Analyzing scientific genres

"A genre consists of something beyond similarity of formal characteristics among a number of texts. A genre is a socially recognized, repeated strategy for achieving similar goals in situations socially perceived as being similar." (Bazerman, *Shaping Written* Knowledge, 1988, p. 62)

1. Collect examples, and "preview" them.

Previewing means quickly researching

– *Who is the author?* Where do they work; what else have they written; where does their expertise lie; how has their work been reviewed or received; are they controversial?

– *Where, when, and why was this text published?*

as well as skimming to get an overview of the *organization* of the work. This kind of previewing is always a good idea before reading a chewy text, and is especially useful for texts that are handed to you out of context (in a coursepack, for example). Good sources are Google, Google Scholar, Google Books, Wikipedia, Amazon.

2. Identify the situation in which the genre is used.

– In what *setting* does this genre appear?

– What *subjects* or types of issues does this genre address? Could you imagine any topic in science appearing in this genre, or only particular kinds?

– Who *writes* the texts in this genre: individuals or teams, identified or anonymous? What characteristics do writers in this genre need to possess?

– Who *reads* the texts in this genre? Is there more than one type of reader? Are there characteristics the readers need to possess?

3. Characterize the social dynamics involved.

– What is the *relationship* between writers and readers—what roles do they play for each other? (For example, sparring partners, master and apprentice, shopkeeper and customer….)

– What *purposes* does the genre fulfill: why do the writers and readers write and read it? This is a crucial question. What change in the world (or in the reader) is the author trying to bring about?

4. Identify patterns in the text that reflect (or create) this social situation.

– What features of the text determine who's included and excluded? (For example, the use of jargon, assumptions about the reader's background knowledge, assumptions about the reader's values….)

– What counts as evidence? Does the text support its claims through appeals to reason, appeals to emotion, or implicitly through the author's personal authority?[1] What is the role of observational data?

– How is the subject matter of the genre treated? What content is considered most important? What content (topics or details) is ignored?

– What makes these texts "sciencey"—the subject matter, the method of argumentation, or simply the identity of the people writing and reading it? What attitude toward science do these texts assume or encourage?

1. Aristotle referred to these as *appeals to logos, pathos, and ethos*.