A Constructionist Clinical Psychology for Cognitive Behaviour Therapy

KIERON P. O'CONNOR

A CONSTRUCTIONIST CLINICAL PSYCHOLOGY FOR COGNITIVE BEHAVIOUR THERAPY

Most clinical psychologists and cognitive behaviour therapists adopt a perspective which assumes that a client's distress arises from inaccurate perceptions of the external world and that these perceptions are due to the problematic filtering of information about the external world through internal perceptual biases and schemas. *A Constructionist Clinical Psychology for Cognitive Behaviour Therapy* provides a timely and innovative critique of the dominant trends in CBT theory and practice. It applies a constructionist framework to treatment and offers a constructionist philosophy and methodology to complement existing clinical approaches in cognitive behaviour therapy.

Kieron O'Connor presents a much needed alternative constructionist framework (addressing both individual and social constructionist ideas) which is laid out in a clear fashion for the clinician. He shows how the framework can be integrated into practice and offers an alternative to viewing psychopathology as an isolated problem which focuses on pathology as a response to internal or external events. He reveals how the new constructionist framework can encourage clinicians to look at the client-centred context which creates psychopathology and explore areas and experiences not easily accessible to traditional cognitive behaviour approaches, but which are rendered understandable through a constructionist approach to experience.

Using extensive case studies, *A Constructionist Clinical Psychology for Cognitive Behaviour Therapy* provides a constructionist framework approach which complements existing CBT approaches and shines new light on questions as to why some techniques work and others do not. With new tools for case formulation and evaluation, and trainee exercises for beginners, the book will appeal to clinical psychologists, clinical researchers, psychotherapists and other health and mental health professionals.

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INTRODUCTION

This book outlines a clinical psychology that embraces a constructionist view of the world. It is designed to introduce constructionist and phenomenological concepts and show how these are not incompatible with cognitive behavioural therapy (CBT) conceptions and may even augment the latter's empirical status. The book introduces individual and social-constructionist ideas and techniques perhaps unfamiliar and certainly not mainstream to the majority of CBT-trained clinicians, and adapts insights from a phenomenological approach that can be combined with current methods for everyday clinical practice. The book is essentially a guide to doing constructionist clinical psychology.

CBT has become one of the treatments of choice for a range of psychological problems. Whilst an earlier mechanistic tradition emphasized conditioning principles of behaviour, recent application of CBT accommodates the wider social context and personal meaning of behaviour and deals with complex emotions. CBT has expanded its reach in terms of therapeutic strategies and at the same time discarded old formulaic models in favour of a more subtle person-based approach to case formulation. But mainstream CBT seems by default trapped within a dated realist mediationist metaphor of information processing, which imposes arbitrary temporal sequences to stimulus cues and responses and compartmentalizes cognition and behaviour into separate realms (mind-body) or disjointed modular domains (thinking versus perception versus action). This fragmented realist approach to viewing cognitive and behavioural responses as discrete, isolated effects encourages a restrictive hypothetico-deductive method of empirical investigation and quantification.

This book offers an alternative constructionist framework (addressing both individual and social-constructionist ideas) laid out in a clear fashion for the clinician. Instead of viewing psychopathology as an isolated problem and focusing on pathology as a response to internal or external events, the constructionist framework encourages clinicians to look at the client-centred context that creates

psychopathology as an act rather than as a stimulus-response paradigm, emphasizing description of individual thinking and behaviour as the starting point to understanding psychopathology. The constructionist approach emphasizes the way psychological disorders and the discourses centred on these disorders are socially and individually constructed.

One way to haul CBT back to a person-centred descriptive empirical basis is to integrate phenomenological methods into clinical practice. Phenomenology, often dismissed by CBT practitioners as subjective, actually offers solid guidelines to help divorce clinical description from explanation and to reveal clinical phenomena-as-lived and therapy-as-lived, whilst bracketing out therapist-client assumptions.

The title of the early phenomenologist Franz Brentano's book (published in 1874, the same year as Wilhelm Wundt's *Physiological Psychology*) was *Psychology from an Empirical Standpoint*. Phenomenology under Brentano and later Husserl (a mathematician) aimed to offer ways to achieve a description of psychological phenomena free of interpretation. Husserl's dictum was 'back to things themselves' (*zu dem sachen selbst*) and methods such as 'bracketing out', 'suspension of disbelief', 'eidetic reduction' and 'horizontal variation' can be adapted to offer a guide on how, in clinical work, the clinician can not only strip away assumptions but recognize (client and therapist) positioning to descriptively see what is actually happening from the person's position.

The phenomenological method fits very well with a constructionist approach which views all action as interaction created in a specific idiosyncratic context. Within this constructionist approach there are no distortions of information or abnormal behaviour, only skilled behaviour adapted to fit the context. Also, the unit of behaviour is the person positioned in the world, and the boundaries of consciousness are not inside the person but rather between the person and the world. What is thought, perceived and felt is a product of the person's interactive projects in the world, and is largely not fed by discrete sensory data entering from 'out there'. Hence these intentional projects should be the focus for clinicians.

Overview of a constructionist approach

A constructionist approach begins by examining how we make sense of the world. In a realist mediationist model of information processing the world of reality is 'out there' and is filtered through our senses, percepts, schema, associations and assumptions 'in here' to produce abnormal misperceptions, exaggerated responses, attentional biases, perceptual distortions and so on. However, constructionist models call into question lay notions of 'out there' versus 'in there' and propose a more quantum model whereby what I perceive depends crucially on my projects or intentions in the here and now. All consciousness is consciousness of something. Although it doesn't seem so through lay eyes, my intentional projects and, in particular, the way I prepare for them largely determine what I see rather than the other way round. These projects are themselves a creative product of how I am positioned in the world.

In the individual constructionist model perception cannot be erroneous or distorted but is rather created in relation to a particular context and revelatory of this context: a context that is always a dynamic interaction between the person and the world. At the same time, an individual's clinical reality is socially constructed and the unit of self and self-consciousness can best be understood in terms of an interactive self-other relation. In this way a constructionist model avoids a more simplistic, problematic and moralistic cognitive-agency model, which proposes, for example, 'You are responsible for your own experiences', and sees us consciously solipsistically construing our world as a cognitive exercise. Such a statement is problematic not least since self is a construct that can only be defined contextually. This functional role of interactive contextualism around all human activity distinguishes a cognitive *constructivism* from a relational *constructionist* approach. Cognitive processes, far from playing a determinant role in forming behaviour and emotions, are themselves a product of a wider temporary self-world relation often better captured in mood than in thinking. This interactive idea of self has implications for understanding shifts in consciousness and the changing boundaries of the self. It offers a novel perspective on the mind-body debate and on the divide between cognition and behaviour.

The constructionist model introduces new notions of human possibility and the concept of a possibilistic distribution of possible thoughts and actions as a device to understand the occurrence of seemingly isolated abnormal human behaviour. The importance of what could be determines what is, and the use of the imagination creates the possible. In particular, the book underlines the importance of an analysis of psychopathology that contextualizes behaviour within uniquely constructed self-world projects. The variation in such projects and their background 'intentionality' are crucial ingredients to capture in any description of experience. All aspects of behaviour, both deliberate and incidental, evolve from a background project and a positioning in the world. In line with the creative theme, the roles of both perception and imagination are explored, with the introduction of the notion of 'disorders of the imagination' in discussing the creation of common pathological thought and mood states. I elaborate on the clinical operationalization of these constructs and argue that the constructionist-phenomenological approach allows a wider application of clinical interventions than current cognitive behavioural methods.

Clinical implications

Adopting a constructionist approach has far-reaching implications since it views all behaviour, activity, thought and feeling as a creative process. Symptoms of psychological disorder do not just magically appear from nowhere, although to the client it sometimes appears so. Constructionist functional analysis requires tying any discrete action to the context that gives it sense. For example, the phenomenological technique of 'eidetic reduction' deconstructs vague feelings of, say, 'anxiety' by a vertical

analysis that reveals the essential characteristics defining anxiety versus no anxiety for the client. At the same time, looking at horizontal variation (all the subtleties of the projects on hand when a feeling or perception appears) can help contextualize an apparent 'out-of-the-blue' experience.

From both a research and clinical perspective this constructionist approach emphasizes the utility of multiple hypotheses and conditional probabilities in case formulation and in determining background processes to psychopathological events. In clinical research this perspective leads to the adoption of non-probabilistic Bayesian or likelihood statistical methods which more easily unite idiopathic and normothetic methods in specifying a clinical process in all its complexity to replace the currently unsatisfactory significance testing of binary-effect models.

The book calls into question statistical methods used in CBT to quantify behaviour and revisits the personalistic versus frequentist debates in statistics of the 1940s and 1950s. Discarding a realist model in favour of a constructionist model provides a compelling rationale for moving towards quantifying clinical behaviour statistically through inductive behaviour and, more justly, in terms of conditional probability, personal likelihoods and contextual interactions in the future. Other chapters discuss the application of clinical constructionist methods to understanding anxiety, psychosis, dissociative states, the body, mood, psychophysiology and involuntary behaviour. Some insights in the book have implications for therapy and lead to intervention, although a constructionist therapy is not systematically described. Rather, the book intends to illustrate constructionist techniques and show how they may be integrated into current CBT. There is also a chapter on teaching constructionist approaches and integrating application into trainees' clinical experience.

1

WHY PHENOMENOLOGY?

Phenomenology (literally, the study of phenomena, or what appears before us) was developed at the turn of the twentieth century by Edmund Husserl, a mathematician, who sought to apply transcendental philosophy to the study of human experience. The word 'transcendental' had no mystical implication but referred to the importance of transcending prior assumptions and models, which might prejudice the descriptive rigour of enquiry. A short historical synopsis of the development of phenomenological thinking and its application in psychology is given here, but more exhaustive academic accounts of the philosophy are cited in the references.

Phenomenology has inspired applications in anthropology, sociology, social psychology, linguistics, education, conversation and discourse analysis. However, attempts to apply the phenomenological method to clinical psychological practice – in particular, cognitive behavioural therapy (CBT) – have mostly hit an ontological impasse: namely, how to render a system of knowledge and practices in a way both authentic and accessible for a clinical audience likely to resist its underlying radical and critical epistemology – an epistemology which seems, on the face of it, opposed to current taken-for-granted practice. Any such resistance, however, is more likely to be out of habit than on principle since clinical psychology is a set of practices and an applied philosophy which are quite compatible with phenomenology and constructionism. A phenomenological approach forms the initial basis for a constructionist clinical psychology since it fully describes experience in a person-created context.

Descriptive phenomenology and transcendental phenomenology

Transcendental phenomenology (TP) can be distinguished from descriptive phenomenology (DP). In the DP version, first explicitly advocated by Karl Jaspers

in his 1912 general psychopathology, phenomenological understanding is reduced to faithfully reporting or observing clients' words or experiences and uncritically considering their subjective expressions, interpretations and opinions as the unit of study. As such, DP has formed an important and productive counterweight to more rigid nosological attempts at clarifying clinical experience, which disregard subjectivity. One creative attempt to integrate DP with cognitive psychology is Jonathan Smith's interpretative phenomenological analysis (IPA) (Yardley, 1997; Smith *et al.*, 2009; Rhodes and Smith, 2014). Smith *et al.* (1999), for example, discuss IPA's application to the psychology of health and illness, including the convergence of constructs between qualitative and quantitative studies when exploring the idea of loss of control in chronic illness such as dialysis. A social-cognitive model of stress and control can then be strengthened by looking at the meaning individuals attach to control, uncertainty and safe decisions.

The question TP addresses, on the other hand, is how to contextualize a personal experience without moving beyond the experience itself. The answer is that experience is more than the subjective reports of what a person is seeing and saying; it is the ground for such reports. An experiential context is an inclusive context that embraces a life world of which the immediate and apparent objects of speech and sight, though a key starting point and which reveal the ground, are still only a small part.

Phenomenology deals with the question of how to contextualize the client's experience without stepping outside of the certainty of what appears before us, and the client's experience. A way of contextualizing what is there and what is not there is by respecting and exploring variations in phenomenal appearance. In a sense this method of contextualizing experience creates a measure of the person and centres experiences on the person's complete experiential space. What for this person appears on different occasions under the same reported phenomenon? When a person refers to their panic in a shopping mall is it the same panic that sets in whilst calculating tax returns? What aspects of the phenomenon vary within occasions? Does the fear of authority have the same intensity throughout exposure to all authority, whether the boss or the traffic police? Idiosyncrasy in appearance is sought after, and such contextualizing of the variations of experience has a spatial and a temporal dimension, and also a vertical and horizontal dimension. We can explore the meaning of a particular phenomenon through vertically tracing its essential features and/or we can look horizontally at the surrounding context of other phenomena against which it appears. Behaviour is always directed and this direction is encapsulated in some goal-directed intentional project. All behaviour occurs in an act context where the person is actively pursuing a goal. The term 'act' captures the notion of a person actively positioning themselves prior to and with respect to their experience, however involuntarily it appears. It is a unique personal unit and this uniqueness enables comparisons with other act contexts. An act can theoretically be any length that has meaning for the person. It is defined as all meaningful activity constituting a behaviour and can be contextualized within a family of acts which form a metric of the person's repertoire. Feeling and cognition fall within the act; the dramaturgical allusions implied by an act metaphor are also

helpful since the term 'act' conveys the sense that all behaviour has a constructed skill level in its self-presentation. The term 'act' also captures the more idiosyncratic human and ecological sense of a behaviour that encompasses the whole body and being in a close relation to the world.

Transcendental phenomenology as a descriptive science

When Edmund Husserl developed his phenomenological method he did not see it exclusively as a psychological method. He thought he was developing a general science of consciousness that would lay the philosophical foundations for all types of systematic investigations. According to Husserl (1913/1982), consciousness is what gives the world to us as we find it, ready-made, always 'there', imbued with meaning, coherent and thematic and seemingly corresponding very well with our intentions and projects towards it, even whilst sometimes disallowing them. Hence anyone who wished to study any part of the world would, reasoned Husserl, need to study first of all the structure of her/his consciousness in order to know how what was there arrived 'out there' in front of the person as something that could be consciously studied in the first place. This concern of phenomenology to study in the first instance not knowledge but what makes knowledge possible sets it apart from the cognitive enterprise to derive meaning from a world which is taken for granted as unproblematically already there.

Husserl himself was not a psychologist; he began his professional life as a mathematician and logician, and it was whilst investigating the logic of mathematical forms in the late 1890s that he realized the limits on such logical relations were not to be found in the intrinsic qualities of shapes or objects but rather in the limits of consciousness itself. Logic features prominently in the phenomenological method and it is by reflecting on our use of logic – in particular, the logic we apply in categorizing the world – that we gain access to the logic of our consciousness. Husserl (1900/1913, 1929/1969), the logician and mathematician, frequently cites examples from mathematics to illustrate his axioms and methods (e.g. the famous triangle example in his demonstration of eidetic reduction; see later).

Husserl took as his starting point the work of Franz Brentano, a lapsed cleric and philosopher who taught in Vienna in the 1870s and who had published his major work, *Psychology from an Empirical Standpoint*, in 1874, the same year that Wundt had published his seminal and experimentally influential work *Physiological Psychology*.

Brentano was writing at a time when two schools of psychology were vying for ascendancy: namely, introspectionism and positivism. Introspectionism was still predominant and rested on the premise that since the individual was largely responsible for what s/he felt and experienced s/he was the obvious person to report and judge this experience. Wilhelm Wundt was himself at this time largely following the introspective method in his own fashion, which consisted of participants monitoring the effects on themselves of various manipulations carried out by the experimenters. In an interesting reversal of current North American practice, the

participants were usually the professors (e.g. Wilhelm Wundt), whilst the students were the experimenters. Needless to say, it was the participants not the experimenters who were the authors of the ensuing publications! It was only much later with the advent of experimentalists such as Bruno Munsterberg that Wundt's laboratory became more positivist and brass instrument in orientation.

Positivism as a philosophy and method had recently (in 1834) been espoused by Auguste Comte, who had suggested that reality was beyond the individual's mind and could only be grasped objectively through collecting facts, which, when tied together, could lead to laws predicting cause and effect. This paradigm was seemingly more in tune with the pragmatic entrepreneurial spirit of the age and led to the idea that social or psychological facts could exist in the same way as physical facts, and that psychological and social laws could be deduced from them. Nineteenth-century social thinkers such as Emile Durkheim and Karl Marx took this positivist spirit to heart and began talking of social facts and laws that derived from a science of society. Indeed, towards the end of the nineteenth century, several such 'human laws', such as the Weber–Fechner Law, were emerging in psychophysics and psychophysiology, attesting to an apparent *fait accompli* by the experimental positivist method.

Brentano was happy neither with introspectionism nor with positivism since he felt that the act of knowing the world and what was known through that act (or, as he termed it, the 'act of presentation' and the 'presentation') were too closely related to be hived off as separate phenomena. He felt that introspection dealt only with the act of knowing and positivism only with the knowledge, whereas in fact every 'internal' subjective act of consciousness (paying attention, memorizing, dreaming), although seeming to originate inside the person, is always directed towards an object 'outside' the person. Put succinctly, Brentano claimed that all consciousness is consciousness *of* something or other. There can be no pure consciousness that just floats aimlessly about unfocused and not conscious of anything in particular. Consciousness always has a content to give it purpose and direction and Brentano termed this properly 'intentionality'.

Brentano felt himself unfit to say which should be the primary subject matter of psychology: the objects that directed consciousness and provided it with its contents or the consciousness directed towards the objects. He suggested we talk instead about 'acts of consciousness', which include both the act of knowing and what is known, and that we seek to classify mental states on the basis of their intentionality. A wilful state is different from a passive state, or a passionate state different from a dreamy state, because the states are necessarily directed towards different objects and hence in each case the act of knowing the object is different.

Brentano also distinguished between description as a primary goal for empirical psychology and what he termed 'genetic psychology'. Genetic psychology is concerned with drawing causal inferences from what is observed, and Brentano felt that this should come only when a proper descriptive taxonomy of intentional states had been drawn up. Even in 1874 Brentano realized the danger of letting interpretation overtake description, particularly when we are trying to be empirical and are describing what appears before us. The phenomenological idea of

describing what is before me has been refined, notably by Amadeo Giorgi (1985), who operationalized phenomenological description, as in Table 1.1.

Husserl elaborated on Brentano's work and suggested that the best way to ground empirical psychology in the description of what is there is to limit this description initially only to that of which we can be certain. Logically, it makes sense to know what we are certain of before deciding what we can't be certain of and before launching into an exploration of the unknown. Husserl concluded that all we can ever be absolutely certain of is our own conscious experience at this moment in time. We may *know* about other people, events and objects existing at other times and places, but we cannot be certain they exist. For example, I may have a fairly good idea that there is an office next to mine with a desk, drawers, windows and a door, even though I have no conscious experience of these items at the moment. On the basis of my past experience I can be pretty sure they exist. But I cannot know for certain, and perhaps someone has removed the desk and demolished the office quietly without my knowledge. This idea of basing behavioural analysis on *certain* process ascertained descriptively rather than, say, the effects of an uncertain hypothetical process, is explored further in Chapter 2.

Husserl was agnostic regarding the aetiology of consciousness. Following Brentano, Husserl was careful to emphasize that he did not consider consciousness to be located inside the person (for that would be applying a model); rather, conscious experience is what presents the world to us regardless of whether our consciousness is internal, external or somewhere in the middle. His fundamental proposition was that I can be absolutely certain only of what presents itself to my consciousness at this moment. The proposition does not imply that my conscious impressions are necessarily correct since, to quote Husserl's (1913/1982, 1929/1969)

TABLE 1.1 Descriptive seeing

Edmund Husserl, the founder of phenomenology, suggested that a science of description should aim to 'bracket out' our natural tendency to impose a priori assumptions on observed phenomena.

Describing exactly what appears before us is a form of awareness training (Husserl termed it 'descriptive seeing') and we can become more aware of how premature interpretations infiltrate our observations even if we cannot eliminate them.

Amedeo Giorgi suggests as strategies for eliciting descriptive narratives from clients empathic emergence in the person's work of description, slowing the person down to dwell on the details of description and magnifying the mundaneness of the client's situation.

Some pitfalls to avoid in clinical description:

1. Selective, summary or vague description that omits detail.
2. Inferring the presence or relevance of events and associations not actually present.
3. Attributing causal or motivational or hierarchical associations within phenomena that appear simultaneously.
4. Viewing events prematurely as repetitions or examples of other events.

own illustration, although my impression of a scented flower may mislead me to incorrectly infer the presence of a flower, I can never be in error about my initial impression of a flower since what appears to me appears to me as such and nothing else. Husserl is not painting a solipsistic or idealistic picture of the world (that the world is simply an extension of my mind) since what appears to me can be in error of what is there. But he does suggest that empirical enquiry into the world must start with the way the world appears to me. He termed these appearances 'phenomena' to distinguish them from external objects or internal ideas of objects, and he suggested that it is only through the study of these phenomena (phenomenology) that I can discover the workings of my own consciousness. At first glance this seems a bit circular. On the one hand, Husserl is saying we must study consciousness to know how we structure the world; on the other, he is saying we can only study consciousness by looking closely at how the world appears to us. Surely, we should isolate and study our consciousness independently of the world before we study it in the world. Unfortunately, according to Husserl, we cannot corner a pure consciousness abstracted from the world and put it under a microscope, since consciousness only shows itself in the context of our everyday concerns. Since I am *in* consciousness I cannot see its workings. If I could I would not be in my own consciousness but in another consciousness outside of my own, rather as, for example, I would need to be outside of the room in which I am sitting in order to see it in its entirety.

Pure undirected consciousness does not exist (a point expanded in Chapter 4's discussion of self-experience and introspection) and I cannot detach myself from my own consciousness in order to examine it. As Brentano (1874/1973) noted, consciousness is always intentional and directed to an object, which is to say I can only ever know the patterns of consciousness through the phenomena consciousness presents to me. Husserl's famous rallying cry was '*zu den sachen selbst*' or 'back to things themselves', by which he meant that a careful, descriptive non-judgemental account of the things that appear in our consciousness is our route to discovering how consciousness operates. What he did not mean was that we should become positivists and start isolating phenomena as facts and things and treat them as if they existed independently outside in the world. Like Brentano, Husserl (1939/1973) was keen to distinguish between description and explanation, or, as he termed it, 'experience' and 'judgement'. He held that anything over and above description of conscious experience was a leap to judgement, which led us to construct models about how the world worked rather than to describe it. Acting as if objects exist in isolation is to subscribe to a model of the world (a realist one), whereas a phenomenologist should stick to describing the world as it appears in a context.

There is clearly a clinical resonance here since most clients readily confuse description with explanation, and tell us not only what is there but what was or might or should be there. A client's narrative presentation often entangles the problem itself with comment, judgement and a verdict on its nature. Arguably, many exaggerated and overcharged responses in the here and now are the result of models, assumptions and evaluations prematurely imposed on what a client perceives.

In the cognitive literature the appraisals and judgements that clients make of their experiences are termed 'secondary evaluations' and are accorded a major role in the maintenance of distress since secondary evaluations such as 'this experience means I am mad' can provoke anxiety over what are quite normal experiences. Such ideas are almost truisms for cognitive therapists. Unfortunately, it is not only the clients who confuse experience and judgement, and Husserl was as scathing about the ability of scientists to distinguish description from interpretation. Practices such as isolating objects from the context in which they appear in consciousness or hierarchically prioritizing events in terms of cause and effect are commonplace in clinical practice. As clinicians, we appeal to a normative understanding of the sense of our endeavour in order to legitimate our practice and hence make the practice itself comprehensible. But such common understanding rests on shared assumptions and prior interpretations of the world outside of what appears to me currently in consciousness. When we describe the clinical picture of a client we frequently select those aspects that are the most meaningful for us, or we group experiences under a general category or assume that succession of events implies causality. Some ways that description escapes us are given in Table 1.1. In fact, much of the conventional diagnostic practice is aimed at isolating the client's statements and experiences from the adaptive context in which they arise in favour of a categorical model (such as in psychiatric classification) imposed on the experiences.

Positivist psychologists might agree that we should not fit models prematurely to data; but there are certain a priori categorizations of the world, into subject, object, inside, outside, past and present, stimulus and response, which would be unproblematic to the positivist psychologist. It is difficult for us to challenge the notion that objects exist in isolation out there and that sensory information comes from the outside to the inside in a unidirectional flow since this is the common-sense view rehearsed in our everyday encounters. The familiar is compelling for scientists and lay people alike. Husserl termed this familiar view the 'natural attitude'. But assumptions are assumptions even if convincingly promoted by a realist rhetoric. They are not phenomena we can be certain of and we cannot therefore take them for granted.

Phenomenology and realism

Epistemological realism and its psychological counterpart, sensory realism, which argues that the world exists independently out there and that knowledge about the would comes to us via sensory inputs, which are then collated and stored cognitively, is contraindicated by three main qualities of the world as it presents to us. First and foremost is the fact that the world always appears to me as a unitary field. This is a property also remarked upon by the gestalt psychologists in the 1920s concerning perceptual organization (Köhler, 1972). I do not, for example, look at the table in front of me, then at the door, and think I'm in a different world. Everything appears at ease together and objects seem proportioned in space and distance in an orderly fashion. If, however, it were simply the physical properties of objects that guided and dominated our attention willy-nilly there is no reason why the world should appear organized

before me as a coherent whole with a focus, a ground and a periphery. Rather, the world would be jerky and staccato, a bit like the Samuel Beckett mime play, where the actions of the actors are prodded along moment to moment by a stimulus stick.

Second, I can never see the world in its entirety; I can only ever have partial knowledge of any object or person. Owing to the necessity of my being positioned in the world, my viewpoint is always a partial perspective. In traditional theories of perception our positioning in space can be viewed as a lack or a failing of the perceptual system to be overcome; but to Husserl (1931/1988) this partial knowledge is a precondition of our consciousness and reflects its basic structure: namely, that there must be a part of our perception which is incomplete. In other words, perception always has a horizon receding into vagueness and incompleteness at the same time as it has a focused figure. The two define each other, and if I try to make the vague horizon clearer by, for example, manoeuvring my position, then another part of the field becomes vague. Our partiality is not a failing of consciousness, it is one of its defining characteristics. This symbiotic relationship between the core and the periphery of consciousness is of crucial interest to phenomenology, since the relationship is often responsible for the transformation of conscious focus. The relationship between the core and the periphery of consciousness is dynamic and synergistic, but its structure is a constant, and what I am not focused on at any moment is as important in revealing my current state as what I am focused on. Consequently, the phenomenological clinician is as interested in what is *not* a problem to a client as in what *is* a problem. To give a straightforward example from clinical practice, a client may be narrowly focused on her/his problem and weaknesses with her/his strengths tailing off vaguely into the periphery. But refocusing on and enacting strengths may then instead place the problem on the periphery.

A third and related argument against realism concerns the thematic nature of what I notice in the world around me – a thematic nature which always reflects my current mode of consciousness. I come into a room in a hurry to retrieve a pen and I notice the door, the desk, the carpet and the drawer in my room; but what I notice about them reflects my concern to retrieve my pen as quickly as possible. The drawer becomes a drawer to be opened quickly, the desk a surface to be searched. What I notice about these objects may be completely at odds with what I might notice if I was sitting at ease in the same room. In fact, what I notice about the table may be completely different to what I noticed before – of course, I will still call what I see a table but I will do so in the face of a different set of sensory information compiled under a different theme. This point is elaborated later when discussing Martin Heidegger and the contribution of ecological phenomenologists such as Merleau-Ponty.

Modes of consciousness

Modes of consciousness dictate cognitive themes and the sensory content of my world of vision depends crucially on my conscious intentionality towards the world. Different states of consciousness do not just selectively curtail or enhance attention (in other words, when I am in a fugue state or a hypnogogic state, my sensory grasp

of the world differs to when I am in my normal mode of consciousness). Rather, we identify divergent and often conflicting sensory information as the same object or class of object, and so we must, since qualitatively distinct modes of consciousness thematize the world in distinct ways. We are unaware of this constant shifting in the criteria of sensory reality – first, because the shifts are subtle, and second, because distinct modes of consciousness, by definition, do not, as a rule, thematize the sensory world at the same time. Third, I am in my consciousness and it is my reference point for sense of reality. Rather like Einstein's (1929) moving-train-stationary-carriage example of relativity, I cannot step outside the carriage to break the illusion of my carriage seeming to move as the other carriage pulls away.

If, for example, I use the telephone in an emergency and grip it tightly and shout into it the qualities I notice about the telephone and identify as part of the telephone may differ from the qualities I appreciate about the same telephone during a leisurely conversation with a friend where I play with the cord and move my eyes and hand around the edge of the object. If I described my experience of the phone as it appeared to me in each case the descriptions would be different and a listener might have difficulty identifying it as the same phone. But for me, unproblematically, distinct sensory qualia correspond to the same phone in my office, since the two separate modes of consciousness represented by an emergency call and a leisurely chat would not normally overlap. At extremes there may be agreement amongst modes about what is definitely not constitutive of a sensory object. If I arrived at my office and found a pumpkin where the phone should be I would not accept this as a phone except under exceptional circumstances (e.g. it was Halloween and I suspected a trickster had placed my phone in the pumpkin). A pumpkin will always lie beyond my horizon of possibilities for being a phone whatever my mode of consciousness.

These contradictions manifest themselves clinically in various ways which often appear frustrating to the clinician. The client may report different symptoms on different occasions. They may even appear to confabulate when reporting introspective appearances. Finally, they may attribute contradictory traits to themselves, depending on the demand context of reporting. For example, a client may answer 'yes' to both 'Are you someone constant in your beliefs?' and 'Are you open and flexible to others' beliefs?' because both responses form part of a project about wishing to appear reasonable.

Normally, modes of consciousness that give conflicting sensory information about the same reality would not co-exist, but occasionally they can overlap. For example, sitting comfortably in your lounge sipping cocoa may instil in you a consciousness of the world and an accompanying sensory presentation of the world very different to that present when listening to a lecture on phenomenology. But should a lecturer appear in your living room and start lecturing you whilst you drink your cocoa you might initially experience a distortion of sensory reality wherein two views of what should be seen as reality at that moment conflict. This clash of competing modes of consciousness, and the consequent disorientation, may lead to the clinical phenomenon of derealization, where the client feels estranged and distant from reality. Derealization can occur as a result of a trauma such as an accident

or childhood abuse, where sense of reality is conflictual (see Chapter 4). Situations identified with two erstwhile autonomous modes of consciousness (feeling in a habitually secure place, e.g. bed, and being assaulted or burnt in a fire) would indeed produce a conflicting presentation of the substantive world. Such a reality shock can occur more benignly when one unexpectedly meets two people from different and habitually distinct parts of one's life at the same time and place. This can instil the feeling of being in two places at once as horizons of the sensory world represented by each set of friends jostle for prominence.

A distinction should be made between the clash of distinct modes of consciousness and the assimilation of an improbable happening into a mode of consciousness. Consciousness presents the world to us as a horizon of possibilities, and the distribution of possibilities can be revised to incorporate the unexpected. But the superimposition of two distinct distributions is likely to produce disorientation. However, conflicting modes of consciousness, once revealed and recognized as such, can be integrated and assimilated if they are not violently opposed (for example, viewing new forms of art expressions).

In the phenomenological model cognition and cognitive categories are largely determined by mode of consciousness. It is the job of cognition to present us with the illusions of the continuity of reality and the completeness of objects in order to construct an everyday world where objects appear to exist in themselves in perpetuity, for without this illusion we would not live in the 'real' world in which we do. But cognitive content only exists by grace of consciousness and, in his later writing, Husserl (1931/1988) relinquished even the experience of the fundamental physical coordinates of time and space to the control of the intuitive consciousness.

Consciousness and cognition

According to Husserl, it is crucial to distinguish between the phenomenon the cogito presents to us and the act of consciousness transcending this knowledge, what he termed respectively the 'noema' and its 'noesis'.

> Every act of thinking or knowing has within it what is thought or known. When an object stands before me as a known and familiar object within a horizon of typical familiarity, then it means consciousness determined it as a possible object of cognition and the theme of consciousness is the substrate for its actuality.
>
> *(Husserl, 1913/1982: 102).*

The idea that any particular thought content or knowledge needs to be grounded in the act of thinking or knowing which brought it forth is not immediately obvious to the clinical psychologist, who is used to viewing thoughts as separate from acts and both as separate from surrounding events. But on what ontological grounds do we separate sensory and cognitive phenomena from the ecological acts in which they are embedded? Whenever I taste a drink I am also drinking

the drink and holding the glass in a certain way. Thinking likewise involves my body doing things in order to think, and holding me in a certain posture. Why are these actions artificially and prematurely alienated from the thought process? The answer is because in modern psychology we a priori relegate thinking and acting to different cognitive domains. This is problematic phenomenologically since any experience arises from the context in which it is experienced and so must be understood in this context. This context involves every modality (thinking, feeling, smelling, hearing, seeing, fantasizing) by which the world appears to me, all of which must be included if appearances are to be described non-judgementally. It makes no phenomenological sense to isolate cognitive factors from sensory or motor factors since all modalities are equally informative about an underlying theme of consciousness. Similarly and perhaps more taxingly from the positivist standpoint, in phenomenological analysis what appears conscious has equal status to what we are not conscious of, and inarticulate and imagined events are grouped alongside 'real' events. In phenomenological analysis imagination is considered as part of our conscious experience.

Perception and imagination

Our apperception of any modality in the world requires perception and imagination to work in tandem. If I can only see the front panel of the phone in front of me I nonetheless 'fill in' the rest of the phone, which I cannot see, and complete the concept of a telephone, back and front. But where does this filling in come from? First, it comes from the dialectical nature of consciousness. What is there implies what is not there. This is a logical point; but it leaves a gap for creativity. The imagination, according to Husserl, is part and parcel of consciousness. In fact, in later writings Husserl (1931/1988) considered imagination to precede and form the ground for what is actually seen, a point of view later expanded by Sartre (1940, 1943) and Casey (1976). Again, we can underline a divergence in phenomenological and cognitive views of consciousness. In the cognitive view prior expectations may bias and direct the selective nature of perception but, underneath, the possibility of 'unbiased' perception exists. The phenomenological view of perception, on the other hand, insists that perception requires variation to work and, in particular, requires variants of imagination and that what I imagine is a part of what I actually see. This debate about reality becomes more digestible if we talk of 'sense of reality' as what appears to us rather than as reality.

The dialectic of consciousness

Both cognitive and phenomenological viewpoints recognize that conscious cognitive operations feature in the focused part of consciousness and that consciousness also has an unseen unfocused part. But to the cognitivist these two parts of consciousness imply that consciousness is a graded dimension between conscious and non-conscious

events, with some events above and others below a threshold of consciousness. In a phenomenological analysis the perennial existence of these two parts is dialectical, and whatever I decide I know or do not know at any given moment reflects the continual opposition between the focused and the unfocused part of consciousness.

This dialectical and mutually exclusive structure to consciousness pervades all areas of conscious life and everyday cognitive categorization itself necessarily follows a binary dialectical logic. If I include something in my thought I must exclude something. If I think in a certain way I must not think in another way. If I have a particular knowledge about an event I do not possess other knowledge. Objects are grouped into classes that have and do not have certain properties. An event represents one thing to me but does not represent something else. In order for any significant evaluation to be attached to the world I must be aware of this evaluation's opposite pole, and it is the entire bipolar dimension that contextualizes any particular categorization. This dialectical or bipolar structure underlying the use of concepts is highlighted by symbolic logic, which can consider the relations between independent forms of experience. Kelly's personal construct theory, with which we will complete our constructionist-phenomenological analysis later on (see Chapter 2), also personalizes the way we construct our understanding of the conscious world.

In phenomenology this dialectic or opposition between awareness-unawareness is implicit in my being aware of anything that places limits on that awareness. It is essential that I am unaware of much of my environment, since this unawareness forms the background that permits awareness to emerge. The novelist Jack Kerouac (1958) speculated in *The Dharma Bums* that the universe probably emits a continuous deafening roar, but we would be unaware of it precisely because it is continuous. If we have no awareness of the absence of the noise we cannot be aware of the noise. If I was aware of everything I would not be aware of my awareness and so unable to be aware of anything.

Sufficiency of experience

Since the content of what we see (and do not see) is an expression of the way our experience is organized it must always be sufficient for my current mode of consciousness. Mozart supposedly once remarked to Joseph II of Austria after the latter had complained that there were too many notes in Mozart's concerto that there were neither too many nor too few notes but just the number he needed to express his music. In the same way the phenomena appearing in our world and the horizons beyond them must be sufficient for our present mode of consciousness or they would simply not have appeared as they did. If, for example, I have the feeling that I am not getting enough information from what I see then what I see is sufficient for a mode of consciousness with the theme 'I am not seeing enough'. In other words, the phenomena that appear to me in the world are already significant by virtue of the fact that they and no other versions of the world have appeared.

Their appearance is testament that the world was produced in the way it was and in no other possible way. Furthermore, I am aware that I experience a version of the world, that this awareness emphasizes the existence of other versions and that the sense of what I see is conditioned by what I don't see.

The meaning of phenomena is hence revealed not just by creating links with other phenomena occurring at a different place and time but by comparison of what did appear with what might (or could not) have appeared. These alternative versions of reality are furnished through imagination, fantasy or memory. They are unreal but they form the context for understanding how and why the sense of the real, such as it is, emerged at this time and place. In this way we recognize the dialectical nature of consciousness and ground the current conscious cognitive focus in the wider transcendental regions of overall personal consciousness of the world. Since such grounding is likely to be complex and dynamic rather than monosyllabic, narrative analysis is the better vehicle to transport transcendent meaning (see Chapter 5).

Eidetic reduction and essences

In our conscious appraisal of the focused world we tend to adopt a natural attitude that relies on vague categorizations of phenomena, and on assumptions that tend to discourage too much attention to variations in experience. We tend to be quite sure about what is 'real' or 'not real', or 'right' or 'not right', at any one time, ignoring the many incoherences that might be subsumed uncritically under such categorizations made at different times. This gives an illusion of permanence and continuity, which is helpful to our everyday activities but unhelpful to our scientific activities since, according to Husserl (1913/1982), it is only by examining and recording these variations in phenomena that we can discover the limits of our own consciousness. Husserl devised a method he termed 'eidetic reduction' for analysing variations in appearances, which applies well to variations of psychological experience, which in turn reveal the essence or bottom line of what I count as a percept.

Husserl considered the essence, or invariant, a necessary, even universal form, which represented a fundamental aspect of our categorization of the world and which was important to recognize as part of our assumptions about the world. There is some confusion in Husserl's writing as to how to operationalize 'essences', so the following should be seen as a perspective. The 'essence' reveals the theme underlying our categorization of this particular part of our world, and by changing or embroidering the theme we can modify how we see and experience it. Once the essence of our categorization of, say, a table is discovered we are in a position, said Husserl (1913/1982), to abandon the ground of its acceptance and, for example, put my experiential acceptance of a table out of play, so to speak. In other words, if I know I have a preconceived bottom-line understanding of a table as a support structure I can be aware that I may be likely to see a support structure as a table or, conversely, not see a non-support structure as a table. In a clinical setting my bottom-line criterion for judging a client as worthy of treatment or not could be

very prejudicial to any decision and carry with it important consequences. If I am aware of my criterion I can then bracket out, or otherwise suspend it, if I feel it is an encumbrance. Implicit in Husserl's analysis is the fact that we are usually unaware of our bottom-line judgements because they are masked by the wide variations that embellish them and make them adaptable to context. We may feel we are judging every case on its merits but find we are inadvertently applying an arbitrary rule to each case. Similarly, a client may be convinced that a particular occurrence or event consistently triggers a negative experience, only to find that it's only an intermittent association. For example, a situation strongly associated with anxiety may present the occasion for anxiety through a habitual coincidental time occurrence rather than a definite trigger. Alarmingly, we may discover no consistency at all in our judgements. A good example here is self-attributes. Most people would argue that, yes, they may vary their persona here and there, but they remain the same person, not obviously producing contradictory behaviour in different contexts. Yet the evidence is that we do contradict ourselves, and not only are self-reports or introspection determined by context but we can literally see ourselves as different people in different contexts (see Chapter 8). For example, when playing different roles people may perceive themselves differently and this can be useful in changing habits such as smoking. People reporting an attribute are also reporting an attribute in a context. The demand characteristics of the context determine the reporting of the problem. One of the aims of constructionist-phenomenological analysis is to make the person aware of these variations and contradictions.

In another example, a client who termed himself 'a perfectionist' and explained away his compulsive behaviour by comfortably announcing, 'Dr, my problem is that I'm a perfectionist. I know I shouldn't be but there you are. That's me'. When looking at the different acts labelled 'perfectionist' there was, in fact, no objective rhyme or reason connecting them. He hung his trousers equidistantly in a closet, always symmetrically and midway along the crease in order to be perfect. He always followed a set sequence of operations when making a sandwich in order to be perfect. He spaced all his letters above the line when writing in order to be perfect. When we carried out an eidetic reduction to try to establish his essential criterion of perfection his only criterion was subjective, i.e. whether he felt right, so his feelings formed the target of eidetic reduction.

This technique of specifying variations implicit in the use of a particular label or concept is of particular use in clarifying the often vague meanings clients attach to their problems. Clients can, for example, often employ terms such as 'panic' or 'anxiety' or even 'thinness' to cover a multitude of meanings. Or clients will use general phrases such as 'I don't feel good in myself' or 'I like things right', which appeal to a commonly understood state (after all, everyone likes to feel good or things to be right) but are in practice used idiosyncratically. Looking at variations in the experiences that clients are ready to classify as, say, anxiety or 'feeling good' or 'being right' clarifies exactly how they are using these terms. At the same time the technique makes the client aware of discrepancies or dispersions in their use of a single label to group disparate phenomena. An added complication here raised by Lakoff (1987) and

Rhodes and Jakes (2009) is that even concrete nouns may be overlaid with meanings that are implied and give them a wider, unrelated sense. In an extreme case a client may realize there is no commonality between identically labelled experiences.

Imaginal variation

The importance of the concepts of variation, free variation and imaginal variation cannot be underestimated either for the pure practice of phenomenology or its clinical application. In different situations we accept different criteria for a table as a table. For example, if I was touring a furniture shop and looking for a table I would probably be looking for something with a flat surface and a vertical support of four legs and this would be a fair criterion to enable me to distinguish between a table and a chair and a lamp. However, if I was in a dark room my criteria for a table might be more tactile, the heaviness and quality of the material, say, compared with the mobility and lightness of a stool or chair. On the other hand, if I was at a surrealist exhibition of Dadaist furniture my criteria may be multimodal and flexible and imaginative to the extent that I might consider all sorts of shapes to be tables. Husserl's idea was that at the root of all these different variations lies an essence or bottom-line criterion of which all variations are examples in one sense or another.

There are, reckoned Husserl, a certain set of qualities over and beyond which I will not identify something as a table. For example, my bottom line may be utilitarian, e.g. a table is an object made specifically to support something else on its upper surface. Anything not meeting this bare minimum requirement I would not consider as a table. Husserl (1913/1982), in love as always with geometry, used the shape of a triangle as an illustration of this type of reduction in order to discover the essential geometric form for making up a triangle. What essential qualities define a triangle? Is it the straightness of the lines, the angles of the intersection of the lines, the colour of the lines or the presence of three lines? If we imagined all possible forms a triangle could take and still remain a triangle we rapidly eliminate accidental features that happen to have become associated with triangle shapes (such as colour, line thickness, size) and arrive at the essential criteria, according to Husserl, of three intersecting lines. Similarly with clients, we can consider that they have a bottom line for determining a state of anxiety or trauma.

In eidetic reduction, imagination and fantasy variations are considered just as valid as real variations. The 'real' is considered only as one possibility, 'it is an exemplary beginning for the style of free fantasies, if we raise all actuality to pure possibility, to the realm of free optionalness then we discover the restriction of every eidos according to its law of necessity' (Husserl, 1913/1982: 340). An example of eidetic reduction is given in Table 1.2.

Husserl's eidetic reduction might be considered as a 'vertical deconstruction' since it specifies the variations underlying a vague inclusive construct, and should be distinguished from 'horizontal construction', which we discuss next and which is one of Martin Heidegger's contributions to the phenomenological method.

TABLE 1.2 Eidetic reduction

In clinical practice clients often mix up descriptions of their problem experience with ideas of its origin and judgements on its effects.

Example: 'My problem is heights. I can't go up at all high, it makes me panic. It's unbearable, I become paralysed'.

Focusing on a detailed description of the problem experience can:

1. Make the client's labelling of their experiences less vague.
2. Reveal variations in the original experience that can 'deconstruct' a vague over-inclusive (and seemingly overwhelming) problem into a more manageable phenomenon.

A phenomenological technique that can be adapted for clinical purposes is Husserl's *eidetic reduction*, which examines *variation* in the nature of an experience in order to lay bare any *essential criteria* that define the experience.

Examples of variations in the nature of an anxious experience, taken from the narrative of a client with a 'fear of heights'.

Initial self-report: 'I panic every time I'm high up'.

Examples of variations:

1. I see the ground receding, my legs buckle and I can't look down, I get light headed.
2. I see people way down on the ground and I feel immobilized. I freeze up and have to move about very slowly, like I would fall.
3. As soon as I know I'm high up a wave of insecurity sweeps over, I sweat and tremble, I have to hang on to something. If I don't shut my eyes I can't breathe.
4. As soon as I look down my stomach jumps, I feel as though I'm falling, I feel sick unless I look up.

Essential elements of the experience

Awareness of: visual distance between self and ground; the possibility of falling; and of the body reacting 'as if' the client was about to fall.

Heidegger's Dasein-analyses

Martin Heidegger was Husserl's research assistant and Husserl, who himself had suffered a lot of discrimination in his academic life, helped Heidegger establish himself in the rather hierarchical German academic system. Husserl was amongst those who, in 1927, urged Heidegger to finish off a book he had been writing for the last ten years (which he dedicated to Husserl) so he could successfully apply for a professorship. The book, *Being and Time*, is arguably one of the philosophical masterpieces of the twentieth century. In it Heidegger (1929/1962) attempted to apply phenomenology to the study of 'being' but ended up challenging some of the main tenets of Husserl's method. In particular, he questioned the logic of eidetic reduction (i.e. trying to reduce variations in experience to a theme or essence) and Husserl's fundamental proposition about the apodictic or certain nature of conscious experience.

Husserl had said that our immediate conscious experience was the fundamental ground for our certainty of what was 'out there' in front of us, and that to talk of anything further was to launch into a model of the world and so to go beyond the description of lived experience. Heidegger (1929/1962) argued that even talk of consciousness was already propositional since it involved suppositions about a faculty that presented the world to me. All I can be certain of, according to Heidegger, is my own being-in-the-world and it is this being in the here and now which forms the ground for all other conscious events. This being-in-the-world Heidegger termed 'Dasein'. Whereas Husserl had suggested looking at the variations in different forms of conscious experience to discover the essential criteria or essence of an experience which reflected a transcendent theme of consciousness, Heidegger suggested dwelling on all aspects of what was happening in the here and now. In other words, we should not neglect the context in which an experience arises in favour of looking for common themes or essences across diverse episodes. We should dwell meticulously on description of what else is going on at the time of the experience. This analysis, which Heidegger termed 'Dasein-analysis', involves looking horizontally over thoughts, actions, sensations, perceptions and fantasies occurring during a given episode of being in time. Whereas Husserl had suggested bracketing out judgements and interpretations to get at the basis of conscious experience, Heidegger said that judgements and interpretations are part of the richness of our current being-in-the-world and should be reported.

Heidegger's horizontal Dasein-analysis is particularly useful clinically for teasing out background thoughts, acts and sensations which occur at the time as a problem experience but the presence of which the client may be unaware. These background factors form a rich context that by their presence or absence may guarantee the nature of an experience. An illustration of its use is given in Table 1.3.

For Heidegger existence in the here and now has precedence over any universal essence, and he described his challenge to Husserl as his famous 'turn'. This turn, as a historical event, ranks alongside Marx's turning Hegel on his head in his application of dialectics to materialism instead of idealism. In Heidegger's case the turn was the realization that he could no longer conceive of being in terms of human understanding but had to conceive of human understanding in terms of being. For Heidegger all conscious cognitive events, no matter how enduring and universal they seem, only seem so because of the context in which I am thinking at the moment. According to Heidegger, the meaning of a concept or a category or a word is created by my use of it in my present context in the here and now, hence meaning must not be sought outside of this context. Meaning is not transportable across different modes of my being-in-the-world. It makes no sense to look for the essential meaning of, say, an interview that took place at one point in time and to try to represent this meaning as *the* meaning of the interview at another point in time. The meaning will be bound to the context at the time it is represented, not to any fixed meaning that the interview acquired at the point it occurred and which has carried through to the present time.

TABLE 1.3 Horizontal variation

Variations in the client's experience can be usefully grounded within the action context in which they emerge. The client may be unaware of other actions, thoughts or sensations occurring in the background at the time of the problem experience but which may prove important operants in managing the problem.

Martin Heidegger developed a method for looking 'horizontally' across all aspects of a person's being-in-the-world for a given unit of time, which he termed *Dasein-analysis*. The method can be adapted clinically in order to identify background thoughts, events and sensations likely (or unlikely) to be present during the problem experience. These background factors qualify the experience and fill in contextual detail.

Examples of actions, thoughts and sensations (other than those tied directly to anxiety) present at the time of the 'fear of heights'.

Thinking about the 'openness' of the support structure of a building, bridge or lift; spending time imagining a fall; focusing on the height differential; feeling tired; having a headache; worrying about balance; feeling unsure of accompanying people; thinking that the present trip or visit involving exposure to heights is an unnecessary one; feeling unoccupied.

In this case the client feeling unoccupied, actively focusing on the height differential and spending time imagining a fall were the horizontal factors most likely to be present during a severe attack.

Language, according to Heidegger, plays an important role in constructing meaning since language is always open to multiple meanings, including meanings the person may not have intended and which depend entirely on the context in which language is used. An example of how context influences the meaning of a conversation is given in Table 1.4.

In his critique of Husserl's eidetic reduction method Heidegger suggested that a search for essences over variations in an experience was futile since any resemblance of universality or invariance of the essence would be a product of my current act context. Basically, my criteria for a table simply comes down to what I say is a table in this or that context. Heidegger's approach emphasized the importance of studying what is actually going on in the here and now as a way of constructing the meaning of past events.

Heidegger argued that the way in which I search for the meaning of a past event in the here and now is more revealing of my mode of being in the world than any static sense of meaning I report after my search. So, for example, when someone is giving an account of what s/he meant by an action the way s/he approaches giving the account, the posture, the feeling and the choice of words constitute the 'act of meaning-searching'. The meaning of the person's giving of the account lies for the person in these acts surrounding the production of the account itself. The substance of the self-report cannot then be understood outside of the act context (Heidegger preferred the word 'project') surrounding its reporting.

TABLE 1.4 Language context

Please read the following text then pick a context from the ones below and read the text again. Does your impression and understanding of the dialogue in the text change?

A: The party was nice. How did you feel?
B: It was bad, bad.
A: I thought it went off well.
B: No, no – me, not me.
A: And Joey was there.
B: He shouldn't. He shouldn't have.
A: You were the last to leave.
B: Lost… I got lost.
A: Never mind. They were pleased to see you.
B: Please yourself.

Context: A is a care worker and B a disturbed client.
Context: A and B are characters in a surrealist play.
Context: A is a computer programmer programming a computer (B) to take part in a conversation.
Context: A and B are back to back, speaking into separate pay phones.

The debate between Heidegger and Husserl revolves essentially around whether we should confine our description to consciously reported experience and then try to refine this description by looking at variations within the experience: what I have termed 'vertical deconstruction' of the client's construal of the problem. Heidegger suggests, on the contrary, that, first and foremost, conscious reports should be grounded in the everyday context at the time the experience is reported. This context includes all acts associated with current being-in-the-world, including the use of language to produce the reported experience, since the act of reporting constitutes part of the experience. Hence Heidegger suggests extending description horizontally to include all acts, or projects taking place at the time of the act, which are focused on as a complaint: what I have termed 'horizontal construction' of the client's problem. The client's project is at the same time its ecological undertaking as a concerned rather than an abstract act and goes beyond the present. In any project the past comes towards the present from the future. Heidegger took existential criteria to everything, including his famous attempt to ask what specifically is 'is' when we refer to something as being there. The 'is' is pre-cognitive, pre-reflective and has already given significance to our sense of reality. His attempt to locate 'thinking' in being is probably best illustrated in his refusal to separate thinking about a tree from the tree being there in a meadow, and how, in that instant, thinking of a tree cannot be divorced from meeting the tree face-to-face at that moment (Heidegger, 1954/1968). The representation of a tree seemingly detached from my project, which seems to be an abstract thought, ignores the existential process that brought it forth. Although the rift between Heidegger and Husserl has considerable philosophical and existential implications, both descriptive methods are useful clinically,

and we can explore in more detail how to employ these descriptive evaluations in clinical practice.

Eidetic reduction and horizontality versus traditional CBT functional analysis

We discuss clinical applications of techniques in the next chapter, but it is important here to distinguish the phenomenological treatment of variation from the more usual cognitive behavioural functional analysis that records the situational variations of an experience. In this latter type of analysis the experience is considered equivalent over different occasions and the self-descriptions of the complaint are assumed to be different reports on the same underlying phenomenon. The clinician looks for situational or state antecedents to a behaviour and explores consequences of the behaviour over different occasions. The aim is to examine potential situational cues or rewards that may provoke or maintain the behaviour and so determine its diverse forms. The eidetic-reduction method stays within what the client labels as the same experience but attempts to be precise about the diverse forms this experience can in actuality take. Hence the method is also distinct from Beck's 'downward arrow technique' (Beck, 1979), where the clinician guides the client through various layers of self-report experiences in order to specify the 'deeper' schema component experiences that contribute to a problem. The technique is clearly useful for accessing global personal themes underlying specific interpretations; but, in phenomenological terms, this technique could confound recall of distinct experiences, each of which should be individually refined. A comparison of the two methods is given in Appendix 1.

In the phenomenological view the client's experience is considered to be constructed differently at each variation. In fact, social constructionists (Parker, 1999) have recently begun using a similar method across discourses as a means of 'deconstructing' ideological stands, which claim a reified immutable status for certain codes and criteria of conduct when in practice such criteria are more arbitrary and flexible. The social-constructivist argument is that judgements are constructed subjectively and differently at different times, and accounts of cross-situational objectivity, in the application of social codes, are mythical. In the clinical use of the method there can be surprisingly little uniformity in the quality of experiences grouped by a client under a generic phrase like 'I'm anxious' or 'I get fearful'. Some examples from the use of the eidetic method, in the case of a height phobic, are given in Table 1.2.

The horizontal approach also differs from the traditional CBT evaluation of current states and stimuli that may contribute to the experience of the problem. For example, the input to the CBT model is largely cognitive, in the sense that it relies on what the person is aware of, usually by conscious self-report. But this awareness could be driven by the problem. For example, the stress of the problem could cause a selective attention to exacerbating factors, where the selective attention is part of

the problem. The horizontal method requires the therapist and client be trained in descriptive seeing and awareness in order to surmount the problem of self-report relying on judgements, interpretations, appraisals and selection. The awareness takes the form of focusing only on what appears certainly before the person. But, and this is a difference with CBT, all and every modality which appears at the moment is relevant – for example, speech acts, language use, interpersonal, environmental, cognitive and imaginary factors, fantasy, touch and body position. In case this already seems overwhelming there are ways to hone down what is actually relevant when we work collaboratively with a client to decide on the relevant context. Defining the problem behaviour as a process takes account of the intentionality of the act and refines it through comparison with other similar acts (see Chapter 2). The introduction of ecological aspects, placing action within a human-world context through the influence of Maurice Merleau-Ponty on the reductive method, also takes us further from traditional CBT functional analysis (see Chapter 7). Some of these theoretical points about meaning and act context are illustrated in the following example.

Meaning and context in the clinical setting

The potato man

I am walking through a park in Montreal and I see a man in a business suit standing in the middle of the grass, screaming 'Potatoes!' at the top of his voice. I stop to look at him and ask myself what he's doing and why. Now already in the process of making sense of the man, I have positioned myself towards him as a phenomenon to be made sense of, rather than, say, ignored. My background project, walking leisurely across the park on my way to work, allowed me this liberty. Had I been in a hurry, late for an important meeting or being chased through the park by a mad axeman I may have positioned myself very differently to the potato man. He's captivating my attention and I start to seek clues to enable me to understand his actions. I could, of course, approach him and ask, but this course would presume more knowledge than I have regarding, for example, the veracity of self-report and his benevolence and accessibility. Since I can't ask him or access his thoughts I look for objects lying around him that might provide a context for his actions. Is there a sack of potatoes at his feet or a line of people with shopping bags indicating he is a potato seller? Is there a dog leash in his hand? Might he be calling out to a dog called Potatoes? Does he wear a uniform or hold a sheet of paper as an official announcer would, perhaps proclaiming a list of plants grown in the park?

Since I observe no such clues about him I use my imagination to create plausible accounts. Perhaps he is from the psychiatric hospital down the road. Or right now he is someone experiencing an acute psychotic episode. I invent stories as to how he could plausibly have ended up in this park and what potatoes might signify in his disordered mind. Each of these stories encompasses a hypothetical context, and I focus on different aspects of the man to try to complete the context.

For the potato salesman I may focus on his clothes and his hands. For the official announcer I may focus on the quality and tone of his voice and pronunciation. For the psychiatric-hospital resident I may look more closely at his gestures and the reactions of passers by.

None of the contexts seems to fit. But I do notice that nobody else seems alarmed by his behaviour. People continue to walk close by him, nonchalantly. He himself does not appear aggressive or menacing, simply lost in his repetitive rendition as though it's his job. My own positioning towards him as an object of curiosity also visibly wanes and loosens. My project today, after all, was not to seek out potato men in Montreal parks but to cross the park on my way to work. It was in this project that I first saw him as an unusual part of the park, but one that is not so worrisome now. Despite knowing nothing about him, I have sufficient knowledge to continue my walk with him more or less unproblematically a part of it. The man is probably a harmless eccentric and with such a person, within my project, no more sense is necessary. However, as I exit on the other side of the park I see a large sign planted by this gate, not present at the gate I entered. The sign says: 'The poet "Spudnick" will perform his poem "potatoes" at 10am today in the park'. So the potato man is a professional poet. All the previous observations about him are now backdated to make sense of this context. I see his speech, his clothes and his manner in the context of a poet. I even make sense of the angle of his handkerchief as a poet's gimmick. I search to construct a poet's context around him. What did I see? I even imagine pieces of paper at his feet. He may have been even had publicity or poetry books for sale.

The search for meaning

This everyday example of making sense illustrates several key aspects about the search for meaning. The first is that meaning is a question of context. This applies to the meaning of the figure of the potato man, his actions, events and words. Where there is no context, there is no meaning. Context, of course, can be defined variously in terms of his physical background, linguistic, cultural or social situation, or even more symbolically as representative of a movement or collective point of reference. In order to mean anything phenomena are embedded within a sense larger than themselves.

The second, perhaps less obvious, aspect is that there is no shortage of meaning. In fact, usually there is too much meaning available. The riposte to the famous Monty Python question, 'What is the meaning of life?', is, most neatly, 'Which meaning do you want?'. It is difficult if not impossible to escape meaning since it's always there, popping up like toast out of a toaster ready-made for phenomena to be spread over it like peanut butter. Table 1.4 illustrates the power of meaning in the form of a textual example of context. In the text the same conversation is understood very differently in the three distinct contexts. A conversation and language, then, can take on several distinct meanings depending on its context.

A third aspect, related to the second, is that a shadow of meaning precedes observation and is cast by my approach to – that is, my way of – seeking meaning. So the way I position myself physically and intellectually towards an event or a person limits the emergence of meaning. This is not solipsism. We are not saying my actions entirely construct or determine meaning, simply that they define the boundaries of meaning. My active project also determines the sufficiency of meaning for any phenomenon. In the case of the potato man, in the context of my project of walking to work not knowing anything about him was sufficient knowledge to continue my actions.

A fourth more obvious aspect is that meaning depends on my importing ideas not actually present in a situation in order to understand it. In other words, I must at the same time be both in and beyond what I see in order to contextualize it and give it meaning. In sum, meaning is making sense by fitting events into a scheme of things. We cannot function without it, since to see things just as they are, as a procession of unconnected events, even were it possible, would be unproductive and perplexing. In any case, it is not possible in human ecology, where we make sense of events through the human unfolding of events. I see or hear or touch in my way not another way.

Victor Frankl (2006), Rollo May (1969) and other philosophers have elegantly addressed the human desire for and the pull to meaning. The human tendency to make sense of disparate recurrences or impose meaning on random events has formed a basis for much experimental work on visual and cognitive illusions, or ambiguous shadows. Indeed, as Berrios (1985) has noted, even a delusional meaning is preferable to perplexity.

The psychology of meaning has a rich history, and not all schools of thought operationalize meaning through context. The word 'meaning' itself is ripe 'for deconstruction'. Meaning itself can have different meanings. I can catch the meaning of a joke, understand the meaning of a phrase or grasp the meaning of a mathematical equation. In cognitive models meaning is imposed on a 'formless flux' by attribution or interpretation. In some humanist schools meaning is reflected in 'felt experience'. There can be double meanings, hidden meanings, as in the psychoanalytic notion of 'apparent meaning', which hides a deeper core meaning further back in the unconscious, or deceptive meanings that point to other meanings.

However, as we noted earlier, in order to seek meaning cognitively there must already exist a (pre-cognitive) grounding of sense, which gives meaning to my meaning seeking. At any time for a thing or event there is further meaning to be sought; but it only makes sense for me at this time to seek a particular further meaning, although seeking even further meaning may follow in time as a consequence of the initial seeking. There are always elements that need updating and clarifying, so changing the meaning. But at the same time the pre-cognitive ground is always uncomplicatedly there, already intelligent to my senses without further question and needing no further question. Such taken-for-granted meaning can be vague and inarticulate, no more than a hunch or a 'felt sense' of 'just rightness'. But

it is this taken-for-granted meaning, often on the margins of consciousness, which creates the implicit context for my cognitive focus.

If, for example, I hear a strange noise in the corner of the room I might wish to focus on it and run through different meaning scenarios. But the corner is not the only point of reference in the room: there is a wall, furniture, a door and a fireplace. At the time of my focus on the corner all the other elements of the room become unproblematically there. This is not just because my time and attention is taken up with the corner, it is because I require their 'thereness' in order to be able to bring the corner into focus. As noted earlier, in order to give meaning to an immediate search for meaning for any particular element I need a background where meaning is always unproblematic, otherwise I have no position in which to position myself.

The clinical importance of this figure-ground distinction is that when the person experiences a symptom or a problem the feeling or sensation already has significance. Although people consult to understand their problem, they have already attached meaning to the problem, or they would not be in the consulting room; indeed, they would not even be reporting the experience of a symptom. The clinical question is how does this taken-for-granted meaning arise?

Confounding contexts can have serious clinical implications since, as a result of this confounding, the problem or the priority of problems in the person's discourse can sometimes seem to change inexplicably over time. The person reports a major problem on the first occasion that on subsequent occasions becomes relatively minor. Or the person will recall a major problem on the second visit that they completely neglected to mention on the first occasion. This change in context can be due to the language the person feels s/he must use – for example, employing clinical language in a diagnostic context versus freely describing the impact of the problem on experience in life. This inconsistency is not due to fickleness on the part of the client but due to a shift in context causing further reflection. A similar phenomenon occurs when we leave the house and then discover that we've forgotten something important in the house. Why did we think of this now and not before? Perhaps the outdoor context permits it. The key point is simply that all behaviours, including reporting symptoms, are contextual. Different contexts produce different information. Even changing the type of room in which you assess a client can change aspects of problem delivery. The same applies for changing the ambiance, tone or power relation of the encounter (White, 2011).

Revealing personal context

The person themselves may very well not be aware of, or only be partially aware of, the surrounding personal context from which their problem emerges. Unlike in the potato example, the therapist may not have the luxury of consciously trying out and fitting clearly labelled contexts. The person is embedded in this context and we have to accept this embeddedness in order to make sense of the problem. The metaphors, language, expression and action of the person will reflect this context but not comment upon it or describe it entirely. So we are in the position of

guessing the ground that produced the figure from only partial knowledge of different aspects of the figure.

It is only by contextualizing the problem that we can achieve understanding and situate the problem in the person's terms. It is rather like someone arriving at your hotel room, shouting 'Fire!'. You take them seriously. But if you immediately run out without further enquiry you are following your idea of what a fire means, not theirs. Further questioning might reveal that, for them, fire means a candle burning, or that they are talking of a mock fire drill. In any event, positioning their observation with respect to the fire will at least clarify the escape route. One can ask an ethnomethodological question like 'What do you mean by..?'. But, as Heidegger (1954/1968) pointed out, this question is unlikely to lead to real meaning. In a clinical setting, in order to specify general questions one can ask about happenings and events that are not a problem and compare content. This description of non-problematic contexts catches the person off guard and can lighten the mood and lead to an authentic account that can model description of problematic contexts.

The personal context is personal. So in order to describe the context we need to concern ourselves exclusively with what comes from the person. In other words, we need to begin with a clear, precise description of the person's problem in their own words. If we wish to discover personal context we should remain in the person's context rather than, say, in some formal outside context. Now this may sound easy. Just let the person talk! But it is extremely difficult for people to describe their problems. In fact, there are a number of pitfalls in obtaining a description of a phenomenon. There are a series of techniques associated with qualitative methods on how to elicit person-centred conversations, and we will cover some of these methods later (Chapters 2, 5 and 10). But for the moment, to continue the flow of our discourse, let us assume a natural dialogue is established and we are faithfully recording the person's spontaneous account of their problem. The first point to note is that people, usually spontaneously, talk in narratives.

Narrative stories

People mostly talk in stories, and not only in stories but colourful stories. It would be unusual to ask a person to recount a description of, say, a journey and for them to do so as a series of facts situated flatly in one plane or single dimension. It is much more likely that they would include metaphors, opinions and attitudes as part of the natural flow of the account. For example, compare the following two accounts of the same journey from Connecticut to Montreal in terms of naturalness.

So how was the trip up from Connecticut? (1) 'Oh great. We drove up to Boston and stopped overnight, although we could have carried on, but you know John, he always liked Boston and I wanted to see the aquarium. My god, it's expensive to park in Boston. We had to leave the car outside the city and that still costs $26 per night'. (2) 'We got in the car, started the engine and drove 200km to Manchester. It was raining. Then we had coffee, then we got in the car again, started the engine and drove 100km to Concord. It was raining there. We had a meal in a restaurant

called Golden Eye. I had a hamburger, John had a salad. Then we got back in the car, we started the engine and drove another 250km until Montpellier. Then we stopped the car. It had stopped raining…'

The second account is, of course, the manufactured one, yet it is also the most factual and descriptive. But neither account is phenomenological in that they do not describe lived experience. The first account is judgemental, the second adopts a factual attitude imposed on experience.

A third, more authentic, account would go: 'We drove up to Boston. There was a lot of traffic. It seemed to me we were jammed up for part of the way. It reminded me of all the times I've driven on a Sunday and spent the day in jams. I was conscious of our conversation, which I was half listening to, and realized we were going slower than most cars. I felt tired and we stopped in a restaurant. The restaurant only served junk food and I was disappointed'. In this account we are considering all the experiences expressed by the person – memory, perception, sensation, emotion – and also capturing the way they are expressed, hence it can be considered phenomenological.

2

CONSTRUCTIONIST EVALUATION

Part 1

Observation as an act

Therapist context

The client's initial context is coming to see the therapist to present their complaint and the source of their distress. The therapist's context is being there professionally to listen to the complaint. This meeting may be the first occasion the therapist has met the client and so far s/he does not know the client's possible range of behaviour. The therapist infers information on the basis of what clients do, show and say, and, of course, what clients do not do, show and say, and what the therapist does not observe or do.

The client is presenting one of a family of problems, and it is variation in the accounts of the problem and the incoherences and coherences of the accounts that reveal the range of meaning. The client is at a moment in the narrative of their problem with a beginning, middle and end. S/he has made sense of it, even if part of making sense of it is realizing the need for advice. The problem has fitted into the client's life as a problem. The client, their social network, their family and other problems are positioned around the main complaint, which at the moment of the interview is the focus and centre of gravity. The centre could shift if awareness towards the problem and the project changes.

Assuring therapist epoché *or bracketing out assumptions: descriptive seeing for the therapist*

Adopting a descriptive attitude includes awareness of and at least an operational bracketing out of assumptions. The therapist will hopefully be aware of implicit prejudices, beliefs and judgements that may colour an encounter: any emotional

reactions, sensitivities and aversions. One way to put assumptions out of play is empathic emergence in the client's world of experience. Making clear that the respect for the client's account is paramount, with minimal often mundane prompting. Other ways to make sure the therapist is rising above taken-for-granted assumptions are as follows. (1) Ratio of expected to surprised experience. If the therapist is hearing what s/he expects or can predict the interview is not capturing the client's idiosyncracy. There is a clinical adage that when you've seen one client, you've seen one client. Unexpected information should in general outweigh expected, to give a good revelation factor. (2) Perplexity factor. What drives the evaluation is inquisitiveness on the part of the therapist. The therapist is, after all, human, and perplexity is a good human motivator for understanding. Perplexity, as Schutz (1962) notes, is a natural precursor to descriptive seeing, and ignorance drives one on to discovery. Self-reflect questions include: What does this phrase mean? What does the client intend here? (3) Ignorance. What more is there to know? Leaving the interview with the feeling there is more to be said is a healthy sign of engagement. Partial information has been uncovered but more can be sought with other questions, and the therapist has immersed her/himself in the flow and richness of the client discourse to reveal what has not yet been covered.

If the therapist is simply confirming what s/he already suspects at this preliminary stage then s/he is not observing but confirming a preordained categorization. At the very best the reflection should be updating a probability, not closing a certainty. A bracketing-out checklist is given in Appendix 2.

Prepared script

The client may have prepared a script of their problem, sometimes polished over several encounters with professionals, which they feel best presents their problem professionally. The client may well have invested in this account and be proud of it, but s/he has added a technical layer that complicates the context. However, if clients are allowed or allow themselves to present their problem in their everyday natural way the account takes the form of a story – a narrative-style conversation – and the normal way to recount a story is as a dialogue with someone else. In other words, the therapist forms the other part of a dialogical encounter. The context we are trying to create with clients is a dialogical context where they feel able to describe their problem in terms meaningful to them. That's about as good as it can get. We do not want clients in any way to feel forced into a context or technical or abstract language since this, as we noted, interposes another layer of context above the personal one we wish to study. We know also that if the client describes their problem the description will vary, at least a little, each time. This is fine because we want variation around the theme in order to find the theme. If the client is repeating set, pat phrases this is not around a personal theme but an imported script. A major issue is that the imposed meanings may be contributing to the distress. It may be that the client feels comfortable with these meanings and the therapist need not confront them, just specify them. Dominant

discourses often reify complaints. For example: 'I can't tolerate this depression any longer. Apparently, I'm a depressive personality, which means I'll always have it. Seeing the future like that depresses me'. As we shall see later, most people view their life histories as stories with them as the main character, hence free description will usually take the form of a story. If the client chooses to use metaphor, imagery, allusion, colloquial or literacy expressions in the story this can add to its lived-in quality.

Mixing judgements and descriptions

In their initial discourse the client may frequently report a jumble of facts, hearsays, conventional wisdom, interpretation, judgements, metaphors and prediction.

'I've had this problem I don't know how many years. My mother was the same. I've been diagnosed with depression but another psychiatrist diagnosed me with anxiety. I think I have both. The medication doesn't work anymore and I can't relax. I don't get any support. I am at the end of my tether, at the bottom of the elevator shaft as it were. I just see my condition getting worse'.

Seeming, here the judgements and interpretations are part of the problem; a lot of the distress may be caused by them. The client may be reluctant to let these go, since they are her/his own creation and since the client has an investment in their expression. But shifting focus into the concrete of what appears before the client can also shift the horizon of consciousness, and change the positioning of the client towards their complaint.

The following two examples mix up expression, judgement, diagnosis and prognosis in the same description: 'I had a bad serotonin day today. It was low, I could tell, and I read somewhere that not eating properly upsets it even more. So that explained probably why I felt more depressed. The medication doesn't help much, which is funny, but that's my problem. Like my doctor said, some people are made that way and I'll just have to live with it'.

'My problem is my serotonin level; it's not balanced properly. I joked with my doctor, it's a shame I can't just take a screwdriver and balance it. It makes sense because my moods can suddenly change like that with no warning. I can just wake up like it. So it's definitely chemical. Trouble is, the medication worked at first but now it has no effect. So, Dr, my psychiatrist said I might as well try CBT'.

There are a number of terms in this dialogue that need to be specified concretely. What exactly is a bad serotonin day? What is a good serotonin day? How does the client know the medication is not working? One ploy here is to ask the client to be concrete and to slow them down in order to return the narrative to the client's description of the experience.

Descriptive seeing and assumptive seeing

Different phenomenologists view the business of descriptive seeing in different ways. One view is that the seeing should be pared down to basic empirical observation of

what is 'factually' certainly before us and nothing else. This might make sense where the observer is a trained phenomenologist and, as we shall see later, it may occasionally be appropriate once therapy is underway to train the client in deconstructing their dialogue to separate individual meaning from a dominant, often medical discourse. However, at the outset we wish to capture the client's natural attitude towards the problem as part of the experience, not, as we said, create another 'pure descriptive' context with its own demands. This descriptive reducing down or bracketing out of non-factual assumptions also implies that some parts of the account can be viewed as more reliable and objective than other parts, an untested and conflictual assumption since we would need to step outside the client to set up such criteria for reliability, when our express aim is to rest within the client's meaning sphere. Illusions, metaphors, metonyms, fantasy and jokey asides are the doors permitting entry into the client's world; they animate the client's world and bring it alive, and we wish to capture such lived-in experiences. The resulting dialogue may be complex, rich and messy, but since we are calibrating within the client's experience – employing their own terms – different descriptions by the client are inherently comparable.

A crucial point here is that the client should be able to give a full description of the phenomenon in their own terms, which reveals the pattern across contexts. We have already noted that people are unlikely to offer a purely descriptive mechanical account of experience, since it goes against the grain unless they have acquired technical terms. Rather, metaphors, turns of phrase and labels embellish their account of the problem to give us the lived-in account that we want. And, later, the therapist, with the client, can carry out an idiosyncratic analysis in order to deconstruct the acquired meanings, language, senses and assumptions associated with the problem, since the client's language use might even produce the problem.

The actual expression, or combination of expressions, that a client uses to describe their experience is less important than that it describes a singular experience, which is unique to the client. The experience will then be compared with other personal experiences, so it must have defining characteristics that set it apart from other experiences and indicate that the client knows when they are experiencing the problem and when they are not. People can be notoriously vague and peculiar about how they feel – for example, if a client complains that an experience made them feel 'tight as a buffalo skin'. This term is phenomenologically fine as long as the client is able to discern what is not as tight as a buffalo skin, offer other defining concrete characteristics, know what forms the experience can take and not take and when it is present or not present – then we can formalize this experience in terms of both horizontal and vertical variation and there is no problem. In this particular case feeling tight as a buffalo skin was at the opposite metaphorical pole from 'comfy as a bed of straw'. The client was also able to identify (roughly) different degrees in the middle where she was more or less comfy and more or less tight ('I felt really tight, really wrapped up'), so a personal calibration of experience was possible.

What is clinically interesting when we look at the client dialogue is how many taken-for-granted words are accepted in therapy due to their assumed frame of reference. Common words like 'bad', 'good', 'right', 'thinness', 'working', etc. These are

ripe for deconstruction because they mask individual experience in a consensually understood abbreviation.

There is the added complication that, as Lakoff (1987) has pointed out, even unproblematic concrete nouns like 'wife' and 'mother' can be imbued with symbolic significance. And it is surprising how difficult clients sometimes find it to concretely specify a complaint, even using common words. For example, 'thinness', the meaning of which most people would be able to agree on. But take the following attempt by an anorexic client to define thinness.

T: So you want to be really thin.

C: Yes, the thinner you are, the more loved and appreciated you are.

T: So how do you know someone is thin?

C: I see so many fat people around and I don't want to be like them.

T: So how will you know when you're thin enough?

C: You can never be thin enough. Every time I see some flesh, I get scared I'm putting on weight.

Here a visual approach to defining themes, perhaps using the silhouette approach of Veale and Neziroglu (2010), may be more revealing as visual methods in psychology may help to encourage expression (Reavey, 2011). It is often difficult for clients to define the key terms composing their problem and give them a fixed sense; but inability to define key terms may exacerbate an abstract value-laden conception of the problem.

Language

In the accounts clients give of their problem they will use language that is meaningful to them. They will also have been shaped by their interaction with the language to the extent that associations, metaphors and metonyms will add impetus. In other words, the way of speaking determines what is spoken (this includes physical delivery and posture).

A client presents with the following dialogue: 'And as if the problem wasn't enough my brother-in-law is a bastard. He makes comments, he knows I get anxious out when I'm drawing on my own, yet he keeps teasing me. He's like constantly trying to push me over the edge. I say nothing but I want to hit him. My wife says never mind, he's harmless'. How to unravel this dialogue? Obviously, one requires more information on the client, and abstracting this verbatim from his complete discourse is artificial. But even as it is the dialogue raises several questions. What does the client understand by 'bastard'? It's a word that encapsulates not just a value judgement but an attitude, an attitude which justifies a certain action.

For this client to call someone a bastard is a strong reproach – stronger, say, than twit, idiot, nincompoop, etc. By saying this the client has necessarily committed her/himself to a position which has further self-generated implications. The client

is following a line that is coherent, and ultimately underlines a sense of offended self. The client may use it playfully and may not 'mean' it, but either way it would be consistent with their speech. What is not said is also an implicit part of the conscious act of communication.

There are, then, two dimensions in which language meaning can be explored. There is the variation in the use of the word itself, which can be discovered through the method of family resemblance, i.e. in what other circumstances will the client use the word 'bastard'? There is also the variation in terms of other ways the client could have responded to a similar situation, other than saying 'bastard'. 'Bastard' is an emotion-laden term. For this reason, does the use of the term suggest frustration, a difficulty to communicate, which leads to anger? Personal variations in word use would reveal this. What other terms does he use? Is bastard a part of the client's emotional construal of their world? Does this emotional construal colour language and metaphor? In other words, the construal of the problem may be a part of the problem and acting on such construals (treating the other as a bastard) will not solve the dilemma. This does not mean that the therapist ignores what the client says in order to explore their own meaning. Rather, the therapist can start with what the client presents, but then explore its meaning and contextualize it, in terms of the way the world is constructed, in collaboration with the client and through close attention to content and form. Language is an expressive act and from the client's use of it we can determine information on their meaning and attitude. The other point to remember is that the client is, at the moment of consultation, in their problem. Hopefully, later in therapy distance may develop, so the way the client talks of it and relates to it cannot be separated from the intensity of the problem. A number of techniques can help, such as awareness of category muddle, being concrete and specific, dwelling on mundanity, slowing the client down, dropping the 'I', experience monitoring, elaborating taken-for-granted meaning, positioning and exploring metaphor and metonyms.

Category muddle

There are two ways in which categories or concepts can be confused. There is conceptual blending, where one concept is used to overshadow a completely separate concept. For example, I might use the term 'dark colour' to describe black, purple, even dark orange. I may use a large category to regroup a number of elements, e.g. 'nuisance people' for everyone I don't like. I may consistently associate a qualifier or adjective with a noun: 'this rotten cold', 'this tiresome symptom'. We have already noted cases where an abstract or generic term may encompass specific experiences that appear to be contradictory or incoherent. The multiple meanings of the terms 'perfection' and 'thinness' were noted earlier.

As we will see later when we discuss themes and constructs, the grouping of divergent activities under one theme often reflects a personal concern, and the client's activities in different instances will correspond to a common self-theme, which dictates category muddle about criteria of how s/he should be. For example,

one woman's definition of 'well groomed' and 'kempt' children was that their hair was washed regularly and their shoes were clean. She judged the mother as responsible according to these blended criteria.

There are latent attitudes and associations that underlie superficial ones, like life below the water indicated by bubbles on the surface. The positioning of the self may underlie categorizations in the problem and point to possible ways to overcome the problem by establishing coherent criteria associated with a new self-theme (see Chapter 4).

Creative techniques

Dwelling on mundaneness

Clients are often stumped trying to describe their own experience within a scaled-down semi-structured format. They say things like 'I don't know how I feel', 'I can't describe myself', or they use vague allusions like 'I don't feel well in my skin'.

In the following dialogue the client is oriented to concrete attributes.

T: Can you describe your qualities for me?
C: I don't have any. I feel I'm really a non person.
T: OK, do you wait in line at the check out?
C: Yes.
T: Do you open doors for people in difficulty?
C: Yes.
T: Do you generally pay your bills?
C: Yes.
T: So what would that say about you?
C: That I'm patient, kind and responsible.
T: So you have those attributes?
C: Yes, but they're not grand noble traits.
T: But they are yours.

In the following example the therapist brings the client back to specific phenomena as lived by contextualizing related experiences.

C: I just don't feel well. I can't put my finger on it.
T: Let's compare it with some other experiences.
C: OK.
T: How does your not feeling well now compare with your feeling when playing golf?
C: It's not at all the same. When I'm playing golf I'm relaxed, not at all tense, focused on the game.

T: What about eating a dinner with the family?

C: When I'm with the family I have a sense of well-being.

T: OK, can we say with your problem you are experiencing tension and a lack of well-being that you are not experiencing elsewhere?

C: Yes, I suppose so.

T: Let's look at what forms tension takes for you. When have you experienced tension?

C: When I'm busy, but when I'm anticipating something bad also. But then it's like normal tension.

T: Normal tension?

C: I guess the tension in my problem is really a form of foreboding.

Here the therapist refined the feeling through establishing its variation across experiences.

Use of metaphors

Even if they are prompted, clients are often uncertain of their reply, querulous about whether they feel anxious, sad or empty. But the same person may feel more comfortable with metaphors than with facts. It's as if in trying to label their experience factually the person has been asked to describe themselves in a foreign language, which they don't really grasp. Such artificial situational demands on reporting experience in no way help evaluation of context. They hinder it, in fact, since they produce two competing response contexts: (1) the imposition of language use to report the experience; (2) the disruption of the problem's personal context.

The use of expressions may vary with the client's perception of the clinical environment, therapist's status and their immediate mood. The variation can occur from time to time in the same setting, and certainly across settings, since recounting in an office or a café are distinct act contexts yielding discrete phenomena. The use of metaphors has been amply explored by Rhodes and Jakes (2009) in their narrative therapy, and by other writers (Berlin *et al.*, 1991; Zimmerman and Dickerson, 1994). Certainly, such metaphors are useful in encapsulating experience since metaphors usually relate to the physical. But there are other expressions and turns of phrase: synonyms, analogies, colloquiums, comparators and descriptors.

C: I have these musical tunes I can't get rid of. It could be any music. It stays around and bothers me.

T: So how do you see and feel about them?

C: I feel they are sapping my energy, my time. They're like a force stopping me doing what I want. I can say I hate them and fear them at the same time. If they come along they're like saying here we are go figure. It's like aliens in my head.

Here it would seem from a clinical point of view that the way the client reads and anticipates the intrusion determines its obsessional character. But in tapping into imagery we have captured its quality, its character and its effect in its metaphor all in one. We can look at other sounds, other experiences where noises come into the head (people talking, whistling, news broadcasts), where the client uses other metaphors and expressions that are not bothersome, to better contextualize this experience.

Concrete slowing down

Being concrete and slowing down the client are part of the same technique. Slowing down can be used to fill in gaps, which people jump over, particularly when a narrative is chained off to an anxious end point. The therapist is interested in embellishing what the client has described, not generating new description. So since it's a question of clarifying the appearance of a phenomenon, a naïve inquisitive attitude by the therapist may be appropriate.

C: … and then the feeling comes and I'm already planning how I'll avoid driving in the day and eventually I'm making excuses and I feel worse.

T: How do you know the feeling comes?

C: It's here in my stomach but like I react to it.

T: What steps do you need to go through in your planning?

C: I look at my agenda. I calculate the distances and decide.

T: On the basis of distance?

C: Whether I can drive or not and then I reflect for half an hour and pick the priorities.

Asking the client to dwell in detail on what signifies the appearance of the problem draws out key components. How does s/he identify the problem? 'I experience a feeling in my stomach. It grabs me; it's like a mix of emotions and an emptiness. I know then I've got an anxiety attack on my hands. I take it from there and I know it will spiral as I dwell on it, first in my hands then my feet, then general weaknesses'. The therapist may initially need to prompt the client to keep them on track, getting them to dwell on the specific. Once the therapist has begun with certain appearance, s/he can explore personal variation.

Clients will sometimes chain over multiple events to arrive at a worst-case scenario.

C: I get so anxious, I just see myself helpless, lost in a crowd, surrounded, suffocated and unable to get out.

T: How could this happen?

C: I don't know exactly but it could happen; crowds form about very quickly.

T: Yes, but there's you, trapped and unable to move.

C: Yes, exactly.

T: But what else would need to happen for you to be helpless?

C: It could happen, unaware. I could get caught.

T: How would you know you were caught?

C: People surrounding me, blocking me; I'm only 5ft.

T: And how would you be unaware?

C: I could be involved in the spectacle and just not notice.

The aim of slowing down is not to get more truthful detail or to try to tax the client's memory more than usual. It is, rather, an attempt to make the relating more lived in. The person places themselves in their actions rather than outside as a narrator of things passed. The slowed-down account also makes the details more vivid, but there is no desire to recall all the details, simply those sufficient to get a feel for the process. The emphasis in slowing down is on the way things happen to help avoid jumping to conclusions or jumping over detail due to foregone conclusions.

Experience monitoring

There exists a range of techniques for monitoring experience or sampling experience (e.g. Csikszentmihalyhi and Larson, 1987). In conventional awareness exercises the client is told to monitor a complaint in order to discover more about the frequency or intensity of antecedents and consequences. Interestingly, when clients do these exercises over a period of time they frequently find that their attitude changes, that the problem does not take quite the form they thought it did. However, monitoring runs the risk of reinforcing previous negative feelings and the client may become even more distressed. For example, if a client focuses on an unwanted motor habit he or she may become more and more aware of its variations but may also become more and more uncomfortable and self-conscious about it. This discomfort may make it difficult to motivate the client to continue with the monitoring. In sampling phenomenological experience this secondary appraisal of the problem would be monitored along with the actual problem. The emphasis would be on identifying the range of feelings and perceptions about the problem at the time of occurrence, not just on closely monitoring the phenomenon itself. In other words, the evaluative context of experience would be included in the monitoring. Some forms to aid this experience sampling are given in Appendix 3.

In monitoring, in order to understand a phenomenon it is important to understand its full range of applicability, not just its range of significance. The clinician is interested more in specific classes of events than whether a response is representative of a hypothetical population of identical events. The range of significance is its meaning and the range of applicability its context. A class concept is distinct from an average. For quantitative purposes in phenomenology we wish to treat phenomena

as classes, where propositions define relations within the class. An experience may be a class of one, and its meaning may be individual. In other words, there is a respect of the variance and the forms experience or phenomena can take. Symbolic logic is helpful here in reminding us of specific and exclusive propositions and relations.

A client experiences panic attacks out of the blue. He experiences milder anxiety in a supermarket than when walking in a public place alone. Are these members of the same class? Can we make the same proposition about them? Are the elements and relations identical, different only in degree? The clinician can look at all the situations where the client is anxious and not anxious, where all aspects of an act are included to better define contexts. Monitoring may elicit two examples, one where the panic attacks form part of the same class of experience, the other where the classes differ (see Part 2 for more discussion of class boundaries). In phenomenological methods one starts with the idea of the peculiarity of the phenomena, so one saves time over more general monitoring, which asks about general notions of anxiety, since starting from abstract notions of anxiety as a uniform concept would only delay an idiosyncratic understanding. Monitoring is extremely important to help decide whether an idiosyncratic sentiment fits into the same general class of anxiety or arousal.

Dropping the 'I'

Placing subjective accounts in the passive sense – in other words, dropping the 'I'/'eye' – makes the client into an observer. The passive mode also helps record the sequence of events in more detail. In the case of a person fearful of crossing bridges, instead of recounting 'I saw the railings on the bridge' the phrase is turned into 'the railings appeared to me', 'the walking felt slow to me', 'the idea came into my head', etc. This submerged 'I' also makes it much more apparent that the person is experiencing one of a variety of possible experiences.

The principal way to reveal this transcendence of the cogito, according to Husserl (1954/1967, 1970), is to strip away the habitual narrative of the cogito – I do this or I do that – which creates an illusion of stand-alone individuality. The 'I' subject clause is replaced with more contextual phrasing, such as 'this phenomenon is presented at this moment', which locates the 'I/eye see' clause as one aspect of several acts going on, which together constitute the assumed world at that moment. It also locates what I see in the wider context of my being present in a world, parts of which I am aware of and other parts I am unaware of, and that I do not control.

Let's compare the following two sequences. (1) 'I went into the supermarket and I started to feel overwhelmed and then I felt shaky and I had to sit down, but I still felt unwell'. (2) 'The supermarket appeared long and wide and the lights appeared bright. It seemed my legs were wobbly. A bench came into view and offered me a place to sit down'. In the second account there is more detail about the quality of the environment and how events led to each other. The landscape is observed, not just passed by in a anthropocentric way. The person is aware of an ecological position in the world. The environment rather than the 'I' and its received wisdom comes to the fore.

Dropping the 'I' as a technique can be combined with slowing the client down in their account. So a client's first account of a panic attack is as follows: 'I went to get into my car as usual, and I closed the door, then it hit me, the panic. It always does just out of the blue like that. I knew I couldn't go on so I went back upstairs'. In the next account, we drop the 'eye'. 'The car was parked in my usual spot. There were few other cars around. The door opened after a bit of trouble, the thought occurred that I'd better move on because I was late. A feeling of tiredness came over me and then the panic…'. In the third account we drop the 'eye' *and* we slow down the narrative. 'The car was parked in my usual spot near the door. There were few other cars around but the neighbour's new expensive one was next to mine. The floor seemed a little slippery as my walking continued. The thought came to me that it had just been mopped and it made me slip by the car. So my legs were wobbly and my breathing was fast. The door wouldn't open easily and it was necessary for me to pull it strongly, then the clock told me I was late and a feeling of exhaustion came over me'.

Whenever a feeling or a symptom comes over a person they are surrounded by actions and events going on at the same time. Of course, there are also many actions and events of which they are unaware. Notice that we are asking the client to become aware of observing what is certainly before them. In this way, by dropping the 'eye', we are avoiding any attempt at introspection – that is, divining motives or causes for actions that move beyond phenomenal experience – to try to seek hypothetical internal states. Introspection is a way of knowing, it is not *the* way of knowing, nor is it a privileged and accessible way of knowing. Most people are not trained in self-observation, and asking them to identify internal states or internal events may lead to guessing or perplexity or attempts to anchor such perceptions in more normal ways of knowing. Many people, for example, determine how they feel by how things appear to them, or by what happens when they try to do something, rather than by introspection. A good example here is Sartre's (1938) character Roquentin in *La Nausée*, who knew he was in a Sunday-feeling state by seeing how the trees in front of him appeared.

The way, then, that a person knows a symptom or feeling is embedded in the way in which they know the world at that time. This way of knowing is in part detectable from what appears as there. So by widening the observer role to include a passive aspect the clinician increases knowledge at the time of the problem. The client becomes conscious that s/he is conscious of some aspects of the environment but not others.

Variations on a personal theme

In unravelling personal context within the phenomenological account we of course start with the phenomenon itself, but on the understanding that the problem is the figure against an (at the outset) unknown ground that contextualizes meaning. The context by definition is wider than the figure so it includes not only the

experience but other thoughts and feelings at the same time. One way of accessing the ground behind a figure is to look at the variations in experience. Different variations in experience require variations in context. However, the experience may carry the same label. For example, the context producing a predominantly tingling sensation may not be the same producing dizziness, but both sensations are symptoms of panic. Differences in context are then detectable by variations in sensations across contexts. Now this seems like a big job. How to determine what counts as background context? As we noted earlier in discussing sufficient knowledge and information, the range of relevant information seems infinite.

The contextual approach adds to the serial antecedent, behaviour, consequence (ABC) analysis because in the first instance it is a spatial not a temporal grouping of experience. The problem with using a sequential template is the assumption that temporal proximity or succession in itself determines relevance. Determining cause and effect on the basis of temporal succession is clearly problematic. But here we go further, saying that something preceding a phenomenon may or may not be part of the same phenomenon, or it may be part of a separate context. It is only by calibrating the range of the client's behaviour that one can arrive at a good grasp of the behavioural boundaries defining the phenomenon in a spatial sense. Just because two phenomena succeed each other in time this does not mean they are related. Rather, the more intimate family relation may be to a more distant phenomenon. For example, the way I eat my meal may have more in common with the way I ate it last week than with the conversation I had immediately before I ate.

Let's take a fairly mundane sensory experience. I can drink the same wine on different occasions and it can taste different in a number of dimensions. On one occasion it can taste, in my own words, 'fresh, light and bitter', and on another occasion 'rough, yellowish and sugary'. Now I could simply ask myself what is distinct on each occasion and, by hit and miss, arrive at some estimate of relevant factors mediating my experience. I could draw on my knowledge of wine and how it interacts with food, sauces and other wines. For example, I might guess intelligently that the taste of the wine varies with what I have just eaten, or not eaten, or on what I've drunk before, or on the temperature of the wine, or the shape and colour of the wine glass. Alternatively, I could take a systematic approach centred on the notion of natural variation in experience and look at the range of my experience along the dimensions of difference. This is like a kind of calibration of my experience. This all sounds technical but is quite straightforward and simply involves identifying two extreme variations along the dimension. After all, if there is no identifiable variation then there is no ground for a difference in experience. So I can now ask what was similar and different about these two extremes of wine-drinking experiences. In one I was thirsty, had not eaten and was hungry and tired. In the other I had already eaten, was relaxed in a restaurant and had previously drunk a glass of wine. Now I can refine the contexts empirically by seeing which factors are likely to determine variation in between these two extremes. In order to complete the degrees of experience

on the scale, unless I have direct experience, I can either imagine or test out the degrees of the context and the effect on the taste of the wine.

Let's take as another example a client who complains of obsessional symptoms. When she visits a restaurant she needs to check constantly for lost items before she leaves. She is in a great deal of distress and the problem is now intolerable because she can't go out with her family and she is afraid of becoming a bad guest. The complete context encompasses her positioning, plus all aspects that make the emergence of the obsessional experience necessary. Horizontal aspects, including the environmental characteristics of the restaurant, appear to her significant: the number of people, the family waiting for her, the pressure. The horizontal context emphasizes how concurrent spatiality (the restaurant's dimensions) and events (the restaurant's buzz) set the person up for the experience.

As another example, a woman presents with episodes of depersonalization. She describes it as 'just this horrible feeling, just not being there, not connected, unable to function'. This woman has already consulted several professionals and been told that it is a sign of depression and anxiety. She does, however, adhere to a biochemical model of depersonalization, which she has been told is the cause of the problem. In her words, the depersonalization switches on like a biochemical switch in the brain. This metaphor is reinforced by the fact that when she takes Buspar the feeling often seems worse.

The depersonalization occurs at night, when there is a questioning, when she is alone, when she feels different. How do we know which of those is the most likely to be the right context for the appearance: the night, trying to sleep, the questioning? There are a number of sensations occurring at the same time as the depersonalization, but these do not have meaning for her: tingling in toes, heartbeat, breathing. Her focus is on the distance between her and the world. If we look at what preceded this distance there was a constant watchfulness and examination of whether she was there or not. So her context is being alone, watching her self. For this woman a horizontal analysis concerns largely her feeling, thinking and self-perception rather than concrete environmental aspects (e.g. night-time), which translate to her way of interacting with the world. We can further analyse in her terms the sense of the feeling within the experience itself. The feeling she would best describe as opposite to the depersonalization is 'feeling part of life', which she experiences when she is engaged in detailed tasks.

Another point that becomes evident from observer accounts is that the person is always 'doing' when they are 'seeing'. Observing is an act. Indeed, it is this act context that surrounds the feeling. A project leads me to act in a certain way towards the world that decides my seeing and feeling. In fact, we cannot separate seeing from doing.

In Part 2 of this chapter we will consider how the boundaries of a specific experience can be clearly defined when adapting a process approach to identifying behaviour and how this leads to defining the unit of experience within an act context rather than by using any other subjective or objective parameters.

Part 2

Construction of behaviour process

If behaviour and experience are placed in the context of other possible processes, rather than a fixed stimulus world, processes can be understood independently, without stepping beyond the boundaries presented by the behaviour itself. The spirit of the process approach is encapsulated by Goethe's approach to classifying the forms of plants and flowers to capture an understanding of the process of development under different conditions (Bockemühl, 1988).

We can therefore outline some basic requirements for a method that seeks to define experience in terms of classes of behavioural processes alone. The basic unit or framework for viewing any behaviour must be the actual observed behaviour itself. In other words, the boundaries of any action must be decided by parameters of the action and not by sensory, stimulus or time markers. Also, the method must respect the unique activity of any individual act.

Any action, no matter how small or large, must be seen as an expression of the person's overall position in the world. Thus all aspects of a person's behaviour are related in a contextual rather than causal fashion: parts of the act cannot cause other parts. The moment we begin to explain a phenomenon in terms of (for example, temporal) cause and effect we step beyond the phenomenon's processes and become hypothetical. Instead, we can view acts as emerging from a context of like acts. This emergence is understood by 'description' not 'explanation' of the context. Explanation in terms of cause and effect generally aims to ascribe a significance to something that does not already possess it. But in the constructionist position any human action is already significant by virtue of its occurrence. We do not have to justify its presence or tamper with it further. The job of the contextual approach is to typify this significance by describing the context of processes that made the acts' emergence possible.

Although a series of actions comprising a process unit may be as large or small as the client wishes, in clinical work shorter episodes are more pertinent. Perhaps in a trajectory analysis a lifetime process may be appropriate, but in clinical work we are dealing with more discrete events. In the beginning a process episode can be defined roughly. 'I'm sitting down, feeling miserable and I feel the dark cloud coming on, then suddenly everything becomes heavy and takes effort'. But even defining process roughly, as long as it is derived from certain appearance, helps both horizontal and vertical analysis. We can ask for more detail to decide on the meaning of the dark cloud or we can see what other events have meaning to the client to amplify the account.

For example, a certain head action involved in dizziness behaviour may be initially classed as one of a class of general head movements, and then as one of a class of head movements with a specific angle of rotation as we find that the degree of head rotation is the parameter most likely to typify dizziness.

The process approach takes the person-centred act as its own reference rather than unitizing the act according to some hypothetical window prescribed by the

observer. Obviously, one cannot compare an act with itself but one can, without losing its self-contained quality, compare it with similar acts. Any action a person performs can be viewed as one of a class of similar actions. The process approach groups behaviour solely according to this criterion of process equivalence. Equivalent actions produce different effects depending, of course, on context. The aim, then, is to find the nearest two equivalent actions within the person's skill repertoire for which some effect is both most and least likely to emerge. This provides opposite ends of a dimension of processes, from amongst the person's complex repertoire, which will typify the act of interest.

This can be illustrated by considering the behaviour of reaching to pick up a glass. The intentionality of the reaching act is revealed by considering it in the context of all possible equivalent reaching acts of the person, past and present.

If I reach out to pick up a straight glass this act of reaching is one of a class of reaching behaviour. They are all unique and independent but nevertheless potentially equivalent in all terms because they share the process of reaching (positioning around the object, extending the arm, bending it, opening the hand, grasping the object). Forming a distribution of acts as equivalent as possible in process terms to my particular reaching act constructs a context that typifies the uniqueness of my act in process terms.

If I am interested in revealing the behavioural process typical of the act of reaching out for a straight glass then comparing this act with reaching out to pick up an umbrella or to pick up a book may not afford a very precise equivalence. Considering the acts of reaching for a round glass, a brandy glass, a wine glass, etc., affords greater precision, whereas considering acts that reach over the same distance gives even greater sharpness to my distribution of equivalent and possible response acts. I might seek further information about these acts in terms of muscle activity, or of the timing of flexor-extensor movements, and examine these measures across my act class in order to see if there are any unique parameters that typify my reaching for the straight glass.

In other words, by seeking what is common to my class of reaching acts I establish what is unique to any particular act. This will enable me to typify that act and ascribe a high likelihood to its occurrence given the presence of certain processes. If I find that a certain strength of grip, which has quantifiable values, typifies my act of reaching for a straight glass and want to explore the significance of this component further I might treat grip itself as a response act and look across equivalent classes involving heavy or light grip, and then look for parameters – environmental, physiological or psychological – that typify this particular grip action.

Process analysis and conventional functional analysis

There are major differences between functional analysis as conventionally practised in clinical psychology and process analysis. Conventional functional analysis is concerned to establish stimulus or situational equivalence. Environmental antecedents

and a behaviour's consequences are charted over several occurrences of the behaviour to unravel variables that show the determinants of the behaviour and the function that the behaviour serves in the environment. Process analysis is person-centred, not environment-centred, and the unit of analysis is the behavioural act bounded solely by its own behavioural occurrence and non-occurrence.

The differences between process and functional analysis can be illustrated by the case of a five-year-old girl who sometimes stutters when speaking. A conventional ABC analysis looks at the situations in which the stutter occurs and notes that the girl stutters when a stranger visits, when she is anticipating something exciting and when people are not paying attention to her. The stutter happens at the beginning of a sentence, when her voice is loud, but not over any particular speech content, and the consequences of the stutter are that people pay more attention to her speech. One conclusion might be that the stutter is cued by an excited mood state and reinforced by attention from others, with the recommendation that a program be implemented to reinforce her differentially for not stuttering and being relaxed.

The process analysis takes one instance of stuttering and looks exactly at what the child is doing in terms of speech-related actions and at equivalent actions where there is no stutter. The analysis then picks out behavioural parameters – speed of talking, say, or rate of breathing – along which we can construct a class of speech actions. The values of these parameters at which the emergence of the act of stuttering is most likely is compared with other possible acts. In the process case we find that a certain speech and/or breathing rate when pronouncing phrases is sufficient to typify the emergence of stuttering, regardless of social surrounding. These rates can be modified by practice to give the girl greater control and flexibility whenever she speaks.

One further important corollary of the process-equivalence approach is, as noted, that time does not necessarily become an ordering variable for behaviour. Conventional functional analysis, of course, can consider the temporal sequence of events to be paramount in defining process. But from the process point of view an act that occurs even milliseconds prior to another act may still be independent of that act. The context that defines the act is the class of which it is a member, not the time at which it occurs.

Under certain circumstances there may be a conditional relation between independent actions. This relation is expressed additively or in combination but not as a sequential dependence. Suppose I scratch my neck and cough when embarrassed, and that these always occur together. Scratching and coughing are independent classes of acts, but I may combine them in this instance, and talk of scratching and coughing behaviour, because the class of combined acts may give me a more precise description of what typifies this embarrassed behaviour. These conjunctions and disjunctions can be best illustrated through symbolic logic.

Similarly, lighting up a cigarette and taking a puff from a cigarette are two independent classes of act that can vary independently (Frenk and Dar, 2000). But in the context of smoking behaviour one may consistently precede the other, in which

case we might say not that they are correlated or associated or contingent on one another but that they are additive as part of a single continuous process.

The process approach begins by describing participant activity as a process. There are two steps involved: (1) identifying the client's activity during the process; and (2) placing systematic boundaries on the activity to create a comparative unit.

1. *Identifying process.* A process is identified by empirical observation in much the same way that processes are identifiable in everyday life. First, a process must form some continuous sequence of activity, the component activities forming different stages, separate steps or changes in amount along a single dimension. So the process of breathing is made up of stages in filling and then emptying the lungs.

   Second, a process must have at least one feature of activity that is unique, which marks it out clearly from competing processes. This feature may depend on how the process is classified, and the feature may be any type(s) of characteristic relating to function, style or content of activity. For example, the process of drinking is characterized by several unique qualities concerning the voluntary ingestion of fluid.

   Third, it follows that a process must have an identifiable beginning and end. One process finishes and another begins. The process of eating begins with mastication and ends with swallowing, after which the process of digestion begins with peristalsis and ends with absorption in the small intestine. This may be more difficult with clinical phenomena, where boundaries may be fuzzy.
2. *Defining act boundaries on the process.* In order that there should be agreement on the actions and events that constitute the process the boundaries of any process can be defined systematically by constructing process units through what I term the 'equivalence procedure'. The non-equivalent is effectively the empirical opposite to the process. But in specifying its opposite one defines the dimension of the process being investigated. Indeed, unless a non-equivalent can be specified it is doubtful that any process is being measured. If I do not know when a client is not 'performing a behaviour' then I cannot know when a client *is* in the process of performing. Equivalent measures must identify both the process and its non-equivalent.

Picking up a bag involves placing fingers round the bag, lifting it forward and then maintaining the grip. This is a very general statement about bag lifting and does not specify adequately where the boundaries of the picking up begin and end. Do they begin with finger contact on the bag or with initial arm movement or with preparation preceding movement? In deciding how to specify bag lifting more precisely I must decide exactly how I wish to classify the process. Am I, for example, viewing the lifting as one of a class of lifting acts (e.g. lifting a dumbbell, lifting a book)? Am I considering it as one of a class of accurate finger-movement tasks? Am I dealing with it just as a general motor act as compared with, say, non-motor acts? By describing the process as one of a class of processes I identify the unique aspect of this process, which engages my current interest. In this way I classify the process in terms of one of its unique characteristics. If the characteristic I am concerned with is force of lift then I

need to describe the bag lifting as one of a class of forceful acts. I will be defining it by comparison with a non-equivalent act with a different degree of force. If I choose speed of the lift as the unique aspect of this process then my description of activity will focus on speed. My non-equivalent comparison units will differ in units of speed.

I am considering subject-initiated activity. The attribute by which I classify the activity is, then, an active one. Because it is an embodied action and the person can choose whether to do it and by what degree I am justified in considering this active attribute as a dimension. Since the process episode is defined by the person's experienced activity this requires the their active cooperation and positive engagement, and maybe training in awareness. We want to include as much activity as can be observed within the process in order to typify the client's own process in a particular situation. A physiological measure cannot confound a behavioural activity going on at the same time if that activity is part of the same process. If when I pay attention to a particular phenomenon I clench my jaw and bite my lip then these are acts associated with my attentional process. It may be a revelation to know that I can pay attention without biting my lip. But in changing or constraining activity I am qualitatively changing my attentional process.

Because in the first instance description of the act is person-centred, and includes everything the person is doing, the context does not become any smaller because the process unit is small. The process unit could, for example, encompass a whole night's sleep or moving the little finger once. It is equivalence of process description that ensures the comparative units are part of the same class rather than uniformity in length or duration. As Edwards *et al.* (1963) have pointed out, there is nothing to be gained from ritual repetition of events after one has gained enough evidence to make a decision. Robustness does not necessarily follow from repetition (Morrison and Hankel, 1970).

Clinical example of process analysis

So far we have given rather mechanical examples of an act process to illustrate the principle. Now we turn to more complex clinical cases. Let's say after slowing down and other techniques we have teased out a description of the experience of panic as it appears to the client. 'I'm planning to go to the mall. Straight away I begin to anticipate that I will have difficulty just being there and breathing and acting normally. As I'm walking to the mall I remember images of past times where I had to flee and I focus straight away on my heart and legs and I imagine myself falling and everybody looking and judging me. By the time I arrive I'm pretty hyped up'.

When the client is in the mall: 'I restrict my vision to straight ahead and avoid others' gaze. I stick close to the mall and have my route where I visit the shops one by one. I try to distract myself with music but all the time in the back of my head I'm asking when it's going to happen. If there is a sudden crowd I'm aware of it and I steer clear. I move as quick as I can towards the exit'.

So the processes comprising this act are planning to go out alone, anticipating difficulty, staying in the mall and breathing and acting normally, remembering images

of past times, focusing on heart and legs and imagining a fall exposed to others. But how many of these processes typify this act? Take going out alone. The client is fully able to go out alone when shopping at the corner shop, when he knows he will not meet other people or when he is on a mission. Hence going out alone with an intent to shop in a particular way is key. Thinking about past events is insufficient since he recalls past events elsewhere but, on the other hand, actively anticipating a fall with imagery seems always to appear in the panic experience as well as the focus on the gaze of others. He can attend to heart rate and breathing in other non-panic situations. We can then construct with the client a non-equivalent act process with many ingredients of the act process that do not support panic. He can go out alone, he can approach a mall, particularly when on a mission, he can interact with others. What typifies the panic act is rather an attitude of leisurely shopping coupled with time to imagine the worst scenario (compared to a feeling of occupied time, where he will not have time to panic). So we have established components of equivalent and non-equivalent dimensions of panic, which can be refined through comparing other episodes.

More specific components typifying non-equivalent process include: 'I'm preparing to go out. I remember my problem but I just have one specific aim which I know exactly how to do'. 'I'm visiting a friend later. I'm expecting to be relaxed and focused on the friend. He knows about my problem so I don't feel watched'. Later on, perhaps, we can further specify feeling watched, what exactly people will say, how the client will feel when relaxed. A cautionary note with refinement: we are specifying experiences already described, which appear significant to the client, not asking them to invent more or embellish the story. The essential points in the description of act process are that there is a beginning, an end and the process is bound by a defining characteristic. Defining the precise beginning and end of a process can be difficult because beginning and end are sometimes fuzzy, and problems may begin sooner than perceived and last longer than estimated. However, grounding process within an act context aids definition.

As a further clinical example let us take the specific case of a man suffering a panic attack in a waiting room. He is sitting in the room and a feeling of unease comes upon him. He starts to sweat, becomes fidgety and experiences breathing difficulties. Eventually, he rushes out of the door into the open air where the feeling subsides.

The man is, for example, sitting down on a chair. This particular act of sitting down is unique in its spatio-temporal characteristics, but from a behavioural point of view it can be considered one of a class of sitting acts. The man also sits on the bus, sits watching TV, sits in the pub, sits watching football, etc. Now he does not experience panic in all of these situations, so simply knowing whether he is sitting or not does not guarantee knowledge that he will panic or not panic. But besides sitting he is also waiting, and waiting silently. In a process class of sitting and waiting silently panic is likely to emerge more often than when he is sitting and not waiting silently.

Having identified the general properties of the process class relevant to panic, we can then look for other properties accompanying the response to enable us to typify

the panic behaviour with greater precision. The man may be sitting uncomfortably, he may be sitting in a particular posture, he may be looking in one direction or thinking about a particular topic. All of these aspects form the basis of independent process classes in their own right. We may include stimulus characteristics as part of our profile, but stimuli are relevant only to the extent that they have implications for act processes and are centred on these processes. So, for example, paying attention in a certain way is part of my act context that forms part of the process defining this experience.

The process dimension goes from 'sitting and waiting and not communicating with strangers' to 'sitting and communicating with friends'. We could move from the nominal binary classification of process classes according to presence of panic to an ordinal ranking of response profiles according to how likely panic is to emerge given a certain combination of sitting and communicating. The extent to which classes of process units or parameters may be in conjunction, disjunction or eclipsed in a universal class can also be represented visually in symbolic logical forms of Venn diagrams (Langer, 1967).

Clinical path analysis

An optional technique that can aid identification of components in a process defining a class is clinical path analysis. In formal statistics this is a multivariate technique where different components mediating an effect are accorded different weights and coefficients. But we can use it clinically to identify the key component that seems to operationalize the experience? In the simplest case this can be binary. Does this component contribute to the process or not? One can also establish cumulative and necessary conditions for other components' appearance. We can combine path analysis with real or thought experiments to see or imagine what will happen if we modify or withdraw certain components and how this will influence others. The clinician appeals to the client's experience, past or hypothetical. The clinician undertakes experiments with the client to test out changes in preparatory activity. The exercise does not only refine process but leads to revelations for the client.

For example, in the left column of Figure 2.1 the previous conception of the process of a panic attack is derived from the client's account. In the client's sequence going out alone to a crowded shopping centre is the key activity and s/he will take precautions to avoid or minimize these conditions. Other components are described, such as anticipation, a focus on feelings, remembering the last panic, focusing on others' reactions and imagining the worst collapse. Through a series of thought and real exercises we discover that, actually, the client can go alone to a shopping centre, depending on the mission and his thoughts. If he is focused on an emergency mission he will go alone to the mall and not panic. However, dwelling on anticipation, imagining a worst-case scenario and hypervigilance seem more effective components in inducing panic than exposure to crowds. This path analysis visually aids formulation of act variations.

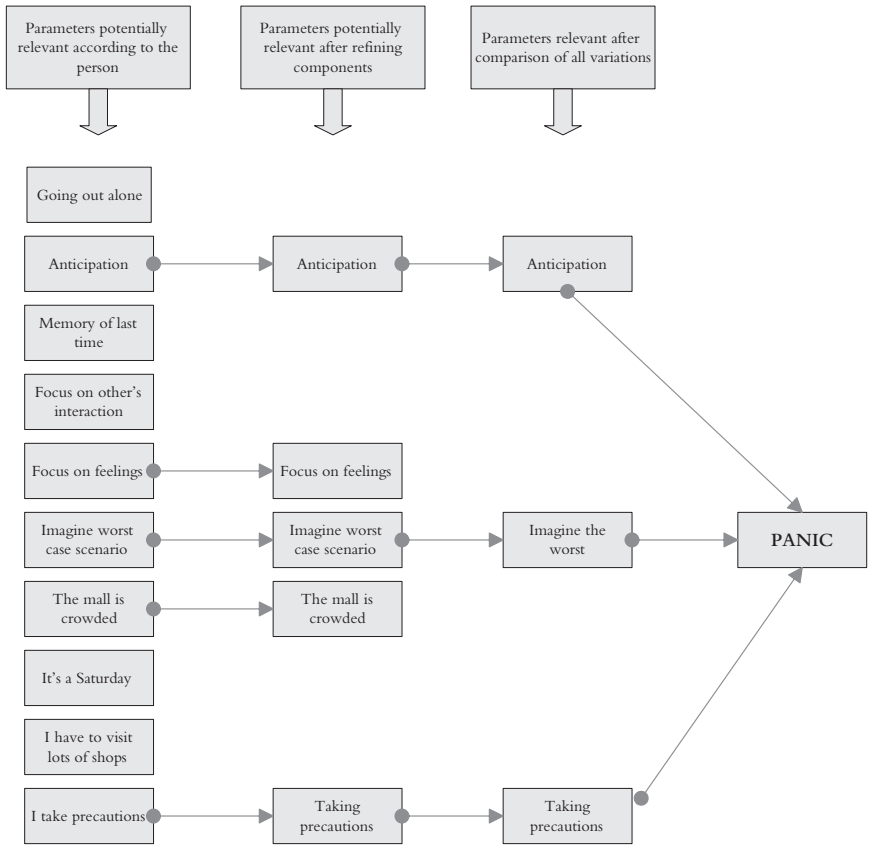


FIGURE 2.1 Clinical path analysis

Behavioural process as an intentional project

Now that we have phenomenologically described and refined a process approach through phenomenological methods we can move directly into constructionist approaches to considering how clients create and set themselves up for experiences. We noted in Chapter 1 that defining my project at the moment I am experiencing it is a part of contextualizing the experience. Identifying the intentional project helps in deciding when the experience begins and ends; it is important, too, in deciding how we know we have passed from one separate experience unit to another. This identification also aids us to surmount the problem of relevance which otherwise might be insurmountable. In our horizontal analysis where does the background context end? With my life, my experience, my family, my psychosocial status, government policy, the war in Iraq? All could be relevant but not all will necessarily figure in my intentional project. In theory, the unit of experience could range from a few seconds to a lifetime; but the nature of psychological problems is that they are

episodic and recurrent, hence they are likely to occupy defined time-space periods. Unfortunately, the problems do not usually announce their arrival and departure over loudspeakers. More usually, the client finds himself in the experience, taken by surprise. 'It just came over me', 'I suddenly realized I was having an attack'. People often report differences in the peak intensity of a problem, but rarely the precise onset since they are initially unaware of it. An important part of standard evaluation is increasing awareness of precursors, often premonitory urges or thoughts. However, identifying immediate precursors, such as anticipation, doesn't necessarily help since the anticipation of onset may be traced to a more and more remote time. For example, simply anticipating a bad day in bed may be identified as the starting point for an attack six hours later. But what criteria can help us establish this anticipation as the effective cause of onset?

Let's take the following account of a panic attack when crossing a bridge: 'I'm walking towards the bridge and the idea comes into my head that I could have a panic attack. So I walk across the bridge and I'm like focusing on the slots and the railings, and I'm feeling tense and wobbly in my legs, but I force myself to walk across, even though my mind is thinking I could throw myself over. What if I did? And I imagine the water being cold and me freezing and dying like when I reach the other side of the bridge. I'm relieved but I'm still thinking of it even as I get to work in my office'.

So this account, which is a mixture of different levels of emotion, thinking and behaviour, is difficult to top and tail precisely, particularly using a functional analysis since it's not clear where the antecedents begin and the consequences start. Instead of a timeline, what would help here is more information on spatial context. What else is going on around the client's focus but which is not reported. After all, there are many events going on around: other people crossing the bridge, maybe boats passing by underneath. These events are on the margins of the client's consciousness but nonetheless form part of a surrounding context. However, here again we risk disappearing horizontally into infinity since what would be the outer limit of such an observation. Could it be the wider horizon of the entire world at that moment? How do we know events ten miles away are not relevant? In order to answer this question coherently we must consider the positioning of the client. We have been allowing the client in their account to take what is called in documentary film making a 'voice of God' position, the assumption that the observation and description are timeless and absolute, not based at a specific position. As we noted in the introduction, the client's approach and positioning to a perceived event or experience casts a shadow on its meaning construction. So how can we discover the relevance of the client's positioning in relation to what is seen when, of course, the client will always see from a position of which s/he is unaware because s/he is in it? In order to link the relevance of observation and the role of active positioning we described earlier some techniques, one of which was termed 'submerging the (or dropping the) "I"'. We ask the client to report their experience in a passive sense and this, paradoxically, makes them realize that they are, in fact, positioned in the midst of an environment. This technique helps to lead on to defining the boundaries of the project behind

the experience. So, for example, 'the railings appeared beside a background of buildings and the town' immediately makes the person aware that they are geographically positioned. The client is now positioned with respect to his problem and better able to report significant events, aware that the report is from a perspective.

Figure and ground awareness as part of a repositioning project

Our positioning in the world essentially determines our focused attention and our background awareness of thoughts and things. If I focus now on the lamp in front of me my cognitive perception is occupied with its silver hood, its handle, etc. But in a larger sense I am aware that the lamp is on a table by the window in a room. Any of these features could become my focus and then all the rest would sink into the background.

The implication is that background awareness is the ground from which cognition arises. In other words, what appears as the focus of our attention is in fact the figure that cannot be understood without the ground. This grounding has clinical implications since it would suggest, when confronted with a troubling thought, that in the first instance the whole field of awareness should be described, not just the thought in isolation. As Sartre (1943) noted, geographical placement reflects a change in attitude that goes with a change in position.

Partial knowledge

Another clue to positioning is the perspective from which I know something. There are the taken-for-granted conventions and terms by which I represent and re-represent my knowledge. There is the intricate relationship between the content of knowledge and my way of knowing it. There is also within knowledge gathering the subtle distinction between faculties. How do I come by the knowledge? By seeing, touching, hearing, inferring? There are situational and state factors determining my knowing at the point I know. There are my private and public intentions in knowing – for example, a professional project versus a personal project in pursuing the knowing.

In other words, the attributes a client reports about an object or event will reveal partial knowledge gleaned by a way of knowing, itself defined by a project and a position. For example, a doorknob has several potential attributes: metallic, aesthetic, decorative. If I choose to focus on one attribute – for example, its possible dirtiness – to the exclusion of others this partial knowledge reveals at the same time my way of knowing the door, and my positioning in general to the world of objects, as a potentially dirty place. My projects would follow from this positioning.

The project also defines the sufficient utility of information to base decisions about subsequent behaviour. In other words, relevant knowledge is always partial knowledge linked to the utility of my project.

Variations in intentional projects

Uncovering variations in projects is similar to establishing variations in process contexts. Take a woman who checks doors and stoves. Does she experience the same feelings when playing with her children, or if she saw a different purpose? Why this problem and not something else? What distinguishes the project of distress from non-stressful projects for the client?

The client's view of her checking problem is that she has to check all the time. It is the checking which has come to the fore. This is the focus; this is what is noticed, what is abnormal, commented upon. But clearly she is checking for a reason: 'maybe I left something'. In other words, there is a motivation which could be better explored, and she doesn't check everywhere. The checking seems to occur in a project when she is leaving somewhere and leaving things behind. She doesn't check on arriving or when walking in the street or even when sitting for some time. There are many instances during the day when she is out and about when she might lose very valuable belongings, so her search is not motivated by value; rather, it is essentially a fear of what she is leaving behind. So does it matter *what* she's leaving behind? No, it could be anything (baseball cap), and in any case she doesn't know what she's looking for. So what essentially is driving her is not so much the thought of leaving something specific behind but that she may have left something despite her not being aware of it. It is in this sense precisely that the event could happen despite her good senses, and it is this fear of becoming victim to the event that makes the checking happen at all. It is a checking which grabs her so intensely and is so absorbing that she ignores all other things around her, including her children's complaints, to accomplish it. We have established that the project is not motivated by value. Is it that she fears losing objects will be used against her, or that her husband or sons will be deprived, maybe sentimentally? When we compare similar incidents where sentimental things have been mislaid, even by her, there is, however, not the same intensity of fear.

Leaving a place without checking, and forgetting something, is part of a class of acts that goes beyond leaving or forgetting, but is a kind of composite class. The key element seems concern of overlooking danger or making a mistake. She describes similar feelings when she made a mistake at school, but not just any mistake, a mistake she shouldn't have made, she said, a stupid mistake. So the leaving falls into the category of stupid mistakes; but why this particular stupid mistake rather than a stupid mistake shopping or driving or forgetting? For her, stupid is something avoidable, avoidable had there been good organization – that is, a control of things. We then have a theme underlying the checking which says: it is intolerable that I cannot control myself enough not to make stupid mistakes. Hence the same theme that may attach to the checking (the fear of mistakes) is implicated in generating the checking. The underlying theme to her interaction with the world can be discovered and refined further by construct analysis.

Personal construct psychology

An important constructionist tool in completing and revealing a person's construction of the world is the adoption of Kelly's personal construct grid. Most accounts of this field date its origin to the publication of George Kelly's (1955) two-volume *The Psychology of Personal Constructs*. Kelly placed persons at the centre of their lived experience, who then try to make sense of it through personal constructs. If unforeseen or unknown events presented themselves the person was required to reconsider their previous constructs and the person being changed in the process. Kelly introduced an instrument – the Role Construct Repertory Test – 'which… (was to) give character and pattern to individual case studies' (Kelly, 1940). These applications were embedded in a theory of sense making and revision – a psychology of personal knowing (Mair, 1985) – so central to our experience of the world. However, the grid is an extremely valuable tool, which can be adapted to constructionism. It structures thematic variation and tries to capture the person's creativity, and allows induction from specific instances of variations in evaluation to more general world constructs.

Kelly defines a disorder as any personal construct that is used repeatedly in spite of consistent invalidation. Kelly speaks of 'controlled elaboration and uncontrolled elaboration'. Controlled elaboration takes the form of exploring one pole of a construct to assess the benefits of adopting one or the other of opposite poles – for example, what are the advantages of seeing 'the man in me who wants to let go' versus 'the man who doesn't want to act'? Uncontrolled elaboration involves spurring the client on to more spontaneous expressions of construing. Even a certain style of speech, or staccato breathing, can serve to reveal a pattern associated with a construct. A construct such as 'I must speak quickly or people will be bored' will influence all levels of communication with the therapist, since what the client does or does not reveal will depend on what they feel is permitted.

Construct systems can be modified in a variety of ways. New constructs can be elicited to complement old ones; the field of application can be modified; the consistency and coherence of constructs can be improved; new constructs can be created through brainstorming with the therapist to generate numerous possibilities before the pre-emptive stage, when it is decided which one to adopt, and before the control stage, when one pole of the new construct is applied to the pertinent elements in the client's world.

Although Kelly accords importance to non-verbal expressions in construing, there is no doubt that for him awareness and verbalization are essential to the emergence of self-awareness and hence to the possibility of exploration and change.

The therapist explores themes from the client's statements by asking questions and connecting separate incidents. This process may be combined with 'delayed probing', where the therapist picks up and explores points made by the client earlier in the session; this should be done tactfully so that the client does not feel pounced on.

The difference between the cognitive approach and the personal construct one is that the cognitive approach adheres to isolated cognitions and challenge centred on a normative idea of what is or is not rational. Kelly's approach uses acceptance, reflection and reassurance techniques. Although Kelly elaborates his therapist-client relation as Rogerian client-centred therapy, he refuses to embrace the ideal client-therapist relation, believing this should be decided according to each individual case of construing.

Technical and statistical aspects of grid measurement are discussed in detail in Blowers and O'Connor (1996), whose principal component analysis on a completed grid identifies key dimensions by which a person constructs their world. Appendix 4 gives the grid to establish themes following phenomenological reduction and clarifying themes or constructs across problem and non-problem variations.

The grid is completed by listing variations on problematic and non-problematic situations (I suggest three of each) and by comparing each problematic and non-problematic variation for differences in attitude and evaluation. The differences in evaluations reveal an implicit and explicit pole, which represent one dichotomous dimension by which the person constructs problematic/non-problematic events. The grid can be adapted to almost any event or situation or person. The author has also adapted Kelly's grid to identify constructs associated with high- and low-risk situations (O'Connor, 2005). Further use of Kelly's grid allows access to the constructs by which the client creates the world in a stable fashion.

Constructs and phenomenology

Personal construct psychology addresses by its nature the core of the logic of consciousness, and by its division into implicit and explicit poles it highlights the logic of awareness – that to be aware of one aspect I must be unaware of other aspects of the world. Personal constructs also, following Heidegger, highlight the different idiosyncratic ways in which the implicit background of awareness lights up the actual act of awareness. The implicit poles form backgrounds for the emergence of explicit poles and can be very idiosyncratic.

Of use here is an adaptation of Kelly's grid that can be applied to a number of elements and events and not just 'persons'. An adapted grid is illustrated in Appendices 5 and 6. The aim is threefold. First, to reveal near-equivalent events and situations which do not elicit the problem; second, to capture the constructs which form the basis for such classification of the world; and, third, these constructs can then be transformed into actions which are symbolic of the person's intentional stance (and, as we will see later, all the preparation and support this entails). The application of Kelly's construct analysis is illustrated in Appendix 10, where a phenomenological reduction produces variation reducible to a theme that is then explored via construct analysis over life domains. Use of Kelly's grid in constructionist evaluation to elicit themes discriminating variations is illustrated in the case of 'leaving the house' reported in Appendix 5. So three variations of problem and non-problem processes

can be written in the vertical column, and the differences in themes distinguishing them when comparing between any two or three of the processes can be noted in terms of implicit and explicit poles.

Case illustrations combining phenomenological and construct analysis

Returning to our obsessional case, the woman feels obliged to check her appliances, her doors, her car doors, her electrics, etc. before leaving the house. We can construct a hierarchy, with appliances being the most difficult to check and car doors being the easiest. There are other minor checks, such as shopping lists and inventories. How does she experience her distress? 'Sometimes it feels like a force. I mean, I have to do it. If I don't I don't feel comfortable. It's on my mind. Sometimes if I can't check I'll keep it in the back of my mind, telling myself I must do it. Imagine the consequences if I don't check and I get anxious. I can't breathe'.

In order to carry out an eidetic reduction to look at the essence of what constitutes the compulsive feeling it's useful in this case to begin with a horizontal analysis of family resemblances. There are many activities where she does not check and which could have equally serious consequences. Indeed, the aim of the analysis is to find the act which is most similar to the problem, but which doesn't pose a problem. Often the topography of the act is very similar but differs in maybe one or two components.

For example, this woman does not check money. She does not check change. She does not check the electrics in her car when she leaves it. She sometimes does, sometimes doesn't, check her windows. She doesn't check her dress, her hair, her shoes. In other words, there are a whole host of activities where she does not check or checks minimally. All of these constitute related act contexts, which give information on the problem act.

So when she is checking she is noting wires all over the house, stoves that could be alight even though they appear to be OK, doors that could spring open. But when she's crossing the road unseen possibilities do not come into view and she is simply seeing what is there. So her project in one case seems to be to look out for possibilities, in another case not to look out and, rather, to see what is there. What creates this difference is her intentional stance revealed by variations in act context. The adaption of Kelly's grid may help us here. How does she evaluate these differences? If we look at Kelly's grid we can construct a grid of three situations that are problematic, three that are not (see Appendix 5). So a typical process 'leaving' episode for this client would be: 'I think of leaving my house to go shopping. I realize I need to check. I'm aware of wires, doors, windows and electric appliances and check them to see they're secure several times. I'm thinking of consequences but I'm never sure'; 'I'm leaving the house to do some shopping in the local shop and see a friend, so I quickly check the door and stove'; 'I'm leaving my car and I just check the steering lock and brakes a couple of times and lock the door'. 'I'm leaving my chalet

up north to go to the beach and I just look around quickly'. In looking at similarities and differences in the leaving acts, through Kelly's grid, we find several implicit/explicit themes: feeling the house could have changed whilst I'm away; knowing that things would not change; being unconcerned about change because of the country setting. The themes define the checking project. Further development of the themes reveals two further implicit/explicit constructs: I distrust my town house versus I feel secure with my car or chalet, and I don't deal well with complications versus I'm simple. These dimensions are then validated with the client.

In this case we see quite clearly that situations where the woman feels she will not be able to cope, where she fears becoming an incompetent, determine her doubts. Interestingly, it is not the consequences nor the responsibility nor a host of social consequences that determine the checking, since all these factors are present in non-problematic situations (see Appendix 5).

In another case, a female client suffers from chronic 'derealization'. On occasion, she suddenly finds herself distant from the world. It does not seem obviously tied to environmental or state factors (which it could be) and she can experience it in a mall, in a meeting, watching a film, in conversation. She could be working or taking it easy, relaxing or working out.

The experience as it appears to her is that the world is distant, as though 'my sensations are numbed, the world appears in echo and I am afraid, I don't understand what's going on'. How does this compare with other experiences where she is detached – for example, flying in a plane or meditating? The opposite non-equivalent experience is, clearly, engagement in reality, and she can describe several activities where she is immersed in real tasks. But there is a thinking element present that tells her what she is experiencing is not right. She shouldn't be experiencing derealization; it is out of place. A state has appeared that she did not expect and has interfered with flow. She is upset, too, by other observations and objects of place. Out of placeness could be as minor as a clash of colours, or a conflict between what she expected as an outcome. As a consequence, when the world seems 'out of place' as opposed to 'flowing on' she adapts a self-reflective stance where she withdraws from the world. This withdrawal has several characteristics that distinguish it from polite withdrawal, anxious avoidance, withdrawal and social withdrawal. It is abrupt, accompanied by intense self-reflection. Self-themes derived from Kelly's grid reveal a dilemma (see Appendix 6). The explicit pole of 'the desire to protect herself from reality' is opposite to an implicit 'feeling that reality might disappear' or that she will lose contact with reality. Hence, depending on the context where she experiences derealization, her intentional stance is either protection from or maintaining contact with reality. In other words, the constructs reveal contradictory stances that can condition the character of the experience.

3

LIVED-IN IMAGINATIONS

Constructionism and imagination

In the previous chapter we laid out the bases of constructionist evaluation, but we missed out details on the systematic use of the imagination. The imagination plays a huge part in constructionist evaluation, and imagination with perception creates sense of reality. We will now briefly consider the role imagination plays in the co-construction of reality, how we can access this imagination, its role in creating disorders and how its evolution can be used to aid evaluation.

We have already noted that when a client presents with their problem one of the ways to contextualize the problem, in order to understand it, is to look at what is not a problem. Part of this contextualization is to look at what could have appeared but did not, what absolutely could not appear and what is a remotely possible and closely possible alternative. Apart from establishing the act processes and the vertical and horizontal variations already discussed, we are interested in the free variations of possible occurrence. For example, if a person suddenly feels powerless in a crowd what other emotions could the person have experienced? In other words, what other emotions could feature in their potential repertoire (e.g. embarrassment, shame, loneliness)? How do these other potential emotions relate to powerlessness? Under what circumstances and in what context is one potential emotion predominant? Perhaps the client has not actually experienced some of these variations, in which case eliciting the variation requires imagination to create the experience.

What is the imagination?

Imagination as a faculty has largely been ignored in psychology (for a review, see O'Connor and Aardema, 2005). In clinical psychology, on the other hand, imagination is used frequently in imaginal exposure, mood induction and guided imagery.

But it is almost inevitably confounded with imagery. Schorr (1974) reviewed the use of imagery in psychotherapy and noted that imagery plays a role in nearly all psychotherapies. Imagination featured in Wolpe's 'systematic desensitization', where the client is led to imagine a series of increasingly anxiety-laden scenes until the anxiety subsides. Schorr underscored the role of imagery to assign meanings to imagery and relate the process of change to new awareness. He talked of direct and spontaneous mental imagery and symbolic images where reality can be expressed in an image. In guided affective imagery (Leuner, 1969) the client is encouraged to daydream. The technique guides transformation of imagery to lead to changes in both affect and attitude in life. However, here we are interested in the wider sense of imagination as the art of the possible, and how imagination and perception complement each other to define context and the sense of the real.

A crucial determinant of my intent towards either an imaginary or a perceived object is its context. The imagination, like perception, always occurs in a context and imagined people and events are always surrounded by an implicit context (Ahsen, 1984; O'Connor and Gareau, 1991). In other words, in the same way that when I see a tree it is seen in the context of, say, a field, and from an observer position, so when I conjure up a person or a scenario in my imagination there is a surrounding context and I am positioned in respect to the person or scene. For example, I imagine my friend Dick, in London, but the image is Dick dressed according to a specific past context, or perhaps a composite of contexts but nonetheless linkable to specific past times and places. This context and positioning embodies my way of seeing or imagining and hence guides my intent towards the image. Changing inferred context may change my intent towards the image. For example, I see a familiar face at a meeting and I struggle to place it in a context, finally settling on a person working in the local hospital. I am not in the hospital now, but this implicit context clouds my immediate intentional interaction with the person. On approaching more closely I may realize that I was wrong and that the face fits better within the context of the local baker. Again, my intended interaction with, and perhaps entire project towards, and way of approaching, the person could consequently change. Neither the person nor the explicit context (the meeting) has changed; rather, a series of implicit contexts have redirected my intentional focus.

The existence of a background context to any image or percept of course confirms that all consciousness is relational. I am always in the world and, in some way, relating to the world when I see or imagine or do anything. I am never in a vacuum. The context takes the form of a distribution peaking at the immediate focus and tapering off into the margins of consciousness. The gradient is defined by diminishing clarity and accessibility and necessarily so, since, as Stephen Brown (2000) notes, the lack of clarity at the margins is essential for contrast with the vividness of the figure, and this contrast completes the sense of being 'here' rather than 'there'. What is unclear and out of view is an essential ground to give the figure clarity. Bruce Mangan (1993) speaks of the margins of consciousness, and how inattentiveness and inarticulacy are essential properties of the margins for contrast with the figure and generate important vague feelings arising from the margins, such as 'tip of the tongue' phenomena.

The common structure of consciousness dictates that to be aware is to be aware that I am aware of some things but not others. In other words, there are always unseen possibilities at the margins of consciousness (e.g. the corner I haven't yet turned, the variation I haven't yet experienced).

The idea that imagination is concerned with unseen possibilities also lets it project into the future. Heidegger (1929/1962) emphasized the primordial importance of time in defining human existence and consciousness. I am always ahead of myself since I am constantly in a state of becoming. An object, a scene or a person is defined by what they promise to become. In Heidegger's opinion, the past comes towards the present from the future. As Heidegger (1988) also pointed out, key emotions spring from the potential unfulfilment of the 'about to be' (e.g. disappointment, grief, anguish). On the one hand, and distinct from imagination, everything which is real in the here and now must, in order to be so real, already be, with its history before and beyond me. But it only has this real property or 'facticity' in the first instance because it has a future, and this future primarily determines its existence as real. The future of the object, of course, always ties in closely with my projects for my future.

The importance of this clinically is that when a client is reporting what appears they are implicitly doing so against a background of what will appear, what did not appear, could have appeared and definitely will not appear. The client may not be aware of this implicit background so how can we capture it clinically through the imagination?

Possibility and perception

Possibility covers very well the relationship of all aspects of a ground 'not yet in view' to my projects. It covers what might be, what might come later, what might constitute a tolerable variation of what already exists and how my changing position might modify my perception. However, the notion of possibility does not just apply to what might be, it is also embedded in what is here now.

In the same way that what is not yet seen has a meaning as a possibility, so what is seen is still equally seen as a possibility, as a function of my project evolving. The nature of my projects in the world is that they are directed into the future, ahead of themselves; in other words, their possibility defines them. What I see about a telephone or a lamp or a door depends very much on what I intend to do with it. We are constantly surprised to detect new physical attributes in familiar objects because our project dictates a possible relevance for them. Equally, as the physical attributes of a visible object are never sufficient to define its possible use, so objects are frequently seen as complete objects simply because my intended use accords them solidity. Although there are many qualitatively distinct types of possibility, and probably as many possibilities for an object as there are projects, it seems nonetheless feasible to quantify possibility dimensionally in terms of a maximum and a minimum within any one project. The knowledge that possibility is a key defining psychological dimension of figure-ground perception makes the co-existence of imagination and perception not only understandable but mandatory for an adaptive seeing.

If the seen is partially defined by the surrounding unseen then this logic of perception leaves a huge space for the imagination. The act of perception itself is defined by the background context of the imagination and, as such, imagination helps form the perceived event and is part of it. Continuing the figure-ground analogy, perception then explores the figure, whereas the surrounding not-seen is a latent, if defining, characteristic of what is there. Imagination is the active exploration of this latent possible space in the same way that perception is the active exploration of the visible space. In sum, imagination is ever present in sensing reality because: (1) what I am doing always exists alongside what I am intending to do (my projects on the world); (2) imagination as the 'art of the possible' is the creative aspect of seeing, and fills up the gap between what is and what is not; (3) living in reality is a matter of degree, and I exist in a gradient of awareness where the plausibility of different possibilities is associated with distinct senses of reality.

So, for example, if my intention is to make a cup of coffee everything I see, all attributes, fit into my coffee-making project, and their ordering on the central or on the margins of consciousness is decided on the basis of their relevance to my coffee making. Of course, I want to make my coffee in a 'real' coffee pot, not one I am imagining. A real coffee pot is one that stands before me, beyond me, with its own 'factual history' as a coffee pot capable of holding hot water. If my project changes to making a cup of cocoa, a whole new structure of past and future attributes of the same objects come into being. The real coffee pot now becomes irrelevant. The realist argument might be that even though I may not notice all attributes of an object at one time they nonetheless exist independently of me. But if someone points out attributes of objects I hadn't previously noticed, and I go back and see them, my seeing is still intricately tied up with being and my projects (in this case a going-back-to-see-missed-attributes project). When I am seeing I am always doing. Seeing and doing are inseparable. No matter how much I think I am purely perceiving or how open I am to experience, I am always doing so within an intentional project. Clinically speaking, the future also looms large, as in the importance of 'looming vulnerability' in anxiety (Riskind, 1997). Anticipation and preparation for the future is the hallmark of anxiety (e.g. What might occur? What if the worst happens?), whilst in depression it is the absence of hope that may condition past and present ruminations.

Imagination as the art of the possible

Certain objects and events always exist on the margins of perception – as about-to-be events, events not yet emerged or completed events that cannot be seen. They emerge into full consciousness as I switch my head to a different position or my intention to a different project. Gibson (1979), in his ecological approach (see Chapter 7), locates these emergent properties invariantly within the objects themselves. So the use of an object is reflected in its about-to-be-used attributes. Its use affords its existence for me in a certain way. But the Gibsonian direct realist account cannot explain how all possible uses of an object emerge. Many possibilities are due

to conceptual not physical attributes and so can be triggered by meta-suggestion. There is a creative aspect to seeing, which is embodied in imaginal possibility. I may use a book as a wedge or a hammer or for other uses not dictated by its consensually accepted singular attributes. In other words, imagination can be concerned with possibilities that are not physically afforded by the object.

Conceiving possible worlds in no way compromises my absorption in a real world. Indeed, cognitive focus is predicated on a pre-cognitive world that is always there. But a gradient of absorption covarying with degrees of possibility accommodates smoothly our sporadic changes in consciousness whilst maintaining our sense of reality. In other words, our focus of attention changes seamlessly only because such focus takes the form of a possibility distribution where the next focus is already imminent on the margins and appears or disappears from view according to the shape of the possibility distribution, rather as successive ripples rise and cascade on a water surface.

Imagination is defined within a possibilistic model as the ability to envisage (in a number of modalities) what could be. This role of the imagination may be hidden but becomes apparent in occasional drifts into the imagination in the normal course of perception and in the difficulties experienced under ambiguity in discerning reality from imagination. In other words, it is quite normal that living in reality entails living partly in the imagination. We frequently drift in and out of the imagination and, occasionally, imaginative states may superimpose on reality. The classic example here is the experience of daydreaming. I may be temporarily lost in a memory or a remote scene but my senses stay tuned and are able to respond to immediate reality. Existence in the half world of imagination and perception is present in the paintings of Cézanne.

Merleau-Ponty (1964) recognizes that Cézanne's images present the coming into being of objects through Cézanne's perceptions. What Cézanne achieves in his paintings is the interrogation of unnoticed visual experience – the interrogation of the 'raw' conceptless world before it becomes unconsciously processed into normal experience. But, as Buteau (2013) has argued, his use, in paintings such as *Mount Sainte-Victoire*, of a disjointed use of compressed space and the disorienting frontal character, as well as formal qualities not articulating empirically objective objects, aligns the act with imagined experience rather than perception.

The possibility distribution

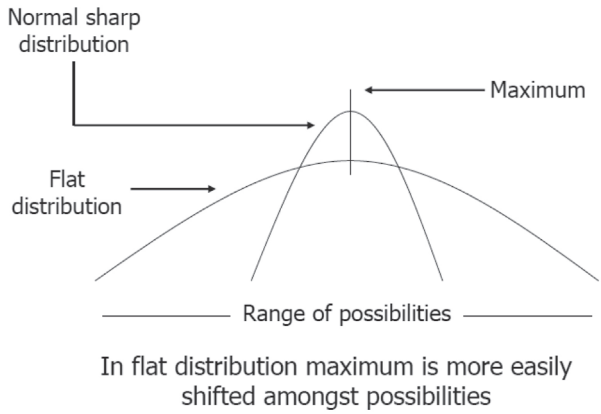
The idea of a personalized possibility distribution may be heuristically compared to a likelihood distribution where the maximum possibility is a maximum likelihood (Edwards, 1972). In its simplest form the possibilistic model proposes that what we take as our reality is arrived at as the most possible world in the context of other possible worlds. So this world is never a stand-alone reality, rather it is only ever constructed as the maximum possibility relative to other possibilities. It forms the maximum of a special distribution of alternative possibilities – some likely, some remote – given the maximum possibility. The possibility distribution may be

skewed, it may be irregular, it may be sharp or flat. If flat this would mean that, in the face of certain alternative versions of reality, the person would be more vulnerable to transition from one reality to another. The person might tolerate more deviation in one direction or another. The maximum possibility may then easily shift amongst closely competing possibilities. Choosing between the possibility that a roaring noise outside my apartment door represents somebody driving a truck or the caretaker vacuuming the hall floor may not be difficult; everything about my current horizons, history and projects supports the caretaker as the maximum possibility. But there are other likely possibilities: it may not be the caretaker who is vacuuming, but his assistant or someone else. These possibilities are well tolerated by my possibility distribution and do not require me to re-orient my projects, to which both the noise and the caretaker were, in any case, on the margins.

Of course, if my current project involved the caretaker and vacuuming, and I wished to consult him, the possibility distribution would be more focused on the nuances of vacuuming and could be sharpened by resolving these possibilities, through opening the door, updating experience and gaining perceptual fit. This is the normal way for pursuing perceptual fit and refining a possibility distribution, by testing the extent to which possibilities thrown up by my project in the world coincide with the figure-ground relationships of pre-existing self-world horizons – my pre-cognitive sense of reality. The more remote the possibilities from my current intended project, the more they form the tail end of the possibility distribution, and the flatness of the tail end of the possibility distribution means I have more tolerance for a variety of possible outcomes. But the maximum can also be modified by changing the personal context of comparable alternative possibilities forming around the margins of the distribution. In other words, a change in the conception of what could be there (but isn't) could change perception of what is there. A good example, here, is waking up on the first night in a strange hotel room, forgetting you are not in your own bedroom at home and being disoriented by your perception of objects in apparently strange places, a perception rapidly normalized by contextualizing the space as a hotel room.

The margins and the peak of the distribution are interdependent. Obviously, change in one will affect the form of the other. A poor perceptual fit will shift the peak possibility of the distribution as may a change in the alternatives on the margins. However, the point is that, according to the possibilistic model, both are determined by the possibilistic distribution. We see an object and a possibility distribution immediately forms around it, which defines my perceptual field; but imagining other forms of possibility can easily change the perceptual field.

Technically, to be absorbed in possibility X implies not being absorbed in possibility Y, yet the level of absorption in Y may affect the level of absorption in X. Thus absorption always exists in relation to other possibilities, where the degree of absorption in a particular scenario would be viewed as the result of the relative degree of absorption in possibility X given the degree of absorption into competing possibilities Y1, Y2, Y3, etc. Such a conception of absorption allows the level of absorption to be schematically represented in Figure 3.1.



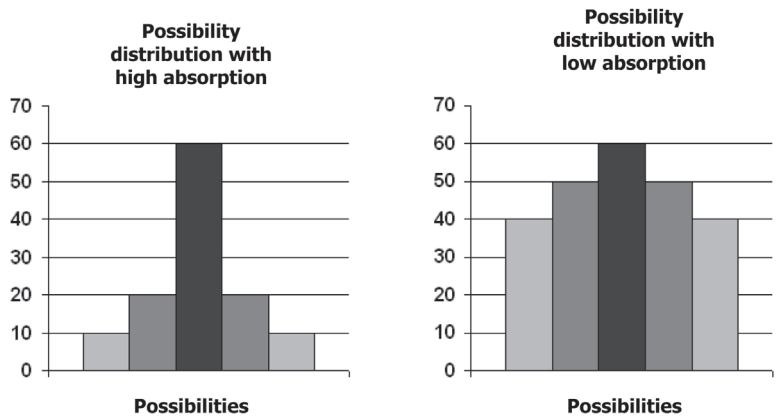


FIGURE 3.1 Possibility distributions
Source: Adapted from O'Connor and Aardema (2003)

At a meta-cognitive level I may be able to consciously detach myself from one sense of reality by creating imaginary possibilities and meta-cognitively jostling these possibilities to create several senses of reality at the same time. Hence a person could legitimately be absorbed in two possible worlds at the same time as, for example, in states of dissociation, or flip alternately from one to the other with a very small perceived change in context. However, if there is a pathological dissociation from reality it may not be a problem of perception but of absorption in possibility.

How imaginings become lived-in

People can become absorbed in possibility through personal or cultural narratives. Two examples here are hypnosis and virtual reality. A good case illustration of

the process of lived-in imagination is hypnosis. In hypnotic suggestion the person believes in a storyline and responds and feels appropriately. The induction techniques restrict the senses, direct attentional and sensory focus to experience and then guide exploration of this experience, positioning the person as a passive recipient of possible experience.

Several authors have reported that a hypnotically induced image can be as vivid as a real one (e.g. Bryant and Mallard, 2003) and invoke similar physiological reactions (e.g. Kosslyn *et al.*, 2000). In hypnosis sense of reality is enhanced by the participant's ability to impose familiar and personally meaningful attributes on suggestions. Elevated hypnotizability is associated with increased levels of absorption, and other traits and cognitive styles (Bryant and Mallard, 2003). Heaps and Nash (1999) found a close association between imagination inflation and hypnotic suggestibility and dissociation. Lynn *et al.* (1996) note that hypnosis depends more on clients' ability to absorb themselves in suggestions and personalize suggestions through imaginative and dissociative abilities than on induction technique or trance-like states. The inductive narrative and procedure works best, however, if it is familiar and culturally credible in order to be trusted and believed. McGuire *et al.* (2001), for example, reported that in a sample of people with delusional beliefs cultural familiarity with the context of delusional narratives mediated estimates of their probability. Green and Brock (2000) highlight the importance of the transportation quality of a narrative to influence belief. Transportation requires imagery, affect and attention, and is unaffected by whether a story is labelled as fact or fiction.

In order to be lived-in imaginary beliefs must somehow be convincingly placed in the world. de Rivera and Sarbin (1998) have suggested that the background for such beliefs must be a cultural framework. The lived-in world must have a credible past and future. An ecologically coherent history creates a current environment and a future horizon. Perceptual and imaginal illusions can lead us to see conflicting or paradoxical information because narrative cues create a competing context to perception. It is normal on such occasions to 'see' imaginary events and hence experience conflicting senses of reality, whilst 'knowing' only one reality.

It may even be desirable on occasion to be metaphorically absorbed in two senses of reality, when watching a magician's or a mime's illusion, for example. The cognitive explanation here is that we suspend our disbelief on such occasions. Alternatively, we may be transported by a convincing visual or verbal narrative to construct a maximum possibility distribution and believe in it accordingly, without in any way compromising our wider perceptual sense of what is 'really' there.

Meta-cognitively, the person can adopt one of three levels of absorption with respect to possibility: detached, metaphorical or living-as. The problem, clinically speaking, occurs when the metaphorical stance is dropped and the temporarily believed-in becomes lived-in. Psychopathological distortions of reality, where the person enters a state of dissociation, and appears absorbed in unreality, may not reflect cognitive distortions but rather meta-cognitive shifts of the imagination. Absorption occurs on the basis of a good storyline, which limits plausible alternatives, not on the basis of facts. Facts are unlikely to influence absorption – so this

sense of unreality may be alleviated more by changing the imagination than by attempting to correct faulty perceptions.

The importance of possibility in defining reality concords with basic notions of quantum physics. The quantum physicist David Bohm (1980) has considered the basic order of being to be that past and future events are available as possibilities and that space consists of nothing more than wave fields of probability. The notion that reality is constituted through shifting distributions of possibilities is a quantum view of consciousness. We only ever perceive reality in its 'aboutness' through our projects, but this aboutness encompasses what might have been, what could be and what could not be. In fact, what *is* is only real because it is defined by what it is not. In other words, a personal possibility space encompasses a rich array of qualitatively distinct human projections. The possibilistic model, then, does not render the world less 'real'. On the contrary, it ensures that the real is perceived as humanly 'real' since it is embedded in my potential ecologically human projects.

Furthermore, many aspects of consciousness are at best pre-cognitive or even anti-cognitive. For example, body awareness, intuition, 'feeling of knowing' and 'tip of the tongue' phenomena seem often to work against our good perceptual sense in that they either prevent access to certain knowledge or misrepresent state or knowledge meta-cognitively (Rosenthal, 2000). Conversely, reflecting can concoct stories about our feelings and awareness that disguises their true nature (Wilson and Dunn, 2003). People can come to believe in happenings that simply did not cognitively appear. Believed-in imaginings can trump cognition (de Rivera and Sarbin, 1998).

Inarticulate imagination, presence and mood

Although I have emphasized that imagination must be part of perception, which is anyway maximal possibility, perception and imagination do present differently as modes of consciousness. In particular, since imagination appears ready made, it more frequently has access to emotion and bypasses cognition as it may form an inarticulate presence. Inarticulate presence can be a basis for later enacting of projects? Mood may be a powerful manifestation of the inarticulate side of being. Some existential philosophies have placed mood centrally as the key monitor of presence in the world. For example, Heidegger (1929/1962) considered mood a much clearer indication of being than thought, to the extent that he felt that poetry, since it affected mood, was more communicative of consciousness than prose and rational thought.

Cognitive aspects of perception highlight immediate concerns in the present static timeframe, whereas mood highlights the otherness of consciousness, its ability to transport and change tone independently of physical or material presence by its appeal to more remote, often inarticulate, experience. Mood often appears intangible to us; it is all around us, we are immersed in it, and often, like Roquentin in Sartre's (1938) novel *La Nausée*, we only recognize our mood through the way we imagine what is around us. Roquentin, for example, knows it is Sunday by the way he imagines the trees around him look and feel. I need to get out of bed and I suddenly *feel* depressed. I think ahead of the work I need to do and *feel* exhausted, or I

replay scenes in relationships and *feel* trapped. My projects 'embody' this awareness. We know our moods by virtue of our attitude or presence signalled through enactment of whatever project we have in hand at this moment. We are not always able to articulate why and wherefore and, if forced, we may confabulate. But we can express possibilities more clearly. In clinical practice clients are frequently unable to articulate 'feel right' or 'just so' experiences (Summerfeldt, 2004). There are experiences where the person feels incomplete, which may be linked to reliance on proprioceptive rather than visual or cognitive input. Then, because mood is intangible and pervasive, it seems, when called into being, that mood transcends the particularities of the moment. To capture mood we are bound to employ vague, ill defined words appealing to feel, hunch, ambiance, etc. precisely because it is pre-cognitive. True, cognition and emotion may be linked later in conscious appraisals of the world, but a conflict between cognition and mood may also pull us in distinct directions. In their mood-as-input model Dash and Davey (2012) discuss how negative mood determines systematic processing strategy and may increase worry and mediate it.

In clinical practice people with depression frequently view the possibility of not succeeding in an activity, but when through behavioural activation they embark on a valued project the perception of activity changes and shifts the distribution of perceived possibilities more positively. In other words, what I imagine will happen influences my perception of possible alternatives, but these possibilities change with my change in intent and activity towards the world. Whereas perception explores tangible textual qualities of an object or event, and requires substance to be accepted as real, often the imagination arrives with a scene ready-made, unquestionably possible because of emotional or other significance. In other words, possibilities can spring up unreflectively – pre-cognitively – and this link between immersion in inarticulate imagination and mood is important since the person may have a strong feeling about a possibility and be living it but unable to articulate it. From a phenomenological point of view this is fine. All the evaluations can still be complete on a vague feeling and, in this case, forcing a cognitive articulation may be destructive and premature. The constructed self-theme can equally reflect a background in articulate positioning of the person that captures an overall attitude or a mood they express towards the world and forms the ground for more articulate operations.

Cognition and mood

The divorce between cognition and mood has important clinical implications since a person may frequently have perfect intellectual insight into the maladaptive nature of their behaviour but yet be grabbed by the strong emotional pull to perform the behaviour nonetheless (Beck *et al.*, 2004). For example, a person with checking compulsions (a form of obsessive-compulsive disorder) may agree 100 per cent that there is no need to check the door once locked, but at the point of locking the door the urge to check becomes stronger than their conscious desire not to check. As a consequence, the person is unable to tolerate not performing the unwanted checking behaviour. It may seem the person is in two minds, one in and one out

of context. Indeed, in clinical work it is common for clients to report two distinct modes of consciousness, a detached one in the therapist's office, which isolates them from the anxiety, and a fused consciousness where the anxiety and the person seem inescapably joined together *in* the context (O'Connor *et al.*, 2005). Yet accurate perception of reality remains unchanged in both cases (Aardema *et al.*, 2009). The experience in the context is not so much a passing specific emotion to be tolerated but an all encompassing presence drawing the person into an obsessional world.

A purely intellectual attempt to distinguish reality from the imagination may fail unless accompanied by a transportation of marginal inarticulate imaginary possibilities influencing presence; in other words, absorption in a narrative flow.

The possibilistic account relies principally on an understanding of how perception and imagination work together in a construction of reality. Imagination is unbounded in its possibilities in that it does not depend on feedback from reality or physicality to be established. Perception, however, depends crucially on the boundaries and laws of probability. Hence when we follow perception our maximum likelihood route stays very close to the most probable event, and each likely event is justified by its possibility grounded in the event preceding it. A temporal order is essential for the arrival of a plausible reality.

In perception the spatio-temporal sequence needs to be credible before it can be lived-in. I need to know, literally, the time and place to know I'm here. In the imagination possibilities do not need to be arrived at by a linear transport system since they need to be lived-in before becoming credible. A coherent context can be inferred once it has been lived-in. In fact, one could say that in imagination multiple contexts are grouped together 'out of context' in order to arrange a personally liveable reality. The person needs to be emotionally connected in order for imaginative possibilities to feel real, and the physical probability of the context is not a criterion for such emotionality. In perception a reasonable question might be 'how did this happen?'. In imagination the power of immersion leads to acceptance of what happened since it feels like a *fait accompli*. So it seems fruitless to ask how this happened but, rather, 'how can I best live with the consequences?'.

For example, a woman with hoarding compulsions, who feared she would make mistakes throwing out rubbish, and who overcame this fear through cognitive restructuring, was still unable to stop emptying out bags of rubbish. Further analysis revealed an overpowering dictum transmitted by her father that nothing, even rubbish, should ever be wasted since there's a use or reuse for everything. The phrase 'don't be careless and throw things out' invoked the strong feeling of being who she felt she should be, which overwhelmed the rational arguments about what in reality she should be doing. In this case, as in other cases, there is an absorbing emotionally charged narrative linking up personal dimensions of possibility about what might or could occur. Here the imagination takes off and chains together remote possibilities so strongly that the person begins to live the impossible and all its associated consequences as if it were real. Stories are, of course, excellent vehicles for feeding imaginative possibilities. In particular, they embrace both articulate and inarticulate consciousness. Imaginary narrative can take on a life of its own seemingly apart from us and affect mood to

capture 'presence'. Presence leads to absorption and immersion in a lived-in reality. We can end up in our narrative world at the same time as we are in the world.

As an example, it is very unusual for people with anxiety disorders, who imagine worst-case scenarios, to be able to pinpoint the essential elements in the process of arriving at the scenario. A person imagines driving his vehicle into the St. Lawrence River and the fear is so great he will not drive at all. But what sequence of events needs to occur for this accident to happen? He has to crash through a barrier, plough down a riverbank, drive across a beach and then get far enough out into the depths (at least 100 yards) for his vehicle to sink. But his image dwells entirely on the image of him drowning and the consequences of the accident, not on the plausibility of the events. In fact, we can say the real-life plausibility of the event does not even feature in the believability of the scenario. The imagined context is justified by narrative reference to other scenarios, unrelated, equally implausible and all chained together. He read of a similar accident in the local paper. He knows facts about heavy objects sinking quickly in water. He saw a film where everybody trapped in a car drowned. All those possibilities, marginal to his actual lived-in reality, when narrated together form a rolling critical mass, leading to the mostly likely, under the imagined circumstances, but logically impossible scenario of him drowning in his car.

Disorders of the imagination

Some psychiatric disorders can be seen as disorders of the imagination. Two disorders are discussed here: obsessive-compulsive disorder (OCD) and delusional disorder (DD). They are considered disorders of the imagination because sense of reality is defined largely by imagination with little overlap between perception and imagination. We have termed this process elsewhere 'inferential confusion', which is defined in terms of two key processes signifying that the person has completely crossed over from reality to the imagination: distrust of the senses and immersion in possibility. Inferential confusion is well established in OCD spectrum disorders, especially where there is overvalued ideation and, for example, in body dysmorphophobia.

Inferential confusion is well represented by the following sample items taken from the Inferential Confusion Questionnaire (Aardema *et al.*, 2005). 'I sometimes imagine what is there'. 'What could be is sometimes stronger than what is'. One way of illustrating this reliance on the imagination is to illustrate the overlap of the imagination with perception, as in Figure 3.2.

In our research on OCD we have established that OCD begins with a doubt (maybe the door is not locked) and this doubt spirals off into secondary consequences and appraisals. Formally, there seems firm evidence that people with OCD are more likely to infer on the basis of possibility than reality, and that this possible information can trump real information (Pélissier and O'Connor, 2002). Often a subjective narrative justifies the doubt by introducing possibility to trump sense of reality.

Example: perhaps the hot plates on my stove are still turned on because… 'I heard on the television that an apartment block caught fire and I guessed it was because the occupants had forgotten to shut off the cooker. Also I was a witness

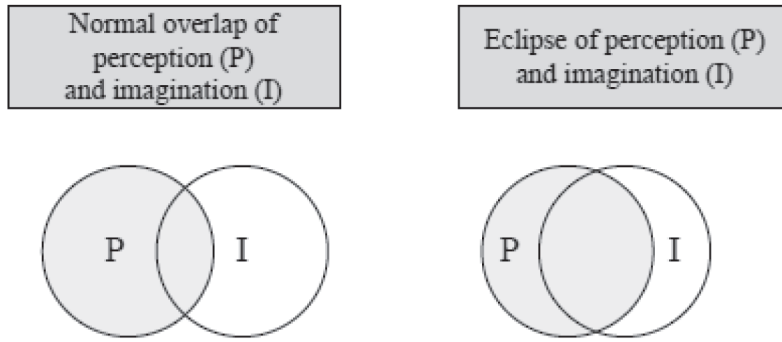


FIGURE 3.2 Perception and imagination in OCD.
Source: Adapted from O'Connor and Aardema (2003)

once to a stove catching fire when my mother-in-law was cooking a meal. So if the cooker caught fire I'm saying to myself that you can't leave a stove unwatched or it will catch fire. This is another proof that you need to be hypervigilant about turning off the stove after using it. Also, when I shut off the stove I have trouble being sure since the light indicating it is off is really tiny'.

So for the person with OCD there is a contradiction between sense of reality and doubting inference. 'My hands look perfectly clean but maybe my hands are really dirty'. The explanation lies in the narrative filling. Explanation for the discrepancy lies in investment in possibility in the narrative filling.

> *Sense information*: 'My hands look perfectly clean… but… maybe…'
>
> *Story (narrative filling)*: 'There were invisible germs on the pole I touched and the invisible germs might have jumped on to my skin because microbes exist and the microbes might be capable of burrowing into my skin'.
>
> *Obsessional doubt*: 'So maybe my hands are really contaminated even if I see nothing'.

Part of the therapy involves making the person aware that they are crossing over from reality to the imagination in creating doubt. Reasoning devices in the OCD narrative maintain the credibility of the doubt, but in entering into the doubt they are being taken further away from reality. The point can be supported by underlining how the person uses the senses normally in non-OCD situations. Alternative narratives can ground the person back into reality, where realistic criteria are emphasized. An exercise here to show the selectivity of doubt, and how imaginary doubts get real, is to create doubt in otherwise non-OCD situations, as in Figure 3.3. This increases awareness of the distinct imaginary processes used in OCD. To emphasize the selective nature of the OCD doubt exercise: make it obsessional! 'Maybe it is important that both my shoes be used equally because…', 'Maybe it's bad luck to go shopping on Tuesdays because…'

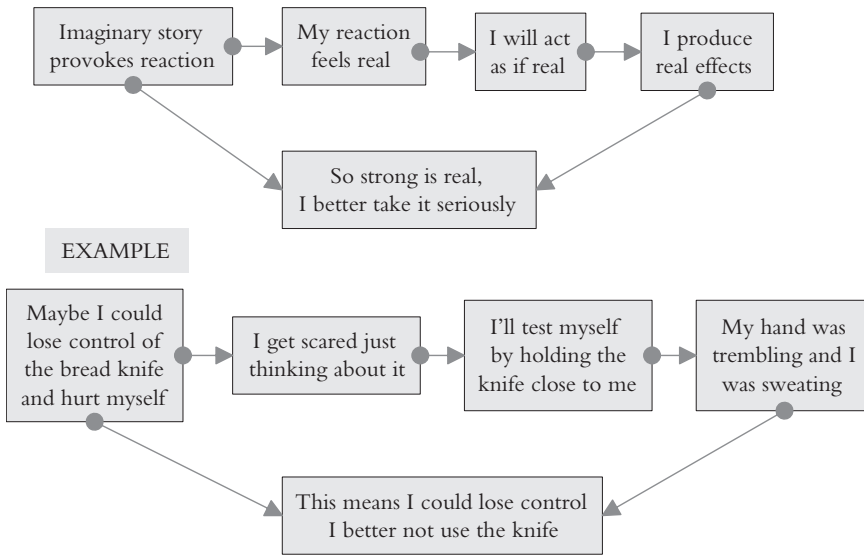


FIGURE 3.3 How imaginary thoughts get real

A key step in the treatment program involves distinguishing between real and imaginary doubt since real doubt is reality-based and relies on the senses, whereas imaginary doubt distrusts the senses and just spirals off into more doubt.

Time is devoted to catching the crossover point between reality and imagination, where the person leaves the world of the senses for the world of the imagination (O'Connor and Aardema, 2012).

People with DD also score high on inferential confusion (Aardema *et al.*, 2005). Inferential confusion in DD creates distrust of outside information and other people through the same two processes working in tandem, which lead the person with delusions from reality over to imagination.

In DD people believe they must rely on their imagination because they cannot trust others or reality, and their imagination has a special power. In both cases the problem is not perceptual distortion, and the solution is replacing an imaginary story with a grounded one.

The following is an example of a delusional story:

> *Sense information*: 'I'm feeling and acting normally… but… maybe…'
>
> *Imaginary story*: 'People can get inside you by letting their spirits out of their bodies. It says so in the Bible. The spirit takes the form of a vapour, which can escape through the nostrils. I saw it in an exorcist film. They get inside like that and take bits out of me, like they do used cars or rag dolls. I feel like a dumped wreck. That's what people do – go through it for spare parts. They get inside me when I'm empty'.

Delusional inference: 'So the people I saw today could be getting inside my body even if I don't know it'.

The following are some examples of somatic delusion imaginary narratives:

'I was in the hospital under observation and they gave me this pill to sleep but it ruined my skin. I'd always been proud of my skin. I had the best in the family and all the others were jealous, that's why they brought me to this hospital. I think they had a word with the doctor. I saw a film where they secretly killed a girl in a hospital like this to get her identity. Now my skin is ruined. I can't work and boyfriends aren't interested. But everybody is denying it, like it never happened, and they don't like me seeing specialists because they know I'll find out eventually and sue them. My skin is just not like it used to be'.

'I know I smell, I see everybody around me sniffing when I'm around. I sit on the metro and straight away people start sniffing or looking away. People don't say anything when you smell. I had an uncle who smelled, lived on his own and didn't look after himself, and when he visited my mother would say – don't say anything about uncle John, he can't help it. So we'd sit there as if he didn't smell but it was horrible. The human nose is very sensitive and you pick up even subconscious smells. I saw a program where they condition people like that. You can never know when you smell or not, and people won't tell you, so you have to pay attention'.

The point of inferential confusion is at the creation of 'ambiguity', which is the DD equivalent of OCD doubt. In other words, at the point where the person should be certain and trust their senses about what appears the person instead 'creates' ambiguity, which seems resolvable only by going into the imagination.

As in the case of OCD doubt, the person with DD will argue that the doubt/ambiguity is really out there, perhaps even part of the conspiracy, and will ask similar questions: How can I be sure? How can I know for certain? But, again, as in the OCD case, the ambiguity is created by a narrative justifying going beyond what is there and distrusting what appears to be there in itself.

Example: 'There are no coincidences, the dark forces out to get me can use powers like karma and ESP to manipulate events to scare me. So when I see three ambulances I know it's a sign for me to act. If I don't I'll be negligent of danger'.

Example: 'It's well known, spy agencies employ planes to track people and do surveillance. I mean, why would a plane fly right over my house otherwise? I'm not near an airport or anywhere on a flight path'.

The person then gets caught up in the anticipated consequences of what could happen if they don't act on the sign. As in OCD, this vividness of the anticipated consequences can become all absorbing emotionally and intellectually, with many embellishments. The structure of the DD narrative is similar to the OCD narrative in a rhetorical use of out-of-context facts, misassociations, apparently comparable events, etc. – all of them remote from the here and now. The point of entry into the imagination is the creation of ambiguity and this must be the focus of evaluation. The consequences of the fully blown delusion follow on directly from ambiguity. In fact, trying to change the conviction intellectually that the Mafia are conspiring

to get me is doomed to failure without addressing the background possibilities reflected in mood. As long as the doubt or ambiguity is accepted as plausible, the consequences follow and will not be changeable.

Separation of consequences from initial doubt may be more difficult in DD than in OCD because, when conviction is both high and relatively mono-symptomatic, there is much more correlation and overlap of content. For example, in OCD the doubt 'I could have left my light on' and the consequences 'My house could catch fire' are a logical sequence but the content is distinct. In DD the doubt 'The devil could get inside me' and the consequences 'Then I'd be possessed by the devil' refer to the same terms and are more closely related. Both terms also relate more directly to the self-theme 'I could be someone easy prey for the devil'. Similarly, in DD the primary ambiguity 'Things aren't what they seem to be with those three people' connects immediately with the paranoid consequence 'They must be spying on me for the mafia', which connects with the theme or construct 'People are out to get me'.

In DD the selective nature of the ambiguity and the content of the sign are dictated by an underlying theme or construct such as 'People are out to get me' and 'I'm the sort of person who could be targeted by malevolence'. Schema of how imagination can work in delusions are illustrated in Figures 3.4 and 3.5.

Evaluation and treatment of DD explores the attitude of distrust of reality except that distrust of senses is replaced by distrust of others and 'doubt' by 'ambiguity'.

In the first step the clinician acknowledges the conviction of the delusion and says s/he is not able to comment one way or the other. But, as a clinician, it may be helpful to look at the process by which the belief is maintained in each case, since this may help us to understand what is really going on. Reports of appearance and sensation are likely to include the possible and hence the imagined. This can be fairly easily identified on the basis of what is actually here and now. Again, slowing the client down to a descriptive seeing can help the separation between what is seen and imagined.

C: I see my workmates talking.
T: You see them talking?
C: And I know they are discussing me

In another example:

C: My wife erased telephone numbers.
T: You see the numbers erased?
C: So she must have a boyfriend.

This distinction becomes very important in discussing the imagination and allows the therapist not to confront content or validity of delusion directly but, rather, illustrate how the imaginary part can be traced back to inferential confusion.

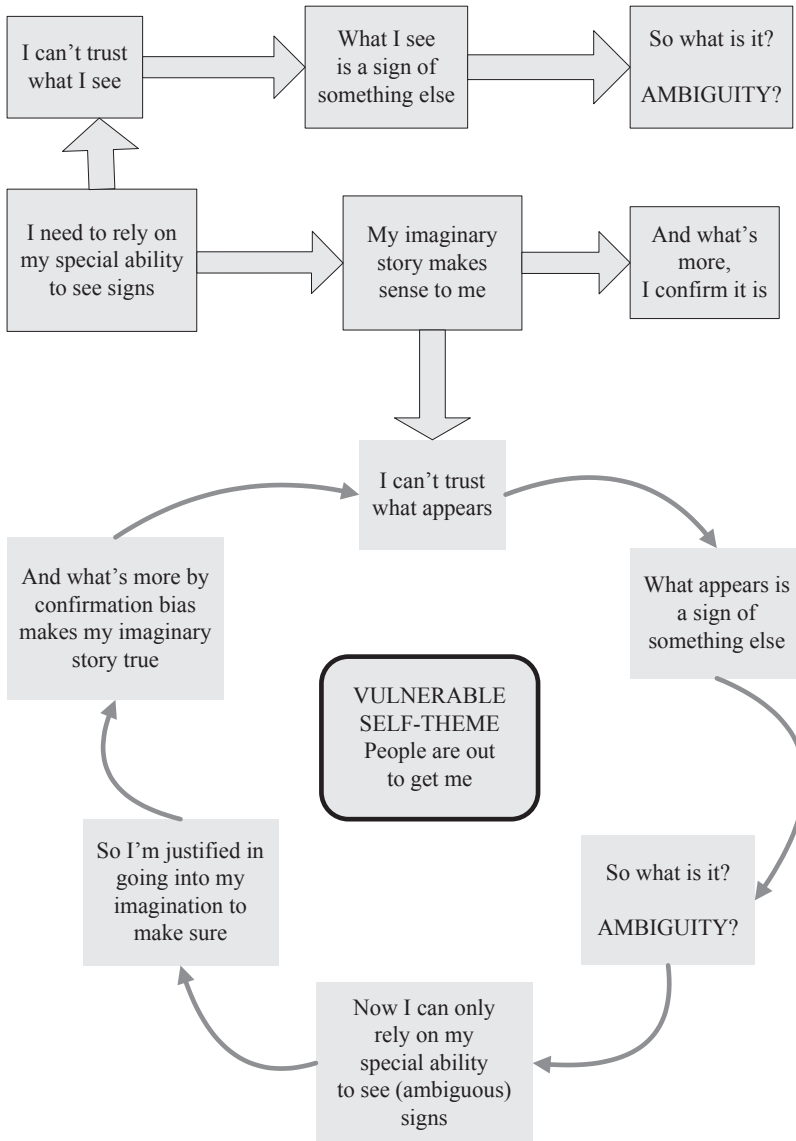


FIGURE 3.4 Imagination in delusions

So the clinician can trace back the inferential delusion to a process by which the person sees an object or a person or an event and refuses to accept that they see what they see, and instead creates an ambiguity requiring 'sign reading' and special powers of interpretation. A question, about what justifies this contradictory leap, should elicit the story. What is it about this person/object/event/situation that elicits ambiguity whilst other similar triggers are accepted as they appear? How are the triggers (elements) evaluated differently (constructs)? Kelly's personal constructs can help here.

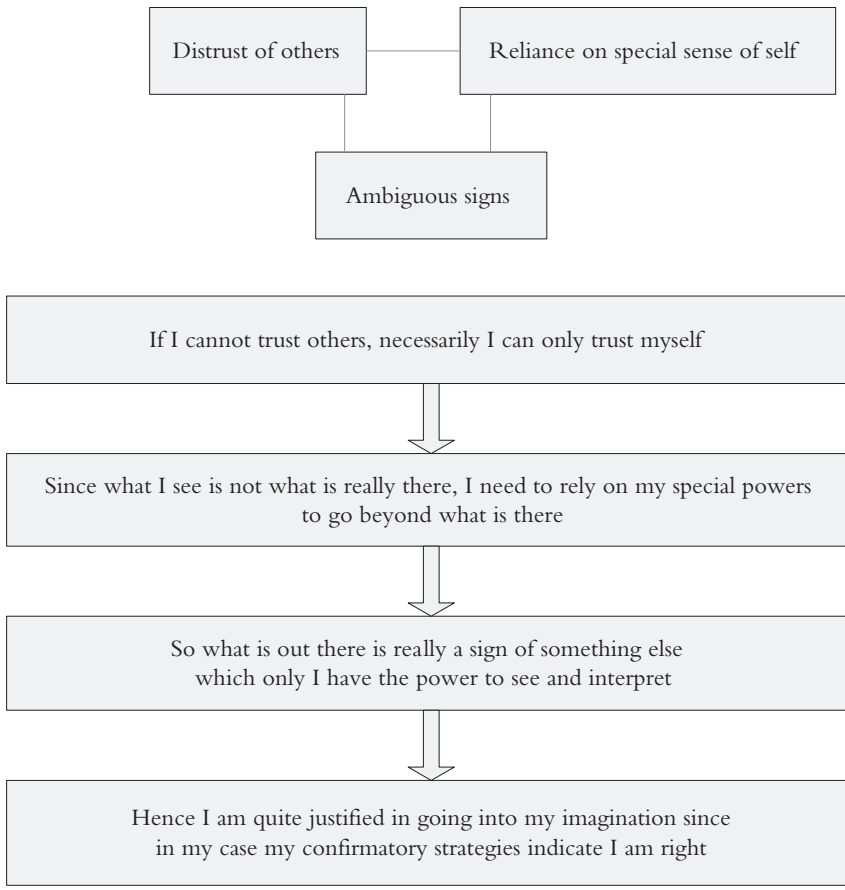


FIGURE 3.5 Delusional schema

The therapist can use Kelly's adapted grid to determine what makes a sign a sign by comparing how signs and non-signs are evaluated and drawing implicit/explicit constructs to determine in what dimension the client constructs their world. One can go further and establish cut-off criteria for a 'happening' becoming a sign. The criteria will be arbitrary and even state dependent. This variability needs to be clearly recognized and emphasized.

Also the selective nature of the evaluations can at this stage be linked back to a self-theme to emphasize their subjectivity.

Q: Why is seeing two workmates talking and looking in your direction a sign of conspiracy whilst two elderly people doing the same thing in the supermarket is not?

A: Because the latter is not likely to harm me?

Often in DD the self-theme may have some basis in early experience; but it does not represent the authentic self in the here and now. It may be worth beginning to reposition the person towards the authentic self at this point. Once the subjective nature of the story is established, the way the story creates ambiguity can be revealed by changing the story to a non-sign appreciation of what is going on. The non-sign story will lead to a non-paranoid inference. This exercise illustrates how the story creates the ambiguity. Changing the imaginary story resolves ambiguity.

The imaginary reasoning in the story can be pointed out, if necessary, by creating suspicion using the imagination in non-sign-seeing situations. Finally, the person rehearses reality sensing and not crossing the bridge into imaginary ambiguity.

This emphasis in therapy on inferential confusion avoids confronting the content of delusional belief and instead, by focusing on inferential confusion and imagination, pinpoints them as processes that can lead to the creation of ambiguity regardless of personal-belief types. A difficulty for the client in letting go of the 'special powers of interpretation' would be an investment in how this keeps them secure in a hostile world, and the idea that they will lose their specialness. So repositioning sense of self towards realistic, natural specialness, i.e. we're all unique, and away from illusory immature specialness, is important, as is identifying how the illusory inflated sense of specialness masks the fruitful exploitation of genuine talents. A limited case series of two participants treated with an inference-based approach is reported in Appendix 7.

Application of the imagination in clinical practice

The technique of free variation uses the imagination, where the client imagines aspects of their problem (see Giorgi, 1985). The therapist may ask the client to imagine hypothetical situations to explore family resemblances (similar episodes in the client's familiar repertoire) that are not available.

Free variation in the imagination is a form of thought experiment where one is creating possibilities that the client has not lived in order to clarify the distribution of likely experiences. For example, let's say we have identified the act context that is provoking a particular distress in interpersonal settings as containing the following components: more than two people, feeling exposed, needing to be authoritative, focusing on past failures, hesitating, anticipating being lost. We want to establish which components are essential to the experience. We ask the client to imagine four or five people. If s/he cannot recall an exact event we use imagination to conjure up a situation of four or five people. Ideally, they would be not faceless people and may be identifiable as relevant people for the group: friends, authorities or acquaintances.

The client can be slowly induced into the scene, leading up to the entry of the people and the location of the people. The client can then identify at what point and in reaction to what features s/he experiences distress. This distress is compared with actual distress in the problem situation and other imagined distressful situations. Obviously, we are hoping for a gradation of distress-distinguishing components. Once the scene is created and the person is immersed various aspects of the scene can be manipulated.

If the person cannot or will not imagine the situation, propositional thinking can be used, and the person can simply estimate level of distress on the basis of a proposition.

T: OK, so we're trying to establish variations of your disorder to be precise about what constitutes it. So when you see people looking at you, do you feel anxious?

C: Yes.

T: Suppose only a few are looking at you.

C: I'd still feel anxious because the others may still be tuned into me.

T: OK, supposing no one was paying attention.

C: You mean if they were all distracted?

T: No, I just mean if they weren't paying attention.

C: I can't imagine it, but if I knew they weren't looking I'd be apprehensive in case they turned back.

T: Just the presence of others makes you anxious.

C: I guess so.

T: If there was only one person?

C: No, I wouldn't feel so anxious. I guess I'd feel able to handle one on one.

A number of possible scenarios could be proposed or created with the person to refine their reaction to the type, number or content of the group.

Imagination can be used to construct the chaining of imaginary consequences. The person afraid they would collapse on the metro can be encouraged to imagine the consequences of collapsing. What would be a likely or an unlikely scenario to unfold? A similar use would be to fill in gaps that people feel lead to worst-case scenarios. Anxious people are very good at ending incomprehensibly at end-point scenarios, in which they are overpowered by imaginary events. For example, a woman imagines she is in a crowd, lost and abandoned and with no way out. But what were the intermediate steps? These can be filled in through imagination.

Another use is to imagine changing aspects of the scenario, perhaps posing alternative scenarios. 'OK, so imagine you were in control in the situation and could leave any time. How would you feel then?'; 'OK, so we've established that the crucial element in your panic is feeling you maybe abandoned. Imagine you were carrying out the same act but with a feeling of security'.

Subtle parts of the client's scene can be gradually modified in the imagination to help them adjust to behaving in a non-distressing environment. Ironically, imagined scenes can ground the person more firmly in sense of reality. Imagining all sorts of outlandish, distress-provoking events emphasizes that these could never happen. Such realization highlights to the client the sense of the real in this scenario, what is

really likely to happen and how s/he is really likely to respond. This sense of reality can readily be compared with what is clearly imaginary and can never happen.

In practice the imagination can create alternative possibilities to aid evaluation of a distribution of distress. It can fill in gaps to help the client realize they are often jumping over the improbability of events leading to a worst-case scenario. It can be used to modify features of an imagined scenario to understand the curative effects of modifying components. Conventional CBT often requires clients to use imagery and recognizes the power of imagery to create distress; but contextualizing the use of imagery inside a possibilistic model accords imagination a cardinal role in the construction of reality and systematizes its role.

The cognitive tendency has been to assume that in states of delusion or hallucination data gathering or perceptual processing is biased (e.g. Garety and Freeman, 1999), whereas, as we have seen, it may be an imaginary possibility, not perception, which maintains a deluded sense of reality. In this case what might be required is a therapy to change the parameters of the imagination. This therapy of the imagination would include operationalizing a possibility distribution and manipulating alternatives on the margins of consciousness in order to shift absorption into new credible alternatives.

4

DISSOCIATIVE STATES

Experiences of depersonalization/derealization

Detachment from reality may take various forms. It may consist of a mild everyday transition from reality, in daydreaming, in benign absorption in memories, a different time and place or an aesthetic adventure in a painting. It may occur when there is a disruption of time and space and the normal coordinates of living are constricted or transformed. It may take the form of abrupt detachment from the flow of living, where the person suddenly feels non-engaged and discordant and mechanical in their actions and thoughts, as though no longer alive and the world no longer lived-in. Frequently, this experience is triggered by abrupt discontinuities in the normal flow, which confront the person with two possible realities.

Holmes *et al*. (2005) have proposed two types of dissociation: detachment and compartmentalization. Detachment incorporates experiences where there is an altered state of consciousness characterized by separation of body or self, whereas the more severe compartmentalization includes dissociated immersion and somatoform dissociation.

One approach to understanding how sense of reality is constituted is to see what happens when it is not present. If we look at people who experience the loss of sense of reality, a condition also known as derealization or, when it involves the self, depersonalization (Fewtrell and O'Connor, 1994), we see that sense of reality is intricately wound up with two functions: sense of space and time and sense of identity. Losing one puts the other in question. In a study looking at appraisals of those suffering from derealization the key worries were fear of not regaining sense of reality and fear of losing self (Charbonneau and O'Connor, 1999). Triggers for derealization tend to be discontinuities in normal experience: a trauma, an accident or a sudden change in arousal, or even perceptual incoherencies in the world (seeing something out of place) or dysfunctional self-awareness. Sometimes disruptions

of the normal balance-orientation system linked to dizziness can lead to derealization experiences (Fewtrell and O'Connor, 1988).

Simeon and Abugel (2006) have pointed out several characteristics of depersonalization/derealization disorder (DPD/DRD). These include heightened self-awareness, self-consciousness, over-preoccupation with existence, the feelings of going through actions robotically and that life has no meaning faced with the infinity of the universe. Charbonneau and O'Connor (1999) note the importance of distinguishing primary experience from secondary appraisals such as 'I won't gain control' and 'I will depart from reality'. The range of experience can be estimated from the Fewtrell and the Cambridge dissociation questionnaires (Sierra and Berrios, 1996), which include answers like: 'I have the sensation of floating; my self-reflection is like someone else's'; 'Nothing seems totally concrete or real; I feel I am not part of the world'; 'I feel I don't exist'; 'Time has no meaning'; 'The movements of my body feel like someone else's'; 'My body feels it does not belong to me'; 'Surroundings seem remote and unreal'; 'I've loss my sense of taste, affection, touch'; 'I'm not sure if it's me touching an object'; 'Everything seems unfamiliar'. The feelings almost always in Western cultures are associated with negative effect, although both Simeon and Abugel report cases where exhilaration accompanied the experience.

A woman describes seeing familiar objects like the American flag as if for the first time. Other people feel like imposters, as though they are actors. They feel they have lost all normal feeling and are disconnected from the wider world. They lack a sense of grounding or gravity and may have no sense of self. Thoughts are weighed disproportionally and the condition is often linked to depression. People with DRD/DPD may feel they are taking up a distant position and that others are aware that they are not fully there. But, ironically, others generally do not notice unless the person themselves comments on their state. Furthermore, people are not in any way incapacitated and can respond and cope with situations efficiently.

Triggers for DRD/DPD can be spatio-temporal. A long-distance truck driver climbing out of the cabin he has been driving in for two to three days feels the sudden freeing of boundary constraints and experiences derealization. There is the well known break-off phenomenon in which pilots experience detachment at high altitudes. Clark and Graybiel (1957) reported that 35 per cent of aviators flying over 13,000 feet reported feelings of detachment, exhilaration, exalted power ('flying makes me feel like a tiger') and blissful reveries. However, a proportion indicated experiencing loneliness, anxiety, pseudo-hallucinations and derealization. But efforts to become involved in some operational aspects of flying, or even maintaining vigilance, alleviated the phenomenon (Sours, 1965). Sours reported that the sensation is pleasurable at first but, as one aviator reported, the experience results in feeling jumpy and alert, and he tried to reassure himself that 'everyone feels funny'. Particularly preceding the attacks, the aviators were keenly aware of isolation and a sense of 'being out of reach'. One of them compared the feelings to anxiety and isolation in a hostile relation with his wife. The more positive experiences were related to the presence of a range of psychiatric disorders, including anxiety

and personality disorders, although the author states that the explanation for the break-off phenomenon is an altered sensory environment, with reduced sensory input, and a perceptual-deprivation experience fostering degrees of wakefulness and awareness. Sours suggests, however, that reduced awareness may not be sufficient to cause the symptoms of sensory deprivation which can occur in alert consciousness. He proposes, rather, that it is an estrangement from the self, with strong affective and perceptual changes following on. There is a loss of ego boundaries, a relaxation of attention, diminished awareness of the environment, allowing fantasies, memory image and primitive body images, leading to a splitting into observing ego and lived ego. Such conflict fits well the situation described in one of Simeon and Abugel's (2006) clients, John, who realized that several of the situations triggering his DPD involved feeling powerless and being faced with a choice or confrontation (in other words, whenever conflicting needs or interests had to be reconciled). The grounding exercises here aimed to reconnect him with real abilities to cope and focus his visual awareness on one object. But, more normally, DRD/DPD is triggered by conflict, either between identities (role conflict), states (high/low arousal) or tasks (stress/strain) (Fewtrell and O'Connor, 1988).

DRD challenges, at least temporarily, taken-for-granted assumptions about sense of reality. The experience of DRD is largely visual, although there is evidence that sounds can produce DRD, but these may be associated with the salient imagery/memory. For example, in one of our cases the sound of chewing and crunching crispy food would produce DRD, but we eventually traced the experience to a childhood memory of a feared adult whose abuse was associated with these activities.

Sense of reality and non-reality: socially and individually constructed

Reality as we know it is essentially defined by a consensus (Rorty, 1979). We know reality through the attitude we adopt to it, and by a convincing discourse that builds up the real through use of culturally bound signs, not just through phenomenal experience. The cultural consensus on visible or undetectable reality can change over time (Feyerabend, 1988).

Although physicality and 'thereness' are part of the implicit criteria for recognizing reality, the feeling of 'realness' is built up by rhetoric and persuasion rather than through appeal to objective criteria (Edwards *et al.*, 1995). As Havel (1997) points out, clear indications between real and conceivable worlds are not self-evident.

The Perky effect originally showed the equivalent effect of perception and imagination on behaviour, and that one cannot imagine and perceive the same object at the same time (Perky, 1910). But people can easily slide off into dreamlike states without losing contact with reality, occupying both imaginary and real space at the same time. A man imagines clearly his mother's face in the window whilst aware he is physically grounded in a therapist's office. I imagine myself in London whilst driving to work in Montreal in the here and now. The person can function

whilst not completely in reality nor in the imagination but somewhere in between. The degree of this in-betweenness can clearly be modified by context. Deprived of clear evidence of reality, imagination comes to the rescue and there is an ability to shift between imagination and perception in the same stimulus context, without losing sense of reality, in order to function. In the case of ambiguity the potential symbiotic relation between perception and imagination is evident, since imagination enables me to draw on experiences from different times and places to try to 'fit' with present reality. Seeing a half-formed image in the dark, I consciously generate different shapes from my memory (Casey, 1970, 1976), going back and forth between perception and imagination both to imagine and see how they fit. On the other hand, when current reality is not in question the imagination can be evoked to conjure up experiences or objects that have never existed. As Casey (1976) points out, imagination can serve to enrich perception, and when we return to perception it is enhanced. Its use here is precisely that it is able to elicit powerful reactions to enhance the effect of a real physical context.

Imaginal disturbance often accompanies perceptual disturbance. In anxiety disorders imagined fears can lead directly to perceptual difficulties. Anticipation of threat can cloud vision and impair attention. Conversely, a perceptual shock can be followed by haunting, imaginary fears, as in post-traumatic stress disorder.

In other words, interacting with the imagination can be identical to interacting with the environment. I can adopt different intentional stances. Either I can be the spectator of an imagined scene and remain distant from it or I can be absorbed and engaged in the scene actively, manipulating the imaginary environment around me. As in real interaction, when I have skilled involvement in the imagination I may lose sense of ego in the flow of the engaging activity (Csikszentmihalyi, 1975).

Dizziness and depersonalization

DRD linked with vestibular disorientation fits with conflicting space-body-position experience. The people most likely to suffer distress from disorientation are those with a rigid and inflexible mode of perception about what should or not constitute reality or normality (O'Connor *et al.*, 1989).

There is evidence linking dizziness with personality traits of anxiety and neuroticism (Hallam and Stephens, 1985). But it is always difficult to distinguish secondary from primary anxiety in such cases, since fears and phobias can develop as a consequence of genuine as well as imagined physical vulnerability. Though emotional cues can, from a clinical point of view, exacerbate the experience of dizziness, there is no evidence tying onset exclusively to stress (Jakes, 1987). Also, emotional cues can precipitate onset of organic as well as psychogenic dizziness (Hinchcliffe, 1967). Dizziness is, however, reliably invoked by what might be termed 'conflict of cues'. This conflict may be multi-sensory and can include conflict between visual and vestibular systems and, sometimes, proprioceptive information (Brandt and Daroff, 1980). Psychogenic dizziness often has a strong cognitive component. The attack

may be precipitated by a conflict of expectations about the environment rather than an actual visual conflict. One client reported to us that an attack came on at the sight of anything she considered odd happening around her (McKenna and O'Connor, 1987). Often, an important constituent of the complaint is fear of interpersonal conflict. The thought of negative evaluations by others, or uncomfortable social situations, can act both as precursors to an attack and common preoccupations during an attack.

A distinguishing characteristic of psychogenic-dizziness clients may be that they are principally troubled by cognitive-perceptual conflict, whilst those whose dizziness results more directly from physiological problems may be primarily vulnerable to sensory conflict. The dizzy person often relies on visual cues to the exclusion of somaesthetic and proprioception.

O'Connor *et al.* (1988) found that people with psychogenic dizziness were more autonomous in their perceptual style and were better able to judge whether a line was vertical with reference to surrounding perceptual cues than a group with peripheral vestibular disease, which suggested the former may be more rigid in their perception. O'Connor *et al.* also reported a type of psychologically generated dizziness linked to inhibition rather than high arousal. They suggest such attacks may derive from responses to perceived conflict or ambivalence in the person's relationship to environmental cues. The person becomes unable to choose between competing signals, tenses, stops breathing and scans back and forth repeatedly, producing dizziness which phenomenologically resembles DRD (Fewtrell and O'Connor, 2014).

The dizzy person is confronted by the subjectivity of space. The spatial distortion is the relative shifts in the perceived dimensions of space, openness-closeness, nearness-farness, social and self-perception that form part of spatial perception – so a girl who suddenly feels out of place in a social gathering experiences disorientation.

As Merleau-Ponty (1962) indicates, there is an immediate equivalence between orientation of the visual field and awareness of one's own body as the potentiality of that field, so that any upheaval can appear indifferently, either as a change in the phenomenal object or as a localizing of sensory function. In the experience of dizziness, for example, the person may feel either that the world is turning 'in front of them' or that it is 'going round in their head', or they may feel that they themselves are disoriented (Fewtrell and O'Connor, 1988). This see-sawing between innerness and outerness in accounting for a disturbing experience is reflected in the discourse of those with dizziness (Yardley, 1996; Yardley and Beech, 1998).

Desomatization

Desomatization is the feeling that the body or parts of the body do not belong together or the person has no ownership of them. It is induced by the same reflective and observer stance as DRD. One extreme variant of desomatization are out-of-body states. In out-of-body experiences (OBEs) a person leaves their body, often travelling through space and looking down at themselves. The person

is often able to displace themselves by intent and pass through space and time. Aardema (2012) explicitly adopts a possibilistic model of perception and locates OBEs within: (1) impoverished sensory input; (2) construction of an imaginary possibilistic environment; (3) living in reality and possibility simultaneously; (4) recognizing somatosensory and visual illusions.

After detailing a number of examples of OBEs and how people seem to enter a parallel consciousness, Aardema (2012) notes a degree of scepticism is warranted as to the actual occurrence of such experiences. Regardless of the reality attributed, the person experiencing OBE is carrying out all of these operations in a project from an experiential point of view. In a sense, OBE represents an extreme example of absorption in multiple worlds and bodies (though not selves), where simply willing and intending can transport the body through environments. As Aardema notes, an attitude is required to transition that often involves living in metaphors (e.g. through tunnels, magic doorways, astral planes), the need to visualize modes of transportation and maintain attention and goal in order to travel.

Meta-cognition and DRD/DPD

A shift into DRD/DPD always represents a defensive option and indicates a positioning of self regarding engagement in reality. In some sense, removing the self from reality can be used to secure the self-world relation and safeguard sense of self over sense of reality. For example, a client begins to experience derealization after a period of intense self-questioning. She asks: 'Do I appear strange?'; 'Are people looking at me?'; 'Am I talking properly?'. She feels the intense need to continuously observe and monitor herself. Ironically, it is this hyperfocus on reality that is inducing derealization. She begins to see herself as acting strangely and oddly, and acts 'as if' she is divorced from her body. Conversely, imagining that she is in reality and acting normally with her friends reduces the derealizing experience. So imagination can help reduce a sense of unreality by bringing the experience within the bounds of the conceivable. It does so either because the real is not perceptually available, or needs elaborating on, or the inconceivable needs to be established as a counterpoint to reality.

However, there is debate over whether meta-awareness is beneficial or detrimental to functioning (Wells, 2000). For example, focusing on my appearance, my speech and my mannerisms would increase self-awareness, but the manner of this awareness would be premised on the way my project constructed future possibilities in line with this awareness. I cannot be self-aware in a void but only in the presence of a self-awareness project. There are many forms of self-awareness, and whether any of them are beneficial depends on the intentional motivation behind the particular self-awareness project. Rather in the way that overuse of reality-based grounding may produce the opposite effect of inducing staring at (rather than connecting with) reality, so a project of meta-cognition could end up critically creating doubt or reinforcing positive reflection.

Meta-cognitive absorption in different realities

As discussed in Chapter 3, sense of reality at any moment for any project is defined by the maximum possibility distribution. According to the maximum possibility distribution, a sense of reality can exist for something totally unrelated to information coming through the senses because an imminent attribute could have a possibility value even though it is not real.

I could be holding my hat and gloves in my hand but feel a strong sense that I have left them behind in a café. Entertaining two competing possible worlds at the same time is entirely possible and even in some situations desirable. The problem is the degree of absorption in both possible worlds. Although there are several possible worlds, there is only one pre-cognitive reality for any given project. But the same reality can spawn distinct and contrasting possibility distributions. Absorption in this case is not a question of perceptual fit but of how my project, by my intentional self-world relation, maintains a remotely possible world in preference to a more possible world with better perceptual fit. Although from one position we can be conscious of the imaginary part of a possibility and consciously know that we are living 'as if' or seeing 'as if' something is there, in a more absorbed position the metaphorical stance may be forgotten and we become confused as to the reality value of the imaginal possibilities.

Part of knowing I am in the here and now in my current environment is a knowledge of how I got here, what is beyond here, what is inside, outside and what is me/not me. Without all these bearings I would not feel comfortably here. By and large I can give a credible account of myself and my surroundings, how I arrived, my intentions, how I intend to carry out my projects and what at least some of the consequences of my acting in the current environment would be. It is when this narrative about my immediate environment is temporarily supplemented with a more remote but convincing one that we see other realities.

Illusions and reality

We act 'as if' illusions were real, even though we may know differently, because to question the reality of an illusion puts in question our normal way of arriving at the real, and so it becomes normal to accept two competing narratives with a meta-cognitive overrider that our sense of reality has been tricked.

In the case of virtual reality (VR) immersion in the virtual depends on the active engagement of the person. Presence in VR relies on immersion in a scene rather than good resolution of the stimulus quality, and it is aided by a state of dissociation (Aardema *et al.*, 2006). Aardema *et al.* (2010) linked immersion and presence in VR with depersonalization/derealization. They reported that immersive tendencies, as measured by an immersive-tendencies questionnaire about involvement in and ability to ignore external distractions, were significantly related to change in symptoms of depersonalization. Those with higher pre-existing levels of dissociative symptoms appeared more vulnerable to increases in depersonalization following VR. The greater the increase in symptoms of depersonalization, the greater the

decrease in one's sense of presence in objective reality. Depersonalization is also related to absorption in imaginary possibilities. The feeling of presence in VR may compromise the connection with objective reality.

Illusions can be created by absorption in possibilities through immersion of the person and a narrowing down of possibilities through taken-for-granted statements, which lead on to maximum possibility regardless of intellectual absurdity. Physicality is not noticed in the construction of reality and is often actively ignored. The present author is an amateur magician and also trained in mime and was taken with how people will not notice obvious physical moves because their attention is redirected by the magician's project. The debutant magician has to be convinced that nobody really saw deception (Cameron, 2013).

Social, ecological and geographic sense of reality

Sense of reality, then, comes not just with reality but with an ecologically human reality. We live always in a 'moody' world, be it benign or hostile, where people and objects are positioned to us as we are to them, and may be variously out to get us or helping us along in a humanized way. As an example, it is easy in poetry as in life for physical objects to become anthropomorphized, seen as characters, frowning, avoiding, disapproving and relating to us. Doorknobs, light switches and chairs, can have 'attitude'. Noble (1986) proposes that the audible and visual world augment our self-identities by communicating human aspects of the environment. The lived-in world is intimate, containing numerous dynamic sounds, indicating my presence, the rub of my sleeve, the scratch of my pen. I perceive myself as part of the environment by virtue of personalized visual and audible horizons. This atmosphere tones our world, colours all around us and is the stuff of being us, and our self-persona is showing how objects appear and disappear, and how these appearances disrupt ourselves. Merleau-Ponty (1962) has described well how we never, for example, lean on an object only physically but with an attitude and in a certain personal way, and this human ecology determines the nature and impact of an object's physicality.

Absorption is defined as the 'full commitment of available, motoric, imaginative and ideational resources to a unified representation of the attentional object' (Tellegen and Atkinson, 1974: 274). Ironically, absorption correlates with fantasy proneness. Individuals prone to fantasy can spend much of their waking life engaged in active vivid fantasy. Depersonalized individuals score higher on fantasy process and poor attentional control, and are more affected by competing internalized cognitions (Levin *et al.*, 2004). People can become absorbed in art, in crosswords, in sunset and nature. Part of the experience of DRD can be transcendental, such as a sublimation of the self into an art object of observation or attention.

Treatment of DRD/DPD

Treating DRD seems a question of re-establishing boundaries, either of self, the body or of activity, overcoming perceptions of incoherence amongst groups of

people, objects and task demands. For example, resolving exposed discrepancies about the self and environmental cues can reduce DRD.

Grounding as a treatment is very idiosyncratic and may mean getting more in touch with internal and external reality. It may be looking intently at an object or even the self in the mirror, saying 'this is me'. Use of non-visual modalities can help wilful immersion in the senses, or touching the body, squeezing an earlobe, closing the eye and intently listening to music. Simeon and Abugel (2006) and Baker *et al.* (2007) note that several strategies of grounding (such as looking at the self) can produce elements of DRD. Depersonalization can occur in high- or low-arousal states and the experiences may be more related to change in arousal than absolute state. Clearly, if DRD occurs when the person is calm further calming strategies such as relaxation may not be helpful. Goal-directed activation may be the strategy of choice.

A case of derealization in OCD

The following case of OCD from O'Connor and Aardema (2012) illustrates the development and maintenance of a derealized state through aberrant self-awareness. S. has suffered chronic derealization for most of her life. She also suffers from health anxiety verging on hypochondriasis and reports, interestingly, that the derealization is actually better when she is fixated on a somatic problem. She is persistently aware of being detached from her body and has the sensation that she observes her actions and words as if going through the motions and never feels that they come from her, or that she is fully participating in her everyday world. As a consequence, she is consistently afraid that she makes errors, appears strange, is missing out on reality. Her solution is to adopt a self-sabotaging project to consistently monitor her state and make sure she is OK. She constantly checks her condition and seeks reassurance from others that she sounds and looks OK. She fears on and off that she has a brain disease that is getting worse. She has developed a series of behaviours that exacerbate the detached feeling. For example, she is constantly staring at reality to 'bring herself closer to it', shaking her head to 'clear it', paying careful attention to her movements and speech which has the effect of slowing both. Her behavioural strategies effectively reinforce the idea that her actions and the world are wrong and strange by intercepting her normal flow. This self-sabotage in turn reinforces the need for her to continue to monitor herself because, although it hasn't happened yet, maybe this time she really will lose it and go mad and out of control. She has become skilled in viewing herself as if another person, and frequently says she is on the shoulder of the other and she speaks to them.

The development of the lived-in possibility of 'losing it' could be traced to childhood, to the instruction to always be on her best behaviour when in front of relatives, and the idea that she might not be able to do this, despite no proof to the contrary. Over the years, this marginal idea of lack of control acquired a more central role whilst the realistic probability of her functioning well became remote. So her behavioural projects continued to reflect an intentional project of being 'about

to lose it'. Such a project was self-reinforcing and restrained her inside its possibility. Ironically, the only time she was able to move outside of her experience was when she immersed herself in a non-self-centred project (e.g. selling and buying on her computer). Encouraging the adoption of a distinct absorbing project, antagonistic to the self-monitoring, induced a therapeutic shift in self-consciousness. So far the focus has been on common elements in DRD/DPD, but DPD raises critical questions about the nature of the self and self-experience.

Self-experience and depersonalization

One of the most frequent criticisms of relying on cognitive self-report is that, contra Descartes, commentary on the self is not a privileged access close to the source, infallible and omniscient, but is itself a project and a behaviour. Hence my project of self-perception depends on the context of this behaviour and thus may be driven by diverse motives (Wilson and Dunn, 2003).

So, for example, filling in a questionnaire about self-attributes may be set against a project of 'appearing to be normal'. Whereas another project, a few minutes later, of explaining how a mistake occurred might direct the focus to abnormal traits in order to fit with a further project of 'excusing the self'. Such different projects, involving different contexts of self-awareness, could easily produce contradictory statements about self. But, for the person, these are not necessarily competing or incoherent views of self. Somebody could see themselves as careful, but also somebody prone to errors, and the person may be able to experience simultaneously both a self that is careful and a self that is careless. A person could happily own up to an action at one moment in the context of performing it, but disown it a few minutes later when the project changes to acting differently in a new context and the person says of the previous act that 'it's not like me at all'. It could be argued that such anomalous questioning of the self points to the constructed and non-unitary nature of self (Hallam, 2009). As Hallam points out, it is possible to think of virtual selves in both real and imaginary worlds.

A person might ascribe an attribute to himself or herself in one context and not in another (Wilson, 1990). A person may consider themselves sociable but then identify situations in which s/he is not sociable. This interaction between the situation and the person forms the core of research into individual differences. It is often the situations in which individuals act out of character that define their personal traits (Hampson, 1992).

Our view of ourselves has been shown to be very elastic and irregular. Wilson (1990) conducted a number of experiments to measure the effects of persuasion on ways of viewing the self. In one experiment he asked participants to repeat a series of random statements supposedly defining themselves (e.g. 'I am an honest person'). The more the person reflected on the statement, the more likely he or she was to find some truth in it. Wilson also found that the behaviour of the experimenter (e.g. expressing prejudice about people) could alter self-concepts.

A recurrent phenomena found particularly in OCD is that people with, to all intents, solid self-knowledge and sense of self nonetheless maintain thoughts and images which suggest they could be not only other than they are but the opposite of their authentic selves; and, further, that they fear they could act in complete contradiction to their moral code (Aardema and O'Connor, 2007; Aardema *et al.*, 2013). How could such people maintain these fears in the face of their own self-knowledge and in the absence of any proof of the likelihood of this anti-self behaviour occurring, especially as such a self is the complete opposite of their actual consciously constructed identity, recognized by them and others? The answer lies, according to the possibilistic model, in a dialectic between 'self as is' and 'self as could be' (Aardema and O'Connor, 2007).

The case of John is typical. He can suddenly become convinced he has molested a child despite no supporting evidence. He doubts whether he may have attacked the child and then forgot it. He finds stains he can't explain on his trousers. His mind is full of all sorts of ways he could aggress children. Yet John realized these thoughts are often triggered by comments he feels are rejecting and get him thinking about how he could be a bad person, which then makes him think of the worst he could do. But even though he realizes the vicious spiral and knows he will never aggress, he is unable to break out from the pull of a fake self.

Problems arise when there is a complete disconnection between the person and the obsession in typical obsessive self-statements such as 'I might be a psychopath', 'I could suffocate my child' and 'I might be a pedophile'. In these cases the person in reality has no history of aberrant behaviour. A story of self, derived from marginal probabilities, traps the person in a self-consciousness completely in discordance with the person's taken-for-granted self.

Contradictions in self-awareness are particularly important in clinical work since cognitive therapy often begins with psycho-education techniques designed to enhance or widen awareness. Such awareness, outside of a therapeutic context, can often worsen distress and exacerbate anxiety since the person's project easily becomes one of judging, and feeling sad about the problem (what are termed secondary appraisals (Clark, 2004)). In a therapeutic context the project of awareness should be constructed as a project on the way to dealing with the problem, not part of judging it.

Indeed, the notion that our self-consciousness is likely to be driven by distinct projects regarding self-world relations explains, for example, how acts of self-awareness and self-monitoring may produce contradictory effects and experiences. In other words, a project of self-monitoring may take place against a background self-world project that the person requires such monitoring and which, as a result, induces a detachment experience as part of the project.

Observing the observer

In an experiment by Henrik Ehrsson (2007) participants viewed themselves through a camera located behind them that transmitted the image to VR goggles.

Consequently, participants felt they were located behind their physical body, as if the body belonged to someone else.

One key finding underlying the meta-cognitive origin of DPD is that self-observation induces DPD. Ultimately, in such situations the person is obliged to step outside themselves and adopt an observer stance. Indeed, that such distancing produces depersonalization has been established experimentally by Ehrsson (2007). The perennial problem with the study of self is that I am permanently *in* my experience, which in turn is always looking *out* at the world. So if I study my thoughts this is also a project with its own horizons and figure-ground configuration requiring a background structure to enact it and to direct cognition. I might decide to scan a variety of what are consensually agreed on as internal processes: memories, feelings and desires. But all my introspections will only make sense to me in the context of my personal project of 'looking inwards' or 'finding out who I really am' or however I define it. This project will, like every other project, define me in a certain self-world relation which entails a dialectic between an articulate and an inarticulate being, and necessarily contains a conscious and non-conscious part; but, like any other project, it gives no privileged access to this non-conscious consciousness.

In other words, my looking-inward project will reveal information coherent with the self-world positioning which made the project possible. It will yield partial information about my self and the world relative to my background project in the same way as any other project, whether this be 'banging a nail in a wall', 'watching the waves roll in' or 'waiting for Godot'. Ironically, the more intense my focus, the narrower my cognitive attention, hence the less aware I am to my background self-world positioning, which makes the cognitive focus possible. The only way I can glimpse a flavour of my background stance is through world-reflection rather than self-reflection, since my presence or position cannot be observed by me directly as I'm in it whilst observing. My positioning can be observed only indirectly in the way the world appears and is revealed to me. The inarticulate part of my background presence can only be glimpsed through its reflection from my being in the world, not by any direct scrutiny. So the appearance of detachment reflects a project, a project of self-scrutiny, which may end up distancing the person even more from a sense of self.

Obviously, as in other psychological disturbances, secondary appraisals of the experience ('I'm going crazy') can exacerbate distress, but the lack of ability to tolerate shifts to alternative forms of reality organization can make the person react 'as if' reality has disappeared (perhaps forever). In other words, when the client drops the attitude of dysfunctional self-focus and focuses awareness on external detail then acting 'as if' the self is distanced from reality is counteracted by acting 'as if' it is immersed in reality. Both 'as ifs' are meta-cognitive exercises which may draw on the imagination, so, paradoxically, imagining specific interactions with reality can help the person engage in perceived reality and lose the abnormal sense of self-awareness.

Self-conscious emotions

As Darwin noted, 'thinking about others thinking of us excites a blush' (1965/1872: 325). Self-conscious emotions require cognitive evaluations and attribution, but although a minimal cognitive content in the form of a propositional attitude is a constituent for cognitively enriched emotions, Zinck (2008) argues that innate non-representational self-conscious emotions can exist. But in order to experience a self-conscious emotion an individual must focus on public and private self-representations, appraise the event with identity and internal attribution. The focus of attention is 'I' reflecting on a stable self-representation of 'me' (Tracy and Robins, 2004). Self-conscious emotions are accompanied by action tendencies. An embarrassed person alternatively looks at people and looks away, often with a subdued smile. A shameful person adopts the posture of someone wishing to hide or disappear.

Social constructionism and the self

Social constructionists (SCs) of a linguistic-pragmatist persuasion view the self as embedded in social relations, language use and, particularly, in the performative function of speech (Austin, 1962). Self is said to be constructed when people refer to themselves, speak about each other's selves and respect each other's right to express themselves.

As Wetherell and Maybin (1996) state: 'The person, consciousness, mind and self are seen as social through and through'. According to Edwards *et al.* (1995), there is 'no reality beyond constructive description' (32) or, as they say a little later, 'It all has to be represented and interpreted' (33).

Harré (1998) draws upon Wittgenstein's (1953) private-language argument that we learn to express pain through others' recognition, and extends it by viewing the expression of self as closely analogous to the expression of bodily feeling. His argument rests upon the assumption that there exists an 'ethological repertoire of natural expression' (48). Just as 'pain' might be understood as a synthetic unity between expressing a feeling (e.g. feeling pain) and knowing how to use a public language game for normatively expressing that feeling linguistically, so a 'sense of self' can be conceptualized as a synthetic unity between a person's 'expressions' and the normative use of personal pronouns.

Harré (1998) attempts to encompass reflexive aspects of self within his concepts of Self2 and Self3 (referring to awareness of other selves). Put differently, persons 'know' how they position themselves, position others and are positioned by others as selves. A person achieves selfhood through knowing, and skilfully enacting, what is normatively expected. The person as knower is, however, reified as a biosocial entity, positional and irreducible (Harré, 1992; Parlee, 1998).

In any event, the singularly embodied person is a knower in some sense, but perhaps in a different sense from the abstract knowing self which is reflexively posited by the person to account for the fact that phenomena are knowable and present themselves as known objects. This knowing self is socially constructed in the course

of action, in which a normatively delimited set of skills are deployed. Accordingly, when these skills are deployed in a non-normative manner persons may have 'not-self' experiences and express 'pathologies' of self (Harré, 1997). Nevertheless, these not-self experiences are also the expressions of a being that knows.

In other words, if I look at the world I am at the same time conscious that 'I' am doing the looking. The fact that I choose to see the world as impersonal and beyond me is only because a personal positioned view is always an option for me, and a ground against which the world is seen as impersonal. Conversely, if I reflect exclusively on 'myself' as a personal realm this shift of focus (and essentially in phenomenological terms it is simply a shift in focus) is against the background of an impersonal world beyond 'me'. My ability to reflect on my own consciousness of an object, as itself an object, is not some higher faculty involving a meta-organization of perception; nor is it, as Nagel (1970) has suggested, a proof of the Cartesian split between subjective experience and the world of material objects. This ability is an implicit part of a perception formed by the process of perceiving. I could not perceive an object as an object without this being predicated by a person viewing the object. Every perception (and in Husserlian terms the way of perceiving and perception are synonymous) implies an object to be seen and a subject to see it. The appearance of any percept, its spatial distance, its finite horizon, its thematic unity, implies a reference point for its being perceived. I may think that in reflecting on my reflection I have attained a higher, more subjective state of consciousness. But I have simply redirected my perception. I am still a person surrounded by objects, even if I see myself as one of the objects. Equally, one might not want to deny that this change of focus has very important intellectual consequences.

Self-appearance and concealment

Heidegger (1987) talks of the opposition between self-manifestation and concealment; what is concealed is hidden, not as deception necessarily, but as emerging not-yet-being. For Heidegger, the two categories of appearance and concealment are brought into conflict to create being as we know it in the world. Heidegger's point is that for something to appear, something must necessarily be hidden, and that what has not appeared is part of what does appear. The nature and quality of my apprehension of what has appeared contains within it an understanding that there is an aspect not yet revealed or in some way concealed, and that it is concealed in a certain manner.

An important aspect of 'reality' is how the dialectical interplay between what is there and what is not there, or between appearance and concealment, determines how the self is apprehended – what I should be, what I might be, at this moment, which gives the self its qualities. Heidegger (1987) noted that the early Greeks did not have a word for space or distance – that this was understood to be given in the sense of 'thereness'. So my current sense of self may be relative to what I consider is certainly not my self and what my self could or could not become. In other words, self as a tangible entity may be illusory and vary with my projects.

The self as illusion

The knowable world is one that has reliable coordinates locating its aspects in knowable form. Amongst such spatial and temporal coordinates the self emerges as a point of reference. The self emerges in everyday life in a way similar to that in which an illusion emerges in a conjuring trick. Such illusions essentially come into being on the basis of preceding conditions that lead up to their emergence. They are not seen but, necessarily, have the immediacy of reality. Similarly, ways of knowing the world bring forth immanent space-time coordinates which structure a world of knowledge and set up the illusion of self as an unseeable, but sensed-as-real, reference point. The power of the self rests exactly on it being an illusion.

The self as an illusory reference point could make feasible knowing the world as we do. The project of 'knowing' experience brings a subject-object division into view – and the 'self' as a pre-existing entity – to substantiate the 'reality' of such a subject-object division. The exact nature of this 'real' self, as discussed earlier, is never fully decided since it need only be revealed as an about-to-be self. The self is determined by the project through which it is sought out, hence it is never determined completely but is always imminent, or about-to-be, and it is exactly this 'becoming-ness' or 'about-to-be-ness' that defines the sense of self as an illusion.

Constructionist account of abnormal self experiences

If the self is an illusion conjured up by a particular way of knowing the world then abnormal self experiences or the distortion of time and space and self could be seen as depending on ways of knowing rather than representing the loss of a core self. We would also predict that boundaries of the self and other self-attributes would be flexible and changeable across ways of being-in-the-world. In other words, each change in the way that the world is known would bring a change in the way the self is experienced, hence variation in the experience of self should be the norm, not the exception. This insight, if valid, has profound clinical implications for 'normalizing' certain disturbing self-world distortions. Indeed, as Heidegger (1981/1998) has pointed out, in most everyday occupations, where we are immersed in the world, the issue of self does not occupy us. We are not seeking to know but to live, and we forget to reflect on who we are. Of course, when we again reflect upon our self we begin once more to seek a world where a sense of self is obligatory.

We would also expect distortions of self to be accompanied by abnormal experiences of both time and space, modifying the habitual way of knowing 'thereness' and 'about-to-be-ness'. Subjective distortions of space take place for a variety of reasons. Distortion may be produced neurologically, socially or psychologically, and results in the person becoming aware of the 'subjectivity' of their space. The dimensions of space itself begin to distort, shrink or change, and the experience is common when a person is drunk, coming back from holiday or feeling 'as if' pushed out of a social space (Fewtrell and O'Connor, 1994).

In the case of self this concealment takes the form of what is about-to-be. The illusory self is the self that is always about to come into existence, or should come into existence, and this imminence is then taken 'as if' it is in existence. We do not act 'as if' the self were complete. Whenever we dwell on self it is always immediately given to us as partly concealed in order for it to be there at all. The self as immanent reality is illusion. The power of this illusion is that this about-to-be-ness exerts a more powerful 'presence' than something *that is* there. What is 'there' only achieves significance in the context of what it is about to become, rather than what it is.

Clinical implications

The first clinical implication is to normalize change in self-awareness and even to encourage the person to explore and develop knowledge of how their boundaries contract and expand. Distorted self-conscious feelings are largely generated by ways in which we try to know ourselves. There are many different ways in which we may try to know ourselves: as people, as deviants, as citizens, as competents, as fools, as error bound. Hence an abnormal sense of self is traceable to the project the person has to know themselves, and the positioning and appraisals that produce the particular self-conscious emotion (shame, embarrassment).

The clinical message here is simply that when people enter states of absorption in unreality they may not be suffering from distortions of reality but from over-reliance on meta-cognition. In this case the top-down approach of attempting perceptual fit through reality testing or information seeking is inappropriate. As an example, people with obsessional contamination fears are frequently convinced of the existence of unseen dirt, despite the presence of an intact and accurate perceptual system that sees no dirt. Further exploration reveals absorption in a possibility of what might be there or a dirty self that could exist. The therapeutic approach proposed here is, paradoxically, to work on constructing alternative imaginary scenarios in an attempt to dislodge the maximum possibility from the bottom (i.e. margins) upwards (O'Connor and Robillard, 1999). Imagining what clearly cannot be real and exploring this absurdity in the imagination can ground a client in sense of reality. A cognitive focus on improving reality testing alone may not be helpful, if reality is not the problem.

Dissociative states may be defined as any lapse where the person leaves reality or experiences distorted reality – a change in sense of reality's boundaries. In the extreme case they may leave their body completely and desomatization fits into the mould. A person may feel parts of the body do not belong to them.

Where the spatial distortion is not neurological, usually the stance is an observer stance, which may be supplemented by a study stance, a reflective stance, a problem-solving stance and an enquiring stance. It should be emphasized here that in our discussion of DRD/DPD in this chapter we do not include the various delusional misidentification syndromes such as exchange double, MacCallum delusion,

self-substitution, metamorphosis delusion or clonal pluralization of the self. These disorders fall under delusional convictions (see Chapter 3).

The antidote for DRD/DPD is grounding or 'realization', where the person focuses on a telic interaction with the world, aligning ecological absorption with a unitary intentional activity, and is positioned, aligned and integrated with the continual flow of reality, without adopting a disruptive, reflexive or discontinuous viewpoint. That DRD/DPD is largely meta-cognitive in origin places it against many experiences that originate in non-reflective experience. Although mood can elicit questioning, DRD/DPD largely requires a reflective consciousness to occur – a good case of when too much thinking can be bad. The clinical implications are first and foremost to normalize DRD experiences and introduce awareness exercises to allow people to realize the everyday frequency of mild DRD; to introduce exercises to diminish probable sources of discontinuities, abrupt shifts in arousal, or time and space contortions; in particular, to experiment with different types of sub-observation and detail how positions of eliciting detached observation induce the experience and how non-reflective engagement reduces it.

Most DRDs involve momentary transcendences, leaving the present for brief moments of time. The experiences are not necessarily negative and may involve daydreaming or fantasy. Table 4.1 lists common potential mild dissociative states. This general back and forth is easy when there is, generally, no conflict between constructions and the transition is eased; but when a conflict arises between assumed sense of reality the person may become aware of what previously was taken-for-granted transition.

The recommended CBT therapy for derealization is grounding the person in realization (Simeon and Abugel, 2006; Baker et al., 2007). According to the possibilistic model, awareness of transcendent images of alternative realities may also help. Imagining a world that does not exist may help the person with DRD/DPD, strengthen perception of one that does and ground them in sense of reality. The self-detached form of DRD/DPD, more properly termed depersonalization, is when intense self-observation – the attitude of looking at the self as if from the perspective of the other – induces loss of ownership of self and body.

TABLE 4.1 Potential mild dissociative states

Immersion in a photo or a painting
Immersion in the television–cinema–VR
Immersion in a daydream
Immersion in fantasy
Immersion in a distant event
Imagining action at some distance
Immersion in an imaginary scenario
Immersion in illusion

Frequently, mood may be a distal influence affecting the more proximal distortions of self. This mood is inarticulate and can be generated by a marginal non-cognitive sense of 'incompleteness' or an emergent sense of self that is somehow imminent and menacing but concealed from view. Since self is an illusion it exists in the present only as a socially constructed point of reference. However, as with all illusions, it is what this self could become, and who we could be, which largely dictates our sense of self. We may see a future self congruent with our authentic attributes, but we may also see a future discordant self and react to the fear of who we could become by acting in the present to contain or avoid this. Themes created about who clients could become can dictate thoughts and actions in the present.

In Table 4.2 we provide ways of how people may try to know themselves and produce self-anomalous experiences.

TABLE 4.2 Questions to elicit ways of knowing self

- Do you observe yourself?
- Do you often think of yourself in different ways?
- Do you try to see yourself as others see you?
- Do you sometimes look at yourself and wonder who you are?
- Do you watch parts of your body because they seem alien?
- Do you try hard to understand your actions?
- Do you analyse your motives?
- Do you notice you're a different person in some contexts?
- Do you worry about having consistent qualities?
- Do your actions surprise you?
- Do others surprise you by their comments on you?
- Do you constantly try to look at yourself from different perspectives?
- Do you reflect on how well you fulfil your roles?

5

NARRATIVE CONSTRUCTION

Structure of narratives

There are many different types of narrative analysis, depending on the aspect of the narrative to be captured (Riessman, 1993). From a constructionist point of view the narrative serves several purposes: (1) it reveals how the person makes sense of events; (2) and how they represent the event to themselves (through language and metaphor); (3) at the same time, it justifies the client's point of view and is persuasive employing rhetoric and reason; (4) it contextualizes the problem in surrounding events; (5) and defines a window on the event, so giving it an episodic flavour, a beginning, a middle and an end; (6) it positions the person in a relationship with the world, with a sense of agency, a personal role, revealing constructions of self and not self; (7) it cannot contain all the information about an experience but it contains what is relevant, given the episode and the goal of the telling.

There are also formal structures to which a narrative must conform to be credible. So this means there are a number of features to look out for in narrative. Russell and van den Broek (1992) have noted that the structure of narratives require the key persuasive elements of events, relations, transitions and contingencies, simply in order to make a convincing story. The three main dimensions of narrative structure relevant to clinical practice are relational structure of the represented events (the structural connectedness), psychological relations between the events (the representation of subjectivity) and the complexity or style of the narrator's linguistics. The main subclasses of structural connectedness are event categories, i.e. temporal relations, causal relations, co-referential relations and propositional relations. Representation of subjectivity details the way the account is narrated and the intensity of the experience of events, i.e. how events are described in relation to emotional intensity and depth of experience. Linguistic complexity may reflect the competence of the person, the sub-clause structure and the number of plots and subplots available in the story.

The main advantage of a narrative approach is that it does not treat cognitions as stand-alone thought units, judged according to their orientation bias or compared with veridical perception, nor does it reduce them to products of hypothetical schemas imposing an embedded core network of perceptions on reality. A narrative approach grounds thoughts in the experience and adaptive context of the person. The unit becomes the voice(s) of the person introduced within a narrative, to account for the problem, discuss its development, elaborate on its implications or relate it to other aspects of life. The narrative, then, immediately engages the person in their own problem and positions them with respect to it. In a monologic narrative the person emerges as a character in their own story. The presenting problem then fits into a scene alongside other problems, non-problems and other events.

Zimmerman and Dickerson (1994) note that narratives evolve through time and are fluid. Dynamic metaphors are more useful than static ones and capture recursive patterns. Owen (1996) quotes Groves' cognitive linguistic use of clean language to capture the relations between speech and lived experience, in particular the use of metaphor and metonyms in linking language and experience. Clean language is phenomenological since it is non-prejudicial and tries through bland repetitive questioning to improve the flow of language, and attempts bracketing, purification and reflection on intentional awareness. Clean language is dedicated to eliciting metaphors, meanings, language use and experiential processes normally out of awareness. Below the surface of conscious experiences, according to Groves, exists a preconscious aspect called 'felt speech'. A metaphor, for example, of a thumping heart may better capture the felt nature of anxiety and permit concrete work. Ordinary language takes a speaker away from such lived experience. Polysyllabic words activate rational modes, which cause metaphors to disintegrate. Two interrelated principles of tracking and development are used in clean language, where one stays with the last phrase or memory recalled, and metaphors are developed by using precise vagueness and bland verbs, prompting the person to 'find out what happened' and using the subjective tense with questions beginning 'and could you have…' and 'and might you have…' The method elicits descriptions of experience in the person's own terms. The person is encouraged to stay focused on the last phrase, body place, memory or metaphor just employed and dwell on this to elaborate experience.

Example adapted from Owen:

> And when there's lots of things you want to tell him, where are those lots of things you want to tell him?
>
> They're closed up inside me.
>
> And when they're closed up inside you, where are they?
>
> They're locked inside my throat and chest and head, the top half of me.
>
> And they're in the top side of you. And where are they more locked inside?

> In my throat.
>
> And when they're stuck inside your throat, whereabouts inside your throat?
>
> In the middle.
>
> And when they're in the middle, where in the middle?
>
> They're in a ball, a very large black iron ball.
>
> And they're inside a very large black iron ball, and is there anything else about the ball?
>
> It's stuck and it won't move.
>
> *(1996: 280–1)*

All comments start with 'And…' as this helps to link the questioner's remarks to the answerer's ongoing experiences. The questioner has no particular aim except to ask a question about the last phrase spoken. The questioner is not searching for anything in particular and tries to become indifferent to finding any particular answer, and bears in mind that there can be no wrong answers but only wrong questions.

Lakoff and Johnson (1999) relate metaphor to cultural and body experience and the lived experience of having a body. Metaphors create meaning and, given the chance, people will conceptualize the non-physical in terms of the physical in order to make sense of it.

As a first step, eliciting narratives is essentially a process of asking people to present the problem in their own words. The narrative is already there in some form, and as it is in the person's own words it is easier to understand than questionnaire responses to the presence or absence of isolated thoughts. According to the narrative approach, listing cognitions, divorced from their embedded narrative, leaves them context-less and is like listening to a line from a play without the speech, character or scene in place. More problematic – given that the natural occurrence of thought is in a narrative – is the cognitive assumption that thought should anyway best be considered outside of a narrative. Setting apart the individual and the perceived/cognized world implies that thoughts must be measured as things; thought units can be reduced to communalities; thought units are comparable as processes; and thoughts can have an absolute value and can be modified by isolated correction.

But thinking is not an isolated logical or biological process to be judged on its own as rational or irrational. Rather, thinking emerges as part of a script, weaving personally and meaningfully around a geography of real, future and imagined scenes, continually reflecting and reacting on itself. Thought requires narrative context to give it nuance and meaning. The following cognitive belief is contextualized by a narrative.

> Belief: I space my letters evenly; I must always be perfect because I'm a perfectionist.

> Narrative: When I was at school we were always taught to copy letters exactly with the exact spacing. The master was a classics teacher who used to transcribe rare manuscripts and he said you could never make a mistake in those days or you had to start all over again. It's like sign writers, they always space letters evenly so it's obviously the way to write even if you're only doing a list or a cheque.

The above narrative is peculiar in interposing associations about how what is not relevant in the here and now is in fact relevant. We have deconstructed a belief about perfectionism into a recalled practice. In the following example, the person is convinced to wash their hands just by recounting a narrative. 'So I say to myself: my kids were playing outside and like I know it's dirty outside, I've seen the dirt and I think maybe they touched something dirty, like picked up something from the street, dirty paper or shit, and then I say if they're dirty then I'm going to be dirty and I'm gonna make the house dirty, and so I go in and wash and I can't stop, you know, it's like a voice in my head, saying over and over again, you're dirty, you're still dirty…'. The person is carried along and absorbed by imagination.

The narrative nuances cognition to give qualitative differences to what seems like the same cognitive phenomenon. For example, consider the following two idiosyncratic narrative units concerning the same cognitive appraisal of over-responsibility. (1) 'You could give me that paper to read and I'll be sure. I'll have no problem. I'll read it now quickly because it's not mine. But when I'm writing something, doing my CV, it's me doing it. Me, I'm not capable. I'll spend hours reading it just in case there's something there, and even then I put it aside and check it again because it's me, you see, it's me who's doing it… and that's the difference'. (2) 'I could be back home, doing the cooking, or something, or listening to the radio, waiting for the kids to come home, and I suddenly think – oh my God, did I fill that memo out properly – what if I didn't – no-one else will check it properly – it's my job to do it – they'll act on it and if it's not right the person will get the wrong information – and everyone will know it was me'.

Narratives also reveal the multiple elements causing distress. So what are the differences between a narrative and a standard cognitive approach to therapy? The narrative approach begins with textual narrative and treats this story, including cognitive and meta-cognitive components, as the basic account of the problem. In the following text, for example, both cognitive and meta-cognitive aspects form part of the narrative. 'I can't stand this problem. These anxiety attacks I'm not able to tolerate them. I told my sister. She agreed. She said they are too much. No one should suffer them like I do. So that's it. I've decided I'm not living another year with this problem. I'm not putting up with it. It's got to go'. What is the theme here? Anxiety or tolerating the anxiety?

So narratives reveal: (1) metaphors/metonyms; (2) associations; (3) causal assumptions; (4) imaginary sequences; (5) apparently related events; (6) selective use of facts; (7) style of story telling; (8) event sequence; (9) continuity of characters; (10) passage of time and place; (11) role of self.

Rhodes and Smith (2014) explored an interpretative phenomenological analysis of depression. They focused on the conscious experience of depression with a stance of 'empathy'. Their analysis illustrates well how rich narratives are in metaphors and how these often convey more of the experience of the problem than facts. The client, Paul, talked about the distinction between a normal 'could' and the tsunami of depression, how it was alien to his normal self, and how he experienced a crushing wave of hopelessness. He focused on a negative future and blended conceptual areas of dying and mortgage debts. He noted, as people often do, a transition in his personality to someone helpless, lost and not the strong self he was previously. His metaphors concerned finding himself in a 'pit', a 'black hole' with his hands tied, with no escape. He could be drowned in the hole, lose his breath, feel abandoned, isolated, cut off and almost under attack. He described the fear of an explosive release of the cumulation of negative thoughts as the fear that the top of his head would pop right off. Interestingly, his dialogue and metaphors related to wider cultural images of assassination and death in popular imagery and song. What seemed to trigger depression more than anything else was the loss of self and core motivational projects ('success').

Narratives may also reveal different positionings towards a problem, sometimes unexpected perspectives where the problem is lived alongside other aspects of life. A person asked to describe their depression as an entity already has a ready-made vocabulary for recounting all sorts of symptoms related to depression, which don't include feeling exceptionally happy. But a narrative is more mixed. What interests us more is how the person experiences and describes the experiences of life.

'… I know I have to do something. It can be something enjoyable. I can look forward to it but on the day suddenly I have no energy, it seems such a burden. I put it off and off until I kind of convince myself I don't really want to do it. I find excuses then I regret it and I feel even more of a failure. I think what if I had to do something unpleasant'.

'When is it different? When I'm at home if someone comes round. I mean I'm expecting them. I think I can't let them down, but for myself I don't care. So I say I can always ask them to leave and I try not to ask too many questions. Usually I forget about myself when I'm at home'.

'The last time I really enjoyed myself – let myself go – it was down at the club. I think it was my birthday. We all remembered what we were like 20 years ago and how we dressed, brought along some old photos, I remembered how much fun we had. I wasn't loaded down but you can't turn the clock back. It's the thinking which makes me serious'.

Just from these three accounts several themes emerge: (1) a strong sense of identification with 'I'; (2) a strange feeling of a past long gone when all was well; (3) a sense of sociability versus a feeling of loneliness; (4) thinking as only rumination versus a serious way of being. Likewise, the following three accounts give different perspectives on the same personal problem of depression.

(1) 'My mother-in-law came to visit and she wanted to know why we couldn't take her condo in Florida she recently inherited from her mother and she's very keen to share it with everybody. I don't generally get along with her and tend to dam up and let my wife do the talking while I sit there. Inside I try not to show it, but I'm fuming. What right does she have to come into our life? OK, we have problems, who doesn't? But we can sort them out. My wife tries to direct her to other issues. But she keeps coming back to how depressed I look, how I should get out. There's a kind of a reproach to me and my wife. She doesn't think either of us is good enough'.

(2) 'I can share a joke or a drink at the pub. Actually, I can be quite lively. People will think I'm extrovert and generous and not at all a depressive. I'd never betray my feelings in public or to others. But when I'm by myself, then that's the real me. You wouldn't recognize me. I'm very down at myself. I don't smile at all. Sometimes I don't answer the telephone. I pretend I'm out'.

(3) 'It annoys me when people say depressed people are selfish, turned in on themselves. I try to be positive. I make a list of things to do. I'm always looking around for activities, even though I'm not working. I keep busy. I even volunteered to work over Christmas in giving out free meals. But I can't get the thought out of my head, what's it all for? I just don't seem to be able to get the pleasure others can. There's something wrong with me. I can get invited to events, I think about them. Then I think, what it's all for? Will I feel better? The answer's no'.

The depression is positioned respectively as: (1) a discussion point; (2) a barely visible problem; and (3) a qualifying occupation.

Narrative, reasoning and rhetoric

O'Connor *et al.* (2013) have identified a number of rhetorical devices that may render obsessional narratives more persuasive (see Appendix 8). These include: (a) mixing up different categories of events, (b) appealing to out of context facts and (c) non-comparable associations. In the following narrative the person mixes up these rhetorical devices. 'It could happen that I press the button of my car lock twice, it really could happen. I don't know how but you often do things twice, like push elevator buttons (a). Maybe I didn't hear the beep. It happened once that my mother used her car and forgot to lock it (b). We hear of burglaries, of people breaking into cars all the time (c) and it's possible if I forgot to lock the door I'd be burglarized. I could lose my car, my belongings, it could be broken into'. As O'Connor *et al.* (2013) have shown, even naive judges can spot these devices and distinguish them from cognitive distortions. The stories gain a persuasiveness through rhetoric but also carry an underlying theme of empowerment and specialness, whereby the speaker is privy to what is often imaginary chaining.

Other examples of rhetoric include the use of allegory, which can sometimes extend the metaphor by impregnating it with features that fit a personal biography. 'He is my anchor', 'he is my eyes': these allegories imply not just 'as if' but a whole reciprocal relationship with the speaker over diverse functions. There are also logical

fallacies in narratives, including fallacies of relevance (e.g. appeal to the force of an argument; confusion of temporal and causal sequence; arguing a proposition is true because it has not been proved fake; fallacious generalization, proving an illogical conclusion) and fallacies of ambiguity (e.g. confusion of two meanings of the same term (e.g. bad meaning rotten or morally bad); taking the part for the whole; arguing from an ambiguous premise). There undoubtedly exist other rhetorical devices such as the use of irony and simile and the simple use of repetition (Lanham, 1991) (see Appendix 8 for a list of rhetorical devices).

Dialogical approach

In contrast to the idea of a central, unitary self, the dialogical approach employs the metaphors of voice and conversation (dialogue) to distribute a person's self between the various discursive positions from which they speak. In a social form dialogicity implies that all thought and action takes place in the presence of others. Hence thoughts by their nature address others and position us socially. The inner world of one and the same individual is studied in the form of interpersonal relationships. However, the dialogical concept as a literary form derives from Bakhtin's (1929/1973) writings on the analysis of literature. In literary form the 'voices' can be exteriorized as characters in a novel, the point being that the voices and their respective worlds are not identical or unified and may well be opposed. The concept of the single author or self can therefore be expanded to a multiplicity of relatively autonomous 'I' positions (Hermans, 1996).

What unifies the 'I' positions is the publicly identified person or speaker. The so-called unitary self is not therefore identified with an enduring cognitive entity but is seen, rather, as an artefact of grammatical usage in which the 'I' indexes the speaker or agent of action in conversation (Harré, 1991). The 'I' is not an entity that persists across situations but is a means of referring, through the material referents of the speaker, to the voice or actions of the speaker in that particular interpersonal context. Harré argues, from a social constructionist rather than a Bakhtinian literary position, that the ability to play different roles or selves depends on a voice (or Self1) that can refer to other voices (Selves2). Self1 is the capacity of the agent as speaker to draw conceptual contrasts across contexts (e.g. 'in this situation I am benevolent and in that one mean'), but Harré does not rule out the possibility of more than one Self1 being associated with one body, as in multiple personality. In this instance the Self1s are dissociated (i.e. unable to cross-refer).

The dialogical approach conceptualizes these context-dependent changes as the expression of different voices speaking from different discursive positions and not as the varying attributes (e.g. degree of conviction or degree of ego-consistency) of a single self. The analogue here would be a role-play in which eliciting opposing characterizations of the situation would be enacted according to the role that is played.

One of the most distinctive features of the dialogical approach is its manner of conceptualizing the structural control of behaviour. When a dialogical analysis invokes the concept of the narrative or scripted nature of human interaction it does not suppose that the narrative or script is a mental representation located in the mind. Hermans (1996) contrasts a 'relational' schema, defined as a stabilized pattern derived from previous encounters, with the idea of being positioned in a dialogue, each position acting as a relatively autonomous voice, as if it was 'another person in the self' endowed with agent-like qualities.

The dialogical approach applied, for example, to obsessions or voices interprets the specificity of obsessions in terms of an unresolved dialogue between contrary modes of self-expression. In other words, a dialogue, referring to intentional acts that concern fear, anger, etc., may be treated as any problematic dialogue. It can be completed, rephrased or answered in order to move it along to resolution. Or it can be transformed into a more mature or better-informed and liberated discourse, where the person may position themselves differently in the conversation. This formulation is compatible with one of the voices having a pervasive influence across different contexts without distressing consequences. In order to account for the distinctive features of repetition, intrusiveness and the alien quality of a voice or obsession at least two related elements need to be added. The first, noted above, is that the conversation does not issue in a resolution and, like any significant unresolved problem, is re-presented for completion. This feature accounts for repetition of the thought/image/impulse. The second element to be added is an account of why the dialogue fails to be concluded, however unsatisfactorily. One can point to the fact that the dialogue is rehearsed privately in the absence of one or more of the protagonists. This absence could be due to the physical or psychological unavailability of the person or people willing to continue the dialogue. Lack of access could also be conceptualized as the unavailability of a context in which the voices could be temporally and spatially brought together for re-scripting a resolution. This is one reason for using imaginal or role-played conversation in therapy, consolidated by encouraging the client to re-engage with the relevant protagonists through homework assignments. These techniques begin to make available to the self the separate voices that have so far remained unconnected or unheard.

People with intrusive thoughts, for example, frequently report their experience of, and interactions with, their thoughts 'as though' they were voices. The 'as though' emphasizes the insight that they characterize obsessions as voices so as to distinguish them from 'real' voices. A client obliged to wash and shower repeatedly after touching objects reports: my obsession said 'no, you're not clean – go back and wash again'. I said: 'No, I won't do it… I'm not listening to you… go away'.

In a dialogical account the emphasis is on language and the power of narrative over representational ideas. If diverse thoughts are a persuasive, engaging one-sided conversation or dialogue, safety behaviour would be dictated by the power of the narrative rather than by abnormal bias or misinterpretation of the exaggeration of danger. A strong action tendency built up by an imaginary narrative that danger is present would necessarily impose avoidance as a behaviour. This would not be a case of

mistaken perception but rather of irresistible absorption in a script. Hence dialogical therapy would not be concerned with confronting the rationality of discrete appraisals or beliefs, but with exposing and identifying with the client the processes by which narratives are constructed. Rather than presenting an alternative perspective in terms of 'information processing' and cognitive science metaphors, the approach would help the client understand how their use of metaphors and metonyms, derived from common assumptions, constrains their experience. This does not necessarily imply that dialogical approaches are opposed to established cognitive insights and findings. Notions of over-responsibility, exaggerated danger, improbable consequences and magical thinking are frequent inhabitants of obsessional narratives. But viewing them within a narrative or dialogical context captures the relational, emotional and power-related aspects of their development, which both nuances a general concept such as, for example, inflated responsibility, and helps us understand the specific idiopathic pattern of the individual's experience. By contrast, cognitive science lacks concepts for the pragmatics of social communication and offers itself as an alternative theory to the client's own construction in a straight competition of persuasive rhetoric (Hallam and O'Connor, 2002).

Dialogical and narrative therapy

Like cognitive therapy, dialogical therapy aims to detach emotional significance and importance from a particular narrative, but this is in the context of analysing and re-scripting the conversation, either by continuing it or by diverting it to resolution. Cognitive techniques of relabelling the problem and distancing oneself from the importance of the problem find comparisons in dialogical techniques such as re-authoring. So instead of the client being immersed in the story 'I'm a bizarre person' the client changes the story to 'I'm a person who has bizarre thoughts but I can have influence over them'. The client then shifts from a habitual listening to an 'active talking' mode of engaging the voice. The client can create different dialogues with the voice without adopting any one narrative. The client can then respond in future in more flexible and satisfying ways. Davies *et al.* (1999) report a case, 'Peg', successfully treated with dialogical therapy. A reconstructed conversation of a dialogical conversation is given in Table 5.1. Dialogical therapy where the person replies to voices or directly addresses voices via an avatar does seem to bring at least short-term alleviation of hallucinations (Leff, 2013).

Here we illustrate a narrative approach for three disorders: generalized anxiety, obsessions and delusions.

Narrative approach to worry (NAW)

Abnormal worry involves distressing thoughts about a variety of personal/impersonal domains. Since the content of the abnormal worry seems similar to normal worry research has focused on other potential factors maintaining the worry as a persistent cause of distress.

TABLE 5.1 Dialogical narrative

The following is a dialogical conversation of a client (C) with the voice of his father (V).

C: You always put me down.
V: Quite right too, you deserved it.
C: But I always did my best. I always tried to please you.
V: Not good enough ever.
C: Is that how your father treated you?
V: You bet. I never got the benefit of the doubt.
C: So you were just transmitting what you learned.
V: Never did me any harm.
C: Yes, it did. You were bitter all your life.
V: Bitter maybe but it made me careful.
C: You never had any joy. It ruined your life and your marriage.
V: Maybe that's the way I am.
C: You are a crippled, hopeless old man. Why should I take you seriously?

A narrative-based understanding of worry views it as a narrative constructed by the person to make sense of events; but the approach considers that the process by which the worry narrative is constructed renders it worrisome.

Worry has generally been conceptualized and measured as if it was composed of isolated cognitive thought units, or statements such as 'I may lose my job' and 'I may be abnormal', whereas worries are usually experienced and reported spontaneously by the person as experienced scenarios (either verbally or visually), and which translate into a narrative about a sequence of events.

Q: So give me an example of your worry.

A: I saw my sister's boyfriend just ignoring us, reading the newspaper and I thought he's in one of his moods again. He's going to be annoyed at her later because of me. I start worrying they were going to argue over me and maybe he'll hit her. I imagined them having a fight. He could really hurt her. Then I start to panic. I phoned my friend to get her opinion. But she only agreed with me which made it worse so I couldn't relax until I knew she's alright about six hours later'.

In another example, a motorcyclist pictures himself losing control at 100 mph and crashing. A salesman at home on his day off imagines his boss discussing him with his co-workers and planning to dismiss him. A mother recounts how her daughter will come home to her new boyfriend, get into an argument and be hit. The worries here all take the form of a short narrative, which may often be further embellished on replay.

The narrative hypothesis is that worry is an inappropriately constructed narrative, which persuades the person that a train of future extremely negative thoughts

must follow from present events, that there is no alternative and that the person is helpless in the face of these events. The nature of the narrative leads to its repetition as a loop with no exit. Since the narrative does not progress beyond the worry episode no further development beyond the dictates of the episode is possible and the episode defies closure.

Hence narrative-based therapy aims to normalize the construction of the narrative to enable the person to progress beyond the worry loop and flow on to other future events and narratives, as would happen in the normal non-worry progression of narratives.

The worry narrative jumps prematurely to extremes and does so in two ways: the scene imagined is always the worst possible (e.g. a person imagines their motorcycle will plunge through the ice into the St Lawrence River and does not see the motorcycle slipping on the surface of the ice but falling right through it) and the logic leading up to the worry event is unclear or unstated (it is not clear exactly how the person would come to be driving a motorcycle on the ice on the St Lawrence River). It is as though the person comes into a movie halfway through and simply finds themselves in the middle of, say, a gunfight, not knowing the previous storyline.

In our clinical experience the main worry scenarios have never actually happened in the way the person envisages them, regardless of whether the worry is objectively speaking realistic or unrealistic Ironically, real negative events that have been experienced are rarely the cause of current worry. Example: a woman whose basement has frequently been flooded worries excessively about the possibility of a fire, which has never occurred, but not about flooding.

Because the event has never happened the person has no prior experience of coping, so personal resources available for dealing with the problem do not feature in the worry scenario. This lack of experience can mean that the person pictures themselves as helpless before the worry scenario. There is no active role the person can play in the narrative to move it along to another scene. The worry, even if it touches diverse topics, has a personal theme, which can be revealed by looking at distinctions between worry and non-worry domains. This theme renders the person more likely to worry in some circumstances than others. The themes mostly likely relate to a vulnerability about being placed in a certain relation with the world or people rather than to any specific topic or content of the worry (see Appendix 6, and Blowers and O'Connor, 1996).

Perhaps because of the personal vulnerability to the underlying theme of the worry, the worry narrative has a disproportionately persuasive credibility, which leads the person to consider it not as a possible ('what if') outcome but as a real ('as if') outcome. Hence the person responds to the narrative not by asking 'what if' this happens but by acting (in different degrees) 'as if' it has already happened. This means present and future are confounded and the person reacts 'as if' the future has already arrived. Many of the somatic reactions accompanying worry make sense if seen as preparations to act 'as if' the event has actually occurred.

Research noted in Chapter 7 has shown that changing preparation strategies can improve coping ability. Inexplicable physiological changes accompanying anxious psychological reactions (e.g. dizziness, depersonalization, blushing) can be more parsimoniously viewed as reactions to a future rather than a current action plan.

Therapy protocol

The main ingredient of generalized anxiety is worry; worry is an internal monologue or narrative which convinces the person that a future hypothetical state of affairs is likely to occur; the worry jumps ahead without considering alternatives; the narrative generates emotions, physical sensations, beliefs and behaviours which maintain the anxiety. The main worry domains are family, finances, relationships, employment, the future, public and world affairs. The physical sensations experienced include muscle tension, headache, sweating and trembling.

The therapy is progressive and extends over eight weeks, not including follow-ups. Personalized worry records are given in Appendix 9. The initial step is to reveal with the client the domain-specific nature of the worry and discover the theme underlying the diverse worry scenarios. This step is accompanied by looking across worry and non-worry domains, separating the two, and by use of a modified form of Kelly's grid to discover the personal constructs by which the two categories are distinguished. The first step helps the client realize the worry is selective and related to personal factors rather than to external circumstances. The therapy illustrates how the client is acting 'as if' the worry had actually happened and the accompanying physiological reactions can be explained in this light. The difference between a 'what if' and an 'as if' reaction is illustrated, with examples from everyday life distinguishing hypothetical from real events. The client is then exposed to other inconsistencies in the narrative, such as jumping to the middle of the plot and always to extremes, and that the worry events have in any case never happened and, conversely, that what has happened in the past is rarely a worry.

Finally, alternative narratives are constructed with the client for each worry situation (ones which are logical, realistic and flow normally through possible events). The person writes the new narrative together with the old narrative in detail in a record book and rehearses replacing one with the other at regular intervals through the day as homework. The effect of this exercise of constructing an alternative narrative on mood and in alleviating worry is underlined, and advice in generalizing the technique to other future worries is discussed. A case example is presented in O'Connor *et al.* (2014a).

The person is provided with the following rationale. In worry you jump to a worst-case scenario that never arrives; you prepare only for that scenario; whilst you worry you cut yourself off from reality; you waste resources in a vicious circle; whilst you continue to worry you end up in even more imagination; the more you worry, the less chance you will act sensibly; worrying itself becomes a source

of problems; the more you are seen as a worrier, the less attention you will receive; acting in a worrying manner itself produces problems.

Coping realistically with problems requires you to identify the specific parameters of the problem; seek relevant information immediately; evaluate alternative solutions; base decisions on prior experience and on a realistic assessment of alternatives; have confidence in your coping resources; if you feel the problem is exceeding your abilities it means the worry narrative is unrealistic; beware of emotional reasoning (e.g. because I feel bad it is bad). Table 5.2 shows how worry takes control in emotional and cognitive areas.

Figures 5.1, 5.2, 5.3 and 5.4 illustrate respectively the factors maintaining worry, progression of a worry narrative, a personalized route for a worry narrative and the various circle of worry.

The NAW would predict that changing narratives would be the most direct way to change both somatic and psychological distress associated with worry; relaxation may induce a decrease in somatic anxiety and so indirectly lead to a re-evaluation of some discomforting aspects of the worry narrative but would not change the structure of the narrative; demolishing beliefs about the utility or desirability of

TABLE 5.2 How anxiety takes control: how narrative chaining recruits cognition, emotion and behaviour

Thought:	If I go out with my friends I'll be upset and uncomfortable.
Emotion:	I already feel ill and weak and unable to go out.
Belief:	If I feel like this something must be terribly wrong.
Thought:	The more I think like this, the worse I feel. I think I could give myself a heart attack.
Behaviour:	I might be better to go straight to hospital.
Thought:	But then my friends won't know where I am.
Thought:	They might think I've forgotten them and they won't forgive me.
Emotion:	I feel terribly guilty.
Thought:	Anyway, if I have a heart attack I'll be alone and abandoned in hospital.
Thought:	I could die without ever seeing my friends again.
Belief:	It's intolerable. Everything is hopeless.

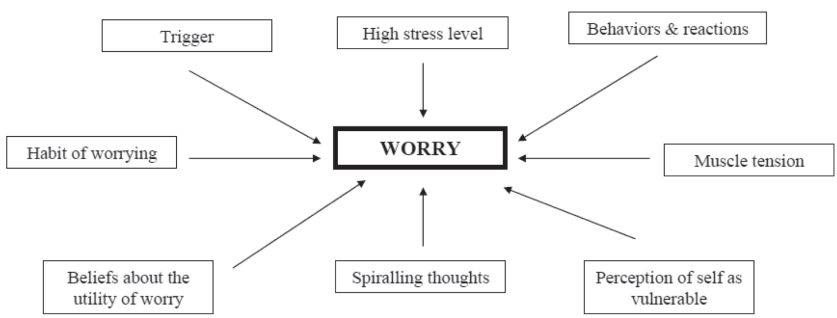


FIGURE 5.1 Factors maintaining the worry narrative

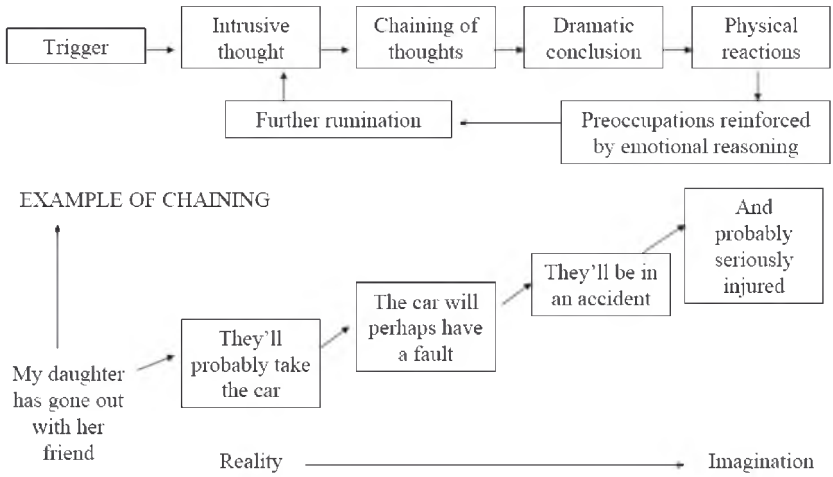


FIGURE 5.2 Progression of the worry narrative

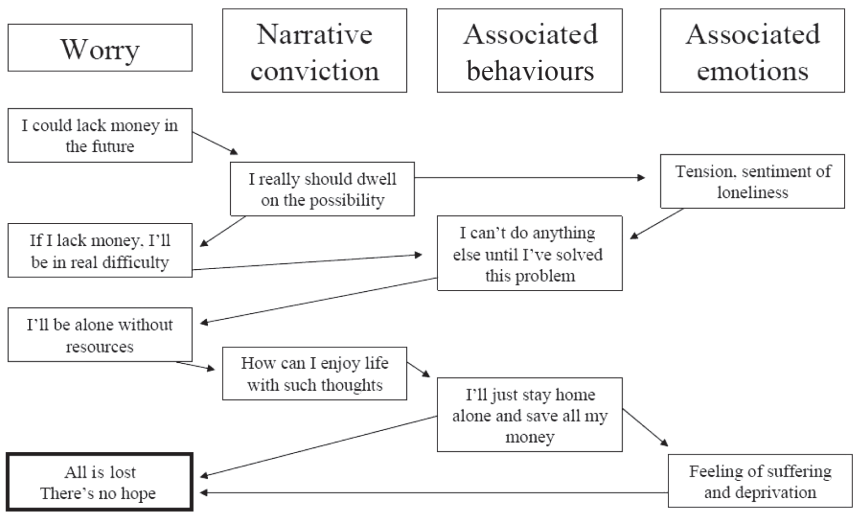


FIGURE 5.3 Example of a personalized route for the worry narrative

worrying would lead to less time spent worrying but no decrease in somatic sensations associated with the worry narrative.

The NAW has been developed partly on the basis of clinical experience with a generalized anxiety population, on the basis of previous studies comparing cognitive and physiological measures in anxiety and from experience in developing a credible narrative-based approach to treating obsessional behaviour. It has been validated in a small open trial. A small group of five participants with generalized anxiety disorder (GAD) followed the NAW therapy, showing a mean clinically

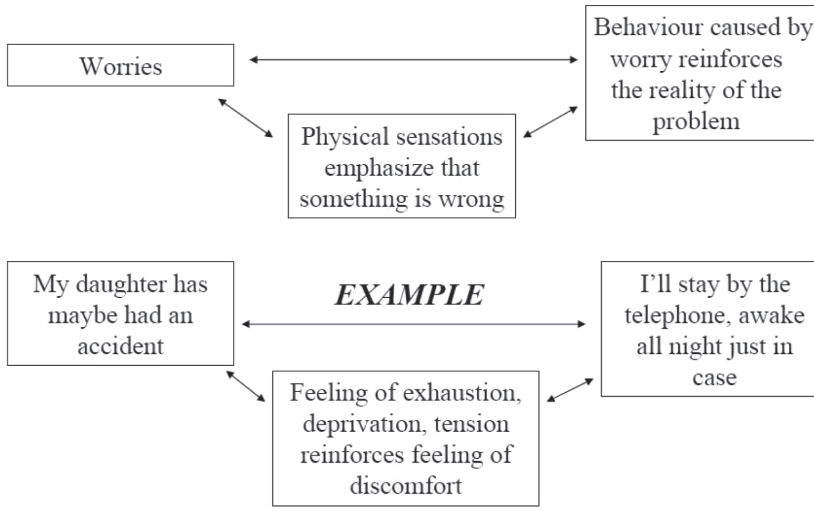


FIGURE 5.4 Vicious circle of worry

significant decrease in neck EMG and symptoms. In particular, the participants reported that the NAW helped establish their successful prior coping, and helped them realize how they had coped in the past, that they were frequently replaying worry scenes without further progression, and that the replayed worry scenes were irresolvable. The majority of participants reported awareness of a personal thread to the worries.

Narrative approach to delusions

In their narrative approach to psychosis Rhodes and Jakes (2009) combine narrative with solution-focused and CBT techniques, which emphasize both positive and negative narratives. Such a narrative approach focuses on goals and self from the point of view of the expression of experienced difficulties, through understanding problems in context and paying attention to the use of language, metaphor and complex characterizations of self. Rhodes and Jakes note that delusions do not exist as single isolated statements, and delusions are often impoverished narratives. The narratives may change over time, even if the themes remain constant. Techniques used to build up an alternative narrative include elaborating with the client ideas about the delusion and asking what the client found unconvincing in the delusional story. The client is encouraged to see the story as a metaphor or a 'like experience'. Alternative perspectives on delusions can be developed by placing them in the context of past relevant emotional and interpersonal concerns, and then incorporating possible metaphorical meanings into the delusion to replace literal meanings. For example, a feeling of being pursued by gangsters may be seen as a characterization of abusive threatening relations.

Rhodes and Jakes' (2009) aim is to understand delusions in all their complexity, as narratives, and relate them to the context of a person's life and interpersonal themes. An important aspect of understanding delusions is to relate the person's literal meanings to metaphors, and see how expressions, art forms and other events or fictional characters, even bizarre imagery, relate to the story. A subtlety brought by the narrative approach is to be able to explore not only metaphors but the subtle interactions with the world reflected in language and also self-themes. Images and interactions can be related to other more mundane expressions and experiences in life, and ultimately reconstituted to build up preferred self-schema. Sometimes working with the past may allow memory to strengthen positive ideas on coping. The profile of themes is unique for each client and needs to be understood in its entirety.

Rhodes and Jakes (2009) outline several approaches to working with delusions – to begin with, supportive therapy dealing with any specific worries or fears of the person; accepting the delusion as a frame of reference and working within it. For example, asking the person what practical activities help when the delusion belief arrives can encourage collaboration. The therapist can attempt a partial modification of details of the belief by querying details, such as why the CIA have taken so long to spy on a person, or why so many people are involved in the conspiracy. In the same cases belief in current conspiracies can be reduced without touching past beliefs. One can also provide a narrative formulation that directly opposes the delusional account, although this is likely best to work when there is already some flexibility concerning the belief.

The approach most favoured by Rhodes and Jakes (2009) is to create an alternative narrative that makes sense of the emotional and interpersonal processes linked thematically to the delusion and, particularly, to accord a metaphorical meaning to the delusion. Acknowledging social difficulties and their cognitive repercussions also earmarks the strengths of the person in coping with these prior problems, which may be neglected in the persecutory delusional narrative. This technique can also help normalize what previously may have seemed a bizarre belief, and help the literal belief 'fade'. Alternatively, directly addressing the emotion and mood invested in delusions may be a way of re-scripting the inarticulate part of the intentionality of the delusion and the pattern of relationship with the world it represents. Lifting mood can diminish preoccupation with the delusion.

Obsessional narratives

O'Connor *et al.* (2009) have illustrated how narratives amongst people with OCD explicitly justify distrusting the senses and investing in possibility. As such, they demonstrate the power of narrative to really trump perception of reality, since the person's senses will clearly contradict the obsessional belief. The narrative convinces the person to doubt.

Perhaps the door is not locked. 'When I leave my house, I often have my daughter with me. She runs ahead and throws herself down the stairs. I seem more preoccupied with her falling down than with the fact that I'm locking the door. When

I leave the house I have my head full (Did I check the electrical appliances? Have I forgotten something else?) and I'm anxious. It's possible I shut the door but then leave without locking it but thinking that I did. I could just as easily simply forget to lock the door. When I'm closing the door I'm not totally attentive and I'm locking it on automatic pilot and there's a lot of distractions. So all this increases the chances of badly shutting and not locking the door'.

Perhaps one of my cats is hiding in the washing machine. 'In my washing room the washer and dryer are the only hiding places perfect for my cats. It's quite likely that a cat could slip in between some sheets. I could take the sheets to be washed and then put the cat in the washing machine without seeing it, since it's a mechanical gesture which I perform often and my mind could be on other events. So I could finish the job and not be aware that I'd left the cat in the machine. If a cat sneaked past me I wouldn't see it, and if the machine was working I wouldn't hear it, either. The cat could hide in the washing machine and I wouldn't see it. Particularly, I wouldn't see my black cat amongst my dark clothes'.

In analysing such narratives O'Connor *et al.* (2013) has identified a number of rhetorical devices that persuade the person to live 'as if' the narrative were probable, despite a large imaginary immersion. In a recent study O'Connor *et al.* (2013) confirmed that both experienced and naive judges agreed that the principle components of such narratives were the blending of categories and immersion in the imagination. A strong component is the use of imagination where the person will often visualize microbes, or a mistake, and conjure up vividly the detailed consequences if the obsession came true.

Obsessional narratives were rated consistently to contain reasoning components that take the person away from the senses and towards remote possibilities and associations. There were significant differences in frequency ratings, which showed that narrative components did not overlap substantially with more traditional cognitive errors. Both a naive and an expert group agreed on the ranking within eight OCD narratives of the presence of cognitive components and narrative components.

The narratives contain a number of rhetorical devices, including conceptual blending, misassociations, use of act-context facts, category errors, going beyond appearances, distrust of the senses and, in particular, an investment in remote imaginary possibilities (see Appendix 8).

Rhodes and Jakes (2009) make the good point that narratives are often made of literary and poetic illusions, and hark back to past literal and literary memories, which are often lost in a monosymptomatic approach. This literary association was illustrated clearly in one case of a girl with OCD, who was convinced that others could get inside her and use her faculties if she didn't take precautions. The apparently psychotic idea stemmed from a novel she had read about alien abductors who did exactly that: get inside people For her the metaphor encapsulated her worst fear of being used and abused by others. Even in bizarre stories the narrative contains similarly persuasive elements.

The narrative approach to people with obsessions forms part of an inference-based approach that includes making the client aware when s/he crosses over to the

imagination; but part of therapy involves re-storying the client in a narrative that stays close to their grounded experience (O'Connor and Aardema, 2012). In most areas of the client's life there is no obsessional doubting and a parallel can be drawn with the client between his or her reasoning in neutral situations and obsessional situations, highlighting the selectivity of the reasoning. Finding the main thread linking the arguments in the narrative frequently reveals an underlying theme or self-construct which reflects an intentional self-positioning in the world, and which undermines confidence in self and senses and explains why the person is vulnerable to doubt in selected situations. Vulnerable themes or constructs are derived from the narratives and convey the intentional stance of the client towards the world in general, which underlines their specific obsessional doubts (e.g. checking; 'perhaps I'm the type of person to do things carelessly'; 'I could be the type of person who catches illnesses'). The self-doubt is also based on a narrative and can be modified exactly as doubting narratives are modified.

Example of obsessional self-theme: *I could be the type of person who acts inappropriately.*

> 'I could be an inappropriate person because I talk a lot and I'm very demonstrative but perhaps I don't have a lot to say. I could appear to be charming but take up too much place. Perhaps I'm not normal. I was raised alone and I don't have many friends'.

Alternative theme: *I'm a person who acts correctly.*

> 'I'm courteous and I respect the rules of society. I often open the door for people; I wait at the end of a line for a bus. When there are people in difficulty I give up my seat. I'm alive and I make a noise like everybody else. I'm respectful, I don't drink beer in public, I don't infringe regulations, like breaking windows or speaking loudly into my cellulaire'.

Alternative narratives

The aim of alternative narratives is to replace a 'problem saturated' story, as White and Epston (1990) put it, with an alternative sympathetic story, often where neglected aspects of the person's experience and personality are expressed. Ideally, the stories should explore purposes and actions previously invisible and often contradictory to problem-laden stories. As Bruner (1986) also puts it, whereas arguments seek to convince you of their truth, stories tell you of their lifelikeness.

In practice, narrative therapy privileges the person's lived experience, encourages a perception of change, generates a flexible multiple perspective, encourages the use of poetic or picturesque language, invites a reflective stance on one's interpretation, encourages a sense of authorship and ownership of experience and acknowledges the various influences whereby social factors cross a story. Instead of a client being totalized as the problem ('I'm just an anxious person'), the client can be seen as

immersed in two contrasting stories or life directions: 'I'm a person who has been in the grip of anxiety' and 'I'm a person who is able to have some influence on anxiety'. New stories develop in preferred life directions (Smith and Nylund, 1997).

An alternative narrative for a client convinced he may not have closed his computer would be: 'When I'm working on the computer and I know I need to leave the house I shut down the computer, choosing the right options via the mouse. I know the computer is turned off because I see I've clicked in the right place. Also the computer light turns from green to black. Also I hear the hissing noise of the computer shutting down. My senses are capable of telling me everything is turned off and I know this instantly even if my head is full of other preoccupations and even if my actions are automatic'. This story is grounded in ownership of attributes.

Adding to these guidelines is the importance that the story is being lived in, and for the person to be immersed in it, so that the basis dynamic structure of the alternative narrative helps to hold its power. The story has characters, evolution, transition points and a beginning and an end. In my experience it is essential the alternative story is built up organically, bit by bit. The person can commence with a phrase and embellish it over time, often elaborating on what s/he has written. It is not advisable to prepare a story that fits the aim of therapy, and which the person then recites mechanically. The alternative story needs to match the problem story in terms of complexity, fluidity and vividness, and the person should be encouraged to use metaphors and linguistic devices with which s/he is familiar. The person can even be prompted by literary or poetic imagery.

The person may use rhetorical devices, and so become aware of the rhetorical power in the problem narrative. If there has been misleading blending or an illogical chaining of events, or an unwarranted flight into fantasy, which has powered the narrative, these should be absent from the alternative narrative. A problem often encountered with new narratives is that clients think they should be immediately convinced of them; but it is worth reminding clients that they have been rehearsing the old stories for years so it takes time to be immersed in the new. New stories may in principle touch symptoms, events, relationships or the self. As pointed out by Rhodes and Jakes (2009), problem ideas often connect into a theme that relates back to a self-theme. Sometimes a new story about the self can also change or help 'fade' peripheral stories.

The influence of conversational metaphors within psychotherapy is growing (Anderson, 1997; Georgaca, 2001; Leudar and Thomas, 2000; Mair, 1989). The clinical examples given here support a dialogical position, but not all clients spontaneously report their thoughts as 'voices' – and even for those who do it is not always clear that the voice is distinct from their own or whether it can be related to past experience. However, even where there is no voice there seems to be a narrative, a story leading up to, and justifying, the problem behaviour (O'Connor and Robillard, 1999), and narrative has been conceptualized as a story in search of a voice (Anderson, 1997).

6

DECONSTRUCTING ANXIETY/ DISTRESS

Anxiety as a unitary state

Anxiety as an experience has a range of somatic, cognitive and behavioural reactions: sweating, weakness, dizziness, nausea, fear of collapsing, freezing, fleeing, difficulty concentrating, restlessness and muscle tension (American Psychiatric Association, 2013). Reports show wide individual differences in the disparate way it is reported and in its often paradoxical physiology and behaviour. When measuring anxiety there is frequently a discordance or fractionation between physiological, behavioural and subjective systems (Lang *et al.*, 1998), which challenges the notion of a unitary concept of anxiety (Roy, 2006). Subjective reports of anxiety may be accompanied by no or few physiological indices of anxiety. Conversely, a high state of physiological or subjective anxiety arousal may not predict behavioural indices such as avoidance. This discordance is confusing to the clinician when trying to help the client overcome an anxiety reaction and target the appropriate symptoms.

One problem contributing to this difficulty in profiling clinical anxiety may be its taken-for-granted conception as a 'state'. An alternative constructionist approach is that 'states' that apparently seem 'passive' – 'primitive' reactions to anxiogenic stimuli – may in fact be 'constructed' by the person as part of an intentional idiosyncratic (albeit automated) 'anxiety behaviour'. The experience of anxiety is the centre of a number of interacting social, cognitive, behavioural and physiological factors, all of which lead the person to experience anxiety (rather than another emotion).

Anxiety is very difficult to measure as a uniform state and a key problem is operationalizing anxiety and agreeing on its measurement in cognitive, behavioural and physiological systems (Lang, 1968, 1978). The literature shows great variety in the measurement of anxiety (Bellack and Lombardo, 1984), including clinical interviews, questionnaires, Likert scales, behavioural observation and physiological measures. A related point raised in several critiques is that it is still unclear what measures are appropriate within each system to operationalize anxiety (Kozak and

Miller, 1982). Is someone whose heart rate (HR) remains high, but who avoids fewer social events, improved compared to someone whose HR is lower but who continues to avoid? Use of verbal self-report is common but this measure is not necessarily reliable (Wilson and Dunn, 2003).

Temporal succession of acts versus horizontal evaluation

Another caution in a constructionist approach is not to mix up separate acts that are distinct and give distinct information. A clinical example here would be the assumption that the act immediately preceding a problem behaviour is linked to the behaviour, maybe even causally. A person is walking to the shopping centre and then has a panic attack. Another person is riding on the metro and then experiences anxiety. Are the two acts temporally and causally related? From a constructionist view they are separate acts. This analysis does not exclude the possibility that discrete acts may share communalities. But in the first instance in the case of anxiety the anticipation or fear preceding anxiety is a distinct act from anxiety during subsequent activity.

Imagine I'm sitting quietly in the library, reading the newspaper on a Saturday morning, but the library is on the way to the supermarket and, indeed, after the library I know I will go shopping. However, the supermarket will be quite hectic and here I am, enjoying the quiet, all the more valuable because I know what is to come. It would be tempting to see the one conditioning the other, and that, for example, my energy for shopping will be all the more vigorous due to the calm preceding it. But is this the best way to contextualize these two acts?

First of all the descriptive context is bounded by what appears in the here and now. I do not step outside this context to understand its meaning, by conditioning it according to events which have not yet happened. After all, I might not go shopping. I might receive a phone call from a relative to help out with a crisis, in which case I would need to change my story about the calm before the storm to a different connecting scenario.

Reading in the library and shopping are two distinct scenarios, each with its own context. Reading as an act is significant in itself. It's an activity I've done numerous times in numerous places. Hence its context is other acts of reading, which I'm not doing at the moment but which form a family of possibility distributions in which the current act makes sense. I am not reading on the metro, I am not reading in my office. The way I'm reading, my approach, my reading action in the library, is determined as much by what I could be doing as by what I am doing. My physiological/psychological reactions make sense in the context of this uniquely defined act context and not in any other. Were I to compare it with the act of reading a report in my office there would be significant variations.

Here a phenomenological approach to defining qualitatively the distinct aspects of anxiety is coupled with a constructionist approach to considering how anticipation of anxiety constitutes a separate act that may produce anxiety. Further, in the 'anxiety as a construction' model the active intentions of the person indirectly determine both the manifestations and experience of anxiety. Anxiety is a personal

construction amongst a set of constructions by which people make sense of events in the world and position themselves socially, cognitively and behaviourally with respect to the world and to others. So everyone's construal of anxiety is distinct, and the construal of anxiety needs to be considered against the wider background context of how an individual construes her/his physical and interpersonal world. Two elements are important to unravel in this constructionist approach: first, a qualitative personal account of the anxiety experience; and, second, an understanding of the ecological factors guiding the preparation.

Regarding the first element, Massé (2000) has pinpointed very well the multiple meanings of terms of distress. Ethno-semantic analysis showed a number of idioms of distress through which people express their experience of suffering. He identifies over 2000 manifestations of distress sorted into a 47-item lexicon of signs. A factor analysis revealed four factors, namely devalorization or self-depreciation, irritability and aggressiveness tinged with arrogance, anxiety and depression mixed with stress, and demotivation, which refer to social disengagement and generalized disinterest. As Massé points out, these terms can be further refined and can make sense only in the context of the narrative of the lived contextualized episode of distress.

Subjective representations frequently vary across health domains and have important clinical implications for health management, adaptation and adherence to treatment (Coutu *et al.*, 2000, 2010).

A qualitative analysis of anxiety experiences permits us to: (1) account for different reactions to anxiety on the basis of how it is construed; (2) understand the construal of anxiety in the context of the client's wider representation of health and other concerns; (3) separate out different types of anxiety – for example, anxiety secondary to physical disability or to bereavement may not be identical to psychological distress where anxiety is a main complaint; and (4) specify idiosyncratic targets for psychosocial intervention.

Phenomemological interviewing

In Appendix 10 I give some verbatim reports of people's descriptions of anxiety, completed with reductions and constructs following Amadeo Giorgi's method. Giorgi's qualitative phenomenological method comprises naive accounts of clients' experiences prompted by open-ended questions. The verbal narratives are categorized into 'meaning units', and the essential meaning is established by finding precisely which elements of a discourse constitute meaning for the client. The phenomenological reduction is a disciplined spontaneity, whereby one first discovers the relevant meaning unit, then reveals by revelatory description its full significance. As strategies for eliciting descriptive narratives from clients Amadeo Giorgi (1985) suggests empathic emergence in the client's word of description, slowing the person down to dwell on the details of description and magnifying the mundanity of the client's situation.

Interviews lasting approximately two hours on two occasions were audio-recorded for later transcription. The domain boundaries and horizons of the

conversational event space were defined by elements relevant to the anxiety and anxious representation of the client, namely events surrounding the anxiety; implication of significant others; significant or unusual events associated with the problem; interactions and interpersonal relations with friends, family and colleagues, and also with health professionals; the client's models and understanding of the problem and its future management; the vision of the client regarding quality of life; and future control of actions and management of the anxiety. The participants met on two occasions for (1) interviews and (2) validation of the analysis.

Giorgi's (1985) methodology explicitly sticks very close to the original ideas on reduction expressed in Husserl and Merleau-Ponty. There is no drift into interpretation or theory. For Giorgi, extracting themes through the reductive process is equivalent to deriving essences in the sense that the themes encapsulate the bottom line of meaning for a range of reported experiences. Imagine one theme to be extracted from the reduction is 'lack of security'. In a number of anxious situations the client reports that in different ways s/he feels insecure. This theme can then be taken up in construct analysis by filling in the grid in Appendix 4, in which can be listed three situations of security versus three situations of insecurity. Further construct analysis can then reveal other constructs deriving from these implicit and explicit poles. For example, the secure situations may be habitual, familiar or non-conflictual versus strange, distant or unknown situations. This analysis provides one dimension to how the person constructs and orders their world, where the familiar is viewed distinctly and elicits different emotions to the unfamiliar. Constructs elicit different behavioural strategies and appraisals, which may feed into the problem and can be addressed later in therapy.

Eidetic reduction

Furthering experiential awareness can be achieved directly with Husserl's (1954/1967) 'eidetic reduction', which examines variation in the nature of an experience in order to lay bare any essential criteria that define the experience. The reported experience need not be very elaborate. For example, the following are reported variations in the nature of an anxious experience, taken from the narrative of a client with a 'fear of heights' (given in Table 1.2).

The description of a more elaborate anxiety experience is obtained in the person's words, and several distinct variations of the same experience are obtained to reveal essential criteria and communalities.

As in the earlier narratives describing depression, the variation in accounts can seem to describe diverging experiences, which are nonetheless labelled as 'anxious depression'. The experience is variously: 'isolating, throwing me back on myself, making me think of past memories. I feel detached and lost'; 'I become agitated and worried about everything. I carry on and put on a brave face, but it's like a minefield'; 'Doesn't mean I can't let myself go and have fun. I can. If I don't dwell on the fear I can forget it'. Here anxious depression is defined through experiences which may seem contradictory but tell us about the heterogeneity of the experience for

the client. Occasionally, variations highlight two very near equivalent experiences: one anxiogenic, the other not so. For example, these experiences are from the same socially fearful actor: 'If I know I must talk in front of people I clam up, I sweat, I anticipate not being able to speak properly, stumbling over words and I won't look at them'; 'I generally deliver my speech loud and clear with a good projection and connect with the audience'. When the actor is in a professional role the anxiety dissipates. Exploring variation generates an awareness of how differences in experiences reflect differences in self-world positioning, which in turn defines the distress.

Variations of anxious experiences

Descriptions of anxious experiences will vary and provide information on personal meaning.

Variation 1

I was on my way to the supermarket, but I wasn't feeling that great so I was walking slowly, I was thinking about an argument I'd had with Frannie and what would happen. I saw the market, I climbed up the steps to the supermarket and, wham, it hit me, I felt weak, I couldn't breathe, my legs were shaking.

Variation 2

OK, I was going for a walk on my own down to the town and I was enjoying the sunshine when the space suddenly seemed to shrink. I think it could have been the light, I felt insecure and I wondered if something was wrong with me. If I look at what was going on that day I wasn't up to anything, I guess I was a bit depressed. I had thoughts about what I would do in the future, whether it would get any better. I noticed other people, they seemed OK. I guess it came to me I was different.

Variations of non-anxious experiences

Finally, the description of experiences associated with no or minimal anxiety are elicited in the person's words to provide a range of anxious versus non-anxious experiences and better articulate personal implicit/explicit construct dimensions across evaluations of the variations. Several variations of the non-anxious experience are obtained to reveal communalities.

Variation 1

I'm sitting at home with the family, enjoying a drink, watching television. I'm thinking of the positive things I accomplish with my family and a feeling of fulfilment, and how important we are to each other. My son talks to me about his schoolwork, my wife makes a special meal. I have a feeling of contentment.

Variation 2

I'm playing sport, well, hockey, I'm in an adult team. I'm focused on the game and whether I will do well and on my role in the team as goalie and how much depends on me. I look forward to that team feeling.

Communalities and regularities from the previous discourse reveal the following essential themes. Anxiety theme: 'I'm alone, different, with no particular purpose, meeting other people'. Non-anxiety theme: 'I'm with family/friends in a familiar setting, with a feeling of togetherness'.

These variations illustrate that the experience occurs in an act context. The person becomes aware that the anxiety is associated with a number of actively generated thoughts/behaviours. Second, the situations/contexts/activities provoking 'anxiety' make sense in terms of how the person lives their life. In construct terms, the opposite of anxious is not simply 'not anxious' but rather a set of feelings and thoughts representing the opposite pole of an explicit personal construct – feeling 'alienated and strange' versus 'feeling valued and appreciated'.

The role of anticipation and preparation in anxiety

Qualitative studies of panic attacks have shown heterogeneous symptoms, including somatic signs, subjective reports and unreliable cognitive profiles. Different types of anxiety involve qualitatively different anticipatory concerns. One client may anticipate his own incompetence, another catastrophe, another loss of control. Such anticipations each involve separate acts of preparation, either defensively or assertively. There are few qualitative studies of panic experience. But when we look at concerns they are often specifically to do with an inability to cope and overcoming embarrassment. Clearly, as in any anxiety, concerns spiral and so the person begins to imagine the consequences of not coping and a number of secondary evaluations come into play.

In their qualitative study of panic attacks Raffa *et al.* (2010) found that it was anticipation (of embarrassment, death, fainting, going crazy, losing control and disability) that provoked panic, and the fears seemed equally divided between anticipation of social and somatic concerns, whereas for Holt and Andrews (1989) it is most definitely fear of impending doom. Anticipation is the active ingredient of anxiety and qualitatively this translates into active preparation for disaster. As noted earlier, the role of anticipation and, in particular, preparation is distinct from the event being anticipated and prepared for. The literature on the role of preparation in generating its own physiological response suggests anxiety is the co-occurrence of different sets of responses with independently controlled effects or systems (McNaughton, 1989). Directed facial action produced larger autonomic changes than reliving emotions (Ekman *et al.*, 1983). Activation as measured by autonomic measures in balance tasks predicted performance better than arousal, with a linear rather than curvilinear relationship (Sabzi *et al.*, 2012). If we move beyond

vague, passive concepts of sensory arousal we are left with the more concrete active operational concept of preparation defining anticipation, which is measurable.

A constructionist account grounds feelings within the action context in which they are constructed, including descriptions of specific intentions, action plans and behaviours. This constructionist approach may offer a heuristic to overcome the discordance (noted earlier) between physiological/behavioural/subjective systems by tying the action context, in which anxiety is experienced more closely, to the intentionality of behaviour. Physiological or other support systems are or are not activated in a particular anxiety experience, depending on the active intentions of the person in the anxiogenic situation.

For example, a person afraid of collapsing may prepare themselves not to collapse by tensing their muscles and breathing to oxygenate the muscles. Someone preparing for negative evaluation may prepare themselves by making sure they reveal less and less of themselves in situations. Someone expecting doom may prepare to escape by activating their heart rate and sweating to shed weight and facilitate escape. Part of preparation, or perception for that matter, involves the future. The person is already ahead of themselves foreseeing plans for action to ensure continuity of action. In normal circumstances such preparation will be in accord with the flow of goal-directed behaviour; but it can be in conflict. I will see myself and prepare myself to advance towards a goal; but in anxiety anticipation there seems to be a conflict of preparation. The person is literally in two worlds, preparing for two conflicting actions, going and staying, participating normally in a social encounter or escaping.

So the anxiety symptoms may be produced by a conflict of purpose in the person's preparation. S/he is preparing for two separate actions or events at the same time, one involving the natural flow of everyday telic events, the other involving anticipation of abrupt rupture or doom. The resulting somatic symptoms are in line with this preparation.

For example, psychophysiologically diverse responses to anxiety can be more parsimoniously viewed as idiosyncratic strategies to actively prepare for action in qualitatively distinct ways (Malmo and Malmo, 2000; O'Connor, 1989a; O'Connor *et al.*, 1999). A person preparing to retire and self-protect in the face of perceived danger will show a distinct somatic and subjective profile compared to another person planning a more active defence of the self (Roy, 2006; Stravynski, 2007). In other words, somatic and subjective signs of anxiety may not be reactions occurring 'out of the blue' to aversive stimuli but, rather, products of the way the person intentionally prepares for a situation. Of course, how a person prepares depends on the perception of the goal.

The role of preparation in social phobia

In the following sections we describe two studies in detail (on social phobia and generalized anxiety), which underline the role of preparation and its somatic support

rather than a state model of anxiety in eliciting psychosomatic distress. Social phobia is traditionally considered to be an anxiety disorder, and in the Diagnostic and Statistical Manual (DSM) it is not only classified amongst anxiety disorders but seen as synonymous with social anxiety. Currently, most research and treatment of social phobia implicitly considers socially phobic behaviour to be a product principally of an abnormal state of social anxiety. Since there is clinical consensus that social anxiety is the core factor driving socially phobic behaviour, most current treatments seek to modify socially phobic behaviour through anxiety reduction, either through medication or psychotherapy, whether behavioural or cognitive.

An interpersonal preparation model of social phobia

Stravynski (2007) has proposed an interpersonal view of social phobia, suggesting that social phobia, far from being driven by a state of anxiety, is better construed as a pattern of active intentional behaviours aimed at self-protection from others. The self-protection may take different forms at different times and may involve a lack of participation or an inappropriate engagement.

An interpersonal approach effectively considers social behaviour and accompanying states as a product of goal-driven behaviour, rather than as a learned passive reaction to anxiogenic stimuli (whether cognitive or behavioural). For example, two individuals unable to enter a social gathering and both reporting anxiety may be avoiding for distinct reasons. The first person, because his goal is to make a good impression and not appear clumsy, the second person because she considers social events as superficial and her goal is to appear authentic. Both these individuals may report similar avoidant behaviour and end up employing perceptual cognitive attentional biases – for example, selective attention – but their interpersonal goals are quite distinct and would not be considered in a therapy focusing on anxiety reduction.

Understanding the interpersonal nature of social phobia hence entails acknowledging self-protective behaviours and the social contexts evoking and shaping them. This self-protective behaviour is, however, self-sabotaging since it effectively inhibits full social/interpersonal participation. In addition to avoidance it may lead to a poverty of communication or interaction, conveying the appearance of indifference or disinterest to others. For example, avoiding expressing an opinion or speaking only briefly are facets of self-protection.

Several studies support the notion that social phobia is characterized by self-protective behaviour as operationalized by Stravynski (2007). For example, the style of talking in the social phobic shows speech with longer silences and less initiation of speech, and this finding has been reported in several studies. Although, interestingly, the actual time spent speaking overall may not be a reliable discriminator, which suggests no overall lack of verbal activity. It has also been noted that social phobics affirm less often in their statements and are less willing to dispute others' arguments or give orders in role-play situations (Stravynski, 2014).

The interpersonal model leads naturally to an interpersonal approach to therapy, whereby the target is modification of self-protective and attendant behaviours. Clinical trials support the efficacy of this interpersonal therapy both at post-treatment and long-term follow-up (Stravynski *et al.*, 2000).

Self-protection and active preparation

A self-protection interpersonal model makes sense of the different and fractionated response systems activated in social phobia by stepping beyond an intrapersonal model of anxiety towards a model of contextual preparation. Several psychophysiological investigators have long considered psychophysiological activation as a physiological support for behaviour, i.e. an element of behaviour rather than a response. Malmo (1957, 1959, 1965) has shown, in a series of studies, how physiological activation depends exclusively on what a person is doing rather than a general level of arousal or energy level. In short, there is no general level of activation or arousal; rather, the system activated depends on task demand and fractionation is the norm, but such fractionation specifically depends on the nature of the active preparation.

Following on from Malmo's original observation, O'Connor (1989b, 2008) has shown that the concept of preparation is more economical than sensory notions of arousal. He studied the effect of nicotine on the autonomic and central nervous systems, comparing a specific-preparation and a general-arousal model of effects. Nicotine is a stimulant but produces paradoxical effects. The current arousal model of nicotine's paradox, following the Yerkes–Dodson law, is the inverted U-shape arousal curve, which predicts that at a certain level of arousal nicotine will have a paradoxical effect and reduce arousal, so explaining the subjective calming effects often reported by smokers. O'Connor (1985a, 1989a) and O'Connor and Langlois (1991) established not only that situational preference to smoke was often a function of type of task engagement but that further physiological effects were mediated by type of task, often interacting with type of personality and style of preparation (O'Connor, 1993).

In subsequent studies O'Connor (1993, 2008) postulated that modifying levels of activation may also serve the function of helping adapt motor preparation in the light of change in task demand and, in particular, represent an effort to adapt to a conflict between initial and perceived level of preparation. The conflict between preparation and adaptation could occur as a consequence of inadequate preparation, as a consequence of changing task demand, a lack of ability or the presence of other distracting tasks. Again, this preparation model found support from studies of the titration of nicotine and the modification of smoking behaviour subsequent to different task engagements (O'Connor and Langlois, 1998). Other studies have supported the notion that preparation is guided by goal-directed intention, that this preparation and intention is reflected directly in physiological activation and that such preparation reflects a gradient of activation proportionally related to the progress of the task (e.g. Malmo and Malmo, 2000).

The preparation model, then, not only explains differential activation amongst physiological systems (according to type of preparation) but makes predictions about the type of activation characterizing different disorders. The key parameters emerging from this preparation model are: (1) the intention (that is the goal-directing action driving the preparation to act); (2) the conflict experienced between preparation and action *in situ*; and (3) the effort of adaptation needed to overcome conflict and adapt to the ongoing situation. The preparation model predicts that the greater the conflict in preparation, the more the flow of action will be interrupted, possibly to the point where it will be impeded. Obviously, the less the conflict, the less the interruption in the flow of action.

Roy (2006) tested the self-protection preparation model, asking participants to discuss a theme suggested by the experimenter during 15 minutes with two strangers. A relaxation period was followed by a 20-minute semi-structured interview with the participant on the degree of distress experienced during the relaxation period. The participant was invited to go to the adjacent room in order to view the video recording of the discussion. During the viewing the participant was asked to confirm which behaviours corresponded, or not, to the previously planned preparation for the discussion. Moreover, the participant specified which behaviours required an adaptation effort. As noted, the key parameters of this preparation for self-protection model are: (1) the self-protective goal directing the preparation to self-protect; (2) the conflict experienced between the prepared self-protective behaviour and task demands *in situ*; and (3) the effort expended to cope in the face of conflict between planned self-protection and demands in the ongoing social situation. In general, the greater the conflict, the more likely that the flow of action will be impeded (O'Connor, 2008).

Sixteen people with social phobia, eight participants with generalized anxiety and 14 non-clinical controls were included in the study. Participants were assessed on the structured interview for DSM-IV-TR criteria (American Psychiatric Association, 2013) and were excluded if they had any other psychiatric or medical problems.

1. ***Planned preparation.*** The experimenter asked participants 13 questions (identified in a pilot study) in a semi-structured interview format just prior to the experimental role-play situation to assess how the participant planned to act during this situation. These questions addressed attitude, initiative, content and goals of planned interaction (e.g. Do you plan to initiate conversation? Will you attempt not to displease others?).

   This interview was transcribed complete and verbatim by the experimenter. Two doctoral candidates in clinical psychology, blind regarding the research hypotheses and group membership of the participants, analysed its content and identified the personal set of themes of each participant. These themes were reduced to four meta-categories determined by a consensus between the raters, namely: (1) avoidance, (2) considerateness, (3) authenticity and (4) performance dissimulation. Participants who expressed the intention not to speak a lot, to be discreet and to leave all the conversation space to the others were placed in the

avoidance category. Participants expressing the intention of maintaining a good ambiance, being considerate of others and not being judgemental were placed in the consideration category. Participants expressing the intention to act naturally, without seeking to perform or to please, were placed in the authenticity category. Finally, participants expressing the intention to make a good impression whilst hiding their nervousness were placed in the performance-dissimulation category. A participant could be in more than one preparation category. Appendix 11 gives the protocol for measuring parameters in the preparation model. Table 6.1 gives preparation of action statement examples for each category.

2. ***Conflict.*** In order to assess conflict of preparation a second semi-structured interview was conducted by the experimenter after the experimental role-play situation in order to see if the behaviours planned by the participants during the pre-role-play interview were actually enacted during the role-play situation. The behaviours adopted during the discussion were confirmed by the participant during a viewing of a video recording of the role-play with the experimenter.

   A conflict scale was constructed, anchored from 0 to 3 (0 as complete match; 3 as complete mismatch), assessing the extent of the discrepancy between the pre-planned action statement and the post-statement describing the adopted behaviour. The scores were added over the 13 statements of the pre-role-play interview, giving a conflict index varying between 0 and 39.

TABLE 6.1 Preparation of action categories with examples of preparation statements
Source: Adapted from Roy (2006)

Preparation categories	*Examples of preparation statements*
Avoidance	• If I do not agree I will not say anything. • I will not move or speak too much in order not to have all the attention on myself.
Consideration	• I will pay attention to the words I use in order not to hurt anyone. • I will take my time to speak while making sure everybody has time.
Authenticity	• I do not have a concern with acting well as I will be myself. • I would not mind having a different opinion, I could say it, especially if it is what I really think.
Performance/dissimulation	• I will elaborate, I will have the tendency to repeat what I have just said in order to make sure I am well understood. • I envisage bringing up elements in order to make the conversation go further, not to make it stagnate. • I envisage smiling, shaking hands with the others, adopting a professional attitude while hiding my nervousness in order to be well perceived.

3. ***Effort of adaptation.*** Adaptation is a behaviour that requires an effort, contrary to a behaviour that goes with the flow (O'Connor, 2008). A behaviour that flows occurs easily, without difficulty. A behaviour that requires an adaptation effort needs to be adjusted to a situation or to a constraining factor. During the viewing of the role-play video recording the participants identified which behaviours required an effort of adaptation from their original planned behaviour. Examples from everyday life were provided in order to anchor the difference between a behaviour that required an effort of adaptation and a behaviour that flowed naturally.

From the set of answers given by the participant, the adaptation behaviours were assessed by the observer on a scale from 1 to 3. A score of 1 indicated that the adaptation behaviour occurred once or less, a score of 2 that the behaviour occurred twice or more but not consistently and a score of 3 that the behaviour occurred consistently during the social role-play situation. Three discordances occurred between the raters so the final scores for these participants were obtained by establishing consensus.

The preparation of action categories differed significantly with a large effect size regarding the effort of adaptation. The post hoc comparisons revealed that the performance-dissimulation preparation category showed a higher effort of adaptation than the authenticity and consideration categories, which did not differ from each other. Moreover, the avoidance category was associated with a higher effort of adaptation than the authenticity category. Chi-square analysis showed that the socially phobic group were more likely than the other two groups to adopt both avoidant and performance-dissimulation action categories.

The hypothesis that the socially phobic group would differ in type of planned behaviour compared to the other two groups was confirmed since a greater proportion of the socially phobic group were characterized by avoidance and performance dissimulation. Further, the socially phobic group showed fewer contributions, less participation and a greater self-protective pattern in the role-play compared to the other groups. When dividing the group, regardless of diagnosis, according to predominant type of preparation of action category the authenticity and the consideration categories reported less distress than the performance-dissimulation and avoidance categories, and less effort of adaptation, suggesting that a more open flexible preparation for social action may encourage greater flow.

Essentially, the results show that people with social anxiety tend to prepare for action in a way characterized by self-protection; they wish to avoid or dissimulate their performance rather than act authentically. This planning leads to distress and to experiencing greater conflict between planned and actual goals and, throughout the role-play, an investment in greater effort of adaptation of behaviour. The socially phobic group's initial protective plan aims to restrict contact but in practice burdens them and impedes their subsequent participation.

The optimal preparation may be not to adopt rigid plans but to be flexible to guarantee flow (O'Connor, 2008), and a more authentic preparation may be to plan

spontaneously. Authentic preparation seems to have led to optimal responding in the role-play in terms of effort of adaptation and subjective distress. This finding has clinical implications since it suggests that encouraging even a positive pre-planned preparation for social encounters may be counterproductive if the preferable option to ensure flow is no preparation at all. Reliance on uniform anxiety reduction as a therapeutic strategy may not always be the optimal response, particularly if this involves creating a general antagonistic state of relaxation or calm since such a global relaxed state may not always represent an authentic attitude facilitating social interaction.

The additional effort of adaptation employed by a person who is socially phobic could indicate a dual preparation. On the one hand, people with social phobia are preparing for negative eventualities and the need to self-protect; on the other hand, they are preparing to adapt to the ongoing conversation. This might also explain their higher level of distress, torn in two conflicting directions. In addition, the performance-dissimulation category showed higher effort of adaptation than the authenticity category. Dividing between high-and low-conflict groups and high-and low-adaptation groups also discriminated well on physiological measures. Lower heart rate was associated with lower conflict (Roy, 2006).

Natural and authentic preparation seems to have led to optimal responding in terms of effort of adaptation, conflict and subjective distress. Conflict can, of course, arise due to diverse sources: inadequate preparation, difficulties in enactment or other competing behaviours (O'Connor, 1989a, 2008).

A series of questions to elicit style of preparation is given in Table 6.2. This recommendation of moving away from anti-anxiety state strategies and towards a telic approach to managing preparation was supported in a further study directly comparing relaxation and what was termed 'motor restructuring' in the management of generalized anxiety.

TABLE 6.2 Questions to prompt narratives on preparation experiences

Does preparation for anticipated problems preoccupy you?
Do you prepare in advance?
Do you always think about preparation?
Do you bodily prepare for certain actions?
Does your preparation produce body sensation?
Do you involve others in preparation?
Does preparing make you more distressed than the actual problem?
Are you constantly preparing?
When do you never prepare?
Do you feel you need to prepare in advance?
What would happen if you didn't invest in preparation?
Can you detail the activities you involve in preparation?

The role of preparation in generalized anxiety

A further study applied the preparation model to generalized anxiety disorder (GAD) (a controlled study of the effects of muscle relaxation in the treatment of generalized anxiety disorder). Relaxation therapy has proven useful in the treatment both of generalized anxiety as well as in panic disorder (Hutchings *et al.*, 1980; Borkovec and Mathews, 1987). The traditional method of muscle relaxation involves a graded tension-relaxation procedure usually termed progressive relaxation and based on Jacobson's approach (Jacobson, 1967). Typically, the person is instructed in discriminating between tension and relaxation in between 7 to 16 muscle groups. The discrimination is achieved by generating tension in opposing muscle masses and then releasing the tension. The exercises are repeated throughout the body, and as the person becomes more skilled in changing from a tensed to a relaxed state so the time taken and the prompts required to relax become shorter. The procedure can then be practised at home or applied settings and used with cue-based exposure.

Comparative studies have shown that prolonged bouts of hyper-muscle arousal may be as effective as hypo-arousal in calming mood, and aerobic exercise and stretching may be more useful in developing awareness of tension since more receptors in the muscle fibres are activated whilst stretching than whilst tensing (Carlson *et al.*, 1987). The assumption that relaxation achieves its psychological effects primarily through feedback from muscles derives from the early work of Jacobson (1967), who was exclusively concerned with physiological relaxation. But success in achieving relaxation is generally measured in a clinical setting by verbal self-report, not physiological measures.

In any case, the sensory notion of a uniform state of arousal is increasingly difficult to apply to qualitatively different motor states, which respond not to a general level of activation but to specific intentions (Neiss, 1988). Different muscles are active in regulating a range of qualitatively distinct emotional states (Levenson *et al.*, 1990).

The strong link noted by Lang *et al.* (1980) between action-focused imagery, muscle activity and autonomic response suggests that the subtleties of imagined action are reflected in the psychophysiological effects of anxiety. Chronic muscle tension might then be considered as inappropriate as prolonged motor preparation for some imagined danger. Active preparation for danger can involve elevated muscle levels in a range of relevant and irrelevant muscle groups (Brunia and Vuister, 1979). Anxiety, on the other hand, reduces the magnitude of central measures of motor preparation (e.g. the motor-readiness electro-cortical potential), and this effect of anxiety on centrally evoked responses is similar to that of prolonged activity or distraction (Plooij-van Gorsel, 1979). A cognitive view of relaxation might suggest modifying the profile of tensions to enhance efficient preparation for action instead of just relaxing.

If the Jacobson model of the muscle-relaxation state as the optimal antagonist state to anxiety is coherent then active muscle restructuring without relaxation should not show the same clinical improvement as a relaxation group.

So the current study compared a treatment employing progressive relaxation techniques and a treatment implementing restructuring muscle tension by enhancing preparation for action without inducing relaxation to see if the action restructuration was more effective. Outcome was measured as a significant clinical change in GAD symptoms, physiological, cognitive and subjective measures post-treatment.

There is potential with GAD for a considerable range of pathology so we opted to carefully select a smallish but comparable group of cases and minimize cross-sectional sampling errors that might unduly affect a small number by looking at within-group changes in clinical measures over a number of treatment sessions.

Twelve GAD clients were selected from outpatient referrals on the basis of a diagnosis of GAD according to DSM-IV criteria. Their age range was 20–60 years with the duration of the problem lasting at least six months. The two treatment groups were sampled to be as similar as far as possible on clinical criteria. Individuals were paired and allocated to either treatment group on a random basis.

The Symptom Check List (SCL-90) (Derogatis, 1977) was also administered. This is a 90-item checklist overviewing psychiatric symptomatology. The clients' scores on nine scales are expressed in terms of a percentile in the distribution of scores for the general population. The higher the percentile, the rarer the phenomenon, and by implication the more severe the pathology.

Participants completed the 38-item Mckay version of the Thayer Adjective Mood Scale checklist (TAMS) (Mackay, 1980), which can be scored according to four psychophysiologically validated subscales of positive (aversive) stress, negative (activating) stress, positive (high) arousal and negative (low) arousal. These were monitored at baseline, throughout discrimination and treatment, and followed up to gauge change in subjective mood concurrent with change in physiological measures.

As part of the initial clinical interview situations where the person had problems in coping were listed according to degree of difficulty in coping (Bandura, 1982). This monitoring of self-efficacy was continued during treatment and at follow-up, and was measured as a change in confidence in coping with the situation on a scale of 0–100. Self-efficacy was analysed separately for coping with low-risk and high-risk anxiety situations. Those rating more than 50 per cent in self-efficacy at pre-treatment were classified as easy.

The client kept a daily event record (at one week, at baseline, during treatment and follow-up) of activities and an analogue rating scale (0–5) of their anxiety level, which was recorded at intervals throughout the day in accordance with the daily-experience sampling method used by Margraf *et al.* (1987). This sampling method scores the number of positive, negative and neutral events occurring weekly and guards against bias inherent in only recording negative events.

Psychophysiological measures were taken in the laboratory, where the participant rested in a comfortable reclinable chair. Electromyographic muscle tension (EMG) was recorded from the arm (right biceps), neck (semi-spinalis-capitis) and forehead (frontalis). These muscles were chosen because they were accessible, in functionally

distinct sites and have different amplitude ranges (Matheson *et al.*, 1988). Integrated EMG was stored as a waveform and measured as RMS (root mean square) level above normalized zero. Heart rate was measured by computer scoring from the photo-electric finger plethysmograph.

There were two preliminary interviews, three discrimination sessions and five treatment sessions. During these interviews the rationale and procedure of the treatment was explained. The clients were given a cassette that explained the link between muscles and emotion, and clients were also given a written rationale.

On the third attendance the person began the discrimination exercises. The person was asked to contract each muscle and release it slowly whilst the experimenter gave audio feedback over the intercom indicating the falling level of tension (as measured by computer display) from 100 per cent (tense) through 50 per cent, 25 per cent and then 0 per cent. This process was repeated three times and then the person themselves was asked to do the exercise whilst repeating to the experimenter the level of 100 per cent, 50 per cent, 25 per cent or 0 per cent tension.

After the third discrimination session the two groups were randomly allocated to either traditional progressive relaxation (PR) or motor restructuring (MR).

The progressive-relaxation treatment began in the next session with work on the lower body (feet, shins, legs, buttocks and abdomen) and progressed to the upper body (forearm, biceps, shoulders, neck, chin, forehead and mid-face). The tense-relax cycle was coupled with expiration and inspiration training. Inspiration was advised just at the point of contracting and expiration took place whilst relaxing.

The second relaxation session was identical to the first except that the contract-relax timing was half that of the first session. In the third session the person was asked to do a tour of their body to identify the tensions and relax them by associating expiration with an internal signal (relax). The person was asked to practise this last self-instruction session six times per day during the next week at the following times: when they got up, mid-morning, midday, mid-afternoon, after work and before going to bed.

At the fourth session the person created in their imagination a scene or sequence associated with a low level of anxiety. S/he described the scene in detail and attempted to relax using the one-word internal instruction, keeping the vivid image in mind. The person practised this at home. In the fifth and final session two of the most anxiety-provoking scenes or sequences were created and described to the person whilst they relaxed. This was also practised at home.

In the first session of motor restructuring the person was asked to imagine an anxiety-provoking situation in detail and describe objects, persons, thoughts and posture during this scene or sequence. The person then made a tour of their body to report on tensions they detected in association with this scene. The experimenter discussed with the person the significance of these tensions and how these tensions did or did not prevent efficient preparation for planned action. When asked at baseline participants were unable to vocalize a clear, good, directed aim in preparing, but rather said they intended to 'keep calm', 'relax' or 'not be too nervous', but without a clear aim in view. For the experiment participants described a detailed process

of preparing for a specific action. The person was instructed to change the nature of tension by concentrating on preparing for one intentional action. The person practised this restructuring in the lab and then practised at home twice daily in imagination. S/he also practised *in vivo* each time the situation was encountered.

For example, a client who detected tension in the shoulders and legs associated with anxiety about supervising an interview was asked to imagine preparing more efficiently for the act of interviewing. This preparation involved for him or her tensing forearm, calf and abdomen muscles. The person concentrated on anticipating and preparing for this one action alone. The goal was to redistribute tension more appropriately. The person practised the technique of motor restructuring until it could be induced by self-instructional training, and the person could tense the chosen muscles automatically.

At the final treatment session both groups were again clinically evaluated. During the next six weeks the client practised *in vivo* with telephone contact at weeks one to five. At six weeks the client attended for physiological assessment of resting tonic EMG and heart rate, together with a further TAMS mood-scale evaluation. Baseline questionnaire measures were retaken and confidence-in-coping (self-efficacy) measures were collected. A final clinical evaluation, as well as a one-week event diary, was completed at a follow-up three months post-treatment. The measures analysed were: pre-post clinical evaluations, TAMS mood questionnaire data, daily event diary, self-efficacy ratings of confidence in coping, the three EMG channels and heart rate.

There was a significance decrease in SCL-90 score over time in both groups ($F[1,10] = 5.63$; $p<0.04$). There was also a significant improvement in both groups in self-efficacy over treatment sessions ($F[1,10] = 12.10$; $p<0.01$) as well as a group difference in this improvement ($F[1,10] = 4.89$; $p<0.05$). Both groups showed an increase in self-efficacy ratings of coping with lower-hierarchy anxiety events. Only the MR group showed an increase in efficacy for high-hierarchy anxiety items. Both groups reported a significant decrease in the percentage of daily events rated as negative ($F[1,10] = 6.03$; $p<0.05$) but no change in neutral items.

For the physiological measures, there were no significant group differences in EMG baseline during discrimination, and there was no significant difference between groups in response to discrimination training across the three sessions. Both groups produced increased frontalis muscle tension across trials within discrimination sessions ($F[9,90] = 1.92$; $p<0.05$).

The only significant group change within treatment sessions was in EMG neck channel, which showed a significantly greater decrease in tension level in the PR group ($[9,90] = 2.96$; $p<0.01$) compared with no change in the MR group. Five out of six participants in the PR group showed this decrease across the ten trials within sessions.

There were no significant self-report TAMS mood changes during the discrimination session, but mood did show significant changes during treatment.

Positive stress (e.g. jittery, irritable) decreased significantly in both groups over treatment ($F[4,40] = 3.27$; $p<0.02$). Negative stress (e.g. pleasant activation) increased

over treatment in both groups ($F[4,40] = 4.39$; $p<0.01$). So in both groups ratings of stress improved. Mood changes within treatment sessions, taken before and after each session, indicated that over treatment sessions both types of treatment showed a decrease in positive stress and an increase in ratings of negative stress. But whereas the PR group reported a decrease in positive arousal (e.g. alertness) and an increase in negative arousal (e.g. drowsiness), the MR group reported an increase in positive arousal within treatment sessions and no change in negative arousal.

The principal finding from the study was that both PR and MR showed improved clinical changes after treatment. Both groups showed a reduction in SCL-90 score. EMG neck tension did show a significant decrease in the PR group over trials within treatment sessions.

The MR group showed a greater change in self-efficacy in dealing with difficult situations, and both groups showed a decrease in everyday anxiety and a decrease in reported negative events as rated on the auto-observation diary. Mood improved in both groups over treatment, most notably in alleviating positive stress (e.g. aversive stress). But only the PR group showed a change in negative arousal. So relaxation increased drowsiness.

Tension levels were invariably higher in the MR group post-treatment than in the PR group. The profile of mood changes also indicates that different affective processes were influenced during treatment sessions. Both groups reported aversive feelings (positive stress) and more pleasant activation (negative stress) at the end of each treatment session, but whereas the MR group showed more positive arousal (alertness) and no change in negative arousal (drowsiness), the PR group showed a decrease in positive arousal and an increase in negative arousal.

The lack of difference in clinical outcome between groups suggests that clinical improvement and change in subjective measures of coping efficacy, and stress, need not be accompanied by lower muscle tension.

The difference between PR and MR treatments lay in the action-directedness of the tension management. The slightly greater improvement in cognitive measures in the MR group leads us to speculate that developing the ability to prepare efficiently for action in the face of anxiety (whether this be towards greater or less tension) may be a therapeutic ingredient. Motor restructuring might well in this case profitably be combined with cognitive restructuring.

The important motor skill aiding adaptation may be increased flexibility in adjusting motor state to the situation rather than absolute change in the general level of tension. At a motor level learning a uniform relaxation response may be less adaptational than learning how to redistribute tension in accordance with goal intention.

Clinical implications

The constructionist view highlights what is generally seen as preparation as the crucial element in identifying intentionality. How far back do we trace preparation? As we have seen it is a separate act, which is defining a relation with the world and brings about the ground for feeling and thought. Preparation can be revealed

in subtle actions and approaches: a way of talking, walking or grasping. The motor preparation may be pre-cognitive and therefore inarticulate and best revealed by mood, ways of being and emotional horizons.

Measuring preparation is more complicated than it seems. Each anxiety disorder may involve distinct preparations. Qualitative interviews are required to match up preparation with behavioural categories in anxiety and distress situations. Such interviews would enquire about cognitive behavioural and emotional aspects of preparation to establish early detection of preparation. If the theory of maladaptation through conflicting preparation is upheld then, clearly, more-optimal or, in some cases, no-preparation strategies would be desirable. A schedule to measure preparation is given in Table 6.2.

The height phobic on the edge of a cliff does not 'receive' conflicting sensory information causing them to perceive conflicting cues. Rather, the person acts out the possibility that he or she is already falling over the cliff and on the way down (to the sea). The person constructs this possibility; the person and their body effectively live the falling over. The sky recedes and the ledges of the cliff pass by and the world turns round. This imaginary fall is as real for them as their actual static position on top of the cliff.

The conflict, then, is an action conflict, not a perceptual one. All the somatic symptoms reported – sweating, jittery legs, breathing problems, vertigo and the scene swirling before them – are sensations generated by a struggle between two incompatible acts, between the one act of staying on top of the cliff and the other of already falling off it. It is the clash between two possible worlds.

Similarly, the boy or girl in a disco who experiences distress and visuo-spatial distortion imagines the action of escaping the disco. If s/he were to run away the others would indeed become more distant as s/he walked further away. But s/he does not or cannot walk away so instead imagines the action of walking away. This possible world of fleeing conflicts with the cues created by the actual world of staying. The person imagines an action, reacts to this image and then lives out the somatic and perceptual concomitants resulting from the conflict their imagination produces with the actual activity that is already underway. Typically, the person is actually in a static position but imagines some dramatic compelling action that conflicts with the actual stationary frame of self-reference. Anxiety, then, is essentially an act, not a sensation.

Hence one strategy to help overcome anticipatory anxiety would be to attend to other somatic-gravitational cues. In fact, any engagement of the person in a task that puts subjective perceptual cues in a narrower perspective can subdue distress. For example, focusing on a specific activity during height phobia can reduce the symptoms.

Each anxiety disorder involves a distinct way and form of preparing for action, and the preparation can be conflictual, thereby producing distress. We might speculate that a person reporting panic and another generalized anxiety may experience conflict in distinct ways. In the generalized-anxiety case there may be a diffuse preparation involving multiple partial preparations for a series of unknowns, resulting in high muscle tension; whilst in the panic case there seems to be exaggerated preparation for a specific event coupled with otherwise routine preparation for

everyday events. In high-risk versus low-risk tic situations the person with tics frequently over-prepares and is overactive in preparing for too much activity, often driven by perfectionist concerns that otherwise s/he will not perform adequately. In non-tic situations preparation is more calm and measured (O'Connor, 2005). Many of these conflicting projects are revealed in the narrative of those with anxiety. The cognitive profile betrays uncertainty about what may arrive. The initial ambiguous project – 'I'm not sure how I will react', 'I could be OK or not in the mall', 'I just need to hope things work out', 'If not I want to disappear', 'I wish I could just become invisible' – may then give way to the project of focusing on somatic disturbance or long-term fear of disability. The therapeutic strategy is to bring the person back to a coherent authentic positioning in the world, where current and future aims are continuous, clear and non-conflictual, and grounded in intentional activity relevant to the here and now.

7

THE BODY AS CONSTRUCT

Body experiences

For a person with body dysmorphia the body is seen as a spectator would see it, gazed upon and noticed. As one client said, it is like walking naked down the street with everyone looking. There is the flash when the corrupted part of the body seems the only part visible. 'Yes, it's just this side of my body feels lopsided, the arms shorter on the right. It's embarrassing; I need to hide it'. On the other hand, for a person with anorexia the body is the enemy. She detests, even hates the flesh beneath her skin. Tight childlike clothes exacerbate the wrinkles and spare creases and she wishes her body would disappear. She is aware of every piece of spare tissue and resents the food that keeps it alive. She may become more accepting after therapy but always in the background is the fear of her body as an invading monster. The needs of the body, its hunger, its pain, its aches, are dismissed in attempts to discipline the body in the light of arbitrary rules. 'I never had a good relationship with my body; I suppose I neglected it. It was there but like a lump attached to me. But I was used to it doing what I told it to'; 'My body's fat and ugly, I wish I could love it. The thinner I am, the more loveable I am'.

The client with hypochondria views their body as an alarm system. The body is constantly under surveillance for noise, for danger signals, for signs saying all is not well. The body becomes an object of fear or embarrassment which could undo or even destroy the person. It's an encumbrance. The client with social phobia wishes their body would disappear and they deliberately try to minimize personal space and visibility. When there is no external reflection available body dysmorphic clients use their 'felt impression' of their body image as an internal mirror of how they look. Self-focused attention produces the 'self as an aesthetic object', which consists of extreme self-consciousness and excess awareness of the body from an observer perspective, with ghosts from past experiences flavouring the perception (Veale and Neziroglu, 2010).

Even in non-pathological experiences there is a flexibility in the perceived boundaries of self. David Sudnow (1980), in his phenomenological study of piano playing, points out, for example, that the keys of the piano become extensions of the self of the pianist, who feels he is living through his fingertips. Merleau-Ponty (1965) notes that an organist does not learn objective positions and commit them to memory; rather, his or her body ends up reflecting the pattern of the keys. People immersed in a skill are immersed in the world: their actions and their tools become extensions of themselves, but their world is equally reflected in their actions. As Merleau-Ponty puts it, consciousness is not 'I think that' but 'I can do that'. There can be no hypothetical mediating points between the self and the world. The phenomenologist finds no perceptible division between perceiving and acting; they are interdependent, and the self is defined by body action and interaction with the world.

The sentiment is captured well in the following report from a racing-car driver. 'When I'm driving my car becomes my body. It's like I extend to the doors, even the mirrors; I kind of bend with it. When someone cuts me off it's like their pushing me, not my car'.

Embodied emotion

Our sense of body can be traced to proprioception, which Sherrington considered a prime function. As far back as 1900 Sherrington showed that there is never any pure exteroceptive reflex that depends only on the intervention of an external stimulus. Sherrington (1900) proposed that all reflexes require proprioceptive feedback of the context or biological value of a stimulus to be effective, and the fate of an excitation is determined by its relationship to the whole of the organic state and to preceding and simultaneous excitations. In other words, the concurrence of a multitude of conditions in the organism has as much right as the stimulus to be called the cause of the reaction. Earlier ideas considered the body and emotions controlled by somatic signals coming from the brain. But this semantic network idea of modular mental nodes controlling emotion has recently been replaced by ideas of embodied emotion. The idea that body activity is closely allied with thought is hardly new. As Lakoff and Johnson (1980) have pointed out frequently, even language uses action metaphors to convey emotion. Metaphors involve action to simulate an emotion, 'love's a journey', 'life's a struggle', etc. Berlin *et al.* (1991) note metaphors can create meaning by forging similarities. Lakoff and Johnson called metaphors derived from experience with the body 'the body in the mind'. Somatically based imagery takes metaphorical projections from physical processes and applies them to conceptual/rational elements. The notion of 'balance' and 'weight', when applied to arguments, is a good example. Lakoff and Johnson argue that all cognition is based on knowledge that comes from the body through conceptual metaphor, image, schemata and prototype. The same metaphors of action are used culturally to map conceptual domains. The way people categorize the world in metaphors and prototypes is often based on our experience of a body, and not logic.

In Chen and Bargh's (1999) study participants indicated valence of word by pulling a lever towards them or pushing it away. Participants responded faster to positive words when pulling the lever towards them, and negative words when pushing away. Reviewing a number of studies where valence was congruent to bodily state, Niedenthal *et al.* (2009) conclude that findings suggest that the meaning of words is partly grounded in motor states. In their own study they reported that conceptual contexts that promote stimulation are associated more with embodied reactions, as measured by facial activity, and that lived emotions were expressed with more facial activity. Conversely, individuals holding a pen in their mouth to block facial muscles were less able to judge emotions (Tversky and Hard, 2009).

Hung and Labroo (2011) assigned people to a hard muscle grip versus a control condition when deciding to donate money to a disaster in an envelope. The muscle-firming groups donated more. Wilson (2002) notes several points supporting embodied cognition, including the fact that cognition is always in interaction with the world, that cognition always implies action and that cognition could not work unless we offloaded work to the environment, which then acts as a store or prompt for further processing.

In social recognition when areas involving the face are activated facial recognition is more complete. Directed action and active intention affect visual search, distance perception, perspective, language processing, memory, reasoning, approach avoidance, self-regulation and social psychology (Bekkering and Neggers, 2001; Balcetis and Cole, 2009; Niedenthal *et al.*, 2009).

Physical movement can influence thought, and experiments cited previously show facial expression may induce mood. The capacity to modify one's body image to adapt to objects and the use of tools as extension of one's body is an important consequence of proprioception (Jones, 1988).

Preselection of movement, or of a central image or aim of action, is necessary for movement organization, and preselected movements may be accurately reproduced whether or not peripheral cues for motion are present. In other words, relational coordination rather than discrete movement governs preselection mechanisms. Action invariance across different muscle types must indicate a centralized rather than a peripheral representation of the image of action (Turvey, 1977).

The perception of velocity and acceleration, according to Turvey (1977), is based on transformational information detected over time and not on the discrimination of elementary aspects of spatial and temporal position. All aspects of the person's response serve one organizing aim or intention rather than a series of separate functions. Bernstein (1929) stressed the leading role of the goal for all complex motor acts. All behaviour is directed towards purposeful goals. There is no evidence that motor action is enacted through the coding of particular muscles. The active role of the organism is to reach goals and the deciding role in the 'architecture of the behavioural act' is played by appearances from the environment. Pittendrigh (1958) proposed that all self-regulating living systems must display 'teleonomy' to ensure internal and external homeostasis. Part of goal-directed behaviour is the

pre-programming of the probabilistic image of future actions, which include motor as well as autonomic nervous components.

Changes in muscle tone correlate with changes in bodily awareness and perceptual awareness of the environment (Ruggieri *et al.*, 1983). Self-awareness is a relationship between proprioceptive forces produced voluntarily and those produced by circumstances. For example, Brewer notes that the location of a body sensation comes to light only in so far as one 'is aware of one's body occupying a physical space which extends beyond it' (Brewer, 1995: 300), and 'experienced embodiment entails the experience of the subject as a spatially extended body' (206). Inevitably, then, awareness of self, awareness of body, awareness of objects and awareness of space are intertwined and equally at the mercy of being in the world. A priori talk of entities, of subject-object divisions, of internal/external, of 'I', 'me', 'it' and 'them' is disqualified. Such subject-object divisions are, in Husserl's terms, 'judgements', not experience. A viewing experience here is no more and no less than the way of viewing *all* that is viewed, and all that processes this way of viewing, including positioning, desiring and looking. So emotion and thought are embodied, and in practice perception and action are also coupled whilst embodied.

Perception and action

Perception and action are closely coupled. Each perception is influenced by efferent impulses and every motor action is embedded in the whole network of environmental relations. Behaviourally, it is quite evident that action (in terms of motor output) is present at all stages of processing. Work on spinal activity during foreperiod preparation preceding responses indicates a longer muscular pre-tuning than could be acceptable to purely sensory models (Loveless, 1979; Turvey *et al.*, 1978). Muscle activity has been seen not only as a precursor or accompaniment to sensory processing but also as a consistent (though uncontrolled) constituent.

The regulatory role of voluntary and involuntary movement is evidenced by the gating effect of somaesthetic potentials (Jones and Hulme, 1976) and electrocortical motor potentials (Papakostopolous, 1980) on subsequent input, suggesting that even minor motor movement may enhance or diminish sensory processes and so act as a screen to incoming events.

Investigation of motor output as a reflection of cognitive activity has been most notably pursued by McGuigan (1978a). His thesis was that the complex muscle-response patterns that accompany cognitive acts in speech and skeletal musculature are essential to generate neurophysiological codes for cortical processing, and he has demonstrated the presence of muscular activity during several apparently passive, silent procedures, such as listening, reading and thinking. He concluded that mental processes are sequences of bodily events that occur under specifiable external and internal conditions and nothing more. In principle, when we have measured all bodily events, according to McGuigan, we have specified the mental process in question. Such evidence, of course, speaks against any temporal separation of input and output processes and suggests that motor activity may actually be part of

information processing rather than just an addition to it. If, indeed, cognition and sensory events may be adequately represented by motor activity, as McGuigan suggests, it seems reasonable to doubt their temporal dissociation and to suggest that sensory events may be generated by motor activity.

Such a point of view is expressed in the motor model of mind, put forward by Weimer (1977), whose main thesis is that motor action is an implicit requirement for stimulus evaluation. Sperry (1969) suggested that mental activities develop out of and in reference to overt action and therefore analysis of output may inform us more about mental processes than analysis of input. But the motor view has run as an undercurrent to the sensory approach for approximately 100 years.

The motor model was originally formulated by Bruno Munsterberg (1899) as an efference theory of perception. Munsterberg held that the vividness of conscious experience is a direct function of joint and muscle sensation. The motor discharge is necessary before any central activity corresponding to perception or consciousness can take place. The spirit of Munsterberg's theory has remained encapsulated in the James–Lange theory of emotion, where muscular changes are seen to account for emotional differentiation; in Freeman's (1948) bioenergetic theory of the muscular control of nervous energy; and in more recent attribution theories linking somatic change with emotional labelling (Schachter, 1971).

Hefferline *et al.* (1970) have reported extensively on how covert movements can be conditioned to control signals despite the inability of some participants to report verbally on what were gross finger movements. Hefferline and Perera (1963) were even able to produce a hallucination manually by conditioning a thumb press with a tone, which was then withdrawn. In pressing the button during 'no tone' sessions the participant claimed they heard the tone.

A related, although not identical, view of perception was expressed by Festinger *et al.* (1967; but see also Rock, 1966; Taylor, 1962), who elaborated Sperry's (1952) notion that 'perception is basically an implicit preparation to respond'. Festinger suggested that perception is determined by the preprogrammed sets of efferent instructions that the stimulus activates into a state of readiness for immediate use. Both Sperry and Festinger advocate a motor theory of perception in the sense that perceptual report is mediated by what the observer is prepared to do about the exteroceptive stimulus. Both these authors, however, make it clear that they are dealing with central rather than peripheral preparations of readiness: Sperry says that his 'emphasis on the motor approach… should definitely not be taken to imply that subjective experience resides within any motor reaction or within the motor system'; Festinger's readiness is a readiness to issue efferent instructions from the central nervous system.

The so-called cortical 'readiness potential', for example, precedes movement and motor potential and is influenced by instructional set and attentional effort, and can be produced by 'imaginary movements' (O'Connor, 1980). Evidence shows that gating of somatic sensory information can occur during movement. Control can be exerted by suppression of some afferent signals by discharge from output of the motor system. Gating action is exerted in the brain on somatosensory afferent

activity after it reaches the cortex and the gating is focused on the movement implicated (Craggs *et al.*,1979). A number of studies have shown that heart-rate deceleration and electroencephalographic asymmetries are learned patterns that can serve as unobstrusive markers of focused attention during the brief preparatory period immediately preceding performance (Landers *et al.*, 1994).

A neuromuscular model of information processing accounts for the close temporal proximity of a variety of such covert responses that are widespread throughout the body. It proposes that during cognitive acts such as perception, imagery, thought and dreams, complex covert processes interact by means of central-peripheral circuits (McGuigan, 1978b, 1978c). According to this model, the meaning of a linguistic stimulus involves internal linguistic coding, which is principally generated by the covert interaction of the speech musculature with linguistic brain processes. The eyes are uniquely active as they interact with visual regions of the brain during visual imagery. During non-linguistic imagery, such as imagining acts of movement, neuromuscular circuits are uniquely activated, involving somatic musculature and somaesthetic brain regions. Imaging is formed by covert responses, following on from Jacobson's (1930) early work. Even Pavlovian conditioning has been considered influenced by volition, such as 'instructions', 'attitude', 'set' and other personal variables preceding preparation (Coleman and Webster, 1988).

Psychophysiology as self-regulated action

The problem with accepted definitions of psychophysiology is their cobbling together of hypothetical demarcations between psyche and soma, internal and external, private and public, subjective and objective realms. Ax (1983), for example, takes as given that psychophysiology is about translating between psyche and soma, but points out that before we can translate between two systems each system must be well described. The problem is they cannot be well described because there is no empirical evidence that independent realms of mind and body exist in the first place. Empirical criteria would demand that, for example, we know for sure when it is possible to have a private event without some measurable public display, or a mental phenomenon which doesn't express itself directly in some physical measure.

Psychophysiological evidence suggests that it is very difficult to place precise boundaries between, say, physiology and behaviour. The issue here is not simply metaphysical; in a sense, the role of psychophysiology is exactly to demystify vague metaphysical distinctions between, for example, mind and body. The point at issue is a practical one. If there is no a priori empirical reason for considering mind and body as qualitatively distinct realms then this bipartisan division of the person in psychophysiology serves only a heuristic function. There is, then, no reason why we cannot consider alternative heuristics that do not insist on a priori division and hence on independent manipulation of physical and mental or internal and external variables. We might, for example, consider a dimensional rather than a categorical

classification. If, for example, physiology and behaviour, or internality and externality, were part of the same continuum it would make no methodological sense to investigate the effect of one upon the other – in the same way that it is clearly nonsense to investigate the effect of personality on personality or age on age, since points along a single dimension are considered a progression of the same process. Mind and body may be mutual influences in different degrees in all psychological and somatic complaints – in the same way that the person and the environment may be linked in the ecological act of perception.

Perception as an ecological act

The work of James Gibson (1966, 1982) is based on the recognition that a functional approach to behaviour must take account of the relational nature of behavioural acts. His main theme is that all behaviour is a (motor) act and that the act is organized relationally, which accounts for the ecological immediacy of behaviour. Gibson points out that the stumbling block of all 'establishment theories of behaviour', as he terms them, is the mediational stage assumed to exist between the world and the organism in order to convert external properties into internal codes. Such a stage, according to Gibson, loses the essential immediacy of behaviour: its 'intuneness' and its ecological validity. The establishment theories also inevitably fragment the person into separate response systems when, in fact, the person responds as a whole. We do not simply see with our eyes but with our eyes in a certain position at a certain height and accompanied and moved by the quality of our body movements.

The 'effective stimulus' for Gibson is the appearance of the environment, and the appearance instantaneously becomes a property of the organism and the environment. In Gibson's terms the environment affords certain possibilities to the person by virtue of the person's movement towards the environment. The notion of a discrete stimulus is replaced by a perceptible form. Properties of the environment are picked up to match the person's position simply because they are implied by a person's particular physical presence. Information is not given or transmitted to any particular sensory system; on the contrary, it is ecologically present in the physical layout.

This effective stimulus is dynamic in that it contains information on the person's action towards the environment, so it is relational properties that are perceived. A stick is 'climbupable' at the same time that a person climbs up it; a garden path is 'walkupable' at the same time as the person walks up it. The limits of these dynamic second-order properties are controlled by structural invariants that designate physical limits of action.

Gibson's strength is to have outlined the concerns of a relational behaviourism and, in particular, the ecological relevance of a response. There is also a curious asymmetry in the holistic relation of environment and person. It cannot be predicted what information will be afforded by the environment until an individual has behaved towards it. A stick is climbable only when someone climbs up it. Behaviour is observed, and only then defined in Gibsonian terms.

The contradiction of the Gibsonian approach is that it attempts to answer problems derived from realism with more realism because it is an attempt to resolve the basic realistic dilemma of matching an absolute world with a relative response by shifting the match/mismatch to a higher-order set of invariants. Under the guise of expanding the response to ecological parameters, Gibson pushes the response further back into a hypothetical realm. In other words, the aims and intentions of action, according to Gibson, are embedded in the concrete structure of the world and remain apart from and unseen in behaviour because they are organized at a higher, unobservable level.

Gibson's definition of behaviour remains a functional one. Behaviour serves a functionally adaptive purpose for the environment here and now. But because behaviour and the stimulus environment are one there is no independent criterion of adaptation, so all behaviour is adapting to itself and hence all behaviour is adaptive. This clever circularity, however, leaves us with no predictability about actual behaviour precisely because behaviour, albeit relational, is an independent process, not a correlate of the environment. This can be achieved by a relativist but not a realist approach to behaviour. Gibson's ecological realism is very much in the American pragmatic tradition of James, Pierce, Dewey and Mead, rather than the European rationalist tradition of Husserl, Merleau-Ponty and Sartre. Pragmatic utilitarian realism considers only one reality and defines behaviour as fixed in a time-bound context. As James put it: 'on the pragmatist side we have one edition of the universe; on the rationalist side a universe in many editions' (James, 1970: 113).

Both Gibson (1979) and Merleau-Ponty (1962) converge on the redundancy of considering mental representations as a guide to perception and action. For Gibson we are tuned to directly pick up affordances from the environment that afford certain actions and not. These affordances can be quantified as point estimates, angles and physical parameters, and Gibson demonstrated how such parameters limit and determine action in a number of experiments regarding stepping and wielding rods – and, of course, the famous cliff experiment of his wife, Eleanor Gibson, showing affordances were already developed in infants.

A point of difference between Merleau-Ponty and Gibson was the former's dismissal of physical attributes in favour of lived-in experience: 'the body inhabits space'; 'In so far as I have a body through which I act in the world, space and time are not a collection of adjacent points. I am not in space and time, I belong to them, my body combines and includes them'; 'A movement is learned when the body has understood it and incorporated it into its world… which is independent of representation' (Merleau-Ponty, 1962: 140).

Merleau-Ponty and Gibson seem to converge on a rejection of cognitivism, indirect perception and realism in current information processing, where the person is seen to sample from the outside world. Gibson's concept of optic flow and, later, affordance properties captured the movement of the optic field relative to the observer. Gibson felt the success of various perceptual illusions shows one cannot trust the senses, and so, in his theory of optic flow motion, parallax and the distance

and motion of objects depend on self-motion. 'The affordances of the environment is that they are in a sense objective, real and physical unlike values and meanings' (Gibson, 1979: 129). But Gibson later admitted the ecological self is equally both a fact of the environment and a fact of behaviour. The Gibsonian notion works well with mechanical properties but not human ones. Turvey *et al.*'s (1989) (disciples of Gibson's) well known paper on knowing by wielding discusses the coordinates of haptic knowing in the wielding rods, but one is left to question how emotion and idiosyncratic intention would make a difference to the knowing. The distinction is well captured in Heidegger's separation of an object into 'ready at hand' for a consensual purpose and 'available at hand' for idiosyncratic use.

For Merleau-Ponty (1968) all sensation in sensible touch is intentional. I have to find the intentional attitude that permits a sensation to a rise. He gives the example of adopting the bodily attitude to seeing a familiar colour (214). 'One must therefore reject as abstraction any analysis of bodily space which takes account of only figures and points since these cannot be conceived without (bodily space) horizons' (101). Merleau-Ponty considers spatial sensations are swallowed up by the 'spatiality of the situation', against which a figure comes to light. He gives several examples of how beckoning to a friend is not a perception followed by a movement but an act of consciousness, an ecological system that varies with my actions and attitude. He discusses how when typing on a typewriter a 'motor space' opens up before me that goes beyond visual structure. The keyboard space is incorporated into the body. He argues that there would be no space for me if I had no body. A blind man uses a stick and we use instruments by incorporating them into the bulk of our body. The experience of a phantom limb varies with the person's projects and may vary in perceived shape and other sensed attributes in accordance with activity. The phantom limb is not simply a conscious memory or belief, it remains part of the body awareness and is attuned and experienced in accord with interactions in the world (Merleau-Ponty, 1968; Gallagher, 1995).

The clinical upshot of these ecological insights is that when looking at intentional stance as a predictor of project, and hence sensations and perception, we need to look at the body. How is it leaning? Where is the pressure that corresponds to this or that attitude? Leaning on my hand in a situation where I'm being criticized gives off what attitude compared to standing up when being praised? This ecological point adds interesting information on the behavioural technique of antagonist action or competing response, since the suggestion is that adopting a conflicting bodily attitude to an undesired action will influence corresponding conflicting emotion and perception. When people grimace over long periods of time they experience congruent sensations and similarities when they smile or make a cheerful face (McCanne and Anderson, 1987; Adelmann and Zajonc, 1989).

The motor-act model, then, offers an ecological account of how behaviour integrates sensory information. But action is organized in relation to other acts at the time and constructed by centrally coordinated intention. The problems for the motor-act model of behaviour are in deciding the form of the relational organization and how one derives relational definitions of behaviour from observation

of behaviour. One implication of research on perception-action coupling and Merleau-Ponty's insight into the role of intentional action in dealing ecological perception is that behaviour, even pathological behaviour, is a skill, not just a learned response.

Intention and attention

A person is always more ready to respond to some stimuli than to others, and this criterion bias or perceptual readiness is independent of sensory thresholds (Swets, 1964) and characteristically ascribed to a pre-attentive (i.e. prestimulus) allocation of set by the client (Kahneman, 1973). We are thus faced with the dilemma: not only is a person's attention not controlled by the objective characteristics of the stimulus, it may not even begin with the stimulus.

The concept of set has been invoked to account for the pre-attentive intention of the client. In a set model the terminal outcome depends not on the presence or absence of a particular stimulus, but only on whether or not the client has adopted a particular set. Unfortunately, the looseness of the concept of set allows the client's prestimulus intentions to be defined in terms of any group of stimulus characteristics to which attention is directed, but which, in fact, the intention to attend must have preceded and created. Attributing attentional bias to the adoption of a particular set masks the point that the client's intentions in a situation precede and precipitate certain attentional strategies rather than originate in them. A client performs a task with certain intentions and with a cognitive armoury of strategies and preferences for carrying those intentions through.

Evidence of the effect of intentions on responding, however, comes from the many experiments that have manipulated experimental instructions and so indirectly altered the intentional engagement of the client.

Reformulating the verbal instructions of an experiment without changing other parameters has been shown to affect, for example, orienting response (Maltzman, 1971), acquisition and extinction of conditioning (Rosenthal *et al.*, 1964), autonomic responses (Grings, 1973), habituation (Hulstijn, 1978), evoked potentials (Campbell *et al.*, 1979; Low *et al.*, 1967), EEG alpha activity (Mulholland, 1973; Targ and Phutoff, 1974) and the relationship between different response systems (Lockhart, 1973; Loveless and Sanford, 1974). The cortical readiness potential develops over a period of a few seconds as a consequence of a client's intention to respond in a certain way (Loveless and Sanford, 1974), and its magnitude can be manipulated by varying instructions as to the amount of effort and other voluntary strategies to be employed in the task (Grunewald-Zuberbier *et al.*, 1978; O'Connor, 1980).

The person-specific intentions and skill control responses. In order to further substantiate the claim that the effect of intentions on response can be examined directly they must be considered as independent processes. This requires a paradigm shift, which emphasizes skill and intention.

Client responses as skilled behaviour

Skill

The work 'skill' itself has proved difficult to define (Adams, 1987). It is clearly a learned ability that involves coordination of different elements in a goal-directed manner. Skill is also to some extent governed by personal factors independently of external activity. Skilled behaviour may be viewed as an active self-assembled coalition of diverse resources in the service of a unitary goal (Kluger and Turvey, 1987). This relational aspect of skill includes not only the interactive relations amongst different segments of the act in question but the interaction between the act and the external environment.

This approach to explaining clinical behaviour is a motor-skills approach, centred on the specific actions of the person as self-contained, self-determined phenomena. A fruitful strategy in the field of motor skills has been to view both personal and external events as part of the same event space. The boundaries, or degrees of freedom, of both the intended responses and the relevant attention to stimuli are seen as governed by the level of skill (Fowler and Turvey, 1978).

Skill and information processing

Attentional allocation differs between novices and experts. Skilled performers do not pay less attention to the environment but they limit their attention. They are less likely than the unskilled to attend to irrelevant cues and more likely to pass quickly to response decision-making (Abernethy and Russell, 1987). Skilled performances are more stable, tend to be more generalizable to the 'real world' and are affected differently by anxiety, fatigue and distraction compared to unskilled performances (Ackerman, 1988).

An important interaction in attentional theory is between the degree of preparation for an action and the level of skill involved. Degree of preparation for response and/or stimulus events is a frequently manipulated factor in attentional experiments, whereas level of skill is not. Prepared does not mean skilled. A client who is unprepared to perform a task will be more susceptible to distraction than one who is prepared, but whether this is due more to competing external demands or to competing response demands depends on skill level (Diener *et al.*, 1988). An important methodological point is that, in the clinical laboratory setting, the attentional tasks are likely to be novel and the client unskilled. It is still rare to find studies that bother to stabilize skills prior to experimentation. An alternative is to choose ecologically relevant tasks with which clients are familiar.

In the context of information processing the disturbing news for serial stage theorists is that sequences of processing may not just be constricted in skilled performance but may change their order of appearance. Some response preparation is likely to precede evaluation stages in skilled people, whereas the reverse is the case for a novice. There is every reason to believe that psychophysiological indices are equally responsive to skill. Sabat (1979) reported that evoked potentials during dichotic listening

change with skill acquisition. Hatfield *et al.* (1987) reported muscle-pattern and heart-rate differences amongst skilled performers. Nideffer and Yock (1976) related skin-conductance changes to changes in cognitive and motor states during athletic training. Recent research (Lopez *et al.*, 2009) has confirmed expert-novice differences in procedural knowledge amongst sportsmen, and the Dreyfus and Dreyfus (1986) model is a widely accepted construct model detailing five stages of competence from novice through advanced beginner to competent, proficient and expert.

The concept of skill, then, seems relevant to the clinical psychophysiology of attention. Although, of course, acquiring attentional skills involves different processes from acquiring motor skills, some general points on the structure of skill can still guide measurement.

The relational structure of skill

An important consideration is that the development and acquisition of skills is heterarchical rather than hierarchical (Newell, 1978). The connections between central and peripheral structures are thus relational rather than causal. It has been shown, for example, that both attentional scanning and limb movements can reflect concurrent changes in the spatial-reference system during skill acquisition (Martenuk, 1978). Skilled movements can react to changes in one single detail with changes in a whole series of others that may be far removed both in space and time.

The point to be stressed is that any change in a peripheral element of action – for example, a minor action during concentration – is not necessarily an irrelevant noise but may represent a shift in central intention. Gale and Baker (1981) have already noted the problems raised by ignoring peripheral actions in the interpretation of central processing. All actions of the client can be described as part of the skill being performed.

The detailed relational structure of skills also suggests that general constructs, like arousal or anxiety, will not be specific enough to distinguish changes in their performance. Neiss (1988) has shown that the general concept of arousal cannot account for specific performance problems. He suggests that a profile of psychophysiological operations may be most appropriate in characterizing skilled actions.

The intentional nature of skill

The intentional nature of skill must be included in its description. Skills are not something that happens passively: they are actively pursued to achieve an intended result. Philosophers have generally despaired of finding any one single intention as a cause of action (Kluger and Turvey, 1987). Expressed intention follows linguistic rules of its own, which suggest that it is an essential aspect of behaviour rather than merely a privileged commentator upon behaviour (Dennett, 1983). Intentionality is an ontological rather than a cognitive phenomenon and describes a person's overall intentional relation with the world. This relation comprises intentions expressed in physiological and autonomic as well as verbal systems.

An individual may have an immediate intention to perform an act, but the way in which it is performed may depend not only on this intention but on a series of other intentional relationships. These exist in the world beyond the act itself and may relate, for example, to whom the act is addressed and to what will be done next. In other words, there are secondary and even tertiary intentions that come into play and form the basis of how a skill is enacted. It is, of course, possible that primary and secondary intentions may conflict, and this would be paralleled by conflict in the elements making up the skill process. It may be precisely the minor changes in psycho physiological elements of an act that reflect change in skill processes rather than any changes in expressed intention.

Intentional context is reflected, then, by the unique patterning of actions that a person *does* during the skill. This includes cognitive and verbal activity, which is a function, not a cause, of intentional context. If skills are self-assembled relational operations it is clearly inappropriate to try to isolate elements or to attempt any outside intervention before establishing the unit of the complex skill. This unit can only be established in personal intentional terms of the skill and not by a uniform standardized measure. Hence the best place to start in quantifying an intentional skill is by describing the processes that make it up.

The intentional paradigm

In the conventional psychological paradigm stimulus conditions are treated as the independent variable and behaviour and physiological responses as the dependent variables. This follows the usual S-R causal contingency model where external sensory registration is assumed to precede any internal response. A constructionist approach, on the other hand, aims to locate and consider a specific intentional strategy, and to end with the external event this involves, hence an I-S paradigm replaces an S-R paradigm where 'I' represents intentional behaviour.

Achieving these aims involves harnessing the participant in maintaining and directing her/his own response intentions appropriately, and this may require micro-monitoring intentions formulated during performance and a skilful training of clients over a number of occasions.

As the learning of any skill progresses, attention becomes less distracted by single elements and more focused on the purpose of the task. Training participants in controlling such attentional gestures as eye movement, scanning and posture has been shown to stabilize responses (Davidson, 1978). Interestingly, in a study of hemisphere differences Gevins *et al.* (1979) reported that previously found EEG asymmetries disappeared when participants cooperated in standardizing attentional strategies and movement. Sabat (1979) challenged the notion of a fixed information-processing-channel capacity since he showed that amplitude of the evoked response to shadowed material was related to skill sophistication. Papakostopoulos (1978) has also reported that extent of skill invested in response can be monitored electrophysiologically.

Lange (1888) noted that when a client's response was in accordance with his prepared intention reaction time was faster. Hefferline and Bruno (1971) trained their clients to produce covert adduction or abduction of the arm during a judegment task requiring a response from one arm or the other. During a subsequent discrimination task prestimulus intention to act as reflected in muscle activity was clearly observed to affect overt responding. In fact, Hefferline and Bruno reported that manipulating intention via prestimulus tension in the muscles is equivalent to manipulating response decision. The competition between experimental instructions and the client's intentions was brought out as a main effect and found to control both psychophysiological and behavioural (decision) responses. Accounting for and even training response intention is unusual in experimental and clinical settings but could improve reliability and credibility of interventions and facilitate participation.

From a constructionist perspective every state of the client, whether it be sitting, thinking, listening or pressing buttons, encapsulates a specific intended skilled-response strategy that typifies that particular behavioural episode. Intentional posture is the psychophysiological interface that derives stimulus meaning through a prestimulus expression of it and so guarantees the continuity of behaviour.

Measuring skill involves considering active parameters of effort and strategy, and it should be differentiated from hypothetical constructs, such as arousal, attention, emotion and performance, which refer to passive states that happen to the client as a consequence of stimulus control (O'Connor, 2008). The effort, strategy and skill invested in behaviour reflect on the intention of the response being implemented. If, for example, I throw up a ball the amount of psychophysiological activity reflecting physical/attentional effort invested in throwing, the strategy used and the skill accomplished will depend on whether I intend to catch it. More specifically, I may intend to catch it in a certain way or achieve a certain effect in throwing, which, of course, will further alter the nature of my skill and strategy. Manipulation of effort, strategy and skill can be as sensitive and differentiated as the response intention allows. Skill here defines the relationship between outcome and intention and should be differentiated from conventional measures of performance. Performance in a set task not only may be accomplished by various strategies but its meaning and effect on behaviour will differ as a function of intended outcome. Skill, however, defines response outcome in client-specific terms since it arises from implementation of a specific strategy and so relates directly to accompanying psychophysiological operations rather than to an external criterion of achievement. Similarly, the perception of a frightening stimulus may be the end point of a skilled manipulation of the body towards the environment, involving several motor sets and over-learned strategies producing sensory input.

After training in an alternative-response procedure clients may optimize and stabilize their allocation of response effort over the time course of the response strategy; and, psychophysiologically, the consistency of the physiological response over trials is a direct measure of behavioural skill achieved (O'Connor, 1990).

The onset of somatic activity is then tied to the onset or offset of behavioural activity. This I-S paradigm does not necessarily confine the behaviour or performance to motor operations, but includes cognitive, affective or other subjective processing and performance. The prerequisite is simply that the somatic episode of activity is sampled during some form of goal-directed, purposeful or intentional behaviour or processing. The episode is bound by behavioural markers, not by stimulus markers.

The important element in the intentional I-S paradigm is the client's active involvement and participation in some activity over the whole episode, during which parameters are recorded. Parameters are taken during a specified process operation but over no other period.

I begin my window at the onset of activity and I end the recording at the offset of activity within my process context (see Chapter 2). I hence know as precisely as possible the client's activity at any particular period of recording. This means specifying the continuous set of operations the client is to carry out, and knowing the strategies the client is employing and her/his level of skill in using them. If necessary this may mean training the client.

Behaviour must be specified as a continual process to be isomorphic with the process of psychological and physiological systems. There is no hierarchical ordering of systems as there is in assumptions that cognitive events 'cause' change in heart rate and 'produce' physiological effects; rather, the concurrent activity of independent systems expresses a common process. Close mapping of behavioural process is the key to mapping accompanying somatic systems since they are directly ecological coupled by a common goal.

Clinical implications

There are three aspects of the body to consider: (1) the boundary of the body and how it contracts and expands depending on how it is being used; (2) the body as expression of my attitude – in its physical thereness, as a support or an impediment; and (3) the signs and signals of the body and how to relate them to current thought and behaviour. Implicit in these is the degree of motor knowledge and skill in action at different times. The experiences of the body are a function of its skill level. Novices and skilled players experience different reactions.

Behaviour includes the body, and embodied emotion includes embodied mind and embodied behaviour. These concepts fit very well with CBT concepts that behaviour can change cognition. Indeed, there is increasing evidence that cognition contributes minimally to behavioural change (Anholt *et al.*, 2008). Of course, this finding led, famously, to cognitive therapy being dropped from behavioural activation therapy for depression (Jacobson *et al.*, 1996). The important point underlined in this chapter is that the body takes on a subtle expressive mode, which forms an accompaniment to and effectively defines each behaviour and attitude. The expressions of the body also reflect the inarticulate expression of

mood, which, as Merleau-Ponty (1968) points out, defines our sensation and perception of the world. This definition goes beyond considering non-verbal language and involves monitoring precisely the bodily stances of clients as part of defining their act context.

For people with tics, the thought that they will tic in a situation frequently provokes the tic, without any further input (O'Connor *et al.*, 2014b); hence the person creates the likelihood of ticking by over-preparing for the possibility. For people with tension habits, it is interesting to track the build-up of tension that a person experiences before entering a high-risk situation to see how the person's preparation develops. Often, small-movement habits, apparently minor and trivial, reinforce an imaginary, non-pertinent but tension-inducing context. A woman who circles her thumb around the tops of her fingers when waiting for appointments recreates a childhood experience where she wore mittens without finger coverings and warmed the fingers with her thumb when waiting for the school bus. Whether or not a habit can be traced to a specific past situation, the exercise of creating a plausible context to make sense of a tension underlines the point that the associated tensions are a skilled preparation for behaviour and are not just passively accumulated surplus nervous energy. A person who tenses their neck muscles and jerks their head away and down when talking recreates with this gesture a scene where s/he is the target of reproach and at the same time disallows development of a calmer reaction to the actual non-threatening context. Inferring the context for which the unwanted movement habit is adaptive sometimes clarifies the original skilled purpose for the person's muscle reaction.

How is it best to evaluate body through intention? How to change body consciousness through intention? How to assess body skills? One way to reconceptualize the body, particularly muscle control, is not as a response but as a series of skills the person has learnt.

Hence when assessing a client it is important to realize the creative role of the body in creating emotion: exercises can increase awareness and use awareness in practice to relate back to intentionality and answer questions like: what attitude I am relating to the world and how am I expressing it by my posture, walk and tension? Questions for eliciting the role of the body in distress are given in Table 7.1.

When we consider the body as a skilled activity it is quite clear that experiences are very different depending on the skill level of the person, not only in terms of processing but in terms of somatic experience. The importance of body action in gating sensations and generally determining perception and motor experience and illusions shows itself in skills research. It is by changing patterns of skilled motor activity that one can best modify intentionality.

There has recently been concern with environmental aspects of anxiety and how certain structures facilitate mobility or constitute obstacles causing distress amongst challenged groups, like the elderly (Julien *et al.*, 2012). Certain ecological designs are often perceived as more friendly because they are more open, and allow more flexible and adaptive body postures. Environments that

TABLE 7.1 Ecological questions for a narrative on the body as construct

When you have a thought are you aware it impacts on your body?
When you experience an emotion do you feel it in your body?
Are you aware your body contracts or expands depending on what you do?
Are you aware that what you do determines what you see?
Are you aware of subtle changes in your body position when leaning or when talking or when carrying out tasks?
Does your posture change depending on the environment?
Do you move to screen out sensations or noise?
Do you fidget a lot?
Do you contract muscles in accord with certain emotions?
Do you grimace when you speak?
Do you find in some environments you are better able to express yourself and communicate?
Are you aware that different muscles are tense depending on thought and emotion?

are anthropomorphized with object-attributed personal characteristics encourage intimacy and belongingness. If we look at behavioural implications a concern with micro-movement during distress is warranted. For example, the behaviour adopted during anxiety is frequently classified as safety-behaviour, where the person adopts subtle strategies, such as standing next to an exit or leaning on a wall to calm or steady themselves in case of panic. We need to consider the way the person leaning and supporting the self reflects on intentional projects in the world, and not just escape behaviour. A particular way of walking or sitting or grimacing may be an habitual attitude, but it may reflect embodied emotional expression concomitant with a determined way to perceive the world. The way a person stands whilst they discuss certain topics, or the subtle fidgeting of a client, may not be dismissed just as nervousness as it may constitute a skilled approach to gating out aversive feelings or sensations.

If motor behaviour in clinical situations is a skilled behaviour it should be treated as such and not as an aberrant response. In other words, it should be considered as relationally organized with its own history and development as a coping skill. As a consequence, new behaviour entails learning new skills, and such skills need to be built up considering the enactment of the whole organism and the role of control agency and convenience at all stages in the acquisition. A new body skill and dynamic go with a new perception.

We have already discussed strategies for preparation in anxiety, but the concept can be extended to all emotions. As Merleau-Ponty (1968) notes, the sensible and the visible constitute a dimension that we are located in as humans, and intersubjectivity is only possible through inter-corporeality. Rather than requesting that the client just stop or inhibit a behaviour, we can consider orchestrating and coordinating new skills, which at the same time will aid cognitive and emotional change.

Examples include helping a depressed person learn the micro skills of expressing positive emotion. Whatever the specific fear, an antagonist-skilled action, a goal-directed approach as a skill, can be emphasized. A man with agoraphobia could learn how to leave the mall in a measured and calm manner, paying attention to pacing, posture and embodied emotion. A person petrified to drive could master the skills of steering and attending to the road ahead. A girl afraid to stand up to authority could adopt a manner and posture concordant with the action of communicating clearly. The skills here are idiosyncratic and depend entirely on individualized fears and idiosyncratic skilled action plans.

8

CONSTRUCTIONIST APPROACH TO CLINICAL PSYCHOLOGY RESEARCH

Personalistic approach

Several points in the constructionist approach present a challenge for conventional hypothesis testing and hypothetico-deductive methods, namely the emphasis on complex behavioural process as a constructionist starting point, the uniqueness of experience, the fact that events and behaviour are already significant by virtue of their occurrence, the emphasis on conditional contextual interaction and the focus on mutually exclusive personally related classes of process, rather than time and temporal succession of points, to order events and behaviour.

Events are already significant, and finding the significance of an event lies not in measuring an effect at any precise moment but understanding the way processes build up and afford a certain behaviour, given the a priori knowledge of the process that has gone before and been built up with the client. Variability is not noise, it is signal, since it is only through variation that we know the possible forms of a response and hence the response. The conditional probability of an event among distinct but related processes, in this context, conditions behaviour and makes its appearance most likely.

The constructionist approach evaluates not reality but the construction of reality in a context – in other words, how real things appear to us given our perspective and our a priori project. The constructionist is not in the business of describing reality in its entirety because, ultimately, there are as many realities as I care for. Rather, in describing reality I'm describing my relationship with my reality at this moment given my project and what as a consequence appears to me. So what appears before me is sufficient and significant for my project because this constitutes my sense of reality.

Experimental situations differ from clinical situations in that conditions are created rather than simply described naturalistically; but the research questions are still process questions. Research questions of interest to the constructionist researcher

are questions about the typicality of the components in a process, the likelihood of change in process parameters, the impact of intervention in process and the conjunction of complex processes in defining a complex behaviour: all the questions that are difficult to answer within a binary hypothetico-deductive structure. We may wish to know, if a client adopts a particular position as opposed to another, how this impacts on the experience of the problem. What other measures feature and constitute the process context? For example, how does heart rate evolve over the process context? To what extent is the experience modified if the client modifies certain thought, behaviour and emotional patterns at different points of the process activity? Are two processes occurring one after the other during separate act contexts part of the same process? If two processes converge does the conjunction intensify or diminish the experience?

The personalistic approach appeals far more to sound common sense and grounds decisions in the experimenter's personal repertoire simply by framing questions within a personal possibility space. In Chapter 3 I discussed the maximal and minimal possibility for sensing reality; similarly, the reality I am investigating can be represented as a possibility space (mathematically, a likelihood function) where I propose alternative likelihoods to the phenomenon I expect to appear from my perspective. I'm not trying to know the entire phenomenon, since what appears before me and my description is already significant. Knowing what does and what does not appear allows me to update my likelihood of this appearance over another likelihood. I am drawing conclusions about what is significant to me from the data.

These alternative likelihoods capture my intentions and sense of reality towards the phenomenon being studied. I may ascribe different conditional probabilities to one emerging behaviour over another. These probabilities capture my perspective on the data a priori, which can be updated a posteriori by new probabilities, depending on what appears in the same way that sense of reality can be updated by marginal possibilities in ordinary life.

Effectively we are turning procedures on their head: the data becomes the independent variable, with my likelihood the dependent variable. This is good news since I can specify multiple likelihoods about a phenomenon, which makes more common sense than the binary hypothetico-deductive procedure.

Variance

As Clark (1983) states, all measurement and analysis is an attempt to give a phenomenon a context. Variance measures view events in the context of a population of random events, separate and uncontrolled by the observer; but, as we have seen, this is not the constructionist view. The observer's behaviour and the observed world are not independent – so observed events can be understood in the first instance in a behavioural rather than a statistical context. If this behavioural contextualization of statistical decision-making is pursued then traditionally separate areas of subjective and objective statistics collapse into personal statistics. All knowledge is considered more or less personal and the individual becomes the basic statistical unit.

Many of the arguments outlined here are echoed in the frequentist versus personalistic debates of the 1940s and 1950s. I will summarize these debates here since they are highly relevant, but further reading is encouraged. In particular, although the frequentists, with Ronald Fisher, effectively won the debates, the debates still raise unresolved questions that resonate with statisticians.

Origins of probability

Hacking (1965) considers that notions of probability arose in the seventeenth century and were largely linked to commerce and merchant risk. What was the probability that a sea voyage would succeed? At first, such calculations were actuarial and based around an uninformative prior. But an Englishman, Reverend Thomas Bayes, introduced the notion of an uninformative prior versus an a priori estimate that would then be strengthened or weakened by evidence. The classic model of evidence was the coin toss, where there was a binary outcome with identical throws, a situation not at all similar to human behaviour where nothing is repeated or identical. It is important to note at the outset of probability that inductive decisions led to inductive behaviours. The results led directly to decisions or actions and where merchants would put their money. Although risk could be described in terms of probability, it would have been more understandably described as odds. What are the odds of my ship coming in? In other words, inductive decisions were closely allied to inductive behaviour. What are you willing to bet on the ship arriving? The merchants were not interested in probabilities in the long run.

The frequentist versus the personalistic debate – the approach to certainty through experience[1]

Savage (1972) argues that a person learns by experience and the more s/he learns the more s/he becomes certain of the truth. But this element of personal probability is missing from objectivist accounts generally based on weak laws of large numbers. The 'behaviouralization' or personalization of statistics, where personal belief in outcome is quantified, builds on previous work by de Finetti (1972), which proved conclusively that propositions referring to unknown probabilities can always be expressed in purely personalistic terms. For example, in the classic case of ignorance of unknown probability the person is almost certainly expressing a symmetric sequence. In particular, de Finetti held that objectivistic parameters of a coin toss can be interpreted in terms of personal probability towards outcome. This notion is important clinically, where there may be many unknown parameters in a person's experience but we nonetheless have information, maybe vague and incomplete but sufficient to propose a personal probability on the behaviour of interest.

Yet barely 40 years ago a debate raged on the legitimacy of the objectivist position. The personalists, as they called themselves, argued vehemently against all the aspects now held dear in objectivism, arguing as a starting point that there was no such probability as stand-alone objective probability but only subjective probability. The

frequentists, on the other side, pooh-poohed subjectivism, putting faith in the possibility of parametrizing objective consensus through outcome in the long run. On the frequentist side eminent philosophers and statisticians such as Fisher and Popper argued for the objectivist position with the backing of positivist-pragmatist philosophers. What is astonishing, however, is not so much that the frequentists won but that all memory of the personalists seems erased. Even as relatively recently as 1972 de Finetti could have confidence that descriptive sciences such as psychology would lead to a return to personal statistics. On the contrary, I suspect that for most psychologists de Finetti and his non-probabilistic statistics are barely known as a method.

The personalistic approach is not just a squabble about techniques. It offers a radically distinct conception on how to reason statistically. The personalistic approach refuses to make a division between inductive behaviour, inductive reasoning and, as such, grounds scientific reasoning in parallel with everyday reasoning by refusing to make a distinction between decision-making in commercial or scientific interests. At the same time it challenges the division between hypothesis generation and confirmation and installs a creative element to science, since with the personalistic approach we are discovering and updating, not just confirming. Revisiting the debate seems particularly timely in view of influential post-modern critiques of psychology. Critical theory and social construction have, of course, for sometime blasted wide-angle shots of the whole notion of 'detached knowledge' and 'objective reality'. As noted in Chapter 4, such general critiques have especially taken root in social sciences with a hermeneutic tradition, where studying social rules, symbolic interaction and discourse defy the simple notion of an objective fact. But debates between so-called qualitative and quantitative methods seem also to implicitly accept the objectivist-subjectivist opposition, without appreciating that the personalistic position is an alternative to the dichotomy rather than a complement to either.

Why the frequentists won

Why did the frequentist position prevail? It was actually a deviation from the classical position, and Fisher, who was very influential in the debate, was initially a Bayesian who changed his position. Essentially, the frequentist argument held sway because it offered a convenient way of disconfirming a hypothesis based on an assumed model of a random occurrence of events. The Vienna Circle, a group of Austrian logical positivists inspired by Wittgenstein, had argued that it is easier to disconfirm than confirm a proposition. A statement such as all ravens are black can never be absolutely confirmed unless you are sure you have sampled every raven in the world. However, it can be disconfirmed by observing one white raven. Using Bernoulli binary tosses as a prototype paradigm, we can associate a binary probability with this confirmation: heads or tails. The other deciding influence was pragmatism and the realist metaphor of information processes, which held that reality was an external fact 'out there', independent of us, waiting to be confirmed if only we could separate the wheat from the chaff. So all human bias should be excluded by a random model of events allowing unhindered approximation to reality over repeated observations.

Hypothetico-deductive methods

The rise of science and testable theories about the world made rules about decision under uncertainty important; and in the twentieth century the Vienna Circle debated how one could confirm a fact universally. With the rise of Nazism, prominent members of the Vienna Circle sought refuge in England: Wittgenstein in Cambridge, Popper in London. Legend has it that Wittgenstein threatened Popper with a poker and told him to clear off when he came to speak at Cambridge. (Edmonds and Edinow, 2001) Kinder souls have contested this version and suggested Wittgenstein was merely demonstrating a philosophical materialist discourse. Either way, Popper ensconced himself at the University of London to pursue the idea that, although one could never confirm an idea, one could disconfirm it. He was joined by another professor, Ronald Fisher, who was also looking at the contribution of statistics to science, and together they allied the hypothetico-deductive method to a series of statistical tests using random models to reduce events to frequency counts (e.g. analysis of variance methods). However, are the designs appropriate to psychology?

Analysis of variance testing effects arose in the 1930s through Fisher (1959) in response to agricultural interest in comparing yields of differently arranged plots of land. The farming terminology still persists in textbooks (e.g. split-plot design). The yields (cell contents) were easily observable and the processes involved in producing the yield (growth) were obvious so that the results were interpretable – and even if an efficient cause to explain the effect was not identifiable the influences responsible for the effect could be controlled.

So the Fisherian tradition of factorial designs originated in agricultural research where different treatment plots were literally arranged side by side. Time was uniform for all effects, hence the growth processes behind the main effects or yields of these plots were never in question. Differences were sought only on quantity of yield. In psychological research, however, the processes governing response outcome are generally unknown, and the uniformity of time relationships amongst these processes cannot be assumed. The aim of factorial design is to look for differences in effects when processes are assumed to be uniform, unlike the behavioural case, which looks for changes in the same process at different points in time.

It is not clear (at least to me) how behaviour corresponds to yields in the Fisherian terminology. Perhaps if psychologists were measuring toenail clippings or designer stubble these might qualify as 'yields'. Behaviour is not yields but a series of events, and it is on this dynamic basis that behaviour is identifiable. One solution already proposed here is to identify certain behaviour as a process context and record all described and recorded activity as relevant activity in the first instance, and describe it as a process prior to parcelling it up into components. This process approach avoids making premature assumptions about relevant and irrelevant activity that appears as a process, not a discrete event. Behaviour is constantly in transition, and it never repeats itself. One component of an activity is affected by the relationship between components, and recorded activity is a gestalt of interacting process, not a series of discrete events.

This process represents an intentional flow of activity on the part of the person, which, as we have seen, may be related to other intentional processes and other times and places, and may or may not correspond to a serial succession of stages. The boundary of the process context is defined as the unit considered by clients to be their meaningful unit of activity in this context, regardless of whether this unit includes, from a functional point of view, independent compound components (see Chapter 2).

The use of inappropriate statistical models

Despite its practical use, significance testing has limitations. The shortcomings of the use of null hypotheses and significance testing are well documented elsewhere (Bakan, 1967; Morrison and Hankel, 1970; Phillips, 1973; Rozeboom, 1960; Steger, 1971). A good review is given in a tutorial paper by Rosnow and Rosenthal (1989). It is worth emphasizing the part that belief and personal intuition play in conventional inference. The whole business of taking a sample from a population is based on a probability model that is rarely tested. The sample mean is assumed to be one of an infinite number of means and, therefore, its value is unlikely to fall into the extremes of the distribution. But such a distribution remains hypothetical and the mean value does not actually exist. The debate reminds me of an example given in college about how an ancient tribesman tried to impress his tribe with the statistical fact that although none of his arrows actually hit a buffalo the mean calculated from all his tries was dead centre on target. Unfortunately, since the mean is an abstraction nobody got any dinner.

The binary hypothesis-testing procedure, which, apparently, gives sharp precision to the aims of the experiment, depends for its validity on the null-hypothesis notion. In practice the null hypothesis is very vague, often inaccurate and arbitrarily biased. The null hypothesis (usually of the variety that there is no difference between means) is almost certainly in error from the true situation. This leads to an asymmetry in favour of H1, so that the more participants, the more likely the error of H0 will depart from the true situation and be rejected. This means that the significance of the 'significance' level, or chosen rejection region, will vary arbitrarily from study to study as a function of null-hypothesis error.

Ironically, as Edwards (1972) has pointed out, given the frequentist dismissal of informed subjectivity, the traditional decision to use the cut-off around the 5 per cent confidence interval was established on the basis of the personal experience of its general utility rather than for other logical reasons. Strictly speaking, the p-value should be chosen in advance of the results, but in practice the choice between significance levels is left up to the personal integrity of the experimenter or editor. Acceptable significance levels can differ not only between disciplines but amongst different areas within a discipline (Rosnow and Rosenthal, 1989).

Significance testing never arrives at a statement of certainty about the response effect, only a statement of uncertainty about what the response is not. Fisher's (1925) statement that the only purpose of experimentation is to give data a chance to reject

a hypothesis fostered the attempt to artificially extract the extreme end of the probability distribution and convert it into an improbability region. Designating alpha probabilities near to zero to create improbability then becomes a criterion for falsification, but there is no corresponding one for verification. In other words, what can be said of data that does not reach significance? Overall (1969) has pointed out that any binary hypothesis testing of the H0-H1 variety is necessarily asymmetrical, since it can come to no conclusion about any effect that does not reach significance.

The asymmetric notion of significance testing is bound to lead to cases where the null hypothesis (H0) will be rejected as false when it is in fact true, since the null hypothesis is not one but several plausible alternatives with unspecified probability and which vary independently of H1. As Lindsley (1957) and Rozeboom (1960) have shown, for any classical significance level rejecting the null hypothesis there always exists a datum equally significant at that level – and without knowledge of alternative hypotheses there are no systematic grounds for choosing a priori amongst several possible rejection regions. The classical method stops short of verifying what response is actually in the data because data usually does not contain discrete fixed effects, and thus imposing standard parameters is not the way to find out what *is* in the activity.

The status of both the hypothesis and the datum post-significance test remains ambivalent because the conclusions are couched in purely negative terms (the null hypothesis was not supported). There is also no viable parameter (process) space (empirical context) available in which to interpret results (Steger, 1971). In practice, most experimenters do not confine themselves to purely negative and binary conclusions, hence personal speculations often make up the bulk of discussion sections. Although some of his writings are ambiguous on this point, Fisher himself probably did not advocate absolutely this null-hypothesis decision rule. Fisher states: 'It should be noted that this null hypothesis is never proved or established, but is possibly disproved in the course of experimentation. Every experiment may be said to exist only in order to give the facts a chance of disproving the null hypothesis' (1935a: 19). Fisher's position was that nothing can be concluded if the null hypothesis is not rejected.

To cite Schmidt (1996), the important benefits that many researchers believe statistical significance testing confers are, in fact, completely imaginary. As he says, 'Significance testing creates an illusion of objectivity, and objectivity is a critical value in science. But objectivity makes a negative contribution when it sabotages the research enterprise by making it impossible to reach correct conclusions about the meaning of data' (124). 'There is a false belief that if a difference or relation is not statistically significant, then it is zero. If the difference is not significant, it is probably due to chance. This belief makes it impossible to discern the real meaning of research' (126).

So significance-testing methods are unsuitable to human science and even counterproductive for advancing science. But nonetheless they are seductive and, for researchers, significance testing appears to offer a quick practical solution to determine the significance of an act or event that is universally applicable. Either

significance testers have misinterpreted Fisher's deductive methods and mixed them up with the Wald (1955) and Neyman and Pearson (1928) inductive decision rules or they have simply grabbed erratically onto to unhinged dogma, like the central limit theorem or the weak law of large numbers.

Neyman and Pearson considered Fisher's image of rare or implausible events an inadequate vehicle for hypothesis testing. Their approach postulates two competing hypotheses. Testing one hypothesis against another introduced the probability of committing type I false rejection and type II false acceptance of the null hypothesis, which Fisher's stand-alone approach disallows. A single p value from a Fisherian significance test has no place in the Neyman–Pearson hypothesis-testing framework. The Neyman–Pearson error rate, which allows definition of a critical region for a test statistics, has no place in Fisher's significance-testing approach (Hubbard, 2004).

Tversky and Kahneman (1971) have pointed to the ambiguities of deciding how large a sample would be required to replicate an analysis of variance significant finding. An additional irony pointed out by Rouanet *et al.* (1978) is that the more precise an experimenter tries to be in eliminating unwanted variance, the more likely his data is to depart from the assumptions of the variance model.

Observation: a sense or an act? Revisited

As we have noted, observation is not a sense, it is an act. Whereas a sense tends to leave the person out as a passive receiver, the notion of an act includes the person as a performer. No perception is possible which does not emerge from a background of personal knowledge and positioning, to give it direction and acuity, whether one views the knowledge project cognitively, in terms of expectation and selection, or ecologically, in terms of environmental interaction. If knowledge is personal not by error but because it cannot be otherwise then the question should be not how do we eliminate bias but how do we make sure we have defined the knowledge in question personalistically enough. Seeking objective facts and objective knowledge in the traditional sense becomes undesirable simply because it is impossible.

Personal knowledge and its behavioural context

Considering all knowledge as personal places observations in a precise and certain behavioural context rather than a probabilistic context. Every description of an objective attribute in the world implies an action context. I might describe this table as 5ft wide. But 5ft wide to whom? To anyone with a tape measure and, more specifically, to anyone who wants to measure it with a tape measure. In other words, implied in the 'fact' that the table is 5ft wide is a behavioural context that forms the basis for describing the attribute. But the apparent invariance of the 'fact' is, in fact, an invariance in the behavioural context of measurement, not in the table.

This relativity is recognized in an individual context, so that I may say with legitimate fallibility that in this light I saw the table as red, or that from my position

the face looked like John's. By openly reporting my behaviour along with the fact perceived I recognize the personal nature of my observation and the role of my intentions in observing. But when the context is culturally shared it seems forgotten. The result is that objective methods rarely mention context as a limiting factor. The tendency is to argue that the 'fact' is independent of context and generalizable across people and time. As mentioned earlier, scientific observation is assumed to be impersonal when it is consensual.

So if I wish to give knowledge meaning I must include the action context in which it is observed. Every observation only emerges because it is part of an implicit context of culturally and personally legitimate action. In everyday life this behavioural context is implicit. But in scientific investigation this must be made explicit, otherwise we cannot begin to understand the nature of the phenomenon being reported. More importantly, it is change in the behavioural context of the observer that allows new 'facts' to be discovered. In recognizing the personal context against which observation takes place we can begin to place our expectations in *certain* process terms, rather than in the uncertain abstract context of probability.

A good case example here is the classic probability paradigm of coin tossing. To the conventional statistician coin tossing is the paradigm *par excellence* of a random (binomial) distribution. With a perfect coin pure chance determines outcome. But coin throwing is also an act. How I'm standing, the way I throw the coin, the social context and my manner. Only if I choose to abstract the coin toss from the behavioural context in which it is thrown can I pretend that it represents some passive chance phenomenon. Within an act framework it is quite clear that active behavioural measures like intention, habit or skill will a priori affect the a posteriori outcome (Mead, 1910; Cohen, 1981) and its interpretation.

If I am to take account of the behavioural context surrounding my observation then there is no reason not to include intuitive observations as well as rational deductive ones since they have the same status as personal behaviour. If we consider that the significance of any event arises within an appropriate behavioural context the distinction between personal and objective knowledge disappears.

Non-probabilistic statisticians, like de Finetti and Savage, explicitly linked their personalistic approach with the behaviourization of statistics.

In inductive logic, or 'learning from experience', the role of probability theory is to show how the evaluation of probabilities of future events is modified in the light of current events. More specifically, the future probabilities are new probabilities, not modified ones. de Finetti rejected the notion that homogeneous trials are identical and that this notion of identical events gives an empirical foundation to the frequentist theory based on a law of large numbers. The circumstance for achieving stability is, rather, independence, where events are dissimilar and unconnected. The validity of a given property never depends on similarities or any other external feature of the events concerned, but only on the probability scheme accepted for them. They are relevant only in how they determine our opinion about probabilities. The following quotes are from de Finetti:

> Frequency in the long run gives in no validity to consider individual cases (comparing two outcomes). I find it most strange that anyone is satisfied simply to put aside all that is subjectively meaningful and much that is objective to progress towards objective thought. Subjectivists are required by theory to completely utilise all known facts (from observation or experiment) without assuming any right to manipulate or set aside data arbitrarily.
>
> *(de Finetti, 1972: 186)*

> We reject any attempt to interpret the words 'under the hypothesis that…' to mean the conclusions are valid or not, according to whether the 'hypothesis' happens to be in agreement with some 'external reality' rather than the opinion chosen from the outset as an unquestionable datum in whose consequences we are interested.
>
> *(de Finetti, 1972: 192).*

The personalistic approach and Bayesian-likelihood non-probabilistic methods

The Bayesian position is the oldest and best established alternative, and has been the most thorough in its critique of traditional probability and espousal of 'subjective' probability. The most comprehensive expositions of the Bayesian position have been given by Savage (1962), Lindley (1965), Barnard *et al.* (1962), and Edwards (1972).

The premise of the Bayesian position is that all probability is subjective, and that it is tied to personal experience. As noted, the word 'Bayesian' originates from the Reverend Bayes, an English clergyman, who was the first to articulate the query of how to reconcile prior experience of a die with a random model that excludes prior experience in calculating the outcome of the next throw (Bayes, 1763). He was introducing in a vague way the importance of personal context, as we discussed it earlier.

The hallmark of Bayesian statistics is the personal involvement of the person in estimating the probability of an event, and it is formalized in terms of Bayes' theorem. The theorem proposes that the a posteriori probability (P) of a hypothesis (H), given the data (D), is a function of the probability of the hypothesis weighted by the probability of the data but conditioned by the probability of the data, given the hypothesis (*P(H/D)*.

$$\text{Bayes' theorem:} \quad \text{P(H/D)}: \frac{P(D/H) \times P(H)}{P(D)}$$

It is only in terms of a constructionist model that the notions of a priori and a posteriori probability make sense. The Bayesian position has moved from the passive

observation of the coin toss, with only one probability, to the active modification of probability as a function of personal involvement and commitment to outcome. The decision about the probability of an event is made nonetheless on the basis of what appears; but the significance of what appears is related to the person since s/he constructs alternative decisions in terms of their relative (ratio of) utility functions to her/himself. The probability of an outcome depends on the choice of decisions available to the person and their personal investment in the outcome. Hence the a posteriori probability reflects outcome plus prior experience and personal utility.

The point of specifying, through previous knowledge, the decisions required from the data is to give some behavioural perspective or context to the observation in order to be certain that the evidence will have implications for further action. Hence the data is significant to the Bayesian whatever the outcome. The question is simply which of a number of several hypotheses are best supported by the data. The more hypotheses to which I can attach prior probabilities, the better, since greater precision can then be attached to the final decision. So, for example, in carrying out a behavioural experiment with a client, I may be able to specify a number of alternatives that may occur if the client ceases a safety behaviour and update the probability of each, depending on outcome. In this way I may nominate alternatives the client had not previously envisaged.

There may be many possible alternative hypotheses about the form of an activity or the processes it may represent. These alternative hypotheses represent some degree of knowledge about the activity. They may arise from a variety of sources, such as previous findings, general experience or intuition. The source is unimportant, providing their probable utility in defining the activity can be specified. They are fallible and may come from fallible sources, since there is no claim to their absolute or objective status. In other words, there may be no single hypothesized parameter that by itself will reveal all the information in an activity, and even a parameter that proves of no utility will reveal something about the activity. Hypotheses represent a way of viewing the data, and discarding one view makes other views more likely.

Conventional statistics limits itself to a binary hypothesis since only one significant effect is to be yielded from the otherwise chance behaviour of variables. As mentioned earlier, this significance can only be interpreted in a probabilistic, not a personalistic context, and data is fitted into the null-hypothesis format. In contrast, the Bayesian is said to fit the models to the data. This is sometimes termed 'inverse probability'.

The fact that the Bayesian starts from a relativist position whilst the conventional statistician begins from an objective position leads to crucial differences in the conception of sample populations and what they and the measures taken by them represent.

Specific populations

The conventional researcher must infer from the sample to the population. The sample statistics, therefore, must be representative of a larger population. But for the Bayesian the only context is the context of the experiment. The Bayesian is not concerned

with representing a population but with creating one, so that s/he deals with aggregates not samples. The Bayesian asks how many of these types of situations show these characteristics rather than how representative is my measure of the population that must exist somewhere. In the Bayesian case the population is determined empirically by what is observed, not hypothetically tied to an assumed population distribution.

There are key differences in design that spring from this difference in inference. Principally, the Bayesian is not bound by formal statistical constraints in dealing with independence of components and interaction of measures; in comparing/combining separate measures; in defining sample space; and in generalizing findings.

Specifying sample space

In conventional experimentation the tendency is to make descriptions of populations as bare and essential as possible. All else is supposedly controlled, though in practice confounding interactions may continue unreported. In the behavioural case as far as possible everything relevant to the experimental set-up is described in detail at the outset. Since the attributes we describe are the whole independent population they can take as many levels and interactions as required. The question of interaction and confounding of experimental effects is not a headache for the Bayesian.

In conventional analysis an interaction is a conditional qualifier to the main factors of the experiment. But in Bayesian analysis one cannot conceive of knowledge that is not in some way conditional, since in order to achieve any kind of certain knowledge, as we have said, we must recognize context. So in a clinical situation I may ask the question: What is the probability that a person in the middle of the shopping mall, with no particular goal, aware of the gaze of others, thinking of collapsing, may decide to escape, compared to someone not thinking of collapsing? I may further quantify the odds comparing them to partial escape, safety behaviour, reassurance seeking and resting in place, each with its own prior probability. I find the a posteriori probability favours partial escape, so this becomes my future a priori probability.

The Bayesian analysis allows the bottom-up approach to begin from complex detail and become more general, whereas the conventional designer starts from the general and is forced to qualify general statements by the evidence. The Bayesian begins by describing as specifically as possible the conditional aspects of the group under study – and such conditional qualifiers are not a nuisance. Describing the entire process as far as possible, at least the outset, helps identify parameters. The more specific we can be about these at the beginning, the better, since we are describing our entire reference population.

Experimenter considerations

I must specify my personal engagement, as experimenter, in looking at uncertainty under this particular set of circumstances. Why this behavioural context and not another? How will the outcome help me decide amongst my possible future behaviour? This implies that I can already foresee distinct plausible outcomes and

direct consequences for my future investigations. Obviously, it is in my interests to be as specific as I can about expected outcomes so that data can refine and update my expectations in a specific way. I could say I'm 50 per cent confident that client escape behaviour will occur in the first 30 minutes of a visit to a mall, or I could be more precise and say prior experience leads me to be 50 per cent confident that the escape will occur between 10 and 30 minutes, but 30 per cent confident that it will occur between 10 and 20 minutes, and so on for multiple alternative hypotheses. In fact, the probabilities are stronger if they are presented as conditional probabilities – that is, the likelihood of one possible outcome versus another mutually exclusive outcome – since this ratio expresses expectations as likelihood ratios or odds rather than absolute probabilities. The interactive relationship between the data and me is emphasized by my ability to change or update and refine expectations at any point during the experiment.

Because the expectations are tied to a particular behavioural process context, which is the total parameter space in this case, it is necessary to pay close attention to behavioural process. This means treating the participant as a collaborator in defining and describing the background behavioural process in question. The person brings their interest, concern, understanding and engagement to the experiment, otherwise they wouldn't be there. The collaboration of the person is essential to make sure the responses are anchored in an identifiable and meaningful ecological context, and only in this context. If, for whatever reason, the state changes or the person is no longer engaged in the process then the context has changed and both person and experimenter must be aware.

Specifying questions

Just for illustration, let's compare a classical approach to the Bayesian. Bayesian questions are different, or at least asked in a different order. So I have two people and I wish to know if they react differently to fear-producing situations. Let's say I measure the reaction by subjective rating. A conventional way to do this would be to calculate the mean value of the rating and the variance and see if the difference between the two clients is significant. The Bayesian approach is to phrase the same question as: what are the respective odds that individual clients will react with a high as opposed to a low rating?

This way of phrasing the question immediately has advantages. First, my stopping rule is evident. If I know, for example, that a person is ten times more likely to have a high reaction this knowledge may be enough to stop after one or two ratings. Is 10:1 more useful than 100:1? The second point is that it is extremely unlikely when posing the question that I am completely indifferent and have no prior expectation. So why am I proposing this idea and not another? If I have a prior expectation and the data confirms it I will, obviously, arrive more quickly at my certain a posteriori probability. If the data does not confirm it my a posteriori expectation can be updated with future cases.

Specifying alternatives

In the Bayesian case one must not only be able to specify the alternative hypotheses but accord them a probability relative to each other and summing to unity. If one cannot specify alternative probabilities one is not in a position to say what is and is not relevant information and so define the experimental context.

Usually, when we explore something or decide on an issue we do not consider just one null hypothesis and, if this hypothesis is disproved, conclude nothing. It would be a dull life if we did. We have a range of alternatives to which we attach likelihoods that we preferentially rate against each other. Indeed, a major component of cognitive therapy is teaching people flexibility in their interpretations and opinions. But binary methods go against common sense. As Edwards (1972) put it: 'When common sense is violated in statistics, you should be alarmed'.

The only way I can be sure of not imposing a priori constraints on the data is to propose as many alternative models of response as possible. Indeed, the power of any model lies not in how well it accounts for an activity but how well its account fares in relation to alternative models (McGuigan, 1956). Bayesian-likelihood methods are appropriate for use in this context as inferential tools.

A situation where one has absolutely no preference amongst alternatives is the case known variously as a 'state of ignorance' or 'uniform prior' and where one would accord two very general alternatives equal prior probability.

Knowledge of prior and posterior odds on rival models are all the information required to enable precise assessment of validity. The Bayesian approach is optimal for identifying response parameters in non-stationary time-series data where the history or exact form of a change in function is unknown.

Probabilities and likelihoods

As mentioned, the Bayesian operationalizes alternative personal decisions as alternative probabilities. So if I have, for example, two, three, four, etc. hypotheses about the type of response I might expect then I must, to be logically coherent, express them as mutually exclusive probabilities that sum to unity (since unity is the upper limit on probability.) This means assuming the alternatives come from a uniform set and that they are always mutually exclusive and can be enumerated to add up to one. Now it is easy enough to compare the probabilities of heads or tails or the fall of a die, where outcome is constrained, to be mutually exclusive; but in everyday life events tend to come from qualitatively different sets or classes and quantitative comparison is very difficult. How, for example, do I enumerate the probability that on a rainy day someone might eat an ice cream, go to the library or stay in bed all day? The evaluation of a behavioural event requires its behavioural context to be known since this, not a probability model, will decide the events with which association and comparison is more meaningful within a personalized comparative unit.

The Bayesian has to construct probability distributions anew out of a subjective guess on events. This is particularly difficult where parameters may have many qualitatively different subjective alternatives or levels since multinomial distributions can often take strange forms. A criticism raised by Diaconis and Zabell (1982) is that, in fact, people do not generally quantitatively assess alternatives in decision-making, and that this Bayesian procedure is prescriptive not descriptive.

In any case, our aim is not to validate the probability of any single model of the data but to maximize the ratio of alternative probabilities to give us the most likely parameters, given the data. This aim means we are concerned with the likelihood ratio, not with single probabilities. We are concerned with assessing the relative support for one of a number of alternative parameters, given the data, not with changing the belief attached to any one response parameter. Change in likelihood ratio leads, of course, to change in prior probability, but working with likelihood functions has mathematical and logistical advantages over the use of probability functions.

The likelihood distribution

The likelihood approach and its sister concept 'information' overcome some of the practical problems of the Bayesian approach. First, they are concerned from the beginning with likelihood ratios, which describe the relative context of a probability rather than an absolute probability. In other words, the basic unit is the probability of event A compared with event B rather than just the probability of event A – period. This makes it easier to ascribe probability to qualitative events. Likelihoods transcend the constraints of probability by dealing with a second moment, which Edwards (1972) terms 'support'.

In deciding on the prior support for one hypothesis, I can support the one against another to the same degree as if I had conducted an experiment leading to experimental support in a situation in which I had no prior preferences. Prior support is thus defined in terms of an imaginary experiment. It has the same properties as experimental support and is not, as in the Bayesian case, a qualitatively different expression of subjective ignorance.

Posterior support + prior support = experimental support.

All the information that the data provides concerning the relative merits of two hypotheses is contained in the likelihood ratio of those two hypotheses on the data. The posterior likelihood is centred on the actual relative accuracy of each hypothesis, given the data. This value is termed the maximum likelihood. Given this actual observed ratio of two hypotheses, the question to be answered is how likely are other likelihood ratios observed in other data to support the assertions made about this data? The answer to this question is inferred from the likelihood distribution, which is constructed around the maximum value in accordance with statistical limits on how far observed values may differ from the maximum likelihood and still be considered equivalent. So the likelihood or support curve would tell the experimenter that a certain observed proportion, and other proportions within so many units of this maximum, support the relative assertion A over relative assertion B within this behavioural episode. But if values outside of these limits are observed the support dwindles away.

Establishing support limits

So for each set of possible proportion of a parameter **Φ** of a process episode (**Φ** = 0, 1/n…n−1/n,1.) I can calculate support limits $\sqrt{\hat{p}(1-\hat{p}/n)}$ and an associated support curve. For any future set (F) of observed relative frequencies (f) these support limits yield an equivalence property where the property defines a binary relation on the Cartesian product F × **Φ**. For a given f this relation will discriminate those proportions observed that are α-compatible from those that are not at a certain level of guarantee. Proportions observed outside the limits are unlikely to be the same process at a guarantee of 95 per cent. For example, I might find that sitting down, waiting impatiently, has better odds for provoking anxiety than moving around or conducting a task. I may even estimate that, typically, 41 minutes out of 80 is the threshold for distress and calculate the two support limits $(2\sqrt{\hat{p}(1-\hat{p}/n)}$ of this parameter at ±0.11. In other words, 30 per cent of the time sitting is not equivalent to 41 per cent in producing distress. I may wish to compare the equivalence of sitting alone in different contexts in eliciting distress. Does sitting alone impatiently produce equivalent distress in a cafe, a library and a park? I can examine the equivalence of my sitting parameter by consulting the above support limits.

The logic here is very similar to creating a likelihood or 'support' distribution by computing likelihood ratios from comparison of complementary event probabilities (Edwards, 1972). A particular set of data supports one statistical hypothesis better than another if the likelihood of the first hypothesis, on the data, exceeds the likelihood of the second hypothesis. In the present case, however, the comparison is between possible actions the person can perform in the same process. Statistical likelihoods are computed from conditional probabilities where probability is a uniform vector from 0 to 1. The conventional probability model assumes a binary symmetry between event and non-event. The probability of an event occurring is considered the complement of the event not occurring in order that occurrence and non-occurrence can be contained along a uniform scale from 0 to 1. But in real terms the non-occurrence of one event means the occurrence of another event, and in process terms these may be qualitatively different acts. Possible actions can be identified solely on the basis of observation of what is most and least possible, whereas probability is always hypothetical. In practice, when the decision is made about whether a measure typifies the process A this does not mean typical of A compared to 'not-A', its complement, but A as compared to B, its non-equivalent process. Refinement of a process through increasingly accurate specification of actions would result in a distribution of maximum and minimum possible values for a series of dichotomous equivalent activities. A different set of possible process limits would apply, depending on how gross or refined the definition of the process unit. Maximum possibilities have all the benefits of likelihoods in that they can be combined across qualitatively different process episodes. The maximum possibility of one client's process may be different from another's, but they can be combined to give an additive description. A maximum possibility of one process may be conditional on the presence of another, in which case they can be combined multiplicatively (see O'Connor, 1985b, 1990 for further details).

Fiducial limits of support for a parameter

Fiducial 'trust' or 'credibility' limits are the inferential equivalents of confidence intervals, but there is no logical relationship between these two statistics (Rouanet *et al.*, 1978; Rouanet and Lecoutre, 1983).

In personalistic methods there is no question of considering events in terms of probability models (de Finetti, generally considered the founder of non-probabilistic methods, argued that objective probability does not exist (1974)). Non-probabilistic methods adopt what Rouanet (1982) terms a set-theoretic approach, which can establish credible limits on the basis of the possible samples that could exist in a space equivalent to the one observed, for which proportions may be greater or less than observed proportions.

The support limits on the likelihood function of a parameter describe the actual limits on its appearance in the data, not the tail ends of a normal probability curve. If the maximum likelihood derived from a hypothetical model of the parameters, or from the parameter's appearance in another sample of activity, is within the two units' support limits of the actual likelihood, given the data, then the data is said to support the model at a guarantee of .95. But this is not a significance level and does not entail acceptance or rejection of anything (Edwards, 1972). The guarantee indicates that the model is acceptable to the data, given the parameter values measured so far. If further information increased the precision of the likelihood curve the fiducial limits of support would narrow, and the model might no longer be acceptable.

The disadvantage of the likelihood approach is that it must still make some assumptions about uniformities and continuities in the data. The 'support' function depends crucially on the exact nature of alternative hypothetical models put forward. When it is impossible to be precise about the exact form of these models, or when they are complicated or irregular (as often is the case in everyday events), the support function, though robust, loses precision.

Joint likelihoods

The conditional likelihood of one parameter value X, given another value Y, is $L(Y/X) \bullet L(X)$. Equally, I might increase the precision of the likelihood by combining the information of several parameters of the activity, computed on binomial or multinomial models, into a single joint likelihood. The likelihood ratios of two parameters A_1 and A_2 on independent data sets may be combined to form a likelihood ratio for two sets of data: D_1 and D_2.

$$L(A_1, A_2/D_1 + D_2) = L(A_1, A_2/D_1) \bullet L(A_1, A_2/D_2)$$

Joint likelihoods are particularly useful in multivariate classification problems. The joint likelihood of parameters on several separate psychological parameters may be more diagnostic of a process than one measure alone. Likelihoods can, of course, be combined directly across episodes, measures, experiments, occasions and clients.

I may wish to refine the parameter by noting what attentional style accompanies the sitting: engaged or distracted. I find that when these two parameters are combined the joint likelihood of distress is increased. The probability of sitting down causing distress is 0.60 compared to 0.30 when moving around. This gives a prior likelihood ratio or odds of 2:1 in favour of sitting. The probability of distress when distracted is 0.90 compared to 0.15 when engaged, which gives prior odds of 4:1 – so this information when taken jointly has prior odds of 8:1 and will be updated by posterior odds on a new datum.

Likelihoods can be compared across different behavioural measures to give an indication of the comparative sensitivity to a process of one system *vis à vis* other systems. For example, sharper likelihood distribution might be obtainable from heart-rate parameters than self-report for a certain cognitive task. In process terms a continuous variable can be considered as a series of sequentially dependent events. Information on sequence as well as occurrence can be expressed within a conditional likelihood.

Revising odds

Any decision on the future odds of a parameter depends systematically on the prior odds. If I have particularly strong odds about a parameter in a particular process then computing posterior odds on one process episode may be sufficient to allow me to decide whether this episode does or does not contain the process.

Prior odds may simply reflect the confidence gained from previous experience and, providing they are not set at zero or infinity, they do not exclude the possibility of change in the odds. Given sufficient evidence, the prior odds provided by separate observers' values would no longer be of importance in weighting decisions.

Prior odds play a crucial role here, not only in confirming opinion but in quantifying change in expectations. Edwards (1972) makes the point that we cannot simply observe an event and then quantify our surprise about it unless we have specified in advance the likelihood of alternative outcomes. This point is particularly relevant to interrupted time-series designs, where obtaining an adequate time history of the measure prior to intervention is always a problem. Prior likelihood distributions on the outcome of a measure may be crucial in assessing models of change in an activity over episodes.

Non-probabilistic criteria of change

A major advantage of the Bayesian-likelihood approach lies in its ability to extract precise information from single episodes of activity and quantify change in activity over as few or as many such episodes as required by prior knowledge. Likelihoods based on a few episodes are comparable with those arrived at after a hundred episodes, providing the sample set and parameters chosen are not contrived to be interdependent.

Lack of prejudice for support values based on unequal samples is particularly useful for quantifying the effects of repeated performance, learning and skill acquisition over a few episodes. The likelihood computed on the n + 1 episode is independent of the likelihood for the nth episode. Each likelihood is giving sufficient information on the development of the parameter of interest up to and including each episode. If the effect of the sequence of episodes is to change the form of the data this will be reflected by change in the form of the likelihood function over episodes. Posterior likelihoods then contain all the required information on change. Freedom from classical statistical models about the form of activity over repeated measures allows the inferential approach to compare alternative models of change by use of likelihood information.

Models about the nature of change in an activity will differ in their prior expectancies of a parameter's appearance over episodes. Each model would generate its own limits on the amount of change expected in the likelihood of a parameter. If the limit on change has not been met or has been exceeded after a set number of episodes the experiment is stopped and a decision made on the utility of the model. The utility of the model would be assessed by fiducial methods, according to whether or not the limits of the prior distribution on change were within the limits supported by the data.

The use of the stopping rule emphasizes that the aim of Bayesian inference is to increase the precision of response measurement rather than to maintain a constant level of variation in parameters over samples. If adequate fiducial support for a model of activity can be obtained over a few samples there is no inherent benefit in collecting more samples.

Process research in psychotherapy

An important implication of the Bayesian-likelihood approach is the ability to address both process and outcome research in psychotherapy. Werbart (1989) placed process and outcome research at different poles and suggested that they apply to distinct quantitative and qualitative realms, and that they may apply to different stages. Werbart listed a number of features that fall into process research, including a client's perception of change, the perception of the therapeutic relationship, and how psychotherapy may impact on different individuals. Key process questions are what is effective, for whom and for how long. As already noted in a process approach, although the act is described behaviourally, all relevant emotional, meta-cognitive and other modalities can be included in the process if they typify this process.

The act process is defined by the overall intentional behaviour – 'leaving the house', 'going to the mall' – but it may well include meta-cognitive processes – the perception or appraisal of what will or will not happen – that typify the onset of a distressing experience rather than other behavioural or emotional factors. The extent to which these meta-cognitive parameters typify one process over another can be quantified through personal statistics by identifying which parameters are more or less likely in any one process unit. In this parameterization complex units of behaviour can be qualitative and quantified.

Once we have quantified disparate equivalent and non-equivalent processes we can extract wider intentional themes which structure a person's world through comparisons using adaptations of Kelly's grid. These themes may well help us understand why certain intentional behaviours are likely to be problematic in certain contexts but not others. The constructs themselves can be quantified and can form the basis for statistical confirmation of their personal dimensions.

Perhaps equally important in the psychotherapy debate is the fact that different processes can serve a similar outcome and one process can serve different outcomes in different contexts. A trajectory model of multiple pathways leading to the same end point and vice versa has preoccupied macro- and micro-trajectory research. In other words, therapeutic processes do not have unique, uniform or fixed meanings. We cannot assume a uniformity of process measures in variables and consequently correlational studies amongst outcome variables may be invalid.

Shoham-Salomon (1990) illustrates the pitfalls of ignoring process with the example that change in process within a context and change over sessions may well go in opposite directions. So, for example, increased compliance during a therapy session could be accompanied by decreased compliance across sessions, indicating context is important to understanding the process of compliance. In a therapeutic context the complex nature of processes requires the analysis of patterns, looking at a more focused enquiry of the differential contribution of that process within different contexts. This layer of modalities interacting in therapeutic space is encapsulated well in Greenberg's notion of event space.

Greenberg (1986) is of the view that processes can be viewed in a hierarchy of contexts. According to Greenberg, speech acts are embedded in therapeutic episodes that in turn are embedded in other social relationships, and it is this pattern of variables that reveal therapeutic significance, not the presence of any single variable. Again, a personalistic approach accommodates this interaction amongst modalities. Pos *et al.* (2003) have noted that levels of emotional processing can change during therapy.

Personalistic approach in clinical practice

As noted, despite the potential sophistication of likelihood modelling (helped by recent advances in computational powers), the clinician can obtain informative decisions on complex clinical data unobtainable by other approaches. The decisions are based on inductive behaviour and lead to inductive decisions, so the clinician needs to be sure of what to expect and be able to construct an a priori distribution of probable outcomes. This means, as we have said, that the clinician is certain of the process and her or his own perspective, and feels that s/he has enough knowledge of parameters relevant to the phenomenon. In any case, prior probabilities are only relevant before an experiment, but posterior likelihoods are relevant after the experiment (Barnard, 1949).

In the example in Chapter 2 we identified in our client a behavioural process producing distress with the following components: sitting down bored and not communicating, thinking negatively and wishing to get out of the situation. This is a complex multilevel process and we could define its parameters as present or

absent or present by degree, and assign likelihoods to the probability that distinct components of the behavioural process produce distress at different points. Perhaps I can consider that sitting alone is more likely to produce distress than not communicating. In this way a posteriori likelihoods can refine process parameters.

It may be that the therapist already has strong prior knowledge of the likely limits of a parameter within the two act processes. In this case specifying the limits may be simply a case of stating prior knowledge of the process context. However, although a therapist may be certain about some values of a parameter that lie in or outside a process, deciding on an exact boundary between two processes may be more difficult (e.g. at what point does the behaviour start to be associated with distress?).

The number of observations is important only in so far as the number is sufficient to cover the entire process. Time is relevant only in so far as it is a condition of equivalence. It is the stages of the operation that are the basis of equivalence and the timing need not be identical. There may be reasons for obtaining more than one repetition but they are not the same requirements for repeated observation as in the classical case. If somebody performs an action in front of me I do not usually ask them to repeat it several times to be sure it happened. Amongst the reasons I may want a repeat are: the event was so remarkable and outside of my expected limits that I distrust its appearance; some interference (internal/external) obscured observation of the action; I wish to change some part of the action or at least change my perspective on the action.

Any constraints on the process (e.g. the limits only apply in some circumstances) will be implied in the specific way I describe the actions of the episode, not in the measures I take. This attention to micro-behaviour, discussed previously, is essential because limits are only relevant to the process described.

In an experimental context we may be able to use Bayesian-type decision theory to decide on limits of equivalent process measures (see Chapter 2). Clinically, however, we can extract all the information required from the client's descriptive experience.

If we are conducting a clinical behavioural experiment we may require the collaboration of the client in modifying the process episode's parameters to find out the odds of change in the experience as a function of this parameter. The questions can concern classical experimental paradigms, such as reaction time but, again, questions would be couched in process form.

So I would have defined my reaction-time process unit very descriptively as placing the hand, lifting the middle finger and pressing the button when a signal is perceived. A process question about reaction time would pertain more to how distinct response processes, preparation and attentional set instructions may modify the process. But, for illustration, let's say my parameter has distinct speed values and I see this process as a variant of speedy behaviour with parameters comparable to other speedy processes.

In a reaction-time experiment within the personalistic approach we see the separate presses not as random variation around a central tendency but as valuable information complete on an event space tied to the behavioural process in question. Any statement about this event space takes account of the entire range of responses so that no individual information is lost, and the statement about any one score places it in the context of the rest of the scores.

So my prior likelihood may be that it is twice as likely that most of the response time scores will fall between 100–200 msec than between 200–300 msec. The data from the first collaborator tells us that the observer scores are, in fact, three times as likely to fall between 100–200 as 200–300, so my a posteriori odds (prior combined with observed) are 2.5:1 in favour. But, in addition, I can refine the limits of my expected range of responses even further by considering the likelihood of the scores falling between 150–90 msec three times, more likely as scores falling outside this range. Indeed, when we look at the observed scores from the next collaborator we find this refined likelihood is actually 4:1. So I can now further update my posterior probability and, if I wish, refine my parameter space even further.

How large I need the odds to be in favour of one particular outcome depends on the cost benefit involved in deciding amongst prior specified behaviours. For example, if the calculation of an even chance of it raining or not raining in a day may be enough for me to decide to go out with an umbrella. However, I might require considerably higher odds, say 10:1, in favour of rain before I cancel an outside party. Similarly, the odds in favour of an outcome might be greater, depending on the importance and consequences of the decision on my subsequent scientific behaviour.

Bayesian-style research questions may include: What other aspects (physiological measures) typify this act process? To what extent is the act changed by intervention? Does it become another process? Do different processes develop and operate over the time course of an intervention? How typical is this component act process in context, A or B? Which of a number of intentional themes typify this process and this experience? I have tried here to tie in a Bayesian with a constructionist approach to creating alternatives at a common-sense level. Little (2006) details how more technical ways in Bayesian approaches can overcome the ambivalence of the frequentist approach.

A clinical example is given in Appendix 12, where we look at change in parameters in a therapy process space. Here the behaviour is taking part in cognitive behaviour therapy. We are looking at change in self-monitoring patterns of distress and duration over therapy divided into three stages. The parameter in this case was chosen on the proportion of each parameter falling above or below the median value. We can then examine the equivalence of episodes over participants using support limits to establish equivalence.

Certain knowledge of the process must precede knowledge of effects if the latter is to be in any way scientifically meaningful, as in agricultural research, since, in practice, identifying an effect depends crucially on how I understand the context of the effect and the process underlying the effect. Growth was the process in agricultural origins of earlier Fisherian designs (Fisher, 1935b). Knowledge of the boundaries of a process facilitates the discovery of a new phenomenon. Discovery comes from simple empirical observation and decision-making based on experience rather than deductive theorizing.

Note

1 The title of Chapter 3, Section 6 of Leonard Savage's seminal *The Foundations of Statistics*.

9

TEACHING CLINICAL CONSTRUCTIONISM/ PHENOMENOLOGY

Supervision

Harper (2012) notes several reflective questions for a supervisor and trainee to consider. How does my development as both a clinical psychologist and a professional relate to me as a person? How can I develop in a way that enables me to move between roles as a therapist, consultant, researcher, supervisor, teacher and so on without feeling overwhelmed and confused about my role? How do I make sense of powerful emotional experiences on my clinical work (e.g. with clients, supervisors or organizational systems)? How might I learn from my experiences in clinical work? How might I start to develop an 'internal supervisor' to help in the reflective process? Harper makes the point that it is important to balance theoretical and reflective teaching alongside skill-based experience.

Optimally, supervision will: (1) encourage critical reflection; (2) deal with the trainee as a person; (3) encourage the trainee to monitor their context, motives and perception; and (4) develop a sensitivity to constructionism, which means gently challenging any absolute claims to truth by considering alternatives with the trainee.

Adopting a phenomenological attitude

Phenomenology requires an ability on the part of the trainee to be attentive to experience. As Churchill has commented, 'It is quite possible to possess knowledge about something while having little in the way of lived acquaintance' (1990: 48), quoted in Halling (2012). It is important to provide the trainees with a good understanding of what 'lived experience' means and to help them to devise a good set of interview questions with specific, concrete questions about experience. This understanding can be gained independently or in dialogue with the supervisor.

Initially, the trainee can acquire a feeling of being in the world and an awareness that s/he is an interactive being, always interacting with the world and others

when going for a walk or shopping; and the trainee can discover that consciousness always has an object – no matter how hard s/he tries to be pure by trying to attain consciousness without an object or intentional attitude – and that projects flavour perception. Does s/he see the same stimuli in different situations? Is s/he the same person over contexts? When s/he feels a certain way does s/he act and think in the same way? Is there response invariance? What are the limits of her/his awareness at any one time? How does s/he talk/walk depending on intention? How is speech an act, a message, an expression and an experience? Does s/he habitually use metaphors? Does this influence the attitude? What about beliefs and opinions? What other assumed frames of reference colour perception? Even a simple phrase – 'I would like some coffee' – will express a position as well as a desire.

The trainee can learn to put in less effort when describing than when interpreting or reflecting. Effectively the trainee reports what appears certainly before them, first of all factually, then in context, then dynamically as an evolving story. This description can be built up with the trainee. First, the trainee can describe an object, then an incident, then an event, then a conversation. Being honest about thoughts, impression, images and feelings is important whilst screening out big words, speculation and judgement, and replacing them with authentic reports. What does the trainee wish to gain from a conversation? What does the trainee's account of a conversation say about her/his values, interpretations, prejudices and personal distractions? In other words, what is the trainee bringing to the conversation that influences evaluation? If the trainee poses questions are they posed formulaically or in a personal empathic way?

It is useful if the trainee recounts a story with a listener. The story can then be deconstructed into components of interpretation, judgement and positioning. The trainee can begin by describing objects as they appear, and progress to reporting experience and sensation accompanying the perception. Describing objects as they appear can be a challenge because of the tendency to fill in partial knowledge with assumed knowledge.

Describing 'keeping up appearances'

Here a series of objects are described in the here and now and the trainee separates what is seen from what is not, what is inferred from what is perceived. For example, I see books on a shelf, the spines of three are pointing towards me, the other six are partially masked. I see two sides of a support structure. The other exercise is to incorporate action into the perception and discover how what the trainee sees depends on intention towards the use of the object. Does even a slight deviation in intent change the perceived properties?

> Aim: To establish how projects determine perception. Relate to an object, under distinct project conditions. A telephone, for example: using it, dusting around it, picking it up as a weight.

> Aim: To see how the possibilities of any one object are never exhausted. Gaze round the room and remark on an object you had not seen before. Do this every day, discovering a new object. Discover different new aspects to the object, different dimensions: colour, hinges, position and angle.

Exercise: describe an event non-judgementally

This is an exercise that can be carried out alone or with a partner. The idea is to choose an experience, maybe a compromising experience – being kissed, being caught out, getting lost – and describe the experience descriptively without letting any judgement, interpretation, aside, bias or commentary step in. This exercise is not as easy as it sounds since there will always be a tendency to introduce some judgement, as in the following: 'I was lost on St Lawrence and De Bullion. I didn't know which way to go. I felt an idiot. I should know by now. The signs didn't help since I didn't recognize them. Finally I just walked towards the park, feeling a bit better'. Or the experience can be recounted non-judgementally: 'I was lost on St. Lawrence and De Bullion. I had lost orientation and was turning left and right. I saw others pass me. My legs felt like they could go right or left. I looked at the signs. I looked at the houses and I saw the park and headed off'. How do the two accounts differ? Some narratives are rather prescriptive than descriptive, informing us about what should have occurred.

Adapting a constructionist attitude

The constructionist approach is essentially a common-sense approach that is initially open to uncertainty. Hence it is essential in the beginning to cultivate a climate of uncertainty when faced with the client. In this context it can be helpful to draw on Mason's (1993) concept of safe uncertainty. Safe uncertainty is where the novice therapist waits to be certain. This approach can be helpful in learning 'not knowing' approaches to therapy that avoid premature certainty and value respectfulness and curiosity (Andersen, 1992; Anderson and Goolishian, 1992).

In this respect a social-constructionist approach can be helpful to trainees. As Dallos and Draper (2000) note, since social constructionism is not a theory as such, but rather a meta-theoretical framework (i.e. a theory about theories), a social-constructionist perspective allows trainees to use other theories in a pragmatic and flexible manner rather than seeing the theories or formulations that flow from them as 'true' in some foundationalist sense. The value of a formulation of a client's difficulties and of professional interventions need not be judged by some abstract notion of truth, but by more pragmatic criteria of whether an approach 'fits' for a client or is going to be useful. Harper (2012) suggests the scientist-practitioner model should encompass evidence-based models but also models relating theory and practice which are more consistent with critical and social constructionism (Anderson, 1992). Where the trainee manages tension between encouraging and

critical and creative thinking and pragmatism, the answer is to encourage flexibility in attitude and perspective. The advice is to follow a sequence: practice, reflection/theorizing, where conversation is followed by a period of reflection on context and positioning. Kenneth Gergen (1994) has talked of the importance of the notion of 'usefulness' as a criterion of better theories and practices in particular contexts (Misra, 1993). The advantage of being versed in social constructionism is the acquisition of a critical attitude. When looking at a client or professional narrative one is able to detect inconsistencies and relate this to dominant discourses. In the clinical field there are discourses springing from medical and psychological language where terms become reified and end up conveying labels, not experiences.

So how does intentional stance (physiological and psychological) modify any questions? Is the trainee more critical when standing up or sitting down? What is the best attitude to adopt to elicit client narratives? Inquisitive, relaxed, detached, professional, empathic, subjugated, reflective, questioning or any of the above? What is the effect if the therapist takes a position of authority? How does perceived social status influence client dialogue? Both client and trainee can reflect on this issue. Having established a perspective describing objects and events, the trainee might work at the implications of social positioning on an interview.

Exercise on variation

The aim is to establish variations in emotional experience in similar contexts. (1) The trainee describes an emotion experienced recently – joy, say, or excitement. What were the essential components that defined this as joy, as opposed to other emotions, such as happiness? (2) The trainee groups together similar emotional experiences on a distribution of similarity from an experiential point of view. What other elements were present in the environment? When did the emotional process begin and end? (3) The trainee thinks or imagines situations where s/he acts completely in opposition experiencing the same emotion. For example, a trainee may react to guilt with an attitude of defeat on one occasion and with over-involvement elsewhere. How to account for the discrepancy? Why has the same self become complex? (4) The trainee thinks or imagines two contexts where the same news creates happiness or unhappiness.

The clinical interview

A useful exercise pre-interview requires that trainees clarify what they intend to explore by discussing the interview project with others (Halling *et al.*, 2006) to convey the anticipated experience. In the interview the client freely recounts his story, and the therapist's questions turn on the elaboration of this story at key points, letting the person set the direction. Letting the person speak relieves the client of feeling they need to respond in a certain way, sanitize their description to suit task demand or not waste the clinician's time with anecdotes. The dialogue allows the client to be immersed and live engaged in their story, and recall and authenticity are

enhanced. The client sets out to retrieve information on which they are expert, and shows off this expertise. The trainee should encourage the client to feel at ease to give their thoughts and opinions on the problem and give insight into their meta-cognition and evaluations, which may lead back to positioning about the problem.

The use of open questions – and certainly reflective questions – is important, but the task is steering the client away from preconceived notions. Instead of asking questions which play on preconceived judgements ('was this anxiety?'), as far as possible the trainee can deconstruct the dialogue and focus on what the client specifically experiences. It is important that the client has a sense of ownership or belonging to the experience rather than dwelling on agency (e.g. 'did I cause this?'), which may be alienating.

Petitmengin (2009) provides useful guidelines for the interviewer on how to encourage the trainee to attend to what appears to them a lived experience. A good gauge of whether the trainee is maintaining a descriptive attitude is the acquiring of mutual enlightenment, where the trainee's listening experience synchronizes with the client's recounting, so both are opening up. Setting aside the trainee's own preoccupations and seeing dialogue in a new way often requires the ability to be absorbed in the client's narrative. The client does not have to be articulate, and can be vague and uncertain, as long as they are sticking with felt description, such as 'I felt yucky all day long!'. Even a felt experience can be fine-tuned.

T: I'm interested in your experiences so far with the problem that brought you here. Take your time, and pace yourself. I've no expectation except to listen to your experience in your own words. You're the boss, talk and quote anything you feel is relevant and helps you express yourself.

C: I just don't know where to start.

T: Let's start at the beginning. How did you know there was something wrong? What new experience appeared?

C: I didn't feel well in my skin. I don't know. I didn't feel myself.

T: How did you know? What changed or what attracted your attention? Can you think back to how you were and how you suddenly weren't?

C: The world would look funny. I remember one day everything looked funny, shallow, almost two-dimensional. I didn't feel my usual energetic self.

T: What did you do?

C: I carried on but I started questioning myself, trying to find an answer.

T: Is questioning part of your experiences?

C: Yes. I've always wanted to know the answers. I can't sleep if I don't know the answer.

T: So were there activities where you just carried on as normal and you didn't have the feeling?

C: I could still eat and drink and talk to my mates. No, I'd say it even helped with my feeling.

T: So let's call it the feeling. Is that OK? Did this feeling change over time or change you over time?

C: Yes. I began to resist it, watch out for it. It made me less adventurous.

T: Did it stop you doing stuff?

C: Yes, I avoided being alone.

T: So does the feeling generally come along when you are doing solitary activities?

C: Yes, thinking and stuff.

T: Thinking about anything?

C: About what I had to do or be, mistakes I may be anticipating.

What's important here is that the trainee is not imposing (opinions or emotions), interpreting or steering the person to a conclusion – but any other attitude is fine if the client feels comfortable. The important point is participation in helping the client express themselves, whether by talking, painting, singing, chanting or laughing. Taking the perspective of a new modality may help the person overcome embarrassment.

In phenomenological interviewing one might well be interested in the client's reaction to diagnosis but in general one steers clear of anything official, including labels, symptoms and any overused terms such as 'anxiety', unless the client uses them, in which case the terms may require deconstructing in order to make sense. It is often quite a battle to focus the person on description of their appearance. The person may fear they are rambling, that added commentary in the narrative is a sign of intelligence or that it signifies a rational understanding of the problem. It is useful at the beginning to prompt the client. The theme the trainee is touching most of all is respect for the client's experience and the client as expert. In fact, the trainee can communicate a sense of empowerment in asking the person to lead the way and reiterating that it's what the person says and their own words and expressions that are important. It helps sometimes to dramatize the narrative by focusing on beginning points, transition points, turning points, enlightenment points, re-orienting points and end points to stimulate the client's narrative. The unit of the narrative can be as long or short on time as the client wishes. They may wish to recount all their experiences over a lifetime or just a specific incident. The person may wish to begin with a narrative of their life history or of a specific episode in it. It doesn't matter, and the same phenomenological analysis applies to both.

The focus of the interview is the client's problem, and trying to help themselves and the therapist understand it. This is practically impossible if the person is not reciprocally and actively implicated in the process. It may be fine to fire off a few factual questions, e.g. 'Did you have difficulty arriving?', but asking general questions, such as 'How are you?' and 'What's the problem?', leads to formulaic responses. The client needs to be considered the expert on their experience and their skill in living and recounting their experience recognized, with the therapist adopting the skill of the learner-listener. The issue is that whatever information is gathered from the client

is constructed according to the context in which it was gathered. Take, for example, the two following discourses that probe symptoms – one trying to understand the problem form a medical framework, the other from the client's point of view.

A traditional diagnostic interview starts off by feeling out facts in accordance with a semi-structured interview. Essentially the interviewer wishes to quantify certain parameters leading to an official appreciation of the case. So the vocabulary and expression are predetermined and, if the client does not reply, the interviewer may even correct the language.

T: So have you had many attacks recently?

C: Attacks of what?

T: Panic and agoraphobia. I defined this earlier. It's feeling symptoms of breathlessness, weakness, palpitations in an enclosed space.

C: Do I need to experience all of the symptoms?

T: No. You can have what's termed a limited symptom attack of one to four symptoms.

C: Yes, I've had that.

T: How many times in the last week?

C: Probably two.

T: Last year?

C: At least once a week.

T: What's the length between attacks?

The second example is an interview about the same problem that moves the person to description and empowerment.

C: Apparently, I have panic attacks and generalized anxiety. I guess I just have to live with it.

T: How does the panic appear to you?

C: It comes along, I feel weak, my legs shake, I have trouble breathing.

T: What are you most aware of?

C: I feel strange, embarrassed. It's like a weight on me.

T: What else?

C: I wonder if it will ever go away. I mean it's handicapping.

T: How does it fit in your life?

C: I have to think carefully before I go out. I anticipate all the time, it's not just when I have attacks. It's when I am alone or planning.

T: Are there activities in your life you enjoy doing despite all this?

C: Yeh, being with the kids, with my grandchildren. But even then I can't be sure.

T: Are there any times when you're sure you won't have an attack?

C: I suppose when I'm comfortable watching the TV.

T: What other emotions do you experience?

C: I dunno. I'm taken up with the worry.

T: Pride, joy, pleasure?

C: Yes, of course. I get pleasure out of lots of activities: eating, talking, being with people, sport. But it's all a bit overshadowed now.

T: But, actually, if we look at your life, the panic is a small part. Let's look at the experiences you had over the last weeks that you felt proud of.

C: OK.

T: Tell me about what goes right at the shopping mall.

C: I know where I'm going. I sometimes help my wife do the shopping.

T: Tell me other anxiety situations you dealt with.

C: I was in a near accident and I helped a person find their way.

T: How did this anxiety differ?

C: It was kind of challenging. I rose to the challenge, I wasn't wanting.

T: So there are several anxiety situations you deal with well.

C: Yes, except this one.

T: The way you're describing the experience, it seems largely anticipation. You told me you're kind of familiar with it now. In fact, you feel bad but so far nothing has happened.

C: So far!

T: But isn't that part of your experience that something might happen but it hasn't? Supposing you could be sure nothing would happen, that you just experienced the symptoms.

C: Yes, I suppose the thinking makes it.

T: You're not thinking in the other anxiety situations when you're challenged. It doesn't strike you something could happen. Why?

C: I just assume it won't. I feel in charge of myself.

T: So you can't feel in charge and still have these emotions?

C: I guess the whole point is with these emotions, they mean I'm not in charge. That's what they say. They're very much what happens to me. They signal I'm out of control.

T: So it seems in situations like the mall the emotions, feelings and thoughts mean you're not in control. You could be overpowered, yes?

C: Yes, that's it, that I could act stupid, appear out of control in front of everybody.

T: How would they judge you?

C: They'd see me as someone out of control, weak.

T: What would that mean?

C: Undependable, untrustworthy, incompetent.

T: You fear these events but actually they never happened.

C: But just the thought that they could paralyses me.

Bracketing (Epoché)

A key point of reflection is the intentionality of the interviewer, in particular the bracketing out (*epochê*) of assumptions, ideas and prejudices. Obviously, with a scientist-practitioner model most therapists are familiar with the idea of updating or revising prejudices. Appendix 2 provides a checklist to prompt some of the prior conceptions when meeting a client. The simple solution here is honesty and transparency on behalf of client and therapist. The idea is not to eliminate such 'biases' to achieve a pure, objective professional assessment but, rather, to acknowledge them as a condition of the interview. All interviews take place in a context. In the extreme and impossible case where all bias is eliminated in a purely clinical and professional interview then that would be the context. The client will, of course, bring along their own intentions and biases, and the context would be no more absolute than any other project.

Part of bracketing is suspension of belief and interpretation, but the trainee must be aware of their baggage first (see Appendix 2). Getting in touch and recognizing your own feelings is a way of establishing empathy with client feelings. Rogerian tip from non-directive psychology: if the therapist feels uncomfortable in a conversation the client probably does too. The uncomfortable often relates to her/his own past experiences. What is the trainee's comfort zone? What is outside it?

Probably, few therapists these days would voice obvious politically incorrect statements, but there can be a gap between intellectual awareness and emotional bias where the trainee may withhold empathy or impede understanding because of a latent prejudice. It is worth exploring the trainee's own limits on professionalism in terms of which clients arouse an emotion, a vigilance and a concern, which can mask openness. Also, more subtle signals like a turn of phrase, a look or attitude can influence openness. Openness is not so much judged by what the trainee does but by what s/he is open to receive. Is the trainee receiving cooperation? Is s/he learning? Is s/he also developing as the client's story unfolds?

Mastering the art of story telling

The narrative

An important skill for the trainee to master is eliciting the client's narrative and listening to it. The story is a natural vehicle for the client to communicate. One way in which clients make sense of events around them and their actions in the face of such events is to construct narratives that integrate the events into the wider picture of the client's life.

Such narratives place actual events in the context of past and future events and take as their centre the clients and their continual evolution through life. Diverse aspects of the self and others and the world around are written into a script that gives a coherence and a continuity to the self and its intentions and activities over time.

Life problems are derived from the way the person tells the story, the characters, the transition, the plot, the complexity. Already, in the story, one has an understanding of how the client perceives and positions their problem.

One of the key elements for the trainee is to realize that the client is an ecological individual in the world. So the client's perspective needs to be grounded in what s/he is doing and intending. More specifically, we occupy a space between us and the world, a space that we equally define and are defined by, which extends beyond our immediate acts to encompass background elements. If I want to eat an ice cream I have to feel like an ice cream. I need to embark on a project that is about eating an ice cream. Wherever I go, whatever I see, my space reflects my intention to get to the ice cream. The texture and the taste of the ice cream depend on how I have led up to it. The sensory input follows the preparatory response. The percept and the sensory characteristics have been created by me. Ah, you may say… an ice cream is an ice cream is an ice cream. But my enjoyment of the ice cream, the way I see it, is different and unique even if I term it 'eating an ice cream'.

Several points follow from this: the window of any observation must be long enough to capture the preparation period which constructs the intentional experience; analysis must concern the complete behaviour of the person; each analysis is idiosyncratic; emphasis on the symptoms alone is misplaced since they are at the end of the sequence; the approach is creative when the therapist is co-constructing a client's world with them. Thought experiments and the imagination can be complements.

T: We've considered a number of situations where you feel you must plan behaviour in advance. Can you imagine others?

C: Only where I may be exposed or need to say something.

C: So if you were in a situation with informal discussion.

T: Let me think. Yes, I would, just in case.

As well as serving a cognitive function of situating the client towards events in a personally meaningful spatio-temporal, social and emotional space, narratives might also persuade the trainee that current events do indeed flow as a result of past events and herald, in principle, the onset of future events. The result is that there is a seamless join between moments. When eliciting stories the trainee has to be sensitive to silences and transition points, and be ready to deconstruct abstractions into implied meanings.

C: I feel disappointed.

T: Disappointed?

C: Well, things didn't turn out.

T: Turn out how?

C: The way I was expecting. She didn't phone me back and I don't think I need to contact her. So that's a relief.

T: You can act differently now. The disappointments become a relief.

C: Yes, I don't need to play up to her.

T: So that's positive.

Here spelling out disappointment relabelled the emotion.

Polkinghorne (2004: 29) states that 'narrative is the form of cognition that links one's life episodes into a whole and thereby gives one's identity a unity and self-sameness through time'.

'As well as directing a script we are emplotted as a unitary person by the stage on which we are placed, the dramas that others have written and the typecasting produced by our inherited features.... That may restrict the parts we play' (Hallam, 2009: 141).

Context of recounting experience

A training exercise to compare alternative constructions of the world involves completing Kelly's grid. It is usually a revelation to trainees to see that others construct the world differently to them. A sheet such as Appendix 4 can be distributed to trainees with six columns at the top and three rows underneath with spaces for the two poles either side of the row. The trainees are asked to list three people or situations they like and three they don't like. Then they are asked to specify the dimension along which they evaluated like/dislike (other than like/dislike, obviously). Usually, all trainees will submit a different dimension of evaluation and be surprised by the lack of concordance. The supervisor can expand on the findings to emphasize the idiosyncracy of construct organization. The grid can be adapted to expand construction to different accounts of ambiguous situations: how implicit/explicit personal constructs are never black and white but nuanced idiosyncratic opposites; how the grid can be adapted to evaluate situations, events and complex clinical phenomena.

Positioning

The trainee can be requested to adopt different physical perspectives on the same task and, afterwards, different narrative perspectives to see how account changes encourage awareness of positioning. Generally, informing trainees and clients that they have no choice but to recount from a perspective, and that what they say and the information derived from it depends on context, takes the load off the feeling that everything needs to be said absolutely and all at once (rather than giving partial information in distinct contexts). As noted earlier, self-report is a contextual act. It depends on self-world contingencies and on intentionality. Hence the self-report will change depending on mood and positioning. This change is not a failing but a plus for the

phenomenologist because it reveals variation in the act of self-report and reveals the conditions defining the act.

T: You played down the problem to your wife.
C: I didn't want her to make an issue of it.
T: And with the doctor?
C: No, I told him all the details.

Here different projects with distinct positions condition the self-report.

Tolerating ambiguity

As mentioned earlier, it is very important for the trainee to be able to tolerate ambiguity and not rush to closure. We are interested in certain experience and sometimes the certainty can be ambiguous.

C: It sometimes feels like a cloud, sometimes like a shadow, sometimes like an odd oppressive feeling. I can't be more specific than that.
T: Fine. And how would you say this odd non-specific feeling differed from other feelings? How do you know you're in it?
C: It's particular. It's not like any other experience.
T: Is there anything you've read or could imagine that's like the feeling? Poetry, metaphor, hearsay, a fictional story, something from your own experience?
C: I wondered if it might be schizophrenia. I read people with schizophrenia are divorced from experience. It seems like out of this world.
T: But you're in touch with reality. It's not reality that's distorted. You don't get mixed up about what's real and what's not.
C: No, that's true. If I need to cope I can. It's almost as if the feeling comes along when I'm sure about myself.

Here the feeling is still expressed as ambiguous for the client, but more localized.

Flexibility

Intellectual and emotional flexibility is essential and encapsulates many of the above techniques, including preserving a sense of 'unknown', 'ambiguity', non-prejudicial aspect and person-centred respect. It requires assimilation of 'bracketing out', recognition of positioning and how to change such positioning. Insights into how to adopt positioning within the narrative approach are given in White and Epston (1990). Here it is a question of being open to client experience, to the trainee's own experience when interviewing and possible contexts where the dialogue could

change. Perhaps the client may be more lucid in a sports room or a music room than a clinic, and, although the dress of the therapist should not be contrived and always authentic, fashion and rapport allow a range of options. This flexibility widens the interviewer's repertoire since the interview could take place anywhere the client is comfortable and in any position.

There is a long literature on the respective benefits of 'open' and 'closed' questioning to elicit distinct information. In general, an interaction encouraging therapeutic alliance should generate in the client empathy, trust and confidence, but also a sense of empowerment. Flexibility involves the ability to change direction and cotton on quickly to a change of topic or exploration of a transition point, which seems important to the client. Within a constructionist approach the interviewer has to remember she or he is always part of the context and so the information divulged and the way it is divulged is part of this context. The client may prefer to speak in a monologue with little prompting or, if they can engage more in their experience through dialogue, have a conversation. Also, although the tone is professional and respectful, the task is to absorb or immerse the person in their story and a number of techniques can help.

Exercise recounting in the passive tense

We noted earlier the technique of dropping the 'I' to generate horizontal information. In some cases it can be useful to emphasize subjective positioning with the use of 'I', since the technique can mask subjectivity. The use of 'I' tends to emphasize the reality of an all-seeing eye. Rephrasing in the passive tense – 'It appears to me' – emphasizes the primacy of appearance and also its relativity to the client. It also allows leeway to contextualize and position by saying 'It appears to me under my present conditions'. This positioning also, of course, leaves open the possibility that perception may change with change in circumstances. So it gives a double perspective: the objective position and the subjective position, and their relation with each other. The therapist can train the client in using passive mode and increasing awareness of the constituents of an act. The client can then become her/his own expert in enhancing awareness.

Natural versus clinical attitude

Many of the above points may be addressed as a normal part of clinical practice. But in phenomenology interviewing forms not just a desirable clinical skill but part of the phenomenon. So what is the right attitude to a client? The therapist can balance a natural attitude with a clinical attitude. Along with a professional demeanour, there is generally something quite grim and depressing in the advice to be professional and objective. It is almost as though the human and frivolous side stands apart from any serious objective consideration. What is the evidence that attitude facilitates communication and revelation? It depends. What the client reveals depends crucially on their perceived relationship with the person, status being one. Research

shows that a white-coat elicits compliance with authority (Feinstein, 1990), but that clients are more at ease revealing to like-status individuals (Cabral and Smith, 2011), even computers (Griffiths, 2003). So it all depends on what information you choose to elicit from the client. Humour, irony and Columbo-style naive probing will all elicit a different stance on the problem, which will define it differently.

The use of humour

There are various theories on the function of humour. Humour often allows an unexpected shift in perspective, whereby the incongruity between a response and the situational demand can create a novel meaning or novel solution. It can highlight the exaggerated ridiculousness of taken-for-granted assumptions. It can highlight mistaken reasoning. It can highlight distinctions between how the client feels the world ought to be and how it is. Humour is also tension release, and it can function as an escape and a defence mechanism. In using humour the therapist wishes to elicit flexibility from the client. Successful use of humour depends on practical knowledge of the person, knowing their limits and, most of all, knowledge of their world.

Use of humour in therapy and evaluation is a delicate skill. The therapist has to know the client's sense of humour and their boundaries to be able to stimulate humour rather than offence. Techniques that work well here are exaggeration, *reductio ad absurdum* and exposing the ridiculousness of the incongruity between assumptions and reality. Humour brings empowerment and a dramaturgical element. So in a classic comedy situation a character finds themselves performing an activity where the context disappears. A scene depicts a person still sleeping in a bed that is now mounted on a truck, travelling down a highway. A scene from Charlie Chaplin's *The Gold Rush* shows him continuing to eat when the walls of his kitchen have collapsed and he is in the middle of snow and ice. The clinical equivalent is elaborating a non-habitual context for panic. Exaggeration simply carries on what is already a client's illogical leap of faith and highlights the ridiculousness of what went before. For example, the client may give credibility to being in an absurd situation (collapsing in a heap at an important event), which can be made more absurd and humorous through exaggeration.

A traditional doctor-client relation (powerful versus powerless) is not recommended here (unless for dramaturgical purposes), and humour can even serve to open up a client to reveal possibilities about their problem that were covert or intentionally repressed, as in the use of exaggeration to highlight ridiculous leaps of faith. Again clues can be found in the client's discourse, which are not respected in the following dialogue.

T: So you fear collapsing on the metro?

C: Yes, I just see my legs give way and down I go.

T: Has it ever happened?

C: No, but I feel it could. My legs are numb but I guess I just hold on.

T: And when you collapse what will happen?

C: People will walk over me.

T: Step on you, pee on you, kick you when you're down… ho, ho.

C: No, I don't think that. Oh my God!

The client stops talking, having found the reference to peeing disturbing, maybe because it elicits more fear or disgust. The client's discourse is respected in the following attempt at humour.

T: You collapse and then you'll get comfortable and go to sleep, and maybe get used to sleeping in the metro.

C: Yeh, I could do. I hadn't thought about long term. You're saying I would appear like a bum.

T: Maybe you should prepare yourself by travelling with lots of bags and wearing a paper bag on your head.

C: Yeh, right. Become a bag lady. No, I can't see that. I think I'd find my way out of the metro. I always have – right?!

The client smiles and continues. Here the absurdity brought some insight into mastering the situation.

The key with humour is that it must come from the client and is used, ideally, only when the therapist has a good idea of the client's own sense of humour. Often one can extract the humour from the client's discourse – irony, satire, farce – and simply systematize this into one of the above techniques. Obviously, one is laughing with the client, not at them, but I feel laughing with the client is less of an issue for most trained clinicians than simply misusing humour for the wrong reason. One key misuse is trying to use humour to empathize with the person or bond with them when, actually, humour should be based on a secure bond, not used to create one. Premature or even inappropriate use of humour can lead to termination of therapy by the client. In one case a therapist in the introductory interview tried to empathize with a client's tales of spousal abuse, joking she had a 'hustle band' and not a 'husband' (actually, the joke was in French – *conjoint-con-joint* – but the term translates well). The client thereafter terminated therapy, complaining to her next therapist that she felt the comment was not funny and actually trivialized her narrative.

Dramaturgical strategies

Sometimes asking the client to play the part of the problem and speak for the problem lets the person realize which parts are from the problem and which are alien to their authentic selves. This technique, termed 'externalization' by White (2011), also tries to objectify and distance the person from their problem. Here the problem can

be identified as an object. Clinical role playing is quite an involved therapy technique, and the practitioner is referred to texts by Moreno (1934). But we have noted a limited use in dialogical therapy where the client may take the role of the commanding and frightening other in order to give an empowered response or even have conversations with voices to render them less menacing (Leff, 2013). When recounting alternative stories or alternative possibilities the client may naturally adopt a different voice or attitude as part of their repositioning. The present author, who has training in mime and mime therapy (O'Connor, 1996), has occasionally used mime conventions to convey feelings, for example, forming a box with the bridge of the hand to represent the feeling of being trapped. Mime can also be used to act out an imagined scene by placing imaginary furniture and people in a space. I have also found noises helpful to represent different feelings, particularly with one client who had a range of nonsense (akin to Jerry Seinfeld's yada yada yada episode) noises to discriminate his emotion. He would use yuk, yuk, yuk instead of brill, brill, brill to describe experiences to refer respectively to negative and positive experiences. The reader can infer the more positive. Constructionism is open to all non-verbal and artistic forms of expression; and, where meaningful to the client, painting, music, poetry and performance may better capture the non-cognitive ground of mood and being.

Establishing situational contexts

The client may have multiple discourses about their problem, depending on whom they address, their motive for telling it and when and where they are telling it. This may confuse trainees, who may ask: does this mean we need to establish all contexts in which the person speaks of their problem to know about it?

The answer is no, but both client and therapist have to be aware of the contextual nature of the report. The therapist is interested in parameters, not only about the problem but the way the client relates to the problem in their description. Is the description part of the problem? Does the way the client describes the problem – use of metaphors, similes, speed of telling, emotion, volume, posture – reveal how they are positioned and what they are trying to express?

For example, if a client relates their problem in a rush, tripping over words, and is confused and distracted, this style gives a clue to their judgement of their problem and that they wish to convey a sense of urgency and desperation. Does the client recount their holidays or shopping exploits in a similar fashion? Do the different styles signal distinct motives?

Recounting in different situations produces different emphases. When recounting to friends the problem may seem a minor problem amongst many. When recounting to strangers it may seem a remote problem. When recounting to a professional it becomes a major problem. All this is perfectly normal and contextual. There is no deception on the part of the client. How the client positions themselves to others impacts on description of the problem.

The client may be aware of positioning differently at different times, when consciously adjusting the narrative for impact. There may also be more distal influences on the positioning: a previous dialogue on the problem with a close other, or a meeting with a doctor may influence the report. The client may wish to present or appear to the therapist in a certain light, which will be conveyed in manner and attitude. The client may present as an urgent case or as well adjusted but with a problem, e.g. 'I'm coping very well so I'm not sure why I'm here', depending on situational demand. This is not random fluctuation of a phenomenon but inevitable variation defining the problem as interactive with in context. Evaluation over variation establishes personal constructs, which can in turn show how the client constructs and perceives different situations.

Alternative stories

Changing narratives about the self can modify mood, self-esteem and future behaviour (Frank, 1987). The trainee may meet obstacles eliciting alternative stories. A new narrative is most usually successful when developed in a zone of proximal development to rival representations, neither exceeding them too dramatically nor staying complacently within the current narrative structure. In other words, to maximize persuasive power the alternative narrative must be comparable in structure but not a close replica of the original narrative with just a few words altered. The client may wish to repeat a ready-made alternative story mechanically or not be aware of the importance of integrating the new narrative.

Alternative stories are best built up organically, piece by piece. The worst strategy is to force a story or try to manufacture one in haste with the client. Establishing a new narrative may be a challenge for client and trainee, and both may be concerned about including enough detail, adopting the correct structure and making the story mundane or heroic. The beginning of the story can be brief, even just a sentence or two, as long as there is absorption, conviction, transport in time and place, a certain amount of resolution and some indication of when and how the alternative story modifies the positioning of the client to the problem.

White (2007) identifies four categories of enquiry that shape interviews with outside witnesses: (1) a focus on specific expressions that lend precision to draw on what the client values in life; (2) the images that come to mind as the client speaks and what these images may say about the client's life and identity; (3) why the expressions struck a personal chord with you (the interest in enquiry is an embodied interest not an academic interest and the expression could light up personal histories); and (4) the focus on transport and identification of the ways the listener was moved by an account – moved as if part of a powerful drama. To where did the experience of listening transport the listener? Has it contributed to the listener becoming another person?

As an exercise, the trainee can take a personal story about an event or a person where there is personal investment and see to what extent and how elaborate an alternative story needs to be constructed to be equally convincing. A story that just stated bare facts – 'This pen is a camera' – is unlikely to be as convincing as one

where detail is fleshed out. 'I obtained this pen when I visited the secret-service government labs in Washington. I gained access as an academic visitor and saw first hand how microchips are put in the pen to make it a camera. I then tried it out to verify it. Here is the pen'. The trainee might experiment with stories that are rich in detail, in fact or fiction, in a personal/impersonal, emotional/non-emotional way, and discover what best absorbs the person.

The key to the alternative story is that the story sticks with an opposite account of the same phenomenon, whether the story is about the self, an event or anticipation. In the case of the self, strengths are emphasized over weaknesses; for an event, sense of reality is emphasized over non-reality; for anticipation, projected negative outcomes are countered with positive outcomes. The trainee can also use rhetorical devices to reinforce persuasion. An important rhetorical technique in alternative narratives is repetition. The narrative must be repeated to be effective. After all, the original narrative is generally over-learned and rehearsed. Clients and trainees should not be disappointed if an alternative narrative takes several weeks of practice to trump the original narrative. The original narrative is the default option, which will appear effortlessly and unrequested at any off-guard moment. The alternative narrative requires effort to be installed in the client's repertoire.

Functional and phenomenological analysis

The trainee should be aware of how the phenomenological analysis complements conventional antecedent, behaviour consequence (ABC) analysis, where the therapist would be looking for triggers that preceded, maintained and reinforced the act. But functional ABC analyses include assumptions about the temporal sequence and the direction of triggers on behaviour.

It is instructive to dwell on the assumptions, often conventional ones, of traditional functional analysis. One assumption is that because two acts follow each other they must be temporally related or even causally related. The trainee can co-opt their own experience of anticipation (e.g. preceding an encounter), not predicting the actual event.

An example here is craving to smoke and smoking behaviour. It would seem common sense that the desire to smoke a cigarette and smoking a cigarette are inevitably intertwined and, certainly, in common parlance, to say 'I felt like a smoke' is considered justification for smoking (rather than 'I had a itch in my throat' or 'I felt an emotional emptiness'). Some of the more naive theories of smoking also consider smoking a product of an involuntary craving for nicotine. However, closer inspection reveals that in fact they are two distinct acts, conditioned by different contingencies and not at all necessarily related.

As we have seen with phenomenological analysis, an act is more probably related to other acts that are similar in form, occurring at different times and places. Looking at the consequences reveals the same quandary. Are the consequences of a behaviour really a consequence or part of the act? An example here is ticking in a child, where the ticking attracts social attention. Such attention is seen to reinforce the tic and tics seem to play a social function. Here social attention is a necessary by-product of ticking but is it a sufficient contingency?

Relevance

The trainee may find obstacles when trying to describe horizontality; the relevant question is 'What is going on at the same time as the problem?'. Relevance is established by comparison between act processes. All sorts of events may be taking place during the problem. If they have relevance their presence (or absence) has an influence on the experience of the problem and will appear as significant to the client. A client may report being aware of the presence of the environment's immediate qualities, such as the number of people and their attitude, but also of being aware of more distal aspects, such as a band playing in the distance. Note we say presence or absence, not half presence or present by degree. Objects, events, experiences appear certainly; they are either there or not there. I may be uncertain what object is there but the uncertainty is to do with me, not the object. Again, this fits with a description where we always start with certain knowledge of process, no matter how vague and unrefined.

Establishing variation of an experience through comparable events

The client may not be familiar with discussing comparable events and this may present an obstacle. So in the following conversation the therapist is leading the person to consider that his problem takes various forms.

T: So you can't go over bridges.

C: I don't like to. I do sometimes with my wife.

T: How did the fear develop?

C: Yes, I suppose the fear built up slowly. I kept latching onto stories of bridges collapsing and I just woke up one day, dreading bridges.

T: Pretty inconvenient because you need to cross to the south shore everyday.

C: Absolutely. I need to take a detour about 10 miles through the tunnel. And once I'm home I don't want to go out.

T: So you literally haven't crossed a bridge in…

C: … in two years, except once with water underneath. I was never comfortable but, like I said, I couldn't do it.

T: You've no other related fear – heights, say, or enclosed spaces?

C: No. I don't like flying but I'm not phobic.

T: So if there's no water…

C: But I'm still wary.

T: What about crossing a bridge in the country, in a walk over a stream?

C: You mean a footbridge? Fine. Yeh, the worst is you get your feet wet.

T: So how big does the stream need to be to be scary?

C: Pretty noisy and ferocious, and the bigger the river, the worse.

T: So suppose you're cycling instead of motoring.

C: [pause] Funnily enough, it's a bit better.

T: You also go sailing with the family?

C: Yeh, but that's not the same.

T: Ah. Why not?

C: I feel in control, I know what to do. My family is there.

So a number of variations have been elicited of problematic and non-problematic experiences of crossing water. On the non-problematic side, there is sailing, cycling, walking over a stream. The person may also describe symptoms of bridge crossing such as dry mouth, heart beating, shortness of breath. But these may not be specific to bridges. The trainee can start by asking the client to describe what is a state diametrically opposed to the fear of crossing bridges. In this case, sailing. What are the components of these non-threatening states: his demeanour, his expectations, his affection, his meta-cognitions. Generally speaking, the trainee will be able to find a behaviour physically similar to the fear situation – crossing the bridge – where there is less or no fear.

So, looking at variations: (1) increases awareness of the act; (2) separates the act from similar but separate acts; (3) provides a clue about repositioning on therapy; (4) gives therapist and client an idea of process and what defines the act; (5) defines the problem interactively as a part of being in the world, and not just triggered by a stimulus. The trainee can consider terms used by a client and the utility of deconstructing them into personal meanings and associations.

As noted, a good guide to family resemblance is the Goetheian method of plant classification where organic forms inform on plant variation and reveal the differential effect of environment on determining forms of growth (Bockemühl, 1988). The act context for the problem is one of a family of repertoire, which will have many other forms that produce similar but distinct experiences. Now is a good time to look vertically at what constitutes the essence of experience through eidetic reduction. What is the essential common element that defines the experience of bridge fear? (See below.)

Another way to refine the relevant horizontal act context is to draw a clinical path diagram of different elements leading up to a personal experience (e.g. panic) and then involve the trainee in constructing a similar path for a clinical problem (see Figure 2.1). Now is a good time to look vertically at what constitutes the essence of experience through eidetic reduction. What is the essential common element that defines the experience of bridge fear? (See below.)

Eidetic reduction of bridge fears

In the case of the bridge fears, following the identification of horizontal variations, the trainee can now embark on vertical eidetic reduction. There are components

of the non-phobic description that will differ significantly from the phobic. Using these different descriptions as a guide, we can hone in on other fear situations to see how they differ from the bridge phobia. For example, the client is fearful of driving over bypasses in case they collapse, but he is able to pass over bridges when he's not driving or when he's not looking at the water. Imagination may create contexts of driving over rivers of different strengths. The class of act could be complex: driving leisurely to work over a bridge with water, alone at the wheel and journeying from the familiar to the unfamiliar. This project is distinct from the project of driving in a hurry to work on a mission. In other words, an intentional project sets him up to experience bridge fear. The intention to drive leisurely to work over a river generates the possibility that he chose to drive and that crossing to the unfamiliar could engender consequences. In the case of a mission, this possibility is sidelined and there is no space for fear.

The nearer the comparative act, and the more similar, the better for comparison. Perhaps, for example, being driven over the bridge blindfolded in a darkened car would not elicit the phobic reaction. But this action is only remotely comparable to the distressing driving process and a more suitable comparative process would be driving voluntarily over the bridge alone but journeying to the familiar. The client's fear of the bridge collapsing and being swept away in the current is allayed by the thought that he is heading home to the familiar. This comparative project of crossing to the familiar shares many details with the problem behaviour, enabling us to more clearly isolate familiarity as a key component of the problem-driving process.

Constructs can be derived from project themes through Kelly's construct approach. The grid was originally developed for discovering personal constructs by which a client constructs their world, but it can be adapted to tease out a number of personal evaluations. Once elicited, the constructs can be further explored to find out specifically what actions and attitudes form part of the project.

The trainee may have problems eliciting rich constructs from Kelly's grid. The constructs may be too tight, too concrete or too mechanically opposite. An evaluation such as good or bad, or well or ill, is uninformative, and the trainee may need to pose the question 'How would you describe "good" [or "bad"]?'. The richer and more complex the constructs, the better. Usually, if clients are comparing variations in the correct manner they will naturally propose idiosyncratic implicit and explicit poles without prompting. But if they feel they should be technical they may propose symmetric opposites. The number of construct themes can be increased until comparisons are saturated, i.e. comparing all the permutations of two equivalent processes with one non-equivalent process, and one equivalent with two non-equivalents. The trainee can conduct further construct analyses on original constructs to elicit super constructs with the adapted grid in Appendix 4. Resources on advanced methods for personal constructs are given in the references (Blowers and O'Connor, 1996).

EPILOGUE

The aim of this book has been to introduce some constructionist-phenomenological concepts to the CBT practitioner. Can the approaches be used in combination? There have already been attempts to successfully combine narrative therapy with more conventional schema therapy, problem-solving approaches and family and interpersonal therapy (Rhodes and Jakes, 2009; Prasko *et al.*, 2010; Seikkula, 2011; Salvatore *et al.*, 2004); and most therapists adopt an eclectic approach, where the focus of therapy and evaluation is decided on individual case formulation (Persons, 2008; Hallam, 2013). Some of the clinical insights of a constructionist approach already seem to be an integral part of current clinical methods. For example, identifying what is not a problem in the client's life and focusing on strengths is becoming a cardinal feature of readaptation (Padesky, 1994); and using questionnaires and interview methods to determine the underlying self-themes of fears, which help situate the selectivity of worries and obsessions, is recognized as useful (Dorion *et al.*, 2008).

The constructionist-phenomenological method and CBT share the aim of describing and contextualizing behaviour. However, there are differences in philosophy and approach, and the constructionist approach challenges many of the CBT information-processing model's assumptions. The first challenge is the realist metaphor that information comes from outside and is mediated by cognition before integrating into awareness. In constructionism, rather, the person and the environment are always a unit, and the way the person interacts with the world not only determines perception, but often gates and even creates our sensory world. This creativity introduces new behavioural components, such as style of preparation, body constructs and ways of knowing. It also firmly grounds behaviourism in ecology, and sizes up very well with Gibson's and Merleau-Ponty's affordances or accordances, matching the person with the environment. It also centres analysis on behaviour as an independent process rather than as a response to environmental

contingency, and grounds our understanding of behaviour in an I-S intentional paradigm rather than an S-R stimulus-bound paradigm.

Senses become seen as acts, extending beyond and qualifying sense input. The effect of stimuli and sensory factors in influencing behaviour is variable and idiosyncratic and seems to affect behavioural/physiological systems in isolated ways (e.g. by fractionation). By contrast, research regarding behaviour in terms of intention-focused processes, such as motor activation, preparation and inhibition, seems more solid and replicable.

The constructionist approach introduces the notion of imagination, both in determining sense of reality and as a technique for understanding experience. We are always in the realm of possibility in order that the future orientation of action can be realized. The possibilistic model locates possibility in perception and views sense of reality as a distribution extending from maximal to minimal consciousness. This model makes the influence of the margins of consciousness, a frequent influence on cognitive orientations in clinical work, more comprehensible.

Immersion in possibility allows the person to be in two senses of reality at the same time. The person is usually absorbed in one maximal sense of reality but may change sense voluntarily in conscious absences and daydreams through everyday transcendence and aesthetic transport. The client may change sense of reality more abruptly when there is a drastic change in state of activation or a conflict in visual, social or interpersonal cues that shake the credibility of a one-world view, which may throw the person into a derealization experience. Meta-cognitive reflection may then come into play and further exacerbate the client's modifiable nature of sense of reality.

There are therapeutic implications for constructionist evaluation when the procedures involve awareness – when awareness brings insight that is generally beneficial in illuminating a problem. But, apart from examples of narrative therapy and imaginal therapy, this book has not systematically explored the general intervention that may evolve from constructionist approaches. However, constructionist insights and strategies can complement CBT applications of exposure, behavioural activation, goal-directed action and meta-cognition. Pre-cognitive notions of presence, absorption, ground and 'felt speech', which we know, clinically, arise as inarticulate motivators for behaviour but are often difficult to pinpoint, can be accommodated with constructionist psychology.

Exposure is a well validated technique and involves the person facing reality, usually in a gradual fashion until discomfort has abated. Interestingly, there are frequently changes in beliefs and efficacy and other cognitive elements that are not directly addressed in the exposure therapy (Anholt *et al.*, 2008). In fact, exposure involves facing reality, and, as we noted in discussion of disorders of the imagination, reality trumps imagination so people with discomfort often avoid reality and its details in favour of an imagined version. Becoming more absorbed in reality would be expected to dispel imagination.

Recent research (Craske *et al.*, 2012) has focused on the role of inhibition in aiding exposure, and feelings of mastery and control. This research highlights the

importance of goal-directed action in encapsulating intention and response as an act in overcoming fear. Perhaps the technique of behavioural activation underlines even better the point that embarking slowly on positive value-laden approaches is more effective than cognitive approaches in ensuring recovery from depression (Jacobson *et al.*, 1996).

The role of meta-cognition is well established as a determinant of distress (Davey and Wells, 2006). Usually, meta-cognition appraises thoughts in terms of their importance and utility but does not address the subtle ways people may observe themselves or embark on ways of knowing themselves, as has been underlined here, as a pathway to producing aberrant self-experiences. Clearly, there are more subtle qualitative aspects of self-observation and self-experience which can profitably be explored.

Self-cognition is already a function of background project and intentional attitude. Self-report also relies on introspection, which is never 'pure' but depends on context – so self-report as a behaviour may be a product of the client's problem. The narrative has been proposed here as a vehicle for understanding experience rather than considering self-report as isolated statements. Enough has been written on the credibility of the narrative approach and its advantages in revealing life histories for it to be considered a naturalistic medium for communication (White, 2011).

Narratives also, necessarily, throw up interpersonal and environmental factors significant to the teller, and capture the language of the speaker, in particular their use of metaphor, metonym and simile, which portray a meaningful form of action in language and show graphically how the teller interacts with their problem.

Various techniques can elicit detailed stories, and the narrative can be reduced vertically to an essential theme translating a generic taken-for-granted term into the person's specific terms. A horizontal analysis, whereby all relevant concurrent appearance is described, captures significant elements surrounding a distressing complaint. Relevancy can be refined by constructing a process dimension, where similar variations are constructed from a family of experiences, which differ on essential elements of their form and refine what is peculiar to the target process.

The idea of exploring variation is to isolate crucial elements typifying one problem experience but not another. Sometimes elements qualifying a problem versus a non-problem experience can surprise both the therapist and client's prior conceptions and be counter-intuitive. Clearly, this approach complements the existing CBT functional and contextual analysis, which aims to determine detail on symptoms and the importance of symptoms for the person and how s/he views them. Functional analysis also tries to look separately at the wider aspects of adaptation and social functioning. However, the narrative form is already rich with such struggles of adaptation.

For the constructionist clinician embarking on research, personalistic statistics seem more appropriate than traditional hypothetico-deductive methods of significance testing. Personalistic methods are extensions of common-sense methods based on induction. The clinician can propose multiple hypotheses, the data can be clinically complex, change form and not be bound by the standard experimenter

controls imposed by binary hypothesis-testing models. The constructionist approach to research represents a return to the 'behaviouralization' of statistics and aligns itself with the personalist side in earlier debates in statistics. It appeals to inductive behaviour rather than hypothetico-deduction and permits a good match between experiment and clinical experience, observation and decision-making, and idiographic and normothetic methods. Informed clinical-research decisions can be made with a basic grasp of Bayesian and likelihood methods, particularly in the calculation of conditional probability and posterior odds on likelihoods, given the data. Recent advances in computational power aid calculation of Bayesian-likelihood models.

Like the agriculture methods of the 1930s on which modern statistics was based, the constructionist approach starts with knowledge of the process involved in producing effects. The process is not hypothetical and under debate as in so many behavioural effects. Knowledge of the behavioural parameters that characterize the process enables an understanding of effects that change these parameters. Finally, teaching constructionism requires a constructionist attitude from supervisor and student. The constructionist attitude means according attention and sensitivity to positioning and description. The attitude also requires overcoming obstacles related to eliciting personal factors and narratives factors in formulating authentic themes and reductions. Exercises can help with this initiation and learning.

APPENDIX 1
COMPARISON OF BECK'S DOWNWARD ARROW AND CONSTRUCT-VARIATION TECHNIQUE

In Beck's downward arrow technique one attempts to discover core constructs by revealing a deep belief dictating adherence to a more superficial one.

C: I don't like being photographed.

T: And if you were photographed what would happen?

C: I always appear stupid.

T: And so?

C: People think I'm stupid because I look stupid.

T: What would that imply?

C: People are always judging you on your appearances.

T: Which means?

C: People are superficial and don't want to know me.

T: And so?

C: I'm unloveable because of my appearance.

In the construct-variation approach we look at variations in being photographed.

Construct variation

C: I don't like being photographed.

T: You don't like any photographs?

C: Certain photographs, when I'm doing sports or after a competition.

T: So let's take three photos you like and three you don't. Now what's the difference between them, apart the fact you don't like some?

C: The ones I don't like are superficial, the others are serious.

T: How do you know a serious photo from a superficial one?

C: By the subject matter if it's recording an event.

T: Like what?

C: Me doing or being who I am, not just standing around like a lemon.

T: So along what dimension would you classify the photos you like and dislike?

C: One's worth more – I'm worth more when I'm being me.

In the personal-construct approach one is concerned to discover common themes by which a client constructs their world.

APPENDIX 2
CHECKLIST TO BRACKETING OUT

Personal prejudice can take various forms: (1) obvious cultural or stereotypic prejudice towards a client; (2) covert attitude engendering more subtle actions (for example, an air of distrust of the client); (3) premature categorization of the person or person's problem (for example, based on past experience); (4) assumptions about the client stemming from mannerisms, speech or dress; (5) interpretation of client attitude and mood (for example, hostile, displeasing); (6) sense of inflexibility in perception of the client. Also, more subtle signals like a turn of phrase, a look, an attitude can influence openness. Openness is not so much judged by what you do but by what you receive. Are you receiving cooperation? Are you learning? Are you developing as the story unfolds?

A key question is the intentionality of the interviewer, in particular the bracketing out (*epoché*) of assumptions, ideas and prejudices. The idea is not that we eliminate 'biases' to achieve a pure, objective, professional assessment but rather that we acknowledge them as a condition of the interview.

Capturing the intentions of the interviewer (what do you hope to achieve) is more complicated than it appears since the therapist may have several aims: to understand the client, to succeed in the interview and to not make an error. All of these are separate acts that together could lead to conflict. The client will, of course, bring along their own intentions and biases.

The following reflections can help the therapist's awareness and the updating and revising of prejudices.

- What was your intention in approaching the client?
- Did you feel your approach influenced the conversation?
- Were you self-conscious in your choice of terms and language?
- Were you aware of your body position? Was it open, closed, upright, leaning?
- What do you feel the client's aim was in describing the problem?

- Did the client or you come across obstacles in the conversation?
- Would other strategies help?
- Overall, what changes would you recommend for future consultations in the space, encounter, time and setting?

Physical qualifiers of situation (quality of space) and environmental qualifiers (clinical setting, hospital/home) need consideration. Both therapist and client may be more comfortable in some spaces than others. Is the person more comfortable at home, in a friendly or relaxed environment? Do they need space or a certain décor to feel comfortable talking?

Constraints of time and place may be important qualifiers of experience. Some clients may need more time than others. Rushing the client or putting time constraints on the session or the therapy can make the client nervous. The client may pace revelations depending on the time available. Witness the door-handle phenomenon where revelations occur at the end of therapy, and the often voiced preoccupation, 'What will I do when the therapy ends?'.

APPENDIX 3
SELF-MONITORING FORMS FOR EXPERIENCE SAMPLING

Please note down how you would describe your experience at the time of distress

_____

_____

_____

Please note down any thoughts at the time of distress

_____

_____

_____

Please note down any thoughts of the future

_____

_____

_____

Please note down any judgements about the distress

_____

_____

_____

Please note down sensations or physical reactions at the time of distress

_____

_____

_____

Please note down feelings at the time of distress

_____

_____

_____

Please note down bodily movements and expressions

Face: _____

Trunk: _____

Legs: _____

Whole body: _____

Does any event or factor in the environment strike you as significant during your distress?

_____

_____

_____

Do you notice other people and their reactions?

_____

_____

_____

What is your dominant goal during distress?

_____

_____

_____

Thank you.

These forms can be converted into portable booklets.

APPENDIX 4
ADAPTATION OF KELLY'S GRID FOR EVALUATING CONSTRUCTS UNDERLYING VARIATION

	Situation/people/events						
	Non-problematic			Problematic			
	1	2	3	4	5	6	
Constructs							

APPENDIX 5
HIGH- AND LOW-RISK SITUATIONS, CLASSIFICATION GRID 1

	Situation/people/events						
	Low-risk			High-risk			
	1	2	3	4	5	6	
Explicit pole	**Leaving my chalet to go to the beach**	**Leaving my car**	**Leaving a friend's house**	**Leaving my house for a short time**	**Leaving the house to go shopping**	**Leaving the house to go to work**	**Implicit pole**
Feel the house could change							Unconcerned strange events could happen
Distrust town house							Feel safe in car and chalet
I don't deal well with complications							I'm a simple girl

APPENDIX 6
HIGH- AND LOW-RISK SITUATIONS, CLASSIFICATION GRID 2

	Situation/people/events						
	Low-risk			High-risk			
	1	2	3	4	5	6	
Explicit pole	**Engaged in a task**	**Having a conversation**	**Physical experience**	**Meditating**	**Seeing an object out of place**	**Experiencing address**	**Implicit pole**
Out of place							Flowing on
Self-reflection							Absorption
Protection							Withdrawal
Keeping reality							Reality could disappear

APPENDIX 7
CLINICAL EXAMPLES OF CLIENTS TREATED WITH INFERENCE-BASED THERAPY FOR DELUSIONS

Client 1

Gender:	Male
Age:	26
Marital status:	Separated
Occupation:	Machine operator
Medication:	Zyprexa 10mg
Life history:	Physical abuse; bullied at school; left school at age 16; drug use 16–19 years

DD narrative

I know my employers are still poisoning employees with gas (CO). I am sure about it, they did it once with Freon so they will continue because they don't want to spend money to have machines repaired properly.

Before, I used to have access to a button that I could push to ventilate the place; now I cannot use it anymore, they control it with a system; they probably want to save money on heating bills.

I saw dust in the ventilation trap. We breathe flour dust. I know it is bad for the lungs and the eyes; my eyes were itchy; it breaks down your immune system.

When I see my work colleagues at the end of the day they are drained. I know there is something in the air that causes their fatigue. I am even more in danger because I work more than them so I breathe more air and get more intoxicated.

Alternative narrative

I don't think that my employers are poisoning my colleagues because I did not hear about anyone being sick; if they were poisoned they would be hospitalized or even some would be dead.

I could explain feeling tired, weak or light-headed by the fact that I work too hard and I don't take breaks. It is very warm and humid in my section because I am near the ovens.

When my colleagues are drained at the end of the day it could be because they worked hard too or maybe they lack sleep…

Results pre-, mid- and post-treatment

	Pre	Mid	Post
BDI-II*	17	0	4
BAI*	24	0	6
MADS*	42	33	22

Results for client 1 on anxiety, depression and delusional questionnaires pre-, mid- and post-treatment
Results for client 2 on anxiety, depression and delusional questionnaires pre-, mid- and post-treatment

For this client, belief in present delusions reduced (MADS = 1) but belief in the correctness of past delusions was maintained (MADS = 27).

Client 2

Gender: Male
Age: 45
Marital status: Married
Occupation: Assistant accountant
Medication: Rivotril (novo clonazepam) 5mg
Life history: No reported history of psychiatric, psychological problems; normal childhood milestones

DD narrative

I know for sure they are after me; I have a good sense of observation; I notice looks and especially very subtle looks; sometimes I catch a look one person gives to another and I feel it is about me.

It is not normal that a beautiful young woman half my age shows interest in me; it has to be arranged.

The jokes my colleagues are sending me are proofs they are harassing me; people should not behave that way, they see that I am tired, why do they do that? They really want to push me to my limits so I crash…

Even my best friend is on their side. He told me on the phone that companies have the right to read employees' emails.

Alternative narrative

Some people I don't know look at me and smile… maybe I look like someone they know or maybe they are just polite.

Guys at work like to joke about things; they were probably joking when they sent me emails…

I called my friend a few days ago; he seemed really happy to hear from me. I think he is OK; he is on my side but he has different opinions about certain things in life.

Results pre-, mid- and post-treatment

	Pre	Mid	Post
BDI-II*	15	0	4
BAI*	11	0	0
MADS*	40	6	0

* BDI = Beck Depressive Inventory (Beck *et al.*, 1996);
BAI = Beck Anxiety Inventory (Beck *et al.*, 1988);
MADS = Maudsley Assessment of Delusions Scale (Buchanan *et al.*, 1993)

APPENDIX 8
EXAMPLES OF RHETORICAL DEVICES IN OBSESSIONAL NARRATIVES[1]

Category errors. Confusing two objects of different categories. (1) 'This table is white, just like the other table last week and that was dirty'. (2) 'Ants are insects just like moths, so ants can eat your clothes just like moths'.

Apparently comparable events. Two events that occur in different times and contexts are comparable. (1) 'I heard that a motorist speeding on the West Island hit someone and drove on so I could do the same in my street'. (2) 'My friend's garage door didn't shut properly so my garage door could also be faulty'.

Inverse inference. Taking the hypothetical possibility as proof of the fact. (1) 'Many dirty people could have walked there so the floor must be dirty'. (2) 'People may not know their true nature so I could be a latent serial killer'.

Imaginative chaining. A narrative chains off into vivid imagery that absorbs the person. (1) 'Microbes could be on my hands with their fangs and scales and stem-like eyes and bloated ugly bodies… yerck!!!'. (2) 'I can see now what could happen. I would be arrested, thrown in prison, lose my house, my job, my wife. I'd end up living on the street in a cardboard box; nobody would talk to me. I can see it now'.

Out of context facts. OCD wheels in all sorts of seemingly authoritative facts to bolster its position. (1) 'Microbes exist, it's a fact. They are everywhere and they are invisible'. (2) 'It's a fact: your memory declines with age so I could have left the stove alight'.

The selective nature of doubt. In most areas of the client's life there is no such obsessional doubting so OCD is highly specific. A parallel must be drawn between the type of reasoning in neutral situations and in OCD situations in order to highlight this discrepancy.

Note

1 Adapted from O'Connor *et al.* (2005).

APPENDIX 9
PERSONALIZED WORRY RECORDS

Exercise 1 – Personal record of worry components

Trigger	Worry	Behaviour
_____	_____	_____
_____	_____	_____
_____	_____	_____

Identify the components associated with your worries.

Exercise 2 – Worry/story

Worry:
(e.g. my daughter could have an accident)

Narrative:
Her boyfriend is a new driver. I don't know how good he is. I'm sure he drives the car too fast. I don't know when his car was last serviced.

Write out the narrative associated with your worry.

Exercise 3 – Worry-narrative components to modify

Worry:
My daughter could have an accident.

Narrative convictions:
I'm convinced her boyfriend's car is unsafe.

Associated behaviour:
Trying to phone her, waiting by the phone.

Associated emotion:
Feeling of imminent catastrophe.

Exercise 4 – Vicious circle of worry

Fill in your personalized anxiety route for your worries

Worry	Narrative conviction	Associated behaviours	Associated emotion
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Modify your worry narrative

Worry narrative:

Her boyfriend is a new driver.

He passed his test and he's never had a major accident.

Hypothetical spiral:

They are driving too fast and the car turns over.

They are driving within the speed limit or the police will spot him.

Worst-case scenario:

I hear news she's dying in hospital.

They will arrive safely as they usually do.

APPENDIX 10
PHENOMENOLOGICAL REDUCTION

The phenomenological reduction was carried out through initial procedures to identify repetitions and redundancies in discourse. Subsequently, themes were selected and validated by group consensus. The consensus group in this case was composed of a core of three psychologists who had already received extensive training in qualitative methods and personal-construct psychology. Two pilot cases served to acclimatize the group to consensus criteria with the present population.

The consensus group extracted from the verbal transcript groups of ideas which repeat themselves, or which seem to appear regularly in different forms. Points of contradiction and transition were also targeted with the idea of focusing on key ideas and themes of the person as they appeared in the text. Ideas were grouped as actual extracts from the person's text. The decision on the first descriptive reduction, grouping together key themes, was made by consensus following the discussion of each participant. Themes retained or modified depended on the degree of consensus. There was no theoretical, ideological or experimenter imposition on the person's account throughout any of the reduction process, which sought only to regroup the person' experiences into meaningful themes. As a check on validity, the final reduced themes were traced directly back to the original verbatim transcript.

All interview transcripts were processed according to the following steps: (1) the person's audio-recorded narrative was typed by a person independent of the study with expertise in transcription; (2) the members of the consensus team read the verbatim transcript individually to gain a preliminary understanding of its sense; (3) two members of the team carried out independently descriptive reductions aimed at grouping repetitions and redundancies, separating out distinct ideas as units and noting transition points marking the entry of new themes or ideas; (4) the reduction was carried out with the help of a table listing on one side the verbatim transcript and on the other side a brief description of the idea represented (the description of the idea was phrased as much as possible in the person's own

words); (5) the reduction was then discussed by all members of the consensus team until saturation was sufficient and there was agreement on the number of unique, independent themes representing each discourse. This process was audio-recorded to ensure consistency of consensus procedure. Extracts of the verbatim transcript and reduction are given below.

Themes to constructs

Themes extracted by group consensus from the verbatim transcript were refined into bipolar (implicit/explicit) dimensional constructs through an adaptation of Kelly's grid (Kelly, 1955) and where other constructs relevant to the principal construct were elicited. The team member who had conducted the initial interview then returned to re-interview the participant and verified with the person the validity of the ideas and themes derived from the transcript by the consensus procedure. At this time the predominant themes were converted into explicit and implicit constructs organizing perception for each participant. A modified form of Kelly's construct grid (Kelly, 1955) (see Appendix 4) was completed, wherein elements (e.g. events, people, goals) in the person's life were ranked according to how the construct evaluation derived from the themes (implicit or explicit pole) applied or did not apply to each element. Explicit constructs were determined by members of the team and were derived to represent one or several similar themes (if several themes seem to share common ideas). The team member who conducted the initial interview returned to re-interview the participant. The participants were then presented with the themes derived by the team and asked to confirm or disconfirm their significance. The explicit construct was then derived from the themes and the person was asked to provide an opposite (implicit pole) construct. The implicit pole was not the logical but the personal opposite of the explicit pole. So, for example, the idea of 'directly addressing problems' was opposite not to 'not addressing problems' but rather to 'thinking, living with and keeping problems and staying with them'.

The transcripts of the interviews were interpreted following the phenomenological reduction approach developed by Giorgi (1985), and emerging themes were structured to elicit personal constructs using personal construct psychology methods (Kelly, 1955; Blowers and O'Connor, 1996). In this phenomenological approach the entire description rests with the actual words and phrases of the person and follows guidelines for checks on reliability and validity of findings (Eliott, 1989).

Key criteria for validity of the qualitative approach were met, namely: internal consistency, test-retest reliability, external validity or generalizability and inter-rater reliability (Laperrière, 1993a, 1993b). Additionally, the sensitivity and specificity of themes is assured through element-construct matching within Kelly's grid (Kelly, 1955), according to personal relevance (Blowers and O'Connor, 1996).

Themes reduced from verbatim transcripts

1. Themes: Insecurity and difficulty being alone. Lack of control and capability without people or the telephone. Anticipation of a catastrophe.

   Verbatim: 'Panic, for me, it's the end of the world. I'll lose consciousness, I'll vomit. I'll die. I'll have a cardiac arrest and be treated as mad. Last time I had a crisis I dialled 911, and I was going to hospital but my chum said, "No, no, calm yourself"'.

   'When I was young I was always insecure, always afraid something would happen to my parents. And now, two years later, I have the same insecurity. Don't go out after 9 pm, it's not safe.

   'Actually, I went out alone in the street and it was fine. I said God is taking care of me. I was fine for several hours. But before going out I said, God willing I won't die but I could die. I'm going to have a crisis but in the end it was fine. It's true, I dramatize when I'm all alone but it's the insecurity. I go to work in the morning. I cry. I don't feel well. I take my cell. I'm insecure.

   'Me, I prefer to be with people, my chum or friends. All alone I'm incapable. When I feel alone, really alone, I avoid everything. Even with my phone in my hands I am not capable of controlling myself, all alone'.
2. Themes: For me the panic is situational, when I'm alone in the office and in the car. It's very much anticipation, I see the event occurring, I look far ahead to be stronger. I fear an event but I do it anyway.

   Verbatim: 'For me it's really situational. It's in the car when I'm alone. Not automatically but because my first crisis was in the car alone, and my brain has registered it.

   'I've had several episodes of panic when I'm all alone, but in the office, when I'm surrounded by people, it's OK. I sometimes get symptoms of panic – for example, in stress situations, like sweaty hands – but I don't panic.

   'If I know I need to go out alone in the car I won't sleep the night before. It's very much anticipation. There are some people who just panic at the time they panic. But with me it's very much anticipation. So the night before I don't sleep. I see the event occurring, I see myself driving. That's how I live my panic. I organize my life in consequence'.
3. Themes: I always have the desire to run, to get out of the car, but I stay inside. I have shortness of breath and I need air. I hyperventilate.

   Verbatim: 'Absolutely, the evening I start planning by what means I'll go to work in the morning. The same thing when I return from work in the evening. If I have an outing in the evening I'll be preoccupied with it. I'll have a fear of it, but generally I'll do it because I was looking forward to it.

   'I take one day at a time and try not to anticipate the whole week, and certainly not the week after. I sometimes have the tendency to look too much at what's coming and not be as present in the here and now as I should. I say to myself, why should I look so far ahead? Maybe when the time comes I'll be stronger, better; that helps me.

'All my life it's like that. I leave in the car and if I'm going to a familiar place, that I already know, it's not too bad. If I have someone with me it's as though they can help me with my symptoms. But, in reality, I know they can't; they can, at least, relax me. Me, also, I speak to myself. I do my respirations, I try to lower my symptoms.

'In the carwash, on the side of claustrophobia, you are shut in and you can't escape. Because you always have the desire to run in a panic situation it's already happened that I got out of the car during the wash to take my breath of air because I always have the impression of needing lots of air. I have several symptoms: shortness of breath, knot in the stomach, swollen hands, tingling in the mouth, hyperventilation. I always take the rapid wash so usually I manage to stay inside the car'.

4. Themes: It's a weight, a burden; it wears you out, organizing in your head and feeling strong enough. The body has its limits.

   Verbatim: 'It's like a weight around your ankle because before confirming a meeting I need to rethink it, organize it in my head. I'm not dramatizing. Just going to work is a burden. I must pass several scenarios through my brain the evening before. How will I feel in the morning? Will I feel strong enough to go to work? Will my chum be able to drive me? Should I take the bus or the metro? I've already had panic attacks in the metro so I'm already worn out organizing the week in my head.

   'I have the impression when I have palpitations; it upsets me and I think the heart will have a flasher. It's only a muscle and the human body has its limits. It upsets me'.

5. Themes: I'm aware of a little girl and my childhood insecurity, and the need to contact someone. It's like when I was a little girl and I was afraid something terrible would happen to my parents 29 years ago. I'm the same now; nothing has changed.

   Verbatim: 'I become aware that inside me is a little girl of four years. The attacks of panic are related to my childhood. I had to take responsibility very quickly but I was insecure. I always take my telephone in case I need to contact someone. But it's insecurity. I don't go out at night. I've been insecure for 29 years.

6. Themes: It's difficult to know your capacity to change but I'm the one who can do it and get out and learn a different way.

   Verbatim: 'It's not obvious to change. It's difficult when you've had the same reflex for years. It's uncomfortable. You don't know your capacity to change. But I knew I'd have to face it. It's as though I was in a box and I couldn't get out. Or I had to learn a different way of walking with different muscles. It's the same thing with me. I knew it would be difficult and not always agreeable, but you're the only one who can do it'.

7. Themes: I don't panic or think of panic when I'm exercising.

   Verbatim: 'When I'm working out, conditioning in the gym, I'm generally focused on the exercise. It's funny because my heart rate goes up and I have, I guess, similar symptoms, but I don't panic and I don't even think of panic'.

8. Themes: I'm good at managing, investing, problem-solving stresses better than my chum.

   Verbatim: 'I'm good at managing money, better than my chum. I've always been stable, with long-term employment. For sure, there are stresses but I don't worry. I can invest in the bank just like that if I think it's worth it. I don't worry after. I have other problems in my head'.
9. Themes: I feel it's important to make people see my way and I will let myself go to make a point.

   Verbatim: 'When I'm in an argument with friends or with my mother, well, I don't hold back, I let myself go, even though my heart is racing. I feel I have a point to make. I want them to see things my way'.

Examples of constructs derived from comparison of variations

• I'm a person who needs the help of others	• I'm independent, strong and I don't need anybody
• I'm always preoccupied with what could happen and I anticipate too much	• I have no anticipation about acting
• I'm very demanding regarding others	• I'm conciliatory to myself and others

APPENDIX 11
PROTOCOL FOR MEASURING PARAMETERS OF PREPARATION MODEL (INTENTION, CONFLICT, ADAPTATION)

Measures of the preparation of action model

Intention

The experimenter asked 13 questions (identified in the pilot study) of the participant just before the experimental social situation, in a semi-structured interview form, in order to assess how the participant envisaged acting during this situation.

The questions

During the discussion to come:

- What attitude will you have with other people (distant, smiling, cordial, etc.)?
- Do you envisage breaking the ice and speaking first?
- How do you envisage moving?
- Do you envisage being tense or having visible or invisible nervousness signs? If so which ones?
- Will you make an effort to perform, to say nice sentences?
- Will you provide arguments and examples to support your opinion?
- Will you seek to adopt behaviours not to displease, whatever they are? If so which ones?
- Do you envisage saying what you think even if it differs from what the others say?
- Do you envisage being discrete, leaving more space to the others?
- Do you envisage avoiding visual contact?
- If there are silences do you envisage filling them?
- Do you envisage talking a lot, explaining yourself a lot?
- Do you envisage seeking to maintain harmony by showing some prudence in your interventions?

APPENDIX 12
BAYESIAN APPROACH TO MODELLING CONTINUOUS SELF-REPORT DATA: TRANSFORMING TIME INTO SPACE

Continuous self-report data

In clinical psychology we are frequently interested in understanding processes of change during treatment: learning, habituation, trauma and life events, to name a few examples. One method of measuring patterns of change is to record behavioural, cognitive and emotional events over time. Mathematically, such recordings can be considered repeated measures and subjected to time-series analyses in order to reveal trends, cyclic variation and dependencies over the course of the sample period.

Problems with time-series analysis

However, treating psychological recordings as time series assumes conditions of stationarity (mean and variance unchanged over observation), independencies of observations plus knowledge of a uniform process producing the repeated events. It is effectively assumed that psychological processes resemble the form of earthquake tremors, electrical signals and agriculture. But psychologists are interested in mathematical modelling of the data only in so far as it gives insight into psychological models of process. So why not begin with alternative models of psychological process and fit these to the series of events rather than try to make the events fit one statistical (time-series) model?

Bayesian inference

Bayesian-likelihood approaches are one of a set of procedures that 'behaviouralize' (in the words of Savage (1972)) statistical inference. In other words, they ground statistical inference in the understanding of the process itself and also in the intentions of the clinician in measuring this process. As such, they end up giving more

credible information on the 'typicality' of a process (e.g. compatibilities, boundaries and equivalence).

Clinical examples

In order to illustrate this approach we have used continuous self-report data acquired from individual clients over different lengths of CBT treatment for OCD. The diaries were completed daily over a number of weeks and measure respectively emotional state and duration of targeted compulsive behaviour. The recording of duration was in minutes per day. Self-reported distress was anchored in a personally calibrated scale ranging from 0–100.

Creating an event space

- In order to do this, the data set is considered an event space, or a series of events unfolding in personal space rather than a series of points equally spaced in time. In other words, the defining window on the data becomes an identifiable process with a beginning and an end.
- Time then becomes a by-product of event space.
- An event is formally defined as a set of states.
- A process within an event is a continuous sequence of states. The sequence may form different stages, steps or changes along a single identifiable dimension of process with a clear boundary marking beginning and end (see Chapter 2).

Defining the clinical event space

The event process we are measuring is three stages in CBT therapy for OCD. The first stage is 28 days before therapy. The second stage is an evaluation stage of 28 days. The third stage is treatment over a variable time period. As an initial parameter we take proportion of each stage falling above the median value of all states within the event space.

Statistics

- The likelihood of a parameter (p) in this case subjective distress consisting of presence (a) or absence (b) of a sequence of states is: $L(p) = p^a (1-p)^b$.
- The support function (log n of likelihood) is $S(p) = a\ 1n + b\ 1n\ (1-p)$. The span of the support curve is square root $(p\ (1-p)/n)$.
- Two units support limits on either side of the evaluate establish equivalence of process.

Results

- Table A12.1 shows maximum likelihood for the proportion of sequential states falling above the median value for the three event spaces for each of ten participants.
- According to the two units support limits (in brackets) participants: #34, #2, #5, #510, #508 show equivalent patterns of change in the parameters over the three event spaces.
- The patterns of distress give different information but can be combined to form a joint likelihood distribution L(a,b) = L(c)

TABLE A12.1 Maximum likelihood values with two units support limits

Participant	*Event 1*	*Event 2*	*Event 3*
#34	0.25 (0.16)	0.46 (0.19)	0.21 (0.15)
#508	0.32 (0.17)	0.36 (0.18)	0.12 (0.12)
#510	0.28 (0.17)	0.21 (0.15)	0.11 (0.10)
#25	0.14 (0.13)	0.28 (0.17)	0.33 (0.17)
#24	0.42 (0.18)	0.21 (0.15)	0.03 (0.06)
#503	0.11 (0.11)	0.29 (0.17)	0.05 (0.08)
#2	0.21 (0.14)	0.29 (0.17)	0.05 (0.06)
#3	0.39 (0.18)	0.07 (0.09)	0.01 (0.03)
#36	0.04 (0.06)	0.07 (0.08)	0.34 (0.16)
#5	0.36 (0.18)	0.04 (0.07)	0.09 (0.10)

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