on input from the user. For Kent and Taylor, dialogic relationship formation and maintenance will only occur when there is “mutual adaptation and contingent response” (1998, p. 323), reminiscent of Bretz’s (1983) requirement for contingent response in his original interactivity definition. Dholakia et al.’s (2000) requirement for responsiveness corresponds directly to what Kent and Taylor (1998) describe as the ‘dialogic loop’ that ensures, via specially trained response personnel, that web sites offer the information publics are requesting, and reply promptly and professionally “to public concerns, questions, and requests” (Kent & Taylor, 1998, p. 325). It is this kind of interactivity that Meikle (from Jensen) categorises as conversational (2002, p. 31), because it provides “the ability to influence and contribute to the *content* of the exchange” (p. 31).

Evaluation of responsiveness in this study is based on the number of options visitors have to change content on pages. For example, if the web site allows contributions to Frequently Asked Questions (FAQ), or provides opportunities for feedback on the content or design of the web pages found in the site. A significant limitation of this study is its inability to measure, because of the short-term nature of data collection, whether this ‘intent to respond’ correlated with actual response; i.e. it is measuring the existence in theory of a dialogic loop, but not its effectiveness in practice, nor the appropriateness of the content of the response which Kent and Taylor (1998) also see as

“critical for relationship building” (p. 325).<sup>1</sup> To somewhat mitigate this limitation, only sites that clearly stated that the collected information would be used to make the site better, for example through a statement such as ‘please use this form to give us your feedback on how to improve this site’ were accredited as responsive.

The analysis showed that 75% (12/16) of the sites gave users opportunities to add information that could be responded to. Responsiveness, a form of conversational interactivity, was therefore fairly widely used on these sites. However, Dholakia et al.’s (2000) next categories, connectedness and real time interaction, also fit into the category of conversational interactivity, yet go much further in allowing users influence and control over exchange content, suggesting that there may be a need to distinguish sub-levels within the category of conversational interactivity when identifying what types of interactivity contribute most to dialogic relationship formation.

### Connectedness

Dholakia et al. describe connectedness as “the feeling of being linked to a world outside the specific site” (2000, p. 8). An example is when the features in a web site are able to connect people (Dholakia et al., 2000). When visitors have their “expectations of response from other visitors” met, interactivity is created (Dholakia et al., 2000, p. 7). In other words, for connectedness to occur responses need to come from other visitors and not only the web site

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<sup>1</sup> Elsewhere, studies have measured responsiveness by sending email to sites and counting responses and delays. Wilcox, for example, describes two such studies in a section on ‘making the site interactive’ in his *Public relations and media writing* textbook (2001, p. 388). Likewise McGovern describes two US studies conducted in this manner; the studies claimed to be measuring ‘interactivity’, however by the definition used in this article both these and the studies described by Wilcox would be studying only one aspect of interactivity; responsiveness (McGovern, 2002, paras. 5 & 6). McGovern (2002) elsewhere referred to chat rooms as “getting people to interact”, indicating that he does consider there to be more dimensions to interactivity than responsiveness alone, however the term was not defined in his article nor in Wilcox’s (2001) text.

itself (Dholakia et al., 2000). Connectedness is a concept that relates directly to Kent and Taylor's (1998) call for internet technology to "be used to keep in touch and not to distance ourselves – from clients, peers, the media" and to bring together "publics who constitute (often-times global) communities" who "might otherwise remain disparate were it not for the Internet and the WWW" (Kent & Taylor, 1998, p. 322). Connectedness should not be confused with responsiveness by the site itself; connectedness links users directly with other users or to communities outside the site. Chat rooms were not included in the evaluation of connectedness, as they are specifically covered under real time interaction. An example of connectedness would rather be space allocated for people to respond to each others' input asynchronously, such as on a message board.

Surprisingly only one web site (6%) provided connectedness via an area where users were able to create their own communities by submitting and reading information based on their own contributions. Again, fear of public critique might be too immense for most of the corporations. Yet it might have been expected that those corporations enabling real time interaction such as chat would also enable asynchronous connectedness. This was not the case.

### **Real time interaction**

Real time interaction "refers to the speed with which communication takes place, particularly response time" (Dholakia et al., 2000, p. 7). The faster the responses between people via the web site, "the greater the perception of interactivity" (Dholakia et al., 2000, p. 7). An example of technology that offers this kind of service is a chat room. Through a chat room visitors can interact in as close to real time situation that technology on the Internet today makes possible. Web sites in this study were therefore checked for facilities that enhance real time interaction such as chat rooms or 'live' Q & A events. Again, these are interactive features that Meikle (2002) categorises as conversational, and therefore with potential to "create new spaces for debate and

action" (p. 31). Kent and Taylor do not specifically discuss chat rooms, but would, like Meikle (2002), seem likely to applaud chat rooms as offering opportunities for dialogic communication in the form of "negotiated exchange of ideas and opinions" (Kent & Taylor, 1998, p. 324). Their statement that, although content of response is important, true dialogue would not seek to control communicator content even if it were critical; "individuals who engage in dialogue do not necessarily have to agree – quite often they vehemently disagree" (Kent & Taylor, 1998, p. 324) would suggest that they would encourage corporations to include unmoderated (real time as opposed to delayed and censored) discussion facilities on their sites. Certainly, under their criteria for generation of return visits, Kent and Taylor specifically recommend "webbed public information events" such as "interactive strategies includ[ing] forums, question and answer formats, and experts – such as featuring the company president, CEO, or department head on the site once a month" (1998, p. 325).

Few of the analysed sites fulfilled the real time interaction component. Just 25% (4/16) gave the opportunity for users to interact in real time interactions such as chat rooms. One reason for this may be that companies are afraid of public critique; especially from their own web sites. Another may be that corporations cannot readily see a revenue benefit from investment in chat technology and related site maintenance. An advantage, however, should be mentioned. As seen from one of the technology sites analysed, chat functions to connect people and draw them back to the site by discussion of relevant technology topics. As Rheingold (2002) argues:

For commercial organizations that are truly committed to broadening their communications with their prospects, customers, subscribers, suppliers, value-added retailers, users or others that constitute the company's 'community', well-designed message boards and chatrooms can prove valuable. But they will only work in this respect if they are regarded as a cost of doing business, an

aspect of marketing, support, and/or customer relations, and not as a profit center. (Rheingold, 2002, n.p.)

Rheingold cautions against expecting fast or tangible 'results' from real time interactivity: "it takes months, even years, to grow valuable and sustainable virtual communities" (2002, n.p.).

### **Playfulness**

By 1994, the video game and computer game business had grown to a US\$ 10 billion market (Forster & Oppermann, 1996). In web sites, this type of amusement is referred to as 'playfulness'; "the entertainment value of a site" (Dholakia et al., 2000, p. 8). Dholakia et al. argue that web sites should "combine both entertainment and information" (2000, p. 8). Nielsen and Tahir (2002) disagree, arguing that web sites should stick to important information. Amusements such as animations can be distracting and take up space, thus increasing the download time of a web page (a useability issue) (Nielsen & Tahir, 2002). Likewise, Kent and Taylor argue that, "the goal of public relations in Webbed environments is to create and foster relationships with publics, and not to 'entertain them'" (1998, p. 326). Yet Kent and Taylor (1998) also argue for novel features that add value for users, to encourage repeat visits. Might not a game add value for a specific type of public? The distraction issue can be overcome by allocating animations and interactive games to their own pages, increasing user choice and control by allowing those who do not wish to experience interactivity through games and

animations the option to ignore them (i.e. allowing basic transmissional and consultational interactivity). Meikle sees games themselves as offering limited interactivity; they are for the most part transmissional, and rarely enable the "discussion, debate, [and] person-to-person interaction" that would represent conversational interactivity (2002, p. 46). For public relations, the relationship building function of games seems questionable and situational; case by case decisions would require intense scrutiny of specific target publics' needs.

This study found 'playfulness' in the form of games and animation (e.g. Macromedia Flash presentations) in four (25%) of the analysed web sites. The component was mostly seen in combination with personalisation. In other words, where different parts were allocated to a special audience there was also the opportunity for some kind of play. In terms of appropriateness for overall target publics, those sites employing playfulness were not only computer technology-related sites as might have been expected. Although Microsoft had a playful site, neither IBM nor Gateway (software and hardware supplier) did. The other playful sites were Boeing, FedEx, and James Devaney (a fuel company).

### **Category comparison**

User control was the most common interactive feature of the corporate website with 13 occurrences, followed by responsiveness with 12, personalisation with 7, playfulness and real time interaction with four each, and finally connectedness with one (see figure 1).

Figure 1: Corporate site overall interactivity

Corporation	URL	User Control	Personalisation	Responsiveness	Connectedness	Real time interaction	Playfulness	Total
Accenture	www.accenture.com	✓	✓			✓		3/6
Boeing	www.boeing.com	✓		✓		✓	✓	4/6
Citigroup	www.citigroup.com	✓						1/6
Directv	www.directv.com	✓		✓				2/6
ExxonMobil	www.exxon.mobil.com	✓						1/6
Fedex	www.fedex.com/us	✓	✓	✓			✓	4/6
Ford Motor Company	www.ford.com	✓	✓	✓		✓		4/6
Gateway Inc.	www.gateway.com			✓				1/6
GE	www.ge.com	✓		✓				2/6
GM cars	www.gm.com	✓		✓				2/6
IBM	www.ibm.com	✓	✓	✓				3/6
James Devaney Fuel Company	www.jamesdevaneyfuel.com		✓	✓			✓	3/6
Microsoft	www.microsoft.com	✓	✓	✓	✓	✓	✓	6/6
Philip Morris	www.philipmorris.com	✓						1/6
Slusser's Green Thumb	www.slussers.com			✓				1/6
Southwest Airlines	www.southwest.com	✓	✓	✓				3/6
Criteria Totals		13 User Control	7 Personalisation	12 Responsiveness	1 Connectedness	4 Real time interactions	4 Playfulness	

The analysed corporate sites appeared comfortable with offering some interactivity, then, but in quite limited transmissional, consultational, and registrational ways that for the most part stopped short of achieving conversational interactivity and building dialogic relationships. Meikle's observation that, for all its potential, much of the excitement about interactivity, community, and democracy online is "cyberhype" (2002, pp. 33-42) is supported by this finding. It would, however, be useful in future studies both to allocate sliding scores for levels of criteria compliance rather than simply ticking yes or no for each criteria

regardless of the number of features -- i.e. to better acknowledge differences in the depth of each unit of analysis (Paul, 2001) -- and to start to identify sub-levels within conversational interactivity, so that more detailed inter-category comparisons could be drawn.

### Overall Results

Microsoft's site fulfilled all six criteria, and was therefore most interactive by this particular measure (see figure 2). Boeing, Fedex, and Ford each fulfilled four criteria. Accenture, IBM, James Devaney, and Southwest fulfilled three

criteria. Directv, GE, and GM fulfilled two, and

Citigroup, ExxonMobil, Gateway, Philip Morris,

Figure 2: Corporate site interactivity: individual criteria accredited

Corporation	Interactivity Continuum						Degree
	Low Interactivity	Moderate	Interactivity	High	Interactivity	High Interactivity	
Citigroup	■						1/6
ExxonMobil	■						1/6
Gateway Inc.	■						1/6
Philip Morris	■						1/6
Slusser's	■						1/6
Directv	■	■					2/6
GE	■	■					2/6
GM	■	■					2/6
Accenture	■	■	■				3/6
IBM	■	■	■				3/6
J. Devaney	■	■	■				3/6
Southwest	■	■	■				3/6
Boeing	■	■	■	■			4/6
Fedex	■	■	■	■			4/6
Ford	■	■	■	■			4/6
Microsoft	■	■	■	■	■	■	6/6

and Slusser's Green Thumb fulfilled one criteria only. Average number of criteria fulfilled per site was 2.6 of a possible six. Overall, the study found that the average interactivity level of these 16 corporate websites was low (43.4% where 100% represents features in every category). Possibly, their communication needs and those of their users do not require it. Van Dijk and Loes de Vos (2001), found from their research on interactive television (ITV), that many viewers did not "have a need for interactive services in using their television" (p. 463). The unit of analysis (corporate web sites) is a category that might not need as much interactivity as other categories such as entertainment and shopping. For that reason, results from studies concentrating on other types of site category might look very different. Dholakia et al. (2000) found that interactivity levels and type were closely related to website type; their argument that user control, personalisation, and real time interaction are far more important factors on information sites than playfulness or connectedness (p. 14) is supported by this study.

There are some significant limitations to this study. Each site was given 30 minutes of evaluation. Because of the given time limit some

components not readily visible using normal navigation methods may have been missed, meaning that poor usability design was allowed to impinge upon measurement of interactivity. However, as such limitations are also likely to apply to other users, the results are a realistic representation of the normal usage experience. The variables used were chosen because, based on a detailed analysis of interactivity theory, they are believed to bring together the core criteria considered important by a range of theorists in evaluating interactivity in web sites. Other variables have been used in other studies (e.g. Paul, 2001; Ha & James, 1998). Although similar results have occurred from these studies it should be acknowledged that future studies on corporate web sites using other variables may produce different results.

Finally, although the many crossovers between Dholakia et al. (2000) and Kent and Taylor's (1998) two sets of criteria enable us to hypothesise that corporate websites may be better able to build relationships with publics when more interactivity criteria are employed, this is not a study that measures relationships or relationship outcomes. Dholakia et al's (2000) hits, sticks, and returns criteria can be measured from net statistics (and it is an interesting aside

to note that the most interactive site by this measure, Microsoft, is also the only one currently appearing in Nielsen/Netrating's current list of top sites by hits and sticks (2002/2003)), but how to measure relationships with any clarity is an ongoing debate in public relations (see for example Mackey, in press). An interesting and productive area for future research may be to compare, for example, results across a sample of websites on the three scales; Dholakia et al's interactivity categories, Kent and Taylor's (1998) dialogue criteria, and Ledingham and Bruning's (2000) relationship measures. Clarifying a relationship outcome measure will assist in solving the conundrum about current low levels of corporate site activity; are low interactive sites inadequate, or is high-level interactivity unnecessary for effective online PR?

The concept of interactivity is an area characterised by complexity and different meanings. Interactivity is a multidimensional term that has different meanings for different purposes. This study has a) identified a definition and set of criteria that may be useful to public relations practitioners in understanding and applying interactivity to online PR and b) used the criteria to show that, at present, the corporate sites of well known companies have relatively little interactivity, particularly of the type that is recommended in building dialogic relationships.

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