

# 1

## Communication today



CONFLICT RESOLUTION TEAM BUILDING  
RESEARCH SKILLS GRAPHIC COMMUNICATIONS  
BUSINESS WRITING TEXT REPORTS PROPOSALS  
LETTER WRITING REFRAMING FEEDBACK

## LEARNING OBJECTIVES

*After studying this chapter, you should be able to:*

- explain the difference between communication and communications
- discuss the strengths and weaknesses of various communication models
- explain why communication breaks down and why it succeeds
- explain the limitations of communication processes.

ADJECTIVES  
RAPSPEAK BOUNDARY STAFFS  
BACKS ORGANIC/MECHANISTIC ORGANISATION  
OLDERS NEGOTIATION GRAMMAR INTERCULTURE  
AND COMMUNICATION EMOTIONAL INTELLIGENCE  
IVENESS ADVERBS NON-VERBAL COMMUNICATION  
ON PLAIN ENGLISH AND STYLE RESEARCH GRAPHICS  
SIGN MEETINGS ONLINE WRITING EMAILS CLAUSES



# One communication, two communications



Communication is a challenging concept, with a search on 'communication' likely to bring up topics as diverse as team communication, body language and electronics.

**Communication:** the study of the transfer of meaning

**Communication** (singular), as applied to human interaction, includes:

- body language or nonverbal communication
- public speaking and presentation skills
- journalism or writing for the mass media
- graphic communication
- leadership, power and managing skills
- debate, logic, persuading and influencing skills
- negotiation and conflict resolution skills
- interpersonal skills (such as listening, assertiveness, questioning and giving feedback)
- intrapersonal communication (self-talk, affirmations, distorted thinking)
- organisational communication skills
- intercultural communication
- writing skills
- communicating with customers
- public relations communication
- communicating in teams and meetings
- job-seeking communication.

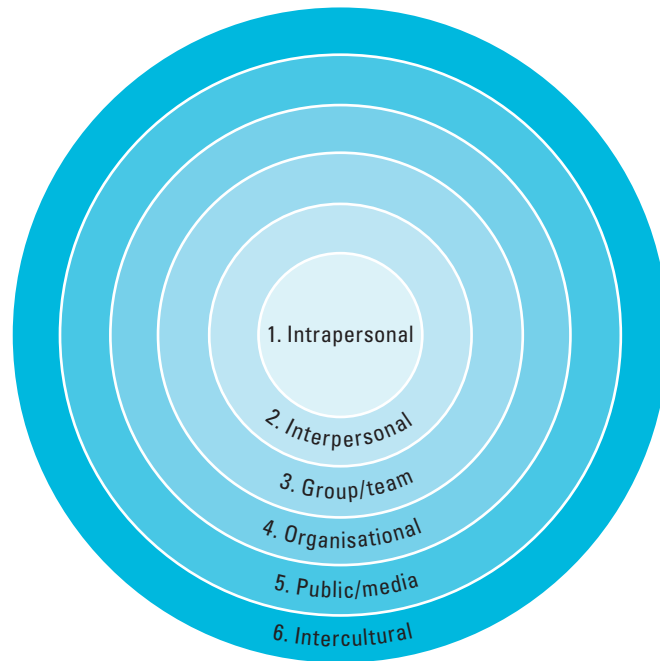
The list is endless. Virtually all these areas of skill and knowledge relate to the humanities or social sciences – although increasingly they are being classified as transferable skills, soft skills or generic skills – and they are recognised as essential by employers in all sectors (see p. xvi). A general definition of this type of communication might be *the study of the transfer of meaning*.

We can visualise these different types of communication interconnecting in a systematic way (figure 1.1). We see here that there are six levels or concentric spheres or arenas or fields of communication enquiry. This could well be a map of communication enquiry, as well as a map of the contents of this book (could we perhaps have a seventh circle of inter-species communication, which might run from communicating with animals to communicating with whatever aliens there might be in space?).

**Communications:** the study of the transfer of data

**Communications** (plural), as distinct from communication, usually relates to the physics and mechanics of telecommunications systems such as telephone networks, satellites and the

internet. These areas of skill and knowledge fall into the fields of engineering and the sciences. A general definition for these types of communication might be *the study of the transfer of data*.

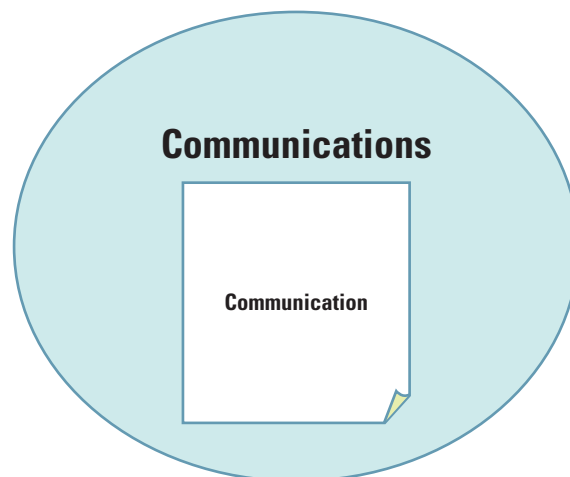


**FIGURE 1.1** A concentric model of fields of communication

**Technologically mediated communication:** human communication that uses mechanical or electronic means to transfer meaning

These are not absolute distinctions: you will encounter cases of ‘communications’ clearly referring to the transfer of knowledge and you may encounter instances of ‘communication’ relating to the engineering application. The confusion can be annoying, but perhaps it is understandable in an age in which so much human communication is **technologically mediated**; that is, it uses mechanical or electronic means or media to transfer meanings. Such means, or media, can also be referred to as *channels of communication* (we explore this concept further later in the chapter).

A useful way of conceiving the difference between the singular and the plural usages of communication is to think of the plural *encompassing* the singular – that is, mechanical transmission enables the transfer of meaning or content (figure 1.2).



**FIGURE 1.2** Communication within communications

Of course an engineer or physicist might suggest that this conception clearly demonstrates that the many subsume the one, and therefore demonstrates the superiority of engineering and physics over the social sciences, but this is not necessarily true. This book, for example, does not have much to say about electronic networks or technology (being concerned with ‘singular’ communication). However, some of the concepts we explore do relate to graphic communication and symbolism, so it would be perfectly viable to render the relationship as in figure 1.3, where the design of information suggests the opposite tendency – the one subsuming the many, setting up the humanities and the social sciences as clearly superior to physics and engineering.



**FIGURE 1.3** Communications within communication

Such a debate is ultimately futile or an example of a false dilemma fallacy: communication and communications are both vitally important and increasingly interact with one another.

As we learn more about human communication and as the technology of communications seems to accelerate in development every day, it would certainly be a good idea for communication specialists (and that includes all human beings) to know more about communications, and it would be an equally good idea for technologists, or communications specialists (who are also part of humanity) to know more about human communication.

We need, in other words, to have as much **meta-communication** – communication about communication and communications – as possible.

**Meta-communication:**  
communication about  
communication and  
communications

## Priestley's paradox

Mediated or technology-driven communication is developing and expanding all the time. In the past thirty years, for example, communication innovations have included:

- facsimile or fax machines
- cordless telephones
- answering machines/voicemail
- mobile/cell/wireless telephones
- SMS, or short messaging service
- pagers
- satellite transmission of images and sounds
- cable television
- interactive television

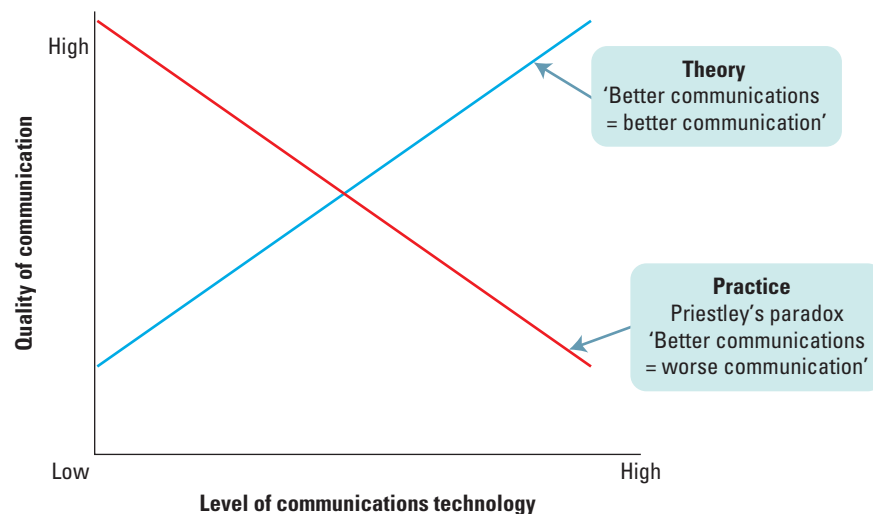
- the internet
- email
- online chat rooms
- online instant messaging
- blogging (web logging)
- podcasting
- texting
- wikis
- Facebook
- Twitter
- smartphones
- apps
- tablet computers.

More technological innovations in communications technology are in the pipeline. Surely all these innovations in communications enhance communication? Surely such a rise in the *quantity* of information transferred leads to an increase in the *quality* of communication and understanding? Again, this is not necessarily true. More than half a century ago, the British writer JB Priestley had this to say about the innovations of TV and communications technology:

Already we Viewers, when not viewing, have begun to whisper to one another that the more we elaborate our means of communication, the less we communicate (Priestley 1957).

In other words, the quantity of channels of communications may actually be diminishing the quality of our communication. This may mean that people living in low-technology societies and situations could have a richer experience of interpersonal communication than people living in high-technology cultures. This is **Priestley's paradox**. In particular, technologically mediated communication is increasingly driving out face-to-face communication. Thus, the idea that improvements in technology can bring about an increase in the quality of communication may in practice be contradicted by Priestley's paradox (figure 1.4).

**Priestley's paradox:** the more we elaborate our means of communication, the less we actually communicate



**FIGURE 1.4** Priestley's paradox

We are only beginning to perceive the dynamics operating between communication and communications. What if, as has been suggested, communications technologies are not simply neutral and instrumental means to facilitate communication, but in fact addictive

**Dataholic:** a person who is emotionally dependent on communications systems such as mobile phones and the internet

systems that create **dataholics** who become emotionally dependent on smartphones, the internet and other technologies (O'Connor et al. 2013; Weiss & Schneider 2013; Ferenstein 2013; Tokunaga 2013; Price 2011)? Perhaps we can go even further and speculate that some people may in fact use communications technology – computers, the internet, television, radio and telephones – to avoid engaging in personal, face-to-face communication with others.

During the 11 September 2001 terrorist attacks in the United States, hijackers used mobile phones to coordinate the attacks, while passengers on the doomed aeroplanes used the same technology to say goodbye to their relatives (Dutton & Nainoa 2002). In light of this, how do we reconcile the potential for good and bad of the new technologies?

### ASSESS YOURSELF

1. Consider, by yourself or in discussion with others, these questions.
  - Is Priestley's paradox convincing or farfetched?
  - Do dataholics exist?
2. *Scenario:* New scientific research demonstrates conclusively that a new communication technology (e.g. LCD or touch computer screens, mobile phones or wireless computing) emits cancer-inducing radiation. Would you now:
  - avoid using the technology
  - reduce your use of the technology
  - continue using the technology at the level you have been using it
  - increase your level of use of the technology?

## Communication: models for understanding

When we travel to unfamiliar places, we use a road map to help us arrive at our destination. When we look at a map, we accept that it is a diagram; a simplified schematic way of looking at things. A photographic map might be more realistic – that is, it might look more like the actual terrain we are covering – but the photographic map might give us too much information. It probably won't be as clear as the diagrammatic map.

Whether we use a diagrammatic or a photographic map, we are unlikely to confuse it for the real thing – the actual terrain. We use common sense to accept the limitations of mapping so that we can achieve a purpose – getting to where we want to go.

So it is with communication. One of the best ways of understanding communication is to look at models of the process. Models can help us to understand, even though they are necessarily limited and are not to be confused with the real thing. Maps and models help us to understand or 'see' reality in ways that reality alone cannot, because reality masks the patterns that lie beneath.

## Models 1 and 2: Lasswell, and Shannon and Weaver

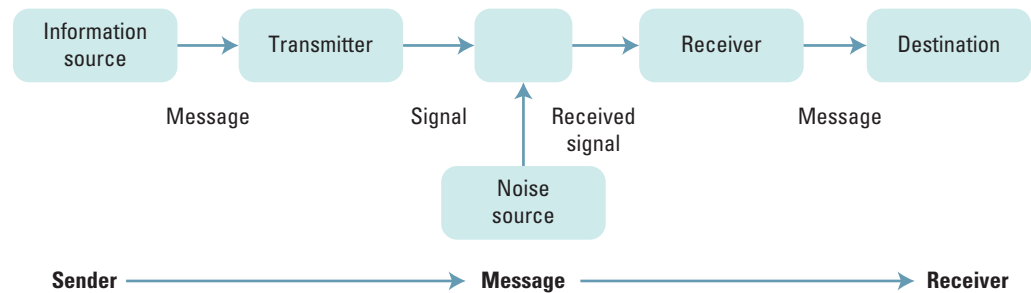
The systematic analysis of communication began in earnest after World War II. Harold Lasswell suggested that all communication processes could be understood in terms of a simple process (table 1.1). (We might compare this model with the mnemonic used by journalists when covering a news story – 5W-H, or What, When, Where, Why, Who and How; note the discussion of communication models in chapter 17 'Public communication').

**TABLE 1.1** Lasswell's model of communication

Who	What	Channel	Whom	Effect
Who?	Says what?	In what channel?	To whom?	With what effect?

Source: Adapted from Lasswell (1948).

Shannon and Weaver developed a more mechanical or technological perspective on the communication process, introducing the concept of noise (figure 1.5). In physics and telecommunications, 'noise' is a disturbance that obscures or reduces the clarity of a signal (e.g. static, 'visual confetti' or echo). Thus, the clarity of a TV picture or radio signal or phone line is sometimes measured using a signal-to-noise (S/N) ratio: a high ratio suggests that the TV picture or radio sound or telephone signal will be of high quality, because there is much more signal than noise.



**FIGURE 1.5** The Shannon-Weaver model

Source: Adapted from Shannon and Weaver (1999 [1949]).

**Sender-Message-Receiver (SMR) model:** a model showing a one-way path or pattern of communication

**Communication breakdown:** a misunderstanding or failure to communicate

**Communication success:** achievement of understanding between interacting individuals and groups

Shannon and Weaver's **Sender-Message-Receiver (SMR) model** has been very influential in the communication sphere (Maras 2000). It helps simplify the complexities of communication and makes it possible to analyse communication processes to see where, for example, barriers to communication might be erected or where **communication breakdown** might take place, as well as how barriers to communication might be dismantled so that **communication success** can occur.

The Shannon-Weaver model, however, has also received the following criticisms (Chandler 1994).

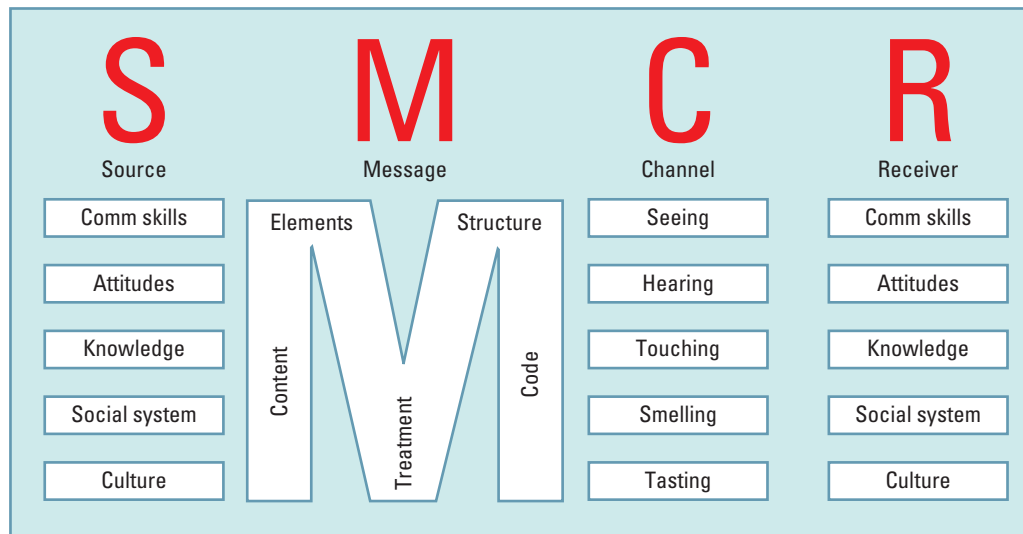
- It embodies a bad metaphor – that of information as a packet or container being transported, as if meanings were neutral rather than constructed and liable to subjective reading, or decoding. In reality, different individuals will interpret the same information in different ways.
- It is linear – that is, it sees communication as a one-way process, the receiver being passive, whereas communication usually occurs in both directions, involving a response or feedback from the receiver, who then becomes a sender, with the original sender becoming the receiver.
- It presumes that all communication is intentional and transparent, but some communication is unintentional, such as body language that contradicts what is being said, and some is nontransparent (its meaning is hidden).
- It ignores the social context in which communication occurs: the context comprises spoken and unspoken social rules and norms, cultural patterns, gender differences and other factors that potentially could radically transform the meanings of messages.

## Models 3, 4 and 5: Berlo, Lievrouw/Finn and Foulger

Let's now build on the basic models we have considered and look at more complex (and perhaps more effective) models.

## Berlo's SMCR model

Berlo (1960) developed his SMCR model of communication (figure 1.6) after contemplating the shortcomings of earlier models. He analyses communication in terms of four phases: S (= Source), M (= Message), C (= Channel) and R (= Receiver).



**FIGURE 1.6** Berlo's model of communication

Source: From Berlo, D 1960, *Process of communication*, 1st edn. Reprinted with permission of Wadsworth, a division of Thomson Learning, www.thomsonrights.com, fax 800 730 2215.

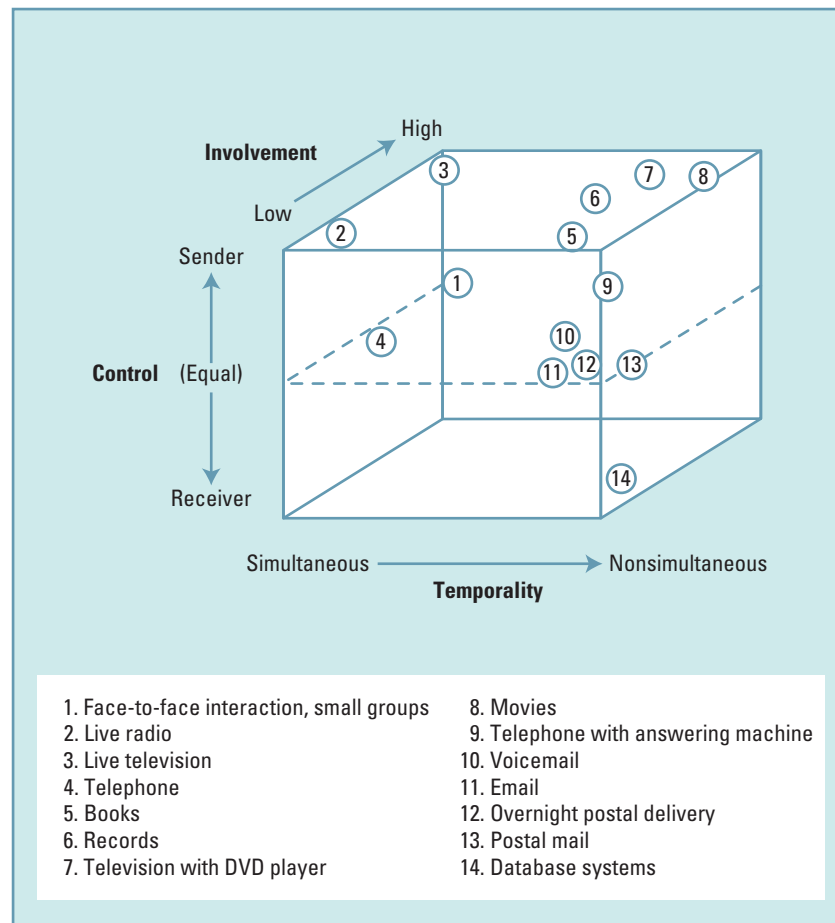
The source and the receiver are, of course, human beings, and the messages they send will be a function of communication skills: encoding skills (writing and speaking), decoding skills (reading and listening) and an encoding–decoding skill (thought or reasoning). Senders and receivers will also be affected by their own attitudes, knowledge, social system and culture.

The message itself is characterised by elements and structure. In art, elements are the substance, while the structure is the form; in communication, having good ideas would comprise elements, while having good organisation would comprise structure. The two should ideally be inseparable. The message is also characterised by codes, content and treatment. A code is anything 'which has a group of elements (a vocabulary) and a set of procedures for combining those elements meaningfully (a syntax). If we want to know whether a set of symbols is a code, we have to isolate its vocabulary and check to see if there are systematic ways (structures) for combining the elements' (Berlo 1960, p. 57). Languages are codes, but so also are dance, radio and television, advertising and headline writing. Content is the material selected by the source to express a purpose. The treatment of a message comprises the decisions which the communication source makes in selecting and arranging both codes and content. A channel comprises the senses through which a decoder–receiver can perceive a message which has been encoded and transmitted by a source–encoder.

Berlo stressed the complex and dynamic nature of communication and the SMCR model was thus a significant advance upon the Shannon–Weaver model. Nevertheless, it is still relatively static and one-way in flow: Berlo did in fact consider feedback processes, but they are not immediately obvious in figure 1.6.

## Lievrouw and Finn's communication systems model

We have mentioned before that communication can be mediated – that is, messages can be transferred by technological, and not simply human, means. In terms of the study of the field of communication, this has often meant in practice that there is a vast gulf between the study of interpersonal communication and the study of mass communication. Lievrouw and Finn (1990, 1996) have created a model of communication modes that attempts to bridge this gap (figure 1.7).



**FIGURE 1.7** Lievrouw and Finn's communication systems model

Source: Adapted from Lievrouw & Finn (1990, p. 54).

The three dimensions of the model are control, involvement and temporality, and they help to explain the properties of different modes and channels of communication.

Senders and receivers figure in the model, but the linear progression of messages assumes less importance here. What is most significant is the balance of control between senders and receivers. Involvement refers to distance – both physical and psychological – and the extent to which such distances are low or high. Finally, the experience of the message can be understood in terms of whether things happen simultaneously or not. Thus, face-to-face interaction between two individuals or members of a group can be characterised as equal control/high involvement/simultaneous, while email can be characterised as control slightly in favour of sender/low involvement/mainly nonsimultaneous.

For Lievrouw and Finn, the mediated/nonmediated dichotomy is a false dilemma: they assert that all communication is mediated, even interpersonal, because interpersonal communication cannot take place without the mediation of five senses and channels such as air and light.

The model helps us to compare apples with oranges – modes of communication that are normally not compared. While the assertion that senses are media and that channels are air and light is problematic for some, the model nevertheless helps us to see that variables such as control, involvement and temporality may be as important as left-to-right sequences in diagrams in our quest to understand communication processes.

### ASSESS YOURSELF

Identify points in figure 1.7 where newer media might be located.

## Foulger's ecological model of communication

Foulger (2004) notes that considerable progress has been made in our understanding of communication processes. Rather than simply define message users as receivers, he suggests that a newer definition of 'consumer' is more appropriate, as we all have a multiplicity of messages from different sources to choose from. He also notes that 'noise' may just as easily be generated within communicators as come from the outside environment, and that we sometimes engage messages through 'selective attention'. He also argues that most communication models are really 'injection' models in which message reception is automatic, but he contends that to expect such reception to be automatic is unrealistic.

While Foulger's ecological model bears resemblance to the models we have considered thus far, it is innovative in a number of aspects.



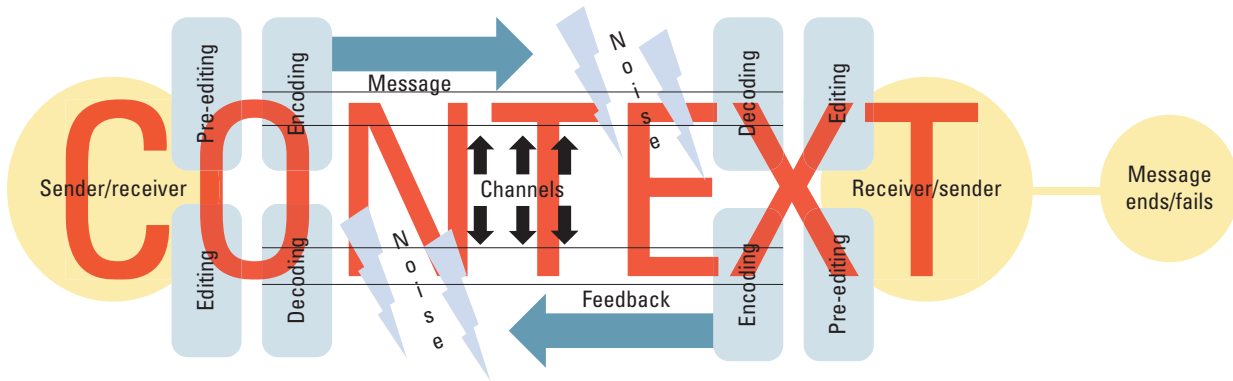
Foulger argues that:

1. 'senders' need to be redefined as 'creators', as well as receivers redefined as 'consumers'
  2. messages are created and consumed using language
  3. language occurs within the context of media
  4. messages are constructed and consumed within the context of media
  5. the roles of consumer and creator are reflexive. People become creators when they reply or supply feedback to other people. Creators become consumers when they make use of feedback to adapt their messages to message consumers. People learn how to create messages through the act of consuming other people's messages
  6. a consumer's interpretation of a message necessarily attributes meaning imperfectly. Consumers interpret messages within the limits of the languages used and the media those languages are used in. A consumer's interpretation of a message may be very different from what the creator of a message imagined
  7. people learn media by using media. The media they learn will necessarily be the media used by the people they communicate with
  8. people invent and evolve media. While some of the modalities and channels associated with communication are naturally occurring, the media we use to communicate are not.
- (Adapted from Foulger 2004)

Foulger's model then notes the role shift we are all undertaking in a world bombarded with messages, it links language use to message formation, and it stresses the subjectivity and synergy of message creation and consumption.

## Model 6: an expanded model of communication

Building upon what we have learnt by looking at the five previous models, figure 1.8 suggests another – although not necessarily perfect – model of communication (Eunson 2007). Let's see how it might work.



**FIGURE 1.8** An expanded model of communication

## Senders and receivers

The message sender does not stay in that one role for long: in most cases, communication is two-way, with sender and receiver switching roles. As shown in table 1.2, receivers are known by different names, depending on the type of communication.

**TABLE 1.2** Message receivers in different fields of communication

Communication field	Receivers
Interpersonal communication	Listeners
Public relations	Publics
Mass media	Audiences, demographics, viewers, listeners, targets
Organisational communication	Customers, clients, stakeholders
Presentations, public speaking	Audiences, auditors
Online communication	Users, participants

Sources: Adapted from Seitel (2013), McQuail & Windahl (1995), Wood (2014), Shockley-Zalabak (2014).

## Messages

**Message:** information conveyed by any means from one person or group to another person or group

Human communication is varied and often complex. **Messages** may be written, spoken, nonverbal, graphic or visual. A message may involve a simple greeting ('Good morning, can I help you?') or warning ('Stop!'); a nonverbal communication (a smile, a frown); a transmitted text message (a letter or email); or a verbal presentation (a radio broadcast, a speech or a declaration of war) (Gozzi 2004a; Gozzi 2004b; Gozzi 2005). Message production can be analysed in terms of qualities such as directness and listener adaptedness; specific word choices (e.g. 'can you' versus 'will you'); and para-verbal aspects such as filled pauses; and in terms of strategies, such as goal-seeking behaviour, persuasion and politeness (Wilson 1997). As we noted when considering the Lasswell model (p. 8), a good strategy when planning your messages is to remember what every journalist is taught: 5WH (what, when, where, why, who, how).

Messages are also carried via cultural products such as songs and films: 'message songs' or 'message films' may be socio-political discussions rather than mere vessels of entertainment. Such messages are not always popular: Hollywood producer Samuel Goldwyn, noted for his cynicism, once remarked: 'If I want to send a message, I'll call Western Union [the US telegraph company]'.

### Pre-editing, encoding, decoding, editing

In war or any situation involving conflict, messages are sometimes sent in secret codes, which can then be decoded by recipients who know what the code is. A similar process can

happen in everyday communication, with messages often edited and encoded (i.e. the ‘pure’ message is transformed or masked in some way).



Messages may be written, spoken, nonverbal, graphic or visual. A simple handshake can convey several messages all at once.

**Encoding:** qualitatively transforming or masking a message in some way

Typical ways of **encoding** or qualitatively transforming messages are shown in table 1.3. Although these types of encoding are, for the sake of clarity, classified here into three distinct categories, in reality they commonly spill across these categories.

**TABLE 1.3** Types of message encoding

Mechanical	Behavioural	Systematic
Accent	Compassionate tone	Jargon or technical language
Inflection	Sarcastic tone	Secret code
Pitch	Hinting/innuendo	Sign language
Pausing	Secretive body language	Semaphore
Emphasis	Directness	Puns
Pronunciation	Aggressive tone	Double entendres
Garbled speech	Hesitation	Irony
Quiet speech	Stressed demeanour	Style or register

**Decoding:** qualitatively transforming or converting a message from a coded form into a plain form

Of course, if the encoded message is to get through, the receiver must have the knowledge and skills needed for **decoding** or interpreting the message, and this is far from guaranteed. However, while the encoding–decoding metaphor makes sense for most of the messages we might send and receive, we need to consider other factors and situations. What if, for example, a message is never sent? What if a message is sent, but it is substantially modified or engineered before it is sent? Table 1.4 compares encoding with pre-editing.

**TABLE 1.4** Encoding versus pre-editing

Pre-editing	Encoding
Transforming the message content quantitatively	Transforming the message content qualitatively

**Pre-editing:** consciously or unconsciously choosing to quantitatively transform or limit the content of a message before it is sent

Sometimes messages are pre-edited or shaped or filtered. Like encoding, **pre-editing** involves transforming the message content, but whereas encoding involves *qualitative* transformation, pre-editing involves *quantitative* transformation.

After pre-editing, what remains of the message is then encoded and sent. This is not always the case – in fact, it may be the mark of authenticity, honesty, transparency and

effectiveness in communication if the message is not shaped or pre-edited in any way – but it happens often enough for us to need to pay attention to the process. Table 1.5 shows how this pre-editing of messages sometimes happens in different areas of communication (note that some strategies may overlap in some contexts).

**TABLE 1.5** Types of message pre-editing

Pre-editing strategy	Communication field	Explanation/example
No pre-editing	All	Complete openness in message sending
Intimidation	All	Threats and/or violence can induce people not to speak out (Kahn 2007; Lawther 2013;).
Denial	Intrapersonal, interpersonal	Psychological defence mechanism, sometimes operating unconsciously. A person in denial simply refuses to acknowledge certain facts (Freud 1971; Varki & Brower 2013; Burgo 2013).
Topic avoidance	Interpersonal	Couples in developing romantic relationships may avoid particular topics, such as religion, according to levels of intimacy and relationship uncertainty (Donovan-kicken, Guinn, Romo & Ciceraro 2013; Merrill & Afifi 2012).
Self-silencing	Interpersonal	Women who have contracted AIDs via sexual activity may silence their own feelings, thoughts and actions to avoid conflict and maintain a relationship (Jacobs & Thomlison 2009). Men and women may self-silence because of depression and/or conflict avoidance (Jack & Ali (eds) 2010).
Chilling effect	Interpersonal, group	Family members may suppress information and conceal secrets because of fears of recrimination (Afifi & Olson 2005); researchers may draft grant requests, leaving out 'controversial' research objectives (Kempner 2008); government regulation may cause public servants to self-censor (Acs & Cameron 2013).
Contextomy	Interpersonal, organisational, public	Words when quoted are taken out of their original linguistic context in order to give a false impression (McGlone 2005; Tynan 2012).
Self-censorship	Group  Organisational  Public	In the groupthink model, members of cohesive groups contribute to ineffective decision making by deciding not to bring controversial material into the discussion (Janis 1982); psychologists as a profession may display groupthink (Levi 2014; Mayo-Wilson, Zollman, & Danks 2013; Hogg 2013; Redding 2012).  Academics in a Chinese university self-censor expression of ideas because of political pressure, while academics in a North American university self-censor because of corporate sponsorship of research and political pressure caused by anti-terrorist sentiment (Bowen 2005). Non-profit organisations may self-censor in order to appeal to private sector funders (Gray & Kendzia 2009).  Individuals withhold their true opinions from an audience perceived to disagree with those opinions; media editors suppress material because of perceived threats from religious extremists and authoritarian governments; editors suppress material critical of advertisers, particularly when media concentration/ownership is high (Hayes, Glynn & Shanhan 2005; Jacoby 2006; Chan 2009; Germano & Meir 2013).

*(continued)*

**TABLE 1.5** (continued)

Pre-editing strategy	Communication field	Explanation/example
Spin	Public	Some public relations techniques may be used to manipulate the truth (Stauber & Rampton 1995; Dietrich 2014; Moloney 2013).
Agenda setting	Public/media	Media may not be successful in telling people what to think, but may be more successful in telling people what to think about; some issues are focused on, while others are not (McCombs 2014; Boydston 2013; Johnson (ed.) 2014; Green-Pedersen & Walgrave (eds) 2014).
	Group	Items may be arranged on a meeting agenda to emphasise and de-emphasise certain issues; there may also be a 'hidden agenda' or concealed strategy of control (Roessler 2008; Stoesz & Stiffney 2011).
Framing	Interpersonal	Mediators in conflicts may choose to re-phrase words and concepts in order to make agreement more likely. Females may cast themselves in a particular inferior role to conform to social expectations (Bloch & Lemish 2005; Livinwood 2003; Roessler 2008). Indian newspapers may portray Indian Muslims in a particular way (Narayana & Kapur 2011).
	Public/media	Media editors and proprietors may emphasise and de-emphasise certain issues and approaches (Greenberg & Knight 2004; Norris, Kern & Just (eds) 2013; Zillman et al. 2004). Environmental issues can be framed in different ways (Schlichting 2013).
Spiral of silence	Interpersonal, group, public	People may experience pressure to conceal their views when they think they are in the minority — public opinion is our 'social skin' and comprises attitudes one can express without running the danger of isolating oneself (Noelle-Neumann 1993; Neuwirth & Frederick 2004; Drake 2008).
Shyness	Intrapersonal, interpersonal	Shyness may be biologically determined, but is certainly a restricting role that may inhibit an individual from expressing true feelings and thoughts (Scott 2004; www.shyness.com 2006; Cain 2012).
Muted group theory	Interpersonal, group, public	Women and other marginalised or minority groups may have their opinions discounted: their gender, ethnic and sociopolitical roles mean that they are not taken seriously (Kramarae 1981; Wall & Gannon-Leary 1999; Hagan 2008).
Gender-based withholding	Interpersonal	Males may withhold emotional support from other males because empathy may be seen as unmasculine (Burlison, Holmstrom & Gilstrap 2005). Athletes may suppress feelings for morale of team (Tamminen & Crocker 2013).
Tactful omission/deafening silence	Interpersonal	Individuals may try to spare the feelings of others by deliberately not talking about certain issues; the same thing might be attempted with manipulative and hostile intent. The undiscussed issues may be the 'elephant in the living room' that sooner or later will demand attention (Zerubavel 2006; Kostigan 2009). Absentee landlords care less about conservation than owner landholders, but for governments this is the elephant in the room which will not be discussed (Petrzelka, Ma & Malin 2013).

Pre-editing strategy	Communication field	Explanation/example
Taboo	Public, intercultural	Certain issues and topics are off-limits because of spiritual and/or social precepts (Douglas 2002; Freud 1962 [1913]). Menstruation among young females is a taboo topic, but there needs to be global education on the topic (Sommer & Sahin 2013).

**Editing:** consciously or unconsciously choosing to quantitatively transform or limit the content of a message after it is received

Also, what happens if a message is sent and decoded, but is then reacted to in such a way that the message content is further modified? In such circumstances, it may be that **editing** takes place (table 1.6).

**TABLE 1.6** Types of message editing

Editing strategy	Communication field	Explanation/example
Selective perception/recall	Intrapersonal, interpersonal	People may not recall all of the content of a message because of ineffective psychological processing or conscious or unconscious bias; they may be so hyper-vigilant in perceiving some things that they fail to notice other things (Wojcieszak & Price 2009; Green, Sedikides & Gregg, 2008; Banaji & Greenwald 2013; Fiske & Taylor 2013; Milton 2013).
Cognitive dissonance	Intrapersonal, interpersonal, public	Individuals have drives that motivate them to avoid or discount information that conflicts with their values and attitudes, and that motivate them to seek out information that reinforces those values and attitudes (Festinger 1957; Zajonc 1970; Stroud, Kim and Scacco 2012).
Self-reinforcing media selection/social dissonance; agenda melding	Intrapersonal, interpersonal, group, public, media	Individuals will pay more attention to messages that reinforce their basic personalities and discount other types of messages; they will give preference to media that reflect the values and attitudes of the groups that individuals belong to (Slater et al. 2003; Shaw, McCombs, Weaver & Hamm 1999; Roessler 2008; Ragas & Roberts 2009).
Inoculation and reactance	Intrapersonal, interpersonal, public	Individuals may resist accepting new ideas because of underlying belief systems and hostile attitudes (Dillard & Shen, 2005; Breen, Gerald-Mark & Matusitz, 2009; Miller et al. 2013).
Hostile media effect	Public, media	Individuals may see unbiased media coverage as biased against their interests (Choi, Yang & Chang 2009; Feldman 2011).
Knowledge gap	Interpersonal, public	As information flows into a social system, members of one socioeconomic status group are more likely to acquire information at a faster rate than members of other socioeconomic status groups (Rucinski 2004; Gaziano & Gaziano 2008; Levin-Rozalis 2010).

Pre-editing and editing, therefore, deal with quantitative transformation of messages, while encoding and decoding deal with qualitative transformation of messages (table 1.7).

**TABLE 1.7** Encoding versus pre-editing

Pre-editing, editing	Encoding, decoding
Transforming the message content quantitatively	Transforming the message content qualitatively

The categories are not hard and fast, and in some communication transactions, the different terms might simply embody distinctions without differences. Indeed, it might be possible to do away with the editing concepts and simply say that message distortion or suppression can be explained by the concept of noise in communication models. If, however,

we are to speculate on why some messages don't get sent in the first place, or if received and decoded still do not seem to get through, then the editing concepts might have some value.

### ASSESS YOURSELF

Working by yourself or with others, brainstorm different ways in which communicators might pre-edit or edit different messages. Use the explanations listed in tables 1.5 and 1.6 or invent new explanations drawn from your own experience and knowledge.

**Noise:** anything that interferes with or distorts a message, or creates barriers to communication

## Noise

**Noise** is anything that distorts the message or creates barriers to communication. Typical sources of noise in communication include:

- sounds, noise
- static, echo
- hearing impairment
- faulty eyesight
- imperfect transfer of information (e.g. a telephone message is passed on inaccurately)
- poor concentration
- incomplete message transfer
- information deliberately withheld
- message misinterpretation (e.g. as a result of fatigue, false assumptions or prejudices)
- mispronunciation
- nonverbal behaviour that appears to contradict message content
- misperception of situations and people.

### ASSESS YOURSELF

Play the game of Chinese whispers. Working in groups (the larger the better), have one person create a nonsense text message featuring some basic description and speech (e.g. *The blue wizard put on a yellow cape and walked to the castle window. He looked out onto the red snow below. There he could see six giant green deer, two of them having silver antlers. The wizard said, 'Boo ha Joe'*), then whisper the message to another person, out of earshot of the rest of the group. This second person then repeats the message, to the best of his or her recall, to a third person. Repeat this process as many times as possible. Finally, compare the message spoken by the last person to receive it with the original version. Has the message changed? If so, what might this reveal about communication processes and noise?

**Feedback:** response from message recipient, turning one-way into two-way communication

## Feedback

**Feedback** (a term that originated in the field of telecommunications but has come to be understood as any response to a message) may entail a raised eyebrow, applause, laughter, disagreement, a spoken response ('Yes', 'No', 'I do'), a physical response (a punch, a kiss, a confused look), a written response (a reply to a letter, memo or email), or a change in social behaviour (an increase in TV ratings, a consumer decision to buy something, a bid at an auction).

Feedback, then, transforms a one-way message into two-way communication, by allowing the participants in the communication process to switch the roles of sender and receiver. 'Feedback', as a term, reveals its history in the telecommunications engineering discourse of Shannon and Weaver and the later discourse of computer science. As such, it strikes some as being a piece of jargon, and suggests a dehumanised, mechanical and unrealistic way of describing human communication. A North American university senior administrator once created a policy whereby any administrator using the terms 'feedback' or 'input' would be fined a small but symbolic amount (Dickson 1992). It is nicely ironic that a term that has

become a key concept in communication is seen by many as jargon – the antithesis of good communication. The paradox may be that the very ‘jargon-ness’ of the term may create a comfortable distance in communication processes for some people, helping to negate threatening perceptions of criticism and/or intimacy in human interaction – ‘Can you send me some feedback on my report?’



Feedback transforms a one-way message into two-way communication.

## Channels

**Channel:** the medium or means of sending messages

**Mediated communication:** communication that takes place by means of a technological channel

**Synchronous communication:** communication that is sent and received at virtually the same time

**Asynchronous communication:** communication that is sent at one time and received at another time

**Dyad:** a group of two people

**Lean medium:** a medium that conveys little detailed information beyond the main message

**Rich medium:** a medium that conveys a range of verbal and nonverbal information, including colour, auditory and visual elements

**Channels** are the means by which messages are conveyed. (Communication analysts sometimes use the terms *channels* and *media* interchangeably, as we do here.) To help make the concept less abstract, let’s consider the channels frequently used in the workplace.

There are many channels, both traditional and new, by which messages can be communicated around workplaces or organisations. Such channels can be:

- one-way, two-way or multidirectional
- technologically **mediated** (e.g. via telephone, internal/external mail, computer or video) or unmediated (delivered personally)
- **synchronous** (sent and received virtually simultaneously) or **asynchronous** (received at a later time)
- individual (involving a **dyad**, or two people) or group (involving more than two people). (Note that communications may be characterised as *Individual* ↔ *Individual*, *Individual* ↔ *Group*, *Group* ↔ *Individual*, *Group* ↔ *Group*.)
- hard copy (taking a physical form, such as a letter or printed report) or electronic (viewed and/or stored using an electronic device)
- permanent or transient (can the message be stored or not?)
- formal or informal (is the message official or unofficial?)
- **lean** or rich (a **rich medium** transfers a range of verbal and nonverbal information, including colour, auditory and visual elements).

Traditional communication channels include memos, formal meetings, suggestion boxes, plenary or large-scale official briefings, team or department briefings, newsletters, charts and posters. Current approaches include:

- email
- websites – the internet (accessible by all) and intranets (accessible only by those inside the organisation (e.g. formally laid out web pages, wikis, podcasts and blogs)

- 360° feedback (in which a person is appraised or evaluated by those above, below and at the same level in an organisation)
- MBWA (Management By Walking Around), a management approach that entails leaders simply walking through work areas, making themselves available to listen to all staff members, rather than remaining inaccessible in management offices
- closed-circuit telecast – private TV programs broadcast via cable or satellite throughout an organisation
- video recordings and DVDs – e.g. briefings or training programs
- position papers – documents outlining organisational policy
- focus groups – small groups brought together to discuss particular issues
- instant messaging – real-time messages sent via computer networks, often viewed on screen on an ongoing basis
- ombudsman or ombudswoman – a person whose role is to mediate conflicts and communication problems within an organisation.

Other, informal channels of communication within organisations are not controlled by management. These include informal meetings and the grapevine, or rumour mill. All these approaches to communication have their strengths and weaknesses (table 1.8).

**TABLE 1.8** Strengths and weaknesses of different information channels

Information channel	Strengths	Weaknesses
<b>Memos</b>	<ul style="list-style-type: none"> <li>■ Provide hard-copy documentation of events, situations and problems</li> <li>■ Can ensure that the same message reaches everyone</li> <li>■ Can impose discipline upon the writer to describe a situation accurately</li> <li>■ Can be used to send attachments (graphics etc.) that provide real information</li> </ul>	<ul style="list-style-type: none"> <li>■ May be unnecessary and irksome</li> <li>■ If sent too frequently, will not be read or taken seriously</li> <li>■ May be an excuse for some writers to avoid face-to-face communication with others</li> <li>■ Slower than email; becoming used much less often than email</li> </ul>
<b>Facsimile</b>	<ul style="list-style-type: none"> <li>■ Provide hard-copy documentation of events, situations and problems</li> <li>■ Can provide a more rapid response to those outside the organisation than channels such as letters</li> <li>■ Can provide basic, hand-drawn visuals</li> </ul>	<ul style="list-style-type: none"> <li>■ Dependent on recipient having similar hardware in order to receive message</li> <li>■ Older models use paper that does not retain images well</li> <li>■ Increasingly being ignored in favour of email</li> </ul>
<b>Noticeboards</b>	<ul style="list-style-type: none"> <li>■ Cheap, low-tech</li> <li>■ Democratic — everyone has equal access to information</li> <li>■ Traditional</li> </ul>	<ul style="list-style-type: none"> <li>■ Physically fragile</li> <li>■ Can easily get lost under notice overload</li> <li>■ Can easily be defaced, removed</li> <li>■ Readers need to be motivated to read</li> </ul>
<b>Emails</b>	<ul style="list-style-type: none"> <li>■ Provide documentation of events</li> <li>■ Can ensure that the same message reaches everyone</li> <li>■ Asynchronous — that is, sender can send them out at one time and receivers can receive them at another time</li> <li>■ Can impose discipline on the writer to describe a situation accurately and in detail</li> </ul>	<ul style="list-style-type: none"> <li>■ May be unnecessary and irksome</li> <li>■ If sent too frequently, will not be read or taken seriously</li> <li>■ May be an excuse for some writers to avoid face-to-face communication with others</li> <li>■ If created in a hurry (as many are), may convey impression of sloppiness and lack of professionalism</li> <li>■ May prove difficult to store, file and access</li> </ul>

Information channel	Strengths	Weaknesses
	<ul style="list-style-type: none"> <li>Can be used to send attachments (graphics etc.) that provide real information more dramatically than memos can</li> <li>May encourage more upward and lateral communication</li> <li>Faster than paper-based memos</li> </ul>	<ul style="list-style-type: none"> <li>Might be lost if hardware and/or software crashes</li> <li>Might not be taken as seriously as a hard-copy document</li> </ul>
<b>Voicemail</b>	<ul style="list-style-type: none"> <li>Asynchronous — we can leave the message when it suits us</li> <li>Can convey personal touch</li> <li>Can convey nonverbal messages</li> </ul>	<ul style="list-style-type: none"> <li>Can be done badly (insufficient details left, poor diction, unclear message)</li> <li>Lean — lends itself to simple messages, not detail</li> <li>Can lead to ‘message ping-pong’, in which two people leave messages for each other but never get to talk</li> </ul>
<b>Formal meetings</b>	<ul style="list-style-type: none"> <li>Personal</li> <li>Easy to observe nonverbal behaviour</li> <li>Conversational pacing/interchange cues clear</li> <li>Formal record kept (minutes)</li> <li>Easy for observers, media to monitor</li> <li>Familiar set structure for handling rituals of conflict and agreement</li> </ul>	<ul style="list-style-type: none"> <li>Formality may inhibit free flow of information, opinions, hunches, gossip</li> <li>Hampered by fear of going ‘on record’ in meeting minutes</li> <li>Tendencies to ritual posturing</li> <li>May suffer from ‘hidden agenda’</li> <li>May be too stressful or uncomfortable for shy individuals, who are inhibited from contributing</li> <li>Subject to pressure to reach decisions merely because of time, agenda pressures</li> </ul>
<b>Informal meetings</b>	<ul style="list-style-type: none"> <li>Fewer inhibitions on free flow of information, opinions, hunches, gossip</li> <li>No fear of going ‘on record’ in meeting minutes</li> </ul>	<ul style="list-style-type: none"> <li>Trust may be betrayed</li> <li>Some don’t feel bound to honour commitments because of informality — there may be good talk but little follow-up</li> </ul>
<b>Suggestion boxes</b>	<ul style="list-style-type: none"> <li>Encourage anonymous suggestions, which removes inhibitions and might help some write down their thoughts</li> <li>Give opportunity for considered views — conveyed with more discipline than ‘just talking’</li> </ul>	<ul style="list-style-type: none"> <li>Might not be taken seriously by management or staff unless follow-up is clearly demonstrated</li> <li>Some may hide behind anonymity to express unconstructive, malicious views</li> </ul>
<b>360° feedback</b>	<ul style="list-style-type: none"> <li>Can break down barriers restricting free flow of information and opinion imposed by hierarchy</li> <li>Can impose discipline upon subordinates to take a wider view of tasks and teams in the organisation</li> </ul>	<ul style="list-style-type: none"> <li>Can be exercises in hypocrisy unless anonymous or managed by third parties</li> <li>Can slow down decision processes with paperwork</li> <li>Can as easily increase conflict as decrease it</li> </ul>
<b>Focus groups</b>	<ul style="list-style-type: none"> <li>Provide a structure for drawing out opinions and facts</li> <li>Facilitator can ensure that group moves beyond ‘pet peeve’ anecdotes to structured responses</li> <li>Can be repeated around workplace to build up database</li> </ul>	<ul style="list-style-type: none"> <li>May not be typical of the larger group (i.e. not a statistically valid sample)</li> <li>May simply legitimise complaining, without constructive suggestions or rationales for opinions given</li> </ul>

(continued)

**TABLE 1.8** (continued)

Information channel	Strengths	Weaknesses
<b>Plenary briefings</b>	<ul style="list-style-type: none"> <li>■ Ensure same message gets out to everyone</li> <li>■ Everyone sees everyone else — common purpose of larger workplace dramatically emphasised</li> <li>■ Good occasions for executives skilled in communication to inform, persuade and motivate</li> </ul>	<ul style="list-style-type: none"> <li>■ Depend critically on communication skills of speakers — cannot always be guaranteed</li> <li>■ Little opportunity for two-way communication, questions, back-and-forth conversations</li> <li>■ Unless rich in facts and overviews, can lead to cynical and confused responses from staff</li> </ul>
<b>Briefings by supervisor/team leader</b>	<ul style="list-style-type: none"> <li>■ Message has high credibility</li> <li>■ Give local details, feedback</li> <li>■ Can show how local efforts fit into bigger picture</li> <li>■ Can be focus of two-way communication, feedback going back up the organisation</li> </ul>	<ul style="list-style-type: none"> <li>■ Depend critically on supervisor's communication skills</li> <li>■ May lead to overemphasis on local issues as opposed to big picture</li> <li>■ Can lead to 'us against them' paranoia and excuse making</li> </ul>
<b>Closed-circuit telecasts</b>	<ul style="list-style-type: none"> <li>■ Ensure same message gets out to everyone</li> <li>■ Everyone sees same message, irrespective of location in organisation — dramatically promotes common purpose of larger workplace</li> <li>■ Opportunity for executives skilled in communication to inform, persuade and motivate</li> <li>■ Can feature visually rich material in cutaway and intro shots as examples or case studies (see podcasts)</li> </ul>	<ul style="list-style-type: none"> <li>■ Depend critically on communication skills of speakers</li> <li>■ Little opportunity for two-way communication, questions, back-and-forth conversations</li> <li>■ Can be expensive</li> <li>■ Subject to technical glitches</li> <li>■ Unless rich in facts and overviews, can lead to cynical and confused responses from staff</li> </ul>
<b>Teleconferencing 1: audio-conferencing</b>	<ul style="list-style-type: none"> <li>■ Can cut travel costs</li> <li>■ Can make meetings happen that might not have happened at all</li> <li>■ Cheaper than video/webcam-based systems</li> </ul>	<ul style="list-style-type: none"> <li>■ Can still be expensive</li> <li>■ Cannot show nonverbal communication</li> <li>■ Cannot display data as basis for discussion</li> </ul>
<b>Teleconferencing 2: video-conferencing</b>	<ul style="list-style-type: none"> <li>■ Can cut travel costs</li> <li>■ Can make meetings happen that might not have happened at all</li> <li>■ Can display nonverbal communication of participants</li> <li>■ Can incorporate data displays — enrich content</li> </ul>	<ul style="list-style-type: none"> <li>■ Can be expensive</li> <li>■ Can be impersonal: face-to-face communication is valuable</li> <li>■ Technical problems may mean that all participants cannot be seen</li> <li>■ Can be expensive to set up and maintain</li> <li>■ May inhibit interaction because of technological artificiality</li> </ul>
<b>Teleconferencing 3: web-conferencing</b>	<ul style="list-style-type: none"> <li>■ Individuals and groups physically distant from each other can confer</li> <li>■ Can be cheap if savings on transport and accommodation are great</li> <li>■ Technological artificiality may damp down conflict dynamics</li> <li>■ Cheaper than videoconferencing — Skype and Face Time (Apple) have greatly reduced costs</li> </ul>	<ul style="list-style-type: none"> <li>■ Excludes those who do not have access to technology</li> <li>■ Computer-based conferencing is limited in the number of images that can fit on a computer screen</li> </ul>

Information channel	Strengths	Weaknesses
<b>Video clips/DVDs</b>	<ul style="list-style-type: none"> <li>■ Ensure same message gets out to everyone</li> <li>■ Everyone sees same message, irrespective of location in organisation — dramatically promotes common purpose of larger organisation</li> <li>■ Opportunity for executives skilled in communication to inform, persuade and motivate</li> <li>■ Easier than with broadcasts to feature visually rich material in cutaway and intro shots as examples or case studies</li> <li>■ Staff can secure their own copies</li> <li>■ Message can be replayed as required</li> </ul>	<ul style="list-style-type: none"> <li>■ Depend critically on communication skills of speakers</li> <li>■ No opportunity for two-way communication, questions, back-and-forth conversations</li> <li>■ Can be expensive, especially if complex production techniques are used to escape 'talking heads' effect</li> <li>■ Subject to technical glitches</li> <li>■ Unless rich in facts and overviews, can lead to cynical and confused responses from staff</li> <li>■ May not be played</li> </ul>
<b>Newsletters</b>	<ul style="list-style-type: none"> <li>■ Hard copy, semi-permanent</li> <li>■ Can show examples of a change program</li> <li>■ Can personalise a change program with interviews and photos</li> </ul>	<ul style="list-style-type: none"> <li>■ May not be kept as record</li> <li>■ Unless approach is professional, showing problems as well as successes, may be dismissed as management propaganda</li> </ul>
<b>Annual reports</b>	<ul style="list-style-type: none"> <li>■ Useful for external and internal audiences to get information on how the organisation is doing</li> <li>■ Meets government rules for accountability and transparency</li> <li>■ Allows reader to take in information at own pace</li> <li>■ Acts as an incentive for the board of management to achieve goals</li> <li>■ Can be well-designed, with good/excellent information design</li> </ul>	<ul style="list-style-type: none"> <li>■ Can be too elaborate and expensive</li> <li>■ Can be seen by some shareholders and employers as just more management propaganda</li> <li>■ Can actually mislead with 'cooked books' information skilfully downplayed</li> <li>■ Can have poor readability qualities</li> <li>■ Can take a lot of time and resources to put together</li> </ul>
<b>Charts and posters</b>	<ul style="list-style-type: none"> <li>■ Hard copy, semi-permanent</li> <li>■ Good for showing progress, relationships between goals or units</li> <li>■ Relatively cheap, can be displayed in numerous locations</li> </ul>	<ul style="list-style-type: none"> <li>■ Can be relatively expensive, depending on production values</li> <li>■ Unless kept up to date, can quickly become irrelevant</li> <li>■ Unless approach is professional, showing problems as well as successes, may be dismissed as management propaganda</li> </ul>
<b>MBWA</b>	<ul style="list-style-type: none"> <li>■ Gets bosses out from behind desks to the 'sharp end'</li> <li>■ Gives managers higher quality, fresher, unfiltered information</li> <li>■ Can motivate staff to see bosses taking a direct interest and listening</li> </ul>	<ul style="list-style-type: none"> <li>■ May tempt 'short concentration span' bosses to avoid detailed paperwork and other obligations</li> <li>■ Unless data unearthed is recorded in some way, may not lead to follow-through — 'all talk, no action' perception</li> </ul>
<b>Grapevine</b>	<ul style="list-style-type: none"> <li>■ Often correct</li> <li>■ May be only source of information in low-transparency organisations</li> </ul>	<ul style="list-style-type: none"> <li>■ Often incorrect</li> <li>■ May be a sign of lack of transparency in organisation</li> </ul>

(continued)

**TABLE 1.8** (continued)

Information channel	Strengths	Weaknesses
<b>Position papers</b>	<ul style="list-style-type: none"> <li>■ Can provide detailed rationale of change process for those who want it</li> <li>■ Hard copy, permanent</li> <li>■ Can be put on intranet</li> </ul>	<ul style="list-style-type: none"> <li>■ Unless well written and laid out, and discussing problems as well as good news, may be ignored</li> <li>■ May be too much information if other sources are available</li> </ul>
<b>Websites/intranets</b>	<ul style="list-style-type: none"> <li>■ Easy to access</li> <li>■ Can contain solid, valuable information if hyperlinking is used intelligently</li> <li>■ Can be updated quickly, reflecting new developments in change program</li> <li>■ (see wikis, podcasts and blogs)</li> </ul>	<ul style="list-style-type: none"> <li>■ Require a lot of resources to set up and maintain</li> <li>■ Unless approach is professional — showing problems as well as successes — may be dismissed as management propaganda</li> </ul>
<b>Ombudsman or Ombudswoman</b>	<ul style="list-style-type: none"> <li>■ Can provide impartial advice</li> <li>■ Has some authority to follow through</li> <li>■ Can alert management to brewing problems</li> </ul>	<ul style="list-style-type: none"> <li>■ Impartiality may be compromised if paid by management, unless guarantees are put in place</li> <li>■ May simply become a conduit for a torrent of complaint</li> </ul>
<b>Instant messaging</b>	<ul style="list-style-type: none"> <li>■ Real-time communication</li> <li>■ Presence detection (target is always aware message is coming through)</li> <li>■ Immediate priority can be given</li> </ul>	<ul style="list-style-type: none"> <li>■ Technical problems (e.g. computer viruses)</li> <li>■ Considered by some to be immature technology</li> <li>■ Often seen as simply a tool for gossip</li> </ul>
<b>Texting</b>	<ul style="list-style-type: none"> <li>■ Useful for short messages</li> <li>■ Can be used to send messages quietly</li> </ul>	<ul style="list-style-type: none"> <li>■ As with instant messaging, can be considered by some to be immature technology</li> <li>■ Often seen as simply a tool for gossip</li> <li>■ Not ideal for lengthy messages</li> <li>■ Problems with storage, getting hard copy</li> <li>■ Can lead to obsessive texting, accidents when texters do not pay attention to their environment</li> </ul>
<b>Podcasts</b>	<ul style="list-style-type: none"> <li>■ A form of narrowcasting (based on the words ‘broadcast’ and ‘iPod’ (an Apple device for storing and receiving audio and video files), it shares virtues of closed-circuit telecasts</li> <li>■ Allows portability — listener/viewer can receive messages anywhere on hand-held devices (not only those made by Apple) or on computers</li> </ul>	<ul style="list-style-type: none"> <li>■ Requires special technology to receive</li> <li>■ One-way medium of communication</li> <li>■ May lead to deterioration in human interaction and rapport</li> </ul>
<b>Wikis</b>	<ul style="list-style-type: none"> <li>■ A group or ‘patchwork quilt’ of web pages that allows collaborative documents on internet or private intranets to let many contributors build knowledge and exchange ideas</li> <li>■ Encourages ‘piggy-backing’ of ideas, as in brainstorming, allowing synergy and inspiration to create new knowledge management database</li> </ul>	<ul style="list-style-type: none"> <li>■ Depends critically upon trust and nonmalicious behaviour of contributors</li> <li>■ Many items or sections are amateurish, as the peer review process of print-based encyclopedias is lacking (although this is changing with internet-based wikis such as Wikipedia and Citizendium)</li> <li>■ Editors may interfere in editing of contributions</li> </ul>

Information channel	Strengths	Weaknesses
		<ul style="list-style-type: none"> <li>■ May be seen as management propaganda</li> <li>■ Items contributed may suffer same problems as many knowledge management programs</li> </ul>
<b>Blogs</b>	<ul style="list-style-type: none"> <li>■ Web logs or blogs can be seen as part of 'social media' of 'user-generated content' as opposed to official messages through mainstream media</li> <li>■ Can be used internally in an organisation to provide updates, generate discussions, foreshadow new developments via 'posts'</li> <li>■ Can be used externally to maintain contact with customers, foreshadow new products and services and invite feedback</li> <li>■ Can act as ongoing 'window' or press release or position paper of an organisation</li> </ul>	<ul style="list-style-type: none"> <li>■ Can be seen as amateurish, egocentric diary-like 'vanity publishing'</li> <li>■ Many blogs are not read or maintained</li> <li>■ Many are seen as too informal/sloppy in use of language, which gives an impression of amateurism</li> <li>■ May give away too much of internal information, culture</li> <li>■ May give the impression that writer has too much time on their hands</li> </ul>
<b>Facebook</b>	<ul style="list-style-type: none"> <li>■ Provides interconnection for hundreds of millions of people</li> <li>■ Data or metrics available to hosts include total likes, talking about this, total reach, gender and age, country, city, and language of users</li> <li>■ Can give an organisation a 'trendy' image if the Facebook page is well-designed</li> <li>■ Can provide feedback for potential/actual customers/clients</li> </ul>	<ul style="list-style-type: none"> <li>■ Have been some serious security breaches, with members' details stolen/hacked</li> <li>■ Facebook may give personal details to law enforcement and other third parties</li> <li>■ Hard work maintaining new content, which is added to retain interest of users</li> <li>■ Third parties may use data mining techniques to gain private information</li> <li>■ Online interaction with others may cause marital tension (20 per cent of UK divorce petitions in 2009 mentioned Facebook)</li> <li>■ Workers may waste time by looking at Facebook</li> <li>■ Confusion over privacy settings for pages, profiles and groups can be a problem</li> <li>■ Ambiguity persists over whether it is a personal leisure activity or a business platform</li> </ul>
<b>Twitter</b>	<ul style="list-style-type: none"> <li>■ Information about other sites, stories can be hyperlinked</li> <li>■ Customers/clients can be attracted to companies ('clicks to bricks') by providing discount coupons, competitions, sneak previews, videos</li> <li>■ Can convey information fast</li> <li>■ Number of followers can be a sign of prestige</li> <li>■ Can be used to get around authoritarian net controls</li> </ul>	<ul style="list-style-type: none"> <li>■ Limitation of 140 characters</li> <li>■ Many tweets are quite trivial and narcissistic</li> <li>■ Many tweeters simply have too much time on their hands</li> <li>■ Trolls (harassing idiots) may 'stalk' tweeters</li> <li>■ Can be hacked and content changed</li> </ul>

(continued)

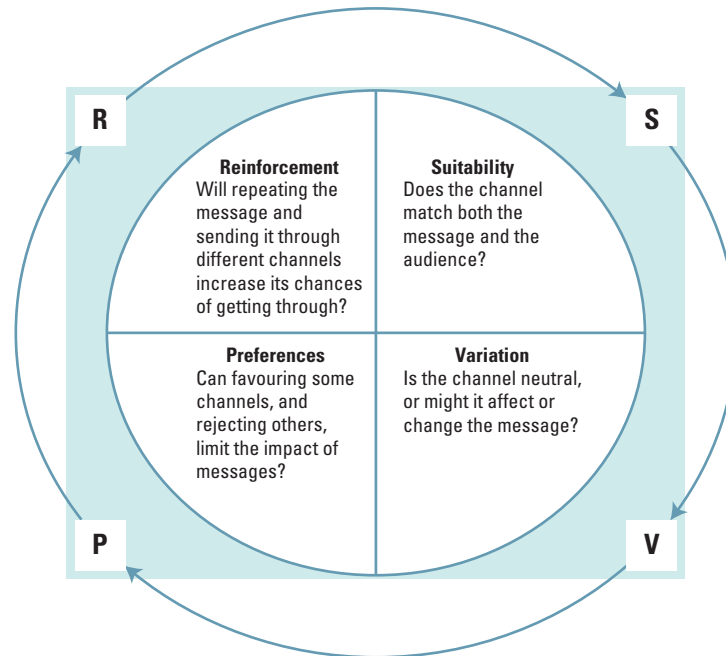
**TABLE 1.8** (continued)

Information channel	Strengths	Weaknesses
Twitter (continued)	<ul style="list-style-type: none"> <li>Can be quicker than email</li> <li>Allows access to thoughts of influential people (e.g. Rupert Murdoch)</li> </ul>	<ul style="list-style-type: none"> <li>Business accounts take up a lot of time in posting new content</li> </ul>
LinkedIn	<ul style="list-style-type: none"> <li>Good for professional networking</li> <li>Personal profiles can be built by contributing real content to groups</li> <li>Groups can be created to cater to niche audiences with members widely separated geographically</li> <li>Data on other users can be obtained for higher subscription rates</li> <li>Jobs can be advertised</li> </ul>	<ul style="list-style-type: none"> <li>Not free for premium service</li> <li>Content in groups is often trivial</li> <li>Some groups are poorly maintained</li> <li>Editorial control by group editor can be biased</li> <li>Some 'groups' are commercial enterprises, not really forums for debate</li> </ul>

Sources: Adapted from Eunson (1994); Osterman (2003); Lewis (1999); Te'eni, Sagie, Schwartz & Amichai-Hamburger (2001); Timmerman (2003); Modaff, DeWine & Butler (2008); Harris (2002); Mitchell (2000); Myers (2010); Hussey (2009); Crystal (2008); Newman & Ober (2012); Barbara (2012); Belew (2014).

## Communicating effectively using channels

There are four main criteria we need to bear in mind when choosing the medium of communication. This is shown in the RSVP model of communication channels in figure 1.9. (RSVP is a standard abbreviation, often written on invitations, taken from the French *répondez s'il vous plaît*, or reply if you please.) Your messages will get more replies if you follow the model, so let's now explore it in more detail.



**FIGURE 1.9** The RSVP model of communication channels

### 1. Reinforcement

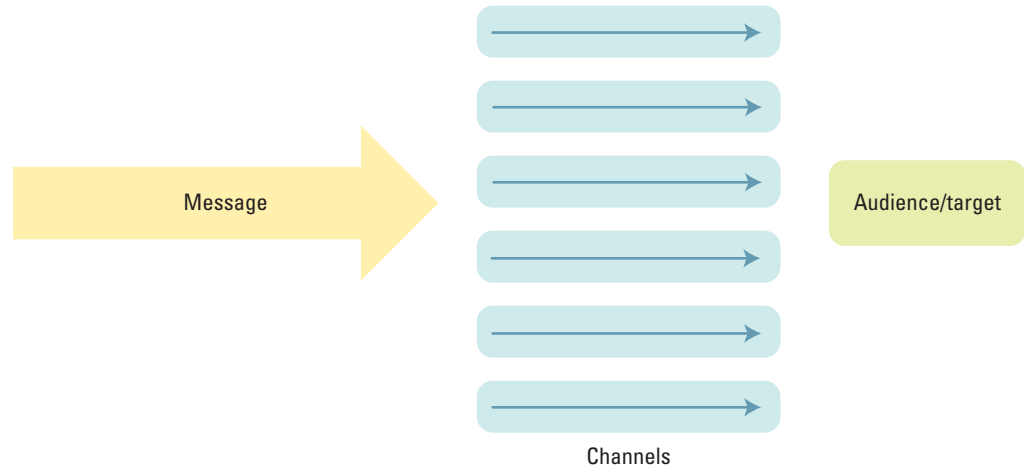
The surest way to get a message across to others is to use more than one channel. This means the message may have to be tailored to different channels, exploiting the strengths of a particular channel while avoiding its weaknesses. Communication effectiveness may therefore depend on saying something more than once, and on saying it in different ways. **Reinforcement** and repetition, applied through different channels, will increase the chances of the message getting through.

**Reinforcement:** sending the same message through different channels

**Channel suitability:** matching the channel to the message and the receiver, audience or target

## 2. Suitability

Match the channel to the message itself and the receiver, audience or target. **Channel suitability** simply means that you choose a channel whose strengths are greater than its weaknesses in terms of the nature of the message and the audience or target (see figure 1.10).



**FIGURE 1.10** Choosing the appropriate channel: first consider the message type and the audience or target

**Variation:** the possible tendency of media or message processes to vary or transform or change the content of a message

## 3. Variation

We cannot assume that the channels or media we use will necessarily convey a message in a neutral and mechanical way: they may affect or **vary** the content of the message in subtle or significant ways, and these effects may be positive or negative. Indeed, we may, consciously or unconsciously, send out quite different messages, depending on the channels we use (Chandler 2002). In effect, this is another type of noise in the communication process. Media theorist Marshall McLuhan once famously claimed ‘the medium is the message’ – in other words, media are not neutral, but actually vary or transform messages and, ultimately, human institutions; see McLuhan (2004 [1964]) and Griffin, and Park’s discussion of McLuhan’s ‘technological determinism’ (Griffin, Ledbetter and Sparks 2015, p. 317; Griffin & Park 2013). Thus, one group listening to a debate on radio and another watching the same debate on television may disagree on who actually won the debate, even though they heard exactly the same words.

## 4. Preferences

**Preferences:** the inclination or bias towards one particular communication channel rather than another

While being aware of our own **preferences** in communication style, in order to choose channels we can work with we should not reject other channels that are effective but with which we may not be as comfortable. For example, a workplace manager who feels uncomfortable interacting directly with her people may keep them at arm’s length with a stream of emails and memos, most of which are ignored by her staff, who feel demoralised and unsupported. She might well be more effective if she were to hold informal meetings or begin to trust her area supervisors to brief staff on important matters.

By contrast, another manager who depends too much on informal meetings and random conversations may confuse his staff with inconsistent messages and policy, and could perhaps benefit from sending out electronic and paper documents setting out policy in a consistent way. If we practise using new or unfamiliar channels, we may become more effective in getting our messages through.

Effective communication depends on being able to match strategies, messages, channels and audiences. The same message may need to be repackaged for different audiences and for different channels of communication. Quinn, Hildebrandt, Rogers and Thompson (1991), for example, suggest that an effective communicator will exploit different communication strategies when, say, making a keynote presentation at a convention or writing a technical or instructional manual. One channel or strategy is not inherently better than another, although it may offer different opportunities. Transformational communication stimulates change, instructional communication directs action, informational communication provides facts and relational communication builds trust (Quinn et al. 1991). The more communication skills and knowledge you master, the more versatile you will become as a communicator, and the greater will be the likelihood that you will be able to communicate effectively in a range of situations. Communicating differentially not only gives you the opportunity to reinforce your message, but also demonstrates your versatility and competence.

Using channels effectively, therefore, depends on:

- matching the channel to the message and the target audience
- repeating and varying the message via different channels to reinforce the message
- being ready to step outside our comfort zone to use new or unfamiliar channels
- being aware that the channel chosen may transform the content of the message.

## Context

The context of the communication process is also important (see figure 1.8). Context issues include the following.

- *Power and status relationships.* Who has control or influence over whom, and what are people trying to achieve in sending a particular message?
- *Cultural factors.* Do the message sender and receiver understand each other's cultural programming, which affects their choice of words and their nonverbal communication?
- *Interpersonal relationships.* What dynamics of empathy/lack of empathy, assertiveness/lack of assertiveness, confidence/lack of confidence, openness/lack of openness exist between receiver and sender?
- *Time.* How does time affect the message? Is it still relevant? Was the response too quick? For example, did a hesitation undercut the impact of the response? How does the communication pattern between people change over seconds, minutes, hours, days, months, years?

## Message termination and failure

We have touched briefly on communication breakdown and success. Part of the beauty of communication models is that they help us to remember that so much communication is transactional or interactive: one message begets another, which in turn begets another, and so on. This dynamic aspect of communication is important, not least because knowing about such dynamism might help us to try harder to see that communication is still going on – for example, via nonverbal gestures, facial movements and postures.

Nevertheless, sometimes communication does break down, and there may be no pleasing circularity to the way in which we interact with others. **Messages** may simply **terminate**, and communication **fails** as a result (see figure 1.8). People may simply never return our calls or answer our letters, and so we give up. Public relations and advertising campaigns may be complete failures as the public simply does not care. Negotiators may walk out, perhaps never to return. A loved one may die without our saying things we wanted to say. Various types of extreme messages may simply leave us speechless, at least for the time being (Berger 2004). Important emails may be trapped by spam filters. Wi-fi may not be strong enough to support skype calls.

**Message termination and failure:** when messages are terminal and when there is no reciprocal response from the message receiver switching into the role of a message sender

Message termination and failure can occur in a variety of different ways. Advertising campaigns, such as the campaigns on these bright billboards at Times Square in New York, may fail simply because the public does not care. They can also fail because consumers feel burdened by information overload — a perception of sensory overload caused by overexposure to communication messages.



## Time and simultaneity

Looking at the various communication models in this chapter, we can see that it sometimes makes sense to try to break communication down into various phases. It also makes sense in the real world to respect such phases — for example, by patiently listening to another person until they have stopped talking, at which point we reciprocate. However, it is wise not to impose too static and ritualised a view of communication, because we might miss out on certain things happening in certain circumstances, and we might also unnecessarily limit our own repertoire of communication skills and strategies. For example, if person A is talking, person B may be nonverbally reacting at the same time or with a minor time lag. Person A may decide — based on observation of person B — to change the content and delivery of the message in order to be more effective. The situation becomes even more complicated — and interesting — when members of a group are communicating with each other. Communication models thus help us to slow down and analyse communication patterns, but we should try to then use the learning we get from that analysis to allow us to speed up and analyse the complex patterns of interaction in real time, in the real world.

### ASSESS YOURSELF

Pair off and ask your partner to think of an example in their life of:

- communication breakdown
- communication success.

Swap roles. Use different communication models to explain what happened. Each person should then introduce his or her partner to the larger group and then recount the shared experiences to the group.

## Communication: always a good thing?

Communication is sometimes seen as a panacea: 'If only we could communicate more, then things would be better'. This is not necessarily the case. To begin with, some people confuse communication with agreement with their views: 'If only you would agree with me, then

things would be better'. The same assumption sometimes underlies people's understanding of listening: 'If only you would listen to me . . .' The outcome of real communication may in fact be disagreement rather than agreement, and to merely 'talk' or to see communication as a metadiscourse of 'talking about talking' (Craig 2005) may not be enough (see the discussion of meta-communication earlier in the chapter).

Within organisations, communication is sometimes overrated as a source of conflict. Conflict may also be due to objective factors such as unit, divisional or team goals, role requirements, organisational structures, personalities, performance criteria, resource allocation and different value systems (Robbins & Judge 2014).

More communication, rather than less, can also backfire when:

- we 'talk a problem to death', going over the same ground again and again without making headway
- a salesperson doesn't shut up and let the customer think about the product and purchase decision
- two people engaged in heated argument say things they later regret (Adler & Proctor 2014).

In other words, we can all learn to be more effective in our communication with others, but sometimes the most effective communication is to say nothing at all, and sometimes we miss the point if we think that a problem is solely or even partially due to communication difficulties.

## Communication and ethics

As communicators, we are often faced with ethical dilemmas, and in this book, we consider many situations in which such dilemmas are presented.

- Should I embellish my résumé or curriculum vitae with 'half-truths' in order to get a job?
- Should I 'lie with statistics' when using graphs or charts in documents or presentations to make my arguments more persuasive?
- Should I pass on, and perhaps embellish, rumours on the organisational grapevine?
- Should I plagiarise material to pad out documents I am writing?
- Should I use dubious tactics (attack the person, divide and conquer) when negotiating with others?
- Should I censor or filter or block information getting to others?
- Should I censor myself or remain silent when the group I am in is making important decisions?
- Should I contribute to a 'shoot-the-messenger' culture by coercing those who bring bad news or those who are 'whistleblowers' or want to speak out about organisational malpractice?
- Should I create 'spin' or deceptive impressions when communicating with the public?
- Should I use knowledge about human behaviour (body language, emotional intelligence, neurolinguistic programming) to more effectively manipulate others? (See chapters 8–10.)
- Should I deliberately distort the situation analysed in a report I am writing in order to create further work opportunities for myself?
- Should I manipulate meetings so that a hidden agenda, rather than the written agenda, is followed?

These are not easy questions, and the realities of the workplace and the wider world often make decisions more difficult than we might think. Marcoux (2006), for example, has argued that, in certain circumstances, it might be right to embellish a résumé, and indeed it might be necessary to do so as a matter of self-defence (the circumstances include those where former employers might not divulge job position details because of legal constraints and where future employers use selection methods apart from simply perusing résumés).

However, as with all ethical questions, we must tread warily on such an issue (Kuhn, Johnson & Miller 2013).

## Ethics and rationalisation

We need to be aware of rationalisations we might indulge in to come up with reasons for conduct that is not ethical. Such rationalisations include:

Everybody's doing it, so why shouldn't I?

This is the argument from democracy: numbers determine what is right. A cliché image of blind conformity is that of lemmings jumping off a cliff: if, however, you are smarter than the average lemming, should you go over the cliff too, along with the rest of the herd? Also, if everyone else around you believes that the world is flat, but you can see that the horizon is curved, should you go along with what they are saying? In fact, in many circumstances, it does make sense to go along with a lie or delusion if the consequences of not doing so are too negative (e.g. being burnt at the stake for affirming that the world is not flat). As the old saying goes, there is no greater sin than to be right at the wrong time. Nevertheless, if the consequences are not too negative, it pays to speak out and speak the truth. Later on, you will be hailed as a leader rather than a heretic. When in doubt, apply the hostile lawyer or courtroom test. Imagine that you are on trial; you give this rationalisation as your excuse for your conduct, and you are cross-examined by a hostile lawyer who says: 'Do you really expect this court to accept that you did what you did merely because the other defendants did it as well?' If such a situation makes you think twice, then you should resist group pressure and the siren call of this rationalisation.

'It's not illegal.'

True, but is it right? As US Supreme Court judge Potter Stewart (1915–1985) put it: 'Ethics is knowing the difference between what you have a right to do and what is right to do.'

'They did it to me, so I'm going to do it to them.'

Very seductive logic with this rationalisation, but a tit-for-tat dynamic rarely works as a mechanism for resolving conflict, not least because both parties to a dispute will rarely agree on who started it or the actual quantitative measure of action and reaction. The counter to this is 'two wrongs don't make right'.

'If I don't do it, somebody else will.'

Ah, but sometimes they don't. And even if they do, what if what they do is killing people or some other unacceptable action? Are you constrained by circumstances to pre-empt them? Of course not. (For more on ethical rationalisations, see the 'Ethics scoreboard rule book: ethics fallacies, myths, distortions and rationalizations' at [www.ethicsscoreboard.com](http://www.ethicsscoreboard.com).)

Schermerhorn (2013) has described the way in which organisations try to come to terms with ethical dilemmas in meeting social responsibilities. He argues that there are four strategies that organisations can adopt. These are shown in table 1.9.

**TABLE 1.9** Ethical strategies for organisations

Strategy	Nature of strategy
<b>Proactive</b>	This is the top-level approach. Here, the organisation's managers and/or staff meet economic, legal and ethical responsibilities, but also actively consider discretionary performance. Problems are anticipated and sought out, and maximum transparency and flow of information within the organisation and at its boundaries with its stakeholders are central to its transactions with the world.

*(continued)*

**TABLE 1.9** (continued)

Strategy	Nature of strategy
<b>Accommodation</b>	This is the third-level approach. Here, the organisation's managers and/or staff decide to meet their economic, legal and ethical responsibilities. The ethical response, however, is only because of outside pressures. Thus, a company may move to rectify the damage of an oil spill, but respond to the crisis slowly, and only out of fear of bad publicity.
<b>Defensive</b>	This is the level above obstruction. Here, the organisation's managers and/or staff decide to meet their economic responsibilities but also their legal responsibilities by meeting, but not exceeding, minimum legal requirements.
<b>Obstructionist</b>	This is the lowest level strategy. When an organisation is confronted with ethical dilemmas, its managers and/or staff simply decide to meet their economic responsibilities (e.g. to shareholders and other stakeholders) and then fight social demands.

Communicators need to keep these four levels in mind and try to operate at the proactive level wherever possible.

When confronted with the ethical dilemmas we have considered, from embellishing résumés to manipulating meetings, we should always check our conduct and thoughts with these tests.

- *Are we rationalising?* We should be familiar with the ethical rationalisations we have considered, as well as numerous others, and see if these are motivating us.
- *What about the Golden Rule?* The Golden Rule is 'do unto others as you would have them do unto you'. How would you feel if what you are contemplating was done to you? If you wouldn't feel good, then don't do it.
- *What about short-term consequences?* Will someone get hurt? What will happen if you get caught? Are you ready to look a hostile lawyer in the eye?
- *What about long-term consequences?* If you believe in an afterlife, what about karma, or the sundry other punishments religions have promised us? Are you ready for those?
- *What about the mirror?* Can you look at yourself in the mirror and not blush, nervously scratch or look away? Can you look into your conscience and not blink?
- *What about action?* We can talk the talk about ethics in communication, but can we walk the walk? As Mason Cooley, the North American aphorist, put it: 'Reading about ethics is about as likely to improve one's behavior as reading about sports is to make one into an athlete'. Of course, sometimes what is required is *inaction*: not doing or saying something.

More dilemmas, ethical and otherwise, are presented at the end of each chapter with the 'What Would You Do?' section.

## Communication: the next frontier

Communication is emerging as a new and exciting discipline. While there are many subfields in the area, stretching from intrapersonal communication to intercultural communication and beyond, the underlying similarities are usually greater than the differences. In the next few decades, we may see the development of trends already apparent, such as *communiology* (the study of the biological bases of communication) (McCroskey 1998; Paulsel & Mottet 2004; Wahba & McCroskey 2005; Mildner 2008; Boren & Veksler 2011) and *critical communication theory* (the radical analysis of power structures underlying types of discourse) (Jansen 2003; Ganesh, Zoller & Cheney 2005; Kuhn & Deetz 2008; Stephen, Ching-kiu & Law 2013).

Right here and right now, however, we have, at the end of this chapter, a good foundation for moving out and sampling other chapters dealing with many areas of communication. Please enjoy the journey.

# STUDENT STUDY GUIDE

## SUMMARY

In this chapter we considered the differences between communication (or the transfer of meaning) and communications (or the transfer of data). We examined the strengths and weaknesses of various communication models and channels. We looked at the ways in which communication can break down and how it can succeed. Finally, we considered some of the limitations of communication processes.

## KEY TERMS

asynchronous communication <i>p. 19</i>	editing <i>p. 17</i>	preferences <i>p. 27</i>
channel <i>p. 19</i>	encoding <i>p. 14</i>	Priestley's paradox <i>p. 7</i>
channel suitability <i>p. 27</i>	feedback <i>p. 18</i>	reinforcement <i>p. 26</i>
communication breakdown <i>p. 9</i>	lean medium <i>p. 19</i>	rich medium <i>p. 19</i>
communication success <i>p. 9</i>	mediated communication <i>p. 19</i>	Sender–Message–Receiver (SMR) model <i>p. 9</i>
communications <i>p. 4</i>	message <i>p. 13</i>	synchronous communication <i>p. 19</i>
dataholic <i>p. 8</i>	message termination and failure <i>p. 28</i>	technologically mediated communication <i>p. 5</i>
decoding <i>p. 14</i>	meta-communication <i>p. 6</i>	variation <i>p. 27</i>
dyad <i>p. 19</i>	noise <i>p. 18</i>	
	pre-editing <i>p. 14</i>	

## REVIEW QUESTIONS

1. What is the fundamental difference between 'communication' and 'communications'?
2. What are the six levels of communication enquiry?
3. What is Priestley's paradox?
4. How does Lasswell's model of communication differ from that of Shannon and Weaver?
5. List at least two limitations of the Shannon–Weaver model.
6. Give three examples of your own of each of the following: (a) encoding (b) messages (c) noise (d) feedback.
7. What are the advantages and disadvantages of asynchronous communication when compared with synchronous communication?
8. Identify two strengths and two weaknesses of at least two channels of communication.
9. What are the four aspects of the RSVP model of communication channels?

## APPLIED ACTIVITIES

1. Analyse a communication interchange between two real or imaginary people. Use this chart or an enlarged copy to analyse the nature of the communication.

	PERSON A	PERSON B
ENCODING		
MESSAGE		
CHANNELS		
NOISE		
DECODING		
CONTEXT		

- Analyse the strengths and weaknesses of the seven communication models discussed in this chapter. Use this chart or an enlarged copy to conduct your analysis.

MODEL	STRENGTHS	WEAKNESSES
Lasswell		
Shannon–Weaver		
Berlo		
Lievrouw/Finn		
Foulger		
Expanded		

- Using print and internet sources, find at least two other models of communication (e.g. those of Jakobson, Barnlund, Aristotle, Gerbner, Osgood and Schramm, Maletzke). Assess their advantages and disadvantages when compared with those discussed in this chapter.
- Create your own communication model. Be prepared to describe how it works and its weaknesses and strengths.
- Using print and online sources, find at least three quotations on the subject of communication. Prepare a three-minute talk based on these quotations.
- Using print and online sources, research Wiio’s Laws of Communication. Describe how at least one of the laws could be reversed using good communication practices.
- ‘Pre-editing is just another form of encoding and post-editing is just another form of decoding. There is really no need for four terms when two will do.’ Discuss.
- Imagine you are a lecturer in communication. You have just looked at figure 1.1 and decide to prepare a lecture on the next level – inter-species communication. Prepare a ten-slide bullet-point presentation/lecture on the topic.
- ‘Better communication is the solution to all human problems.’ Discuss.

### WHAT WOULD YOU DO?

In Victoria, Australia, in 2009, 173 people died in what soon became Australia’s worst peace-time disaster (AAP 2009). There were many reasons why the Victorian bushfire disaster occurred. One that stands out was the sheer, almost unbelievable lack of communication between the trained professionals in charge of the operation.

The essence of any counter-disaster operation is effective coordination. This proved to be impossible to achieve with the disaster, with rural fire-fighting authorities and metropolitan emergency services operating on incompatible communications systems during the crisis. The rural fire-fighting authorities were operating on analogue radio, while the metropolitan emergency services were operating on digital radio. There were no digital communication towers in rural Victoria at the time of the fires. People who were on the fringe between a metropolitan area and a bush area usually had both systems (Caldwell 2009).



During an investigation that followed, Victorian Police Deputy Commissioner Kieran Walshe told the investigating body, the Bushfire Royal Commission, that a ‘single integrated radio communications network’ was needed to ensure that a similar communications breakdown did not occur again in the future. When the Commission Chairman described the dual system approach as a ‘major disability’ in a situation in which resources needed to be deployed quickly, Deputy Commissioner Walshe agreed (Caldwell 2009).

At one time during the crisis, the same problem existed for the metropolitan fire brigade and the metropolitan ambulance service. One resident who testified said:

It’s important for them to be able to communicate with each other so they can mass resources and let people know what’s happening and call in other resources if it’s necessary. And if they have trouble communicating, it’s going to cause delays (Caldwell 2009).

Despite the severity of the tragedy, total integration of communication systems would not occur until at least five years later (Naphine 2013).

More than two decades earlier, another communications breakdown contributed to a different serious event in the United States. On December 11 1988, the Mars Climate Orbiter spacecraft lifted off from Cape Canaveral in Florida. The Orbiter’s main mission was to monitor weather patterns on Mars, and its total cost at the time was US\$328 million. A few months later, the Challenger crashed on the moon. What was the cause? One team at NASA had been working in metric units, while another team had been working in imperial units.

‘People sometimes make errors’, said Dr Edward Weiler, NASA Associate Administrator for Space Science. ‘The problem here was not the error, it was the failure of NASA systems engineering, and the checks and balances in our processes to detect the error. That’s why we lost the spacecraft’ (quoted in Oberg 1999).

Miller and Rosenfeld (2009) call this type of faulty decision making and non-communication ‘intellectual hazard’, or ‘the tendency of behavioural biases to interfere with accurate thought and analysis within complex organisations’. They argue that ‘Intellectual hazard impairs the acquisition, analysis, communication and implementation of information within an organisation and the communication of such information between an organisation and external parties’ (p. 1).

Discuss how poor communication played a role in the Victorian bushfire crisis. What might have been done in response to the communication breakdown during the crisis? Discuss how poor communication played a role in the Challenger crash during the late 1980s. What might have been done to avoid the communication breakdown?

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