

# Situational Theory of the Digital Persona: public relations for non-human internet agents

Mark Balnaves, Melanie James and Janet Fulton, University of Newcastle

Corresponding author: mark.balnaves@newcastle.edu.au

## Abstract

*Public relations practitioners are today faced with publics that are non-human. Internet robots now account for more than 60 per cent of internet activity. Building and maintaining an active digital persona on the internet is an important part of that non-human activity. James Grunig's situational theory of publics started the shift away from an organisation-centric view of public relations towards a relationship based view. However, this shift should be in the direction of dialogic methodology and not traditional functionalist approaches to relationships; something to be controlled. In this paper, the author discusses the rise of the super aggregators as a potential constraint on non-human publics, the importance of active digital personae, and origins of the theoretical discussion on dialogue. New skills are required by practitioners if they are to deploy active digital personae successfully and importantly to protect those personae.*

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## Introduction

The illusion of control comes from a traditional paradigm of public relations that views public relations as a messaging, publicity, informational, and media relations function. Practitioners who think within that paradigm emphasise publications, news, communication campaigns, and media contacts in their work. Often, they define public relations as a marketing communication function that supports marketing through media publicity or by combining publicity with advertising in a programme of “integrated marketing communication”. Practitioners within this paradigm generally believe that they can control what messages members of publics are exposed to. (Grunig 2009)

James Grunig and his colleagues created a situational theory of publics in order to move away from an organisation centric approach to public relations and, indeed, away from what he calls “the illusion of control”. The theory includes level of involvement of publics, information seeking and processing, and issues in recognition and constraint against an issue or a problem. What is new since the creation of this theory is the rise of non-human active agents, internet robots, who can act and interact with other active agents. These robots can represent us and indeed project who we are. Non-human agents now account for over 60 per cent of internet activity (Madrigal 2013). Search Engine Optimisation (SEO) techniques have emerged to take advantage of how the super aggregators obtain and rank information, but interaction with digital personae involves more than writing for super aggregators in order to get noticed. Creating active digital personae involves identity, dialogue and protection of that identity over time. Understanding communication, space and time with digital personae is very different from understanding these core phenomena in a non-internet world.

This paper proposes an extension of the situational theory of publics to a situational theory of digital persona that incorporates a relationship-dialogic based approach to public relations (Kent & Taylor 2006). The idea of active and passive digital persona in online and digital environments is now well established (Clarke 2001, 2014; Balnaves 2005). Rather than moving away from situational theory, the author argue that understanding human and non-human audiences (internet robots) on the internet requires knowledge of level of involvement in and constraints of digital persona in their activities online. and public relations practitioners need to understand not only the interactions between humans but humans and their own digital persona and the relationship between non-human agents on the internet.

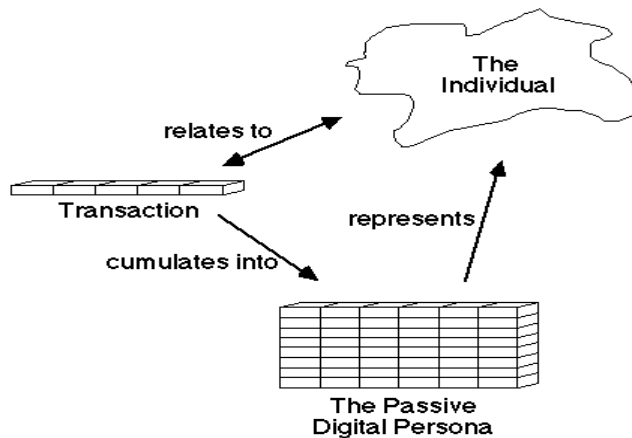
As Grunig points out, “extensive research on a situational theory of publics has shown that members of publics always have controlled the messages to which they are exposed—not the organisations or media that disseminate messages intended for them.” (Grunig 2009). The rise of super aggregators such as Google and Comcast and the rise of active digital persona present the opportunity for publics to enhance control of their own messages, but they also represent significant constraints.

### **Passive and Active Digital Persona**

There is something innately threatening about a persona, constructed from data, and used as a proxy for the real person. It is reminiscent of the popular image of the voodoo doll, a (mythical) physical or iconic model, used to place a magical curse on a person from a distance. Similar ideas have surfaced in “cyberpunk” science fiction, in which a “construct” is “a hardwired ROM cassette replicating a ... man’s [sic] skills, obsessions, knee-jerk responses” (Gibson, 1984, 97).

The history of passive and active digital persona is almost an analogy of the “press agency” and “two way symmetry” models. The early digital collection of information was primarily “passive” (see Figure 1). Visa, for example, might collect thousands and millions of items of information about its customers and construct a profile of them, passive. Active persona, on the other hand, originates with the idea of an agent. In a digital context, “an agent acts on behalf of the individual, and runs in the individual’s workstation and/or elsewhere in the net. A trivial implementation of this idea is the “vacation” feature in some email servers, which returns a message such as “I”m away on holidays until <date>” to the senders of messages. (Where the sender is a mailing list, this may result in broadcast of the message to hundreds or thousands of list-members).” (Clarke, 2001).

Figure 1 - Passive Digital Persona



Source: Clarke (2001)

Projected active digital personae originally included mail filterers, news and “knowbots”, intelligent searches of networks. Active digital persona can be projected by the individual or imposed by others. The difference between active and passive is in the degree to which control can be exercised over what is happening to the persona. If the individual is projecting their persona, for example, they may wish to create filters around themselves and restrict the bombardment of information through the networked world (Clarke 2001).

As Clarke (2001) says, the ability to create a persona may be vested in the individual, or in other people or organisations, or in both. “The individual has some degree of control over a projected persona, but it is harder to influence imposed personae created by others.” (2001) In addition to imposition, at all times, all digital personae are at risk of Dangers of personal dataveillance, Wrong identification, Low quality data, Noncontextual use of data, Low quality decisions, Lack of subject knowledge of data flows, Lack of subject consent to data flows, Denial of redemption and Denial of due process.

As algorithms and internet delivery have become more sophisticated, of course, the capacity of individuals to create their own active digital persona has increased, allowing people to attract by chance or by design massive audiences in order to project their image (Leaver, Balnaves & Willson 2012). Linked-In is an active digital personae in this sense. Islamic State is a more dramatic example of active digital personae, with over 40,000 individual Twitter accounts (BBC 2015) and a range techniques for projection of information on the surface internet and the deep (anonymous) web.

At first glance, it might appear that digital personae, as publics, maximize the control of publics over their own affairs and, indeed their involvement in matters that affect them. However, super aggregators (hyper giants) such as Google and Comcast and the future structuring of the internet will affect individuals and organisations in their capacity to control their digital personae, including Islamic State.

### **The Superaggregators**

The emergence of the super aggregators, or hyper giants, is changing perceptions about the structure of the Internet, even within the Internet industry itself. These super Content Delivery Networks (CDNs) now operate at global and national levels and provide technological backbones for regional providers and customer IP networks. In 2007 thousands of ASNs contributed to 50% of network traffic. An Internet Service Provider must have a registered Autonomous System Number (ASN). Today hyper giants like Comcast account for more than 30% of traffic. But there are also other kinds of consolidation. Browsers have become more important for consolidation of functions (e.g., mail, video). New technologies like cloud computing are redefining the notion of network. Table 1 below provides an overview of changes to the global internet core between 2007 and 2009.

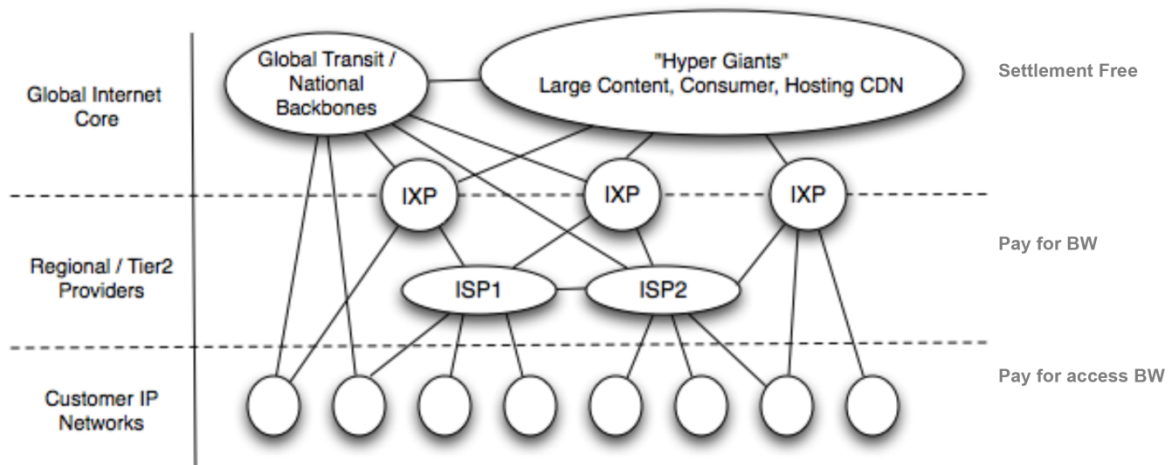
Table 1 – The Global Core

Rank	2007 Top Ten	%	2009 Top Ten	%
1	Level(3)	5.77	Level(3)	9.41
2	Global Crossing	4.55	Global Crossing	5.7
3	ATT	3.35	Google	5.2
4	Sprint	3.2	-	
5	Cogent	2.77	-	
6	NTT	2.6	Comcast	3.12
7	Verizon	2.24	-	
8	TeliaSonera	1.82	-	
9	Savvis	1.35	-	
10	AboveNet	1.23	-	

Source: McPherson (2009)

Between 2007 and 2009 the internet global internet core narrowed to only a relatively few giant aggregators, as Figure 2 demonstrates.

Figure 2 - The New Internet



Source: Adapted from Labovitz, Iekel-Johnson, McPherson Oberheide, and Jahanian (2010)

Super aggregators can and do decide to bias one form of traffic over another. This is no minor issue and has led, of course, to Net Neutrality debates. The aggregators in all their forms have become more concentrated and more influential as well as more complicated. Google purchased the currency platform, Jambool, to help developers manage and monetize their virtual economies across the globe (Takahashi 2010). Google, like Comcast, has vested interests in where traffic goes and a banking platform would no doubt affect the nature of traffic flows. Google could, for example, limit an aspiring creative artist's digital persona by exercising what is called "ramp control", slowing down the service in order to stop the artist uploading broadband materials that exemplify their work or even potentially affecting banking service. The individual might never know that it was the superaggregator limiting their activities, of course, left probably to think that they need a new service provider in order to increase bandwidth.

The rise of passive and active digital personae and the rise of super aggregation are, of course, intimately linked. The phrase Big Data is used precisely to designate an era where there is an abundance of information about everything, including individuals. Public relations practitioners need to understand digital personae and super aggregation, opportunities and advantages. Knowledge about successful active digital personae can assist public relations professionals in their use of techniques to limited imposed personae and maximize projection of personae.

### Dialogue and Active Digital Persona

In the situational theory of publics active publics have a dual role as public and public communicator (Toth 2007, 352). Surrendering the illusion of control, Grunig's argument, also means adopting an alternative means of building and maintaining relationships. Active digital personae, clearly, can

become active publics. An individual's digital persona is half human, produced by a human, and half internet robot. Sometimes an individual's real persona and digital persona will operate in real time, like a Skype session. Sometimes the active persona will be operating by itself. The author argues that for the public relations practitioner dialogue is the obvious bond that is needed with active digital persona. False empathy, false dialogue can have the same effect as failed persuasion.

The literature on the philosophy and psychology of empathy is clear. Dialogue is at the heart of empathy (Jaspers 1994). "Emotional intelligence" associated with dialogue is not simply a matter of personal characteristics but relational characteristics. A range of disciplines is now embedding dialogic theory and method into their everyday practice, recognising that simulation without dialogue and empathy can be a double-edged sword with unanticipated consequences. Anderson (1994), Buber (1970) and Laing (1969) are the philosophical basis of these methods, which range from deliberative engagement in public relations (Kent 2002) through to local government engagement with citizens (Hartz-Karp, Balnaves & Sullivan 2011). The philosophy of dialogue, centrally, involves the observation that conversation is not simply turn-taking and, indeed, can be characterized as "in-betweenness" (Buber 1970). Psychiatry of course translated Buber's and Jasper's insights and recommendations by taking down notes in real conversations with patients. Karl Jaspers emphasised the importance of how people narrate their lives and the role of narrative in psychiatric methodology (1997). In particular, he recognised the importance of the consultant talking to patients in a way that was normal, supportive and a conversation with a purpose. The taking of notes, recording the narrative, was a key part of his methodology (Lewis 2011). Jaspers's phrase, "the truth begins with two", reflects Buber's philosophy and work on the nature of empathy and dialogue. We do not have modern computer programs that can simulate empathy and dialogue because, to do so, under a Turing Test, would make them human. Laing (1969) shows that acknowledgment or confirmation of the value of others is one of the essential features of humanity and extraordinarily important to how we act as humans. Acknowledging the "the other" in spite of our ability to ignore "the other" is a confirmation that we all understand. This confirmation is a necessary precondition of dialogue (Gunson & Collins 1997). Dialogic empathy, as Kent and Taylor (2002) outline, has specific characteristics that we have found from empirical research:

- \* Confirmation
- \* Supportiveness
- \* Communal orientation
- \* Vulnerability
- \* Unanticipated reactions and actions
- \* Spontaneity
- \* Recognition of difference and strangeness (uniqueness of other people)
- \* Commitment to conversation and interpretation

In modern computing there are attempts to replicate through artificial intelligence what Cai (2006) calls "low level subconscious feelings" as empathy. "Does your knee hurt" for instance involves conversation but it does not require in the computing program confirmation. As Laing says (1969), real "confirmation

varies in degree from a smile or a handshake to an evocative action.” These can only be acknowledged if they are accepted as genuine.

### **Public Relation Practitioners as Aggregators**

Public relations practitioners are already aggregators of content, analyzing what is happening among stakeholders and the public and ensuring that information is collected and deployed in the most efficient way to enhance relationships (Kim, & Grunig, 2011; Kim & Ni 2013). Key variables in situational theory, such as problem recognition, constraint recognition, information seeking, and information processing can be used as heuristics in understanding active digital personae and their activities and their level of involvement. Non-human agents as publics, however, involves a reorientation in models of communication in the public relations discipline. There are two sides to this reorientation. The first is related to public relations theory itself. Situational theory and dialogic theory can work together when functionalist elements are removed from situational theory (Anderson 1994). Jim Grunig has, perhaps ironically, started this himself by promoting a shift away from an ideology of control of messages.

Traditional propaganda and persuasion are certainly possible in social media networks. It is also clear, though, that genuine relationships are possible in these networks. The skills for building dialogic communication through active digital personae are going to be very different from the skills in the traditional functionalist approach.

The second change in orientation involves, therefore, level of information technology skill that many practitioners, at present, might not have. The author is not talking about high level maths in this reorientation. However, being able to construct sophisticated digital personae, to deploy that personae and to understand how algorithms can enhance or detract from dialogic communication would be essential. The United Kingdom is already exploring teaching source coding as required learning at school level. Otherwise, public relations professionals may resort to employing , for example, growth hackers, or others, in order to influence non-human agents, rather than fully understanding the implications of these services, legal or illegal, on real non-human publics. These new skills are also necessary for addressing the power of the super aggregator and how aggregators may be limiting access to human and non-human publics. Communication, space and place have changed, radically, in public relations practice.

### **Note**

The author is working with Dr. Marc Adam and Dr. Melanie James on a theory of the digital persona, combining public relations, neuroIS and audience studies perspectives.

### **References**

Anderson, R. (1994). Anonymity, Presence, And The Dialogical Self In A Technological Culture. In Anderson, R. Cissna, K.N. & Arnett, R.C. (Eds.) *The Reach of Dialogue: Confirmation, Voice, and Community*. New Jersey: Hampton Press, Cresskill, 91–110.

Arnett, R.C. & Arneson P. (1999). *Dialogic Civility in a Cynical Age: Community, Hope, and Interpersonal Relationships*. Albany New York: State University of New York Press.

Balnaves, M. & Luca, J. (2005). *The Impact Of Digital Persona On The Future Of Learning: A Case Study On Digital Repositories And The Sharing Of Information About Children At Risk In Western Australia. Balance, Fidelity, Mobility: Maintaining the Momentum?* , Brisbane: Australasian Society for Computers in Learning in Tertiary Education, December 4-7.

BBC. (2015). Nearly 50,000 pro-Islamic State Twitter accounts. 6 March  
<http://www.bbc.com/news/world-us-canada-31760126>

Clarke, R. (2001). Roger Clarke's Dataveillance and Information Privacy Home-Page.  
<http://www.anu.edu.au/people/Roger.Clarke/DV/>

Buber, M. (1970). *I and Thou*. New York: Charles Scribners Sons.

Cai, Y. (2006) Empathic Computing. In Y. Cai and J. Abascal (Eds.) *Ambient Intelligence in Everyday Life*, LNAI 3864, 67, 85.

Clarke, R. (2014). *Persona Missing, Feared Drowned: The Digital Persona Concept, Two Decades Later*. *Information Technology & People*, 27(2), 182- 207.

Grunig, J. (1997). *A Situational Theory of Publics: Conceptual History, Recent Challenges and New Research*. In Moss, D. MacManus, T. & Vercic, D. (Eds.) *Public Relations Research: An International Perspective*. London: International Thomson Publishing, 3–48, 282–288.

Grunig, J. E. (2009). *Paradigms of Global Public Relations in an Age of Digitalisation*. *PRism*, 6(2), 1-19.

Kent, M.L. & Taylor, M. (2002). *Toward a Dialogic Theory of Public Relations*. *Public Relations Review*, 28 (2002) 21-37.

Kim, J. & Ni, L. (2010). *Seeing the Forest Through the Trees: The Behavioural, Strategic Management Paradigm In Public Relations And Its Future*. In Heath, R. (Ed.) *The Sage Handbook of Public Relations*. Thousand Oaks, CA: Sage, 35-57.

Kim, J-N. & Grunig, J. E. (2011). *Problem Solving And Communicative Action: A Situational Theory Of Problem Solving*. *Journal of Communication*, 61(1), 120-149.



Kim, J-N & Ni, L. (2013) Two Types of Public Relations Problems and Integrating Formative and Evaluative Research: A Review of Research Programs within the Behavioral, Strategic Management Paradigm. *Journal of Public Relations Research*, 2(1), 1-29.

Labovitz, C., Iekel-Johnson, S., McPherson, D. Oberheide, J. & Jahanian, F. Internet Inter-Domain Traffic. *SIGCOMM'10*, 75-86.

Leaver, T., Willson, M., & Balnaves, M. (2012). Transparency and the Ubiquity of Information Filtration? *Ctrl-Z: New Media Philosophy*, 1(2), <http://www.ctrl-z.net.au//journal?slug=leaver-willson-balnaves-transparency-and-the-ubiquity-ofinformation-filtration>

Madrigal, A.C. (2013). Welcome to the Internet of Thingies: 61.5% of Web Traffic Is Not Human, *The Atlantic*, December 12. <http://www.theatlantic.com/technology/archive/2013/12/welcome-to-the-internet-of-thingies-615-of-web-traffic-is-not-human/282309/>

McPherson, D. (2009). ATLAS Internet Observatory. Bandwidth Bandwagon: An ISOC Briefing Panel. November 11, Hiroshima, Japan. [http://www.isoc.org/isoc/conferences/bwpanel/docs/20091111\\_bandwidth\\_mcpherson.pdf](http://www.isoc.org/isoc/conferences/bwpanel/docs/20091111_bandwidth_mcpherson.pdf)