

# Writing - Week 7

## Introductions

*One of the most difficult things to write is the first paragraph. I have spent many months on a first paragraph, and once I get it, the rest just comes out very easily. In the first paragraph you solve most of the problems with your book. The theme is defined, the style, the tone.*

—Gabriel Garcia Marquez

- Coherence -- we're not done! Read handout from Steven Pinker.
  - Note principles you can follow to make your writing more coherent.
  - We'll discuss these principles next class.
- First draft -- March 31 (for April 1 class). Earlier is fine too.

# HW 4

- 1) When the president assumed office, he had two aims -- the recovery of the American economy and the modernization of America into a military power. He succeeded in the first as testified to by the drop in unemployment figures and inflation, and the increase in the GDP. But he had less success with the second, as indicated by America's increased involvement in international conflict without any clear set of political goals. Nevertheless, the American voter was pleased by vast increases in the military budget and a good deal of saber rattling.
- 2) Except for those areas covered with ice or scorched by continual heat, the earth is covered by vegetation. Plants grow most richly in fertilized plains and river valleys, but they also grow at the edge of perpetual snow in high mountains. Dense vegetation grows in the ocean and around its edges as well as in and around lakes and swamps. Plants grow in the cracks of busy city sidewalks as well as on seemingly barren cliffs. Vegetation will cover the earth long after we have been swallowed up by evolutionary history.

# What should an introduction accomplish?

- state what the aim is.
- state how you're going to accomplish that aim. (organization, methods, etc.)
- get interest & attention from readers. Make the reader interested.
- give enough context to situate the reader. But not too much, else we lose sight of objective.
- convince reader to read rest of paper
- identify the gap in the research, that you are trying to fill.
- set the tone, and the level of abstraction. Indicate what the assumed knowledge is.
- say how it relates to other research.
- establish main characters (papers, people, ideas, concepts)

# Model: from Williams & Bizup (Lesson 7, Motivation)

An introduction should:

- 1) Establish a shared context.
- 2) State the problem.
- 3) State the solution.

**Shared Context — Problem — Solution / Main Point / Claim**

and sometimes, before everything else

**Prelude:** quote, anecdote, startling fact, etc.

# 1: Establish a Shared Context

When college students go out to relax on the weekend, many now “binge”, downing several alcoholic drinks quickly until they are drunk or even pass out. It is a behavior that has been spreading through colleges and universities across the country, especially at large state universities. It once was done mostly by men, but now even women binge. It has drawn the attention of parents, college administrators, and researchers.

*So what? Who cares that college students drink a lot?*

Alcohol has been a big part of college life for hundreds of years. From football weekends to fraternity parties, college students drink and often drink hard. But a new kind of drinking known as “binge” drinking is spreading through our colleges and universities. Bingers drink quickly not to be sociable but to get drunk or even to pass out. Bingeing is far from the harmless fun long associated with college life. In the last six months, it has been cited in at least six deaths, many injuries, and considerable destruction of property. It crosses the line from fun to reckless behavior that kills and injures not just drinkers but those around them. We may not be able to stop bingeing entirely, but we must try to control its worst costs by educating students in how to manage its risks.

## Shared contexts

- Historical background:
  - Alcohol has been a big part of college life for hundreds of years. From football weekends to fraternity parties, college students drink and often drink hard. [But a new kind of drinking known as “binge” ...]
- Event:
  - A recent State U survey showed that 80% of first-year students engaged in underage drinking in their first month on campus, a fact that should surprise no one. [But what is worrisome is the spread among first-year students of a new kind of drinking known as “binge” drinking...]
- Belief:
  - Most students believe that college is a safe place to drink for those who live on or near campus. And for the most part they are right. [But for those students who get caught up in the new trend of “binge” drinking...]
- Occasionally skipped, if readers know the subject well. (Math - often skipped. Good/Bad?)

**Common move: open with a seeming truth, then qualify or even reject it.**

- *a literature review* in academic writing

## 2. State the problem

A problem has 2 parts:

- **Condition or situation.** Anything that has the potential to cause trouble.
  - But a new kind of drinking known as “binge” drinking is spreading through our colleges and universities. Bingers drink quickly not to be sociable but to get drunk or even to pass out.
- **Intolerable consequence.** A *cost* that readers don’t want to pay.
  - Bingeing is far from the harmless fun long associated with college life. In the last six months, it has been cited in at least six deaths, many injuries, and considerable destruction of property. It crosses the line from fun to reckless behavior that kills and injures not just drinkers but those around them.



# Two kinds of problems

**Practical:** a condition or situation in the world; demands an *action* as its solution.  
*(not common in academic writing)*

**Conceptual:** concerns what we think about something; demands a *change in understanding* as its solution.  
*(common in academic writing)*

# Conceptual problems

- Condition can be expressed as a question:
  - *How much does the universe weigh?*
  - *Why does the hair on your head keep growing, but the hair on your legs doesn't?*
- Cost is dissatisfaction in not understanding something more important; another, larger question:
  - Cosmologists do not know how much the universe weighs. [condition] *So what?* Well, if they knew, they might figure out something more important: Will time and space go on forever, or will they end? And if they do, when and how? [cost/larger question]
  - Biologists don't know why some hair keeps growing and other hair stops. [condition] *So what?* If they knew, they might understand something more important: What turns growth on and off? [cost/larger question]
  - Administrators do not know why students underestimate the risks of binge drinking. [condition] *So what?* If they knew, they might figure out something more important: Would better information at orientation help students make safer decisions about drinking? [cost/larger question]

**You answer a small question so your answer contributes to answering a larger, more important one.**

# State the solution

- **Practical problem: what we should do**
  - We may not be able to stop bingeing entirely, but we must try to control its worst costs by educating students in how to manage its risks.
- **Conceptual problem: what we should think.**
  - ... we can better understand not only the causes of this dangerous behavior but also the nature of risk-taking behavior in general. This study reports on our analysis of the beliefs of 300 first-year college students. We found that students were more likely to binge if they knew more stories of other students bingeing, so that they believed that bingeing is far more common than it actually is.

# Model: “Creating a Research Space” (CARS), by John Sawles

Summary by Helen Sword:

- 1) Establish that your particular area of research has some significance.
- 2) Selectively summarise the relevant previous research.
- 3) Show that the reported research is not complete.
- 4) Turn the gap into the research space for the present article.

Alternatively:

- Establish a territory
- Establish a niche
- Occupy that niche

# “Create a Research Space” (CARS) Model of Research Introductions<sup>1</sup>

JOHN SWALES

Sometimes getting through the introduction of a research article can be the most difficult part of reading it. In his CARS model, Swales describes three “moves” that almost all research introductions make. We’re providing a summary of Swales’s model here as a kind of shorthand to help you in both reading research articles and writing them. Identifying these moves in introductions to the articles you read in this book will help you understand the authors’ projects better from the outset. When you write your own papers, making the same moves yourself will help you present your own arguments clearly and convincingly. So read through the summary now, but be sure to return to it often for help in understanding the selections in the rest of the book.

## Move 1: Establishing a Territory

In this move, the author sets the context for his or her research, providing necessary background on the topic. This move includes one or more of the following steps:

### Step 1: Claiming Centrality

The author asks the **discourse community** (the audience for the paper) to accept that the research about to be reported is part of a lively, significant, or well-established research area. To claim centrality the author might write:

“Recently there has been a spate of interest in . . .”

“Knowledge of X has great importance for . . .”

This step is used widely across the academic disciplines, though less in the physical sciences than in the social sciences and the humanities.

and/or

### Step 2: Making Topic Generalizations

The author makes statements about current knowledge, practices, or phenomena in the field. For example:

“The properties of X are still not completely understood.”

“X is a common finding in patients with . . .”

and/or

### Step 3: Reviewing Previous Items of Research

The author relates what has been found on the topic and who found it. For example:

“Both Johnson and Morgan claim that the biographical facts have been misrepresented.”

“Several studies have suggested that . . . (Gordon, 2003; Ratzinger, 2009).”

“Reading to children early and often seems to have a positive long-term correlation with grades in English courses (Jones, 2002; Strong, 2009).”

In citing the research of others, the author may use *integral citation* (citing the author’s name in the sentence, as in the first example above) or *non-integral citation* (citing the author’s name in parentheses only, as in the second and third examples above). The use of different types of verbs (e.g., *reporting verbs* such as “shows” or “claims”) and verb tenses (past, present perfect, or present) varies across disciplines.

## Move 2: Establishing a Niche

In this move, the author argues that there is an open “niche” in the existing research, a space that needs to be filled through additional research. The author can establish a niche in one of four ways:

### Counter-claiming

The author refutes or challenges earlier research by making a counter-claim. For example:

“While Jones and Riley believe X method to be accurate, a close examination demonstrates their method to be flawed.”

### Indicating a Gap

The author demonstrates that earlier research does not sufficiently address all existing questions or problems. For example:

“While existing studies have clearly established X, they have not addressed Y.”

### Question-raising

The author asks questions about previous research, suggesting that additional research needs to be done. For example:

<sup>1</sup>Adapted from John M. Swales’s *Genre Analysis: English in Academic and Research Settings*. Cambridge: Cambridge UP, 1990.

“While Jones and Morgan have established X, these findings raise a number of questions, including . . .”

### **Continuing a Tradition**

The author presents the research as a useful extension of existing research. For example:

“Earlier studies seemed to suggest X. To verify this finding, more work is urgently needed.”

### **Move 3: Occupying a Niche**

In this move, the author turns the niche established in Move 2 into the *research space* that he or she will fill; that is, the author demonstrates how he or she will substantiate the counter-claim made, fill the gap identified, answer the question(s) asked, or continue the research tradition. The author makes this move in several steps, described below. The initial step (1A or 1B) is obligatory, though many research articles stop after that step.

#### **Step 1A: Outlining Purposes**

The author indicates the main purpose(s) of the current article. For example:

“In this article I argue . . .”

“The present research tries to clarify . . .”

or

#### **Step 1B: Announcing Present Research**

The author describes the research in the current article. For example:

“This paper describes three separate studies conducted between March 2008 and January 2009.”

#### **Step 2: Announcing Principal Findings**

The author presents the main conclusions of his or her research. For example:

“The results of the study suggest . . .”

“When we examined X, we discovered . . .”

#### **Step 3: Indicating the Structure of the Research Article**

The author previews the organization of the article. For example:

“This paper is structured as follows . . .”

## Advantages of CARS:

- Promoted as a more subtle alternative to “problem-solution” model
- Helps develop clear & compelling argument

## Disadvantage of CARS

- **It can promote predictable/weak writing**  
(Helen Sword, “Stylish Academic Writing”)

1) Establish that your particular area of research has some significance.

*Encourages beginning with a sweeping statement of the obvious:*

Ecologists and anthropologists, among others, recognize that humans have significantly affected the biophysical environment. [Anthropology]

2) Selectively summarise the relevant previous research.

*Can lead to egregious name-dropping rather than meaningful engagement with colleagues' ideas and arguments.*

Identity is central to any sociocultural account of learning. As far as mathematics is concerned, it is essential to students' beliefs about themselves as learners and as potential mathematicians (Klooster-man & Coughan, 1994; Carlson, 1999; Martino & Maher, 1999; Boaler & Greeno, 2000; De Corte et al., 2002; Maher, 2005), and it has vital gender, race and class components (see Becker, 1995; Burton, 1995; Bartholomew, 1999; Cooper, 2001; Dowling, 2001; Kassem, 2001; Boaler, 2002; Cobb & Hodge, 2002; Gilborn & Mizra, 2002; Nasir, 2002; De Abreu & Cline, 2003; Black, 2004). [Higher Education]



3) Show that the reported research is not complete.

*Invites authors to take a crowbar to the existing literature, finding research gaps whether or not they actually exist.*

Although scholars have demonstrated the link between collective efficacy and team performance (Gully, Incalcaterra, Joshi & Beaubien, 2002), little is yet known about the factors responsible for the development of collective efficacy. [Psychology]

4) Turn the gap into the research space for the present article.

*Author steps up boldly, making claims, frequently inflated, for the novelty and importance of their own research.*

This study expands the existing models for estimating the effect of community college attendance on baccalaureate attainment by mapping out the points of divergence in the educational trajectory of 2-year and 4-year students [Higher Education]

- Sword argues that CARS often leads to predictable / formulaic writing.
- She gives good advice for making introductions more engaging. (“Stylish Academic Writing”, Chapter 7)
- In her study of 1000 academic articles from across the disciplines
  - 25% open in a deliberately engaging way:  
stories, anecdotes, scene-setting descriptions of historical events or artistic representations, literary or historical quotations, surprising fact, provocative or challenging questions aimed directly at the reader.
  - 75% begin with an informational statement:  
announce topic of article, present relevant background information, summarize previous research, posits a fact, makes a claim for the importance of the topic, sets up the author’s main thesis by identifying a gap in existing knowledge or by presenting the opening moves of a “straw man” argument

# Activity: Analyze an Introduction

Each group will be assigned to read one of 3 papers:

- “Atmospheric diffusion shown on a distance-neighbour graph”, by L. F. Richardson
- “Colloidal matter: Packing, geometry, and entropy”, by Vinothan Manoharan
- “On Malliavin’s proof of Hormander’s theorem”, by Martin Hairer

Read the introduction to each paper and analyze its structure. Ask:

- Where does the introduction stop? How did you identify this location?
- How does the author follow (or deviate from) the models we discussed?  
Identify where in the introduction they use each element of the models, and identify places where they do something else.

The models were

- (Prelude) — Shared context — Problem — Solution/Main Point/Claim
- Establish a territory — Establish a niche — Occupy that niche
- How does the author engage the reader, and make them want to keep reading?