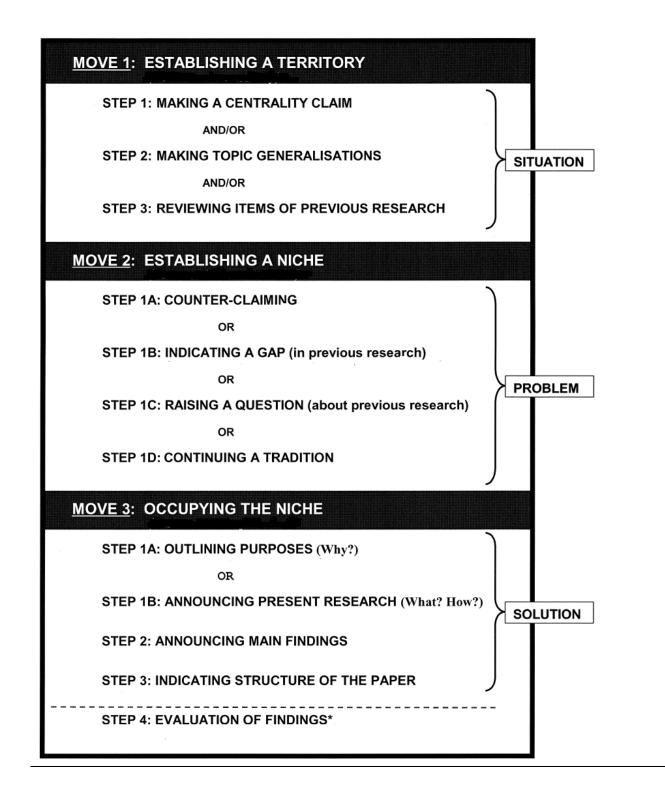




Academic Writing II The Introduction Section Prof. Jorge Carroza



MOVE 1: ESTABLISHING A TERRITORY

Introduction generally start by describing the general "terrain" or "layout" of their research area using one or more of the following strategies.

STEP 1: CLAIMING CENTRALITY

The writer states that the topic of research is *useful*, *relevant*, *important*, or *worth* investigating since it forms part of a *lively*, *significant* or *well-established* research area. Centrality claims frequently serve as *topic sentences* and are therefore usually followed by evidence to support this statement.

The effect of...has been studied extensively in recent years.

Of the many...,have been the most extensively studied.

The effects of... have received considerable attention

Many investigators have recently turned to...

A large body of data concerning...has been reported.

In recent years, there have been many papers describing...

Recently, there has been wide interest in...

In recent years, researchers have become increasingly interested in...

The possibility of...has generated interest in...

Knowledge of...has great importance for ...

The study of...has become an important aspect of ...

...are believed to play an important role in...

The explication of the relationship between... and ...is a classic problem in fluid mechanics.

A long-standing problem has been to obtain more information on...

The well-known...phenomena...have been favorite topics for analysis both in...

A central issue in...is the validity of...

STEP 2: MAKING TOPIC GENERALISATIONS

These consist of statements concerning the current state of either *knowledge*, *consensus*, *practice* or description of *phenomena*.

The general features of ... are well known.

Plumage coloration is known to influence mate selection in mallards.

An increase of Mallards in eastern North America has been well documented.

Trout are believed to be relatively immobile.

It is generally accepted that ...

There is now <u>much evidence</u> to support the hypothesis that...

A standard procedure for assessing...has been...

Such...methods are often criticized for ...

it is commonly suggested that ...

Comparisons of spatially separated populations tend to consist of...

STEP 3: REVIEWING ITEMS OF PREVIOUS RESEARCH

Here, the writer needs to relate what has been found (or claimed) with who has found it (or claimed it).

Smith (1989) found...

It has been suggested that...(Smith 1989)

Belovsky (1981) concluded that ...

Data have been presented in the literature [1], [5] which suggest that...

Peterson (1988) argued that...

Observations by Smith (1989) suggest that...

MOVE 2: ESTABLISHING A NICHE

After describing important features of their research territory (**Move 1**), academic writers typically try to claim a "niche" for their research. They can do this by showing that the previous research (or solutions) are not complete, or that there are aspects of the research field still needing further investigation. This is often signalled by words expressing a **contrast** or **negative evaluation** such as the following.

| <u>CONTRAST</u> | QUANTITY | <u>VERBS</u> | | <u>ADJECTIVES</u> | |
|-----------------|----------|-----------------------------------------|-----------|-------------------|----------------|
| however | few | fail ignore lack prevent hinder obviate | neglect | scarce | ineffective |
| but | less | | overlook | elusive | inconclusive |
| yet | little | | question | limited | uncertain |
| nevertheless | no | | challenge | restricted | unclear |
| unfortunately | none | | deter | difficult | unreliable |
| although | not | | limit | inefficient | unsatisfactory |

STEP 1A: COUNTER-CLAIMING

This step frequently follows **Move 1-Step 3** (**Reviewing Items Of Previous Research**) and is used to introduce an opposing viewpoint or pinpoint weaknesses in previous research (or solutions).

However, this view is challenged by recent data showing...

However, these studies have failed to recognize the...

However, recent work in our laboratory suggests that ...

....., but the experiments were performed on...and are therefore suspect.

...these approaches become increasingly unreliable when...

STEP 1B: INDICATING A GAP (in previous research)

Frequently follows Move 1-Step 2 (Making Topic Generalisations)

A considerable amount of research has been... but little research...

...has been extensively studied. However, less attention has been paid to...

As a result, no comprehensive theory appears to exist.

Despite the importance of..., few researchers have studied...

Research has tended to focus on...rather than...

The only reported study to date of...covered a limited range of...

...studies have appeared previously in the literature, but measurements were restricted to...

The properties of...are still not completely understood.

Evidence on this question is presently inconclusive.

STEP 1C: RAISING A QUESTION (about previous research)

However, it is not clear whether the use of...can be modified to...

In spite of these early observations, the mechanism...has remained unclear.

The question remains ...?

How much has the seal population actually decreased?

STEP 1D: CONTINUING A TRADITION

Frequently signalled by logical connectors, such as therefore, Hence, Consequently, or thus.

These differences need to be analyzed...

Hence, additional studies of...are needed.

It is desirable to carry out surveys of ...

It is of interest to compare...

MOVE 3: OCCUPYING THE NICHE

Here, writers reveal their solution to help *fill the gap*, *answer the specific question* or *continue a research tradition* that has been presented in **Move 2**:

STEP 1A: OUTLINING PURPOSES (Why?)

The writer introduces his/her solution to the problem described in <u>Move 2</u> by stating the main *purpose* or *aim* of the study. Note in the examples below how the *verb tense* used depends on whether the writer is referring to a **physical** or **abstract** concept.

PRESENT TENSE:

The present tense tends to be used when the aims are described in terms of **the written product** held physically in the reader's hands.

(paper, article, thesis → PRESENT)

The **aim** of this **paper** <u>is</u> to... The purpose **here** <u>is</u> to document...

PAST TENSE:

The past tense tends to be used when the aims are described in terms of abstract concepts such as **mental enquiry**.

(study, investigation, experiment → PAST)

The aim of the present **study** <u>was</u> to elucidate... The objective of this **research** <u>was</u> to quantify... **Our purpose** <u>was</u> to describe...

STEP 1B: ANNOUNCING PRESENT RESEARCH (What? Who? How? Where? When?)

This step represents an alternative strategy to that used in <u>Step 1A</u>. Here, the writer describes the aims in terms of what the research sets out to **"do"** or **accomplish**. Notice how the same information can be expressed using either **human** or **inanimate agents** as the subject:

HUMAN AGENT:

In this study, <u>we</u> suggest a 3-step process...
In this letter, <u>we</u> propose a ...algorithm.
In this paper, <u>we</u> attempt to develop a...
In this letter, <u>we</u> provide a novel approach to...
In this paper, <u>we</u> describe novel algorithms for...
In this paper, <u>we</u> present a system for...

INANIMATE AGENT:

This <u>paper</u> evaluates the effect on...
This <u>research</u> presents data on...
This <u>study</u> focuses on a strategy for...
The present <u>study</u> tested...
This <u>thesis</u> proposes a formal procedure for...
This <u>paper</u> introduces a novel architecture for...

STEP 2: ANNOUNCING MAIN FINDINGS

In this step, the writer considers the results to be the most important aspect of the research and therefore reports these as part of the introduction. Beware, not all disciplines allow this in the Introduction Section!

In this paper, we argue that ...

This approach provides effective...

Our results indicate that this method is effective in...

STEP 3: INDICATING STRUCTURE OF THE PAPER

We have <u>organized</u> the rest of this paper in the following way...
This paper is <u>structured</u> as follows...
The remainder of this paper is <u>divided</u> into five sections...

STEP 4: EVALUATION OF FINDINGS

Numerical results show that **the proposed algorithm** not only enjoys <u>advantages</u> of <u>low</u> <u>complexity</u> and <u>ease</u> <u>of implementation</u> but is also able to achieve performance <u>very close to the optimum</u> <u>achievable</u> <u>bound</u>.