control, perhaps because paragraph development is intuited rather than based on clear understanding of the academic paragraph's function and significance in ensuring coherence.

Effective paragraph development

To arrive at effective paragraph development, it is necessary to fully understand the basics of how the academic paragraph functions, as is now discussed.

Capturing your main ideas

Typically, the academic paragraph is organized around a *main idea* that takes the form of a general assertion or statement that is then subsequently developed. These main ideas capture your evolving understanding of the subject you are discussing.

key points

Ensure that you do have main ideas around which to organize your paragraphs by clearly identifying these in your text.

Main ideas usually, but not necessarily, appear in the first sentence of a paragraph called the **topic sentence**, which Popken (1987) showed was a 'standard feature in academic articles' (and not only articles), with some variation in usage across disciplines. By skimming through these topic sentences, readers are able to chart the progression of your thinking.

Using main ideas to push along your thesis

Each main idea is used to advance your overall point of view, your position, or your thesis. This tight interlocking relationship is illustrated in Figure 4.3.

Your research theses and essays, or any other type of academic writing, should be organized around an identifiable point of view that you are developing. The main ideas you bring forward in your paragraphs should support your point of view – push it along, just as the details you include in developing your paragraphs should support your main ideas.

Determining paragraph length

There is no set length for a paragraph. They are, however, often long because of the amplifying detail needed to completely develop ideas within
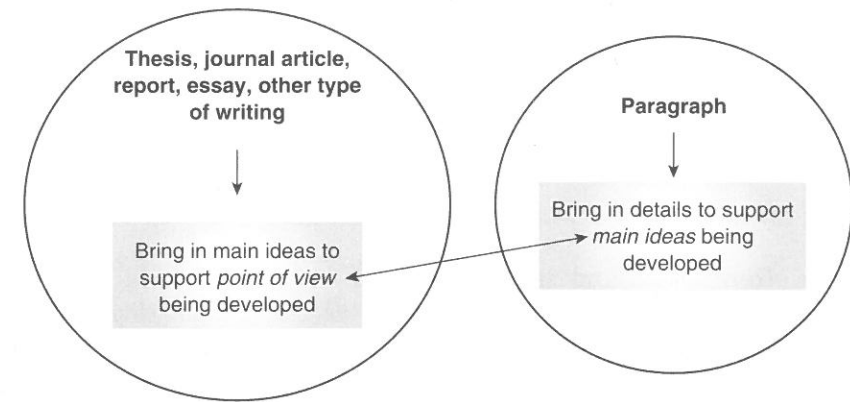

FIGURE 4.3   The structural relationship between point of view and paragraph development

the paragraph. Prominent 'organizing' ideas, as in this example, can take many paragraphs to develop:

> *Significant changes had taken place in the geographical landscape during this period.*

Where a paragraph is used as a structural or organizational device, it may be very short, and effectively so, as in this example, where the author proceeded to discuss his results over several pages:

> *Previous research has relied on a recessive model that limits available options [references]. The results of this study, however, suggest that there are sound reasons to re-define the accepted boundaries.*

Ensuring internal paragraph coherence

Sentences within a paragraph need to hang together, to cohere, so that they evidence a logical flow. Consider what happens in this example, where coherence breaks down:

> *Recall bias has been a problem in this investigation. Despite the inconclusive results, the investigation has identified the need for a review of food preparation techniques at this venue. It was not possible to identify clearly the source of contamination.*

As you see, the expected paragraph focus in the first sentence is 'recall bias'. However, the next sentence ruptures this expectation by directing attention to another topic, review of 'food preparation techniques'. There is a further rupture in the third sentence as the reader is directed to yet another topic, the impossibility of identifying the 'source of contamination'. The paragraph

is not coherent in terms of the flow of ideas. There are too many ideas presented too quickly, with each idea needing further development.

There also needs to be coherent linking of paragraphs across longer stretches of writing.

Strategies for linking paragraphs

Linking is often subtle and sophisticated in writing. Linking may even be unnecessary as, for example, in a methods section, where logic inheres in detailing the sequence of steps taken. Or you may be **mapping the structure in the process of writing** (very common) by using organizing topic sentences or short, sharp paragraphs that signal subsequent structure of the writing.

In situations where you will be discussing points at length, take care in using the **technique of First(ly), Second(ly), Third(ly)** to introduce paragraphs, because a reader will have forgotten what you are talking about by the time she/he gets to the fourth point on the third page of writing. Linking phrases of this type would be better:

> One strategy involved ... Another strategy ... A third strategy brought into effect because of spiralling costs was ... [reminding the reader of what you are discussing] Finally, senior management found it necessary to ...

Try to use a range of linking or transition strategies of the type now discussed, rather than rely on a standard few.

Repeating words/phrases

One of the simplest, most common and subtle transitions is the repeated word, phrase or idea:

Last sentence of a paragraph:

The nature of the ceremonial **rites** performed at this initiation ceremony is particularly important.

First sentence of the next paragraph:

These **rites** are organized around three basic activities, each with its own religious significance.

Last sentence of a paragraph:

Here X postulates two general linguistic notions: the **notion of polarities** and the notion of equivalence.

First sentence of the next paragraph:

The **notion of polarities** derives from X's insight concerning ...

The question-and-answer transition

While this type of transition can be effective, use the rhetorical question with caution, as clumsy overuse tends to produce a forced stylistic effect:

Last sentence of a paragraph:

Why did the plan fail?

First sentence of next paragraph:

X, in his analysis, suggests three major reasons.

The summarizing transition

This technique can be illustrated by this example, where, say, a writer has just completed a lengthy comparison of high school and university teaching methods and now wants to move to a new, but related, topic of 'personal responsibility' in learning. The first sentence of the next paragraph is:

> Because of **these differences in teaching methods**, universities throw more responsibility on the student.

The transition is marked by using a summary phrase – 'differences in teaching methods' – to refer to the lengthy discussion just finished.

The summarizing transition may take even briefer form, with pronouns like *this, that, these, those* or *such* being used to sum up a topic discussed in the preceding paragraph/s. Such pronouns though, like all English pronouns ('it' can be a real problem), carry with them the danger of the unclear referent. It is not altogether clear in the following example whether 'these' refers back to 'policies' or 'fiscal arrangements':

Last sentence of a paragraph:

The different institutions have produced incoherent policies in terms of the tight fiscal arrangements proposed on introducing the scheme in 1992.

First sentence of the next paragraph:

These have been the subject of vigorous debate in the literature.

This problem is easily overcome by naming the referent: 'these policies' or 'these fiscal arrangements'.

key points

If English pronouns give you trouble, name the referent rather than let a pronoun stand alone.

Using logical connectives

Paragraphs can also be linked by words showing logical relationship: *therefore, however, but, consequently, thus, even so, conversely, nevertheless, moreover, in addition*, and many more. Usually, though, logical connectives are used to move from one sentence to the next within paragraphs, that is, as internal paragraph transitions.

To illustrate, say a writer has just completed a paragraph summarizing an author's analysis of a documented riot and now wants to move the discussion along. Here are three different logical connectives:

Last sentence of a paragraph:

Brown's analysis provides useful insights into the existing power relations between the army and the government at that time.

Possible first sentences of the next paragraph:

(a) **However**, the power relations embedded in the social structure may be more important in explaining the causes of the riot.
(b) **Even so**, there is no real attempt to grapple with the issue of the government's role in the army's attack on unarmed men, women and children.
(c) **Consequently**, Smith's much quoted analysis of this same event needs to be reconsidered in view of Brown's findings.

Whatever its form, an inter-paragraph transition should be unobtrusive, shifting readers easily from one topic to the next.

Manipulating sentence structure

Understanding how to manipulate English sentence structures will allow you to emphasize important ideas, give focus to your writing and avoid alienating or boring readers.

These basic English sentence structures provide for very sophisticated combinations of simple, compound and complex sentences:

Simple sentence (one main idea):

Trade figures have improved.

Compound sentence (two ideas of equal weight):

Trade figures have improved and so has the economy.

Complex sentence (two ideas of unequal weight):
Although trade figures have improved, the economy remains slow.
Or:

Although the economy remains slow, trade figures have improved.

Note the shift in emphasis in the turn-around here. In the first sentence the main idea is the 'slow economy'; in the second it is the 'improved trade figures'.

Do vary your sentence structure. If writing consists of a series of simple short sentences strung together it will be monotonous and lack focus. It will be difficult for a reader to discern what *you* consider more or less important about what you are saying. An excess of long sentences can be equally troublesome. Overloaded sentences that are not well constructed can also cause reader confusion, making it difficult, even impossible, to understand the intended meaning. So do take care, particularly if English is a second language.
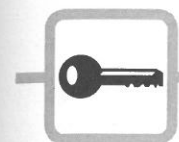
key points

Short, sharp, emphatic sentences (simple sentence structure) draw readers' attention to your important ideas or points and ensure they are not overlooked.

exercise: improving sentence structure

Review sentence structure in several paragraphs of your own writing and compare what you do with the practice of a disciplinary writer you admire. Could you improve?

The 'discards' file

When developing texts, you need to ensure that all ideas you bring forward are directly relevant to the topic under discussion. It is certain that at times you will need to discard material because it just does not fit the context of discussion. This can indeed be hard when it comes to being ruthless about insights and ideas you have developed as beautifully constructed sentences, paragraphs, even longer stretches of writing – pieces of writing to which you remain doggedly attached even though you sense they do not fit. Every academic writer knows about this dilemma.

Resistant though you may be, force yourself to discard such material. But never delete it. Cut it and transfer it to a special 'discards' file; give each piece of writing a summary title designating its central import. It is likely that discarded material of this type will slot perfectly into another context of writing at another time.