

INFORMATION CONVENTIONS & Ex.3.1

The following introduction is from a report in the field of ecology. Notice how Stage II supports the background information presented in Stage I.

SPATIAL DISTRIBUTION OF LITTER AND MICROARTHROPODS IN A CHIHUAHUAN DESERT ECOSYSTEM

Stage I	<p>¹ In most deserts of the world, transitions between topographic elements are abrupt and watercourses which are dry most of the time tend to dissipate their occasional waters within local basins.</p> <p>² Occasional torrential rainfall, characteristic of most desert regions, washes loose debris into watercourses or transports this material, depositing it in and along the shores of ephemeral lakes.</p> <p>³ These physical processes result in a redistribution of dead plant material (litter), affect the distribution of soil water and create a heterogeneous biotic community. ⁴. Therefore; before the dynamics of desert ecosystems can be adequately understood, the spatial relationships must be clarified.</p>
Stage II	<p>⁵There have been few studies of litter distribution and/or soil found in any of the world deserts (Wallwork, 1976). ⁶ Wood (1971) surveyed the soil fauna in a number of Australian arid and semi- arid ecosystems. ⁷Wallwork (1972) made some studies of the microarthropod fauna in the California Mojave Desert and Edney et al. (1974, 1975, 1976) studied abundance and distribution of soil microarthropods in the Mojave desert in Nevada.</p> <p>⁸ In the Chihuahuan desert, Whitford et al. (1975, 1976, 1977) described the spatial relationships for many groups of organisms,</p>
Stage III	<p>but soil microarthropods remain unstudied. ⁹ The lack of such information represents a gap in our Knowledge of desert ecosystems.</p>
Stage IV	<p>¹⁰As part of our continuing program of studies of the structure and dynamics of Chihuahuan desert ecosystems, we designed the study reported here to understand the relationship between litter redistribution and the spatial distribution and composition soil microarthropod community.</p>

WHAT HAVE YOU OBSERVED?

1. Notice that the writers of the preceding literature review cite other authors in two different ways. What are the two ways?
2. What do you think determines a writer's choice between these two forms?
3. What do you think determined the order of the citations in the preceding literature review?

EXERCISE 3.2 Analysis

Look at each of the following examples of Stage II. Indicate if the method of ordering citations used is *distant to close*, *different approach*, or a combination of these methods. Read the title carefully to determine the *specific focus* of the author's own study.

A. PROVIDING DIRECTION AND BUILDING COMMITMENT: TEACHING AS INSTITUTIONAL LEADERSHIP

The conception of teaching as institutional leadership was first proposed by Waller (1932) who paid explicit attention to the organization of schools and the roles of teacher and student as defined by the organization. Recent literature on teacher leadership has not really followed Waller's approach of considering the roles of teachers and students in school organizations but has more closely resembled what Waller referred to as "personal leadership"

The literature on classroom leadership has also suffered from problems other than the tendency to deal with personal leadership. There has been a great deal of conceptual confusion about the dimensions of teacher behavior to be examined. Different investigations have used a variety of variables such as authoritarian- democratic (Lewin, Lippett & White, 1939), dominant-integrative (Anderson, 1943); initiating structure-consideration (Hemphill, 1957), directiveness-warmth (Dunki & Biddle, 1974) task oriented-supportive (Cruikshank, 1976), and teacher structuring-praise (Soar & Soar, 1976).

Order of citations in example A: _____

B. THE MEASUREMENT OF MOBILITY

The economic literature which discusses mobility and makes some attempt at measurement broadly falls into two categories. In the first, elementary statistical techniques and indices such as the rank correlation coefficient are used to evaluate the changes in relative positions (6, 8, 11, 13, 14, 19, 22). In the second category, measures of mobility are a by-product of simple stochastic specifications of changes over time (1, 9, 10).

Order of citations in example B: _____

**C. SUBSURFACE IRRIGATION AND FERTILIZATION OF
FIELD CORN**

Little literature has been *published* on subsurface irrigation *and* fertilization through line emitters. Earl and Jury (4), Keng et al. (5)

And others *have examined water movement patterns* and root development associated with trickle irrigation but in all cases emitters *have been placed at or near the soil surface*. Williams and Hanson (1) placed perforated plastic tubing 25 to 30 cm below cotton rows and over a 3 year period were *able to achieve a 10% yield increase* when compared to flood irrigation. Phene (9) described the use of line emitters for high frequency *irrigation of* sweet corn. Yield was 10% higher than that *obtained with sprinkler irrigation with the use of 50% less water*. Mitchell et al. (7) irrigated *field corn* with perforated *plastic tubing*. Over a 3-year period yields with subsurface *irrigation averaged 68% more* than the non-irrigated control plots.

Order of citations in example C: _____

**D. ON THE TIME CONSISTENCY OF OPTIMAL POLICY
IN A MONETARY ECONOMY**

The time-consistency issue is by no means a new one in economics. Strotz (25) appears to be the first one to have raised it in relation to an individual consumer. More recently, however, Kydland and Prescott (15) have discovered a family of models exhibiting time inconsistency where the source of the problem lies in the technology and in the assumption that people hold rational expectations. Although they briefly touch upon a monetary economy, the central results of their remarkable paper are given in a context where money plays no central role.

In the monetary literature, Auernheimer (2) appears to be the first one to have noticed that time inconsistency could arise if the government attempts to maximize the revenue from money creation ...(etc.)

Order of citations in example D: : _____

EXERCISE 3.3 Arrangement

The following citations are taken from Stage II of the introduction to a research report from the field of nutrition. The citations are given here in scrambled order. Number the citations in the order you feel they should appear in the literature review for this report.

FOOD HABITS OF UNDERGRADUATE STUDENTS AT NEW MEXICO STATE UNIVERSITY

- A. _____ Young and Starvick (1970) surveyed the food habits of 595 college freshmen in Oregon and found that the men generally had better diets than the women.
- B. _____ Litman et al. (1975) reported that green and yellow vegetables and liver (all nutritionally desirable foods) were not liked by teenagers in Minnesota public schools. They also found that teachers have almost no influence on their students' food habits.
- C. _____ Studies of the food habits of young school children have shown that the diets of grade school children are often deficient in ascorbic acid, calcium and iron (Lantz et al., 1958; Patterson, 1966).
- D. _____ A review of the literature indicates that food habit studies have been conducted with students from a variety of different age groups.
- E. _____ Young (1965) examined the nutrition habits of a group of young school children and found that their mothers lacked information about the importance of milk and foods rich in ascorbic acid.
- F. _____ Studies done with adolescent children report similar findings (Ohlson and Hart, 1970; van de Mark and Underwood, 1972).
- G. _____ A number of studies have been conducted using both male and female college students as subjects.

EXERCISE 3.4 – Gap fill

In the following example from the field of psychology fill in the correct tense for each Stage II verb given in parentheses.

LISTENING, COMPREHENSION: THE EFFECTS OF SEX, AGE PASSAGE STRUCTURE AND SPEECH RATE

¹The learning of verbal information is a two-stage process.

²First of all the student must understand the meaning of the sentence he has just heard and then, secondly, he must relate the information it contains to what he has learned earlier and which is now stored in memory. ³A number of authors (advance)

_____ this active view of learning (Bartlett, 1932; Ausubel, 1968; Haviland and Clark, 1974; and Clark, 1976).

⁴Other writers (show) _____ that this two-stage process operates at the level of sentences. ⁵Barclay and Franks (1972) (show) _____ that when two or more sentences contain information about the same subject, the learner abstracts the information from the sentences and tends to integrate it into a whole.

⁶Riding (1975) (find) _____ that after likening to a prose passage in which some related details were in adjacent sentences, while others were separated by other sentences, ten-year-old children recalled the closely positioned details better than the more distantly positioned ones. ⁷Kieras (1978) (study) _____ reading time in adult subjects using short paragraphs as the learning material. ⁸He (note) _____ that reading time was less when a sentence was preceded by those containing related information than when one or more unrelated sentences intervened between directly related ones.