

Visualization of Semantic/conceptual Data

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Concept Analysis and Concept-based Retrieval

Generating Contexts

Conexp Word X Sense

Cut and paste the text output by the query into a text-only editor (or select *Paste Special* and choose "Unformatted Text"), then save the file as ***word.cxt*** e.g. test.cxt

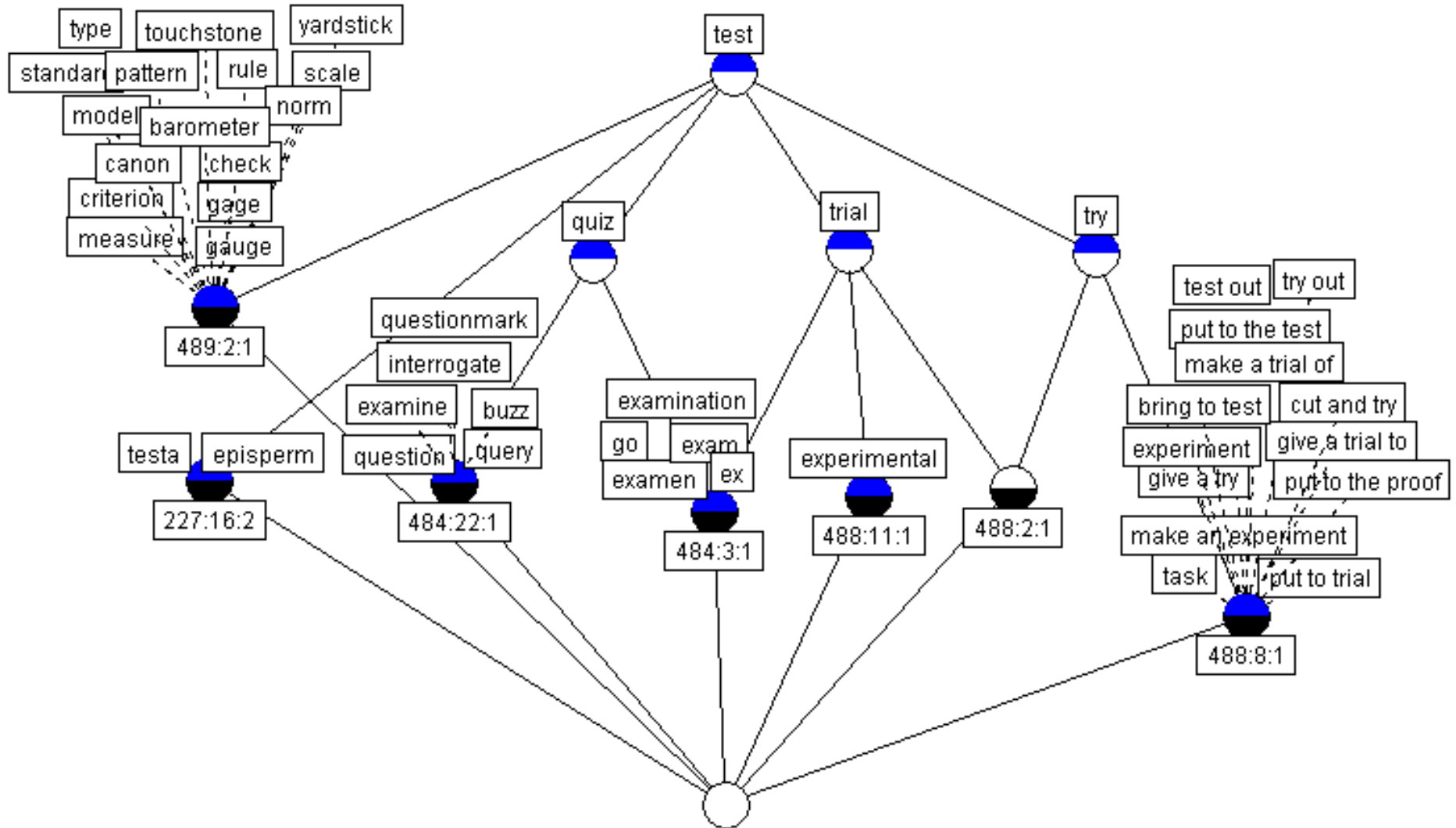
This will return a **Conexp**-format file of the semantic neighbourhood of the input word. ([example](#))

<input type="button" value="Submit"/>	<input type="text" value="test"/>
---------------------------------------	-----------------------------------

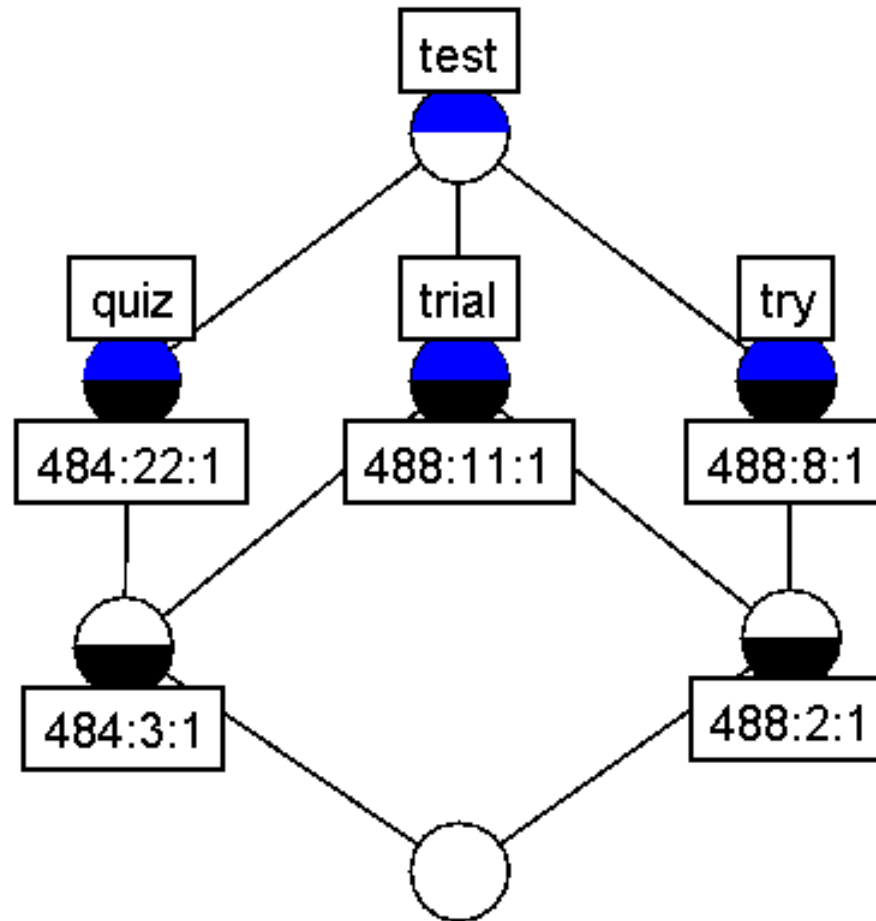
This will return a **Conexp**-format file of the restricted semantic neighbourhood of the input word. ([example](#))

<input type="button" value="Submit"/>	<input type="text" value="test"/>
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Example: Neighbourhood (*test*)



Example: Restricted Neighbourhood (*test*)



Graphs

Cut and paste the text output by the query into a text-only editor (or select *Paste Special* and choose "Unformatted Text"), then save the file as **word.net** e.g. test.net

Pajek Word X Sense

This will return a **Pajek-format** file of the semantic neighbourhood of the input word ([example](#)).

This will return a **Pajek-format** file of the **restricted** semantic neighbourhood of the input word ([example](#)).

Pajek Word X Word

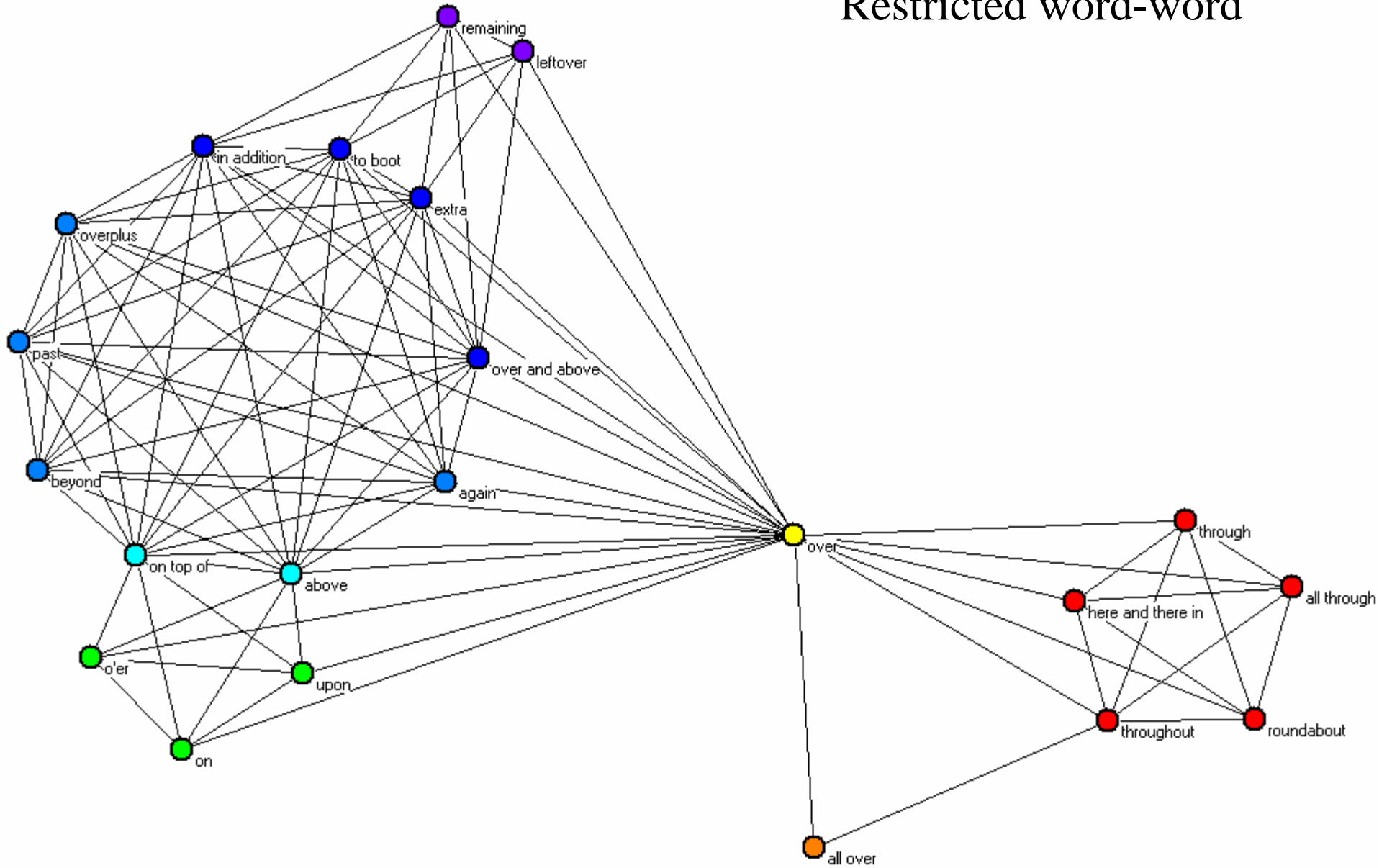
This will return a **Pajek-format file** of the semantic neighbourhood of the input word, as a **relation between words only** ([example](#)).

This will return a **Pajek-format file** of the **restricted** semantic neighbourhood of the input word, as a **relation between words only** ([example](#)).

--may time out--

Generating Graphs

Restricted word-word



Word-Sense Relation

WORDS → Synonymy

	over	above	beyond	across	past	in excess	additionally	...
9:12:1	x	x						
206:24:	x		x	x	x			
206:27:	x	x	x		x	x		
227:40:	x					x		
40:10:1	x	x	x	x	x	x	x	
...	x	x				x		

SENSES ↓ Polysemy

ENTRY=40:10:1-over

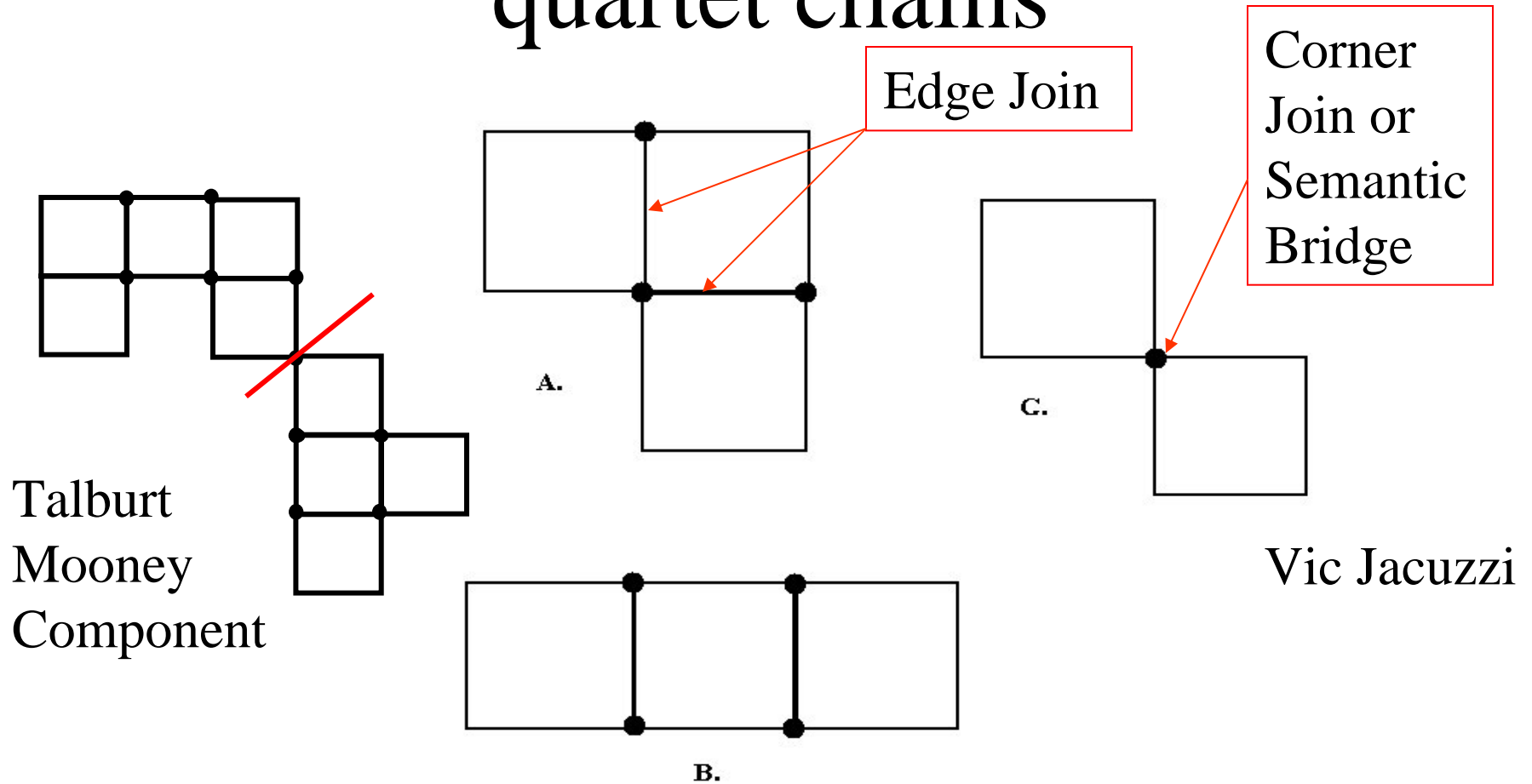
Quartet Chains

Robert Bryan (1973,1974) – “Abstract Thesauri” – homograph discrimination

		WORDS							
		over	above	beyond	across	past	in excess	additionally	...
SENSES	9:12:1	x	x						
	206:24:	X		x	x	X			
	206:27:	x	x	x		x	x		Synonymy
	227:40:	x					x		
	40:10:1	X	x	x	x	X	x	x	
	...	x	x				x		

↓
Polysemy

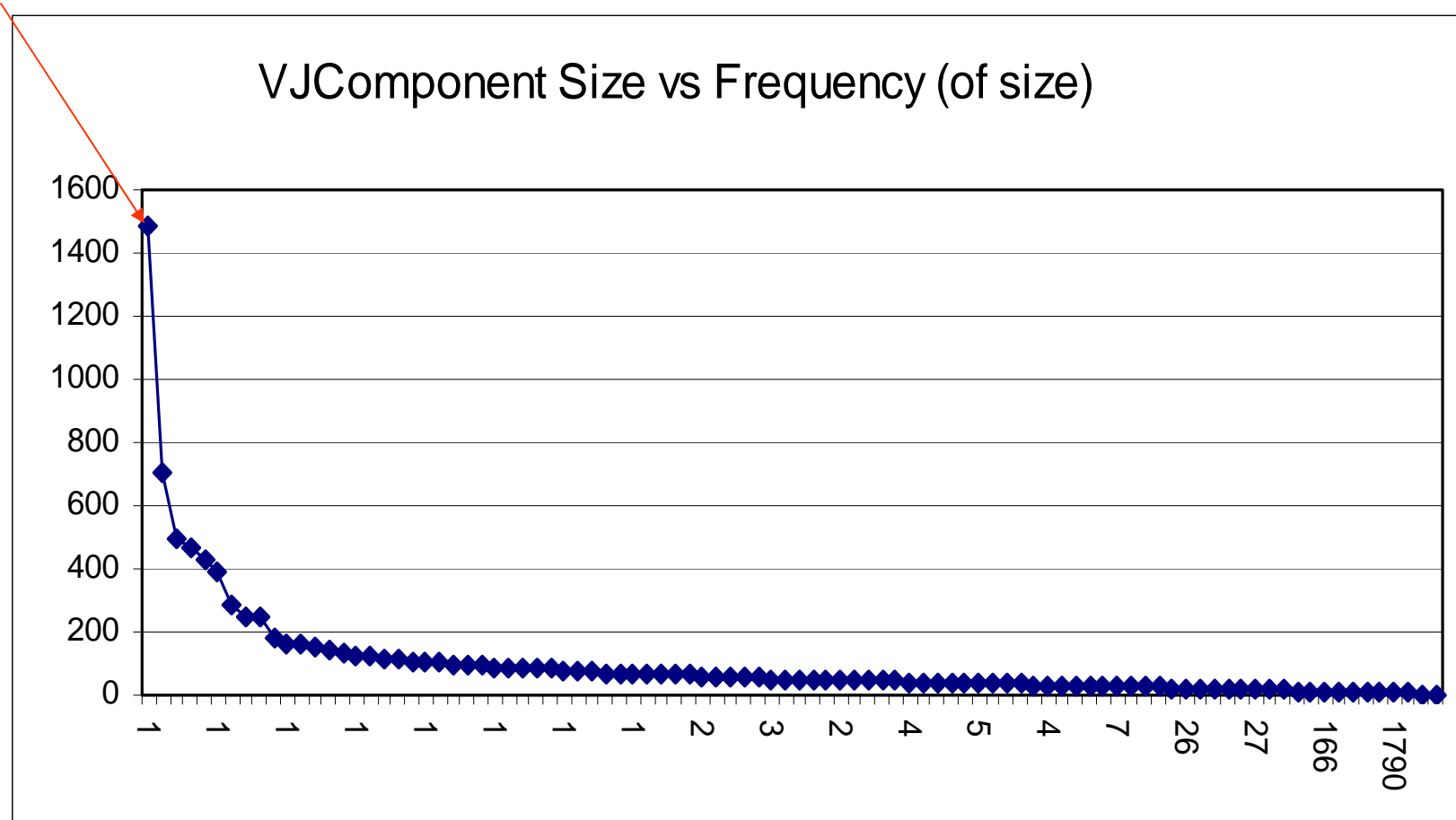
Edge join vs. Corner join of quartet chains



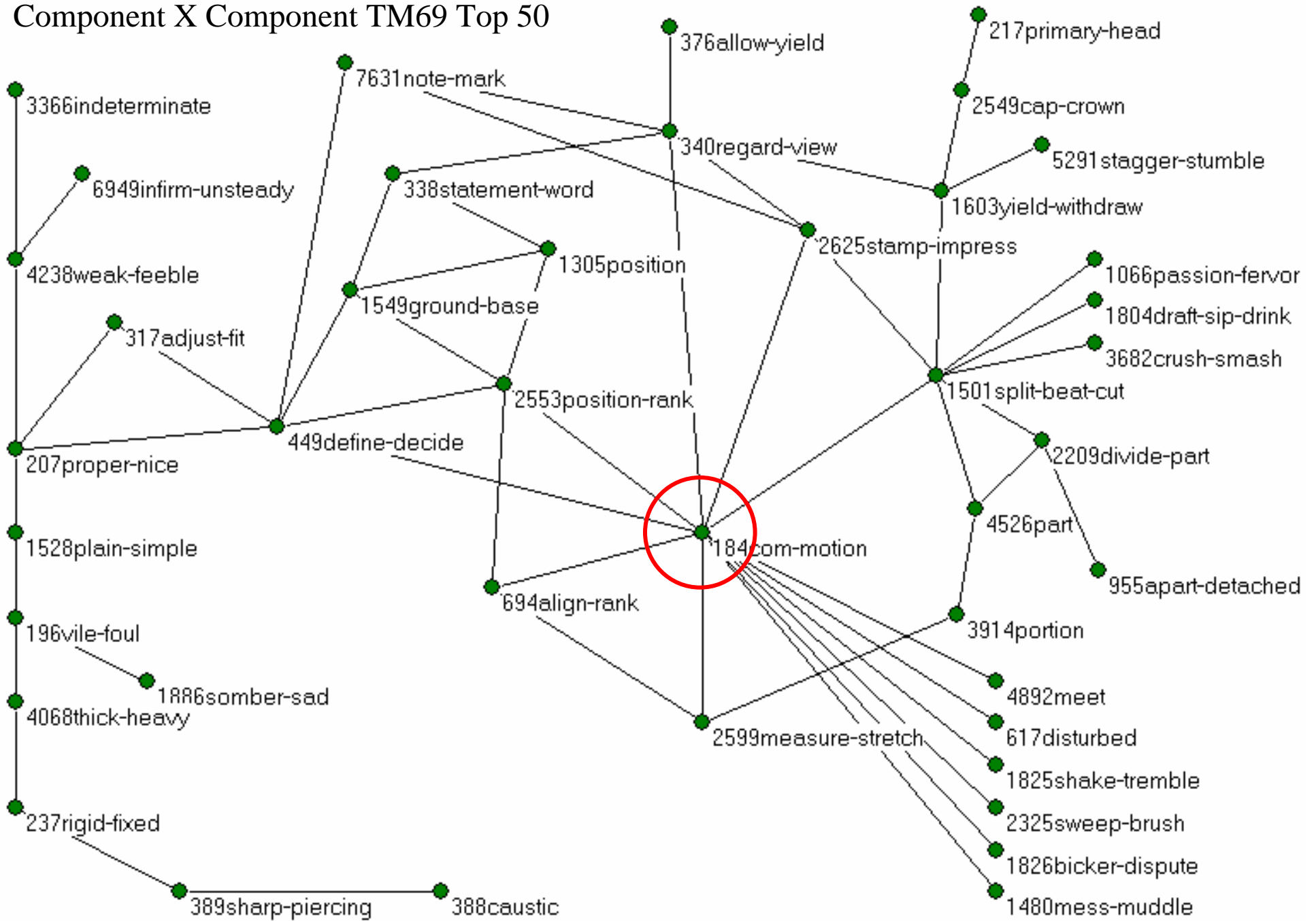
Central Components

Talburt-Mooney Component TMC69 – 22,000 entries

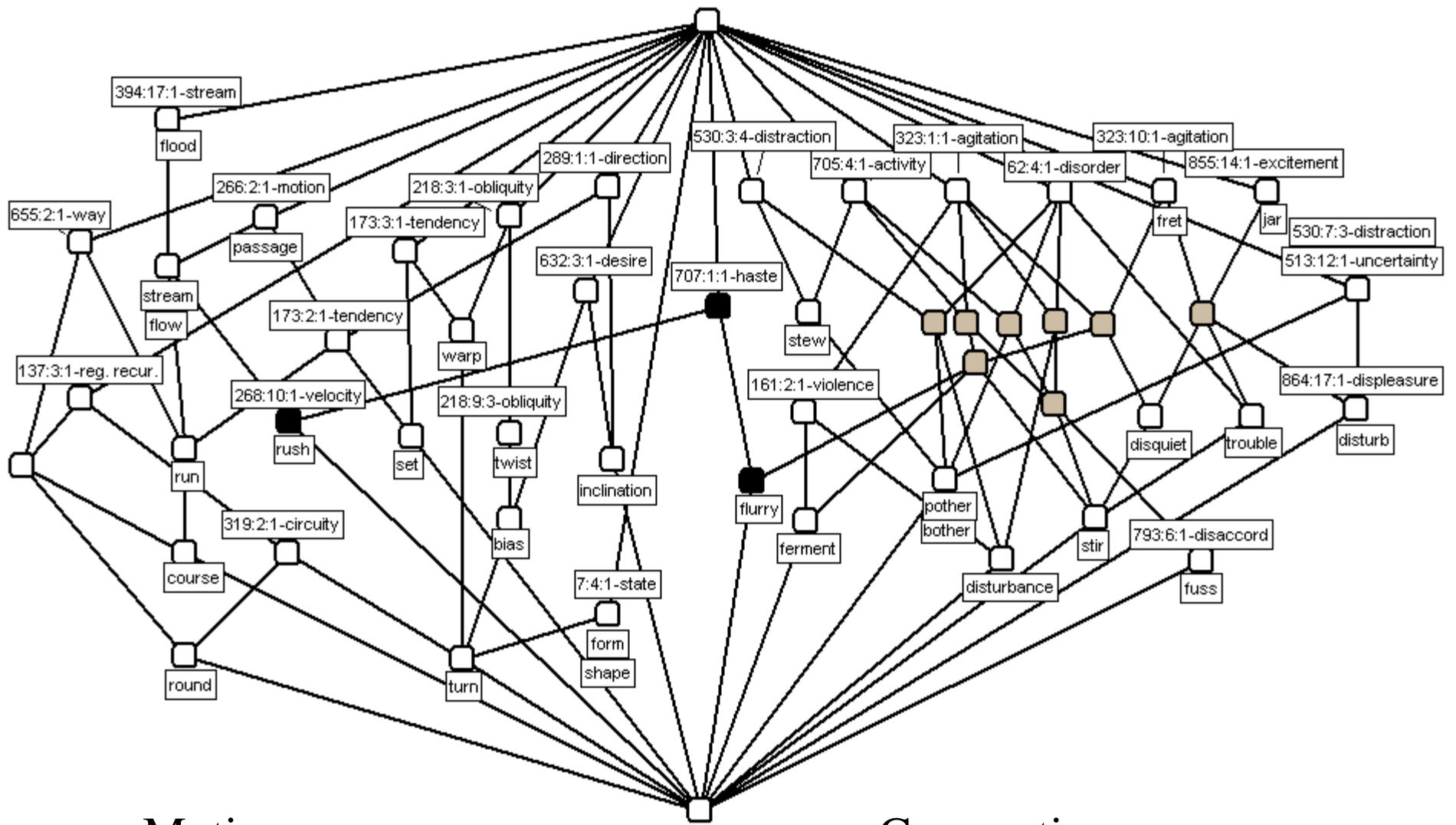
VJC184 (312 words X 324 Senses = 1,490 entries)



Component X Component TM69 Top 50



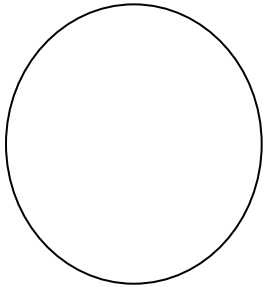
VJC184 *Motion & Commotion* 10+



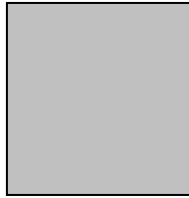
Motion

Commotion

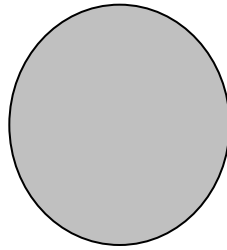
Unlabelled Concepts



CircleWhite



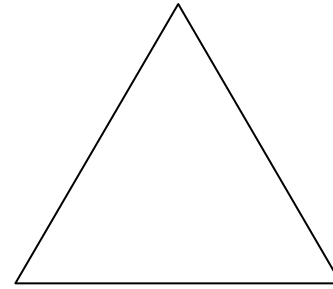
SquareGrey



CircleGrey



CircleSmall

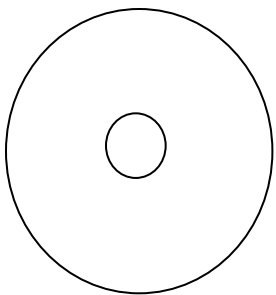


Triangle

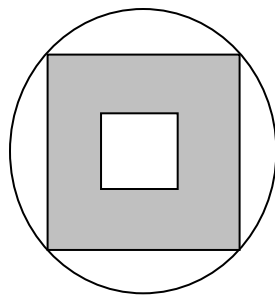


SquareSmall

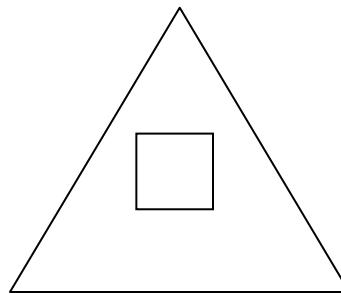
Which is the odd object out?



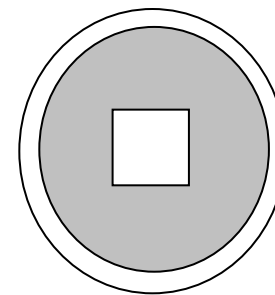
One



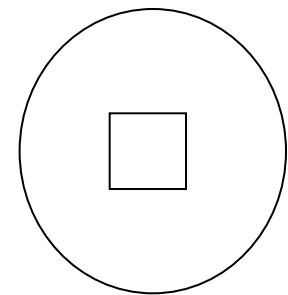
Two



Three

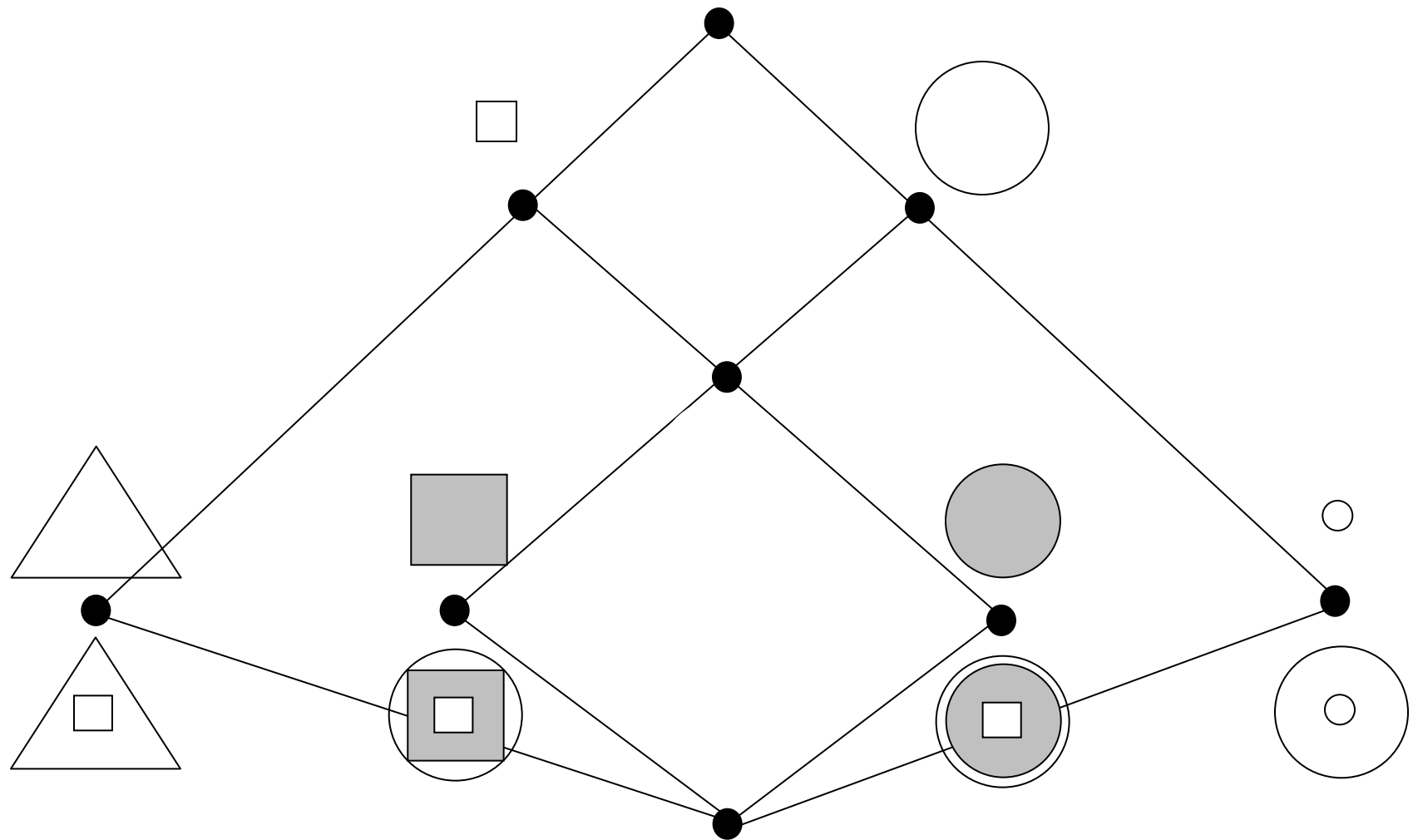


Four

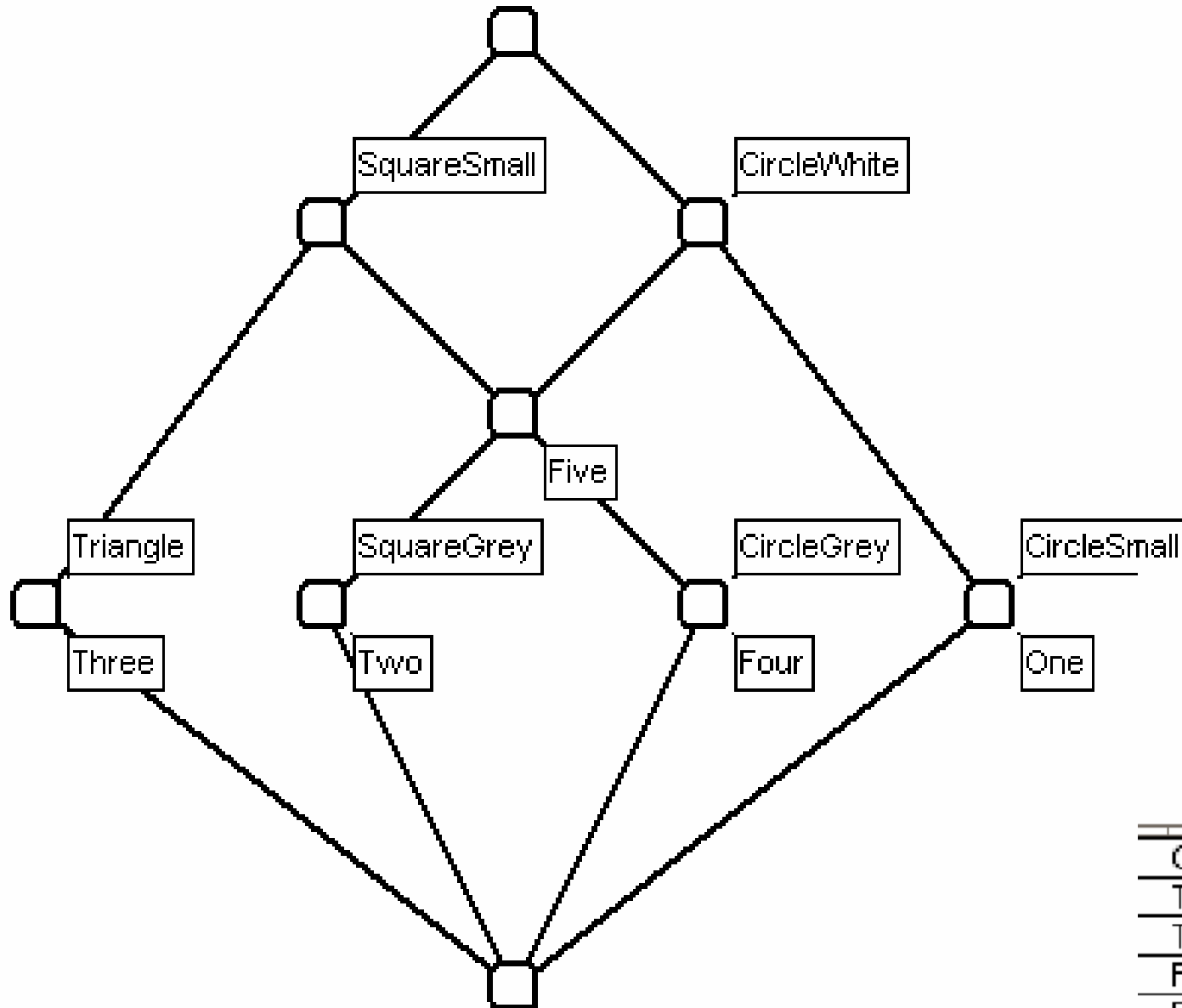


Five

Lattice of shapes and Objects

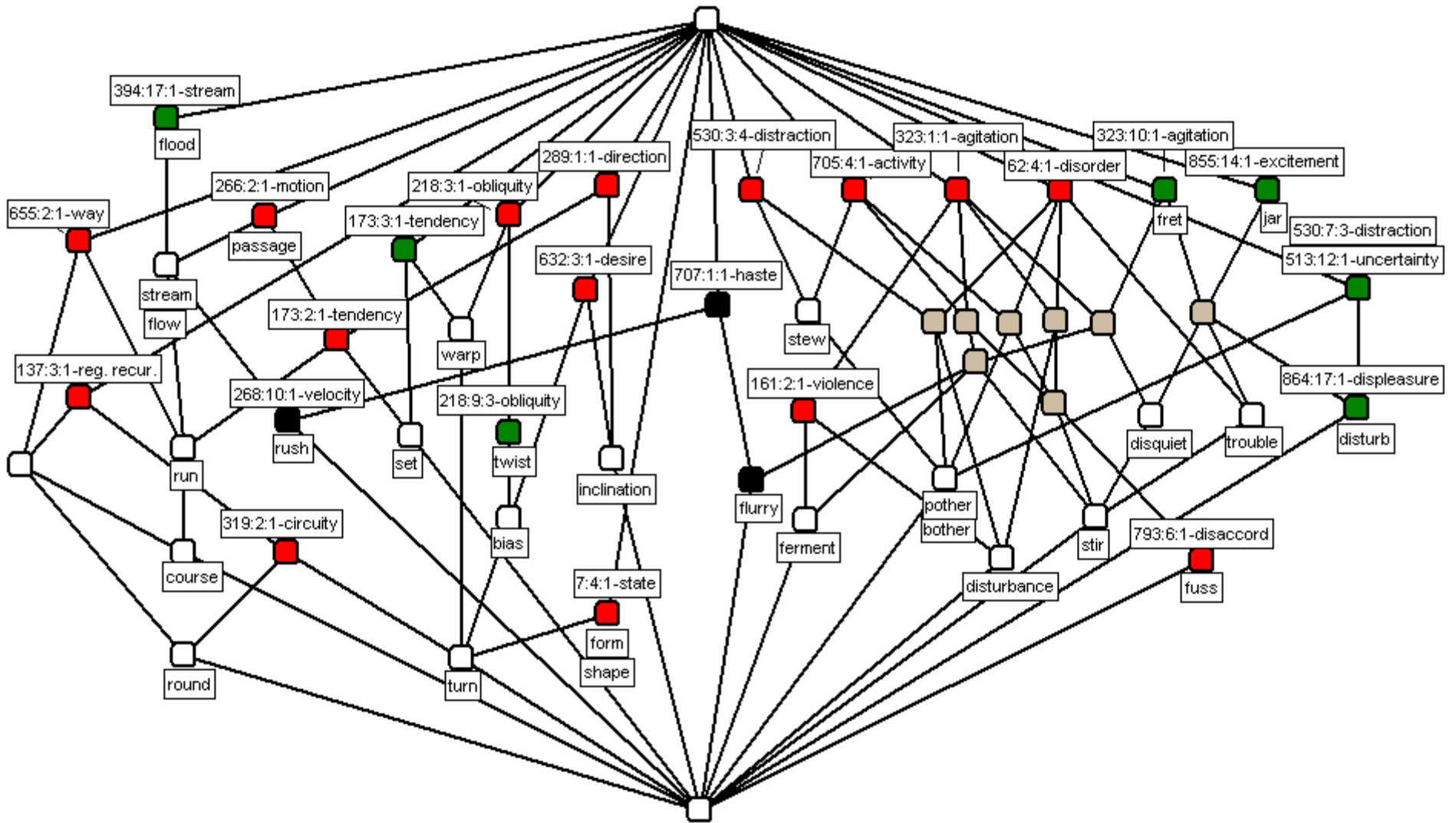


Lattice of shapes and Objects



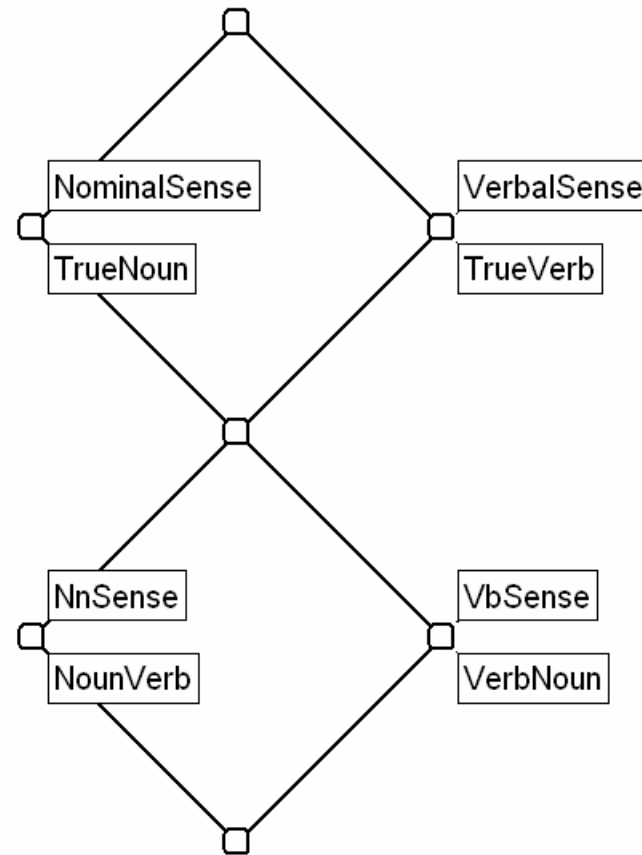
	CircleWhite	SquareGrey	CircleGrey	CircleSmall	Triangle	SquareSmall
One	X			X		
Two	X	X				X
Three					X	X
Four	X		X			X
Five	X					X

Nouns & Verbs



Nominal - Verbal Senses

- **Nominal**
- Distraction
- Agitation
- Disorder
- Disaccord
- Violence
- Activity
- Haste



Verbal

Distraction

Agitation

Uncertainty

Displeasure

Excitement