Chapter 2 Social thinking

What to look for

- How we process social information
- Forming impressions of other people
- Social schema and social categories
- Encoding persons in memory
- Biases and mental short cuts in social inference
- How thinking interacts with feelings and emotions
- Explaining our own and other people's behaviour
- Attributing the causes of behaviour
- The nature of biases in attribution
- Attributions made about groups
- Social representations, rumour and conspiracy theories

Focus questions

- 1. You have just been interviewed for a job. Ms Jones in the personnel department has decided that you are intelligent, sincere and helpful. However, you did not laugh readily at one of her jokes she may suspect you don't have a sense of humour! How would she form an overall impression of you?
- 2. John's hair is multi-coloured and the colours change every couple of weeks. Would others spot him immediately at a student-staff meeting in your university department? What about at a board meeting of your capital city's largest accountancy firm?
- **3.** Aaron comes to mind rather differently for Julie and Rosa. Julie remembers him mostly when she thinks of the various lawyers whom she knows. Rosa thinks about his quirky smile and his knowledge of best-selling novels. Why might their memories differ in these ways?
- **4.** Helen is angry with her husband Lewis who avoids approaching his boss for a pay rise. Lewis argues that the timing is not right. Helen says he simply fails to face up to people. How are these attributions different in kind? Watch Helen and Lewis debate this in Chapter 2 of MyPsychLab at www.mypsychlab.co.uk.



6. The job market was tight and Rajna began to worry that she might be made redundant. Then she heard a rumour that the worst had come – several staff were about to be fired. She was itching to pass this on to the next colleague that she saw. Why would Rajna want to spread the rumour further?



Source: Neil Lukas / © Dorling Kindersley

s we saw in Chapter 1, social psychology studies how human thoughts, feelings and behaviours are influenced by and have influence on other people. Within this broad definition, thought has occupied a pivotal role: people think about their social world, and on the basis of thought they act in certain ways. Psychologists use another term in their treatment of our thinking processes. While thought and cognition are often used interchangeably in popular language, there are some differences in emphasis made within psychology. Thought is very much the internal language and symbols we use. It is often conscious, or at least something we are or could be aware of. The term cognition has another connotation since it also refers to mental processing that can be largely automatic. We are unaware of it and only with some effort notice it, let alone characterise it in language or shared symbols. In this sense, cognition acts like a computer program: it operates in the background, running all the functions of the computer that we are aware of.

Cognition is a mental activity that occurs in one's mind to process, make sense of and store perceptual information, and to plan and programme what we do and say. Cognition cannot be observed directly, so we infer it from people's expressions, actions, writings and sayings. If we can understand cognition, we can also gain an understanding of how and why people behave in the ways they do.

In this chapter we look in some detail at thought itself. We introduce the topic of social cognition, doing so within the context of how we form impressions of people. We deal with the ways we organise these impressions to construct apparently real mental pictures (*schemas*) of them, and the short cuts (*cognitive heuristics*) we use as we do this. We then consider how humans seek to explain behaviour. Finally, we ask an intriguing question: are people merely driven by curiosity when they try to uncover causes, as if they are amateur scientists, or are they searching for an account of life that makes living seem reasonably predictable?

Social cognition
Cognitive processes and structures that influence and are influenced by social behaviour.

Cognitive
consistency
A model of social
cognition in which
people try to reduce
inconsistency among
their cognitions, because
they find inconsistency
unpleasant.

Naive scientist (or psychologist)
Model of social cognition that characterises people as using rational, scientific-like, cause—effect analyses to understand their world.

Forming impressions of people

Social psychology has always developed theories of cognitive activity to explain social behaviour (Jones, 1998; Taylor, 1998), and since the late 1970s this approach, called social cognition (e.g. Fiske & Taylor, 2008; Hamilton & Stroessner, in press; Moskowitz, 2005), has dominated the field and had an enormous impact on social psychology (Devine, Hamilton & Ostrom, 1994).

Social cognition has taken different forms over the years. For example, Kurt Lewin, who is often considered the 'father' of experimental social psychology (Marrow, 1969), believed that behaviour is best understood as a function of how people perceive their world and manipulate and interrelate these mental representations (e.g. Lewin, 1951). During the 1940s and 1950s social psychologists researching attitude change produced a number of theories sharing an assumption that people strive for cognitive consistency. These theories assumed that people feel uncomfortable when their thoughts are contradictory, and engage in all manner of behaviours and rationalisations, including changing their attitudes, to resolve the inconsistency (e.g. Abelson *et al.*, 1968; Festinger, 1957; Heider, 1958; see Chapter 4).

Consistency theories lost popularity in the 1960s as it became clear that people are remarkably tolerant of cognitive inconsistency. Researchers next adopted a naive scientist model, which characterised people as having a need to attribute

causes to behaviour and events in order to render the world a meaningful place in which to act. This model underpins the attribution theories of social behaviour that dominated social psychology in the 1970s – we look at these later in this chapter. The naive scientist model assumed that people are rational and scientific when they analyse cause and effect.

By the late 1970s, however, research was suggesting that people are either very poor scientists who are compromised by limited cognitive capacity, or are irrational and motivated by self-interest, or both. All sorts of errors and biases creep in. Even in ideal circumstances people are not very careful scientists and they take cognitive short cuts. Richard Nisbett and Lee Ross (1980) used the colourful phrase cognitive misers to describe how we are often economic rather than accurate when jumping to a conclusion. However, the various errors and biases in our social thinking are not motivated departures from some ideal form of information processing – they are actually intrinsic to social thinking. In this account, the term 'motivation' had almost disappeared from the description of the cognitive miser. However, as Carolin Showers and Nancy Cantor (1985) noted in their review, the cognitive miser perspective matured further and motivation regained its prominence. The social thinker was now a motivated tactician who was:

a fully engaged thinker who has multiple cognitive strategies available and chooses among them based on goals, motives, and needs. Sometimes the motivated tactician chooses wisely, in the interests of adaptability and accuracy, and sometimes . . . defensively, in the interests of speed or self-esteem. (Fiske & Taylor, 1991, p. 13)

In social psychology today, social cognition focuses on how cognition is affected by both wider and more immediate social contexts and on how cognition affects our social behaviour. Social cognition is also an approach to research that uses an array of methods, largely borrowed and refined from cognitive psychology.

A recent development in social cognition is social neuroscience (Harmon-Jones & Winkielman, 2007). It is largely a methodology where cognitive activity is monitored by functional magnetic resonance imaging (fMRI), which detects and localises electrical activity in the brain associated with cognitive activities or functions. Social neuroscience is increasingly being applied to many social psychological phenomena. For example, different parts of the brain may 'light up' when people are thinking positively or negatively about friends or strangers or social categories, and in general about interpersonal processes. Matthew Lieberman and his associates have outlined how social neuroscience can be applied to the study of how people look for causes of behaviour (Lieberman, Gaunt, Gilbert & Trope, 2002), a field known as causal attribution that is discussed later in this chapter. Other studies have pursued a search for a so-called 'God spot': has the human brain evolved in such a way that believing in God might improve our chances of survival? A research team led by Jordan Grafman and his colleagues (Kapogiannis et al., 2009) has reported that neural activity increased when people think about God's involvement in our daily lives. Researchers in neuroscience are nothing if not inventive in the topics they now choose to investigate!

Joseph Forgas and Craig Smith (2003) have described another recent development that has gathered momentum – a focus on how feelings (affect, emotion, mood) influence and are influenced by social cognition. Different situations (funeral, party) evoke different emotions (sad, happy), but also the same situation (examination) can evoke different emotions (anxiety, challenge) in different people

Attribution
The process of assigning a cause to

our own behaviour, and

that of others.

Cognitive miser
A model of social
cognition that
characterises people as
using the least complex
and demanding
cognitions that are able
to produce generally
adaptive behaviours.

Motivated tactician
A model of social
cognition that
characterises people as
having multiple
cognitive strategies
available, which they
choose among on the
basis of personal goals,
motives and needs.

Social neuroscience
The exploration of the
neurological
underpinnings of the
processes traditionally
examined by social
psychology.

Social neuroscience. Increased neural activity in specific areas of the brain may indicate that the person is having a particular thought or a particular feeling.

Source: © Mark Harmel / Alamy



(weak student, competent student). Research suggests that people continually appraise their hopes, desires and abilities, and the situation they find themselves in (see Box 2.1).

These cognitive *appraisals* generate or are associated with specific emotions (such as fear, anger or guilt) and physiological reactions (such as elevated heart rate and trembling) that together ready one to take some form of action. There is also some evidence, from Forgas's (1995) affect-infusion model, that the way we think about people is most infused by the mood we are in when: (1) we need to think longer and more constructively; and (2) we actively elaborate the details of a stimulus (e.g. another person or our health) and can draw on details from memory.

There is no doubt that social cognition has advanced social psychology immensely – as you will see below. However, critics have felt that some aspects of social cognition focus too much on cognitive activity and brain functioning within the head of the isolated individual and too little on social interaction among individuals and processes within and between groups. Make up your own mind as you read on.

Which impressions are important?

People spend a great deal of time thinking about other people. We form impressions of people we meet, have described to us or encounter in the media. We communicate these impressions to others, and we use them as bases for deciding

Affect-infusion model
Cognition is infused with affect such that social judgements reflect current mood.

Research and applications 2.1 Appraisals leading to emotional responses

According to Smith and Lazarus (1990), emotional response rests on seven appraisals that can be framed as questions that people ask themselves in particular situations.

Primary appraisals

- **1** How relevant (important) is what is happening to my needs and goals?
- 2 Is this congruent (good) or incongruent (bad) with my needs or goals?

Secondary appraisals

- 1 How responsible am I for what is happening?
- 2 How responsible is someone or something else?

- 3 Can I act on this situation to make or keep it more like what I want?
- **4** Can I handle and adjust to this situation however it might turn out?
- 5 Do I expect this situation to improve or to get worse?

These appraisal dimensions produce an array of emotional and behavioural responses. For example, if something were important and bad and caused by someone else, we would feel anger and be motivated to act towards the other person in a way that would fix the situation. If something were important and bad, but caused by us, then we would feel shame or guilt and be motivated to make amends.

how we will feel and act. Impression formation and person perception are important aspects of social cognition (Schneider, Hastorf & Ellsworth, 1979).

Control impressions

We are very quick to use personality traits when we describe other people, even those we have just met (Gawronski, 2003). However, the impressions we form are influenced by some bits of information more than others. Very early on, Solomon Asch (1946) argued that some attributes are strongly related in our minds to a large number of other attributes – knowing someone has one of these attributes allows one to infer a great deal about a person and readily form an integrated impression of that person. These attributes he called central traits, to distinguish them from less diagnostic attributes that he called peripheral traits.

To investigate this idea, Asch had students read one of two lists of seven adjectives (traits) describing a hypothetical person. The lists differed only slightly – embedded in one was the word warm and in the other the word cold. The students then evaluated the target person on a number of other dimensions, such as generous/ungenerous, happy/unhappy, reliable/unreliable. Students who read the list containing warm formed a much more favourable impression of the target than did those exposed to the list containing the trait cold (see Figure 2.1). When the words warm and cold were replaced by polite and blunt, the difference in impression was far less marked. Asch argued that warm/cold is a central trait dimension that has more influence on impression formation than polite/blunt, which is a peripheral trait dimension.

Perhaps you are now wondering how ordinary people, or social psychologists for that matter, decide which traits are central and which peripheral. Asch believed that central traits are ones that are intrinsically highly correlated with other traits.

Central traits
Traits that have a
disproportionate
influence on the
configuration of final
impressions, in Asch's
configural model of
impression formation.

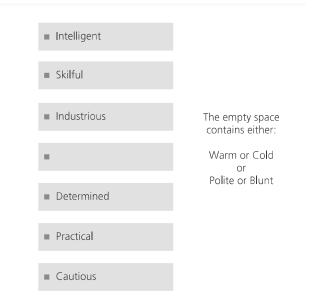
Peripheral traits
Traits that have an insignificant influence on the configuration of final impressions, in Asch's configural model of impression formation.

Figure 2.1

Impressions of a hypothetical person, based on central and peripheral traits.

Asch (1946) presented students with a 7-trait description of a hypothetical person in which either the word warm or cold, or polite or blunt appeared. The percentage of students assigning other traits to the target was markedly affected when warm was replaced by cold, but not when polite was replaced by blunt.

Source: Based on Asch (1946).



% assigning additional traits as function of focal trait inserted:

Additional traits	Focal traits inserted in the list						
	Warm	Cold	Polite	Blunt			
Generous Wise Happy Good-natured Reliable	91 65 90 94 94	8 25 34 17 99	56 30 75 87 95	58 50 65 56 100			

Personal constructs Idiosyncratic and personal ways of characterising other people.

Implicit personality theories Idiosyncratic and personal ways of characterising other people and explaining their behaviour. However, others such as Mark Zanna and David Hamilton (1972) argued that what makes a trait central is influenced by context. In Figure 2.1, a trait that is distinctive (e.g. warm) and semantically linked to the other judgement dimensions (e.g. goodnatured) will be more central than one that is non-distinctive or not obviously related to the other dimensions. Yet others have suggested that people have their own idiosyncratic and enduring beliefs, which the personality psychologist George Kelly (1955) called personal constructs, about which attributes are most important in making judgements of people – for example, you might organise your impressions around humour while your partner anchors it on intelligence. Arising from his research in person perception, David Schneider (1973) suggested that people may also have more integrated implicit personality theories, or philosophies of human nature, which are enduring general principles about what sorts of characteristics go together to form certain types of personality. Implicit personality theories are widely shared within cultures but differ between cultures, according to Hazel Markus and her colleagues (Markus, Kitayama & Heiman, 1996), and can sometimes be quite idiosyncratic.

First and last impressions

Impressions are also influenced by the order in which bits of information about the person are encountered. There is a primacy effect in which the first things you learn about a person disproportionately affect your overall impression. For example, Asch (1946) found that people had a more favourable impression of a hypothetical person described as being *intelligent*, *industrious*, *impulsive*, *critical*, *stubborn*, *envious* (i.e. positive traits first, negative traits last) than when the order of the traits was reversed. He speculated that early information functions in the same way as central traits. There is also evidence for a recency effect where later information has more impact than earlier information – this is most likely to occur if you are distracted (e.g. overworked, bombarded with stimuli, tired) or you have little motivation to attend to someone. Overall, however, primacy is more common (Jones & Goethals, 1972) – first impressions really do count!

Physical appearance counts

Given that in forming impressions of strangers often the first bit of information we have is what they look like, maybe appearance has a primacy effect. Although we would like to believe that we are way too sophisticated to be swayed in our impressions by mere physical appearance, research suggests otherwise – physical appearance has a huge influence on impressions. According to Leslie Zebrowitz and Mary Ann Collins (1997), people *do* tend to 'judge a book by its cover'. This may not necessarily always be a bad thing, as appearance-based impressions can be surprisingly accurate. Indeed, as you will find in Chapter 10, impressions based on physical appearance play a critical role in romantic attraction. Now try answering the first focus question.

However, forming impressions based on appearance can also have undesirable implications. For example, Mark Knapp (1978) found that professional men taller than 1.88 m had 10 per cent higher starting salaries than men under 1.83 m. In her research conducted in work settings, Madeline Heilman found that attractive male executives were considered more able than less attractive male executives. She also found that this effect was reversed for female executives; participants suspected that attractive female executives had been promoted because of their appearance, not their ability (Heilman & Stopeck, 1985; also see Chapter 7).

Another problem with appearance-based first impressions is that because racial, ethnic and gender cues are highly visible, people rapidly categorise others and generate impressions based on these cues, effectively stereotyping them, sometimes in negative ways (again, see Chapter 7). Negative impressions formed in this way are difficult to change.

Indeed a review of research shows that we usually give more weight to negative information when we form impressions than we do to positive information (Skowronski & Carlston, 1989). Even a positive view of a stranger that we have just formed can be dramatically reversed by just a small negative 'fact', such as appearing to avoid eye contact a couple of times. Unfortunately, positive information seems to have little impact on a negative impression. Negative information has this effect because it is unusual and distinctive; it may also have survival value because it signals potential danger.

Primacy

An order of presentation effect in which earlier presented information has a disproportionate influence on social cognition.

Recency

An order of presentation effect in which later presented information has a disproportionate influence on social cognition.

Schema

attributes.

Cognitive structure that

about a concept or type

of stimulus, including its

relations among those

attributes and the

represents knowledge

Schemas and categories

In this section we explore how schemas flow from the categories we form, and how these are related to two technical concepts – prototypes and stereotypes.

A mental activity common to us all is that we store information about ourselves and about other people, events and places as schemas. A schema is a circumscribed and coherent set of interrelated cognitions (e.g. thoughts, beliefs, attitudes) that allows us quickly to make sense of a person, situation, event or place on the basis of limited information. Typically, certain cues activate a schema and the schema then 'fills in' missing details to provide a rich set of perceptions, interpretations and expectations.

Once activated, schemas facilitate what is called *top-down*, concept-driven or theory-driven processing – that is, they rapidly generate an overall impression based on preconceptions and prior knowledge. The converse is *bottom-up* or data-driven processing in which an impression is painstakingly put together from separate bits of information gleaned directly from the immediate context.

There are many types of schema, all of which influence the encoding (internalisation and interpretation) of new information, memory of old information and inferences about missing information.

- *Person schemas* are idiosyncratic schemas we have about specific people: for example, a close friend (she is kind and intelligent but is shy and would rather frequent cafes than go mountain climbing).
- Role schemas are knowledge structures about role occupants: for example, airline pilots (they fly the plane and should not be seen swigging whisky in the cabin) and doctors (although often complete strangers, they are allowed to ask intimate questions and get you to undress). Role schemas can sometimes be better understood as schemas about social groups, in which case if such schemas are shared, they are social stereotypes.
- *Scripts* are schemas about events (Abelson, 1981): for example, attending a lecture, having a party, giving a presentation or eating out in a restaurant.
- Self-schemas are schemas about your self they are often more complex and varied than schemas about other people. They form part of a person's concept of who they are, the self-concept, and are discussed in Chapter 3 when we deal with self and identity.
- Content-free schemas do not describe specific people or categories, but are 'rules' about how to process information: for example, a content-free schema might specify how to attribute causes to people's behaviour (see discussion of attribution theories below); or that if you like John and John likes Tom, then in order to maintain balance you should also like Tom (Heider, 1958).

Family resemblance
Defining property of
category membership.

Fuzzy sets
Categories are
considered to be fuzzy
sets of features
organised around a
prototype.

Prototype Cognitive representation of the typical/ideal defining features of a category.

Categories and prototypes

To apply a particular schema, you first need to categorise an instance that fits. It might be a specific person, event or situation. A key question is how do we identify an instance as being a member of one category not another, and how do we cognitively organise information about a category?

Research shows that people view categories as collections of instances that are not identical but have a general family resemblance (Rosch, 1978) – categories are fuzzy sets of related attributes, called a prototype, rather than a rigid checklist of essential attributes. Although prototypes often represent the average or typical





Are prototypes accurate? What is your idea of a typical mother? The woman on the left is probably closer to your prototype than the woman on the right – but some mothers do like climbing big rocks!

Source: Pearson Online Database (POD)

category member (e.g. the typical environmentalist), this may not always be the case (Chaplin, John & Goldberg, 1988). Under some circumstances, for example when social categories are in competition (e.g. environmentalists versus developers), the prototype may be an extreme member (the most radical environmentalist).

In addition to representing categories as prototypes (essentially an abstraction from many instances), people may also represent them in terms of exemplars, specific concrete instances they have encountered (Smith & Zárate, 1992). For example, many Americans may represent the category 'British' in terms of the actors Hugh Grant or Colin Firth.

What determines whether we represent a category as a prototype or an exemplar? As people become more familiar with a category, they shift from using prototypes to exemplars. This shift is most clear-cut when people represent outgroups (Klein, Loftus, Trafton & Fuhrman, 1992).

Once a person, event or situation is categorised, the relevant schema is invoked. Schemas and prototypes are similar and indeed are often used interchangeably by social psychologists. One way to distinguish them is that prototypes are more nebulous and fuzzy whereas schemas are much more organised (Wyer & Gordon, 1984).

ExemplarsSpecific instances of a member of a category.

Stereotype Widely shared and simplified evaluative image of a social group and its members.

Ethnocentric Evaluative preference for all aspects of our own group relative to other groups.

Categories and stereotypes

Stereotypes are essentially schemas of social groups, and those applied to outgroups are ethnocentric, and are often associated with prejudice, discrimination and conflict between groups (see Chapter 7). They featured in Gordon Allport's (1954b) famous book *The Nature of Prejudice*, and as Susan Fiske (1998) noted in her review, nearly a century of social psychological research means that we now know a great deal about them.

- Stereotypes are simplified images of members of a group; they are often derogatory when applied to outgroups; and they are often based on, or create, clearly visible differences between groups (e.g. in terms of physical appearance; Zebrowitz, 1996). They are usually shared by group members characterising members of another group; and can also be shared images of one's own ingroup.
- People readily describe vast human groups using a few fairly crude shared features. Stereotyping is an adaptive cognitive short cut that allows one to form quick impressions of people. Stereotypes are not inaccurate or wrong, and they may or may not have a kernel of truth; but the key point is that they serve to make sense of particular intergroup relations.
- Because stereotypes are cognitively adaptive they are slow to change. When they
 do, it is generally in response to wider social, political or economic changes.
 However, stereotypes of the same group can vary from context to context they
 are selected to fit situational demands and our own goals and motives.
 Stereotypes will usually persist if we can readily access them in memory, because
 we use them a great deal and they are important to who we are. Changes in
 accessibility or fit will change the stereotype.
- Some stereotypes are acquired at an early age, often before the child has any knowledge about the groups that are being stereotyped, while others crystallise later in childhood, after age 10 (e.g. Rutland, 1999).
- Stereotypes become more pronounced and hostile when social tensions and conflict arise between groups, and then they are extremely difficult to modify.

Stereotypes and accentuation

There is a respect in which stereotypes are more than schemas associated with social categories. The actual process of categorising can lead to perceptual 'distortion' that lends stereotyping some of its distinctive features. The famous European social psychologist Henri Tajfel (1959) argued that when we judge a stimulus (for example, how long a line is, how aggressive a person is) we draw on any and all other information we believe may help us make the judgement.

Tajfel and Wilkes (1963) used a visual perception task to test this. The stimuli were eight lines that differed in length by a constant percentage increment. A simple manipulation in an experimental condition caused the eight lines to be categorised into two groups of four, and their estimated lengths were different from those judged in a control condition. In the experimental condition, the four shorter lines were labelled *A* and the four longer lines are labelled *B*, whereas in the control condition the *A* and *B* labels were random. In the experimental condition, length was therefore correlated with the labels and the lines were perceived to be in two categories or groups, a shorter one and a longer one. Further, the participants accentuated the difference between the categories: the *A*-lines were judged a little shorter and the *B*-lines a little longer than they really were.

Relying on categories to clarify perception is a very basic human activity, but it also produces a widespread cognitive perceptual bias. Tajfel (1959, 1969) introduced the term accentuation principle to describe how we accentuate: (1) similarities among instances within the same category; (2) differences between instances from different categories; and (3) differences between different categories as a whole. This effect is enhanced when people are uncertain about how to judge something, and when they think that what they are categorising is very important, relevant or valuable. Shelley Taylor and her colleagues found that, in practice, we tend to make more errors within a category than between categories (Taylor, Fiske, Etcoff & Ruderman, 1978). For example, British people attending a meeting in London would more likely remember whether it was an Italian or a Greek delegate who said something than remember which specific Italian or Greek delegate it was.

In summary, the categories we use are basic to stereotypes. However, a deeper understanding of stereotypes requires recognising that they are developed by one group to characterise another group and that they are closely connected to the nature of the relations between the groups involved (Oakes, Haslam & Turner, 1994). In this respect stereotypes are grounded in and sustained and shaped by intergroup relations. They define identities, reduce uncertainty and justify the status quo (see Chapter 7). They also provide an explanation of complex social phenomena such as social representations (see below).

How we use and acquire schemas

Our social world is overflowing with information that we can use as the basis for categorisation. For instance, Juan is a British, male, Catholic from Aberdeen who is witty, well read, not very sporty and works as a nurse. How would we categorise him – what determines which cues serve as a basis for categorisation and schema use?

Using schemas

According to the cognitive psychologist Eleanor Rosch (1978), people tend to default to basic-level categories that are neither too big nor too small (see Figure 2.2). They use subtypes such as 'career woman', rather than superordinate categories such as 'woman' or subordinate categories such as 'female astronaut'. They also access social stereotypes and role schemas such as 'politician', rather than trait schemas such as 'intelligent'. According to optimal distinctiveness theory (Brewer, 1991), basic-level categories and subtypes balance people's need to see people as similar to others but also as different from others. People also readily categorise on the basis of distinctive cues such as skin colour, dress or physical appearance (Zebrowitz, 1996), or standing out from the crowd (a single man in a group of women), and on the basis of subjectively important schemas and schemas that are easily retrieved from memory because they use them a lot or have used them recently (Bargh, Lombardi & Higgins, 1988).

Schemas that we use automatically are usually accurate enough for immediate day-to-day interaction – they have *circumscribed accuracy* that optimises the trade-off between rapid top-down theory-driven cognition and accurate bottom-up data-driven cognition (Swann, 1984). A key factor that governs this trade-off is how costly people feel it is to be wrong or to be indecisive.

If the costs of being wrong are high, we are more attentive to data and use more accurate schemas. The costs of being wrong become important when our rewards and punishments are heavily dependent on the actions of others, and when we feel

Accentuation principle Categorisation accentuates perceived similarities within and differences between groups on dimensions that people believe are correlated with the categorisation. The effect is amplified where the categorisation and/or dimension has subjective importance, relevance or value.

Basic-level categories Middle range categories that have cognitive priority because they are the most useful, e.g. a 'chair' rather than 'furniture' or a 'rocker'.

Optimal distinctiveness
People strive to ac

People strive to achieve a balance between conflicting motives for inclusiveness and separateness, expressed in groups as a balance between intragroup differentiation and intragroup homogenisation.

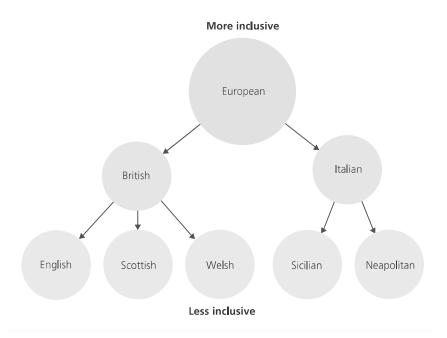


Figure 2.2Categories organised by level of inclusiveness.

Categories are organised hierarchically so that less inclusive categories are nested beneath more inclusive categories.

that we should account for their actions (see Neuberg & Fiske, 1987; Tetlock & Boettger, 1989). If the costs of being indecisive are high, people make quick decisions and form quick impressions – indeed, any decision or impression, however inaccurate, may be preferable to no decision or impression, so people rely heavily on schemas. The costs of being indecisive become important when people perform a task under time pressure, or when people are anxious or distracted (Jamieson & Zanna, 1989; Wilder & Shapiro, 1989).

People are often aware that schemas can be inaccurate, and in the case of social groups can also be undesirable. Thus William may refrain from calling Mary a housewife, since it is a schema suggesting he is sexist. Some people are better at avoiding being too dependent on schemas – for example, those who think deeply and complexly about things and can entertain ambiguity and a variety of explanations of their world. However, attempts to buffer or circumvent the automatic processes described above are typically not very successful (Ellis, Olson & Zanna, 1983).

Acquiring schemas

Where do our schemas come from? People can simply tell you or you can read about them, but more typically we acquire or modify our schemas through encounters with instances that fit the category (directly or through various media). Take an example when the schema is of an individual person. According to Bernadette Park (1986), as you encounter more instances of a category, in this case a person, your schema becomes more general and abstract. For example, your impressions of

Roberta might evolve from descriptions such as 'dyes her hair pink' and 'is boisterous in class' to character traits such as 'extraverted'. A schema can also become richer, more complex and more tightly organized into a single compact mental structure that can be activated in an all-or-nothing manner. Thus an experienced university student is more likely than a first-year student to have a more detailed schema of someone who would make a good roommate. Schemas formed in this way are quite resilient – they are able to incorporate exceptions, rather than disregard them simply because they might threaten the validity of the schema (Fiske & Neuberg, 1990). One paradoxical feature of such schemas is that they are relatively 'accurate' in so far as they closely map social reality.

Changing schemas

Because schemas *appear* to be accurate they suggest a sense of order, structure and coherence to a social world that would otherwise be highly complex and unpredictable. For this reason schemas do not easily change. Ross, Lepper and Hubbard (1975) investigated how people deal with information that is not consistent with a schema. They told their participants that information they had received, that a target person had made either good or poor at making decisions, was entirely false. Despite this correction, participants held on to their original impression that the target was a good or poor decision maker. Trial lawyers take advantage of this. They introduce inadmissible evidence, which the judge immediately instructs the jury to disregard. But of course an impression formed from inadmissible evidence will not vanish just because the judge has instructed jurors to disregard it (Thompson, Fong & Rosenhan, 1981). The impression lingers.

People think a lot about their schemas, marshalling all sorts of supportive evidence. The original basis of the schema is lost in the mists of time and is rarely unearthed, let alone critically re-examined (e.g. Schul & Burnstein, 1985).

Schemas can, and do, change, however, if they are really inaccurate. For example, a schema that characterised lions as cuddly, good-natured and playful pets as seen in a fun TV programme would, if you encountered one on foot in the wild, change rather dramatically – assuming that you survived the encounter! Mick Rothbart (1981) has studied extensively how social categorisation works, and suggested three ways in which schemas can change:

- 1. Bookkeeping they can change slowly in the face of accumulating evidence.
- 2. *Conversion* they can change suddenly once a critical mass of disconfirming evidence has accumulated.
- 3. Subtyping they can form a subcategory to accommodate disconfirming evidence.

Subtyping is probably the most common way that a schema adapts to disconfirming evidence (Weber & Crocker, 1983). For example, a woman who believes that men are violent might, through encountering many who are not, form a subtype of non-violent men to contrast with violent men.

Perceiving and remembering people

Social encoding

Social encoding is the process of representing external social stimuli in our minds. There are at least four key stages (Bargh, 1984):

- 1. Pre-attentive analysis an automatic, non-conscious scanning of the environment.
- 2. Focal attention once noticed, stimuli are consciously identified and categorised.
- 3. Comprehension stimuli are given meaning.
- 4. *Elaborative reasoning* the stimulus is linked to other knowledge to allow complex inferences.

Social encoding depends heavily on what captures our attention. In turn, attention is influenced by salience and accessibility.

Salience

Salience is the property of a stimulus that makes it stand out relative to other stimuli in a particular context – for example, a single male is salient in a group of women but not a mixed sex group, and someone wearing a bright T-shirt is salient at a funeral but not on the beach. Consider the second focus question. People can be salient because they are novel and stand out against the background, because their appearance or behaviour does not fit your expectations of them, or because they are important to you (e.g. because of their rank) in a particular context. Salient people attract attention and are considered more influential in a group, more personally responsible for their behaviour (e.g. choosing to dress differently from others), and less influenced by the situation. We usually attend closely to them and form coherent impressions of them. People do not necessarily recall more about salient people; rather, they find it easier to hold a coherent mental picture of them.

Attention is often directed not so much by stimulus properties 'out there' but by the accessibility of categories or schemas that we already have in our heads (Higgins, 1996). Because accessible categories are ones we often use and are consistent with our goals, needs and expectations, they are very easily activated or primed by things we see or hear – priming takes place. For example, people who are concerned about racial discrimination (i.e. it is an accessible category) may see racism everywhere: it is readily primed and used to interpret the social world.

Once primed, a category interprets stimuli, particularly ambiguous stimuli, in a *category-consistent* manner. However, when people become aware that a category has been primed, they may try to counteract it. For example, Charles Stangor (1988) has shown that gender is often an accessible category that is readily primed and used to interpret behaviour; but if you knew that gender had been primed, you might make a special effort to interpret behaviour in a non-gendered way.

Memory for people

What we remember about people is our person memory, and how this is organised influences our behaviour, sometimes profoundly (Fiske & Taylor, 2008; Hastie & Park, 1986). Typically, however, we tend not to rely on memory but instead form impressions of people *on-line*, relying on incoming data that are assimilated by schemas to produce an impression. Our memory of Bill, let us say, depends on what engages our attention in interacting with him, in particular about his behaviour and personality. According to Thomas Srull and Robert Wyer (1989), the more we focus, the more deeply we process and store information about Bill.

Memory operates as an associative network (e.g. Anderson, 1990) – specific ideas or items of memory, called *nodes*, are linked to (i.e. *associated* with) other nodes. Associative links vary in strength. Links become stronger the more they are activated by cognitive rehearsal and a node is more likely to be recalled (i.e. activated) if there are many strong links to it. There are two levels of memory:

Salience
Property of a stimulus
that makes it stand out
in relation to other
stimuli and attract
attention.

Accessibility
Ease of recall of
categories or schemas
that we already have in
mind.

Priming
Activation of accessible categories or schemas in memory that influence how we process new information.

Associative network
Model of memory in
which nodes or ideas
are connected by
associative links along
which cognitive
activation can spread.

long-term memory, which is the vast store of information that can potentially be brought to mind, and *short-term memory* (or working memory), which is the much smaller amount of information that you actually have in consciousness, and is the focus of your attention, at a specific time.

This basic model of memory applies to person memory (Srull & Wyer, 1989), with one important feature – information that is inconsistent with an impression we have of someone attracts attention and generates cognition, and is therefore better recalled. This is most likely if we do not already have a well-established impression, if the inconsistency is evaluative rather than descriptive, and if the judgement task is simple and we cannot deliberate carefully about our impression.

Contents of person memory

What we remember about Bill will vary in concreteness, from concrete appearance through behaviour to abstract traits, and in valence, from positive and desirable to negative and undesirable. Memory for Bill's *appearance* is usually based on directly observable concrete information and is stored like a picture in the mind – for example, both of his tweed jackets have leather patches on the elbows. We are phenomenally accurate at remembering faces, often with 100 per cent accuracy over very long periods of time (Freides, 1974). Bill has a long nose and wide-set piercing blue eyes.

However, we are less accurate at remembering outgroup faces, most likely because we pay less attention to them; indeed, a general remedy for poor memory for faces is simply to pay more attention. We are also pretty bad at remembering appearances in natural contexts where eyewitness testimony is required; probably because the witness or victim is frightened and doesn't get a clear look, and the event is unexpected, confusing and quick. However, eyewitness testimony is more accurate if certain conditions are met (see Box 2.2).

Unlike people's appearance, we store *trait* memories as propositions that can be quite abstract ('Mary is mean and nasty'). They are based on causal inferences drawn from behaviour and situations (Park, 1986; see below), and tend to be coded in terms of social desirability (e.g. *warm*, *pleasant*, *friendly*) and competence

Real world 2.2 Factors that make eyewitness testimony more accurate

Although eyewitness testimony is often unreliable, there are various ways in which its accuracy can be improved.

The witness:

- mentally goes back over the scene of the crime to reinstate additional cues;
- has already associated the person's face with other symbolic information;
- was exposed to the person's face for a long time;
- gave testimony a very short time after the crime;

- is habitually attentive to the external environment;
- generally forms vivid mental images.

The person:

- had a face that was not altered by disguise;
- was younger than 30 years old;
- looked dishonest.

Sources: Based on Shapiro & Penrod (1986); Valentine, Pickering & Darling (2003); Wells, Memon & Penrod, (2006).

(e.g. intelligent, industrious, efficient; see Schneider, Hastorf & Ellsworth, 1979). Although we can observe behaviour directly, how we remember an act is influenced by our inferences about its purpose or goal. For example, we would remember running differently if we thought its purpose was to catch a bus rather than to escape with a stolen wallet (Hoffman, Mischel & Mazze, 1981).

Organising person memory

There are two distinct ways in which we can organise information about people – by *person* or by *group*. In most situations we remember people as a cluster of information about their traits, behaviour and appearance. Organising person memory by person in this way produces rich and accurate person memories that are easily recalled – it is most common when people are significant to us because they are familiar, real people with whom we expect to interact across many specific situations (Sedikides & Ostrom, 1988). (Now consider the third focus question.) We can also store information about people by clustering people under groups or schemas of groups (see Figure 2.3).

Organising person memory by group is most likely in first encounters with strangers: the person is pigeon-holed, described and stored in terms of stereotypical attributes of a salient social category. Think of when you meet a new psychology lecturer whom we'll call Dr MacIlroy. Does she dress and speak like an academic? Over time and as you become more familiar with her, the category of *academic* recedes to an extent – it becomes less salient – and Penny the human being emerges. However, the two ways of representing your lecturer can coexist and can be primed by different contexts (Srull & Wyer, 1989). In a group context such as a lecture room your lecturer assumes a social identity as Dr MacIlroy, whereas sitting in the cafeteria with a few of your friends you say 'Hi Penny!'. Her personal identity has been primed (see social identity theory in Chapter 7).

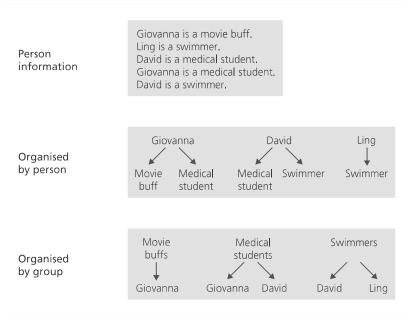


Figure 2.3

Person memory organised by person or by group.

We can organise information about people in two quite different ways. We can cluster attributes under individual people, or we can cluster people under attributes or groups.

Source: Based on Fiske & Taylor (1991).

Social inference

Social inference lies at the heart of social cognition. It refers to the way we process social information to form impressions of people and make judgements about them. A key distinction that has already surfaced in different guises in this chapter is between (a) bottom-up processing in which we construct impressions piecemeal from specific bits of information and (b) top-down processing in which we automatically draw inferences from general schemas or stereotypes.

Related distinctions abound, such as in treatments of impression formation. For example, Marilyn Brewer (1988) distinguished between two kinds of processing: one that uses categories and is relatively automatic; and one based on a person's attributes and is more deliberate. Susan Fiske and Steven Neuberg (1990) pointed to a difference between inferences based on schemas and those based on data. Alice Eagly and Shelley Chaiken (1993) argued that we use two different processing routes whenever our attitudes come into play. We can choose a heuristic/peripheral route for rapid top-of-the-head decisions based on stereotypes, schemas and other cognitive short cuts, or a systematic/central route when we need to think carefully and deliberately. We call on one of these two routes when we respond (i.e. process) persuasive messages such as TV advertisements (see Chapter 4).

Whichever process we use, our inferences are generally less accurate than they could be and not very scientific. Indeed, we are prey to quite a range of biases and errors, and our focus is on one of these next.

The illusory correlation

A well-known bias that is difficult to avoid is the illusory correlation (e.g. Hamilton & Gifford, 1976). When we make an inference we essentially make a judgement that a correlation exists – for example, if you believe that obesity and poor education are correlated then if you met an obese person you would infer that he or she was also poorly educated. The illusory feature is the tendency to overestimate the degree of correlation or to even see a correlation where none actually exists.

Loren Chapman (1967) observed that an illusory correlation can justify a belief in magic, e.g. it is more likely to rain after a rain dance. He demonstrated how this bias can intrude into the way we make verbal associations:

- Chapman showed students lists of paired words such as *lion/tiger*, *lion/eggs*, *bacon/eggs*, *blossoms/notebook* and *notebook/tiger*, who then had to recall how often each word was paired with each other word.
- Although every word was paired an equal number of times with every other word, participants overestimated meaningful pairings (e.g. *baconleggs*); and distinctive pairings (e.g. *blossoms/notebook* words that were much longer than all the other words in the list).
- He concluded that there are two bases for illusory correlation: associative meaning (items are seen as belonging together because they 'ought' to, on the basis of prior expectations) and paired distinctiveness (items are thought to go together because they share some unusual feature).

Although associative meaning is clearly related to stereotyping, it has also been suggested that illusory correlation based on distinctiveness is involved in stereotyping. In an experimental demonstration, Hamilton and Gifford (1976) had participants recall statements describing two groups, A and B. There were twice as many statements about group A as there were about group B, and there were twice as many positive as

Bottom-up processing Information is processed synthetically from specific bits of data.

Top-down processing Information is processed analytically from psychological constructs or theories.

Illusory correlation
Cognitive exaggeration
of the degree of
co-occurrence of two
stimuli or events, or the
perception of a
co-occurrence where
none exists.

negative statements about each group. So the actual ratio of positive and negative statements was the same for both groups. Participants erroneously recalled that more negative statements (the less common and more distinctive statements) were paired with group B (the less common and more distinctive group). When the experiment was replicated but with more negative than positive statements, participants now overestimated the number of positive statements paired with group B.

In real life, negative events are distinctive because they are perceived to be more rare than positive events (Parducci, 1968), and minority groups are distinctive because people have few contacts with them. As a result, an illusory correlation based on distinctiveness will occur and produce negative stereotyping of minority groups. If you reckon that a green-haired man cheated you out of money on a card game, you might be inclined to keep an eye on the next green-haired man you play with!

Short cuts in making inferences

People are inferentially challenged when making inferences because they have limited short-term memory available to work with, i.e. for on-line processing, but an enormous capacity for long-term memory. So, it pays for us to store information as schemas in long-term memory and call up these as needed. Social inference is thus heavily schema-driven, and it means that we draw conclusions that support schemas we already have. Why accumulate new knowledge when you can be lazy and muddle through? Most of the time, our day-to-day inference processes seem adequate, if occasionally wrong or even unfair on others.

Cognitive heuristics

These 'adequate' rather than optimal processes are based on cognitive short cuts, called heuristics, that reduce complex problem solving to simpler judgemental operations. Amos Tversky and Daniel Kahneman (1974) have researched extensively on how humans make decisions and on their tolerance of getting some of these wrong. Here are three heuristics that have been explored:

- Representativeness heuristic we assess how similar we think an instance, say a person, is to a typical member in a given category, and if we feel the level of similarity is sufficient we infer that the person has all the category attributes. If Jane, whom you have just met, has short hair, wears overalls and talks loudly, you might mull over whether she might be one of 'those radical protestor types'.
- Availability heuristic events or associations that come readily to mind are considered to be more common and prevalent than they really are. And so in sizing Paul up, who has even shorter hair than Jane, wears big boots and carries a cane, you would overestimate the likelihood that he will also be violent because you had just seen that old film *A Clockwork Orange*. Availability is adequate as a basis for making inferences (after all, things that come to mind easily are probably fairly plentiful), but it fails to control for the odd exposure to events or associations that may actually be rare.
- Anchoring and adjustment impressions are tied to earlier perceptions that are a starting point, much like the primacy effect we discussed earlier. Inferences about other people are often anchored in beliefs about ourselves. We might therefore decide how intelligent, artistic or kind someone else is by referring to our own self-schema. 'Because I think I am bright, smart Fred must have a giant brain!' Another example your dislike for Mary can act as an anchor from which only small adjustments are made, even in the light of subsequent overwhelming evidence that she is actually absolutely delightful!

Heuristics
Cognitive short cuts that provide adequately accurate inferences for most of us most of the time.

Representativeness heuristic
A cognitive short cut in which instances are assigned to categories or types on the basis of overall similarity or resemblance to the category.

Availability heuristic A cognitive short cut in which the frequency or likelihood of an event is based on how quickly instances or associations come to mind.

Anchoring and adjustment
A cognitive short cut in which inferences are tied to initial standards or schemas.

Should we be worried about our cognitive biases? Although social inference is not as good as it could be, it is generally adequate and well adapted to everyday life – so 'remedies' for our shortcomings may not actually be necessary (Funder, 1987). For example, on encountering a pit bull terrier in the street, it might be very adaptive to rely on availability (media coverage of attacks by pit bull terriers) and to flee automatically rather than think long and deeply about what to do: an error in the laboratory might be a disaster in the field.

Of course, not being accurate can have some undesirable consequences. One of these is when people form inaccurate impressions of others, or develop stereotypes of minorities. However, it is possible to improve on our intuitive inferential strategies, for example, through formal education in scientific and rational thinking and in understanding statistical techniques (Nisbett, Krantz, Jepson & Fong, 1982).

Seeking the causes of behaviour

A key motive behind social inference is to gain sufficient understanding of other people to predict how they will behave, how they will treat us, how we should behave and more generally how the course of interaction will play out. All of us are in the business of constructing a representation of our social world that makes it a predictable and controllable – a place in which we can reliably make things happen.

The most powerful way to do this is to have an understanding of what causes what, being able to attribute causes to behaviour and events (Forsterling & Rudolph, 1988). This is the business of formal science, but not surprisingly we also do this automatically and informally almost all the time. The famous Austrian psychologist Fritz Heider (1958) thought of humans as 'naive' or lay psychologists who constantly construct their own informal theories to explain and predict how people will behave.

How do we attribute causality, why is it important?

People as naive psychologists

Fritz Heider (1958) drew the attention of social psychologists to the importance of studying people's naive, or commonsense, psychological theories. He believed that these theories are important in their own right because they influence behaviour. For example, people who believe in astrology are likely to have different expectations and are likely to act in different ways from those who do not. Heider believed that people are intuitive psychologists who construct causal theories of human behaviour, and because such theories have the same form as systematic scientific social psychological theories, people are actually intuitive or naive psychologists.

Heider made a lasting distinction between personal factors (e.g. personality, ability) and environmental factors (e.g. situations, social pressure) in the way that we account for the causes for behaviour. The former are examples of an internal (or dispositional) attribution and the latter of an external (or situational) attribution. So, for example, it might be useful to know whether someone you meet at a party who seems aloof and distant is an aloof and distant person or is acting in that way because she is not enjoying that particular party. Heider believed that because internal causes, or intentions, are hidden from us, we can infer their presence only if there are no clear external causes. However, as we see below, people tend to be biased in preferring internal to external attributions even in the face of evidence for

Internal (or dispositional) attribution Process of assigning the cause of our own or others' behaviour to internal or dispositional factors.

External (or situational) attribution Assigning the cause of our own or others' behaviour to external or environmental factors. closely with the

behaviour.

external causality. It seems that we readily attribute behaviour to stable properties of people. Klaus Scherer (1978), for example, found that people made assumptions about the stable personality traits of complete strangers simply on the basis of hearing their voices on the telephone.

People as everyday scientists

Covariation model Kelley's theory of causal attribution - people assign the cause of behaviour to the factor that covaries most

A well-known theory of how attributions are made is Harold Kelley's (1967) covariation model. A key question that people ask themselves is whether someone's behaviour is caused by the person's internal disposition to behave in that way (their personality) or by external situational factors. This allows us to know whether the person will always behave in a certain way or whether the behaviour is tied to the situation - is Jane being nice to me because she likes me (an internal dispositional cause) or because we are working on something together and being nice helps get the task done (an external situational cause)? This much is in line with what Heider had observed.

Kelley went on to argue that in order to discover a cause of someone's behaviour people act much like scientists, rather than naive psychologists. They identify what factor covaries with the behaviour and then assign that factor a causal role. People use this covariation principle to decide whether to attribute a particular act to internal dispositions (e.g. personality) or external environmental factors (e.g. social pressure). To make this attributional decision people consider three types of information: consistency, distinctiveness and consensus.

If Jane only sometimes behaves in a particular way, for example giggles, in a given situation then *consistency* is low and we look for alternative causes. If on the other hand Jane always giggles in the same situation consistency is high but we still don't know whether the giggling reflects Jane's personality or the situation. Assuming high consistency, people can assess the distinctiveness of the behaviour (distinctiveness is low if Jane giggles all the time, high if Jane only giggles in this situation) and whether there is high consensus (every one giggles in this situation) or low consensus (only Jane giggles in this situation). The conjunction of high distinctiveness and consensus leads to an external attribution (Jane's giggling is due to the situation), and the conjunction of low distinctiveness and consensus leads to an internal attribution (Jane's giggling is due to Jane – she is simply the sort of person who giggles).

Research shows that people certainly can make causal attributions for behaviour in this way (Kassin, 1979; McArthur, 1972), however, they under-use consensus information and are generally not very good at assessing covariation. Also, just because people can perform these laborious attributional analyses, it does not mean that in everyday life they actually do it or do it all the time.

Acts that are stable and controlled

Bernard Weiner (1979, 1986) was interested in the causes and consequences of the sorts of attribution people make when they succeed or fail on a task – for example, how students interpret their performance in examinations. He believed that in making an achievement attribution, we consider three performance dimensions. The first is locus, which once again features internal and external causes. The next two are new and interesting: stability and controllability.

Let us say that your classmate Helga fails in her psychology examination, and we think this was caused by 'unusual hindrance from others' (the top right-hand box in Figure 2.4). Now, you know that Helga is intelligent (therefore, failure in this case is an external factor). You also know that she was seriously disturbed by Bevan. He should never have been there - his eyes were running from a bout of hay fever, he

	Internal		External		
	Stable	Unstable	Stable	Unstable	
Controllable	Typical effort	Unusual effort	Consistent help or hindrance from others	Unusual help or hindrance from others	
Uncontrollable	Ability	Mood	Task difficulty	Luck	

Figure 2.4

Achievement attributions as a function of locus, stability and controllability.

How we attribute someone's task achievement depends on:

- Locus is the performance caused by the actor (internal) or the situation (external)?
- Stability is the internal cause a stable or unstable one?
- Controllability to what extent is future task performance under the actor's control?

kept sneezing throughout, and he was sitting next to poor Helga. So let us look to the future: in future examinations Bevan might not be present (an unstable factor), or Helga could choose to sit well away from Bevan if he turns up (a controllable factor). In total, there are eight different ways of explaining task performance.



Controllability. According to Weiner's attribution model, these athletes may attribute their success to unusually hard training – an internal but unstable attribution.

Source: Pearson Online Database (POD)

Weiner's model is a dynamic one, in that people first assess whether someone has succeeded or failed and accordingly experience positive or negative emotion. They then make a causal attribution for the performance; further, people can experience specific emotions (e.g. pride for doing well due to ability) and expectations that influence future performance.

Weiner's model is relatively well supported by experiments that provide participants with performance outcomes and locus, stability and controllability information, often under role-playing conditions (e.g. de Jong, Koomen & Mellenbergh, 1988). However, critics have suggested that the controllability dimension may be less important than was first thought. They have also wondered to what extent people outside controlled laboratory conditions really analyse achievement in this way.

Causal attribution in action

In this section we look first at the way we make attributions about ourselves, and in particular about explaining our emotions. Next we note that people can differ in their emotional styles. We close by considering how our attributions for other people's motives can impact our close relationships.

Self-perception

If you can attribute an act internally to a person's disposition you now know something about that person – his or her personality. Daryl Bem (1972) pinpointed an interesting implication of this in his self-perception theory. He argued that: (1) we make attributions for our own behaviour in the same way as we make attributions for others' behaviour; and (2) it is through internal attribution of our own behaviour that we gain knowledge about ourselves, our self-concept and identity (see Chapter 3).

Explaining our emotions

Making attributions also plays a role in defining emotions. Our emotions have two distinct components: a state of physiological *arousal*, and *cognitions* that we use to label the arousal as an emotion, such as fear or excitement. Although the arousal and label usually go hand-in-hand and our thoughts can generate the associated arousal, in some cases unexplained arousal could be experienced as different emotions depending on what kind of attributions we make for what we are experiencing. A major contributor to theory and research in this area is Stanley Schachter (1964; for a review of his work see Reisenzein, 1983). One of his experiments dealt with 'emotional lability'. See Box 2.3 and Figure 2.5 to see the components in the process of attributing an emotion in this experiment.

Being emotionally labile can help in therapy. Valins and Nisbett (1972) wondered if the process of making attributions could be used to treat emotional disorders. For example, might someone who is chronically anxious learn to re-label the arousal as happiness, transform depression into contentment, or attribute shyness to external factors rather than their own social anxiety? While some experiments suggest this could work (e.g. Olson, 1988), in general what is a misattribution effect is limited to the laboratory, unreliable and short-lived (Forsterling, 1988; Parkinson, 1985).

Self-perception theory
Bem's idea that we gain knowledge of ourselves only by making selfattributions: for example, we infer our own attitudes from our own behaviour.

Research classic 2.3

The context affects how we label an emotion

In the late nineteenth century the famous psychologist William James turned the usual account of how we experience an emotion on its head. As ordinary folk, we might believe that our mental images cause the body to react, and define our feelings as an emotion. However, James argued that first the body responds automatically to a stimulus, and then we interpret our bodily responses on the basis of what is going on around us: if we see a bear, we run, and a little later our pounding heart tells us that we are afraid.

One of Stanley Schachter's experiments dealing with 'emotional lability' brought this idea into the laboratory and gave it an attributional flavour. The key condition was one in which adrenalin was administered to male volunteers causing them to feel aroused (an increase in

heart rate), but were not informed what the drug was or what would happen. The aim was to show that the drug-induced arousal would be interpreted differently according to the context, of which there were two. In the first context, a confederate in the same room engaged in silly antics and made paper aeroplanes, which led the volunteers to report feeling euphoric. In the second context, the confederate ripped up papers and stomped around the room, which led the students to report feeling angry.

Given that the arousal brought on by the drug was unexpected, the confederate's actions provided sufficient cues to attach a label to what the volunteers thought was actually an 'emotion'.

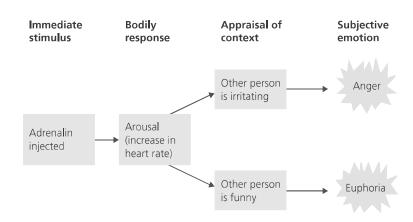


Figure 2.5Attributing a likely cause to an experimentally induced emotion. *Source*: Based on Schachter & Singer (1962).

Styles of attribution

We all engage in attributions, but it appears that we differ in our attributional style. According to the eminent clinical psychologist Julian Rotter (1966), those of us who are *internals* tend to make internal attributions; believing we have a great deal of personal control over our destiny – things happen because we make them happen. Those of us who are *externals* tend to make external attributions; believing that we have little control over what happens to us – things simply occur by chance, luck or the actions of powerful external agents. We can also differ in the

Attributional style
An individual
(personality)
predisposition to make
a certain type of causal
attribution for
behaviour.

extent to which they attribute behaviour or events to very general, diffuse and widespread causes (e.g. 'the economy') to explain redundancy, or to more narrowly defined causes (e.g. a company closing down).

Close relationships and attribution

Attributions also play an important role in close interpersonal relationships where attributions are *communicated* to fulfil a variety of functions: for instance, to explain, justify or excuse behaviour, as well as to assign blame and instil guilt (Hilton, 1990; see Chapter 10). A key finding is that attributional conflict, where partners in a relationship disagree over attributions (e.g. one exclaiming, 'I withdraw because you nag', the other, 'I nag because you withdraw'), is strongly associated with and plays a causal role in relationship dissatisfaction and distress (Fincham & Bradbury, 1993). In good relationships people credit their partners for positive behaviour by citing internal, stable, global and controllable factors to explain them, and explain away negative behaviour by ascribing it to external, unstable, specific and uncontrollable causes. Distressed couples behave in exactly the opposite way. Women tend fairly continuously to engage in attributional thought about the relationship, but men do so only when the relationship becomes dysfunctional. In this respect, and contrary to popular opinion, men's attributional behaviour is a better barometer of relationship dysfunction.

Biases in attributing motives

A central theme in social cognition is that people only do as much social thinking as is necessary for an adequate outcome – they are not in the business of optimal thought, as we noted earlier in this chapter. The same is true of the way we make attributions – there is an array of biases and errors (Nisbett & Ross, 1980).

From acts to dispositions: correspondence bias

Correspondent inference

Ned Jones and his colleagues developed a theory of theory of correspondent inference to explain that people infer that a person's behaviour corresponds to an underlying disposition or personality trait (Jones & Davis, 1965; Jones & McGillis, 1976). For example, if we saw Alex make a donation to charity we might infer that he has an underlying disposition to be charitable. People like to make correspondent inferences. A dispositional cause is a stable cause that renders people's behaviour predictable: it increases our own sense of control over our world. There are several cues that suggest a correspondent inference will be made. One cue is whether an act seems to be *freely chosen* rather than a response to external threats, inducements or constraints. Another cue is whether an act appears to be *socially desirable*, i.e. controlled by social norms. If so, it does not tell us much about a person's disposition. A better basis for a correspondent inference is socially undesirable action, because this would be in breach of a social norm.

y to see or as reflecting Correspondence bias

Perhaps the best-known attribution bias is correspondence bias (also called the *fundamental attribution error*). This a tendency for people to attribute behaviour

Correspondent inference
Causal attribution of behaviour to underlying dispositions.

Correspondence bias
A general attribution
bias in which people
have an inflated
tendency to see
behaviour as reflecting
(corresponding to)
stable underlying
personality attributes.

internally to stable underlying personality dispositions, even in the face of strong evidence for external causes (Gilbert & Malone, 1995; Ross, 1977). It is called *correspondence bias* because it is a bias in viewing behaviour as corresponding to internal dispositions rather than external situations. Check the fourth focus question.

Correspondence bias was the focus of a classic study by Jones and Harris (1967). American participants read speeches about the Cuban leader Fidel Castro ostensibly written by fellow students – at the time Castro was very unpopular in the United States. The speeches were either pro-Castro or anti-Castro, and the writers had ostensibly either freely chosen to write the speech or been instructed to do so. Where there was a choice, participants not surprisingly reasoned that those who had written a pro-Castro speech were in favour of Castro, and those who had written an anti-Castro speech were against Castro – an internal, dispositional attribution was made (see Figure 2.6).

However, a dispositional attribution was also made even when the speech writers had been *instructed* to write the speech! Although there was overwhelming evidence for an exclusively external cause, participants seemed largely to overlook this information and to prefer a dispositional explanation – they were victims of the fundamental attribution error or correspondence bias.

Correspondence bias has been widely demonstrated as a common inferential error that we all make (Gilbert, 1998). It is, however, less pronounced in relatively collectivist, East Asian cultures where people are more inclined to adjust their behaviour to the social context of other people and of situational norms (Morris & Peng, 1994; Smith, Bond & Kağitçibaşi, 2006; see Chapter 11). Correspondence bias arises primarily because people tend automatically to focus on the person against the background of the situation. The other person is the focus of their attention and is therefore more salient in information processing (e.g. Rholes & Pryor, 1982). Clearly, the bias will be weakened if one focuses more on the situation, as is the case in Eastern cultures.

Nick Haslam has pointed out that, in some situations, correspondence bias can take an extreme form called essentialism. People not only attribute behaviour to underlying dispositions but regard these dispositions as immutable and often innate

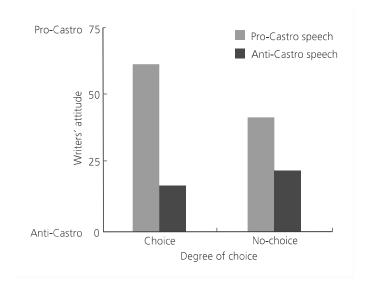
Essentialism
Pervasive tendency to consider behaviour to reflect underlying and immutable, often innate, properties of people or the groups they belong to.

Figure 2.6

The correspondence bias: attributing attitudes in the absence of freedom of choice.

- Students who freely chose to write a pro- or an anti-Castro speech were attributed with a pro- or anti-Castro attitude, respectively.
- Although less strong, this same tendency to attribute the speech to an underlying disposition (the fundamental attribution error) prevailed when the writers had no choice and were simply instructed to write the speech.





properties of the person or the group the person belongs to. Essentialism is particularly troublesome when it causes people to attribute negative stereotypes of outgroups to essential and immutable personality attributes of members of that group (e.g. Haslam, Rothschild & Ernst, 1998; Haslam, Bastian, Bain & Kashima, 2006).

The actor-observer effect

Correspondence bias only occurs reliably when we make an attribution of others' behaviour. When seeking causes for our own behaviour we are more likely to attribute it externally to situational factors. This asymmetry, for which there is substantial empirical support, is called the actor-observer effect (Jones & Nisbett, 1972; Watson, 1982). The most likely causes of the actor-observer effect are the following:

- Focus of attention when other people are the focus we judge them against the background of the situation. However, when we consider our own actions we focus outwards on the situation rather than inwards on our self: the situation is causally more salient.
- Asymmetry of information we know more about ourselves and therefore know that our behaviour is influenced by situational factors, because we behave differently in different situations. At least *we* think we do!

Not surprisingly, the actor-observer effect can be reduced or even disappear if the actor becomes the observer. One way that you might begin to see your dispositional side is to watch videotape of yourself recorded in a natural situation. Now, you become like others – you are the observer of *you* (Storms, 1973).

False consensus

A third attributional bias is called the false consensus effect. People tend to overestimate how typical their own behaviour is – assuming that others behave in the same way as they do. This egocentric bias was first demonstrated by Ross, Greene and House (1977) who asked students if they would agree to walk around campus for 30 minutes wearing a sandwich board carrying the slogan 'Eat at Joe's'. Those who agreed estimated that 62 per cent of their peers would also have agreed, while those who refused estimated that 67 per cent of their peers would also have refused.

False consensus is very prevalent (Marks & Miller, 1987), and arises because:

- we usually seek out similar others and so should not be surprised to find that other people are similar to us;
- our own opinions are so salient to us that they eclipse the possibility of alternative opinions;
- we are motivated to ground our opinions and actions in perceived consensus in order to validate them and build a stable world for ourselves.

False consensus is stronger for important beliefs that we care about, for beliefs we feel certain about, when we feel under external threat, and where we feel others are similar to us and we are members of a minority status group.

Self-serving biases

In keeping with the motivated tactician model of social cognition (Fiske & Taylor, 1991) discussed earlier in this chapter, attribution is influenced by our desire for a

Actor—observer effect Tendency to attribute our own behaviours externally and others' behaviours internally.

False consensus effect Seeing our own behaviour as being more typical than it really is. favourable image of ourselves. We are very good at producing self-serving biases. Overall, we take credit for our positive behaviours as reflecting who we are and our intention and effort to do positive things (the *self-enhancing bias*), while we explain away our negative behaviours as being due to coercion, normative constraints and other external situational factors that do not reflect who we 'really' are (the *self-protecting bias*). This is a robust effect that holds across many cultures (Fletcher & Ward, 1988).

Self-serving biases Attributional distortions that protect or enhance self-esteem or the selfconcept.

Self-enhancing biases are more common than self-protecting biases (Miller & Ross, 1975) – partly because people with low self-esteem tend not to protect themselves by attributing their failures externally; rather, they attribute them internally (Campbell & Fairey, 1985). However, self-enhancement and self-protection can sometimes be muted by a desire not to be seen to be boasting over our successes and lying about our failures (e.g. Schlenker, Weingold & Hallam, 1990). A fascinating self-serving bias, which most of us have used from time to time, acts in anticipation – self-handicapping, a term described by Edward Jones and Steven Berglas:

The self-handicapper, we are suggesting, reaches out for impediments, exaggerates handicaps, embraces any factor reducing personal responsibility for mediocrity and enhancing personal responsibility for success. (Jones & Berglas, 1978, p. 202)

People use this bias when they anticipate failure, whether in their job performance, in sport, or even in therapeutic settings when being 'sick' allows one to drop out of life. What a person often will do is to intentionally and publicly make external attributions for a poor showing even before it happens. Check the experiment about choosing between drugs in Box 2.4 and Figure 2.7.

Self-serving biases are also framed by our need to believe the world is a just place in which we have some control over our destiny. We cling to an illusion of control (Langer, 1975) by having a belief in a just world (Furnham, 2003) in which 'bad things happen to bad people', 'good things to good people' (i.e. people get what they deserve), and people have control over their outcomes. Refer back to the fifth focus question. This pattern of attributions makes the world seem a controllable and

Self-handicapping
Publicly making
advance external
attributions for our
anticipated failure or
poor performance in a
forthcoming event.

Illusion of control
Belief that we have
more control over our
world than we really do.

Belief in a just world Belief that the world is a just and predictable place where good things happen to 'good people' and bad things to 'bad people'.

Research classic 2.4 Self-handicapping: explaining away your failure

Imagine that you are waiting to take an examination in a subject you find difficult and that you fully anticipate failing. You might well make sure that as many people as possible know that you have done no revision, are not really interested in the subject and have a mind-numbing hangover to boot. Your subsequent failure is thus externally attributed without it seeming that you are making excuses to explain away your failure.

To investigate this idea, Berglas and Jones (1978) had introductory psychology students try to solve some problems where the problems were either solvable or not solvable. They were told that they had done very well, and before continuing with a second problem-

solving task they were given the choice of taking either a drug called 'Actavil', which would ostensibly improve intellectual functioning and performance, or 'Pandocrin', which would have the opposite effect. As predicted, those students who had succeeded on the solvable puzzles felt confident about their ability and so chose Actavil in order to improve further (see Figure 2.7). Those who had succeeded on the not-solvable puzzles attributed their performance externally to luck and chose Pandocrin in order to be able to explain away more easily the anticipated failure on the second task.

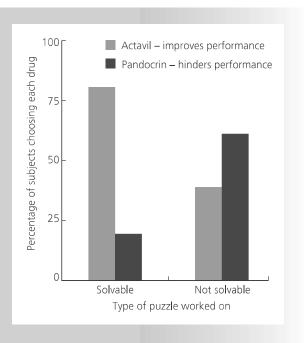
Source: Based on data from Berglas & Jones (1978).

Figure 2.7

Self-handicapping: choosing a drug depends on a puzzle's solvability.

- Students who had done well on a solvable puzzle could attribute their performance internally (e.g. to ability): anticipating an equally good performance on a second similar task, they chose a performance-enhancing drug, Actavil, rather than a performance-impairing drug, Pandocrin.
- Students who had done well on a not-solvable puzzle could only attribute their performance externally (e.g. to luck): with little prospect of an equivalent performance on the second task they chose the performance-impairing drug, as the self-handicapping option.

Source: Based on data from Berglas & Jones (1978).



secure place in which we can determine our own destiny. One consequence of this is that we often blame others for their misfortunes, such as unemployment, stigma or victimisation. We can even blame ourselves for bad things that happen to us; for example, victims of incest or rape can experience such a strong sense that the world is no longer stable, meaningful, controllable and just that they may reinstate an illusion of control by taking some responsibility for the event (Miller & Porter, 1983).

Explaining our social world

When we talk of an illusion of control and a belief in a just world we have travelled a long way from attribution theory's initial focus on how an individual painstakingly attributes a cause to another individual's behaviour. Often, it is groups or even our society that construct causal explanations to explain events and justify actions, and we as members of particular groups subscribe to these *social explanations*. People do not wake up every morning and causally reconstruct their world anew. In general we rely on causal scripts, group stereotypes, cultural belief systems, and wider ideologies (see Box 2.5). We stop, think and make causal attributions only when events are unexpected or inconsistent with expectations (Hastie, 1984), when we are in a bad mood (Bohner, Bless, Schwarz & Strack, 1988), when we feel a lack of control (Liu & Steele, 1986), or when we are actually asked or expected to proffer a causal explanation.

Intergroup attribution

Miles Hewstone (1989) has observed that groups develop causal explanations for themselves as group members and others as either ingroup or outgroup members (also see Chapter 7). For example, the British tend to attribute crime and economic

Real world 2.5 A very strange custom: the cultural context of causal attribution

Gün Semin tells a fictitious story about a Brazilian aborigine who visits Rio de Janeiro and then returns home to his tribe deep in the Amazonian rainforest to give an account of the visit (Semin, 1980, p. 292).

On particular days more people than all those you have seen in your whole lifetime roam to this huge place of worship, an open hut the size of which you will never imagine. They come, chanting, singing, with symbols of their gods and once everybody is gathered the chanting drives away all alien spirits. Then, at the appointed time the priests arrive wearing colourful garments, and the chanting rises to war cries until three high priests, wearing black, arrive. All priests who were running around with sacred round objects leave them and at the order of the high

priests begin the religious ceremony. Then, when the chief high priest gives a shrill sound from himself they all run after the single sacred round object that is left, only to kick it away when they get hold of it. Whenever the sacred object goes through one of the two doors and hits the sacred net the religious followers start to chant, piercing the heavens, and most of the priests embark on a most ecstatic orgy until the chief priest blows the whistle on them.

This is, of course, a description of a football match by someone who does not know the purpose or rules of the game! It illustrates an important point. For causal explanations to be meaningful they need to be part of a highly complex general interpretative framework that constitutes our socially acquired cultural knowledge.

ills to minority outgroups, such as Eastern European immigrants in Britain. In making attributions for the behaviour of outgroups, people often attribute negative behaviour dispositionally and positive behaviour externally – Thomas Pettigrew



Intergroup attributions. These are usually negative when applied to an outgroup, and in the case of gangs can lead to murder.

Source: Daniel Berehulak / Getty Images

Ultimate attribution error
Tendency to internally attribute bad outgroup and good ingroup behaviour, and to externally attribute good outgroup and bad ingroup behaviour.

Intergroup attributions Process of assigning the cause of one's own or others' behaviour to group membership.

Ideology
A systematically interrelated set of beliefs whose primary function is explanation. It circumscribes thinking, making it difficult for the holder to escape from its mould.

(1979) called this the ultimate attribution error. When you also build in attributions for ingroup behaviour you get true ethnocentric intergroup attributions – a group level manifestation of self-serving biases, in which socially desirable (positive) behaviour by ingroup members and socially undesirable (negative) behaviour by outgroup members are internally attributed to dispositions, and negative ingroup and positive outgroup behaviour are externally attributed to situational factors.

Don Taylor and Vaishna Jaggi (1974) studied intergroup attributions in southern India, against a background of intergroup conflict between Hindus and Muslims. Hindu participants read vignettes describing Hindus or Muslims acting towards them in a socially desirable way (e.g. offering shelter from the rain) or socially undesirable way (e.g. refusing shelter), and then chose one of a number of explanations for the behaviour. As predicted, Hindus made more internal attributions for socially desirable than socially undesirable acts by Hindus (ingroup), and this difference disappeared when Hindus made attributions for Muslims (outgroup). Other studies have shown that intergroup attributions are more pronounced where a group has a negative stereotype of an outgroup and less pronounced where outgroup attitudes are more favourable (e.g. Hewstone & Ward, 1985; Islam & Hewstone, 1993).

Intergroup attributions are ethnocentric. They reflect ethnocentric differences between ingroup and outgroup schemas and stereotypes that we hold: our evaluations are biased in favour of our own group. People often accentuate these perceived differences to achieve a positive self-image as a group member (Hogg & Abrams, 1988; Tajfel & Turner, 1979). We are biased to attribute internally good things about the ingroup and bad things about the outgroup, and likewise to attribute externally bad things about the ingroup and good things about the outgroup.

At the societal level, group attributions furnish us with explanations for poverty, wealth and unemployment. In the political sphere, conservatives tend to make internal attributions for poverty (Pandey, Sinha, Prakash & Tripathi, 1982), wealth (Furnham, 1983) and unemployment (Feather, 1985); liberals are inclined more towards external explanations. These attributions are quite clearly framed by ideology, as are explanations of social unrest, riots and even widespread disease. Conservatives will identify deviance, or personal or social pathology as the cause, while liberals will identify extenuating circumstances (Reicher & Potter, 1985; Jost, Federico & Napier, 2009). You will probably get a sense of this in media releases by party spokespersons and sometimes in letters to a newspaper editor.

Level of education level may lead people to arrive at intergroup attributions. Paul Sniderman and his colleagues investigated explanations for racial inequality and preferences for government policies. They found that less educated American Whites employed an 'affect-driven' reasoning process; starting with (mainly negative) feelings about Blacks, then proceeding directly to advocate minimal government assistance. Having done this, they 'doubled back' to fill in the intervening link to justify their advocacy – that Blacks were personally responsible for their own disadvantage. In contrast, better-educated Whites adopted a 'cognition-driven' reasoning process, in which they reasoned both forwards and backwards. Their policy recommendations were based on causal attributions for inequality, and in turn their causal attributions were influenced by their policy preference (Sniderman, Hagen, Tetlock & Brady, 1986).

Social representations

One way in which cultural knowledge about the causes of things may be developed is described by the eminent social psychologist Serge Moscovici in his theory of social representations (Lorenzi-Cioldi & Clémence, 2001; Moscovici, 1988). These are commonsense explanations of the world we live in, which are shared among members of a group. They develop through everyday informal communication among people to transform the unfamiliar and complex into the familiar and straightforward. Social representations are simplified and often ritualised 'distortions' of the real nature of the world.

Everyday commonsense understandings of evolution, global warming, the economy, globalism, and diet and health are all examples of social representations. We also have social representations of the nature of particular groups in society (what they do and believe, and why) – for example, Muslims, Americans and rich people. Carmen Huici and her colleagues gave the European Union as an excellent example of a social representation (Huici *et al.* 1997). The EU is a relatively new and quite technical idea that has its roots in complex economic matters such as free trade and subsidies. But the EU is now an accepted and commonplace part of European discourse which often emphasises more emotive issues of national and European identity rather than economic and trade matters.

Social representations research is popular in France. It uses a variety of methods that includes qualitative and quantitative analyses of interviews, questionnaires, observational data and archival material (Breakwell & Canter, 1993). A good example of this pluralism is Denise Jodelet's (1991) classic work *Madness and Social Representations* that centred on how mental illness is described and represented in the small French community of Ainay-le-Chateau. Her research used questionnaires, interviews and ethnographic observation.

Rumour

The way that social representations are developed through informal communication resembles the way rumours develop and spread. The transmission of rumours is characterised by levelling, sharpening and assimilation: the rumour becomes shorter and less detailed and complex, at the same times as certain features are selectively exaggerated to conform to people's pre-existing schemas (Allport & Postman, 1945; Rosnow, 1980).

Rumours are most likely to develop in a crisis when people are uncertain, anxious and stressed. When we pass a rumour on to others we are actually helping to reduce the uncertainty and stress we feel and to build social integration. (Check the sixth focus question. Here is one reason why Rajna wanted to pass a rumour on.) Rumours also have a source, and often this source purposely elaborates the rumour for a specific reason – someone might be trying to discredit individuals or groups. For example, an organisation can spread a rumour to undermine a competitor's market share (Shibutani, 1966), or a social group can spread a rumour to blame another group for a widespread crisis. A popular instance is the fabrication and promulgation of conspiracy theories.

Conspiracy theories

Conspiracy theories are convoluted causal theories. They attribute widespread natural and social calamities to the intentional and organised activities of certain

Social representations
Collectively elaborated explanations of unfamiliar and complex phenomena that transform them into a familiar and simple form.

Rumours
Unverified accounts
passed between
individuals who try to
make sense of events
that are uncertain or
confusing.

Conspiracy theories
Explanations of
widespread, complex
and worrying events
in terms of the
premeditated actions of
small groups of highly
organised conspirators.

Conspiracy theories. As an adherent to a convoluted causal theory, Mohamed Al Fayed would not relinquish it easily.

Source: Cathal McNaughton / PA Archive / Press Association Images



social groups, depicted as conspiratorial bodies out to ruin and then dominate the rest of humanity. Conspiracy theories wax and wane in popularity. They were particularly popular from the mid-seventeenth to the mid-eighteenth centuries:

Everywhere people sensed designs within designs, cabals within cabals; there were court conspiracies, backstairs conspiracies, ministerial conspiracies, factional conspiracies, aristocratic conspiracies, and by the last half of the eighteenth century even conspiracies of gigantic secret societies that cut across national boundaries and spanned the Atlantic. (Wood, 1982, p. 407)

One well-known conspiracy theory is the myth of the Jewish world conspiracy which surfaces periodically and is often associated with persecution of Jews (Cohn, 1966); another is of the role of the CIA in the 1963 assassination of John F. Kennedy. The accomplished conspiracy theorist can, with consummate skill and breathtaking versatility, explain even the most arcane and puzzling events in terms of the devious schemes and inscrutable machinations of hidden conspirators. Michael Billig (1978) believed it is precisely this that can make conspiracy theories so attractive – they are incredibly effective at reducing uncertainty. They provide a causal explanation in terms of enduring dispositions that can explain a wide range of events. It is much more fun to suggest and solve a devious mystery in simple terms. The reality of dealing with complex situational factors is both less widely applicable and more boring. Furthermore, 'uncovering' a conspiracy renders worrying events controllable and easily remedied. They are caused by small groups of highly visible people rather than arising from sociohistorical circumstances that may be difficult to comprehend.

Not surprisingly, conspiracy theories are almost immune to disconfirming evidence. For example, in December 2006 the outcome of a three-year, £3.5 million enquiry into the death in 1997 of Princess Diana was reported. Although there was absolutely no evidence that the British Royal family conspired with the British Government to have her killed to prevent her marrying an Egyptian Muslim, this conspiracy theory still persists. Take another recent example, emerging as a clash of civilisations. In his book *The Crisis of Islam: Holy War and Unholy Terror*, the historian Bernard Lewis (2004) described how the Muslim world portrayed President Bush's war on terror as a religious war. There is another even more convoluted conspiracy theory that Israel, or perhaps even the US Government itself, perpetrated the 9/11 terrorist attacks in the United States in 2001.

The basic cognitive and attributional processes we have discussed in this chapter are important for numerous sections in the chapters that follow. To take a few examples: we make attributions about our self and an intimate partner (Chapters 3 and 10); cognitive heuristics are involved in how we attend to persuasive messages (Chapter 4); schemas are fundamental to stereotypes and prejudice (Chapter 7); priming is sometimes involved in the way aggressive thoughts arise (Chapter 8); and cognitive biases can vary across cultures (Chapter 11). We expect that you will revisit this chapter many times as you progress further in this book.

Summary

- Social cognition deals with how our thinking processes and structures interact with the social context. People are limited in how they process information. Sometimes they are cognitive misers who take all sorts of cognitive short cuts. At other times they are motivated tacticians who choose, on the basis of their goals, motives and needs, between an array of cognitive strategies.
- The overall impressions that we form of other people are dominated by stereotypes, unfavourable information, first impressions and idiosyncratic personal constructs.
- Schemas are cognitive structures that represent knowledge about people, objects, events, roles and the self. Once a schema is invoked, our biases ensure that it is not undermined by the way we process information and make inferences.
- Categories are fuzzy sets of features organised around a prototype. They are hierarchically structured in terms of inclusiveness. Less inclusive categories are subsets of broader, more inclusive categories. When we categorise we aim to accentuate similarities within a category and differences between categories. Accentuation is a basis for stereotyping. To really work, a stereotype needs to

- be connected with the way that groups relate to each other.
- In processing information about others, we rely mostly on schemas relating to subtypes, stereotypes, current moods, easily detected features, accessible categories and information relevant to our self. However, we depend less on schemas when the cost of making a wrong inference is increased, when the cost of being indecisive is low, and when we believe that using a schema can lead to errors.
- Schemas become more abstract, complex, organised, compact, resilient and accurate over time. A schema is hard to change but can be modified when information is inconsistent with it. One kind of change occurs when we form subtypes.
- The way we encode information is heavily influenced by salient stimuli and by existing schemas that are easy to access.
- We remember people mainly for their traits but also their behaviour and appearance. They can be stored as individuals, or as members of a category.
- Our inferences fall far short of ideal. Our schemas dominate us, we disregard regression effects and base-rate information, and we perceive illusory

correlations. We use cognitive short cuts (heuristics) such as representativeness, availability, and anchoring and adjustment, rather than process information accurately.

- Our needs, goals, being accountable and capacity to cope underpin affect and emotion. In turn, affect can influence social cognition. It infuses social cognition only when we need to put effort into processing information, such as actively elaborating stimulus details and retrieving information from memory.
- People are commonsense psychologists trying to understand the causes of their own and other people's behaviour.
- Much like scientists, we take account of consensus, consistency and distinctiveness information
 when we attribute behaviour either internally to
 personality traits and dispositions, or externally
 to situational factors.
- Our attributions can have a profound impact on our emotions, self-concept and relationships with

- others. People can differ in their tendencies to make internal or external attributions.
- We are actually poor scientists who show biases when making attributions. Two biases stand out.
 One is our tendency to attribute the actions of others internally but our own actions externally.
 The other is our tendency to protect our selfconcept, attributing our failures externally but successes internally.
- Attributions for the behaviour of the people acting as group members are ethnocentric and stereotyped, a bias that is affected by the real or perceived nature of intergroup relations.
- Stereotypes may originate in a need for groups to attribute the cause of large-scale distressing events to outgroups we have already stereotyped and seem relevant to such events.
- People resort to causal attributions only when there is no readily available social knowledge (e.g. scripts, ideologies, social representations, cultural beliefs) to explain things automatically.

Literature, film and TV

The Reader

A 2008 film directed by Stephen Daldry and starring Ralph Fiennes, Jeanette Hain and David Kross. A teenage boy, Michael, in post-World War II Germany develops a passionate relationship with an older woman, Hanna, which profoundly affects him. Hanna suddenly disappears, but reappears 8 years later in Michael's life when she is on trial for war crimes. The impression of Hanna that Michael has cherished for so long is dramatically and upsettingly turned upside down. One way in which Michael deals with this is by focusing on a positive aspect of his former impression of her – her vulnerability in one aspect of her life.

Billy Elliot

The 2000 film by Stephen Daldry, and with Julie Walters, is set in a north of England mining town against the backdrop of the very bitter 1984 miners' strike. Billy Elliot is an 11-year-old boy who rejects the traditional male activity of boxing — preferring to become a ballet dancer. The film shows what happens when people violate social scripts and behave out-of-role in counter-stereotypical ways.

Reality TV

In shows such as I'm a Celebrity, Get Me Out of Here, minor celebrities attempt to gain publicity by projecting particular images of themselves to the public. These programmes show how people construct, manage and project impressions about themselves, and form impressions of other people.

About a Boy

This feel-good 2002 comedy by Chris and Paul Weitz, stars Hugh Grant. One of the themes in this lighthearted film is the embarrassment felt by the young boy, Marcus (Nicholas Hoult), because of the weirdness of his mother Fiona (Toni Collette), an ex-hippie depressive who tries to commit suicide and dresses Marcus strangely for school. Marcus is made to stand out and be salient at an age where one simply wants to fit in and be ordinary and part of the crowd.

The Third Policeman

Flan O'Brien's (1967) book is a wacky, bizarre and magical book about the absurd. It has a very funny section that is relevant to social representations. There is an hilarious

account of how bizarre social representations (in this case about atomic theory) can be formed and sustained.

JFK

The 1991 film by Oliver Stone stars Kevin Costner as a New Orleans district attorney who reopens the case to find out who really assassinated JFK on 22 November 1963, in Dallas, and what the process/plot behind it was. This is a wonderful encounter with conspiracy theories and people's need to construct a causal explanation, however bizarre, of a disturbing event. The film also stars Tommy Lee Jones and Sissy Spacek.

The Devils

Harrowing 1971 Ken Russell cult classic about the inquisition and political intrigue in the church/state.

The scenes are grotesque, evocative of the paintings of Hieronymus Bosch. The film is based on an Aldous Huxley novel and stars Vanessa Redgrave and Oliver Reed. It shows the awful lengths to which a group can go to protect its ultimate causal explanation — any divergence is seen as heresy or blasphemy, and is severely punished in order to make sure that everyone believes in its explanation of the nature of things.

Macbeth

Shakespeare's 1606/07 tragedy in which three witches prophesise a string of evil deeds committed by Macbeth during his bloody rise to power, including the murder of the Scottish king Duncan. The causal question is whether the prophecy caused the events – or was there some other complex of causes.

Guided questions

- You have heard the saying that people sometimes 'judge a book by its cover'. Use this idea as a springboard to outline how we form our first impressions of another person.
- Stereotypes are notoriously resistant to change. Why is this?
- How reliable is witness testimony? Apply what you know about person memory to this issue.
- Sometimes our mental short cuts lead us into error. One of these is *correspondence bias*. Describe and illustrate this concept.
- The term *conspiracy theory* has entered everyday language. Can social psychology help us understand what purpose these theories serve?



• How are *schemas* related to *stereotypes*? Give an example. See an experimental demonstration of how quick, cognitive processing might lead people to fire a weapon at someone based on their race in Chapter 2 of MyPsychLab at www.mypsychlab.co.uk.

Learn more

- Devine, P. G., Hamilton, D. L., & Ostrom, T. M. (eds) (1994). Social cognition: Impact on social psychology. San Diego: Academic Press. Leading experts discuss the impact that social cognition has had on a wide range of topics in social psychology.
- Fiske, S. T., & Taylor, S. E. (2008). Social cognition: From brains to culture. New York: McGraw-Hill. Fully updated edition of perhaps the classic text on social cognition. It is comprehensive, detailed and very well written.
- Hewstone, M. (1989). *Causal attribution: From cognitive processes to collective beliefs*. Oxford: Blackwell. A comprehensive and detailed coverage of attribution theory and research, which also includes coverage of European perspectives that locate attribution processes in the context of society and intergroup relations.
- Hilton, D. (2007). Casual explanation: From social perception to knowledge-based causal attribution. In A. W. Kruglanski & E. T. Higgins (eds), *Social psychology: Handbook of basic principles* (2nd ed, pp. 232–253). New York: Guilford. A recent overview of how and why we make causal attributions for behaviour, and how this relates to basic social cognition.
- Moskowitz, G. B. (2005). Social cognition: Understanding self and others. New York: Guilford. A comprehensive social cognition text written in a relatively accessible style as an introduction to the topic.
- Tesser, A., & Schwarz, N. (eds) (2001). *Blackwell handbook of social psychology: Intra-individual processes*. Oxford: Blackwell. A collection of twenty-eight chapters by leading scholars on intra-individual processes. It includes many chapters covering social cognition topics.
- Trope, Y., & Gaunt, R. (2007). Attribution and person perception. In M. A. Hogg & J. Cooper (eds), *The Sage handbook of social psychology: Concise student edition* (pp. 176–194). London: Sage. A recent, comprehensive and very readable overview of attribution research.



Refresh your understanding, assess your progress and go further with interactive summaries, questions, podcasts, videos and much more on the website accompanying the book: www.mypsychlab.co.uk.