TEMPLATE FOR THEMATIC PROGRESSION (TP) DIAGRAMS
Information Sheet

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PREAMBLE

- This template was created using Microsoft Excel. It is intended to help you produce TP diagrams, such as those in the following publications:

  Leong, P. A. (2015). Topical themes and thematic progression: The 'picture' of research articles. *Text & Talk*, *35*(3), 289–315.

  Leong, P. A. (2016). Thematic density of research-article abstracts: A systemic-functional account. *Word*, *62*(4), 209–227.

- A description of the *thematic-density index* (TDI) is available in Leong (2016).

PRELIMINARY ACTION

Before using the template, you should do the following:

- Convert the document that you want to analyze into a text file (e.g., by using Notepad). Otherwise, the template can become very sluggish or non-responsive.

- Break the text up into appropriate units of analysis. These can be clauses or *t*-units, depending on your preferred approach. Ensure that each unit of analysis is separated by a hard return (i.e., use the 'Return' or 'Enter' key). Do *not* number the units of analysis, or insert a blank line between them. Hence, your text should not look like Fig 1, but Fig 2.

```
The text here is a simple one. It will serve as our example text in this information sheet. The unit of analysis in this text is the ranking clause. Downranked clauses are not considered. Before you use the template and assign labels to your topical themes, you should convert your document into a text file. Also, each ranking clause should be on a new line. If you do not do this, the template may produce errors, and you may need to make numerous tiresome corrections. The corrections may in turn lead to migraines. And the migraines may in turn lead to your giving up on SFG analysis. The philosopher among us will no doubt have noticed a slippery-slope fallacy here. And you may now be further bothered by this. But you do not need to worry about migraines or fallacies if you follow the instructions carefully.
```

Fig 1. Wrongly prepared text

```
The text here is a simple one.
It will serve as our example text in this information sheet.
The unit of analysis in this text is the ranking clause.
Downranked clauses are not considered.
Before you use the template
and assign labels to your topical themes,
you should convert your document into a text file.
Also, each ranking clause should be on a new line.
If you do not do this,
the template may produce errors,
and you may need to make numerous tiresome corrections.
The corrections may in turn lead to migraines.
And the migraines may in turn lead to your giving up on SFG analysis.
The philosopher among us will no doubt have noticed a slippery-slope fallacy here.
And you may now be further bothered by this.
But you do not need to worry about migraines or fallacies
if you follow the instructions carefully.
```

Fig 2. Correctly prepared text

USING THE TEMPLATE

The template has two worksheets—*Data* and *Diagram*.

DATA WORKSHEET

- The *Data* worksheet has been preset to display 1,000 rows as *Clauses*. These rows are marked out using 'R0001', 'R0002', 'R0003', etc. If you have a very long text and need additional rows, please contact me. This is because inserting additional rows requires changes to the settings for the TP diagram. My email address is as follows:

  alvin.leong@ntu.edu.sg

- The second column of the *Data* worksheet is where the text goes. Copy and paste the text into this column.

- Your *Data* worksheet should now look like Fig 3.

	1	2	3	4	6	7	8	9	10
1	Clauses	Text	Semantic Labels	Frequency		Thematic-Density Index (TDI)			
2	R0001	The text here is a simple one.				No. of themes		0	
3	R0002	It will serve as our example text in this information sheet.				No. of semantic labels		1	
4	R0003	The unit of analysis in this text is the ranking clause.				TDI		0	
5	R0004	Downranked clauses are not considered.							
6	R0005	Before you use the template							
7	R0006	and assign labels to your topical themes,				Themes per Semantic Label			
8	R0007	you should convert your document into a text file.				Row Labels	No. of Themes	% of Total	Total
9	R0008	Also, each ranking clause should be on a new line.				(blank)	1000	100.00%	1000
10	R0009	If you do not do this,							
11	R0010	the template may produce errors,							
12	R0011	and you may need to make numerous tiresome corrections.							
13	R0012	The corrections may in turn lead to migraines.							
14	R0013	And the migraines may in turn lead to your giving up on SFG analysis.							
15	R0014	The philosopher among us will no doubt have noticed a slippery-slope fallacy here.							
16	R0015	And you may now be further bothered by this.							
17	R0016	But you do not need to worry about migraines or fallacies							
18	R0017	if you follow the instructions carefully.							
19	R0018								
20	R0019								
21	R0020								
22	R0021								
23	R0022								
24	R0023								
25	R0024								
26	R0025								
27	R0026								

Data | Diagram

Fig 3. Data worksheet with example text

- The third column—*Semantic Labels*—is where you assign appropriate labels to the topical themes. You are free to come up with any label to describe the semantic content of each topical theme. But please take note of the following:

  - Insert a number in front of each label. This is *obligatory*. The numbers should be ordered sequentially—so use '1' for the first label, '2' for the second, etc. For e.g., if you want to use 'Text' as your very first label, you should write '1 Text'.

    The numbers are critical to prevent sorting errors. If you do not include a number in front of the label, the program will sort the labels alphabetically, thus producing an inaccurate TP diagram.

- Assign a new number only to *new* labels. For e.g., if another topical theme corresponds to the same idea of *text*, simply re-use '1 Text' as the label. But if it corresponds to a new idea—e.g., *analytical unit*—then create a new label as follows: '2 Analytical Unit'.

- Keep track of the semantic labels by consulting the table titled *Themes per Semantic Label* (on the right of the *Data* worksheet). This table is automatically updated whenever you create a new label. As the semantic labels in this table are automatically sorted, it also helpfully indicates which number you should use if you need to create a new label.

- Do *not* create a new label when there is already an existing one in the table—i.e., do *not* write '1 Text' and '8 Text'. Always check the table first to decide whether to create a new label.

- The fourth column—*Frequency*—is automatically populated whenever a semantic label is inserted. You do not need to bother with this column.

- Once you have assigned semantic labels to the topical themes, the *Data* worksheet should look like Fig 4. Here, each topical theme is in bold and underlined (you can choose your own preferred formatting in Microsoft Excel).

	1	2	3	4	6	7	8	9	10
1	Clauses	Text	Semantic Labels	Frequency		Thematic-Density Index (TDI)			
2	R0001	**The text** here is a simple one.	1 Text	1		No. of themes		17	
3	R0002	**It** will serve as our example text in this information sheet.	1 Text	1		No. of semantic labels		9	
4	R0003	**The unit of analysis** in this text is the ranking clause.	2 Analytical Unit	1		TDI		1.88889	
5	R0004	**Downranked clauses** are not considered.	3 Clause	1					
6	R0005	Before **you** use the template	4 You	1					
7	R0006	and **(you)** assign labels to your topical themes,	4 You	1		Themes per Semantic Label			
8	R0007	**you** should convert your document into a text file.	4 You	1		Row Labels	No. of Themes	% of Total	Total
9	R0008	Also, **each ranking clause** should be on a new line.	3 Clause	1		1 Text	2	0.20%	1000
10	R0009	If **you** do not do this,	4 You	1		2 Analytical Unit	1	0.10%	
11	R0010	**the template** may produce errors,	5 Template	1		3 Clause	2	0.20%	
12	R0011	and **you** may need to make numerous tiresome corrections.	4 You	1		4 You	8	0.80%	
13	R0012	**The corrections** may in turn lead to migraines.	6 Correction	1		5 Template	1	0.10%	
14	R0013	And **the migraines** may in turn lead to your giving up on SFG analysis.	7 Migraine	1		6 Correction	1	0.10%	
15	R0014	**The philosopher** among us will no doubt have noticed a slippery-slope fallacy here.	8 Philosopher	1		7 Migraine	1	0.10%	
16	R0015	And **you** may now be further bothered by this.	4 You	1		8 Philosopher	1	0.10%	
17	R0016	But **you** do not need to worry about migraines or fallacies	4 You	1		(blank)	983	98.30%	
18	R0017	if **you** follow the instructions carefully.	4 You	1					
19	R0018								
20	R0019								
21	R0020								
22	R0021								

Data | Diagram

Fig 4. Data worksheet with example text, including semantic labels

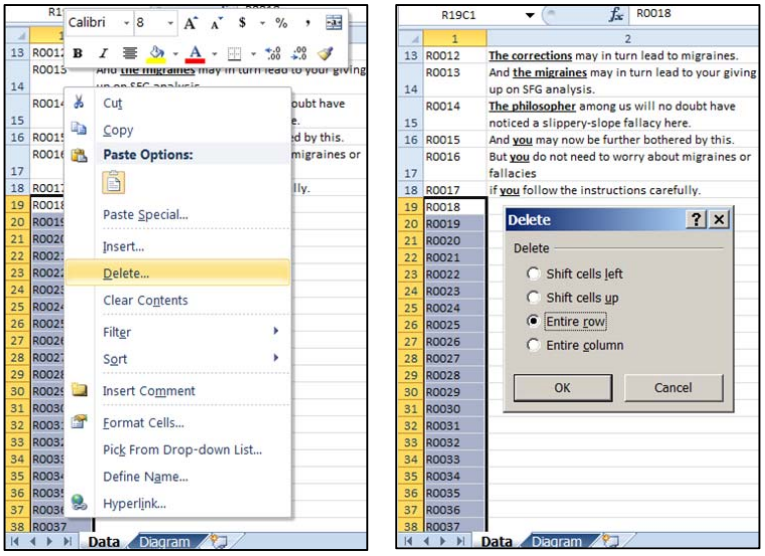
- You will have noticed that the *Themes per Semantic Label* table in Figs. 3–4 has a curious '(blank)' entry. This is because the template has 1,000 preset rows, of which only 17 rows have been filled with the example text and semantic labels. We need to therefore delete the unused rows. Please note:

  - Deleting the rows is not simply deleting the entries in the *Clauses* column from 'R0018' onwards. This achieves nothing.

  - Instead, you should do the following:

    - Select all the unused rows (by selecting the first cell, 'R0018', and then pressing Shift-Ctrl-↓).

- Right-click, and select 'Delete' followed by 'Entire row' (see Fig 5a–b).



(a) (b)

Fig 5. Deleting unused rows

- Once you have deleted the unused rows, your Data worksheet should look like Fig 6. Notice that '(blank)' is now no longer reflected in the *Themes per Semantic Label* table.

	Clauses	Text	Semantic Labels	Frequency
2	R0001	**The text** here is a simple one.	1 Text	1
3	R0002	**It** will serve as our example text in this information sheet.	1 Text	1
4	R0003	**The unit of analysis** in this text is the ranking clause.	2 Analytical Unit	1
5	R0004	**Downranked clauses** are not considered.	3 Clause	1
6	R0005	Before **you** use the template	4 You	1
7	R0006	and **(you)** assign labels to your topical themes,	4 You	1
8	R0007	**you** should convert your document into a text file.	4 You	1
9	R0008	Also, **each ranking clause** should be on a new line.	3 Clause	1
10	R0009	If **you** do not do this,	4 You	1
11	R0010	**the template** may produce errors,	5 Template	1
12	R0011	and **you** may need to make numerous tiresome corrections.	4 You	1
13	R0012	**The corrections** may in turn lead to migraines.	6 Correction	1
14	R0013	And **the migraines** may in turn lead to your giving up on SFG analysis.	7 Migraine	1
15	R0014	**The philosopher** among us will no doubt have noticed a slippery-slope fallacy here.	8 Philosopher	1
16	R0015	And **you** may now be further bothered by this.	4 You	1
17	R0016	But **you** do not need to worry about migraines or fallacies	4 You	1
18	R0017	if **you** follow the instructions carefully.	4 You	1

Thematic-Density Index (TDI)	
No. of themes	17
No. of semantic labels	8
TDI	2.125

Themes per Semantic Label			
Row Labels	No. of Themes	% of Total	Total
1 Text	2	11.76%	17
2 Analytical Unit	1	5.88%	
3 Clause	2	11.76%	
4 You	8	47.06%	
5 Template	1	5.88%	
6 Correction	1	5.88%	
7 Migraine	1	5.88%	
8 Philosopher	1	5.88%	

Fig 6. Data worksheet with deleted unused rows

- On the right of the *Data* worksheet, summary statistics are provided, as follows:
  - *TDI*—this is calculated by dividing the number of themes by the number of semantic labels used.
  - *Themes per semantic label*—the numbers are also expressed as percentage figures (of the total number of themes).

- In summary, the only two columns in which action is required from you are the *Text* and *Semantic Labels* columns. There is no need for you to change anything else in the other columns (apart from deleting unused rows at the end of your analysis).

DIAGRAM WORKSHEET

- The *Diagram* worksheet captures the TP diagram of the analyzed text. The diagram is automatically refreshed to reflect all the labels in the *Data* worksheet.

- The TP diagram of the example text is given in Fig 7.

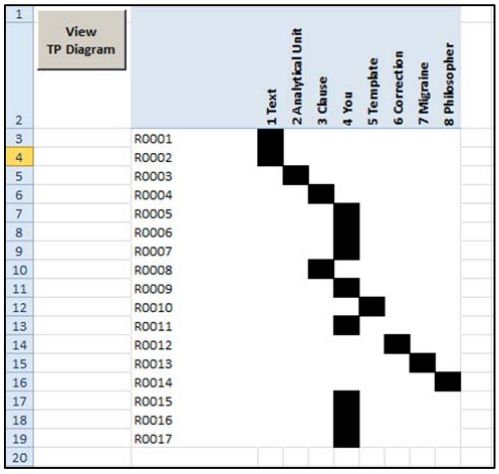


Fig 7. TP diagram of example text

- In a longer text, you may want to press the 'View TP Diagram' button at the top left corner of the worksheet to display the entire diagram on a single screen.

QUERIES

- I have tried to make the template as user-friendly as possible. Drop me an email message if you encounter any issues. Or if you simply need to rant about theme.