# THE DYNAMICS OF FUNCTIONAL MEANINGS IN DISCOURSE 

Volume II

LOH BOON LIANG
(B.SC. (HONS), NUS)
A THESIS SUBMITTED FOR
THE DEGREE OF MASTER OF ARTS (ENGLISH LANGUAGE)
DEPARTMENT OF ENGLISH LANGUAGE AND LITERATURE NATIONAL UNIVERSITY OF SINGAPORE

## TABLE OF CONTENTS

Volume II

TITLE PAGE ..... i
TABLE OF CONTENTS ..... ii
APPENDICES ..... 227
Appendix 1 Clauses of the Text ..... 227
Appendix 1.1 Main Story (852 words) ..... 227
Appendix 1.2 Ten (Last) Comments (990 words) ..... 230
Appendix 2 SF Analysis of Clauses ..... 234
Appendix 2.1 Main Story ..... 234
Appendix 2.2 Comments ..... 332
Appendix 3 SF Analysis Matrices ..... 368
Appendix 4 Theme/Rheme Calculation ..... 385
Appendix 5 SVD Definition ..... 387
Appendix 6 SVD Plots ..... 390
Appendix 6.1 Main story ..... 391
Appendix 6.2 Comments ..... 410
Appendix 7 The Grammar ..... 413
Appendix 7.1 Clause Page ..... 413
Appendix 7.2 Interclausal Page ..... 418
Appendix 7.3 Discourse Page ..... 419

## APPENDICES

## APPENDIX 1 CLAUSES OF THE TEXT

## Appendix 1.1 Main Story (852 words)

1 October 10, 2008 -- Updated 1136 GMT (1936 HKT)
2 Commentary:
3 Why there 's a crisis
4 -- and how to stop it
5 - CNN.com
6
7 At this point in the credit crisis, at least one thing is certain
8 : most policymakers lack a clue of what is really at stake.
9 Those with some knowledge are driving policy
10 looking through the rearview mirror.
11 Begin with the U.S. Treasury's $\$ 700$ billion bailout package.
12 This was presented as some magic pill
13 which, if gulped down, would quickly restore financial stability.
14 The "shock and awe" of the sheer size of the taxpayer-funded bailout would somehow restore confidence.
15 Instead, stock markets collapsed
16 and credit markets remained frozen.
17 This is because the credit crisis reflects something more fundamental than a serious problem of mortgage defaults.
18 Global investors, now on the sidelines, have declared a buyers' strike against the sophisticated paper assets of securitization that financial institutions use to measure and offload risk.
19 In recent years, our banks, borrowing to maximize the leverage of their assets at unheard-of levels, produced mountains of financial paper instruments (called asset-backed securities) with little means of measuring their value
20 Incredibly, these paper instruments were insured by more dubious paper instruments.
21 Therefore, the housing crisis was a mere trigger for a collapse of trust in paper,
22 followed by a de-leveraging of the entire global financial system.
23 As a result, we are experiencing the painful downward reappraisal of the value of virtually every asset in the world.
24 So what are these paper instruments, these asset-backed or mortgage-backed securities?

52 Translation: The U.S. financial system will have a whopping $\$ 15$ trillion to $\$ 20$ trillion less credit available next year than was around a year and a half before.
53 The cost of money is rising
I like to use a salad analogy.
Before the last decade, bankers simply lent in the form of syndicated loans. But with the huge expansion of the global economy in the 1990s, which produced an ocean of new capital, the bankers came up with an idea called securitization.
Instead of making simple loans and holding them until maturity, a bank collected all its loans together, then diced and sliced them up into a big, beautiful tossed salad.
The idea was to sell (for huge fees) individual servings of diversified financial salad around the world.
34 The only problem: under an occasional piece of lettuce was a speck of toxic waste in the form of a defaulting subprime mortgage.
Eat that piece of salad, and you're dead.
The overall salad looked delicious, but suddenly global investors were no longer ordering salad. No one knew the location of the toxic waste. This distrust heightened when global interest rates began to rise. So what does this salad boycott mean for the future and why have financial markets collapsed so brutally? The markets are telling us the world will face a serious credit crunch in 2009 regardless of how much money government spends to remove the toxic salad from bank balance sheets. Policymakers have no means of forcing the banks to start lending short of nationalizing the entire financial system.
After all, the U.S. banks alone so far during the crisis have lost upwards of \$2 trillion from their collective asset base.
Most banks are leveraged by more than 10 to 1 . and the availability shrinking. True, the banks will still lend -- but the fear is they will do it only to people such as Warren Buffett, who don't need loans.
What is uncertain is the amount of lending to borrowers engaged in entrepreneurial risk, the center of business reinvention and job creation.

59 Apart from the economic pain resulting from shrinking credit markets, we are about to see an earthquake in the relationship between government and financial markets.
60 The great uncertainty is whether government has the power to rescue the financial system in times of crisis.
61 It seems doubtful.
62 In the United Kingdom, for example, the collected assets of the major banks are four times the nation's gross domestic product (GDP).
63 A similar situation exists in many Euro zone countries.
64 This means government cannot bail out the system even if it wanted to.
65 Given such massive exposure, government guarantees in a time of crisis become meaningless.
66 Yet because of the interconnected web of global financial relationships, we are all vulnerable to the threat.
67 The collapse of, say, a major European bank would hardly leave American workers immune.
68 Our policy leaders in Washington are thinking domestically
69 when the solution to the credit crisis will be global.
70 It is not that the world lacks money;
71 it is that the world's money is sitting on the sidelines
72 -- more than $\$ 6$ trillion in idle global money markets alone.
73 The challenge will be to reform our financial system quickly
74 to draw that global capital back into more productive uses.
75 The first step should be efforts to make the market for future asset-backed paper more transparent and credible.
76 We need a private/public global bank clearing facility.
77 The bankers don't trust each other.
78 The central banks, working with the private institutions in providing enhanced data, need to begin to refashion the world's financial architecture.
79 And while that is happening,
80 the major governments of the world, including the Chinese, should begin major fiscal efforts to stimulate their weakening economies.

## Appendix 1.2 Ten (Last) Comments (990 words)

1 Commentary: Why there's a crisis -- and how to stop it - CNN.com
2 Sound Off: Your opinions and comments
3
4 1. RCE
5 One easy way to stop the market volatility would be to make permanent the ban on short sales, across the board.
6 Take the short sales out of the market
7 and you will see reduced market volatility.
8
9 2. Professor Bear
10 It is much easier to explain the disaster in progress than to specify a remedy
11 -- sort of like noticing a tsunami is about to hit a coastal community is much easier than figuring out how to evacuate the community in time to save everyone.

14 I truly do wonder
15 how all these professionals, people who are paid for their knowledge of the workings of the nation's and the world's financial dealings, did not foresee the impending collapse of this house of cards built out of these toxic paper instruments?
16 It seems that for a long time your slightly above average Joe Sixpack knew 17 the bubble was going to burst.
18 How could these highly paid professionals have been blind to it?
19 Or were they perfectly aware of the situation
20 and playing chicken with the world's economy,
21 assured by their golden parachutes
22 if they swerved too late
23 that they would be able to ride out the chaos they had created?
24 Next time around I hope
25 there is someone willing to point out the elephant in the room and the fact the emperor has no clothes,
26 well, that someone with some power would.
27 It's not even a matter of regulation vs. de-regulation.
28 It is a matter of personal responsibility vs. corporate greed.
29 Forsaking all in the pursuit of profit is not the foundation of a sound economy.
30 Why weren't the boards of directors seeking sound investments instead of the quick buck?
31 Why were investors willing to ignore the fact they were participating in a dangerous pyramid scheme?

32 Why was Joe Sixpack getting a mortgage for a house he couldn't afford to maintain let alone pay for?

41 On the other side of the globe they wake up

51 Pulling all of your money out of stocks right now is not only a hasty decision that you will regret,
52 but adding to the problem
53 and making things worse.
54 Unless you are on the cusp of retirement,
55 sit tight
56 and ride it out
57 and don't panic
58 because panic only adds to the problem.

61 I believe one of the problems is with the credit default swap (CDS) market, particularly what are called naked swaps.
62 A CDS is a contract between two parties
63 where the buyer pays a premium to the seller for protection against a debt security (like a collaterized mortgage obligation or a company bond) defaulting.
64 If the debt defaults,
65 the seller then needs to pay the buyer the par value of the debt.
66 This is basically an insurance contract against defaulting debt.
67 The problem is that speculators (hedge funds, etc) have bought this insurance on debt they don't even own.

68 This is where the regulation has failed.
69 So now if a $\$ 1 \mathrm{MM}$ bond defaults, 70 and 100 speculators have bought a CDS on it, the sellers of the CDS need to pay off that $\$ 1 \mathrm{MM}$ bond 100 times over. How does this make economic sense?!
73 The reason for the credit squeeze is that the banks and financial institutions who sold these swaps have to acquire as much cash as they can in case they have to pay off on the defualts of the underlying debt.
They can't lend money

- they need to pay the speculators.

The credit crisis is not not going away until this issue is addressed.
I think the government should make naked swaps illegal

- force all the financial institutions and speculators to unwind the contracts. Have the sellers give the buyers thier premium back,
close the swaps, and call it even.
84 Then the banks and financial instiutions won't have to hoard their cash and instead can start loaning it out again.
86 The outstanding value of all the CDS is on the order of $\$ 50$ TRILLION dollars!!
The credit markets are not going to get back to normal until this is addressed.
But that is just my opinion.

6. Steve

## 7. Texrat

97 Wow, a refreshing dose of common sense and reason.

## 8. Mike M

It's emotion fueling it now
102 so the media could help
103 by pulling back on the rabid coverage -- the amount of coverage and the way its couched.
We do not need to see another "Is this another Great Depression" piece when most Americans don't fully understand the complexity of the market nor the full details of the Depression.
106 The press hype adds to the panic.

107 Watching every flicker of the Dow is not representative as well.
108 Do we even know
109 what 6,000 points means?
110 The average invesotr needs to ask themseklves:
111 Is that my price?
112 Some investors see it as a buying opportunity.
113 The President's near daily special press conferences also do not help,
114 especially having lost his credibility with Mission Accomplished.
115
116 9. Jonathan
117 If you really knew
118 "how to stop it,"
119 wouldn't you be a billionaire 700 times over?

121 10. Susan
122 Has anyone ever thought to do an in-depth analyses of Bush and his associates finances?
123 I firmly believe they've gotten brutally rich during his term.
124 First with invading Iraq (oil)
125 then laying in bed with Wall St.

In all clauses presented in Appendix 1.1 and Appendix 1.2, the original form of the text is preserved - including all misspellings and punctuation marks

## APPENDIX 2 SF ANALYSIS OF CLAUSES

This is the most important section in the Appendices (and perhaps in the entire thesis); the information in this section forms the basis of all discussions in the main body of this thesis. Analysis at the level of the clause has been the basis of research in linguistics through the ages. Here is a complete compilation of all the SF analyses, at the level of the clause, of all clauses (as listed in Appendix 1: Clauses of the Text) of the main story and comments. The clause analysis is presented in the form of printouts from the Clause Page of Systemics.

## Appendix 2.1 Main Story

SF analysis of the main story is comprehensive, spanning all metafunctions. For a complete list of dimensions of meaning present within the main story analysis, see Appendix 3: SF Analysis Matrices. The analysis includes the title: clause 3 \& 4; and 74 ranking clauses numbered 7 to 80 .

## Index to Appendix 2.1

Main Story Clause Page
clause $1 \quad 236$
clause 10240
clause 20255
clause $30 \quad 266$
clause 40276
clause $50 \quad 287$
clause 60302
clause $70 \quad 314$
clause 80330

For each clause the printout consists of two tables: Clause Table, followed by the Analysis Table. The occasional Text Box beside the tables contains remarks, sometimes explaining why I analysed clause elements in non-conventional ways.

Clause 1

Clause 2
Commentary:

## Clause 3

|  | Why | there | 's | a | crisis |
| :---: | :---: | :---: | :---: | :---: | :---: |
| S1 | Rank-shift |  |  |  |  |
| S_C | Clause-1 |  |  |  |  |
| TH2 | Topic <br> WH <br> Theme | Rheme |  |  |  |
| M2 | $\begin{aligned} & \text { Circ-Adj } \\ & \text { WH } \\ & \text { Residue } \end{aligned}$ |  | Fin <br> Mood | Subj <br> Mood |  |
| T2 | Caus <br> Reas |  | Proc <br> Exist | Ex |  |
| E2 | Circ |  | Proc | Medm |  |

Clause 4


## Clause 5

- CNN.com

Clause 6

Clause 7

|  | At | this | point | [in t | the | credit | crisis], | at | least | one | thing | is | certain |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Topic <br> Theme |  |  |  |  |  |  | Rheme |  |  |  |  |  |
| M1 | Circ-Adj <br> Residue |  |  |  |  |  |  | Adj Comm Mood |  | Subj <br> Mood |  | Fin <br> Mood | Comp <br> Residue |
| T1 | $\begin{aligned} & \text { Locn } \\ & \text { Time } \end{aligned}$ |  |  |  |  |  |  |  |  | Carr |  | $\begin{aligned} & \text { Proc } \\ & \text { ReIn } \\ & \text { Attr } \\ & \text { Int } \end{aligned}$ | Att |
| E1 | Circ |  |  |  |  |  |  |  |  | Medm |  | Proc | Range |
| MET1m |  |  | $\begin{aligned} & \text { Exp } \\ & \text { Circ } \\ & \text { Ent } \end{aligned}$ |  |  |  |  |  |  | Tex |  |  | Int <br> Modal Qual |


| Tex1 | Theme <br> simple | Topic <br> marked |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | TENSE <br> present | POLARITY <br> positive |
| Exp1 | VOICE <br> middle <br> medium |  |  |  |

## Clause 8

|  | : | most | policymakers | lack | a | clue | [[of | what | is | really | at | stake]]. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S1 |  |  |  |  | Rank-shift |  |  |  |  |  |  |  |
| S1c |  |  |  |  | Head |  | Clause-1 |  |  |  |  |  |
| TH1 | Text <br> Conj <br> Str <br> Theme | Topic <br> Theme |  | Rheme |  |  |  |  |  |  |  |  |
| M1 |  | Subj <br> Mood |  | Fin <br> Pred <br> Mood-Residue | Comp <br> Residue |  |  |  |  |  |  |  |
| T1 |  | Carr <br> Possr |  | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Attr } \\ & \text { Poss } \end{aligned}$ | Att Possd |  |  |  |  |  |  |  |
| E1 |  | Medm |  | Proc | Range |  |  |  |  |  |  |  |
| M2 |  |  |  |  |  |  | Residue | Subj <br> WH <br> Mood | Fin <br> Mood | Adj <br> Mood | Comp <br> Residue |  |
| T2 |  |  |  |  |  |  |  | Carr | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Attr } \\ & \text { Circ } \end{aligned}$ |  | Att Circ |  |
| E2 |  |  |  |  |  |  |  | Medm | Proc |  | Range |  |

\(\left.$$
\begin{array}{|c|l|l|l|l|l|}\hline \text { Tex1 } & \begin{array}{l}\text { Theme } \\
\text { multiple } \\
\text { textual-1 }\end{array} & \begin{array}{l}\text { Topic } \\
\text { unmarked }\end{array} & & \\
\hline \text { Int1 } & \begin{array}{l}\text { SPEECH-FUNCTION } \\
\text { Knowledge } \\
\text { statement }\end{array} & \begin{array}{l}\text { Mood } \\
\text { declarative } \\
\text { full }\end{array} & \begin{array}{l}\text { TENSE } \\
\text { present }\end{array} & \begin{array}{l}\text { POLARITY } \\
\text { positive }\end{array} & \\
\hline \text { S1 } & \begin{array}{l}\text { VOICE } \\
\text { middle } \\
\text { medium }\end{array} & \begin{array}{l}\text { Clause-1 }\end{array} & \begin{array}{l}\text { SPEECH-FUNCTION } \\
\text { Knowledge } \\
\text { statement }\end{array} & \begin{array}{l}\text { Mood } \\
\text { declarative } \\
\text { full }\end{array} & \begin{array}{l}\text { MOOD-ADJUNCT } \\
\text { intensity }\end{array} \\
\hline \text { Exp2 } & \begin{array}{l}\text { VOICE } \\
\text { middle } \\
\text { medium }\end{array}
$$ \& TENSE <br>

present\end{array}\right]\) positive | POLARITY |
| :--- |

## Clause 9

|  | Those | with | some | knowledge | are | driving | policy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Topic <br> Theme |  |  |  | Rheme |  |  |
| M1 | Subj Mood |  |  |  | $\begin{aligned} & \text { Fin } \\ & \text { Mood } \end{aligned}$ | $\begin{aligned} & \text { Pred } \\ & \text { Residue } \end{aligned}$ | $\begin{array}{\|l} \text { Comp } \\ \text { Residue } \end{array}$ |
| T1 | Actor |  |  |  | $\begin{array}{\|l} \text { Proc } \\ \text { Mat } \end{array}$ |  | Goal |
| E1 | Agent |  |  |  | Proc |  | Medm |


| Tex1 | Theme <br> simple | Topic <br> unmarked |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | TENSE <br> present | POLARITY <br> positive |
| Exp1CE <br> effective <br> active <br> agent |  |  |  |  |

policy: Range or Goal.
Range-like: policy is a plan or strategy, doesn't exist without the action.
Goal-like: policy is developed/made/steered, impacted upon

## Clause 10

|  | looking | through | the rearview | mirror. |  |
| ---: | :--- | :--- | :--- | :--- | :--- |
| TH1 | Rheme |  |  |  |  |
| M1 | Pred | Comp |  |  |  |
|  | Residue | Residue |  |  |  |
| T1 | Proc | Locn |  |  |  |
|  | Behl | Place |  |  |  |
| E1 | Proc | Circ |  |  |  |


| Tex1 | Theme <br> none <br> non-finite | Topic <br> none |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> Statement | Mood <br> non-finite |  |  |
| Exp1 | VOICE <br> none |  |  |  |

## Clause 11

|  | Begin | with | the | U.S. | Treasury's | \$700 | billion | bailout | package |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | $\begin{aligned} & \text { Topic } \\ & \text { Theme } \end{aligned}$ |  | Rheme |  |  |  |  |  |  |
| M1 | $\begin{aligned} & \text { Pred } \\ & \text { Residue } \end{aligned}$ |  | Comp Residue |  |  |  |  |  |  |
| T1 | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |  | Range |  |  |  |  |  |  |
| E1 | Proc |  | Range |  |  |  |  |  |  |
| MET1m | Tex |  |  | Exp <br> Ent <br> Mod |  | Exp <br> Ent <br> Mod |  | Exp <br> Proc <br> Qual | Exp <br> None <br> Ent |


| Tex1 | Theme simple | Topic unmarked |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> imperative full | Mood metaphor | TENSE present | POLARITY <br> positive |
| Exp1 | VOICE <br> middle <br> medium |  |  |  |  |
| Exp1m | VOICE <br> middle <br> medium |  |  |  |  |

mood met because it means "we're going to begin with..."

## Clause 12

|  | This | was | presented | as | some | magic | pill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 |  | Rheme |  |  |  |  |  |
| M1 |  | Fin Mood | Pred Residue | Circ-Adj <br> Residue |  |  |  |
| T1m | Goal | $\begin{array}{\|l} \text { Proc } \\ \text { Mat } \end{array}$ |  | Role Guise |  |  |  |
| T1 | Idd Token | $\begin{array}{\|l} \hline \text { Proc } \\ \text { Reln } \\ \text { Iden } \\ \text { Int } \end{array}$ |  | \|dr <br> Value |  |  |  |
| E1m | Medm | Proc |  | Circ |  |  |  |
| E1 | Medm | Proc |  | Range |  |  |  |


| Tex1 | Theme <br> simple | Topic <br> unmarked |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | TENSE <br> past | POLARITY <br> positive |
| Exp1m | VOICE <br> effective <br> passive <br> ell-agent | VOICE <br> middle <br> medium |  |  |

[^0]
## Clause 13

|  | which, | <<if | gulped | down>>, | would | quickly | restore | financial | stability |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S1 |  | Interrupt |  |  |  |  |  |  |  |
| S1c |  | Clause-1 |  |  |  |  |  |  |  |
| TH1 | Topic <br> WH <br> Theme |  |  |  | Rheme |  |  |  |  |
| M1 | Subj <br> WH <br> Mood |  |  |  | Fin <br> Modl <br> Mood | Circ-Adj <br> Residue | Pred <br> Residue | Comp <br> Residue |  |
| T1 | Actor |  |  |  | $\begin{array}{\|l} \text { Proc } \\ \text { Mat } \end{array}$ | $\begin{aligned} & \text { Mann } \\ & \text { Qual } \end{aligned}$ | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | Range |  |
| E1 | Medm |  |  |  | Proc | Circ | Proc | Range |  |
| MET1m |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Exp } \\ & \text { Qual } \\ & \text { Ent } \end{aligned}$ |
| M2 |  | Residue | Fin <br> Pred <br> Mood-Residue |  |  |  |  |  |  |
| T2 |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | Range |  |  |  |  |  |
| E2 |  |  | Proc | Range |  |  |  |  |  |


| Tex1 | Theme <br> simple | Topic <br> unmarked <br> Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | MODALITY <br> Modalization <br> probability <br> median | MODALITY-orientation <br> subjective <br> implict |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Exp1 | VOICE <br> middle <br> medium | TENSE <br> future | POLARITY <br> positive |  |  |  |
| S1 | Clause-1 | Int2 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> non-finite |  |  |


| Clau | $\begin{gathered} \text { se } 14 \\ \text { The } \end{gathered}$ | "shock | and | awe" |  |  | sheer | size | [ 0 | the | taxpayer | -funded | bailout]] | would | somehow | restore | confidence. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Topic <br> Theme |  |  |  |  |  |  |  |  |  |  |  |  | Rheme |  |  |  |
| M1 | Subj <br> Mood |  |  |  |  |  |  |  |  |  |  |  |  | Fin <br> Modl <br> Mood | Circ-Adj <br> Residue | Pred <br> Residue | Comp <br> Residue |
| T1 | Actor |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | Mann <br> Means | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | Range |
| E1 | Medm |  |  |  |  |  |  |  |  |  |  |  |  | Proc | Circ | Proc | Range |
| MET1m |  | $\begin{aligned} & \text { Exp } \\ & \text { Proc } \\ & \text { Ent } \end{aligned}$ |  | $\begin{aligned} & \text { Exp } \\ & \text { Proc } \\ & \text { Ent } \end{aligned}$ |  |  |  | $\begin{array}{\|l} \text { Exp } \\ \text { Attrib } \\ \text { Ent } \end{array}$ |  |  | $\begin{aligned} & \text { Exp } \\ & \text { Ent } \\ & \text { Mod } \end{aligned}$ | Exp <br> Proc <br> Qual | $\begin{array}{\|l} \text { Exp } \\ \text { Proc } \\ \text { Ent } \end{array}$ |  |  |  | Exp <br> Qual <br> Ent |


| Tex1 | Theme <br> simple | Topic <br> unmarked <br> -- |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | MODALITY <br> Modalization <br> probability <br> median | MODALITY-orientation <br> subjective <br> implict | TENSE <br> future | POLARITY <br> positive |
| Exp1 | VOICE <br> middle <br> medium |  |  |  |  |  |

"somehow" has some interpersonal function, expressing the author's own misgivings about this

Clause 15

|  | Instead, | stock | markets | collapsed |
| :---: | :---: | :---: | :---: | :---: |
| TH1 | Text <br> Conj <br> Adj <br> Theme | Topic <br> Theme |  | Rheme |
| M1 |  | Subj Mood |  | Fin <br> Pred <br> Mood-Residue |
| T1 |  | Actor |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |
| E1 |  | Medm |  | Proc |

$\left.\begin{array}{|l|l|l|l|l|}\hline \text { Tex1 } & \begin{array}{l}\text { Theme } \\ \text { multiple } \\ \text { textual-1 }\end{array} & \begin{array}{l}\text { Topic } \\ \text { unmarked }\end{array} & & \\ \hline \text { Exp1 } & \begin{array}{l}\text { SPEECH-FUNCTION } \\ \text { Knowledge } \\ \text { statement }\end{array} & \begin{array}{l}\text { Mood } \\ \text { VOICE } \\ \text { declarative } \\ \text { middle } \\ \text { medium }\end{array} & \begin{array}{l}\text { full }\end{array} & \text { past }\end{array} \quad \begin{array}{l}\text { POLARITY } \\ \text { positive }\end{array}\right]$

## Clause 16

|  | and | credit | markets | remained | frozen. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Text <br> Conj <br> Str <br> Theme | Topic <br> Theme |  | Rheme |  |
| M1 |  | Subj <br> Mood |  | Fin <br> Pred <br> Mood-Residue | Comp <br> Residue |
| T1 |  | Carr |  | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Attr } \\ & \text { Int } \end{aligned}$ | Att |
| E1 |  | Medm |  | Proc | Range |
| MET1m |  |  |  |  | Exp <br> Proc <br> Qual |

$\left.\begin{array}{|l|l|l|l|l|}\hline \text { Tex1 } & \begin{array}{l}\text { Theme } \\ \text { multiple } \\ \text { textual-1 }\end{array} & \begin{array}{l}\text { Topic } \\ \text { unmarked }\end{array} & & \\ \text { Int1 } & \text {-- }\end{array} \begin{array}{l}\text { SPEECH-FUNCTION } \\ \begin{array}{l}\text { Knowledge } \\ \text { Statement }\end{array}\end{array} \begin{array}{l}\text { Mood } \\ \text { declarative } \\ \text { full }\end{array} \quad \begin{array}{l}\text { TENSE } \\ \text { past }\end{array} \quad \begin{array}{l}\text { POLARITY } \\ \text { positive }\end{array}\right\}$

## Clause 17

|  | This | is | because | [ [the | credit | crisis reflects | something |  | \{which | is) | re | damental | an | erious | problem | mortga | defaul |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S1 |  |  |  | Rank-shift |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S1c |  |  |  | Clause-1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S2 |  |  |  |  |  |  |  | Rank-shift |  |  |  |  |  |  |  |  |  |  |
| S2c |  |  |  |  |  |  |  | Clause-2 |  |  |  |  |  |  |  |  |  |  |
| S2cc |  |  |  |  |  |  |  |  | Ellipsis |  |  |  |  |  |  |  |  |  |
| TH1 | Topic <br> TH <br> Theme | Rheme |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M1 | Subj <br> TH <br> Mood | $\begin{aligned} & \text { Fin } \\ & \text { Mood } \\ & \hline \end{aligned}$ | Pred Residue | Comp <br> Residue |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| T1 | Idd Value <br> -- | Proc Reln Iden Circ |  | Idr <br> Token <br> Circ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| E1 | Medm | Proc |  | Agent |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MET1m | Tex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M2 |  |  |  | $\begin{aligned} & \hline \text { Subj } \\ & \text { Mood } \\ & \hline \end{aligned}$ |  | Fin  <br> Pred  <br> Mood-Residue  | Comp <br> Residue |  |  |  |  |  |  |  |  |  |  |  |
| T2 |  |  |  | $\begin{array}{\|l\|} \hline \text { Idd } \\ \text { Token } \end{array}$ |  | Proc <br> Reln <br> Iden <br> Int | $\begin{array}{\|l\|} \hline \text { Idr } \\ \hline \text { Value } \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |
| E2 |  |  |  | Medm |  | Proc | Range |  |  |  |  |  |  |  |  |  |  |  |
| M3 |  |  |  |  |  |  |  |  | Subj <br> WH <br> Mood | Fin Mood | Comp <br> Residue |  |  |  |  |  |  |  |
| T3 |  |  |  |  |  |  |  |  | Carr | Proc <br> Reln <br> Attr <br> Int | Att |  |  |  |  |  |  |  |
| E3 |  |  |  |  |  |  |  |  | Medm | Proc | Range |  |  |  |  |  |  |  |
| MET2m |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Exp } \\ & \text { Ent } \\ & \text { Mod } \end{aligned}$ | Exp <br> Proc <br> Ent |  |


| Tex1 | Theme <br> simple | Topic unmarked -- |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION <br> Knowledge statement | Mood <br> declarative full | TENSE present | POLARITY <br> positive |
| Exp1 | effective passive agent |  |  |  |
| S1 | Clause-1 |  |  |  |
| Int2 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative full | TENSE present | POLARITY <br> positive |
| Exp2 | VOICE middle medium |  |  |  |
| S2 | Clause-2 |  |  |  |
| Int3 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood declarative ellipsed | TENSE present | POLARITY <br> positive |
| Exp3 | VOICE <br> middle <br> ell-medium |  |  |  |

because="caused by (the fact that)" (therefore process)
X causes Y (or X so Y )
Y is because X
(identifying)

## Clause 18




| Tex1 | Theme simple | Topic unmarked <br> - |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION Knowledge statement | Mood declarative full | TENSE <br> past | POLARITY positive |  |  |  |  |  |  |  |  |
| Exp1m | $\begin{aligned} & \text { VOICE } \\ & \text { middle } \\ & \text { medium } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |
| Exp1 | $\begin{aligned} & \text { VOICE } \\ & \text { middle } \\ & \text { medium } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |
| S1 | Clause-1 |  |  |  | Clause-2 |  |  |  | Clause-3 |  | Clause-4 |  |
| Int2 | SPEECH-FUNCTION <br> Knowledge statement | Mood declarative ellipsed | TENSE present | POLARITY positive | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood declarative full | TENSE present | POLARITY positive | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood non-finite | SPEECH-FUNCTION <br> Knowledge statement | Mood non-finite |
| Exp2 | VOICE middle ell-medium |  |  |  | VOICE <br> effective <br> active agent |  |  |  | VOICE none |  | VOICE none |  |

## Clause 19




| Tex1 | Theme simple | Topic marked |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION Knowledge statement | Mood declarative full | TENSE past | POLARITY positive |  |  |  |  |
| Exp1 | $\begin{aligned} & \text { VOICE } \\ & \text { middle } \\ & \text { medium } \end{aligned}$ |  |  |  |  |  |  |  |
| S1 | Clause-1 |  | Clause-2 |  | Clause-3 |  | Clause-4 |  |
| Int2 | SPEECH-FUNCTION Knowledge statement | Mood non-finite | SPEECH-FUNCTION <br> Knowledge statement | Mood non-finite | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood non-finite | SPEECH-FUNCTION <br> Knowledge statement | Mood non-finite |
| Exp2 | VOICE none |  | VOICE none |  | VOICE none |  | VOICE none |  |

Clause 20

|  | Incredibly, | these | paper | instruments | were | insured | by | more | dubious | paper | instruments. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Int <br> Mod <br> Adj <br> Theme | Topic <br> Theme |  |  | Rheme |  |  |  |  |  |  |
| M1 | Adj <br> Comm <br> Mood | Subj <br> Mood |  |  | Fin <br> Mood | Pred <br> Residue | Circ-Adj <br> Residue |  |  |  |  |
| T1 |  | Idd <br> Value |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Iden } \\ & \text { Circ } \end{aligned}$ |  | ldr Token |  |  |  |  |
| E1 |  | Medm |  |  | Proc |  | Agent |  |  |  |  |
| MET1m | Int <br> Modal <br> Circ |  |  |  |  |  |  |  | Int <br> Modal <br> Qual |  |  |


| Tex1 | Theme <br> multiple <br> interpersonal-1 | Topic <br> unmarked |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Ext1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | TENSE <br> past | POLARITY <br> positive |
| effective <br> passive <br> agent |  |  |  |  |

Kevin: X were insured by Y =X were represented by Y
Self: circ because insured $=$ covered

## Clause 21

|  | Therefore, | the | housing | crisis | was | a | mere | trigger | [for | collapse | [of trust | [in | paper[]], |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Text <br> Conj <br> Adj <br> Theme | Topic <br> Theme |  |  | Rheme |  |  |  |  |  |  |  |  |
| M1 |  | Subj <br> Mood |  |  | $\begin{aligned} & \text { Fin } \\ & \text { Mood } \end{aligned}$ | Comp <br> Residue |  |  |  |  |  |  |  |
| T1 |  | Carr |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Attr } \\ & \text { Int } \end{aligned}$ | Att |  |  |  |  |  |  |  |
| E1 |  | Medm |  |  | Proc | Range |  |  |  |  |  |  |  |
| MET1m |  |  | Exp <br> Proc <br> Qual |  |  |  |  | $\begin{aligned} & \text { Exp } \\ & \text { Proc } \\ & \text { Ent } \end{aligned}$ |  | Exp Proc Ent | Exp <br> Proc <br> Ent |  | $\begin{aligned} & \text { Exp } \\ & \text { Ent } \\ & \text { Mod } \end{aligned}$ |


| Tex1 |  | Topic unmarked -- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | MOOD-ADJUNCT <br> intensity | TENSE <br> past | POLARITY <br> positive |
| Exp1 | VOICE <br> middle <br> medium |  |  |  |  |




| Tex1 | Theme <br> multiple <br> textual-1 | Topic <br> unmarked |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | TENSE <br> present | POLARITY <br> positive |
| VOICE <br> middle <br> medium |  |  |  |  |



## Clause 25

|  | 1 | \{1\} | like | to | use | a | salad | analogy. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Topic <br> Theme | Rheme |  |  |  |  |  |  |
| M1 | $\begin{aligned} & \text { Subj } \\ & \text { Mood } \end{aligned}$ | Modal-Met <br> Mood |  | Pred <br> Residue |  | Comp <br> Residue |  |  |
| T1 | Actor |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |  | Range |  |  |
| E1 | Medm |  |  | Proc |  | Range |  |  |


| Tex1 | Theme <br> multiple <br> interpersonal-1 | Topic <br> unmarked |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Int1 | SPEECH-FUNCTION <br> Action <br> offer | Mood <br> declarative <br> full | MODALITY <br> Modulation <br> inclination <br> median | MODALITY-orientation <br> subjective <br> explicit | POLARITY <br> positive |
| Exp1VOICE <br> middle <br> medium |  |  |  |  |  |


| Cla |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Before | the | last | decade, | bankers | simply | lent | in | the | form | of syndicated | loans. |
| TH1 | Topic <br> Theme |  |  |  | Rheme |  |  |  |  |  |  |  |
| M1 | Circ-Adj <br> Residue |  |  |  | Subj <br> Mood | Adj <br> Mood | Fin <br> Pred <br> Mood-Residue | Circ-Adj <br> Residue |  |  |  |  |
| T1 | $\begin{aligned} & \text { Locn } \\ & \text { Time } \end{aligned}$ |  |  |  | Actor |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | $\begin{aligned} & \text { Role } \\ & \text { Guise } \end{aligned}$ |  |  |  |  |
| E1 | Circ |  |  |  | Medm |  | Proc | Circ |  |  |  |  |
| MET1m |  |  |  |  |  |  |  |  |  |  | Exp <br> Proc <br> Qual |  |


| Tex1 | Theme <br> simple | Topic <br> marked <br> Int1 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | MOOD-ADJUNCT <br> intensity | TENSE <br> past | POLARITY <br> positive |  |
|  | VOICE <br> middle <br> medium |  |  |  |  |

## Clause 27


see IFG 3rd ed p. 542: "and" and "but" are not syntactic adjuncts but can function as conj adj
the bankers came up with an idea [[called securitization]].


| Tex1 | Theme <br> multiple <br> textual-1 | Topic <br> marked <br> Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | TENSE <br> past | POLARITY <br> positive |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Exp1m | VOICE <br> middle <br> medium | Exp1 | VOICE <br> middle <br> medium |  |  |  |

## Clause 28

|  | Instead | of making | simple | loans |
| :---: | :---: | :---: | :---: | :---: |
| TH1 | Topic <br> Theme |  |  |  |
| TH2 | Text <br> Conj <br> Str <br> Theme | Rheme |  |  |
| M1 |  | Pred <br> Residue | Comp Residue |  |
| T1 |  | $\begin{array}{\|l} \text { Proc } \\ \text { Mat } \end{array}$ | Range |  |
| E1 |  | Proc | Range |  |


| Tex1 | Theme <br> beta-clause | Topic <br> marked <br> dependent |  |
| :--- | :--- | :--- | :--- |
| Tex2 | Theme <br> multiple <br> textual-1 | Topic <br> none |  |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> Statement | Mood <br> non-finite |  |
|  | VOICE <br> none |  |  |


|  | and | holding | them | until | maturity, |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Topic <br> Theme |  |  |  |  |
| TH2 | Text <br> Conj <br> Str <br> Theme | Rheme |  |  |  |
| M1 |  | Pred <br> Residue | Comp Residue | Circ-Adj <br> Residue |  |
| T1 |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | Goal | $\begin{aligned} & \text { Ext } \\ & \text { Temp } \end{aligned}$ |  |
| E1 |  | Proc | Medm | Circ |  |
| MET1m |  |  |  |  | Exp Qual Ent |


| Tex1 | Theme <br> beta-clause | Topic <br> marked <br> dependent |  |
| :--- | :--- | :--- | :--- |
| Tex2 | Theme <br> multiple <br> textual-1 | Topic <br> none |  |
| Exp1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> non-finite |  |
| none |  |  |  |

Clause 31

## Clause 30

|  | a | bank | collected |  | all |  | its | loans | together, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Rheme |  |  |  |  |  |  |  |  |
| TH2 | Topic <br> Theme |  | Rheme |  |  |  |  |  |  |
| M1 | Subj <br> Mood |  | Fin <br> Pred <br> Mood-Residue |  | Comp <br> Residue |  |  |  | Circ-Adj <br> Residue |
| T1 | Actor |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |  | Goal |  |  |  | $\begin{aligned} & \text { Mann } \\ & \text { Qual } \end{aligned}$ |
| E1 | Agent |  | Proc |  | Medm |  |  |  | Circ |
| Tex1 | Theme none alpha-clause |  |  | Topic none |  |  |  |  |  |
| Tex2 | Theme simple |  |  | Topic unmarked -- |  |  |  |  |  |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement |  |  | Mood <br> decla full |  | TENS past |  |  | RITY |
| Exp1 | VOICE <br> effective active agent |  |  |  |  |  |  |  |  |



| Tex1 | Theme <br> none <br> alpha-clause | Topic <br> none |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Tex2 | Ineme <br> nultiple <br> textual-1 | Topic <br> unmarked <br> ellipsed |  |  |
| SPEECH-FUNCTION <br> Enowledge <br> Exp1 | Mood <br> declarative <br> stlipsed | TENSE <br> past | POLARITY <br> positive |  |
| effective |  |  |  |  |
| active |  |  |  |  |
| ell-agent |  |  |  |  |


|  | and | \{the | bank\} | sliced | them | up | into | a big, | beautiful | tossed | salad. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S1 |  | Ellipsis |  |  |  |  |  |  |  |  |  |
| TH1 | Rheme |  |  |  |  |  |  |  |  |  |  |
| TH2 | Text Conj Str Theme | Topic <br> Theme |  | Rheme |  |  |  |  |  |  |  |
| M1 |  | Subj <br> Mood |  | Fin <br> Pred <br> Mood-Residue | Comp <br> Residue | Pred <br> Residue | Circ-Adj <br> Residue |  |  |  |  |
| T1 |  | Actor |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | Goal | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | $\begin{aligned} & \text { Role } \\ & \text { Prod } \end{aligned}$ |  |  |  |  |
| E1 |  | Agent |  | Proc | Medm | Proc | Circ |  |  |  |  |
| ET1m |  |  |  |  |  |  |  |  |  | Exp <br> Proc <br> Qua |  |


| Tex1 | Theme none alpha-clause | Topic none |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Tex2 | Theme multiple textual-1 | Topic unmarked ellipsed |  |  |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood declarative ellipsed | TENSE past | POLARITY positive |
| Exp1 | VOICE <br> effective <br> active <br> ell-agent |  |  |  |


| Clause 33 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | The | idea | was | [ 1 to | sell | <(for | huge | fees)> | individual | servings | [of | diversified | financial | salad] | around | the | world]]. |
| S1 |  |  |  | Rank-shift |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S1c |  |  |  | Clause-1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TH1 | Topic <br> Theme |  | Rheme |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M1 | Subj <br> Mood |  | Fin <br> Mood | Comp Residue |  |  |  |  |  |  |  |  |  |  |  |  |  |
| T1 | $\begin{aligned} & \text { Idd } \\ & \text { Value } \end{aligned}$ |  | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Iden } \\ & \text { Int } \end{aligned}$ | Idr <br> Token |  |  |  |  |  |  |  |  |  |  |  |  |  |
| E1 | Medm |  | Proc | Agent |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MET1m |  | $\begin{aligned} & \mathrm{Log} \\ & \mathrm{Rel} \\ & \text { Ent } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M2 |  |  |  | $\begin{aligned} & \text { Pred } \\ & \text { Residue } \end{aligned}$ |  | Circ-Adj <br> Residue |  |  | $\begin{aligned} & \text { Comp } \\ & \text { Residue } \end{aligned}$ |  |  |  |  |  | Circ-Adj Residue |  |  |
| T2 |  |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |  | $\begin{aligned} & \text { Caus } \\ & \text { Purp } \end{aligned}$ |  |  | Goal |  |  |  |  |  | $\begin{aligned} & \text { Locn } \\ & \text { Place } \end{aligned}$ |  |  |
| E2 |  |  |  | Proc |  | Circ |  |  | Medm |  |  |  |  |  | Circ |  |  |
| MET2m |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Exp } \\ & \text { Circ } \\ & \text { Qual } \end{aligned}$ | $\begin{aligned} & \text { Exp } \\ & \text { Proc } \\ & \text { Ent } \end{aligned}$ |  | Exp <br> Proc <br> Qual |  |  |  |  |  |


| Tex1 | Theme simple | Topic unmarked |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | TENSE past | POLARITY <br> positive |
| Exp1 | VOICE <br> effective passive agent |  |  |  |
| S1 | Clause-1 |  |  |  |
| Int2 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood non-finite |  |  |
| Exp2 | VOICE <br> none |  |  |  |

Clause 34


| Tex1 | $\begin{aligned} & \text { Theme } \\ & \text { simple } \end{aligned}$ | Topic unmarked |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION Knowledge statement | Mood declarative full | POLARITY <br> positive |  |
| Exp1 | VOICE <br> effective passive agent |  |  |  |
| S1 | Clause-1 |  |  |  |
| Int2 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative full | $\begin{aligned} & \text { TENSE } \\ & \text { past } \end{aligned}$ | POLARITY <br> positive |
| Exp2 |  |  |  |  |

## Clause 35

|  | Eat | that | piece | of salad, |
| :---: | :---: | :---: | :---: | :---: |
| TH1 | Topic <br> Theme | Rheme |  |  |
| M1 | Pred <br> Residue | Comp <br> Residue |  |  |
| T1 | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | Goal |  |  |
| E1 | Proc | Medm |  |  |


| Tex1 | Theme <br> simple | Topic <br> unmarked <br> Int1 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> Experative <br> full | Mood metaphor | TENSE <br> VOICE <br> effective <br> active <br> ell-agent |  | POLARITY <br> positive |



## Clause 37

|  | The | overall | salad | looked | delicious, |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Topic <br> Theme |  |  | Rheme |  |
| M1 | Subj <br> Mood |  |  | Fin <br> Pred <br> Mood-Residue | Comp <br> Residue |
| T1 | Carr |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Attr } \\ & \text { Int } \end{aligned}$ | Att |
| E1 | Medm |  |  | Proc | Range |


| Tex1 | Theme <br> simple | Topic <br> unmarked |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> Exatement | Mood <br> declarative <br> full | TENSE <br> past | POLARITY <br> positive |
| VOICE <br> middle <br> medium |  |  |  |  |


| Clau | $\begin{gathered} \text { se } 38 \\ \text { but } \end{gathered}$ | suddenly | global | investors | were | no | longer | ordering | salad. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | $\begin{aligned} & \text { Text } \\ & \text { Conj } \\ & \text { Str } \\ & \text { Theme } \end{aligned}$ | Topic <br> Theme | Rheme |  |  |  |  |  |  |
| M1 |  | Circ-Adj Residue | Subj Mood |  | $\begin{aligned} & \text { Fin } \\ & \text { Mood } \end{aligned}$ | Adj <br> Mood |  | Pred <br> Residue | Comp Residue |
| T1 |  | Mann Qual | Actor |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | $\begin{aligned} & \text { Ext } \\ & \text { Temp } \end{aligned}$ |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | Range |
| E1 |  | Circ | Medm |  | Proc | Circ |  | Proc | Range |
| Tex1 | Theme multiple textual-1 |  |  | Topic marked -- |  |  |  |  |  |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement |  |  | Mood <br> declarative full | MOOD-ADJUNCT time |  |  | TENSE <br> past | LARITY <br> itive |
| Exp1 | VOICE <br> middle <br> medium |  |  |  |  |  |  |  |  |


| Clause 39 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No | one | knew | the | location | [of | the | toxic | waste]. |
| TH1 | Topic <br> Theme |  | Rheme |  |  |  |  |  |  |
| M1 | Subj <br> Mood |  | Fin <br> Pred <br> Mood-Residue | Comp <br> Residue |  |  |  |  |  |
| T1 | Sens |  | Proc <br> Ment <br> Cogn | Phen Range |  |  |  |  |  |
| E1 | Medm |  | Proc | Range |  |  |  |  |  |
| MET1m |  |  |  |  | Exp Circ Ent |  |  | Exp <br> Ent <br> Mod |  |


| Tex1 | Theme <br> simple | Topic unmarked |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative full | TENSE <br> past | POLARITY <br> positive |
| Exp1 | VOICE <br> middle medium |  |  |  |


$\left.\begin{array}{|l|l|l|l|l|}\hline \text { Tex1 } & \begin{array}{l}\text { Theme } \\ \text { simple }\end{array} & \begin{array}{l}\text { Topic } \\ \text { unmarked } \\ \text { Int1 }\end{array} & \begin{array}{l}\text { SPEECH-FUNCTION } \\ \text { Knowledge } \\ \text { statement }\end{array} & \begin{array}{l}\text { Mood } \\ \text { declarative } \\ \text { full }\end{array}\end{array} \begin{array}{l}\text { TENSE } \\ \text { past }\end{array} ~ \begin{array}{l}\text { POLARITY } \\ \text { positive }\end{array}\right]$

## Clause 41

|  | when | global | interest | rates | began | to | rise. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Text <br> Conj <br> Str <br> Theme | Topic <br> Theme |  |  | Rheme |  |  |
| M1 | $\begin{aligned} & \text { Circ-Adj } \\ & \text { WH } \\ & \text { Residue } \end{aligned}$ | Subj <br> Mood |  |  | Fin <br> Temp <br> Mood | Pred <br> Residue |  |
| T1 |  | Actor |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |  |  |
| E1 |  | Medm |  |  | Proc |  |  |


| Tex1 | Theme <br> multiple <br> textual-1 | Topic unmarked |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | TENSE <br> past | POLARITY positive |
| Exp1 | VOICE <br> middle medium |  |  |  |



| Clause 43 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | and | why | have | financial | markets | collapsed | so | brutally? |
| TH1 | Text Conj Str Theme | Topic <br> WH <br> Theme | Rheme |  |  |  |  |  |
| M1 |  | Circ-Adj <br> WH <br> Residue | Fin <br> Mood | Subj <br> Mood |  | Pred <br> Residue | Circ-Adj <br> Residue |  |
| T1 |  | $\begin{aligned} & \text { Caus } \\ & \text { Reas } \end{aligned}$ | $\begin{array}{\|l} \text { Proc } \\ \text { Mat } \end{array}$ | Actor |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | $\begin{aligned} & \text { Mann } \\ & \text { Qual } \end{aligned}$ |  |
| E1 |  | Circ | Proc | Medm |  | Proc | Circ |  |
| MET1m |  |  |  |  |  |  |  | Exp <br> Qual Circ |


| Tex1 | Theme multiple textual-1 | Topic unmarked |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION <br> Knowledge statement | Mood <br> WH-interrogative full | Mood metaphor | $\begin{aligned} & \text { TENSE } \\ & \text { past } \end{aligned}$ | POLARITY positive |
| Exp1 | VOICE <br> middle <br> medium |  |  |  |  |


| Clause 44 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | The | markets | are | telling | us |
| TH1 | Topic |  |  |  |  |
|  | Theme |  | Rheme |  |  |
| M1 | Subj |  | Fin | Pred | Comp |
|  | Mood |  | Mood | Residue | Residue |
| T1 | Sayer |  | Proc |  | Rec |
|  |  |  | Verbl |  |  |
| E1 | Medm |  | Proc |  | Benef |


| Tex1 | Theme <br> simple | Topic <br> unmarked |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | TENSE <br> present | POLARITY <br> positive |
|  | VOICE <br> middle <br> medium |  |  |  |


| Clause 45 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | the | world | will | face | a | serious | credit | crunch | in | 2009 |
| TH1 | Topic <br> Theme |  | Rheme |  |  |  |  |  |  |  |
| M1 | Subj <br> Mood |  | Fin <br> Temp <br> Mood | Pred <br> Residue | Comp <br> Residue |  |  |  | Circ-Adj <br> Residue |  |
| T1m | Actor |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |  | Range |  |  |  | $\begin{aligned} & \text { Locn } \\ & \text { Time } \end{aligned}$ |  |
| T1 | Carr |  | $\begin{aligned} & \hline \text { Proc } \\ & \text { Reln } \\ & \text { Attr } \\ & \text { Circ } \end{aligned}$ |  | $\begin{aligned} & \text { Att } \\ & \text { Circ } \end{aligned}$ |  |  |  | $\begin{aligned} & \text { Locn } \\ & \text { Time } \end{aligned}$ |  |
| E1m | Medm |  | Proc |  | Range |  |  |  | Circ |  |
| E1 | Medm |  | Proc |  | Range |  |  |  | Circ |  |
| MET1m |  |  |  |  |  |  | Exp Ent Mod | $\begin{aligned} & \text { Exp } \\ & \text { Proc } \\ & \text { Ent } \end{aligned}$ |  |  |


| Tex1 | Theme <br> simple | Topic <br> unmarked |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Ext1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | TENSE <br> future | POLARITY <br> positive |
| VOICE <br> middle <br> medium | Exp1 | VOICE <br> middle <br> medium |  |  |

## Clause 46

|  | regardless | of how | much | money | government | spends |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | $\begin{aligned} & \text { Text } \\ & \text { Conj } \\ & \text { Str } \\ & \text { Theme } \end{aligned}$ | Topic <br> Theme |  |  | Rheme |  |
| M1 |  | Comp <br> Residue |  |  | Subj <br> Mood | Fin <br> Pred <br> Mood-Residue |
| T1 |  | Range |  |  | Actor | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |
| E1 |  | Range |  |  | Medm | Proc |


| Tex1 | Theme <br> multiple <br> textual-1 | Topic <br> unmarked |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Ent1 | SPEECH-FUNCTION <br> Knowledge <br> Statement | Mood <br> declarative <br> full | TENSE <br> present | POLARITY <br> positive |


| Clause 47 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | to | remove | the | toxic | salad | from | bank | balance | sheets. |
| TH1 | Rheme |  |  |  |  |  |  |  |  |
| M1 | $\begin{aligned} & \text { Pred } \\ & \text { Residue } \end{aligned}$ |  | Comp Residue |  |  | Circ-Adj <br> Residue |  |  |  |
| T1m | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |  | Goal |  |  | $\begin{aligned} & \text { Locn } \\ & \text { Place } \end{aligned}$ |  |  |  |
| T1 | $\begin{array}{\|l} \text { Proc } \\ \text { Reln } \\ \text { Attr } \\ \text { Poss } \end{array}$ |  | Att <br> Possd |  |  | $\begin{aligned} & \text { Carr } \\ & \text { Possr } \end{aligned}$ |  |  |  |
| E1m | Proc |  | Medm |  |  | Circ |  |  |  |
| E1 | Proc |  | Range |  |  | Medm |  |  |  |
| Tex1 | Themenonenon-finite |  |  | Topic <br> none |  |  |  |  |  |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement |  |  | Mood non-finite |  |  |  |  |  |
| Exp1m | $\begin{aligned} & \text { VOICE } \\ & \text { none } \end{aligned}$ |  |  |  |  |  |  |  |  |
| Exp1 |  |  |  |  |  |  |  |  |  |

conventionally "remove" is material process, but here I've taken it to mean something like removing $\$ 5$ from your bank account, so possessive

| Clause 48 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Policymakers | have | no | means | [[0f | forcing | the | banks | to | start | lending]] |
| S1 |  |  | Rank-shift |  |  |  |  |  |  |  |  |
| S1c |  |  | Head |  | Clause-1 |  |  |  |  |  |  |
| TH1 | Topic <br> Theme | Rheme |  |  |  |  |  |  |  |  |  |
| M1 | $\begin{aligned} & \text { Subj } \\ & \text { Mood } \end{aligned}$ | $\begin{aligned} & \text { Fin } \\ & \text { Mood } \end{aligned}$ | Comp Residue |  |  |  |  |  |  |  |  |
| T1 | Carr Possr | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Attr } \\ & \text { Poss } \end{aligned}$ | Att <br> Possd |  |  |  |  |  |  |  |  |
| E1 | Medm | Proc | Range |  |  |  |  |  |  |  |  |
| MET1m |  |  |  | Log <br> Rel <br> Ent |  |  |  |  |  |  |  |
| M2 |  |  |  |  | Residue | Pred <br> Residue | Comp <br> Residue |  | Pred <br> Residue |  |  |
| T2 |  |  |  |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | Goal |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |  |  |
| E2 |  |  |  |  |  | Proc | Medm |  | Proc |  |  |


| Tex1 | Theme <br> simple | Topic <br> unmarked <br> Int1 |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Exp1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | TENSE <br> present <br> middle <br> medium | POLARITY <br> positive |
| S1 | Clause-1 |  |  |  |
| Int2 | SPEECH-FUNCTION <br> Knowledge <br> Statement | Mood <br> non-finite |  |  |
| Exp2 | VOICE <br> none |  |  |  |



| Tex1 | Theme <br> multiple <br> textual-1 | Topic <br> none |  |
| :--- | :--- | :--- | :--- |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> Statement | Mood <br> non-finite |  |
| VOICE <br> none |  |  |  |

Clause 50


Clause 51

|  | Most | banks | are | leveraged | by | more | than | 10 | to 1. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Topic |  |  |  |  |  |  |  |  |
|  | Theme |  | Rheme |  |  |  |  |  |  |
| M1 | Subj |  | Fin | Pred | Circ-Adj |  |  |  |  |
|  | Mood |  | Mood | Residue | Residue |  |  |  |  |
| T1 | Goal |  | Proc |  | Ext |  |  |  |  |
|  |  |  | Mat |  | Spat |  |  |  |  |
| E1 | Medm |  | Proc |  | Circ |  |  |  |  |


| Tex1 | Theme <br> simple | Topic <br> unmarked <br> Int1 |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Exp1 | SPEECH-FUNCTION <br> Knowledge <br> Statement | Mood <br> declarative <br> full | TENSE <br> present | POLARITY <br> positive |
| effective <br> passive <br> ell-agent |  |  |  |  |

Leverage

1. using borrowed money to increase your potential return on investment.
2. The amount of debt used to finance a firm's assets
P) The bank was leveraged by the merger.
A) The merger leveraged the bank.

Clause 52

[[than \{what\} was around a
year and a half before]].]]


| Tex1 | Theme simple | Topic unmarked |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative full | POLARITY positive |  |  |  |
| Exp1 | VOICE <br> middle <br> medium |  |  |  |  |  |
| S1 | Clause-1 |  |  |  |  |  |
| Int2 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative full | MODALITY <br> Modalization probability median | MODALITY-orientation subjective implict | TENSE <br> future | POLARITY positive |
| Exp2 | VOICE <br> middle <br> medium |  |  |  |  |  |
| S2 | Clause-2 |  |  |  |  |  |
| Int3 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> ellipsed | TENSE past | POLARITY positive |  |  |
| Exp3 | VOICE <br> middle <br> ell-medium |  |  |  |  |  |

## Clause 53

|  | The | cost | [of money] | is | rising |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | $\begin{aligned} & \text { Topic } \\ & \text { Theme } \end{aligned}$ |  |  | Rheme |  |
| M1 | Subj Mood |  |  | Fin <br> Mood | Pred <br> Residue |
| T1 | Actor |  |  | Proc <br> Mat |  |
| E1 | Medm |  |  | Proc |  |
| MET1m |  | Exp <br> Attrib <br> Ent | Exp <br> Ent <br> Mod |  |  |


| Tex1 | Theme <br> simple | Topic <br> unmarked <br> -- |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | TENSE <br> present | POLARITY <br> positive |
|  | VOICE <br> middle <br> medium |  |  |  |

## Clause 54

|  | and | the | availability |  | \{is\} | shrinking. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S1 |  |  |  |  | Ellipsis |  |  |
| TH1 | Text <br> Conj <br> Str <br> Theme | Topic <br> Theme |  |  | Rheme |  |  |
| M1 |  | $\begin{aligned} & \text { Subj } \\ & \text { Mood } \end{aligned}$ |  |  | $\begin{aligned} & \text { Fin } \\ & \text { Mood } \end{aligned}$ | Pred <br> Residue |  |
| T1 |  | Actor |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |  |  |
| E1 |  | Medm |  |  | Proc |  |  |
| MET1m |  |  | $\begin{aligned} & \text { Exp } \\ & \text { Qual } \\ & \text { Ent } \end{aligned}$ |  |  |  |  |
| Tex1 | Theme multiple textual-1 |  |  | Topic unmarked |  |  |  |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement |  |  |  | d <br> arative <br> sed | $\begin{aligned} & \text { TENSE } \\ & \text { present } \end{aligned}$ | POLARITY positive |
| Exp1 | VOICE <br> middle medium |  |  |  |  |  |  |

## Clause 55

|  | True, | the | banks | will | still | lend |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Int <br> Mod <br> Adj <br> Theme | Topic <br> Theme |  | Rheme |  |  |
| M1 | Adj <br> Pol <br> Mood | Subj <br> Mood |  | Fin Temp Mood | Adj <br> Mood | Pred <br> Residue |
| T1 |  | Actor |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { Ext } \\ \text { Temp } \end{array}$ | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |
| E1 |  | Medm |  | Proc | Circ | Proc |

$\left.\begin{array}{|l|l|l|l|l|l|l|}\hline \text { Tex1 } & \begin{array}{l}\text { Theme } \\ \text { multiple } \\ \text { interpersonal-1 }\end{array} & \begin{array}{l}\text { Topic } \\ \text { unmarked }\end{array} & --\end{array}\right)$

## Clause 56

|  | -- | but | the | fear | is | [[they | will | do | it | only | to | people | <such | as | Warren | Buffett>, ]] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S1 |  |  |  |  |  | Rank-shift |  |  |  |  |  |  |  |  |  |  |
| S1c |  |  |  |  |  | Clause-1 |  |  |  |  |  |  |  |  |  |  |
| TH1 | Text <br> Conj <br> Str <br> Theme | Text <br> Conj <br> Str <br> Theme | Topic <br> Theme |  | Rheme |  |  |  |  |  |  |  |  |  |  |  |
| M1 |  |  | $\begin{aligned} & \text { Subj } \\ & \text { Mood } \end{aligned}$ |  | $\begin{aligned} & \text { Fin } \\ & \text { Mood } \end{aligned}$ | Comp <br> Residue |  |  |  |  |  |  |  |  |  |  |
| T1 |  |  |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Iden } \\ & \text { Int } \end{aligned}$ | Idr <br> Token |  |  |  |  |  |  |  |  |  |  |
| E1 |  |  | Medm |  | Proc | Agent |  |  |  |  |  |  |  |  |  |  |
| MET1m |  |  |  | $\begin{aligned} & \text { Exp } \\ & \text { Proc } \\ & \text { Ent } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| M2 |  |  |  |  |  | Subj <br> Mood | Fin <br> Modl <br> Mood | Pred <br> Residue | Comp <br> Residue | Adj <br> Mood | Pred <br> Residue | Comp <br> Residue |  |  |  |  |
| T2 |  |  |  |  |  | Actor | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |  | Range |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | Goal |  |  |  |  |
| E2 |  |  |  |  |  | Agent | Proc |  | Range |  | Proc | Medm |  |  |  |  |


| Tex1 | Theme multiple textual-2 | Topic unmarked |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | $\begin{aligned} & \text { TENSE } \\ & \text { present } \end{aligned}$ | POLARITY positive |  |  |  |
| Exp1 | VOICE <br> effective <br> passive <br> agent |  |  |  |  |  |  |
| S1 | Clause-1 |  |  |  |  |  |  |
| Int2 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | MODALITY <br> Modalization probability median | MODALITY-orientation subjective implict | MOOD-ADJUNCT <br> intensity | TENSE <br> future | POLARITY positive |
| Exp2 | VOICE <br> effective <br> active <br> agent |  |  |  |  |  |  |


| Clause 57 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | who | don't | need | loans. |  |  |
| TH1 | Topic <br> WH <br> Theme | Rheme |  |  |  |  |
| M1 | Subj <br> WH <br> Mood | Fin <br> Mood | Pred Residue | Comp <br> Residue |  |  |
| T1 | $\begin{aligned} & \text { Carr } \\ & \text { Possr } \end{aligned}$ | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Attr } \\ & \text { Poss } \end{aligned}$ |  | A.tt <br> Possd |  |  |
| E1 | Medm | Proc |  | Range |  |  |
| Tex1 | Themesimple |  |  | Topic unmarked |  |  |
| Int1 | SPEECH-FUNCTION Knowledge statement |  |  | Mood <br> declarative <br> full | TENSE present | POLARITY <br> negative |
| Exp1 |  |  |  |  |  |  |

## Clause 58

[[What is uncertain]] is the amount of lending [to borrowers [[engaged in entrepreneurial risk, the center of business reinvention and job creation.]]]


| Tex1 | Theme <br> simple | Topic <br> unmarked <br> rankshift |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> Exatement | Mood <br> declarative <br> full | TENSE <br> present | POLARITY <br> positive <br> effective <br> passive <br> agent |  |  |
| S1 | Clause-1 |  |  |  |  |  |
| Int2 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | TENSE <br> present | POLARITY <br> positive | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> non-finite |
| Exp2 | VOICE <br> middle <br> medium |  |  | VOICE <br> none |  |  |


| Clause 59 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Apart | from | the | economic | pain | [[resulting | from | shrinking | credit | markets]], | we | are | about |
| S1 Rank-shift |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S1c |  |  | Head |  |  | Clause-1 |  |  |  |  |  |  |  |
| TH1 | Topic Theme |  |  |  |  |  |  |  |  |  | Rheme |  |  |
| M1 | Circ-Adj <br> Residue |  |  |  |  |  |  |  |  |  | Subj <br> Mood | Fin <br> Temp <br> Mood |  |
| T1 | Accom <br> Add |  |  |  |  |  |  |  |  |  | Sens | Proc <br> Ment <br> Perc |  |
| E1 | Circ |  |  |  |  |  |  |  |  |  | Medm | Proc |  |
| MET1m |  |  |  | $\begin{aligned} & \text { Exp } \\ & \text { Ent } \\ & \text { Qual } \end{aligned}$ |  |  |  |  |  |  |  |  |  |
| M2 |  |  |  |  |  | Pred Residue |  | Comp <br> Residue |  |  |  |  |  |
| T2 |  |  |  |  |  | Proc <br> Reln <br> Iden <br> Circ |  | Idr <br> Token <br> Cirs |  |  |  |  |  |
| E2 |  |  |  |  |  | Proc |  | Agent |  |  |  |  |  |
| MET2m |  |  |  |  |  | Log <br> Rel <br> Proc |  | Exp <br> Proc <br> Qual |  |  |  |  |  |


| to | see | an | earthquake | [in | the | relationship | [between | government | and | financial | markets]]. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | earthquake $=$ great change |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pred <br> Residue |  | Comp <br> Residue |  |  |  |  |  |  |  |  |  |  |
|  |  | Phen Range |  |  |  |  |  |  |  |  |  |  |
|  |  | Range |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | $\begin{aligned} & \text { Exp } \\ & \text { Proc } \\ & \text { Ent } \end{aligned}$ |  |  | Exp <br> Proc <br> Ent |  |  |  |  |  |  |


| Tex1 | Theme simple | Topic marked |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION <br> Knowledge statement | Mood <br> declarative full | TENSE <br> future | POLARITY <br> positive |
| Exp1 | VOICE <br> middle <br> medium |  |  |  |
| S1 | Clause-1 |  |  |  |
| Int2 | SPEECH-FUNCTION <br> Knowledge <br> statement | $\begin{aligned} & \text { Mood } \\ & \text { non-finite } \end{aligned}$ |  |  |
| Exp2 | $\begin{aligned} & \text { VOICE } \\ & \text { none } \end{aligned}$ |  |  |  |

Clause 60


| Tex1 | Theme <br> simple | Topic unmarked |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative full | TENSE <br> present | POLARITY <br> positive |
| Exp1 | VOICE <br> effective <br> passive <br> agent |  |  |  |
| S1 | Clause-1 |  |  |  |
| Int2 | SPEECH-FUNCTION <br> Knowledge <br> question | \|Mood <br> declarative full | TENSE present | POLARITY positive |
| Exp2 |  |  |  |  |
| S2 | Clause-2 |  |  |  |
| Int3 | SPEECH-FUNCTION <br> Knowledge statement | Mood non-finite |  |  |
| Exp3 | VOICE <br> none |  |  |  |



| Tex1 | $\begin{aligned} & \text { Theme } \\ & \text { simple } \end{aligned}$ | Topic unmarked |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood declarative full | TENSE <br> present | POLARITY <br> positive |
| Exp1 | VOICE <br> middle <br> medium |  |  |  |

Clause 62
In the United Kingdom, <for example>, the collected assets [of the major banks] are four times the nation's gross domestic product (GDP).


Tex1

| Theme <br> simple | Topic <br> marked <br> -- |  |  |
| :--- | :--- | :--- | :--- |
| SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | TENSE <br> present | POLARITY <br> positive |
| VOICE <br> middle <br> medium |  |  |  |



Clause 64

|  | This | means | [[governmen | annot | bail | out the | system \|| | even | if it | wanted | \|| to | \{bail | out the | system\}]] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S1 |  |  | Rank-shift |  |  |  |  |  |  |  |  |  |  |  |
| S1c |  |  | Complex |  |  |  |  |  |  |  |  |  |  |  |
| S1cc |  |  | Clause-1 |  |  |  |  | Clause-2 |  |  | Clause-3 |  |  |  |
| S2 |  |  |  |  |  |  |  |  |  |  |  | Ellipsis |  |  |
| TH1 | Topic TH Theme | Rheme |  |  |  |  |  |  |  |  |  |  |  |  |
| M1 | $\begin{aligned} & \hline \text { Subj } \\ & \text { TH } \\ & \text { Mood } \\ & \hline \end{aligned}$ | Fin <br> Pred <br> Mood-Residue | Comp Residue |  |  |  |  |  |  |  |  |  |  |  |
| T1 | ldd Token | Proc <br> Reln <br> Iden <br> Int | Idr Value |  |  |  |  |  |  |  |  |  |  |  |
| E1 | Medm | Proc | Range |  |  |  |  |  |  |  |  |  |  |  |
| MET1m | Tex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M2 |  |  | Subj <br> Mood | Fin Modl Mood | Pred Residue | Comp <br> Residue |  | Residue | $\begin{aligned} & \text { Subj } \\ & \text { Mood } \end{aligned}$ | Fin <br> Pred <br> Mood-Residue | Pred Residue |  | Comp <br> Residue |  |
| T2 |  |  | Actor | Proc Mat |  | Goal |  |  | Sens | $\begin{aligned} & \text { Proc } \\ & \text { Ment } \\ & \text { Aff } \\ & \hline \end{aligned}$ | Proc Mat |  | Goal |  |
| E2 |  |  | Agent | Proc |  | Medm |  |  | Medm | Proc | Proc |  | Medm |  |


| Tex1 | Theme simple | Topic unmarked |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\operatorname{lnt} 1$ | SPEECH-FUNCTION Knowledge statement | Mood declarative full | $\begin{aligned} & \text { TENSE } \\ & \text { present } \end{aligned}$ | POLARITY positive |  |  |  |  |  |  |  |  |
| Exp1 | VOICE <br> $\begin{array}{l}\text { middle } \\ \text { medium }\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |
| S1 | Clause-1 |  |  |  |  |  | Clause-2 |  |  |  | Clause-3 |  |
| Int2 | SPEECH-FUNCTION Knowledge statement | Mood declarative full | MODALITY Modalization potentiality | MODALITY-orientation subjective implict | TENSE present | POLARITY negative | SPEECH-FUNCTION <br> Knowledge statement | Mood declarative full | TENSE past | POLARITY positive | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood non-finite |
| Exp2 | VOICE effective active agent |  |  |  |  |  | VOICE middle medium |  |  |  | VOICE none |  |

## Clause 65

|  | Given | such | massive | exposure, | government | guarantees | [in | a time | of crisis] | become | meaningless. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Topic <br> Theme |  |  |  | Rheme |  |  |  |  |  |  |
| M1 | Circ-Adj <br> Residue |  |  |  | Subj <br> Mood |  |  |  |  | Fin Pred Mood-Residue | Comp <br> Residue |
| T1 | Contg |  |  |  | Carr |  |  |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Attr } \\ & \text { Int } \end{aligned}$ | Att |
| E1 | Circ |  |  |  | Medm |  |  |  |  | Proc | Range |
| MET1m |  | Tex |  |  | $\begin{aligned} & \text { Exp } \\ & \text { Ent } \\ & \text { Mod } \end{aligned}$ | Exp <br> Proc <br> Ent | Exp Rel Circ |  |  |  | $\begin{aligned} & \text { Exp } \\ & \text { Ent } \\ & \text { Qual } \end{aligned}$ |


| Tex1 | Theme <br> simple | Topic <br> marked |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | TENSE <br> present | POLARITY <br> positive |
| VOICE <br> middle <br> medium |  |  |  |  |

[^1]nt1
xp

## Clause 66

|  | Yet | because | of the | interconnected | web | [of | global | financial | relationships], | we | are | all | vulnerable | to | the | threat. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Text <br> Conj <br> Adj <br> Theme | Topic Theme |  |  |  |  |  |  |  | Rheme |  |  |  |  |  |  |
| M1 |  | $\begin{aligned} & \text { Circ-Adj } \\ & \text { Residue } \end{aligned}$ |  |  |  |  |  |  |  | $\begin{aligned} & \text { Subj } \\ & \text { Mood } \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { Fin } \\ \text { Mood } \end{array}$ | $\begin{aligned} & \text { Adj } \\ & \text { Mood } \end{aligned}$ |  | Circ-Adj <br> Residue |  |  |
| T1 |  | $\begin{aligned} & \text { Caus } \\ & \text { Reas } \end{aligned}$ |  |  |  |  |  |  |  | Carr | Proc Reln Attr Int |  | Att | Contg Cond |  |  |
| E1 |  | Circ |  |  |  |  |  |  |  | Medm | Proc |  | Range | Circ |  |  |
| MET1m |  | $\begin{aligned} & \text { Log } \\ & \text { Rel } \\ & \text { Circ } \end{aligned}$ |  | Exp <br> Proc <br> Qual |  |  |  |  | $\begin{aligned} & \text { Exp } \\ & \text { Proc } \\ & \text { Ent } \end{aligned}$ |  |  |  |  |  |  | $\begin{aligned} & \text { Exp } \\ & \text { Proc } \\ & \text { Ent } \end{aligned}$ |


| Tex1 | Theme <br> multiple <br> textual-1 | Topic <br> marked |  |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | MOOD-ADJUNCT <br> degree | TENSE <br> present | POLARITY <br> positive |
|  | VOICE <br> middle <br> medium |  |  |  |  |


| Clause 67 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | The | collapse | of, | <say>, | a | major | European | bank | would | hardly | leave | American | workers | immune. |
| TH1 | Topic Theme |  |  |  |  |  |  |  | Rheme |  |  |  |  |  |
| M1 | Subj <br> Mood |  |  |  |  |  |  |  | Fin <br> Modl <br> Mood | Adj <br> Pol <br> Mood | $\begin{aligned} & \text { Pred } \\ & \text { Residue } \end{aligned}$ | Comp <br> Residue |  | Comp <br> Residue |
| T1 | Attbr |  |  |  |  |  |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Attr } \\ & \text { Int } \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Attr } \\ & \text { Int } \end{aligned}$ | Carr |  | Att |
| E1 | Agent |  |  |  |  |  |  |  | Proc |  | Proc | Medm |  | Range |
| MET1m |  | $\begin{aligned} & \text { Exp } \\ & \text { Proc } \\ & \text { Ent } \end{aligned}$ |  |  |  | $\begin{aligned} & \text { Exp } \\ & \text { Ent } \\ & \text { Mod } \end{aligned}$ |  |  |  |  | $\begin{aligned} & \text { Exp } \\ & \text { Rel } \\ & \text { Proc } \end{aligned}$ |  |  |  |


| Tex1 | Theme <br> simple | Topic <br> unmarked <br> Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | MODALITY <br> Modalization <br> probability <br> median | MODALITY-orientation <br> subjective <br> implict | MOOD-ADJUNCT <br> degree |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Exp1 | VOICE <br> effective <br> active <br> agent |  |  | TENSE <br> future | POLARITY <br> positive |  |  |

## Clause 68

|  | Our | policy | leaders | [in | Washington] | are | thinking | domestically |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Topic <br> Theme |  |  |  |  | Rheme |  |  |
| M1 | Subj <br> Mood |  |  |  |  | Fin Mood | Pred Residue | Circ-Adj <br> Residue |
| T1 | Sens |  |  |  |  | Proc <br> Ment <br> Cogn |  | $\begin{aligned} & \text { Mann } \\ & \text { Qual } \end{aligned}$ |
| E1 | Medm |  |  |  |  | Proc |  | Circ |
| MET1m |  |  |  |  |  |  |  | Exp <br> Qual Circ |


| Tex1 | Theme <br> simple | Topic <br> unmarked <br> Int1 |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Exp1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | TENSE <br> present | POLARITY <br> middle <br> positive |
| medium |  |  |  |  |$\quad$



| Tex1 | Theme <br> multiple <br> textual-1 | Topic unmarked |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative full | TENSE <br> future | POLARITY positive |
| Exp1 | VOICE <br> middle <br> medium |  |  |  |

## Clause 70

|  | It | is | not | that | the | world | lacks | money |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Int <br> Mod-Met <br> Theme |  |  |  | Topic <br> Theme |  | Rheme |  |
| M1 | Modal-Met <br> Mood |  |  |  | $\begin{aligned} & \text { Subj } \\ & \text { Mood } \end{aligned}$ |  | Pred <br> Residue | Comp <br> Residue |
| T1 |  |  |  |  | Carr <br> Poss |  | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Attr } \\ & \text { Poss } \end{aligned}$ | Att Possd |
| E1 |  |  |  |  | Medm |  | Proc | Range |
| MET1m | Int <br> None <br> Ent | Int <br> Modal <br> Proc |  |  |  |  |  |  |


| Tex1 | Theme <br> multiple <br> interpersonal-1 | Topic <br> unmarked |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> Statement | Mood <br> declarative <br> full | MODALITY-orientation <br> objective <br> explicit | TENSE <br> present | POLARITY <br> negative |
| VOICE <br> middle <br> medium |  |  |  |  |  |

## Clause 71

|  | ; | it | is | that | the | world's | money | is | sitting | on | the | sidelines |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Text <br> Conj <br> Str <br> Theme | Int <br> Mod-Met <br> Theme |  |  | Topic <br> Theme |  |  | Rheme |  |  |  |  |
| M1 |  | Modal-Met Mood |  |  | $\begin{aligned} & \text { Subj } \\ & \text { Mood } \end{aligned}$ |  |  | Fin Mood | Pred Residue | Circ-Adj Residue |  |  |
| T1m |  |  |  |  | Behav |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Behl } \end{aligned}$ |  | $\begin{aligned} & \text { Locn } \\ & \text { Place } \end{aligned}$ |  |  |
| T1 |  |  |  |  | Carr |  |  | Proc <br> Reln <br> Attr <br> Circ |  | $\begin{aligned} & \hline \text { Att } \\ & \text { Circ } \end{aligned}$ |  |  |
| E1m |  |  |  |  | Medm |  |  | Proc |  | Circ |  |  |
| E1 |  |  |  |  | Medm |  |  | Proc |  | Range |  |  |
| MET1m |  | $\begin{aligned} & \text { Int } \\ & \text { None } \\ & \text { Ent } \end{aligned}$ | Int <br> Modal Proc |  |  |  |  |  |  |  |  |  |


| Tex1 | Theme multiple interpersanal-1 | Topic unmarked |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | MODALITY-orientation objective explicit | TENSE present | POLARITY <br> positive |
| Exp1m | VOICE <br> middle medium |  |  |  |  |
| Exp1 | VOICE <br> middle <br> medium |  |  |  |  |

## Clause 72

|  | -- | more | than | \$6 | trillion | \{are | sitting\} | in | idle | global | money | markets | alone. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S1 |  |  |  |  |  | Ellipsis |  |  |  |  |  |  |  |
| TH1 | Text <br> Conj <br> Str <br> Theme | Topic <br> Theme |  |  |  | Rheme |  |  |  |  |  |  |  |
| M1 |  | $\begin{aligned} & \text { Subj } \\ & \text { Mood } \end{aligned}$ |  |  |  | Fin Mood | $\begin{aligned} & \text { Pred } \\ & \text { Residue } \end{aligned}$ | $\begin{aligned} & \text { Circ-Adj } \\ & \text { Residue } \end{aligned}$ |  |  |  |  | Adj <br> Mood |
| T1m |  | Behav |  |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Behl } \end{aligned}$ |  | $\begin{aligned} & \text { Locn } \\ & \text { Place } \end{aligned}$ |  |  |  |  |  |
| T1 |  | Carr |  |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Attr } \\ & \text { Circ } \end{aligned}$ |  | $\begin{aligned} & \text { Att } \\ & \text { Circ } \end{aligned}$ |  |  |  |  |  |
| E1m |  | Medm |  |  |  | Proc |  | Circ |  |  |  |  |  |
| E1 |  | Medm |  |  |  | Proc |  | Range |  |  |  |  |  |

\(\left.$$
\begin{array}{|c|l|l|l|l|l|}\hline \text { Tex1 } & \begin{array}{l}\text { Theme } \\
\text { multiple } \\
\text { textual-1 }\end{array} & \begin{array}{l}\text { Topic } \\
\text { unmarked }\end{array} & & & \\
\hline \text { Exp1m } & \begin{array}{l}\text { SPEECH-FUNCTION } \\
\text { Knowledge } \\
\text { statement }\end{array} & \begin{array}{l}\text { Mood } \\
\text { declarative } \\
\text { full }\end{array} & \begin{array}{l}\text { VOICE } \\
\text { middle } \\
\text { medium }\end{array} & \begin{array}{l}\text { intensity }\end{array} & \text { present }\end{array}
$$ \quad \begin{array}{l}POLARITY <br>

positive\end{array}\right] |\)| Exp1 |
| :--- |
| VOICE <br> middle <br> medium |


| Tex1 | Theme simple | Topic unmarked -- |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood declarative full | $\begin{aligned} & \text { TENSE } \\ & \text { future } \end{aligned}$ | POLARITY positive |
| Exp1 | VOICE <br> effective <br> passive agent |  |  |  |
| S1 | Clause-1 |  |  |  |
| Int2 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood non-finite |  |  |
| Exp2 | VOICE <br> none |  |  |  |

## Clause 74

|  | to | draw | that | global | capital | back | into | more | productive | uses. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Rheme |  |  |  |  |  |  |  |  |  |
| M1 | $\begin{aligned} & \hline \text { Pred } \\ & \text { Residue } \end{aligned}$ |  | Comp Residue |  |  | Circ-Adj <br> Residue | Circ-Adj Residue |  |  |  |
| T1 | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |  | Goal |  |  | $\begin{aligned} & \text { Locn } \\ & \text { Place } \end{aligned}$ | $\begin{aligned} & \text { Role } \\ & \text { Prod } \end{aligned}$ |  |  |  |
| E1 | Proc |  | Medm |  |  | Circ | Circ |  |  |  |
| MET1m |  |  |  |  |  |  |  |  | Exp <br> Proc <br> Qual | $\begin{aligned} & \text { Exp } \\ & \text { Proc } \\ & \text { Ent } \end{aligned}$ |


| Tex1 | Theme <br> none <br> non-finite | Topic <br> none |  |
| :--- | :--- | :--- | :--- |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> Statement | Mood <br> non-finite |  |
| Exp1 | VOICE <br> none |  |  |

## Clause 75


first step $=$ first move
effort $=$ "try to do" gram met $-\operatorname{Martin}(1992: 411)$

| Tex1 | Theme simple | Topic unmarked -- |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION <br> Action command | Mood declarative full | Mood metaphor | MODALITY <br> Modulation <br> obligation median | MODALITY-orientation subjective implict | $\begin{aligned} & \text { TENSE } \\ & \text { present } \end{aligned}$ | POLARITY positive |
| Exp1 | VOICE <br> effective <br> passive <br> agent |  |  |  |  |  |  |
| S1 | Clause-1 |  |  |  |  |  |  |
| Int2 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood non-finite |  |  |  |  |  |
| Exp2 | VOICE none |  |  |  |  |  |  |


| Clause 76 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | We | need | a | private/putilibal | bank | clearing | facility. |
| TH1 | Topic <br> Theme | Rheme |  |  |  |  |  |
| M1 | Subj <br> Mood | Fin <br> Pred <br> Mood-Residue | Pred <br> Residue |  |  |  |  |
| T1 | $\begin{array}{\|l\|} \hline \text { Carr } \\ \text { Possr } \end{array}$ | Proc Reln Attr Poss | Att <br> Possd |  |  |  |  |
| E1 | Medm | Proc | Range |  |  |  |  |
| MET1m |  |  |  |  | $\begin{aligned} & \text { Exp } \\ & \text { Ent } \\ & \text { Mod } \end{aligned}$ | Exp <br> Proc <br> Qual |  |


| Tex 1 | $\begin{aligned} & \text { Theme } \\ & \text { simple } \end{aligned}$ | Topic unmarked -- |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION Knowledge statement | Mood <br> declarative full | TENSE <br> present | POLARITY <br> positive |
| Exp1 | VOICE <br> middle <br> medium |  |  |  |


| Clause 77 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | The | bankers | don't | trust | each | other. |
| TH1 | Topic <br> Theme |  | Rheme |  |  |  |
| M1 | Subj Mood |  | Fin <br> Mood | Pred <br> Residue | Comp Residue |  |
| T1 | Sens |  | Proc <br> Ment <br> Cogn |  | $\begin{aligned} & \text { Phen } \\ & \text { Range } \end{aligned}$ |  |
| E1 | Medm |  | Proc |  | Range |  |
| Tex1 | $\begin{aligned} & \text { Theme } \\ & \text { simple } \end{aligned}$ |  |  | Topic unmarked |  |  |
| Int1 | SPEECH-FUNCTION <br> Knowledge <br> statement |  |  | Mood <br> declarative <br> full | TENSE present | POLARITY negative |
| Exp1 | VOICE <br> middle <br> medium |  |  |  |  |  |


| Clause 78 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | The | central | banks, | <<working | with | the | private | institutions | \|| in | providing | enhanced | data>>, |
| S1 |  |  |  | Interrupt |  |  |  |  |  |  |  |  |
| S1c |  |  |  | Complex |  |  |  |  |  |  |  |  |
| S1cc |  |  |  | Clause-1 |  |  |  |  | Clause-2 |  |  |  |
| TH1 | Topic <br> Theme |  |  | Rheme |  |  |  |  |  |  |  |  |
| M1 | Subj <br> Mood |  |  | Circ-Adj <br> Residue |  |  |  |  |  |  |  |  |
| T1 | Actor |  |  | Mann <br> Means |  |  |  |  |  |  |  |  |
| E1 | Agent |  |  | Circ |  |  |  |  |  |  |  |  |
| M2 |  |  |  | $\begin{aligned} & \text { Pred } \\ & \text { Residue } \end{aligned}$ | Circ-Adj <br> Residue |  |  |  | Pred Residue |  | $\begin{aligned} & \text { Comp } \\ & \text { Residue } \end{aligned}$ |  |
| T2 |  |  |  | $\begin{array}{\|l} \text { Proc } \\ \text { Behl } \end{array}$ | Accom <br> Comt |  |  |  | $\begin{array}{\|l} \text { Proc } \\ \text { Mat } \end{array}$ |  | Range |  |
| E2 |  |  |  | Proc | Circ |  |  |  | Proc |  | Range |  |
| MET 2 m |  |  |  |  |  |  |  |  |  |  | Exp <br> Proc <br> Qual |  |


| ed | to | begin | to | refashion | the | world's | financial | architecture. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Fin <br> Modl <br> Mood | Pred <br> Residue |  | Pred <br> Residue |  | Comp <br> Residue |  |  |  |
| $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | $\begin{aligned} & \text { Locn } \\ & \text { Time } \end{aligned}$ |  | Proc <br> Mat |  | Goal |  |  |  |
| Proc | Circ |  | Proc |  | Medm |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |


| Tex1 | $\begin{aligned} & \text { Theme } \\ & \text { simple } \end{aligned}$ | Topic unmarked |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int1 | SPEECH-FUNCTION Action command | Mood <br> declarative full | Mood metaphor | MODALITY <br> Modulation obligation median | MODALITY-orientation subjective implict | TENSE present | POLARITY <br> positive |
| Exp1 | $\begin{aligned} & \text { VOICE } \\ & \text { effective } \\ & \text { active } \\ & \text { agent } \end{aligned}$ |  |  |  |  |  |  |
| S1 | Clause-1 |  | Clause-2 |  |  |  |  |
| Int2 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood non-finite | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood non-finite |  |  |  |
| Exp2 | $\begin{aligned} & \text { VOICE } \\ & \text { none } \end{aligned}$ |  | VOICE <br> none |  |  |  |  |

## Clause 79

|  | And | while | that | is | happening, |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TH1 | Text <br> Conj <br> Adj <br> Theme | Topic <br> Theme |  |  |  |
| TH2 |  | Text <br> Conj <br> Str <br> Theme | Topic <br> TH <br> Theme | Rheme |  |
| M1 |  |  | Subj <br> TH <br> Mood | Fin <br> Mood | Pred <br> Residue |
| T1 |  |  | Actor | $\begin{array}{\|l} \text { Proc } \\ \text { Mat } \end{array}$ |  |
| E1 |  |  | Medm | Proc |  |
| MET1m |  |  | Tex |  | Exp <br> None <br> Proc |


| Tex1 | Theme <br> multiple <br> textual-1 | Theme <br> beta-clause | Topic <br> marked <br> dependent |  |
| :---: | :--- | :--- | :--- | :--- |
| Tex2 | Theme <br> multiple <br> textual-1 | Topic <br> unmarked |  |  |
| Exp1 | SPEECH-FUNCTION <br> Knowledge <br> statement | Mood <br> declarative <br> full | TENSE <br> present | POLARITY <br> middle <br> medium |

[^2]Clause 80


| Tex1 | Theme <br> none <br> alpha-clause | Topic none |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tex2 | $\begin{aligned} & \text { Theme } \\ & \text { simple } \end{aligned}$ | Topic unmarked |  |  |  |  |  |
| Int1 | SPEECH-FUNCTION Action command | Mood <br> declarative full | Mood metaphor | MODALITY <br> Modulation <br> obligation <br> median | MODALITY-orientation <br> subjective <br> implict | TENSE present | POLARITY positive |
| Exp1 |  |  |  |  |  |  |  |
| S1 | Clause-1 |  | Clause-2 |  |  |  |  |
| Int2 | SPEECH-FUNCTION <br> Knowledge statement | $\begin{aligned} & \text { Mood } \\ & \text { non-finite } \end{aligned}$ | SPEECH-FUNCTION <br> Knowledge statement |  |  |  |  |
| Exp2 | VOICE <br> none |  | VOICE none |  |  |  |  |

## Appendix 2.2 Comments

While the same level of comprehensive analysis as the main story was performed on the comments, to respect the constraints of space, only the parts of the commentary analysis which are used in the main body of this thesis (Chapter 5: SVD Section 5.2 p. 219) will be shown here, namely, the transitivity analysis.

## Index to Appendix 2.2

Comment Clause Page
clause 1 ..... 333
clause 20 ..... 340
clause 40 ..... 346
clause 60 ..... 350
clause 80 ..... 357
clause 100 ..... 361
clause 120 ..... 366
clause 125 ..... 367

## Clause 1

Commentary: Why there's a crisis -- and how to stop it -
T1

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## CNN.com

$\square$

## Clause 2



## Clause 3

T1

## Clause 4

1. RCE

T1 $\square$

## Clause 5



board.]]


## Clause 6



## Clause 7

and you will see reduced market volatility.
T1

| Sens | Proc <br> Ment <br> Perc | $\begin{aligned} & \text { Phen } \\ & \text { Range } \end{aligned}$ |
| :---: | :---: | :---: |

## Clause 8

T1

## Clause 9

2. Professor Bear

T1 $\square \square$

## Clause 10



| progress]]] | [[than | to | specify | a | remedy]] |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Att |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Clause 11


| to hit a | coastal | community]] | is | much | easier | [[than | figuring |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |




## Clause 12

## T1

Clause 13
3. $P$

T1 $\square$

Clause 14


## Clause 15




| financial | dealings]]]], | did | not | foresee | the | impending | collapse |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { Proc } \\ & \text { Ment } \\ & \text { Perc } \end{aligned}$ |  |  | Phen Range |  |  |
|  |  |  |  |  |  |  |  |


| [of this | house | [of cards] | [lbuilt | out | of these | toxic | paper |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Proc <br> Mat | Range |  |  |  |  |



## Clause 16

| It seems |
| :--- |
| T1 that for |
| T1 |


| Sixpack | knew |
| :--- | :--- |
|  | Proc <br>  <br>  <br>  <br>  Ment |
| Cogn |  |

Clause 17
the bubble was going to burst.


Clause 18



## Clause 19

Or were they perfectly aware of the situation
T1

|  | Proc | Carr |  | Att | Contg |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Reln |  |  |  | Cond |  |  |
| Attr |  |  |  |  |  |  |
| Int |  |  |  |  |  |  |

## Clause 20

and \{were they\} playing chicken with the world's economy,
T1


## Clause 21

|  | assured | by | their | golden | parachutes |
| :--- | :--- | :--- | :--- | :--- | :--- |
| T1 | Proc <br> Ment | Phen <br> Aff |  |  |  |

## Clause 22

if they swerved too late
T1

| Actor | Proc <br> Mat | Locn |  |
| :--- | :--- | :--- | :--- |
|  | Time |  |  |$\quad$|  |
| :--- |

Clause 23

created]]?


## Clause 24

|  | Next | time | around | I | hope |
| :--- | :--- | :--- | :--- | :--- | :--- |
| T1 | Locn |  |  | Sens | Proc |
| Time |  |  |  | Ment <br> Aff |  |

## Clause 25



clothes]]]],


## Clause 26

well, that someone [with some power] would \{do that\}.
T1


## Clause 27



Clause 28

greed].


## Clause 29

|  | [[Forsaking | all | in | the | pursuit | [of | profit]]] | is | not | the |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T1 | Idd |  |  |  |  |  |  | Proc |  | Idr |
|  | Token |  |  |  |  |  |  | Reln Iden Int |  | Value |
| T2 | Proc | Phen | Caus |  |  |  |  |  |  |  |
|  | Ment | Range | Purp |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

foundation [of a sound economy].


## Clause 30

Why weren't the boards [of directors] seeking sound
T1

investments instead of the quick buck?

|  | Accom |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Add |  |  |  |  |

## Clause 31



| participating | in a | dangerous | pyramid | scheme] $]$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  | Behr |  |  |  |

## Clause 32

|  | Why | was | Joe | Sixpack | getting | a | mortgage | for | a | house |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T1 | $\begin{aligned} & \text { Caus } \\ & \text { Reas } \end{aligned}$ | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | Actor |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ | Range |  | Clien |  |  |
| T2 |  |  |  |  |  |  |  |  |  |  |



## Clause 33

T1

## Clause 34

4. Jared

T1


## Clause 35

|  | We | are | caught | in | a | vicious | cycle | right | now |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T1m | Carr | Proc |  | Att |  |  |  | Locn |  |
|  |  | Reln |  | Circ |  |  |  | Time |  |
|  |  | Att |  |  |  |  |  |  |  |
|  |  | Circ |  |  |  |  |  |  |  |
| T1 | Goal | Proc |  | Range |  |  |  | Locn |  |
|  |  | Mat |  |  |  |  |  | Time |  |

## Clause 36



| to [[where | the | problem | lies]]]]. |
| :---: | :---: | :---: | :---: |
| Range |  |  |  |
| Idr <br> Token <br> Circ | Idd <br> Value |  | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Iden } \\ & \text { Circ } \end{aligned}$ |

## Clause 37

We wake up each morning

| T1\begin{tabular}{l\|l|l|l|}
\hline
\end{tabular} | Behav | Procn <br> Behl | Time |
| :--- | :--- | :--- | :--- | :--- |

## Clause 38

to find


## Clause 39



## Clause 40



## Clause 41



## Clause 42

to see
T1 Proc
Ment
Perc

## Clause 43

that American markets have plummeted
T1

| Actor |  | Proc |
| :--- | :--- | :--- | :--- | :--- |
|  | Mat |  |

## Clause 44

and theirs plummets in kind.
T1

|  | Actor | Proc | Mann |  |
| :--- | :--- | :--- | :--- | :--- |
| Mat |  |  |  |  |

Clause 45

|  | The | media | reports | on | it |
| :---: | :---: | :---: | :---: | :---: | :---: |
| T1 | Sayer |  | Proc | Verb |  |
|  |  |  | Verbl |  |  |

Clause 46
and everyone panics,
T1

| Behav | Proc <br> Behl |
| :--- | :--- |

## Clause 47



## Clause 48

and making it worse.
T1

|  | Proc <br> Mat | Goal | Range |
| :--- | :--- | :--- | :--- |

## Clause 49

We are in a downward spiral
T1

| Carr | Proc | Att |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Reln | Circ |  |  |  |
|  | Attr |  |  |  |  |
|  | Circ |  |  |  |  |

## Clause 50

and people's fears are only making it worse.
T1


Clause 51
[[Pulling all of your money out of stocks right now] is


| not | only | a | hasty | decision | [[that | you | will | regret]], |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accom |  | Value |  |  |  |  |  |  |
| Add |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | Sens | Proc |  |
|  |  |  |  |  |  |  | Ment |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

## Clause 52



## Clause 53

and making things worse.
T1


## Clause 54

Unless you are on the cusp [of retirement],
T1

|  | Carr | Proc | Att |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Reln | Circ |  |  |  |
|  |  |  |  |  |  |  |
| Attr |  |  |  |  |  |  |
| Circ |  |  |  |  |  |  |

## Clause 55

sit tight

| T1 | $\begin{array}{l}\text { Proc } \\ \text { Behl }\end{array}$ | Range |
| :--- | :--- | :--- |

## Clause 56

and ride it out
T1

|  | Proc <br> Mat | Goal | Proc |
| :--- | :--- | :--- | :--- |
| Mat |  |  |  |

## Clause 57

and don't panic
T1


## Clause 58

because panic only adds to the problem.
T1

|  | Actor |  | Proc <br> Mat | Range |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Clause 59

T1

## Clause 60

5. gmakens

T1


## Clause 61

|  | I believe | one | of the | problems | is | with | the | credit | default | swap |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T1 |  | Carr |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Attr } \\ & \text { Circ } \end{aligned}$ | $\begin{aligned} & \text { Att } \\ & \text { Circ } \end{aligned}$ |  |  |  |  |
| T2 |  |  |  |  |  |  |  |  |  |  |


| (CDS) | market, | particularly | [[what | are | called | naked | swaps]]. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{\|l\|} \hline \text { Att } \\ \text { Circ } \end{array}$ |  |  |  |  |  |
|  |  |  | Idd | Proc |  | Idr |  |
|  |  |  | Value |  |  | Token |  |

## Clause 62

A CDS is a contract [between two parties]
T1


## Clause 63

|  | where | the | buyer | pays | a | premium | to | the | seller | for |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T1 | $\begin{array}{\|l} \text { Locn } \\ \text { Place } \end{array}$ | Actor |  | Proc Mat | Range |  | Recip |  |  | $\begin{aligned} & \text { Caus } \\ & \text { Purp } \end{aligned}$ |
| T2 |  |  |  |  |  |  |  |  |  |  |

protection [[against a debt security <(like a collaterized

|  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |
|  |  | Actor |  |  | Actor |  |  |



## Clause 64

If the debt defaults,
T1


## Clause 65


the debt].


## Clause 66

|  | This | is | basically | an | insurance | contract | [against | defaulting |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T1 | Idd | Proc |  | Idr |  |  |  |  |
|  | Token | Reln |  | Value |  |  |  |  |
|  |  | Iden |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

debt].


Clause 67

|  | The | problem | is | [[that | speculators | (hedge | funds, | etc) | have |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T1 | $\begin{array}{\|l\|} \hline \text { Idd } \\ \text { Value } \end{array}$ |  | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Iden } \\ & \text { Int } \end{aligned}$ | ldr <br> Token |  |  |  |  |  |
| T2 |  |  |  |  | Actor | Actor |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |
| T3 |  |  |  |  |  |  |  |  |  |



## Clause 68

This is [[where the regulation has failed]].

| T1 | Idd Token -- | $\begin{array}{\|l} \text { Proc } \\ \text { Reln } \\ \text { Iden } \\ \text { Circ } \end{array}$ | $\mid l d r$ Value Circ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T2 |  |  | Range | Actor | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |  |

## Clause 69

So now if a \$1MM bond defaults,
T1
$\square \square$

-

## Clause 70



## Clause 71

the sellers [of the CDS] need to pay off that $\$ 1 \mathrm{MM}$ bond


100 times over.

| Ext |  |  |
| :--- | :--- | :--- |
| Temp |  |  |

## Clause 72

How does this make economic sense?!

| T1 | Mann | Proc | Carr | Proc | Att |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Means | Reln |  | Reln |  |  |
|  | Attr |  | Attr |  |  |
|  | Int |  | Int |  |  |
|  |  |  |  |  |  |

Clause 73




## Clause 74


underlying debt].


## Clause 75

They can't lend money

| T1 | Actor | $\begin{array}{l}\text { Proc } \\ \text { Mat }\end{array}$ | Range |
| :--- | :--- | :--- | :--- |

## Clause 76

- they need to pay the speculators.

T1


Clause 77


## Clause 78

until this issue is addressed.
T1


## Clause 79

| I think the |  |  | government | should | make | naked | swaps | illegal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T1 |  | Attbr |  | Proc |  | Carr |  | Att |
|  |  |  |  | Reln |  |  |  |  |
|  |  |  |  | Attr |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

## Clause 80

| - force all |  |  | the | financial | institutions | and | speculators | to |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T1 | Proc | Actor |  |  |  |  |  | Proc |
|  | Mat |  |  |  |  |  |  | Mat |

unwind the contracts.


## Clause 81



## Clause 82

close the swaps,
T1 Proc Goal
Mat

## Clause 83

and call it even.
T1

|  | Proc | Carr | Att |
| :--- | :--- | :--- | :--- |
| Reln |  |  |  |
| Attr |  |  |  |
| Int |  |  |  |

## Clause 84

Then the banks and financial instiutions won't have to hoard
T1



## Clause 85


loaning it out again.

|  | Goal | Range |
| :--- | :--- | :--- | | Ext |
| :--- |
| Temp |

## Clause 86

The outstanding value [of all the CDS] is on the order of $\$ 50$
T1


TRILLION dollars!!


## Clause 87

The credit markets are not going to get back to normal


## Clause 88

until this is addressed.


## Clause 89

But that is just my opinion.
T1

| Idd Proc Idr  <br> Token Reln   <br> Iden    <br> Int    |  | Value |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |

## Clause 90

T1

## Clause 91

6. Steve

T1


## Clause 92



| Street]J] | appears | so. |
| :--- | :--- | :--- |
|  | Proc | Att |
|  | Reln | Circ |
|  | Attr |  |
|  | Circ |  |
|  |  |  |
|  |  |  |

## Clause 93

Why is there no diversity?

| T1Caus Proc  Ex <br> Reas Exist   |  |  |  |
| :--- | :--- | :--- | :--- | :--- |

## Clause 94



## Clause 95

## T1

## Clause 96

7. Texrat

T1


Clause 97


## Clause 98

|  | Do | we | have | time | [ to | write | David | Smick | in | for | president]]? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T1 | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Attr } \\ & \text { Circ } \end{aligned}$ | Carr | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Attr } \\ & \text { Circ } \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { Att } \\ \text { Circ } \end{array}$ |  |  |  |  |  |  |  |
| T2 |  |  |  |  | Proc Mat |  | Goal |  | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |  | Range |

## Clause 99

T1

## Clause 100

8. Mike M

T1


## Clause 101

|  | It | 's | emotion | [[fthat | is) | fueling | it | now]] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T1 | $\begin{array}{\|l\|} \hline \text { Idd } \\ \text { Value } \end{array}$ | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Iden } \\ & \text { Int } \end{aligned}$ | Idr Token | $\begin{array}{\|l\|} \hline \text { Idd } \\ \text { Value } \end{array}$ |  |  |  |  |
| T2 |  |  |  | Actor | $\begin{aligned} & \text { Proc } \\ & \text { Mat } \end{aligned}$ |  | Goal | $\begin{aligned} & \text { Locn } \\ & \text { Time } \end{aligned}$ |

## Clause 102

so the media could help
T1

| Actor |  | Proc <br> Mat |
| :--- | :--- | :--- | :--- |

## Clause 103


coverage and the way [[it s couched]].


Clause 104

|  | We | \{we\} | do | not | need | to | see | another | "Is | this | another |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T1 | Sens |  |  |  |  | Proc <br> Ment <br> Perc |  | $\begin{aligned} & \text { Phen } \\ & \text { Range } \end{aligned}$ |  |  |  |
| T2 |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Proc } \\ & \text { Reln } \\ & \text { Iden } \\ & \text { Int } \end{aligned}$ | Idd Token | Idr Value |


| Great | Depression" |
| :--- | :--- |
|  |  |
|  |  |
|  |  |
|  |  |

## Clause 105


[of the market] nor the full details [of the Depression].

|  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |

## Clause 106



## Clause 107

|  | [[Watching | every | flicker | of the | Dow]] | is | not | representative |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T1 | Carr |  |  |  |  | Proc <br> Reln <br> Attr <br> Circ |  | $\begin{array}{\|l\|} \hline \text { Att } \\ \text { Circ } \end{array}$ |
| T2 | $\begin{array}{\|l\|} \hline \text { Proc } \\ \text { Behl } \end{array}$ | Behr |  |  |  |  |  |  |

as well.


## Clause 108

|  | Do | we | even | know |
| :---: | :--- | :--- | :--- | :--- | :--- |
| T1 | Proc | Sens |  | Proc |
| Ment |  |  | Ment |  |
| Cogn |  |  | Cogn |  |

## Clause 109

what 6,000 points means?

| T1 | Idr <br> Value | Idd <br> Token |  | Reln <br> Iden <br> Int |
| :--- | :--- | :--- | :--- | :--- |

## Clause 110



## Clause 111

Is that my price?

T1 | Proc | ldd | Idr |  |
| :--- | :--- | :--- | :--- | :--- |
| Reln | Token | Value |  |
| Iden |  |  |  |
| Int |  |  |  |

## Clause 112

Some investors see it as a buying opportunity.

| T1 Sens | Proc Phen <br> Ment  <br> Perc  | Role <br> Range | Guise |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Clause 113


not help,


## Clause 114

| especially | having | lost | his | credibility | with | Mission |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T1 | Proc |  | Att |  | Caus |  |
|  | Reln |  | Possd |  | Reas |  |
|  | Attr |  |  |  |  |  |
|  | Poss |  |  |  |  |  |

Accomplished.


## Clause 115

T1

## Clause 116

9. Jonathan

T1


## Clause 117

| If you |  | really | knew |
| :---: | :---: | :---: | :---: |
| T1 | Sens |  | Proc |
|  |  |  | Ment |
|  |  |  | Cogn |

## Clause 118

"how to stop it,"

| T1 | Mann <br> Means | Proc <br> Mat |  |  |
| :--- | :--- | :--- | :--- | :--- |

Clause 119

|  | wouldn't | you | be | a | billionaire | 700 | times | over? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T1 | Proc | Carr | Proc | Att |  | Ext |  |  |
|  | Reln |  | Reln |  |  | Temp |  |  |
|  | Attr |  | Attr |  |  |  |  |  |
|  | Int |  | Int |  |  |  |  |  |

## Clause 120

## T1

## Clause 121

10. Susan

T1


Clause 122



Clause 123
I firmly believe they 've gotten brutally rich during his term.
T1


## Clause 124

First with invading Iraq (oil)
T1

|  | Proc <br> Mat | Goal | Caus <br> Purp |
| :--- | :--- | :--- | :--- | :--- |

Clause 125

|  | laying | in | bed | with | Wall | St. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T1 | Proc | Behav |  | Accom |  |  |
|  | Behl |  |  | Comt |  |  |

## APPENDIX 3 SF ANALYSIS MATRICES

The occurrences of all tags in all clauses in the main story as shown in the previous section, Appendix 2: SF Analysis of Clauses, are counted by Systemics and output as matrices. This section is a compilation of the matrices, classified according to Key. The matrices in this section are crucial for understanding the recurrence plots, as well as the SVD results.

All the Keys can be extracted from Systemics Search Page with the commands:
CI/*
An/*
The information in this section is restricted to clause 7 to 80 of the main story, and only terminal-tags are used (superordinate tags are ignored).

Key
No. of tag types

S
21
TH 13
Tex 18
M 33
Int 44
T 92
E 19
$\operatorname{Exp} 16$
MET 37

$$
\text { Total }=293
$$

Note that the tags in the matrices are not arranged in alphabetical order like the tag lists in the rest of this thesis, but have been arranged to reflect what tags are important (more important = leftmost columns), in my judgement. I have also tried, as far as possible, to group together columns (columns $=$ tags) that are most closely semantically related to each other. This is to facilitate interpretation.

|  | $\frac{\underset{\sim}{\sim}}{\frac{\sim}{\sim}}$ | $\begin{aligned} & \stackrel{ \pm}{\Sigma} \\ & \stackrel{\oplus}{\circlearrowleft} \end{aligned}$ | $\begin{aligned} & \overline{\bar{\omega}} \\ & \bar{\omega} \\ & \bar{\omega} \end{aligned}$ | $\begin{aligned} & \overline{0} \\ & \overline{0} \\ & \bar{\sim} \end{aligned}$ | $\begin{aligned} & \mathrm{O} \\ & \stackrel{0}{\omega} \\ & \overline{0} \end{aligned}$ | $\begin{aligned} & \frac{1}{O} \\ & \frac{\ddots}{\omega} \\ & \vdots \end{aligned}$ | $\begin{aligned} & 0 \\ & \vdots \\ & \vdots \\ & \vdots \end{aligned}$ | $\begin{aligned} & \frac{0}{0} \\ & \bar{\omega} \\ & \overline{0} \end{aligned}$ | $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{0} \end{aligned}$ | $\begin{aligned} & \frac{0}{0} \\ & \bar{\omega} \\ & \bar{O} \end{aligned}$ | $\begin{aligned} & \frac{0}{\grave{0}} \\ & \frac{0}{0} \end{aligned}$ | $\begin{aligned} & \mathrm{U} \\ & \bar{v} \\ & \bar{v} \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & \frac{0}{0} \\ & 0 \end{aligned}$ | $\begin{aligned} & \text { O} \\ & \frac{0}{\omega} \\ & \vdots \end{aligned}$ | $\begin{aligned} & \text { U} \\ & \text { } \\ & \bar{\omega} \\ & \bar{U} \end{aligned}$ | $\begin{aligned} & \stackrel{\sim}{\sim} \\ & \underset{\sim}{0} \\ & \hline \end{aligned}$ | $\begin{aligned} & \overline{\bar{W}} \\ & \underset{\sim}{\mathscr{N}} \\ & \bar{\circlearrowleft} \end{aligned}$ | $\begin{aligned} & \text { O} \\ & \text { N } \\ & 0 \\ & \bar{U} \end{aligned}$ | $\begin{aligned} & \frac{1}{\mathcal{N}} \\ & \underset{\sim}{\mathcal{O}} \end{aligned}$ | O <br> N <br> $\substack{0 \\ \hline}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Totals | 19 | 6 | 6 | 1 | 1 | 10 | 4 | 16 | 3 | 1 | 1 | 3 | 4 | 2 | 1 | 3 | 1 | 1 | 2 | 3 | 1 |
| Clause 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 8 | 1 |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 13 |  | 1 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 17 | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  | 1 |  | 1 |  | 1 |  |
| Clause 18 | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 |  |  |  |  | 1 | 1 | 1 |  |  |  |  |  |  |
| Clause 19 | 2 | 1 |  |  |  | 2 | 1 |  |  | 1 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |
| Clause 20 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 22 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 23 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 24 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 25 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 26 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 27 | 1 | 1 |  |  |  | 1 |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 28 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 29 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 31 |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 32 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 33 | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 34 | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 35 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 36 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 37 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 38 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 39 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 40 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 41 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 42 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 43 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 44 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 45 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 46 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 47 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 48 | 1 |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 49 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 51 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 52 | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  | 1 |  |  | 1 | 1 | 1 |
| Clause 53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 54 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 55 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 56 | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 57 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 58 | 2 |  |  |  |  | 1 |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 59 | 1 |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 60 | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  | 1 |  |  | 1 | 1 |  |
| Clause 61 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 62 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 63 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 64 | 1 |  |  |  |  |  | 1 |  |  |  |  | 1 | 1 | 1 |  |  | 1 |  |  |  |  |
| Clause 65 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 66 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 67 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 68 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 70 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 71 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 72 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 73 | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 74 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 75 | 1 |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 76 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 77 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 78 |  | 1 |  |  |  |  | 1 |  |  |  |  | 1 | 1 |  |  |  |  |  |  |  |  |
| Clause 79 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clause 80 | 1 | 1 |  |  |  | 1 |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |


| TH |  |  | Cl/TH1/Topic/TH/Theme |  |  |  |  |  |  | Cl/TH2/Topic/Theme |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| totals | 57 | 6 | 3 | 71 | 7 | 14 | 2 | 2 | 2 | 4 | 1 | 7 | 5 |
| clause 7 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 8 | 1 |  |  | 1 |  | 1 |  |  |  |  |  |  |  |
| clause 9 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 10 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 11 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 12 |  |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| clause 13 |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 14 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 15 | 1 |  |  | 1 | 1 |  |  |  |  |  |  |  |  |
| clause 16 | 1 |  |  | 1 |  | 1 |  |  |  |  |  |  |  |
| clause 17 |  |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| clause 18 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 19 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 20 | 1 |  |  | 1 |  |  |  |  | 1 |  |  |  |  |
| clause 21 | 1 |  |  | 1 | 1 |  |  |  |  |  |  |  |  |
| clause 22 |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 23 | 1 |  |  | 1 | 1 |  |  |  |  |  |  |  |  |
| clause 24 |  | 1 |  | 1 |  |  | 1 |  |  |  |  |  |  |
| clause 25 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 26 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 27 | 1 |  |  | 1 | 1 |  |  |  |  |  |  |  |  |
| clause 28 | 1 |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| clause 29 | 1 |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| clause 30 |  |  |  | 1 |  |  |  |  |  | 1 |  | 1 |  |
| clause 31 |  |  |  | 1 |  |  |  |  |  | 1 |  | 1 | 1 |
| clause 32 |  |  |  | 1 |  |  |  |  |  | 1 |  | 1 | 1 |
| clause 33 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 34 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 35 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 36 | 1 |  |  | 1 |  | 1 |  |  |  |  |  |  |  |
| clause 37 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 38 | 1 |  |  | 1 |  | 1 |  |  |  |  |  |  |  |
| clause 39 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 40 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 41 | 1 |  |  | 1 |  | 1 |  |  |  |  |  |  |  |
| clause 42 |  | 1 |  | 1 |  |  | 1 |  |  |  |  |  |  |
| clause 43 |  | 1 |  | 1 |  | 1 |  |  |  |  |  |  |  |
| clause 44 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 45 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 46 | 1 |  |  | 1 |  | 1 |  |  |  |  |  |  |  |
| clause 47 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 48 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 49 |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |
| clause 50 | 1 |  |  | 1 | 1 |  |  |  |  |  |  |  |  |
| clause 51 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 52 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 53 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 54 | 1 |  |  | 1 |  | 1 |  |  |  |  |  |  |  |
| clause 55 | 1 |  |  | 1 |  |  |  |  | 1 |  |  |  |  |
| clause 56 | 1 |  |  | 1 |  | 2 |  |  |  |  |  |  |  |
| clause 57 |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 58 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 59 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 60 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 61 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 62 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 63 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 64 |  |  | 1 | 1 |  |  |  |  |  |  |  |  |  |
| clause 65 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 66 | 1 |  |  | 1 | 1 |  |  |  |  |  |  |  |  |
| clause 67 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 68 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 69 | 1 |  |  | 1 |  | 1 |  |  |  |  |  |  |  |
| clause 70 | 1 |  |  | 1 |  |  |  | 1 |  |  |  |  |  |
| clause 71 | 1 |  |  | 1 |  | 1 |  | 1 |  |  |  |  |  |
| clause 72 | 1 |  |  | 1 |  | 1 |  |  |  |  |  |  |  |
| clause 73 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 74 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 75 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 76 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 77 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 78 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 79 | 1 |  |  |  | 1 |  |  |  |  |  | 1 | 1 | 1 |
| clause 80 |  |  |  | 1 |  |  |  |  |  | 1 |  | 1 |  |


| Tex |  |  |  |  |  |  | An/Tex1/Topic/unmarked/ellipsed | An/Tex1/Topic/unmarked/rankshift |  | An/Tex1/Topic/none |  | An/Tex1/Theme/beta-clause |  | An/Tex2/Theme/simple |  |  |  | An/Tex2/Topic/none |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| totals | 39 | 5 | 20 | 1 | 3 | 52 | 1 | 1 | 9 | 8 | 4 | 3 | 3 | 2 | 5 | 3 | 2 | 2 |
| clause 7 | 1 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 8 |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 9 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 10 |  |  |  |  | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |
| clause 11 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 12 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 13 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 14 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 15 |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 16 |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 17 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 18 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 19 | 1 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 20 |  | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 21 |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 22 | 1 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| clause 23 |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 24 |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 25 |  | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 26 | 1 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 27 |  |  | 1 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 28 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  | 1 |  |  | 1 |
| clause 29 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  | 1 |  |  | 1 |
| clause 30 |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  | 1 |  | 1 |  |  |
| clause 31 |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  | 1 |  | 1 |  |
| clause 32 |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  | 1 |  | 1 |  |
| clause 33 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 34 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 35 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 36 |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 37 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 38 |  |  | 1 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 39 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 40 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 41 |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 42 |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 43 |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 44 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 45 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 46 |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 47 |  |  |  |  | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |
| clause 48 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 49 |  |  | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |
| clause 50 |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 51 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 52 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 53 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 54 |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 55 |  | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 56 |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 57 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 58 | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| clause 59 | 1 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 60 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 61 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 62 | 1 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 63 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 64 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 65 | 1 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 66 |  |  | 1 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 67 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 68 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 69 |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 70 |  | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 71 |  | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 72 |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 73 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 74 |  |  |  |  | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |
| clause 75 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 76 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 77 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 78 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 79 |  |  | 1 |  |  |  |  |  |  |  |  | 1 | 1 |  | 1 | 1 |  |  |
| clause 80 |  |  |  |  |  |  |  |  |  | 1. | 1 |  |  | 1 |  | 1 |  |  |


| $\mathbf{M}$ | CI/M1/Subj/Mood | CI/M1/Subj/TH/Mood | CI/M1/Subj/WH/Mood | $\stackrel{-0}{0}$ | CI/M1/Fin/Modl/Mood |  |  |  |  |  | CI/M1/Modal-Met/Mood |  |  |  |  | CI/M1/Circ-Adj/WH/Residue |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| totals | 60 | 4 | 3 | 35 | 6 | 6 | 18 | 2 | 7 | 2 | 3 | 45 | 55 | 1 | 35 | 3 | 1 |
| clause 7 | 1 |  |  | 1 |  |  |  | 1 |  |  |  |  | 1 |  | 1 |  |  |
| clause 8 | 1 |  |  |  |  |  | 1 |  |  |  |  |  | 1 |  |  |  |  |
| clause 9 | 1 |  |  | 1 |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| clause 10 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| clause 11 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| clause 12 |  | 1 |  | 1 |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |
| clause 13 |  |  | 1 |  | 1 |  |  |  |  |  |  | 1 | 1 |  | 1 |  |  |
| clause 14 | 1 |  |  |  | 1 |  |  |  |  |  |  | 1 | 1 |  | 1 |  |  |
| clause 15 | 1 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| clause 16 | 1 |  |  |  |  |  | 1 |  |  |  |  |  | 1 |  |  |  |  |
| clause 17 |  | 1 |  | 1 |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| clause 18 | 1 |  |  | 1 |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| clause 19 | 1 |  |  |  |  |  | 1 |  |  |  |  |  | 1 |  | 3 |  |  |
| clause 20 | 1 |  |  | 1 |  |  |  | 1 |  |  |  | 1 |  |  | 1 |  |  |
| clause 21 | 1 |  |  | 1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
| clause 22 |  |  | 1 | 1 |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |
| clause 23 | 1 |  |  | 1 |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| clause 24 | 2 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
| clause 25 | 1 |  |  |  |  |  |  |  |  |  | 1 | 1 | 1 |  |  |  |  |
| clause 26 | 1 |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  | 2 |  |  |
| clause 27 | 1 |  |  |  |  |  | 1 |  |  |  |  |  | 1 |  | 1 |  |  |
| clause 28 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| clause 29 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  | 1 |  |  |
| clause 30 | 1 |  |  |  |  |  | 1 |  |  |  |  |  | 1 |  | 1 |  |  |
| clause 31 | 1 |  |  |  |  |  | 1 |  |  |  |  |  | 1 |  |  |  |  |
| clause 32 | 1 |  |  |  |  |  | 1 |  |  |  |  | 1 | 1 |  | 1 |  |  |
| clause 33 | 1 |  |  | 1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
| clause 34 | 1 |  |  | 1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
| clause 35 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| clause 36 | 1 |  |  | 1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
| clause 37 | 1 |  |  |  |  |  | 1 |  |  |  |  |  | 1 |  |  |  |  |
| clause 38 | 1 |  |  | 1 |  |  |  |  | 1 |  |  | 1 | 1 |  | 1 |  |  |
| clause 39 | 1 |  |  |  |  |  | 1 |  |  |  |  |  | 1 |  |  |  |  |
| clause 40 | 1 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| clause 41 | 1 |  |  |  |  | 1 |  |  |  |  |  | 1 |  |  |  | 1 |  |
| clause 42 | 1 |  |  | 1 |  |  |  |  |  |  |  | 1 |  | 1 | 1 |  |  |
| clause 43 | 1 |  |  | 1 |  |  |  |  |  |  |  | 1 |  |  | 1 | 1 |  |
| clause 44 | 1 |  |  | 1 |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| clause 45 | 1 |  |  |  |  | 1 |  |  |  |  |  | 1 | 1 |  | 1 |  |  |
| clause 46 | 1 |  |  |  |  |  | 1 |  |  |  |  |  | 1 |  |  |  |  |
| clause 47 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  | 1 |  |  |
| clause 48 | 1 |  |  | 1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
| clause 49 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| clause 50 | 1 |  |  | 1 |  |  |  |  | 2 |  |  | 1 | 1 |  | 2 |  |  |
| clause 51 | 1 |  |  | 1 |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |
| clause 52 | 1 |  |  | 1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
| clause 53 | 1 |  |  | 1 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |
| clause 54 | 1 |  |  | 1 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |
| clause 55 | 1 |  |  |  |  | 1 |  |  | 1 | 1 |  | 1 |  |  |  |  |  |
| clause 56 | 1 |  |  | 1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
| clause 57 |  |  | 1 | 1 |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| clause 58 | 1 |  |  | 1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
| clause 59 | 1 |  |  |  |  | 1 |  |  |  |  |  | 1 | 1 |  | 1 |  |  |
| clause 60 | 1 |  |  | 1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
| clause 61 | 1 |  |  |  |  |  | 1 |  |  |  |  |  | 1 |  |  |  |  |
| clause 62 | 1 |  |  | 1 |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |
| clause 63 | 1 |  |  |  |  |  | 1 |  |  |  |  |  |  |  | 1 |  |  |
| clause 64 |  | 1 |  |  |  |  | 1 |  |  |  |  |  | 1 |  |  |  |  |
| clause 65 | 1 |  |  |  |  |  | 1 |  |  |  |  |  | 1 |  | 1 |  |  |
| clause 66 | 1 |  |  | 1 |  |  |  |  | 1 |  |  |  | 1 |  | 2 |  |  |
| clause 67 | 1 |  |  |  | 1 |  |  |  |  | 1 |  | 1 | 2 |  |  |  |  |
| clause 68 | 1 |  |  | 1 |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |
| clause 69 | 1 |  |  | 1 |  | 1 |  |  |  |  |  |  | 1 |  |  |  | 1 |
| clause 70 | 1 |  |  |  |  |  |  |  |  |  | 1 | 1 | , |  |  |  |  |
| clause 71 | 1 |  |  | 1 |  |  |  |  |  |  | 1 | 1 |  |  | 1 |  |  |
| clause 72 | 1 |  |  | 1 |  |  |  |  | 1 |  |  | 1 |  |  | 1 |  |  |
| clause 73 | 1 |  |  |  |  | 1 |  |  |  |  |  | 1 | 1 |  |  |  |  |
| clause 74 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  | 2 |  |  |
| clause 75 | 1 |  |  |  | 1 |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| clause 76 | 1 |  |  |  |  |  | 1 |  |  |  |  | 1 |  |  |  |  |  |
| clause 77 | 1 |  |  | 1 |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| clause 78 | 1 |  |  |  | 1 |  |  |  |  |  |  | 2 | 1 |  | 1 |  |  |
| clause 79 |  | 1 |  | 1 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |
| clause 80 | 1 |  |  |  | 1 |  |  |  |  |  |  | 1 | 1 |  |  |  |  |



| Int |  |  |  |  | $\qquad$ |  |  |  |  |  |  |  | $\qquad$ |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| totals | 70 | 3 | 1 | 59 | 3 | 3 | 2 | 7 | 8 | 6 | 2 | 1 | 3 | 1 | 3 | 2 | 4 | 3 | 1 | 64 | , | 20 | 36 | 8 |
| clause 7 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 8 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 9 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 10 | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 11 | 1 |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 12 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | , |  | 1 |  |  |
| clause 13 | 1 |  |  | 1 |  |  |  |  |  | 1 |  |  | 1 |  |  |  |  |  |  | , |  |  |  | 1 |
| clause 14 | 1 |  |  | 1 |  |  |  |  |  | 1 |  |  | 1 |  |  |  |  |  |  | , |  |  |  | 1 |
| clause 15 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |
| clause 16 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | , |  | 1 |  |  |
| clause 17 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 18 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |
| clause 19 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | , |  | 1 |  |  |
| clause 20 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |
| clause 21 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  | 1 |  |  |
| clause 22 | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 23 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 24 | 1 |  |  |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 25 |  |  | 1 | 1 |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  | 1 |  |  |  |  |
| clause 26 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | , |  |  | 1 |  | 1 |  |  |
| clause 27 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |
| clause 28 | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 29 | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 30 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |
| clause 31 | 1 |  |  |  | , |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |
| clause 32 | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |
| clause 33 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |
| clause 34 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
| clause 35 | 1 |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 36 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 37 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |
| clause 38 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  | 1 |  |  |
| clause 39 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |
| clause 40 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |
| clause 41 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |
| clause 42 | 1 |  |  |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 43 | 1 |  |  |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |
| clause 44 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 45 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | , |  |  |  | 1 |
| clause 46 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 47 | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 48 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | , |  |  | 1 |  |
| clause 49 | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 50 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  | 1 |  | 1 |  |  |
| clause 51 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 52 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
| clause 53 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 54 | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 55 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 | 1 |  |  |  | 1 |
| clause 56 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 57 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |
| clause 58 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 59 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  | 1 |
| clause 60 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 61 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 62 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 63 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | , |  |
| clause 64 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 65 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 66 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  | , |  |  | 1 |  |
| clause 67 | 1 |  |  | 1 |  |  |  |  |  | 1 |  |  | 1 |  |  | 1 |  |  |  | 1 |  |  |  | 1 |
| clause 68 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 69 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  | 1 |
| clause 70 | 1 |  |  | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |
| clause 71 | 1 |  |  | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 72 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  | 1 |  |
| clause 73 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  | 1 |
| clause 74 | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 75 |  | 1 |  | 1 |  |  |  |  | 1 | 1 |  |  |  |  | 1 |  |  |  |  | 1 |  |  | 1 |  |
| clause 76 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | , |  |
| clause 77 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |
| clause 78 |  | 1 |  | 1 |  |  |  |  | 1 | 1 |  |  |  |  | 1 |  |  |  |  | 1 |  |  | 1 |  |
| clause 79 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |
| clause 80 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |



| $T$ |  |  |  |  |  |  |  |  |  |  | CI/T1/Proc/Verbl |  | $\begin{aligned} & \bar{O} \\ & \frac{1}{y} \\ & \vdots \\ & \vdots \\ & \hline \end{aligned}$ | $\begin{aligned} & \bar{\pi} \\ & 0 \\ & \stackrel{N}{0} \\ & \bar{U} \\ & \bar{U} \end{aligned}$ | CI/T1/Range | $\begin{aligned} & \frac{i}{0} \\ & \substack{2} \\ & \frac{1}{2} \end{aligned}$ | $\bar{\omega}$ 0 0 0 $\vdots$ $\vdots$ $\vdots$ $\vdots$ $\vdots$ | $\begin{aligned} & \pm \\ & \frac{ \pm}{\leq} \\ & \vdots \\ & \hline \vdots \end{aligned}$ |  |  | $\begin{aligned} & \grave{a} \\ & \frac{7}{5} \\ & \frac{1}{5} \\ & \vdots \end{aligned}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| totals | 36 | 11 | 4 | 7 | 13 | 3 | 4 | 1 | 1 | 1 | 1 | 1 | 22 | 10 | 10 | 14 | 7 | 10 | 4 | 7 | 1 | 6 | 8 | 2 |
| clause 7 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| clause 8 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |  |  |
| clause 9 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |
| clause 10 |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 11 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 12 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |
| clause 13 | 2 |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 14 | 2 |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 15 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| clause 16 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| clause 17 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| clause 18 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 19 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 20 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
| clause 21 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| clause 22 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| clause 23 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 24 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |
| clause 25 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 26 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| clause 27 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 28 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 29 | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| clause 30 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |
| clause 31 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |
| clause 32 | 2 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |
| clause 33 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
| clause 34 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
| clause 35 | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| clause 36 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| clause 37 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| clause 38 | 2 |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 39 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 40 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| clause 41 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| clause 42 |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |
| clause 43 | 2 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| clause 44 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 45 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |  |  |  |
| clause 46 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 47 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |  |  |
| clause 48 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |  |  |
| clause 49 | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| clause 50 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |  |  |
| clause 51 | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| clause 52 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |
| clause 53 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| clause 54 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| clause 55 | 2 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| clause 56 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
| clause 57 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |  |  |
| clause 58 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
| clause 59 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 60 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
| clause 61 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| clause 62 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| clause 63 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 64 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |
| clause 65 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| clause 66 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| clause 67 |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  | 1 |  |  |  |
| clause 68 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 69 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |  |  |  |
| clause 70 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |  |  |
| clause 71 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |  |  |  |
| clause 72 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |  |  |  |
| clause 73 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
| clause 74 | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| clause 75 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
| clause 76 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |  |  |
| clause 77 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 78 | 2 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |
| clause 79 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| clause 80 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |



|  |  |  | $\grave{0}$ $\stackrel{\rightharpoonup}{0}$ $\vdots$ $\vdots$ $\vdots$ $\vdots$ | $\bar{\circ}$ 0 $\vdots$ $\vdots$ $\vdots$ $\vdots$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 2 | 1 | 2 | 2 | 2 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| 1 |  |  |  | 1 |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  | 1 |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| 1 |  |  | 1 |  | 1 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| 1 |  |  | 1 |  | 1 |
|  |  |  |  |  |  |
| 1 |  |  |  | 1 |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  | - |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  | - |  |  |
|  |  |  |  |  |  |
|  |  |  | - |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  | - |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | 1 |  |  |  |  |
|  | 1 |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |



|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - $\mathrm{Cl} /$ T2//ldd/Value/Circ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - Cl/T2/Sens |
|  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - C//T2/Accom/Comt |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  | - Cl/T2/Caus/Purp |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  | - CI/T2/Ext/Spat |
|  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - CI/T2/Mann/Qual |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  | - Cl/T2/Locn/Place |
|  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  | N Cl/T2/Locn/Time |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - ${ }_{\text {C//T3/Proc/Mat }}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - CI/T3/Proc/Reln/Attr/Circ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  | - CI/T3/Proc/Reln/Attr/Int |
|  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - CI/T3/Goal |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  | - CI/T3/Att |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - CI/T3/Att/Circ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  | ~ Cl/T3/Carr |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - CI/T3/Locn/Time |


|  | $\begin{aligned} & 0 \\ & \frac{0}{2} \\ & \underset{\sim}{4} \\ & \hline \bar{U} \\ & \hline \end{aligned}$ |  |  |  | $\begin{aligned} & \stackrel{v}{u} \\ & \bar{u} \\ & \bar{u} \\ & \hline \end{aligned}$ | $\begin{aligned} & \stackrel{\oplus}{0} \\ & \bar{\omega} \\ & \stackrel{1}{\omega} \\ & \stackrel{\omega}{\omega} \\ & \bar{\omega} \end{aligned}$ | 0 ò ¿ $\frac{1}{\omega}$ $\vdots$ |  |  |  |  |  | $\stackrel{0}{0}$ $\stackrel{0}{\widetilde{0}}$ $\stackrel{\sim}{\sim}$ $\underset{\sim}{\sim}$ $\underset{\sim}{U}$ |  | $\begin{aligned} & \dot{U} \\ & \overline{0} \\ & N \\ & \tilde{U} \\ & \hline \end{aligned}$ | $\begin{aligned} & 0 \\ & \frac{0}{2} \\ & \stackrel{1}{n} \\ & \underset{\sim}{\omega} \\ & \hline \end{aligned}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| totals | 83 | 72 | 41 | 16 | 36 | 1 | 7 | 7 | 3 | 6 | 33 | 20 | 17 | 6 | 7 | 3 | 3 | 2 | 1 |
| clause 7 | 1 | 1 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 8 | 1 | 1 | 1 |  |  |  |  |  |  |  | 1 | 1 | 1 |  |  |  |  |  |  |
| clause 9 | 1 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 10 | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 11 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 12 | 1 | 1 | 1 |  |  |  | 1 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 13 | 2 | 1 | 1 |  | 1 |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| clause 14 | 2 | 1 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 15 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 16 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 17 | 1 | 1 |  | 1 |  |  |  |  |  |  | 1 | 1 | 1 |  |  | 1 | 1 | 1 |  |
| clause 18 | 1 | 1 | 1 |  |  |  | 1 | 1 | 1 |  | 4 | 4 | 1 | 1 | 1 |  |  |  |  |
| clause 19 | 1 | 1 | 1 |  | 3 |  |  |  |  |  | 4 |  | 3 |  | 1 |  |  |  |  |
| clause 20 | 1 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 21 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 22 | 1 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 23 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 24 | 1 | 2 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 25 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 26 | 1 | 1 |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 27 | 1 | 1 | 1 |  | 1 |  | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |  |  |  |  |  |
| clause 28 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 29 | 1 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 30 | 1 | 1 |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 31 | 1 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 32 | 2 | 1 |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 33 | 1 | 1 |  | 1 |  |  |  |  |  |  | 1 | 1 |  |  | 2 |  |  |  |  |
| clause 34 | 1 | 1 |  | 1 |  |  |  |  |  |  | 1 | 1 |  | 1 |  |  |  |  |  |
| clause 35 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 36 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 37 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 38 | 2 | 1 | 1 |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 39 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 40 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 41 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 42 | 2 | 1 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 43 | 2 | 1 |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 44 | 1 | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 45 | 1 | 1 | 1 |  | 1 |  | 1 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |
| clause 46 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 47 | 1 | 1 | 1 |  |  |  | 1 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 48 | 1 | 1 | 1 |  |  |  |  |  |  |  | 2 | 1 |  |  |  |  |  |  |  |
| clause 49 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 50 | 1 | 1 | 1 |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 51 | 1 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 52 | 1 | 1 | 1 |  |  |  |  |  |  |  | 1 | 1 | 1 |  |  | 1 | 1 | 1 | 1 |
| clause 53 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 54 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 55 | 2 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 56 | 1 | 1 |  | 1 |  |  |  |  |  |  | 2 | 1 | 1 | 1 |  |  |  |  |  |
| clause 57 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 58 | 1 | 1 |  | 1 |  |  |  |  |  |  | 2 | 1 | 3 |  |  |  |  |  |  |
| clause 59 | 1 | 1 | 1 |  | 1 |  |  |  |  |  | 1 |  |  | 1 |  |  |  |  |  |
| clause 60 | 1 | 1 |  | 1 |  |  |  |  |  |  | 1 | 1 | 1 |  | 1 | 1 | 1 |  |  |
| clause 61 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 62 | 1 | 1 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 63 | 1 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 64 | 1 | 1 | 1 |  |  |  |  |  |  |  | 3 | 3 |  | 1 |  |  |  |  |  |
| clause 65 | 1 | 1 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 66 | 1 | 1 | 1 |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 67 | 2 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 68 | 1 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 69 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 70 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 71 | 1 | 1 | 1 |  |  |  | 1 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 72 | 1 | 1 | 1 |  |  |  | 1 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 73 | 1 | 1 |  | 1 |  |  |  |  |  |  | 1 | 1 |  |  | 1 |  |  |  |  |
| clause 74 | 1 | 1 |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 75 | 1 | 1 |  | 1 |  |  |  |  |  |  | 1 | 1 | 1 |  |  |  |  |  |  |
| clause 76 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 77 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 78 | 2 | 1 |  | 1 | 2 |  |  |  |  |  | 2 |  | 1 |  | 1 |  |  |  |  |
| clause 79 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 80 | 1 | 1 | 1 |  |  |  |  |  |  |  | 2 | 1 | 1 |  |  |  |  |  |  |



| $M E$ |  |  | CI/MET1m/Exp/Ent/Mod | CI/MET1m/Exp/Ent/Proc |  |  |  |  |  | CI/MET1m/Exp/Attrib/Ent |  |  | CI/MET1m/Exp/Rel/Proc |  |  |  |  |  |  | CI/MET1m/Int/None/Ent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| totals | 26 | 13 | 19 | , | 2 | 2 | 2 | 2 | 4 | 3 | 1 | 1 | 1 | 1 | 1 | 4 | 3 | 1 | 1 | 2 | 3 | 1 | 1 |
| clause 7 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |
| clause 8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 11 |  | 1 | 2 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| clause 12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 13 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 14 | 3 | 1 | 1 |  |  |  |  |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 16 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 18 | 2 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 19 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 20 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |  |
| clause 21 | 3 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 22 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| clause 23 | 1 |  | 1 |  |  |  | 2 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 24 |  | 2 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 25 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 26 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 27 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 28 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 29 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 31 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 32 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 33 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |
| clause 34 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |
| clause 35 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 36 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 37 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 38 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 39 |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 40 | 1 |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 41 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 42 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 43 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 44 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 45 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 46 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 47 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 48 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |
| clause 49 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 50 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 51 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 52 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 53 |  |  | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 54 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 55 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 56 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 57 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 58 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |
| clause 59 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |  |  |
| clause 61 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |
| clause 62 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 63 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 64 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 65 | 1 |  | 1 |  | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| clause 66 | 2 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
| clause 67 | 1 |  | 1 |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| clause 68 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 69 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 70 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  | 1 |  |  |  |
| clause 71 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  | 1 |  |  |  |
| clause 72 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 73 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 74 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 75 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 76 |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 77 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 78 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| clause 79 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |
| clause 80 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



## APPENDIX 4 THEME/RHEME CALCULATION

|  | No. of participants in... |  |
| :---: | :---: | :---: |
|  | Theme | Rheme |
| clause7 | 2 | 1 |
| clause8 | 1 | 2 |
| clause9 | 2 | 1 |
| clause10 |  | non-finite |
| clause11 | 0 | 5 |
| clause12 | 1 | 1 |
| clause13 | 1 | 0 |
| clause14 | 4 | 1 |
| clause15 | 1 | 0 |
| clause16 | 1 | 0 |
| clause17 | 1 | 3 |
| clause18 | 2 | 5 |
| clause19 | 1 | 8 |
| clause20 | 1 | 2 |
| clause21 | 1 | 5 |
| clause22 | 1 | 3 |
| clause23 | 1 | 4 |
| clause24 | 0 | 4 |
| clause25 | 1 | 1 |
| clause26 | 1 | 2 |
| clause27 | 5 | 3 |
| clause28 |  | non-finite |
| clause29 |  | non-finite |
| clause30 | 1 | 1 |
| clause31 | 1 | 1 |
| clause32 | 1 | 2 |
| clause33 | 1 | 4 |
| clause34 | 1 | 3 |
| clause35 | 0 | 1 |
| clause36 | 1 | 0 |
| clause37 | 1 | 0 |
| clause38 | 0 | 2 |
| clause39 | 1 | 2 |
| clause40 | 1 | 0 |
| clause41 | 1 | 0 |
| clause42 | 0 | 2 |
| clause43 | 0 | 1 |
| clause44 | 1 | 1 |
| clause45 | 1 | 2 |
| clause46 | 1 | 1 |


|  | No. of participants in... |  |
| :---: | :---: | :---: |
|  | Theme | Rheme |
| clause47 |  | non-finite |
| clause48 | 1 | 2 |
| clause49 |  | non-finite |
| clause50 | 1 | 3 |
| clause51 | 1 | 0 |
| clause52 | 1 | 5 |
| clause53 | 1 | 0 |
| clause54 | 1 | 0 |
| clause55 | 1 | 0 |
| clause56 | 1 | 3 |
| clause57 | 1 | 0 |
| clause58 | 0 | 5 |
| clause59 | 2 | 5 |
| clause60 | 1 | 4 |
| clause61 | 1 | 0 |
| clause62 | 1 | 4 |
| clause63 | 1 | 1 |
| clause64 | 1 | 4 |
| clause65 | 1 | 2 |
| clause66 | 2 | 2 |
| clause67 | 2 | 1 |
| clause68 | 2 | 0 |
| clause69 | 2 | 0 |
| clause70 | 1 | 1 |
| clause71 | 1 | 1 |
| clause72 | 1 | 1 |
| clause73 | 1 | 1 |
| clause74 |  | non-finite |
| clause75 | 1 | 3 |
| clause76 | 1 | 2 |
| clause77 | 1 | 0 |
| clause78 | 1 | 3 |
| clause79 | 1 | 0 |
| clause80 | 3 | 2 |
| total | 78 | 129 |

$\mathrm{k}=\mathrm{R} / \mathrm{T}$ ratio $=129 / 78=1.653846154$

## APPENDIX 5 SVD DEFINITION

Matrix multiplication is defined as follows:
Let A be a matrix with m rows and p columns i.e. a $m \times p$ matrix with entries $a_{i j}$ ( $a_{i j}$ denotes the entry at the $\mathrm{i}^{\text {th }}$ row and $\mathrm{j}^{\text {th }}$ column)

Let B be a $p \times n$ matrix with entries $b_{i j}$
Their product AB is defined as a $m \times n$ matrix with entries given by:

$$
\sum_{k=1}^{p} a_{i k} b_{k j}
$$

Just as a number like 30 can be factorized as:

$$
30=2 \times 3 \times 5,
$$

a matrix, A , can be factorized into the form:

$$
A=U S V^{*}
$$

This factorization is known as singular value decomposition. $\mathrm{U}, \mathrm{V}$ are matrices, superscript * denotes transposition ${ }^{1}$, and S is a diagonal matrix, i.e. its non-diagonal entries are zero.

To illustrate this, suppose A is a $m \times n$ matrix where $m>n$, e.g. $\mathrm{m}=3, \mathrm{n}=2$ :

$\star$ and $■$ denote values that need not be zero.
■ , the diagonal entries of S , are known as the singular values of A .

[^3]In the SVD analysis performed in my thesis, A is the reduced matrix of clauses (in columns) by tags (in rows):


The columns of U are called the left-singular vectors: vectors representing Features in terms of tags, while the rows of $\mathrm{V}^{*}$ (i.e. the columns of V ) are the rightsingular vectors: vectors representing Features in terms of clauses.

Each singular value represents the strength of a Feature in the discourse. To show this more clearly, multiply both sides of the equation by V on the right:

$$
\underbrace{\left[\begin{array}{ll}
\star & \star \\
\star & \star \\
\star & \star
\end{array}\right]}_{A} \underbrace{\left[\begin{array}{ll}
\star & \star \\
\star & \star
\end{array}\right]}_{V}=\underbrace{\left[\begin{array}{lll}
\star & \star & \star \\
\star & \star & \star \\
\star & \star & \star
\end{array}\right]}_{U} \underbrace{\left[\begin{array}{ll}
\square & 0 \\
0 & ■ \\
0 & 0
\end{array}\right]}_{S}
$$

Organize the matrices V, U, S into columns:

$$
\underbrace{\left[\begin{array}{ll}
\star & \star \\
\star & \star \\
\star & \star
\end{array}\right]}_{A} \underbrace{\left[\begin{array}{ll}
v_{1} & v_{2}
\end{array}\right]}_{V}=\underbrace{\left[\begin{array}{lll}
u_{1} & u_{2} & \star \\
& & \star
\end{array}\right]}_{U} \underbrace{\left[\begin{array}{cc}
\sigma_{1} & 0 \\
0 & \sigma_{2} \\
0 & 0
\end{array}\right]}_{S}
$$

This gives us:

$$
\begin{align*}
& A v_{1}=\sigma_{1} u_{1}  \tag{1}\\
& A v_{2}=\sigma_{2} u_{2} \tag{2}
\end{align*}
$$

In this form, the variables are easier to interpret.
Equation (1) defines Feature 1.
$u_{1}$ is Feature 1 in terms of tags - a vector
$v_{1}$ is Feature 1 in terms of clauses - a vector $\sigma_{1}$ is the strength of Feature $1-$ a positive number $^{2}$

The purpose of performing SVD is that it generates Features, which form a new set of basis vectors - a new coordinate system - to describe the positions of the clauses in Semantic Space in a more economical way (least squares fit) compared to the original basis vectors (the tags).

The results of the SVD are the same regardless of the order of the rows/columns of the input matrix A , i.e. changing the ordering of the clauses in the article does not affect the results of SVD, neither does changing the order of tags.

[^4]
## APPENDIX 6 SVD PLOTS

The plots in this section are explained and used in Chapter 5: Singular Value Decomposition (SVD) in the main body of the thesis.

## Index to Appendix 6.1: Main story

Figure A-1: Main story T1 F0 tag wheel 391
Figure A-2: Main story T1 F0 tag neighbours 392
Figure A-3: Main story T1 F0 clause neighbours 393
Figure A-4: Main story T1 F1 tag wheel 394
Figure A-5: Main story T1 F1 text 395
Figure A-6: Main story T1 F1 tag neighbours 396
Figure A-7: Main story T1 F1 clause neighbours 397
Figure A-8: Main story T1 F2 tag wheel 398
Figure A-9: Main story T1 F2 text 399
Figure A-10: Main story T1 F2 tag neighbours 400
Figure A-11: Main story T1 F2 clause neighbours 401
Figure A-12: Main story T1 F3 tag wheel 402
Figure A-13: Main story T1 F3 text 403
Figure A-14: Main story T1 F3 tag neighbourhood 404
Figure A-15: Main story T1 F3 clause neighbourhood 405
Figure A-16: Main story T1 F4 tag wheel 406
Figure A-17: Main story T1 F4 text 407
Figure A-18: Main story T1 F4 tag neighbours 408
Figure A-19: Main story T1 F4 clause neighbours 409

## Index to Appendix 6.2: Comments

Figure A-20: Comments T1 F1 tag wheel 410
Figure A-21: Comments T1 F2 tag wheel 411
Figure A-22: Comments T1 F3 tag wheel 412

## Key (for all SVD plots in Appendix 6)

-Blue indicates presence and Red indicates "absence" (or vice versa) -intensity of colouring, font size and the size of node/circle denote strength (for a tinted tag, strength refers to strength of tag's contribution to the Feature; for a tinted clause, strength refers to the strength of the Feature in the clause)

## Appendix 6.1 Main story



## Figure A-1: Main story T1 F0 tag wheel



Figure A-2: Main story T1 F0 tag neighbours


Figure A-3: Main story T1 F0 clause neighbours


Figure A-4: Main story T1 F1 tag wheel


Figure A-5: Main story T1 F1 text


Figure A-6: Main story T1 F1 tag neighbours


Figure A-7: Main story T1 F1 clause neighbours


Figure A-8: Main story T1 F2 tag wheel

ᄀAt this point [in the credit orisis), at lost one thing is certian
8: most policymakers lack a clue [lof what is really at stake].
Those with some knowledge are driving policy

- 1 Begin with the the rearview mirror.
${ }^{12}$ Thegis was presented Treasury's $\$ 700$ bil

is Thich, est guped domm> would quickly restore financial stability.
15 andead, stock markets collapsed
${ }^{17}$ This is because [the credit trisis reflects something [II \{which is\} more fundamental than a serious problem [of morigage defaulis] ]II].
Global investors, <<<who are\} now on the sidelines>>, have declared a buyers' strike [against the sophisticated paper assets [of securritization] [that financial institutions use \{the sophisticated paper assets [of securitization]\} || to measure II
20 incrodibly, these paper instruments were insured by more dubious paper instruments.
21 Theertore, the housing crisis was a mere trigger [for a collapse lof trust [in paperi]l.
22 \{which wass followed by a de-leveraging lof the entire global financial system].
22 As a nowit we are experiencing the painful downward reappraisal [of the value [of virtually every asset [in the worldII]
24 so what are these paper instruments, these asset -backed or mortgage -backed securities?
IM lise to use a salad analogy.
27 unt with the huge expansion [of the global economy] in the 1990s, <<which produced an ocean [of new capita]>>, the bankers came up with an idea [[called securitization].
28 stase of making simple loans
22 and holding them until maturity,
30 a bank collected all its loans tog
so bank collected all its loans toget
sithen \{the bank\} diced \{位s loans\}
33 The idea was [ito sell <(for huge fees)> individual servings [of diversified financial salad] around the world].
The only problem : [[liunder an occasional piece of lettuce] was a speck of toxic waste [in the form of a defaulting subprime mortgage]].
Eat that piece of sa

| 35 and you tre dead |
| :--- |
| 37 The overall sal |

3 The ouverall salad looked delicious,
38 but suddelly
lobal i ivvestors were no longer ordering salad.
40 This distrust heightened
When glotar interest rates began to rise
${ }^{42}$ So what does this salad boycott mean for the future
The markets are telling us
45 the world will face a serious credit crunch in 200
47 to remove the toxic molad from bankment balance sheets
47 to remove the toxic salad from bank balance sheets.
48 Policymakers have no means [lof forcing the banks to start lending]]
49 hyon o n nationalizing the entire financiail system.
soAfter al. the
U.S. banks alone so
Translation : ITThe U.S. financial system will have a whopping $\$ 15$ trillion to $\$ 20$ trillion less credit available next year [than (what) was around a year and halt befoll
52 Translation : IlThe U.S. fitanancia
The cost [of money] is rising
St
A snd the availability (is\} shring
55 - but the fear is [they will do it only to people <such as Warren Butfett, ]l
58 [What is uncertain]] is the amount of lending [to borrowers [lengaged in entrepreneurial risk, the center of business reinvention and job creation.]I]
$5_{0}$ AThe great uncertainty is [iwhether government has the power [ito rescuue the financial system] in times of crisis.]]
51 t sems doubtful.
eln the United Kingdom, for examples, the collected assets [of the maior banksl are four times the nation's gross domestic product (GDP).
This means
Siven such massive exposure, government guarantees [in a time of crisis] become meaningless
e6 ver because of the interconnected web [of global financial relationships), we are al vulnerable to the threal.
67 The collapse of, <say, a major European bank would hardly leave American workers immune.
e8 umen phe solution [to the credit crisis] will be global.
20his not that the world lacks money
The - more than $\$ 6$ trillion *2e ${ }^{2}$.
The challenge will be [tto reform our financial system quickly]
${ }^{75}$ The first step should be efforts [tto make the market [for future asset -backed paper] more transparent and credible]
76 We need a private/public global bank clearing facility.
78 The central banks, <<working with the private institutions II in providing enhanced date>>, need to begin to refashion the word's financial architecture.
70 the wht that is happening,

## Figure A-9: Main story T1 F2 text



## Figure A-10: Main story T1 F2 tag neighbours



Figure A-11: Main story T1 F2 clause neighbours


Figure A-12: Main story T1 F3 tag wheel


```
    \
    \a.col
    A At this point lin the credit crisis), t tossone thing is certain
    8. most policymakers lack a clue llof what is rem
    Begin with the U.S. Treasury's $$00 billion bailout package
    This was presented as some magic p
    \s which, erf gupod doww> would quickly restore financial staility.
    15 hemed, stock markets collapsed
17 This is because [the credit crisis reflects something [{ {which is} more fundamental than a serious problem [of morigage defauls)] ]\J.
18 Global investors, <<{who are} now on the sidelines>>, have declared a buyers's strike [against the sophisticated paper assets [of securitization] [that financial institutions use {the sophisticated paper assets [of securitization]} I| to measure || and offload risk|]|
10 In recent years, our banks,<<<orrowing || to maximize the leverage [of their assets] at unheard-of levels>>, produced mountains [of financial paper instruments ([called asset -backed securities|)] with little means [lof measuring their value].]
20
{ (Theretre, the housing crisis was a mere trigger [for a collapse [oftust [in paper[]).
22As resit,we are experiencing the painful downward reappraisal [of the value [of virtually every asset lin the world]l.
$2.4. a rasm., we are experiencing the painfuldownward reappraisal lof the value lof virtully e
26 Before the last decade, bank
*27 隹with the huge expansion [of the global coonomy] in the 1900s, <<which produced an ocean [of new capita]\>>, the bankers came up with an idea [[called securitization])
$a nsead of making simple loans,
30a bonk ollected all its loans log
#1then {the bank} diced {its loans)
*)}\mp@subsup{}{2}{32 \mathrm{ and {the bank} sliced them up into a big, beautiful tossed salad,}
*The idea was [ito sell <(for huge fees)> individual sevings [of diversified financial salad] around the word]].
35 Eat that piece of salad
35 and you 're dead.
33 bu suddenly global investors were nolonger ordering salad.
39 No one knew the location [of the toxic waste].
40 This distrust heightened
U2 so what does this salad begontto tore
$1250 what does this salad boyoott mean for the future
44. The markets rare teling urets collapsed so bruta
$4.
O 4. mpardesmovew much money govermment spends
\ 4s Policymakers have no means llof fording the L
anks to start lending]]
$1 Most banks are leveraged by more than 10 to 1. a whopping $15 trillion to $20 trillion less credit available next year [Ithan {what} was around a year and a half before]].]
$5 The cost [of money] is rising
$5 nad the availability fiss shrinking
$5--but the fear is [lthey will do it only to people <such as Warren Buffett,]
57 who don't need loans
55 [What is uncertain] is the amount of lending [to borrowers [lengaged in entrepreneurial risk, the center of business reinvention and job creation.|l1)
$a
*i It seems doubtrul.
*)
*)
$5 Given such massive exposure, government guarantees [in a time of crisis] become meaningless."
#7The collapse of, <say>. a maiod Eubropean bank wouldd hardyl leave American workers immune.
&8 Our policy leaders in Washington) are thinking domestically
$Our policy leaders lin Washington) are thinking dd
70. Is not tha the world lacks money 
72-more than $G trillion "re sitting' in idile global money markets lone
T3. The challenge will be [ito reform our financial system quickly
```



```
76 We need a private/public global bank clearing facilyy
TT\mathrm{ The bankers don't tust each other.}
The central banks,<<working with the private institutions II in providing enhanced date>>, need to begin to refashion the world's financial architecture.
70 The central banks,
<<working with the
Of the world], <<including the Chinese>>, should begin maior fiscal efforts [Ito stimulate their weakening economies)
```

Figure A-13: Main story T1 F3 text


Figure A-14: Main story T1 F3 tag neighbourhood


Figure A-15: Main story T1 F3 clause neighbourhood


Figure A-16: Main story T1 F4 tag wheel

```
    Ny.
    \,
    At this point [in the credit crisis], et lest one thing is cerla 
    most policymakers lack a clue [lof what is really at stake]
    Those with some knowledge are driving polic
    Begin with the U.S. Treasury's $700 
    $This was presented as some magic pill
    .14 The "shock, and awe" loof the sheer size [of the taxpayer -funded bailout]] would somehow restore confidenc
    15 hesad. stock markets collapsed
    47This is because [the credit crisis reflects something [I{{which is} more fundamental than a serious problem [of morigage defaults] ]I]:
    is Global investors, <<{Who are} now on the sidelines>>, have declared a buyers' strike [against the sophisticated paper assets [of securitization] [that financial institutions use {the sophisticated paper assets [of securitization]}|| to measure || and oflload rit |i|
    19 In recent years, our banks, <<borrowing || to maximize the leverage [of their assets] at unheard-of levels>>, produced mountains [of financial paper instruments ([lcalled asset -backed securities||]] with little means [|of measuring their value].
    20 locodiby, these paper instruments were insured by more dubious paper instrumenis)
```



```
2 {which was} followed by a de-leveraging [of the entire global financial system]. \ vitually every asset [in the world]]]
    24 oo what are these paper instruments, these asset -backed or mortgage -backed securities?
    251mime to use a salad analogy.
    2z but with the huge expansion [of the global economy] in the 1990s, <<which produced an ocean [of new capita]>>, the bankers came up with an idea [[called securitization]
    20 hsteacol olmaking simple loans
22 and holding them until maturity
3oa bank collected all its loans toge
32 no {the bank}} sliced them up into a big, beautiful tossed salad
*) The idea was [lto sell <(tor huge fees)> individual sevings [of diversified financial salad] around the world]!
    34.The only problem: \llu
    35 Eat that pliece of
    37 The overall salad looked delicious,
$ but suddenly global investors were no longer ordering salad
    49 This distrust heightened
    4. Mmen global interstr rates began to rise
    250 what does this salad boycott mean for the future
    The markets are telling us us colapsed so brut
    the world will face a serious credit crunch in 2000
    14 reardles of how much money government spends
    40
    40 shonom ontionalizing the entire finincial system.
```



```
    $2Translation: [[The U.S., financial system will have a whopping $15 trillion to $20 trillion less credit available next year [Ithan {what}} was around a year and a half beforel].]
    $53 The cost [of money] is rising
    *)
    55 Tue. the banks will still lend
    57 who don't is [they w
    ss [What is uncertain)] is the amount of lending to borrowers llengeged in entrepreneurial risk, the center of business reinvention and job creation
```



```
    .60 The great uncertaintt
    62 In the United Kingdom, for example>, the collected assets Iof the major banksl are four times the nation's gross domestio product (GDP)
    &s A similar situation exists in many Euro, zone countries.
    $4 This means [lgovernment cannot bail out the system II even if it wanted II to {bail out the system}].
    WGiven such massive exposure, government guarantees [in a time of crisis] become meaningless.,
    \sigmaT The collapse of, <say, a maior European bank would hardy leave American workers immune.
    e8 Our policy leaders [in Washington] are thinking domestically
    TOn is not that the world lacks money
    In;itis that the world's money is sitting on the sidelines
    3-".- more than se trilion "are sitting" in idile global money marke
    75 The first step should be efforts [tto make the market flor future asset -backed paper] more transparent and credible).
    70 We need a privat/public global bank clearing facility
    76 Te need a private/public global be
    78 The central banks, <<working with. the private institutions II in providing enhanced date>>, need to begin to refashion the world's financial architecture
\circ 70 md whe that is happening,
```

Figure A-17: Main story T1 F4 text


Figure A-18: Main story T1 F4 tag neighbours


Figure A-19: Main story T1 F4 clause neighbours

## Appendix 6.2 Comments



Figure A-20: Comments T1 F1 tag wheel


Figure A-21: Comments T1 F2 tag wheel


Figure A-22: Comments T1 F3 tag wheel

## APPENDIX 7 THE GRAMMAR

## Appendix 7.1 Clause Page

## Overview of Grammar for Clause Page analyses



The Overview above is generated by expanding the system networks to only three
nodes deep. The full systems of TH, M, T, MET, Tex, Int, Exp, however, are generally deeper; their complete networks are as follows:

Appendix 7.1.1 $\quad$ System of TH (Theme)


Appendix 7.1.2 System of M (Mood)




Appendix 7.1.3 System of T (Transitivity)



The categories "Exp", "Int", and "Log" expand into:

(congruent grammatical function)
Each of these expands into:

(shifted grammatical function)

Appendix 7.1.5 System of Tex (Textual)



Appendix 7.1.7 System of Exp (Experiential)


## Appendix 7.2 Interclausal Page


"Lg": Logical Complexing
Each of the nodes "paratactic", "hypotactic", and "cohesive", expand further into:


The nodes of "elaboration", "extension", "enhancement" can be expanded deeper:


## Appendix 7.3 Discourse Page


"Ch": Reference Chains
"'St": Lexical Strings


[^0]:    T1m = "presented as" $=$ "appeared as"

[^1]:    "Given" = "with" semi-preposition Halliday (1995: 232)

[^2]:    see IFG 3rd ed p. 542: "and" and "but" are not syntactic adjuncts but can
    function as conj adj

[^3]:    ${ }^{1}$ More generally, * denotes conjugate transposition, but in the SF data the numbers are all real numbers

[^4]:    ${ }^{2} \sigma$ can be a negative number, but the corresponding singular vector can be reversed in polarity to make $\sigma$ positive.

