they were never disappointed and never driven to modify their constructs or try new ways of obtaining control over events; or if they had succeeded in establishing for themselves a cozy environment sheltered from the rigours of the rest of the world—an outer world which they found a petrifying prospect. Quite a few people, of course, do fall into this mould; indeed most of us might seem to have ceased to evolve in some areas of our lives for precisely the reasons listed. However, many people are busily trying to change their lives, carving new lifestyles, new careers, social niches, leisure activities and so on for themselves. The analysis I have proposed provides a way of explaining the behaviour of both kinds of people: we can look at people who have got themselves into a rut, whether they see things like this or as a comfortable existence, and we can begin to see how firms might successfully seek to change their behaviour; we can also look at evolving consumers and, mindful of possible activity relationships, we can seek to anticipate where they might move their existences in coming months and years. Furthermore, we have a way of understanding how people can have ‘everything’ and yet end up asking, in the words of the song, ‘is that all there is to a [...?] For if people form grand expectations about themselves and about the reputedly desirable things in life (including expectations that they will be able ‘to see a lot’ in such things when eventually they encounter them), then we should not be surprised to see them find that much of life is just a series of disappointments.

Had we stayed with the much simpler postulate that ‘people seek to maximise their utilities’, we would not have had the bother of coming to terms with PCP, but we would have remained largely mystified by such phenomena. Skeptics might note the less seek to point to a dubious paradox in my suggestions, by asking ‘is not the “theory of the consumer as a scientist” itself merely an example of “pseudo-science”, since there is no aspect of choice that it cannot accommodate if one constructs an appropriate rationalising tale?’ Such a criticism is in fact misplaced, for PCP encompasses techniques for uncovering how people themselves see events and make judgements. I will eventually come to describe these empirical tools (see section 6.4) but, before I do, it is appropriate to examine from a theoretical standpoint precisely how people may come to see things in the ways that they do.

Chapter 5 begins this task.

5 Possibilities and Potential Surprises

5.1 INTRODUCTION

A decision maker who wishes to make choices on the basis of reasoning may require information about the following:

1. What has happened so far, either as a direct consequence of her past actions or as a result of processes whose workings she sees as conceptually separate from her own behaviour. She will be particularly interested to know whether her own anticipations were correct and whether her experiments aimed at achieving control over events seemed to have been validated.

2. What might have happened but did not eventuate.

3. What could happen in the future if she does not seek to control events.

4. What she might be able to do to affect the course of events.

5. What it could be appropriate to try to do, given 1–4.

How consumers may obtain these kinds of information is the subject of section 5.2 of this chapter. Section 5.3 examines the kinds of mental images that consumers may construct from their current stocks of ideas, as a basis for choice. Particular attention is paid to the fact that they will often come across ideas that seem to be incompatible, mutually exclusive rivals, and may consequently perceive uncertainty. The analysis in section 5.3 deals with images of uncertain events in the light of Shackle’s theory of ‘potential surprise’, without any mention of the conventional ‘economist’s idea that people may assign ‘probabilities’ to events. Bearing in mind that consumers in everyday life often speak in terms of probabilities, I feel obliged to discuss the relationship between these two views of how people think about uncertain events. Section 5.4 is devoted to this task. Finally, section 5.5
examines criticisms that have been or might be raised in relation to the way I am portraying consumers as conceptualising things prior to choice.

5.2 ORIGINS OF IDEAS IN THE CONSUMER’S MIND

The ideas that a consumer may consider en route to making up her mind will typically come from a variety of sources, and the processes by which she gathers them together may be so complex as to defy formal modelling in any kind of deterministic manner. As far as economists are concerned, the usual response to this problem has been to try to circumvent it by assuming at the outset that “consumers know what they want and they know how to get it.” An alternative approach would be to suggest that chance plays the major role in determining precisely which pieces of information a consumer encounters or is driven to seek out. I suspect that the latter would disturb most consumers—I find it quite disturbing myself to look back upon the “chance” linkages in the chain of events that has culminated in my sitting here today in my study in a particular house in Australia, writing this particular book on consumer behaviour and employed as a university lecturer. (I have detailed some of these linkages in Earl, 1983c, pp. 4–11, and elsewhere in this book.) For a long while, before I discovered and became familiar with Shackles’ writings, I anticipated that after graduating from university I would become a civil servant—things could have been so different! It is the fact that things seem as though they could so easily have been very different that makes it disturbing to consider the role of chance in our lives; it seems to run counter to the idea that we have much control over what happens to us. Faced with such a picture, many people are inclined to take refuge in astrological theories or conjectures about “someone ‘up there’ who is in control of our destinies.” My own view is that, although the processes by which consumers gather and process information are indeed complex, they are not the less sufficiently systematic in nature as to make them worthy of study as a means for forming bounded and not wholly misleading conjectures of what consumers may do. It would seem worth while to try to segment the population of consumers according to their relative propensities to employ the following sources of information and inspiration, and then to group them more finely according to how they use these sources—a suggestion that will come as no surprise to marketers (see section 6.4).

5.2.1 Creative thinking in the light of personal experience

Using her existing constructs, including those relating to rules of logic and inference, the consumer may be able to create new ideas about what might happen in the future, or about what has already happened. By experimenting with wider ranges of convenience for some constructs, or with new arrangements of constructs that she would not normally tie together, the consumer may come to see new ways of looking at things—just as, in writing this book, I am exploring possibilities for widening the applicability of ideas from the theory of the firm to the study of household behaviour and am experimenting with the integration of constructs from economics and FCP. Bounds are placed upon the consumer’s ability to create new ideas by the limitations of her existing ideas; to be given a new range of convenience or a new relationship with other constructs, a construct must already be part of the consumer’s repertoire. (An interesting corollary of this is that a person must possess some constructs at birth in order to be able to make anything of the events of her early life.) This view of limits to creativity obviously underlines my earlier (section 4.5) arguments about the significance of past experience in shaping the activities people will feel confident in choosing. (For thought-provoking discussions of the nature of creative thinking, see Koeschler, 1975, Shackles, 1979, and the references to “construct loosening” in Kelly, 1955; excellent discussions of how to achieve creative and open-minded thinking are provided by Adams, 1980, and Nolan, 1981.)

Researchers studying the processes whereby people form new ideas would do well to remember that their subjects may be employing different rules of logic and inference from themselves. Like many a poorly trained scientist, the inquisitive consumer may commit all manner of methodological blunders as she exercises her creative faculties, for example the fallacy of induction, or the maturity of chances fallacy (see Ross and Levy, 1958, for evidence). Consequently she may end up taking decisions that have unpleasantly surprising sequels.
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5.2.2 ‘Unbiased’ specialist sources of information
The enormous popularity of consumer choice magazines and radio/television programmes on consumer affairs is only one manifestation of the use of this kind of source of ideas about what can and should be done. One must also note the widespread use of brokers/agents and of consultants such as investment advisors, surveyors and interior designers. Acknowledged professional experts with access to the mass media would appear potentially to enjoy great scope for determining whether or not particular products are successful, but in practice their opinions are by no means always decisive. The car market is a case in point. On the one hand, we can note the impact that Ralph Nader’s (1965) book *Unsafe At Any Speed* had upon the sales of the ill-handling rear-engined Chevrolet Corvair in the United States. Similarly, the fortunes of the UK distributor of Lancia cars took a very severe knock when a feature on the BBC television programme *That’s Life* highlighted the propensity of nearly-new Lancia Betas to suffer from serious structural rusting (see section 10.3). On the other hand, however, we can note the case of the Leyland P76 V8 saloon, the Australian equivalent of the Edsel in terms of its sales success. This car, which enjoyed a production run of barely a year, was Leyland Australia’s belated attempt to provide a purpose-built, big, powerful car, rugged enough to stand up to local road surfaces, instead of continuing to provide variants of BL’s small European models. The P76 was awarded the 1973 Car of the Year Award by the widely-read magazine *Wheels*, but the Australian motoring public avoided it like the plague and stuck to the technologically inferior and less spacious products of General Motors-Holden, Ford and Chrysler.

5.2.3 Advertisements and information from potentially biased sales personnel
The chances that these sources of information will be misleading are somewhat restricted by the incentives to firms to try to discredit any inflated claims made by their rivals. However, consumers may find it difficult to judge the ‘truth’ when faced with a mass of conflicting claims. They may also be distracted from the sales campaigns of relatively sincere but small firms by the sheer volume of pretentious propaganda put out by large ones. Some consumers may systematically resist making use of sales personnel as sources of information because they are not confident of their abilities to maintain control in such interchanges.

5.2.4 Information available from social communications
This information arises at three main levels: first, consumers will have particular reference groups of friends and acquaintances whose opinions they take seriously (see Shibutani, 1955). Some members of the typical consumer’s reference group may possess a good deal of expertise in certain areas, while she may suspect others of being somewhat pretentious. Second, consumers will be interested to hear of the latest ideas that are circulating—what Shackley calls the ‘state of the news’—regardless of whether or not members of their reference groups have reached firm conclusions as to their accuracy. Third, most consumers will look to beliefs held by the wider populace, beliefs which we may call ‘the common-sense things that everyone knows’ (see Garfinkel, 1967) or simply ‘folk wisdom’. One reason for taking such beliefs seriously, even when they clash with those of professional pundits, is that consumers who publically act at odds with the ideas of the majority will stand out as deviants and be called upon to justify (often in a remarkably watertight manner) their departures from ‘the norm’, even if the majority are acting on the ‘million lemmings can’t be wrong’ principle and have little idea how ‘the norm’ was justified in the first place. Obvious examples of this phenomenon are situations in which parents react with hostility when their offspring brazenly flout conventions that decree they should marry and produce within wedlock at least two grandchildren, or where teenagers inquire sneeringly of their deviant peers ‘you don’t drink, don’t smoke, aren’t going out with anyone and don’t do sport, so what do you do?’ It takes strong principles, self-confidence and a willingness to suffer a highly restricted set of acquaintances if one is to opt to follow the lifestyle of, say, a lesbian teetotal vegetarian Marxist—all the information signals from society at large will suggest that this is a queer way to attain happiness.

Clearly, these four information sources may often contain many conflicting ideas. In the case of the Leyland P76, the folk wisdom was (and remains) that ‘you’d have to be crazy to buy a P76 (...only half a car); it’s just a huge boot with four wheels that is bound to fall to pieces since Leyland couldn’t build a car tough
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enough for Australian roads”, whereas if I were to try to sell you the one I drive, I’d tell you ‘its engine is still super-smooth and surprisingly economical after more than 100,000 miles, while after twelve years the body is not at all rusty; everything still works and the only things that are missing are a couple of plastic interior trim inserts’. However, it will often be the case that consumers end up getting their ideas from mutually reinforcing sources. This point is central to the arguments of the Women’s Movement. A woman growing up in the UK in the midst of ‘conventional’ beliefs about the nature of womanhood is much more likely to read *Honey* and graduate to *Woman’s Weekly* than she is to read *Spare Rib*, because of her observations of what her peers read. Consequently her head will be filled with ideas about romance, marriage and how to make herself look attractive to men; the occasional article on ‘career women’ will provide a few clues as to the heights that women may attain in a ‘man’s world’, but overwhelmingly the focus of both text and advertisements in orthodox women’s magazines is on the woman’s role as a homemaker and sex object. She may remain largely oblivious of the feminist viewpoint, carrying in her mind little more than an image of ‘bra-burning women’s libbers’, an image that is almost wholly visual instead of being concerned with feminist beliefs.

5.3 LANDSCAPES OF THE FUTURE

Having gathered a set of ideas together, the consumer will be concerned to decide what to make of them, what constructions to place upon them. This task could prove very confusing to someone with a background in epistemology. No one can possess, let alone process, a complete list of potentially credible raw possibilities. This implies that it is not strictly meaningful to say that a particular event is perfectly possible, simply because one can see nothing to prevent it from happening. Neither does it make complete sense to assert that a particular event is absolutely impossible, since events that one has not imagined nor heard about as possibilities could combine to ensure that ‘the impossible’ actually happens. For the same reason it should be questionable to attach a greater rating of ‘possibility’ to one event than to another, simply because one can see fewer things that might prevent it from coming about. If one follows this line of argument, it is difficult to see any basis for closing one’s mind about what it could be appropriate to do, what could happen or even about what has happened in the past; absolutely anything might happen but, then again, it might not. One might as well choose at random.

If one is unaware of the ideas from which such a position of scepticism follows, or if one views with scepticism the idea that one should be completely open-minded and choose at random, then one can adopt a much looser view of the nature of a ‘perfectly possible’ event and hence of events that seem somewhat less than perfectly possible. It makes no sense for a boundedly rational decision maker to class an event as perfectly possible ‘because I have every reason to believe it will happen’. However, if a person can see no obstructions to prevent a particular event from coming about, she may feel she has no reason to disbelieve in it as a prospect. Following Shackle (1983, pp. 31-4) I would suggest that although people often speak in the terms of belief, they actually see perfect possibility as involving the total absence of perceived fatal obstacles, that is to say that perfect possibility is, in cognitive terms, synonymous with zero disbelief. By extension I would argue that the more obstacles a person can see potentially lying in the way of a particular event, and the greater their imagined sizes, the greater will be the extent of the person’s disbelief in the event as a prospect and the less willing she will be to ‘take it seriously’. However, it should be noticed that obstacles to possible events are themselves imagined events, in the way of which may lie yet other obstacles. Hence the more hypothetical events that a consumer can see potentially lying as obstacles in the way of obstacles she sees in the way of a particular event, the smaller will be her disbelief in the idea that this event may actually come about. It is only because a consumer possesses a finite list of ideas that she is able to come to some conclusion concerning the extent of her disbelief in any particular idea; her inability to see obstacles to obstacles beyond a certain level of abstraction extricates her from a potential problem of infinite regress (see section 6.2).

However, to speak of consumers assigning ‘degrees of disbelief’ to rival ideas seems altogether too formal; we are, after all, dealing with ideas which consumers may after some
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deliberation classify as 'hopes' or 'fears' which may seem worthy of attention or which may be dismissed as blase. In the context of empirical research it would seem somewhat unclear as to how one might usefully get consumers to assign measures of intensity to their assessments of the extent to which they see events as potentially unblocked prospects. Shackle (1983, p. 34) has addressed this issue as follows:

Disbelief is an intuitional, something which has, in itself, form rather than intensity. What psychic experience can we find, that will reflect these forms of intuitions? There is one emotion which directly springs from the combination of some formal kind or source of disbelief, and an actual taking-place which belies that disbelief. This is the feeling of surprise. The individual may be supposed to ask himself: How much or little should I be surprised if, with no relevant change in my present knowledge, such-and-such occurred? Potential surprise seems to me a practical link between formal and emotional disbelief.

Actual surprise is something that has an upper limit, namely utter astonishment, so anticipations of feelings of surprise will be similarly bounded; beyond some point, thoughts about further seemingly unblocked barriers to an outcome that already seems to have 'the odds stacked against it' will not make it any more incredible as a prospect. At the other extreme, an event in whose way a person can presently see no obstacles will be one whose actual taking-place will be completely unsurprising to that person, unless her ideas change in the interim.

Now, suppose we ask a consumer to list all the ideas she is thinking about in relation to a particular choice, and suppose that we then ask her to state, for each idea, how surprised she would be if it actually eventuated. The answers she gives to these questions embody her conjectures in relation to the choice upon which her attention is focused. Taken together, these answers define topographical forms that can be depicted diagrammatically as a set of landscapes for each imagined option in respect of each of the construct axes in whose terms the consumer sees them. For example, consider the case of a consumer thinking about her career prospects. One dimension of her thoughts concerns her income from the near future—let us suppose from the end of 1985—as far as she can imagine into the distant future. This dimension may include both real and nominal income, but let us

here just concern ourselves with her conjectures concerning nominal income, which will be heavily dependent on her feelings about possible rates of inflation. (Nominal income will be particularly relevant in relation to the absence of thoughts concerning indebtedness and rates of saving.) For each job in which she imagines herself as possibly being employed, the consumer may be able to define a set of potential surprise conjectures. These ideas concerning possible income paths, formed after due thought about what might prevent them from eventuating, are essentially three-dimensional: they concern income levels, dates and assessments of potential surprise. But they can be represented on a two-dimensional diagram with axes of time and income, and contour lines for degrees of potential surprise between zero and the upper 'astonishment' bound. Our consumer might be thinking, for example, about how much she could earn if she can build herself a career in the American university sector. Figure 5.1 shows how she might envisage this prospect. Figure 5.2 is a cross-section through Figure 5.1, depicting the consumer's expectations for such a career for the year 1995. The latter diagram treats the scale of potential surprise as if it is continuous, following Shackle's original exposition of the potential surprise curve idea (see Shackle, 1948, for his first book-length investigation of the concept); however, it is probably unrealistic to expect consumers to think normally in terms of anything more than a stepped scale with five or seven points, including both bounds.

The landscape depicted in Figure 5.1 is shaped like a widening flat-floored channel, carved into a plain. However, it is to be stressed that this is only one of many configurations that might be imagined. A consumer might be unable to see any outcomes that seem 'perfectly possible'. There may also be periods in the future which she finds it very confusing to try to anticipate, so as one moves across the landscape there might be areas that are best represented, without reference to any particular potential surprise rating, as 'rapids' that come between periods expected to be less turbulent (see Jefferson's (1983, pp. 138–9) description of how corporate planners at Shell International Petroleum characterised their company's environment in the mid 1970s). Possibilities might be thought of not as a single channel but as bifurcating after some expected crucial event, such as a political upheaval in which 'moderate' policies were replaced by those of
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Disbelief is an intension, something which has, in itself, form rather than intensity. What psychic experience can we find, that will reflect these forms as intensities? There is one emotion which directly springs from the combination of some formal kind or source of disbelief, and an actual taking-place which belies that disbelief. This is the feeling of surprise. The individual may be supposed to ask himself: How much or little should I be surprised if, with no relevant change in my present knowledge, such-and-such occurred? Potential surprise seems to me a practical link between formal and emotional disbelief.

Actual surprise is something that has an upper limit, namely utter astonishment, so anticipations of feelings of surprise will be similarly bounded; beyond some point, thoughts about further seemingly unblocked barriers to an outcome that already seems to have 'the odds stacked against it' will not make it any more incredible as a prospect. At the other extreme, an event in whose way a person can presently see no obstacles will be one whose actual taking-place will be completely unsurprising to that person, unless her ideas change in the interim.

Now, suppose we ask a consumer to list all the ideas she is thinking about in relation to a particular choice, and suppose that we then ask her to state, for each idea, how surprised she would be if it actually eventuated. The answers she gives to these questions embody her conjectures in relation to the choice upon which her attention is focused. Taken together, these answers define topographical forms that can be depicted diagrammatically as a set of landscapes for each imagined option in respect of each of the construct axes in whose terms the consumer sees them. For example, consider the case of a consumer thinking about her career prospects. One dimension of her thoughts concerns her income from the near future—let us suppose from the end of 1985—as far as she can imagine into the distant future. This dimension may include both real and nominal income, but let us here just concern ourselves with his conjectures concerning nominal income, which will be heavily dependent on her feelings about possible rates of inflation. (Nominal income will be particularly relevant in relation to thoughts concerning indebtedness and rates of saving.) For each job in which she imagines herself as possibly being employed, the consumer may be able to define a set of potential surprise conjectures. These ideas concerning possible income paths, formed after due thought about what might prevent them from eventuating, are essentially three-dimensional: they concern income levels, dates and assessments of potential surprise. But they can be represented on a two-dimensional diagram with axes of time and income, and contour lines for degrees of potential surprise between zero and the upper 'astonishment' bound. Our consumer might be thinking, for example, about how much she could earn if she can build herself a career in the American university sector. Figure 5.1 shows how she might envisage this prospect. Figure 5.2 is a cross-section through Figure 5.1, depicting the consumer's expectations for such a career for the year 1995. The latter diagram treats the scale of potential surprise as if it is continuous, following Shackle's original exposition of the potential surprise curve idea (see Shackle, 1949, for his first book-length investigation of the concept); however, it is probably unrealistic to expect consumers to think normally in terms of anything more than a stepped scale with five or seven points, including both bounds.

The landscape depicted in Figure 5.1 is shaped like a widening flat-floored channel, carved into a plain. However, it is to be stressed that this is only one of many configurations that might be imagined. A consumer might be unable to see any outcomes that seem 'perfectly possible'. There may also be periods in the future which she finds it very confusing to try to anticipate, so as one moves across the landscape there might be areas that are best represented, without reference to any particular potential surprise rating, as 'rapids' that come between periods expected to be less turbulent (see Jefferson's (1983, pp. 138–9) description of how corporate planners at Shell International Petroleum characterized their company's environment in the mid 1970s). Possibilities might be thought of not as a single channel but as bifurcating after some expected crucial event, such as a political upheaval in which 'moderate' policies were replaced by those of
either the extreme Left or of the extreme Right. (To gain a greater feel of these arguments, readers might do well to ask themselves whether they would dispute the expectations depicted in Figures 5.1 and 5.2 and, if so, to try to construct their own maps for this particular line of employment.)

For our consumer to form a conjecture of how much she could earn over the period 1985–2000, she will need to ask herself not only which rates of pay could be available in particular job-slots that have come to her mind as possibilities. She will also need to ask herself how surprised she would expect to be if she were employed in each of these mutually exclusive positions, at each point in time. Her answers to these questions may depend on her expectations about whether or not she could be offered each of the jobs in each year, and on how surprised she expects she would be to find herself accepting them. Thus even if she thinks it is perfectly possible that an assistant professor in an American university could be earning $50,000 in 1995, she might expect to be pretty surprised to find herself actually in such a position in 1995, since she may expect to have achieved promotion to associate professor or beyond before then (Figures 5.1 and 5.2 might be built up on this exception), or she may expect that she would have left the academic world altogether if she had not achieved such promotion, even if presently she thinks such promotion is perfectly possible. Thus the expectational landscape of the consumer’s imagined earning is not the simple product of the superimposition of her conjectures concerning possible rates of remuneration in mutually exclusive lines of employment.

The kind of expectational landscape a consumer sees, at the start of 1985, for the period 1985–2000, may be very different from that which she envisaged in, say, the early 1970s. The difference may go a long way towards explaining how she feels about her current lifestyle. Consider the case of someone who, on the basis of a good first degree in the United Kingdom, obtained a postgraduate scholarship to a Canadian university in 1970. From the standpoint of 1970, she might well have assigned only a small degree of potential surprise to the idea that, by the
either the extreme Left or of the extreme Right. (To gain a greater feel of these arguments, readers might do well to ask themselves whether they would dispute the expectations depicted in Figures 5.1 and 5.2 and, if so, to try to construct their own maps for this particular line of employment.)

![Graph showing possible earnings in the American universities sector from 1985 to the year 2000, as a would-be faculty member might see them in 1985.]

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![Graph showing potential surprise in prospect.]

The kind of expectational landscape a consumer sees, at the start of 1985, for the period 1985–2000, may be very different from that which she envisaged in, say, the early 1970s. The difference may go a long way towards explaining how she feels about her current lifestyle. Consider the case of someone who, on the basis of a good first degree in the United Kingdom, obtained a postgraduate scholarship to a Canadian university in 1970. From the standpoint of 1970, she might well have assigned only a small degree of potential surprise to the idea that, by the
mid/late 1980s she would have become a professor, or would at
least have reached the stage where she was 'shortlisted' if she
applied for professorial positions. At the same time, she might
have assigned considerable potential surprise both to the idea
that she would be anything other than an academic, and to the
idea she would, by 1985, be employed in a polytechnic. By 1985,
a whole series of surprising events could have taken place,
causing her to revise her expectations. Let us consider two
extreme, yet perhaps familiar, scenarios.

The first is a tale of life in the academic 'fast lane'. The
consumer completes her Master's degree and follows this with a
doctorate in an area which is attracting great interest. Even
before submitting her thesis, she achieves some publications. By
1973, cuts in education expenditure mean that it is difficult to get
a lecturing job back in the United Kingdom, but she none the
less obtains one in the face of strong competition. She rapidly
establishes herself as a leader in her fashionable area of interest
and, in 1980, at the age of thirty-two, she is head-hunted and
offered a full professorship. By 1985, she has already moved on
to a more prestigious chair in an 'Ivy League' college in the
United States. Her career path has encompassed quite a few
surprises and she has often revised her expectations (her most
recent move did not come as a surprise, once she had attained
her first chair so young, but in 1970 she had not even considered
the idea that, by 1985, she would be so successful), yet she has
experienced no disappointments in respect of her employment
opportunities.

Second, consider the following tale of life en route to an
academic 'dead end'. The consumer completes her Master's
degree, but experiences great difficulty with her doctorate, owing
to an absentee supervisor and unanticipated data problems. By
the time her scholarship funds have run out, she is still a long way
from finishing her thesis, and she is unable to get a part-time
teaching job in Canada. On returning to the United Kingdom,
she is surprised by the impact of the cuts in education expenditure
and unable to get a university lectureship, owing to strong
competition from people with doctorates. As a 'stop-gap'
measure, she applies for a job in a polytechnic and obtains it.
The high teaching demands of this job make it difficult for her to
find time to finish her thesis; the fact that many of her colleagues
are former high-school teachers with no interest in research also
means she finds it difficult to engage in fruitful discussions about
the progress of her work. In the late 1970s, there appear some
more vacant university lectureships in her area of interest, but
she is unable to obtain one of these; she is competing against
people five years younger with doctorates, or with people of her
own age with proven research records. Although she has managed
to turn one of her teaching courses into a fairly successful
textbook, this counts for far less than scholarly articles and
finished doctorates. In 1980, she is promoted to senior lecturer in
her polytechnic; the money is useful, but the promotion is no
great source of joy given the lack of strong internal competition,
her ever-present thoughts of 'what might have been', and her
memories of the rosy expectations she held a decade ago. By
1985, she sees no prospect of employment in a British university
and can imagine no possible new, non-teaching career oppor-
tunities. Given repeated announcements of funding cut-backs,
she feels she would be somewhat surprised even to be promoted
to principal lecturer within the polytechnic sector within the next
five years. She would be astonished to obtain a teaching post in
an American or Australian university. Overall, she feels she has
little control over her career; her domestic life is comfortable, but
she is far from content with life. Job-wise, she feels she is well
and truly 'stuck in a rut' (albeit a somewhat different kind of rut
from that referred to in section 4.6). Her inability to finish her
doctoral thesis on time seems, with the benefit of hindsight, to
have been a truly tragic event, a watershed in her expectational
landscape. She feels she must do something to extricate herself
before it is too late, but what can she do?

5.4 THE POSSIBILITY OF PROBABILITY

When Shackle first wrote about expectations in terms of potential
surprise and perfect or seemingly obstructed possibilities, he did
so out of his dissatisfaction with the orthodox analysis of expecta-
tions in terms of probabilities. Today, despite forty years of
Shackle's writings on potential surprise, economic analysis still
employs the concept of probability. The lay consumer, too, is
frequently to be heard speaking in probabilistic terms: for
are former high-school teachers with no interest in research also means she finds it difficult to engage in fruitful discussions about the progress of her work. In the late 1970s, there appear some more vacant university lecturerships in her area of interest, but she is unable to obtain one of these: she is competing against people five years younger with doctorates, or with people of her own age with proven research records. Although she has managed to turn one of her teaching courses into a fairly successful textbook, this counts for far less than scholarly articles and finished doctorates. In 1980, she is promoted to senior lecturer in her polytechnic: the money is useful, but the promotion is no great source of joy given the lack of strong internal competition, and her ever-present thoughts of 'what might have been', and her memories of the rosy expectations she held a decade ago. By 1985, she sees no prospect of employment in a British university and can imagine no possible new, non-teaching career opportunities. Given repeated announcements of funding cut-backs, she feels she would be somewhat surprised even to be promoted to principal lecturer within the polytechnic sector within the next five years. She would be astonished to obtain a teaching post in an American or Australian university. Overall, she feels she has little control over her career; her domestic life is comfortable, but she is far from content with life. Job-wise, she feels she is well and truly 'stuck in a rut' (albeit a somewhat different kind of rut from the referred to in section 4.6). Her inability to finish her doctoral thesis on time seems, with the benefit of hindsight, to have been a truly tragic event, a watershed in her expectation landscape. She feels she must do something to extricate herself before it is too late, but what can she do?

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example, 'I reckon I've a one-in-four chance of getting the job', or 'I'd say we had a fifty-fifty chance of selling the house by the end of the week'.

The reason that Shackle took issue with the concept of probability as applied to decision making by individuals was that choices are essentially one-off, unique acts undertaken at particular points in the tangled and ever-extending web of events called history. Probability as discussed in the formal literature is essentially a *distributional* concept: fractional probability weights that sum to unity are thought of as reflecting the relative frequency with which particular outcomes will arise if choices are repeated. For example, take the case of family-planning choices. If tastes in respect of family-planning technology and the desire to preclude children are stable, one can use last year's statistics to anticipate the numbers of couples who may choose each method of family planning. One can also make confident projections concerning the numbers of unplanned pregnancies that will occur this year, providing one has statistics concerning the reliability rates for each of the family-planning technologies. (The opening comment about stability of tastes should, of course, not be forgotten; in a turbulent world—where a piece of news concerning, say, cancer risks associated with oral contraceptives can lead to a sudden shift in preferences—past statistics cannot tell a demographer what will happen in the population she is studying.) But statistical inference cannot tell us for sure which *particular* couples will be faced with unplanned pregnancies. Couples may employ published reliability statistics as guides when making up their minds about which family-planning technology to employ, but in the event they are either beset by an unplanned pregnancy or they are not, during the course of the year. Even if they employ a technique with only a 90 per cent reliability rate one hundred times during the year, they will not, for obvious biological reasons, be faced with ten unplanned pregnancies; nor can the woman become only 'one-tenth pregnant'.

To be sure there are some low-cost choices that an individual can repeat time and again and so end up generating a pattern of experience that is a microcosm of the aggregate experience of similar people who make similar choices. However, readers should note, in the light of my 'academic fast lane' and 'dead end' scenarios and of my family-planning example (as well as many other examples throughout this book), that some choices (for example, topics for doctoral research or methods of family planning) may be watershed events of massive significance and very expensive if not impossible to recover from if they misfire. These are, in Shackle's terms, *crucial* decisions whose sequels may lead to *kaleidoscopic* changes in expectational landscapes, both in the mind of the chooser and in the minds of others for whom her actions have implications.

Many economists to whom I have explained Shackle's mode of thinking have reacted by saying that potential surprise curves look not unlike inverted distributions. Formally speaking, this is incorrect in anything other than pictorial terms. As Hey (1983b, p. 131) has emphasised in a recent review of the 'state of the art' in probabilistic approaches to uncertainty, the formal theory assumes that decision makers *know with certainty* the sets of options, possible states of the world and final consequences that are relevant to their choices. The only thing they do not know is precisely which state of the world will come about. (For example, consumers choosing holidays may know the precise characteristics of each available holiday, but be unsure which of a finite set of possible weather patterns will come about and impact upon the relative values of rival holidays.) The formal theory, in other words, does not admit the possibility of surprise due to unimagined outcomes. (For example, one might have been on holiday in Cyprus and be utterly astonished to find oneself in the midst of a civil war.) However, if one leaves aside this major difference, one can begin to see that it might be possible to convert potential surprise patterns into probabilistic ones. Very simply, given a set of imagined possible outcomes, one might be able to convert their potential surprise ratings into a set of fractional 'subjective probability weights' that add up to unity. In his recent and fascinating book on Shackle's theory of choice under uncertainty, Ford (1983, pp. 129–30; 146–7) has examined, in a highly technical manner, ways of performing such a conversion (or, as he calls it, 'recodification'). In the rest of this section I will consider, with the aid of some simple examples, this idea and some of the problems it entails.

First, let us think about a particularly simple potential surprise construct, where a consumer has in mind only two rival 'ultimate events, $X$ and $Y$. If she can neither imagine nor take seriously
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example, 'I reckon I've a one-in-four chance of getting the job', or 'I'd say we had a fifty-fifty chance of selling the house by the end of the week'.

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First, let us think about a particularly simple potential surprise construct, where a consumer has in mind only two rival 'ultimate' events, X and Y. If she can neither imagine nor take seriously
any barriers to either of them, then she would be totally unsurprised should either come about. If called upon or brought up to express her expectations in terms of probabilities that sum to unity, then the logic of the situation she envisages would compel her to say that each outcome had a 50 per cent chance of coming about. But this does not necessarily mean she will expect that, if she had the opportunity seemingly to ‘trigger off’ these events time and again by a given procedure, she would generate an equal division of outcomes between X and Y. All she is saying to herself is that they presently look equally unsurprising in prospect.

Now suppose the consumer suddenly conceives of a third possibility, Z, that is a rival to the original pair. Plainly, if she talks in terms of probabilities, she can no longer continue to speak of X and Y as having 50 per cent chances of coming about. If Z is an event to which she assigns only a moderate degree of potential surprise, she might now verbalise her ‘subjective probability weights’ as follows: 40 per cent to X, 40 per cent to Y, and 20 per cent to Z. In other words, thoughts about additional possibilities reduce the ‘weight’ the consumer seems to attach even to perfectly possible future events. This is an idea to which Shackle (1961, p. 92) is utterly opposed; to him, a small share of a total, and a share that can vary according to the length of the list of rival imagined possibilities, cannot suitably indicate the status of an outcome seen as ‘perfectly possible’, since perfect possibility arises from an absence of (that is, zero) imagined fatal obstacles.

To see why Shackle adopts this stance, it is helpful to add some more substance to our example. Suppose that the situation concerns the possible promotion of a lecturer to senior lecturer by an academic review committee. Two candidates are obvious contenders who would seem to lack nothing by way of qualifications for promotion. If our consumer (who might herself be one of the candidates) can see no reason to suppose that the committee will select neither of these candidates and no reason why the committee could favour one at the cost of excluding the other, then she will see it as perfectly possible that either could be promoted. Now imagine the consumer hears that a third candidate, not automatically due for consideration, has asked for her case to be heard. The consumer will see the idea that the extra candidate might be promoted as less than perfectly possible if this candidate appears to lack some of the usual qualifications. The third candidate’s entry only changes the way the consumer sees the others’ prospects if the new candidacy brings with it a possibility that looks like a potentially fatal barrier to the promotion of X and/or Y. For example, whilst our consumer might in normal circumstances think that ‘Z is too young to be taken seriously’, she may in this situation think that ‘despite her youth, Z is a threat to the other candidates, for she is the protege of the committee’s most influential member’. In other words, the imagined predispositions of the influential member are now seen as a hurdle that X and Y must overcome if either is to be appointed. No longer will the consumer regard the appointment of either X or Y as perfectly possible. But if Z does not seem to bring with her a potential barrier to the success of X and/or Y—and there is no necessary reason why she will—then the standing of X and Y are not going to seem diminished when Z enters the contest.

To clarify further the Shacklean perspective, let us consider some other employment-oriented examples. Suppose I think that I am one of twenty candidates for a job, and that neither I nor my nineteen rivals lack any qualifications. (I might reason that they otherwise would not have troubled to apply.) If this is as far as my assessment of the situation goes, then I can treat myself and all my rivals as perfect possibilities; I have no reason to expect to be surprised regardless of who is, in the event, successful. But now suppose I hear from a seemingly reliable source that there are not twenty candidates, but forty. If I follow my original line of reasoning, I now have a vision of forty perfect possibilities. A probability theorist would say my subjective probability of success must fall from one in twenty to one in forty, yet in terms of possibilities I see nothing that has happened to impair my chances. However, my reasoning processes might be rather more complex: I might expect that, faced with candidates who have no unsatisfactory characteristics, the committee will start considering other discriminatory criteria, not specified in the job advertisement, or that it will apply weights in respect of performances that exceed targets in varying degrees (see Chapter 7).

In this case, the size of the field is something that might affect my conjectures about my prospects. For example, I might reason that, the bigger the field, the larger could be the number of
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In this case, the size of the field is something that might affect my conjectures about my prospects. For example, I might reason that, the bigger the field, the larger could be the number of
additional characteristics between which the committee could find itself able to choose. More people could be applying with something else to offer that I do not possess: each characteristic I lack is a barrier to my success; the more candidates there are, the more surprised I shall expect to be if I am successful. But note that I do not have to think like this; I might actually be exceedingly confident because I am totally unable to think of any grounds on which others might be preferred and because I can think of all manner of reasons why I might be preferred instead. If so, I will regard myself as the only perfectly appointable applicant and will be astonished to see anyone else being appointed, no matter how many other candidates there are. My excess of qualifications is something I see as an impenetrable set of barriers to the prospects of my rivals. (Of course, I may be failing to see that I could be turned down precisely because I am ‘over qualified’ and am therefore judged not likely to stay in the job for long.)

The inference I draw from these discussions is that the addition of an extra hypothetical outcome to a list of previously imagined possibilities may involve a decision maker in changing her assessments of some or all of the elements on such a list. This could happen if the newly considered outcome is felt to be associated with something that could get in the way of its rivals. But this need not happen. In circumstances where new thoughts about what could happen do lead decision makers to revise their expectations and assign possibility scores to newly imagined prospects whilst downgrading scores they had previously assigned to rivals, it may appear ‘as if’ they are thinking in probabilistic terms. However, people might not think of themselves as if they are carving up some fixed ‘possibilities pie’ in a new manner; some may indeed do so, but we could be unwise to presume that this is generally what happens and then, on the basis of such a presumption, to attempt to treat in distributive terms all rival thoughts about the future.

Finally, we should recognise that imagined future events are not in themselves potentially fatal barriers to each other even though they may be rivals in time to come. In prospect, rival events are just figments of our imaginations; mere thoughts cannot stop their rivals from turning into events. What can serve as barriers are other, prior events, anticipated or otherwise, which choices as well as natural processes have a power to determine.

5.5 POSSIBLE NON-PROBABILISTIC ALTERNATIVES TO POTENTIAL SURPRISE

Whatever one thinks of the philosophical conflict between Shackle and probability theorists about how one should face up to an uncertain future, this should not be allowed to distract us from the question of how people do envisage events and their possible sequels, prior to choice. By referring to commonly employed topographical terms in the previous sections, I have sought to suggest that Shackle’s analysis may not be altogether misleading in descriptive terms. Ordinary consumers may lack Shackle’s philosophical insight, but some of them do none the less talk about outcomes that are ‘watersheds’, that are ‘not beyond the bounds of possibility’, or that ‘open up whole ranges of hitherto undreamt-of possibilities’. The ‘cut’ term is perhaps the most instructive, when employed by someone who is clearly disappointed with the seriously restricted set of options that seem ‘open’ to her. However, there are a number of alternative possibilities that might describe more accurately the ways in which some people, at least some of the time, attempt or find themselves able to face up to an uncertain and as yet undetermined future.

One possibility takes us back to the discussion of impulsive behaviour in section 4.4. People may find themselves completely unable to form constructs on some occasions; either they fear that they do not have potentially important construct axes in mind, or they find the future so foggy that they recognise that unforeseen possibilities could get in the way of events that presently seem to be unblocked prospects in terms of the construct axes they do have in mind. Here, they are recognising the limitations of their past experience and present creative capacities as guides to what the future could hold; in some degree, they might be thought of as embracing the scepticist position outlined at the start of section 5.3. A vivid example of this kind of thinking is contained in the following short passage from Marilyn French’s novel The Women’s Room. It is part of a discussion of the lifestyle choices faced by women in a male-dominated society. French (1978, p. 44) writes thus about the predicament of a woman playing the ‘mating game’ in the days before reliable contraception:

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additional characteristics between which the committee could find itself able to choose. More people could be applying with something to offer that I do not possess; each characteristic I lack is a barrier to my success; the more candidates there are, the more surprised I shall expect to be if I am successful. But note that I do not have to think like this; I might actually be exceedingly confident because I am totally unable to think of any grounds on which others might be preferred and because I can think of all manner of reasons why I might be preferred instead. If so, I will regard myself as the only perfectly appointable applicant and will be astonished to see anyone else being appointed, no matter how many other candidates there are. My excess of qualifications is something I see as an impenetrable set of barriers to the prospects of my rivals. (Of course, I may be failing to see that I could be turned down precisely because I am ‘over qualified’ and am therefore judged not likely to stay in the job for long.)

The inference I draw from these discussions is that the addition of an extra hypothetical outcome to a list of previously imagined possibilities may involve a decision maker in changing her assessments of some or all of the elements on such a list. This could happen if the newly considered outcome is felt to be associated with something that could get in the way of its rivals. But this need not happen. In circumstances where new thoughts about what could happen do lead decision makers to revise their expectations and assign possibility scores to newly imagined prospects whilst downgrading scores they had previously assigned to rivals, it may appear ‘as if’ they are thinking in probabilistic terms. However, people might not think of themselves as if they are carving up some fixed ‘possibilities pie’ in a new manner; some might indeed do so, but we could be unwise to presume that this is generally what happens and then, on the basis of such a presumption, to attempt to treat in distributive terms all rivals’ thoughts about the future.

Finally, we should recognise that imagined future events are not in themselves potentially fatal barriers to each other even though they may be rivals in time to come. In prospect, rival events are just figments of our imaginations; mere thoughts cannot stop their rivals from turning into events. What can serve as barriers are other, prior events, anticipated or otherwise, which choices as well as natural processes have a power to determine.

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There was no way out of her dilemma; all the alternatives rot. Like being in a burning building, the fire beyond you, two windows in front of you, one looking down on a tiny bunch of firemen holding a canvas that looks no bigger than your thumb, the other looking down on the filthy Hudson River. When you are in situations like that, the only thing you can do is close your eyes and plunge. No amount of ratification can help you decide whether the fire is only a corridor deep and you could reach the staircase beyond, whether your chances are better with the water or the net.

A similar view of the nature of processes of decision making under uncertainty is to be found in the writings of Keynes. The relevant passages are actually his famous objections to probabilistic ideas, yet they would appear to indicate that he would have thought Shackle’s analysis presumes chooser’s have a far clearer idea of what might and might not happen than is actually the case. It is noteworthy that his view is not limited to unpleasant dilemmas, such as the one facing the heroine of French’s feminist novel, for Keynes (1936, pp. 161–2) asserted that:

Most, probably, of our decisions to do something positive, the full consequences of which will be drawn out over many days to come, can only be taken as a result of animal spirits—of a spontaneous urge to action rather than reaction, and not as the outcome of a weighted average of quantitative benefits multiplied by quantitative probabilities. Enterprise only pretends to itself to be mainly actuated by the statements in its own prospectus, however candid and sincere. Only a little more than an expedition to the South Pole, as it is based on an exact calculation of benefits to come (emphasis added).

And, in replying to critics of his monetary theory of employment, Keynes (1937, pp. 213–4) emphasized that:

the fact that our knowledge of the future is fluctuating, vague and uncertain, renders wealth a peculiarly unsuitable subject for the methods of the classical economic theory... The sense in which I am using the term [uncertain] is that in which the prospect of a European war is uncertain, or the price of copper and the rate of interest twenty years hence, or the obsoleteness of a new invention, or the position of private wealth owners in the social system in 1970. About these matters there is no scientific basis on which to form any calculable probability whatever. We simply do not know.

These passages suggest that people may quite often be totally unable to look at the sets of ideas at their disposal and then feel they have a secure basis for at least partially closing their minds in a way which enables them to define expectations and reasons for their choices. They may have no basis for saying because they may be unable to justify opinions about possible events even if placed under pressure to do so. In section 8.6, I shall attempt to explain how they decide what to do in such situations.

The polar opposite to extreme open-mindedness and ‘emptiness’ is that which Carter (1954) and Steinbruner (1974) have independently come to suggest. Carter’s suggestion is part of his critique of Shackle’s original model of choice in the face of potential surprise. In addition to arguing that it is unrealistic to expect choosers to think in terms of continuous variables (as opposed to stepped scales), Carter (1954, p. 52, emphasis in original) goes as far as to argue that, in some cases:

We may find that, in looking at a fairly close date, a man’s calculations are based on a single typical outcome. He has made up his mind about what will, he thinks, happen; he has no side glances at alternative possibilities.

Steinbruner displays as even greater willingness to reject outright the notion that people are willing and able to keep in mind ranges of possible outcomes relating to mutually exclusive states of the world. He asserts (1974, p. 123, emphasis in original) that:

[T]he mind [does not] match the uncertain structure of the environment in which events might take a number of alternative courses. Rather, it imposes an image and works to preserve that image. A single course of events is projected; evidence for alternative outcomes is manipulated to preserve the expectations. We might call this, then, the assumption of a single outcome calculation.

As a general analysis of how people think about the uncertain world in which they find themselves, the ‘single outcome’ approach seems flawed, since it appears to deny the everyday observation that people frequently display signs of uneasiness about what is going to happen, even when they have made up their minds about what to do. However, this is not to say that people never behave in the suggested manner. On the contrary, one can, for example, note the behaviour of undergraduates
There was no way out of her dilemma; all the alternatives rot. Like being in a burning building, the fire beyond you, two windows in front of you, one looking down on a tiny bunch of firemen holding a canvas that looks no bigger than your thumb, the other looking down on the filthy Hudson River. When you are in situations like that, the only thing you can do is close your eyes and plunge. No amount of ratification can help you decide whether the fire is only a corridor deep and you could reach the staircase beyond, whether your chances are better with the water or the rot.

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doing case study work on business policy; they are all too prone to treat supplied sales projections as gospel truths, instead of realising that demand curves might be more usefully seen as conjectural bands of possible sales levels at particular possible prices. Further evidence of the tendency of people to ignore uncertainty and make single-line forecasts is provided in Jefferson's (1983) account of his experience in using 'scenario-planning' techniques in the Shell International Petroleum Company. Managers at Shell often took the view that the purpose of a planning tool is to reduce ignorance about the future. Consequently they were very hostile to the idea of using a technique which, instead of telling them what the result of a decision would be, confronted them with the realities of uncertainty (see Jefferson, 1983, p. 146; also see section 4.4 and note the obvious overlap between the conceptualisation of hostility in PCP and Steinbruner's mention of evidence being manipulated). Experience at Shell indicates that people often find it difficult to face more than two or three scenarios without becoming confused and apathetic. Furthermore, if one of these scenarios is in the nature of a middle course, 'base case', people tend to ignore the others and accord it an excessive degree of certainty. The avoidance of narrow-minded ways of thinking would appear to be a skill that is not always easy to develop and which, if developed too far, can be a positive hindrance to the activity of trying to predict and control events.

Carter does not explain upon what basis people may feel justified in sometimes coming to focus their expectations on single typical outcomes. One simple explanation may be that they have not imagined or have not been exposed to ideas that are rivals to those upon which they base their choices. Indeed, the absence of any thoughts about rival possibilities may mean that a person moves along particular pathways in life without actively choosing at all, in the sense of evaluating opportunity costs prior to selecting a particular course of action (see section 3.2). Simple as this explanation is, we could be foolish to play down its significance, particularly in the light of my earlier comments about the tendency for people to get their ideas from mutually reinforcing sources. Sad to say, one can very easily end up living in suburbia, 'married with two kids, a dog and a cat' and holding absolutely conventional beliefs, without ever crossing one's mind that life did not have to turn out like this and could be turned into something radically different.

Steinbruner's attempt to explain how people settle on single-pathway expectations is rather more complex and draws heavily upon experimental findings from cognitive psychology. These experiments seem to show that mental images are, by virtue of their very subjectivity, highly malleable. There is thus scope for the mind to twist ideas that might collectively suggest ranges of rival possible events into images of unique future pathways. In relation to Shackle's idea of the nature of a 'perfect possibility', for example, we can note that what constitutes a potentially fatal obstacle to a particular event is something that may be open to debate. If we wish to believe or disbelieve particular ideas we can, providing we 'rig' our mental lines of thought accordingly. Steinbruner (1974, pp. 114–22) details five techniques people employ to do this:

1. the construction of images and arguments from analogy (in other words, people seek our analogies that appear to lend support to ideas to which they feel predisposed—as is done in section 6.3);
2. inferences of transformation ('wishful thinking');
3. inferences of impossibility (it is here that Steinbruner comes closest to Shackle's way of thinking, though at no point does he mention Shackle's work);
4. negative images (in other words, people look around for arguments against ideas they are predisposed to reject, with their expressed preferences thus often being determined by their previously construed constraints—see Elster's (1983) book Sour Grapes for an excellent study of this phenomenon);
5. attempts to obtain social corroboration (which is not the same as attempting to obtain from society ideas that would call into question the images that are being constructed).

Steinbruner's suggestion, then, is that a decision maker who wrestles with uncertainty but ultimately whittles her vision of the future into a single projection essentially deludes herself into believing that she has a basis for rational action. She selects one self-concocted image of the future and an implied scheme of action when, in principle, she might have dressed up any of the rejected possibilities in a suitable manner.
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It should be obvious that it is by no means necessary to consign the use of the above five techniques solely to the representation of an activity that culminates in so much sense being made of a situation that all scenarios bar one are rejected. People who are less prone to delude themselves may be thought of as using these techniques as they attempt to piece together rival scenarios against which to make their choices. Indeed, it should be noted that Keynes’ comments about business behaviour are entirely consistent with the idea that much decision making is based on ‘deliberate self-deception’ (Shackle, 1967, p. 132) in the face of an uncertain and undetermined future. I would suggest that Steinbruner’s ‘cognitive’ analysis complements any discussion of the origins of confidence, even though I would question his claim that people generally are ‘banking on’ single expected outcomes when they choose in turbulent times.

5.6 CONCLUSION

I hope that readers will get four main ideas from this chapter. First, the possible sources of ideas that may or may not be seen fit only for disbelief are diverse. However, depending upon how consumers employ them, these sources may be mutually reinforcing or contradictory. Second, prospects seen in term of a particular construct axis/characteristic scale may be envisaged in a variety of ways: in terms of bounded sets of rival scenarios to which either potential surprise ratings or ‘probability weights’ have been assigned, as highly blurred images, or as tightly focused single scenarios. Third, choices may be deemed to be crucial in nature if they appear to involve consequent rival prospects for a dramatic closing off or opening up of the chooser’s future options. Fourth, and finally, we have added more flesh to the notion of confidence. In the previous chapter it was suggested that confidence can arise from a chooser’s failure to envisage possible events which would call into question her ability to predict and control her life. Now we can see other aspects of confidence, namely an awareness of potentially fatal possible obstacles to the taking place of counter-desired events, a lack of awareness of potentially fatal obstacles to the taking place of desired events, and an awareness of possible obstacles to things
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