Reading the Discourse of the Research Article
LTH 2014
Instructor: Margaret Newman-Nowicka

What I’d like you to have learned from this course

• You can get more from reading if you pay attention, not just to information, but also to the discourse in RAs.

• Discourse is language used to carry out purpose.

What I’d like you to have learned from this course

• The two main communicative purposes of RAs are:
  • To describe/explain WHAT was done (informative purpose)
  • To establish WHY it was done (persuasive purpose);
  • To show the reported research achieved novel outcomes of significance for the field

What I’d like you to have learned from this course

• The main purpose in introduction sections is to show
  • what problem was investigated
  • why that problem is of interest of the field
  • Attention to the section discourse helps you see:
    • What problems are considered relevant/interesting/highly interesting/not-yet accepted in the field/journal
    • Conversely, what sort of information and language is commonly used to carry out the section purposes in the field/journal
What I’d like you to have learned from this course

The main purpose in M-sections is to show:
• what method/MADT was applied or developed
• why that method/MADT is a credible means of dealing with the research problem
• Attention to discourse in the M-section can help you see:
  • What methods/MADTs are accepted and standard
  • and which are easily/not easily accepted as valid/suitable/excellent/superior/groundbreaking/Novel/innovative
  • Conversely, what sort of information and language is commonly used to carry out the section purposes

What I’d like you to have learned from this course

The main purpose in R&D-sections is to show:
• what novel outcomes were achieved
• why those outcomes are novel and significant for the goals of the field
• Attention to the section discourse helps you see:
  • What are considered relevant/interesting/highly interesting/not-yet accepted outcomes of significance in the field/journal
  • Conversely, what sort of information and language is commonly used to carry out the section purposes in the field/journal

What I’d like you to have learned from this course

The moves and steps presented in this class can help you think about and discuss:
• purpose in RAs
• the discourse is used in your journals to carry out those purposes:
• Moves and steps are tools for thinking about purpose in discourse sections.
  • They are not rules for how to write sections.
  • There are no rules
  • Sorry!

What I’d like you to have learned from this course

Researchers have developed different language conventions
• for carrying out the common communicative purposes of their fields
• These differences in discourse often reflect important differences in:
  • the type of research, the communicative purposes and readership of different fields/journals

What I’d like you to have learned from this course

Awareness of discourse conventions in your field can help you understand how authors position their research in relation to:
• The common goals, values and direction of the field
• Previous related research

What I’d like you to have learned from this course

Some authors are better than others at using the RA discourse and discourse conventions
• Some do not use the discourse effectively
  • You can still read them
• Some may be using uncommon (or no) discourse conventions
  • You can still read them
• But you may need to dig out the probable purpose using your awareness of the typical section purposes
Variation of discourse in RAs:

**Two aspects**

- Variations over time in reporting results
  (Discourse to establish novelty)

- Variation in the language of stance
  (Discourse to show attitude and opinion) for different disciplines/parts of RAs

### Results referred to in titles

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Titles</th>
<th>No. with results</th>
<th>%</th>
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<tr>
<td>1989</td>
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### Results in introductions (Move 3 step)

<table>
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<th>Year</th>
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<th>%</th>
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<tbody>
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<tr>
<td>1959</td>
<td>70</td>
<td>46</td>
<td>66%</td>
</tr>
<tr>
<td>1974</td>
<td>110</td>
<td>67</td>
<td>61%</td>
</tr>
<tr>
<td>1989</td>
<td>120</td>
<td>91</td>
<td>76%</td>
</tr>
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</table>

### Variation in results in titles

**The research problem only**

- Chemical and enzyme assisted degradation of phenanthrene
- Time dependence of primary and secondary oxidation products of dG
- Elasticity of Hierarchical Networks of Casein Proteins

**Also novel outcomes**

- Enhanced degradation of phenanthrene through combined chemical and enzyme treatment
- A novel technique for measuring the time dependence of primary and secondary oxidation products of dG
- Hierarchical Networks of Casein Proteins: An Elasticity Study based on Atomic Force Microscopy

### Results in result section headings

<table>
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<tr>
<th>Year</th>
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</tr>
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<td>1959</td>
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<td>2%</td>
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<tr>
<td>1974</td>
<td>110</td>
<td>293</td>
<td>22</td>
<td>8%</td>
</tr>
<tr>
<td>1989</td>
<td>120</td>
<td>446</td>
<td>156</td>
<td>35%</td>
</tr>
</tbody>
</table>
Previously, results may only have been referred to in the results section. Today, readers often assume:

- the title will allow them to predict novelty (and even significance)
- the introduction will often highlight the best novelty claims

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**Variation in expressing stance:**
Frequency of hedges and boosters in RAs

<table>
<thead>
<tr>
<th>Research Area</th>
<th>Hedges per 1000 words</th>
<th>Boosters per 1000 words</th>
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</thead>
<tbody>
<tr>
<td>Biology</td>
<td>12.2</td>
<td>3.5</td>
</tr>
<tr>
<td>Astrophysics</td>
<td>9.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Applied Linguistics</td>
<td>15.7</td>
<td>4.6</td>
</tr>
<tr>
<td>Marketing</td>
<td>19.0</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Based on 20 research articles, over 160,000 words

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**Modals**
(can, could, may, might, will, would, shall, should)
in parts of abstracts

<table>
<thead>
<tr>
<th></th>
<th>Modular</th>
<th>Purpose</th>
<th>Methods</th>
<th>Results</th>
<th>Conclu.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>15</td>
<td>3</td>
<td>5</td>
<td>14</td>
<td>13</td>
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<tr>
<td>Social</td>
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</tr>
<tr>
<td>Sciences</td>
<td>1</td>
<td>--</td>
<td>3</td>
<td>23</td>
<td>15</td>
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<td>Natural</td>
<td>12</td>
<td>--</td>
<td>5</td>
<td>9</td>
<td>32</td>
</tr>
</tbody>
</table>

300 abstracts from 51 journals

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**What I’d like you to have learned from this course**

- Awareness of paragraph organisation can help you determine:
  - what main topics are covered in section paragraphs
  - what the authors consider the main topics of importance in a section
  - Thus avoiding getting lost in details

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**Reading skills I’d like you to have developed during this course**

- You can skim top-down paragraphs
  - to get a quick overview of the main topics
  - to prepare to read the details in the rest of the paragraph (the supports)
  - to get an overview of the field
  - to prepare to read a difficult text
What I’d like you to have learned from this course

• It is important to read actively:
  • When you read a title, abstract, brief conclusion, topic sentence:
    • Think about what you already know about the topic (known information)
  • On this basis predict what (kind of) details
    • you expect to find (expected information)
    • you would like to find (sought information)
  • Check your predictions as you read

Using the tools and insights from this class when you write your own RAs

• Check the paragraphing in the journals for (possible) submission:
  • select sample articles that
    • report on research similar to that you plan to publish in the journal
    • you, colleagues and/or advisors consider (decently) well-written
  • Usually best those by native-speaker writers in higher impact journals

Using the tools and insights from this class when you write your own RAs

• Check the paragraphing in the journals for (possible) submission to see:
  • what sorts of topics are common in paragraphs in the different sections

Using the tools and insights from this class when you write your own RAs

• Using reading when writing RAs:
  • You don’t need to invent a discourse for your RA
  • But rather to use the conventions of the RAs in your field
  • and adapt those conventions so that they convey the intended message about the value and interest of your research

Using the tools and insights from this class when you write your own RAs

• Check the paragraphing in the journals for (possible) submission to see:
  • what sort of information and discourse is typically found in the TSs:
    • Factual statements, general ideas, points of discussion, reference to claims, reference to previous research…?
  • Which moves are common in the TSs, which in the SU’s
Using the tools and insights from this class when you write your own RAs

• Check the paragraphing in the journals for (possible) submission to see:
  • How supports are used to clarify/substantiate /illustrate/comment on the topic of the paragraph

• Look at the PURPOSE of the sentences, words and expressions and organization of text and information.
  • Try to use the same sorts of sentences/words and expressions and organization of information to signal the same sort of purposes in your RA.

• You can use your new checklist to help you
  • plan what to include in your RA to carry out your communicative purposes in ways that are adapted to your journal
  • monitor your writing

• To check your journal(s), you can ask for example:
  • Do the authors always / sometimes / never establish the territory in the I-sections?
  • If so, which steps are commonly / sometimes / never used for that move?
  • Why is the move / step commonly / never used?
  • How does this use of moves and steps show the interest of studying the problem?

• To plan and monitor your writing, you can ask for example:
  • Do I need to give background in the M- or R-sections or orient the audience to the interest of the methods, respectively novel outcomes? (The I need a Move 1)
  • How can I best describe the method / novel outcome? (How can I best carry out Move 2)
Using the tools and insights from this class when you write your own RAs

- To plan and monitor your writing, you can ask for example:
  - Do the facts in Move 2 “speak for themselves” or do I need to explain, clarify or substantiate the statements I make (Do I need a Move 3 and if so, what should I include?)
  - Which steps are best / most common for carrying out the purposes of the moves I’ve decided to use?

A final note

- When you read and write RAs, you are part of a long discourse tradition developed by science and engineering researchers
- This discourse has succeeded in communicating to a global audience information that is highly detailed, complex and precise.
- It has been instrumental in the development of new technologies and theories that have changed our world and the way we think.

What I’d like you to have learned from this course

- Enjoy being part of and continuing this proud discourse tradition!