Lecture - 5

The problem of relating to the concepts of academic or scientific discourse

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01 Technical language

02 Jargon

03 Complexity of ideas

04 Writing style

Complex Language and Jargon:

1. **Issue:** Academic and scientific discourses often employ specialized terminology and jargon that is unfamiliar to those outside the specific field.
2. **Example:** In molecular biology, terms like "transcription factors" or "epigenetic modifications" might be commonplace, but they can be confusing for individuals without a background in the field.

According to Bakhtin et al. (1981, p. 293), “there are no ‘neutral’ words and forms–words and forms that can belong to ‘no one’; language has been completely taken over, shot through with intentions and accents.” If language is never a neutral medium, then scientific discourse can also never be neutral, never truly be objective. Nevertheless, scientific discourse attempts to construct an objective stance through the particular stratifcation of its language and its generic conventions.

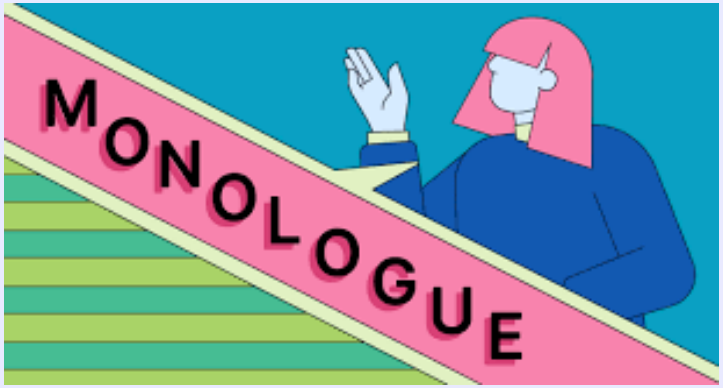
Complex Language and Jargon:

Two grammatical aspects of the style of scientifc discourse—scientifc nominalizations and the frequent use of passive voice—also set the stage for lack of understanding between the scientifc world and the larger population. One aspect of scientifc language that can feel especially “foreign” for the non-scientist is the “frequency of grammatical metaphor, from the union of nominalization with recursive modifcation of the nominal group” (Haliday and Martin 2003, p. 15).

Lexically, just unweaving the dense web of signifers can be difcult, even for academics. Moreover, the level of abstract thought that nominalizes actions into things requires not only training, but also a worldview or epistemology that can be at real odds with that of an “average” person.

Authoritative Tone and Monologic Style:

1. **Issue:** Scientific discourse can often come across as authoritative, detached, and one-sided, potentially alienating non-expert audiences.
2. **Example:** The use of passive voice or nominalizations in scientific writing may create an impersonal tone. For instance, "It was observed that..." instead of a more direct and engaging statement.



Hedging in Academic Writing

Purpose

Express hesitation or uncertainty.

Demonstrate politeness and indirectness.

Hedging Language

Believe, assume, suggest, seem, tend, looks like, appear to be, think, possibly, perhaps, conceivably, could, may, might, it could be the case that..., it might be suggested that..., there is every hope that...,
etc.

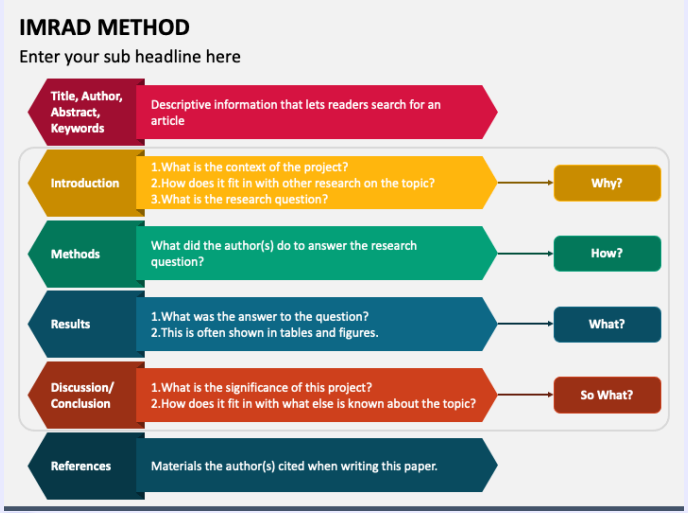
Hedging: Weismann suggested that polar bears hibernate presumably to conserve the fat in their body.
No hedging: Weismann found that polar bears hibernate to conserve fat in their body.

Structural Conventions (IMRaD Format):

Issue: The traditional structure of scientific papers, such as the Introduction, Methods, Results, and Discussion (IMRaD) format, may not be intuitive for those unfamiliar with academic writing.

Example: Readers may struggle to navigate a scientific paper structured in IMRaD if they are not accustomed to this convention.

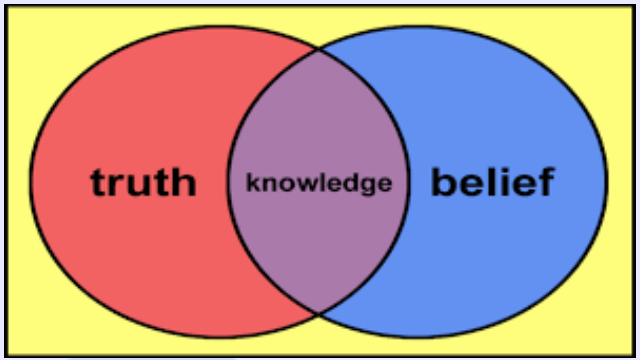
Most scientifc research articles are organized in a fairly rigid structure. This structure was adopted during the 1920s and was suggested as the ideal method of writing papers but didn't become prevalent until the 1930–1940s (Lewis, and Zinn 2005). "Development and changes in the internal organization of the scientifc article is simply an answer to the constant growth of information. The IMRaD structure facilitates modular reading, because readers usually do not read in a linear way but browse in each section of the article, looking for specifc information, which is normally found in pre-established areas of the paper" (Meadows 1985).



Mismatched Epistemologies:

1. **Issue:** Scientific discourse often follows a deductive, objective approach, while everyday communication may involve narrative, anecdotal reasoning, and inductive thinking.
2. **Example:** Scientific statements often rely on controlled experiments and statistical significance, while the public may be more influenced by personal experiences or stories.

Epistemology, **the philosophical study of the nature, origin, and limits of human knowledge**.



Lack of Accessibility:

1. **Issue:** Academic writing may lack accessibility for a broader audience due to its formality and use of technical language.
2. **Example:** Long sentences, heavy use of discipline-specific terms, and intricate syntactic structures may hinder understanding for non-experts.

In Bakhtinian terms, scientific discourse is an example of "a professional stratification of language" (1981, p. 289), which, on the one hand, in necessary for a field like science because such stratification allows for particular kinds of thought and inquiry.

"Language is seen as both carrier and creator of a culture's epistemological codes. The ways we speak and write are held to influence our conceptual boundaries and to create areas of silence as language organizes meaning in terms of pre-established categories" (Lather 1991, p. 74). These areas of silence are ripe, not only for epistemological blind spots, but also as pitfalls for cross-group communication. As Bakhtin et al. (1981, p. 289) explains, "For such outsiders [to a stratified language], the intentions permeating these languages become things, limited in their meaning and expression."

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Those who were interested in altering their style of communication to fit their audience and
Those who hoped the audience would alter their understanding to meet the speaker