CHAPTER IV

ANALYSIS AND INTERPRETATION OF THE DATA

In describing the organization of first and second language vocabulary storage in the semantic network structure, the writer chose randomly the data of 3 respondents to be analyzed in terms of their semantic network structures. They are respondents number 7,19, and 30.

Meanwhile, the writer needs the data of the whole respondents or the data of the 30 respondents to interpret the data or test the hypothesis.

IV.1 Analysis of the Data

The analysis of the data is done per respondent and per association chain. The writer presents the analysis in boxes complete with the semantic features of the associated concepts possessed. Follows the boxes are the respondents' interpretation of the associations.

The following is the description of the meaning of the association chains that appear in the semantic network structures of respondents number 7, 19, and 30 based on the analysis of their semantic features and the respondents' interpretation of the meaning of the association.

IV.1.1. Data analysis of Respondent 7

IV.1.1.1. The Indonesian Semantic Network Structure

Chain 1

gunung	tinggi	besar	rumah
+ hill	+ above the ground	+ size	+ building
+ mass of rock	+ upward	+ large	+ man-made
+ big			+ for people
+ high			to live

Mountain (gunung) is characterized as high (tinggi). High leads to big (besar). Big is the size of the house (rumah).

Chain 2

gunung	hijau	pohon	lebat	hutan
+ hill	+ colour	+ plant	+ number	+ land
+ mass of rock	+ between yellow	+ big	+ large	+ covered with
+ big	and blue in the	+ has trunk	+ close	plants and trees
+ high	spectrum	+ wooden stem		
		+ has branches		
		+ bearing leaves		

The semantic feature of Mountain is hill. Hill is associated with green (hijau) and so is tree (pohon) because tree is bearing leaves which have green colour. Large number of trees which stand closely to each other leads it to be associated with dense (lebat). Dense is the characteristic of (forest) hutan which is covered with plants and trees.

Chain 3

rumah	putih	mawar	bunga
+ building	+ colour	+ shrub	+ part of plant
+ man-made	+ pale	+ stem bearing	+ develop into
+ for people to live		thorns	seed or fruit
		+ sweet-smelling	+ colourful
		flower	+ long-lasting
		+ colourful	

House is painted white (putih). White is one of the characteristic feature of the rose or mawar's colour. Rose is an example of flower (bunga).

Chain 4

rumah	kaya	uang	pencuri
+ building + man-made + for people to live	+ amount + large + money or property	+ means of payment + standart of value + legal + coin or banknote	+ person + taking things which do not belong to him + secretly − permission

House which has large number of properties is associated with rich (kaya). Rich means having large number of money(uang). Money leads to be taken by thief.

Chain 5

hutan	kayu	jati	pencuri
+ plant + covered with plants and trees	+ part of trunk +hard fibrous	+ tree + big soft hairy leaves + producing good quality of wood	+ person + taking things which do not belong to him + secretly − permission

Forest is covered by tree which has the component of wood (kayu). Timber (jati) is an example of wood. The good quality of timber leads it to be taken by thief.

Chain 6

hutan	pohon	hijau	rumput	gajah
+ land + covered with plants and trees	+ plant + big + has trunk	+ colour + between yellow and blue in + in the spectrum	+ plant + low-growing + green leaves or stalk	+ animal + mammal + four-footed + has trunk + has tusk + large ears + thick skin + grey fur + live in a group

Forest is planted by trees. Trees is associated with green. Green is the characteristic of grass (rumput). Grass ie eaten by elephant (gajah).

Chain 7

bunga	kredit	mobil

+ money
+ given for having
   credit
	+ payment
	– cash
		+ vehicle
		+ wheeled
		+ moved by machine
		   power
		+ needs fuel to
		   operate the machine

The association of bunga and credit (kredit) in this case is a metaphor. It means money given for not paying cashly. This sistem of payment (credit) can also be applied in buying car (mobil).

Chain 8

bunga	melati	putih	kelinci

+ part of plant
+ develop into
   seed or fruit
+ colourful
– long-lasting
	+ shrub
	+ sweet-smelling flower
	+ white or yellow
	+ star shapped
		+ colour
		+ pale
			+ animal
			+ mammal
			+ hare family
			+ long ears
			+ short furry
			   tail

Jasmine (melati) is an example of flower. Jasmine is white. White is the characteristic colour of rabbit (kelinci)'s fur.

Chain 9

pencuri	malam	hantu	putih	kelinci

+ person
+ taking things
   which do not
   belong to him
+ secretly
– permission
	+ time
	+ darkness
	+ between sunset
	   and sunrise
		+ spirirt of
		   dead person
			+ colour
			+ pale
				+ animal
				+ mammal
				+hare family
				+ long ears
				+ short furry
				   tail

Thief does the action at night (malam). Night is the time at which ghost (hantu) usually appears. Ghost is associated as having white colour. White is associated with the characteristic colour of rabbit'

Chain 10

Pencuri	malam	dingin	kaki	kaos kaki

+ person
+ taking things
  which do not
  belong to him
+ secretly
– permission
	+ time
	+ darkness
	+ between sunset
	  and sunrise
		+ temperature
		– high
			+ part of body
			+ lowest part
			  of leg
			+ to support
			  body
				+ stocking
				+ covering ankle
				  or foot

Thief does the action at night. The temperature at night is low thus it is cold (dingin). Cold leads to foot (kaki). It means foot which has the characteristic feature of cold. Foot is covered by sock (kaos kaki).

Chain 11

gajah	gambar	pola	kain	kaos kaki

+ animal
+ mammal
+ fou-footed
+ has trunk
+has tusk
+ large ears
+ thick skin
+ grey fur
+ live in a group
	+ imitative object
	+ made by drawing
		+ design
		+ arrangement
			+ fabric
			+ knitted or
			  or woven
				+ stocking
				+ covering
				  ankle or foot

Elephant is associated with picture (gambar). It means a picture which has the characteristic features of elephant. Picture is associated with pattern (pola). The picture found in the design of the pattern. Pola is also found in textile (kain). It characterized the textile itself. Textile is used to make sock.

Chain 12

gajah	belalai	air	laut
+ animal	+ animal	+ substance	+ earth surface
+ mammal	+ nose	+ liquid	+ covered with
+ four-footed	+ long	– colour	water
+ has trunk	+ as hand	– smell	+ salty
+ has tusk	+ as sucker	– taste	+ large
+ large ears			+ enclosing
+ thick skin			continents
+ grey fur			and island
+ live in a group			

Elephant has trunk (belalai). Trunk is used to suck water (air). Water is the feature of sea (laut).

Chain 13

rumah	penjaga	hutan
+ building	+ person	+ land
+ man-made	+ watchful	+ covered with
+ for people to live	+ against danger	plants and trees

House leads to guard (penjaga). It means a person who is guarding the house. Such guard is also found in term of guarding forest.

Chain 14

bunga	deposito	uang	pencuri
+ money	+ bank	+ means of payment	+ person
+ given for having	+ saving account	+ standart of value	+ taking things
+ saving	can be drawn only	+ legal	which do no
	at certain time	+ coin or banknote	belong to him
+ secretly			

Bunga deposito is a metaphor. It means money given for having deposit account at bank. Deposit is money saved at bank. Money leads to be taken by thief.

Chain 15

pencuri	kayu	besar	gajah
+ person	+ part of trunk	+ size	+ animal
+ taking things which do not belong to him	+ hard fibrous	+ large	+mammal
+ secretly			+ four-footed
− permission			+ has trunk
			+ has tusk
			+ large ears
			+ thick skin
			+ grey fur
			+ live in a group

Thief take wood. Wood which has the characteristic of big. Big is the character of elephant.

Chain 16

mobil	laju	lari	kelinci
+ vehicle	+motion	+ motion	+ animal
+ wheeled	+ forward	+forward	+ mammal
+ moved by machine power	+ fast	+fast	+ hare family
+ needs fuel to operate the machine	+ on wheels	+ on feet	+ long ears
			+ short furry tail

Car is associated with laju (speed). Speed leads to run (lari). Both are associated because they share most common features. Run leads to rabbit. It means rabbit which runs.

Chain 17

kelinci	boneka	bayi	kaos kaki
+ animal	+ toy	+ animate	+ stocking
+ mammal	+ model of baby or adult	+ new born	+ covering ankle or foot
+ hare family		+ very young	
+ long ears			
+ short furry tail			

Rabbit leads to doll (boneka). It means doll which has the characteristic features of rabbit. Doll also sometimes has the characteristic of baby (bayi). Baby leads to sock. It means sock for baby.

Chain 18

kaos kaki	basah	air	laut
+ stocking + covering ankle or foot	– dry + soaked	+ substance + liquid – colour – smell – taste	+ earth surface + covered with water + salty + large + enclosing continents and islands

Sock leads to wet (basah). Wet has the characteristic feature of water. Water is the main component of sea.

IV.1.1.2. The English Semantic Network Structure

Chain 1

mountain	nature	scenery	beautiful	house
+ hill + mass of rock + big + high	+ universe – man-made	+ view + natural features	+ quality + pleasant + satisfactory	+ buliding + man-made +for people to live

Mountain is part of the universe or nature. Nature characterizes scenery. Scenery which has the characteristic features of beautiful. The features of beautiful also characterized house.

Chain 2

mountain	green	tree	forest
+ hill	+ colour	+ plant	+ land
+ mass of rock	+ between yellow	+ big	+ covered with
+ big	and blue in the	+ has trunk	plants and trees
+ high	spectrum	+ wooden stem	
		+ has branches	
		+ bearing leaves	

Mountain is associated with green. Green is the leaves colour, which the tree bears. Tree is in forest.

Chain 3

house	white	red	rose	flower
+ building	+ colour	+ colour	+ shrub	+ part of plant
+ man-made	+ pale	+ the first in	+ stem bearing	+ develop into
+ for people to live		the spectrum	thorns	seed or fruit
			+ sweet-smelling	+ colourful
			flower	+ long-lasting
			+ colourful	

House is painted white. White leads to red (merah). Both are included in the class of colour. Red is the characteristic feature of rose's colour. Rose is an example of flower.

Chain 4

House	big	rich	money	thief
+ building	+ size	+ amount	+ means of payment	+ person
+ man-made	+ large	+ large	+ standart of value	+ taking things
+ for people to live		+ money or	+ legal	which do not
		property	+ coin or banknote	belong to him
				+ secretly
				− permission

House which owns the semantic features of big. Big is associated with rich since it has the semantic peoperties of rich. Rich owns the feature of money. Money leads to be taken by thief.

Chain 5

forest	silent	dark	night	thief

+ land
+ covered with
  plants and trees
	− sound	− light	+ time
			+ darkeness
			+ between sunset
			  and sunrise
				+ person
				+ taking things
				  which do not
				  belong to him
				+ secretly
				− permission

Forest is less sound. Thus, it is associated with silent (tenang). It is usually silent in the dark (kegelapan). The concept 'dark' is owned by the concept 'night'. Night leads to thief since thief is associated doing the action at night.

Chain 6

forest	green	tree	big	elephant

+ land
+ covered with
  plants and trees
	+ colour
	+ between yellow
	  and blue in
	  the spectrum
		+ plant
		+ big
		+has trunk
		+ has wooden stem
		+ has branches
		+ bearing leaves
			+ size
			+ large
				+ animal
				+ mammal
				+ four-footed
				+ has trunk
				+ has tusk
				+ large ears
				+ thick skin
				+ grey fur
				+ live in a group

Forest is associated with green. Green is tree. Tree, which has the characteristic of big. The properties of big are also owned by elephant.

Chain 7

flower	rose	red	car

+ part of plant
+ develop into seed or fruit
+ colourful
	+ shrub
	+ stem bearing
	  thorns
	+ sweet-smelling
	  flower
	+ colourful
		+ colour
		+ the first
		  in the spectrum
			+ vehicle
			+ wheeled
			+ moved by machine
			+ needs fuel to
			  operate the machine

Flower is various. One example is rose. Rose is red. The characteristic features of red are also appeared in the characteristic feature of car's colour.

Chain 8

Flower	jasmine	white	rabbit

+ part of plant
+ develop into
  seed or fruit
+ colourful
− long-lasting
	+ shrub
	+ sweet-smelling flower
	+ white or yellow
	+ star shapped
		+ colour
		+ pale
			+ animal
			+ mammal
			+ hare family
			+ long ears
			+ short furry
			  tail

One example of flower is jasmine. Jasmine is white. White is rabbit's fur.

Chain 9

thief	run	rabbit

+ person
+ taking things
  which do not
  belong to him
+ secretly
− permission
	+ motion
	+ forward
	+ fast
	+ on feet
		+ animal
		+ mammal
		+ hare family
		+ long ears
		+ short furry tail

Thief who does running and so does the rabbit.

Chain 10

thief	run	foot	sock

+ person
+ taking things
  which do not
  belong to him
+ secretly
− permission
	+ motion
	+ forward
	+ fast
	+ on feet
		+ part of body
		+ lowest part
		  of leg
		+ to support body
			+ stocking
			+ covering ankle
			  or foot

Thief runs. Running on feet. Foot is covered by sock.

Chain 11

elephant	animal	big	foot	sock
+ animal	+ animate	+ size	+ part of body	+ stocking
+ mammal	+ can move	+ large	+ lowest part	+ covering
+ fou-footed	+ eat		leg	ankle or foot
+ has trunk	+ drink		+ to support body	
+has tusk	− human			
+ large ears	−plant			
+ thick skin				
+ grey fur				
+ live in a group				

Elephant is an animal. Animal may own the characteristic features of of big. Big also applied as the size of foot. Foot is covered by sock.

Chain 12

elephant	trunk	water	sea
+ animal	+ animal	+ substance	+ earth surface
+ mammal	+ nose	+ liquid	+ covered with
+ four-footed	+ long	− colour	water
+ has trunk	+ as hand	− smell	+ salty
+ has tusk	+ as sucker	− taste	+ large
+ large ears			+ enclosing
+ thick skin			continents
+ grey fur			and island
+ live in a group			

Elephant has trunk. Trunk is used to suck water. Water is the main component of sea.

Chain 13

house	big	garden	tree	forest
+ building	+ size	+ ground	+ plant	+ land
+ man-made	+ large	+ for growing	+ big	+ covered with
+ for people to live	+plants		+ has trunk	plants and trees
			+ has wooden stem	
			+ has branches	
			+ bearing leaves	

House has the characteristic features of big and so does the garden. Garden is growth by tree. Tree covers forest.

Chain 14

flower	shop	jewelry	thief
+ part of plant develop into seed or fruit + colourful − long-lasting	+ place + for business + selling goods or services	+ ornament + made of metal + set with jewel	+ person + taking things which do not belong to him + secretly − permission

The concept of flower leads to the concept of shop. It is a shop, which sells flower. Shop may not sell flower only but also jewelry. Thief takes jewelry.

Chain 15

thief	police	jail	cage	elephant
+ person + taking things which do not belong to him + secretly − permission	+ organization + official + keeping public order + preventing crime + solving crime	+ place + for keeping locked up people who do crime + keeping in as a punishment	+ structure + made of bars or wires + for keeping animal animal	+ animal +mammal + four-footed + has trunk + has tusk + large ears + thick skin + grey fur + live in a group

Thief is caught by the police. Police is associated with jail. Jail found in the police office. Jail shares most common features with the concept cage. Cage is used to keep elephant.

Chain 16

Car	fast	run	rabbit
+ vehicle + wheeled + moved by machine power + needs fuel to operate the machine	+ speed + high	+ motion + forward + fast + on feet	+ animal + mammal + hare family + long ears + short furry tail

Car owns the semantic features of the concept 'fast'. 'Fast' is the characteristic feature of 'run'. Run leads to rabbit, means rabbit which does running.

Chain 17

rabbit	animal	stink	sock
+ animal	+ animate	+ smell	+ stocking
+ mammal	+ can move	− pleasant	+ covering ankle
+ hare family	+ eator foot		
+ long ears	+ drink		
+ short furry tail	− human		
	− plant		

Rabbit is an animal. Animal leads to stink. It means animal which has the properties of stink and so does the sock. It has the properties of stink. Thus it leads to stink.

Chain 18

Sock	white	water	sea
+ stocking	+ colour	+ substance	+ earth surface
+ covering ankle or foot	+ pale	+ liquid	+ covered with water
		− colour	+ salty
		− smell	+ large
		− taste	+ enclosing continents and islands

Sock has the characteristic features of white. The characteristic of white is possed by water. It means white water. Water is the main component of sea.

IV.1.2. Data analysis of Respondent 19

IV. 1.2.1. The Indonesian Semantic Network Structure

Chain 1

gunung	besar	tinggi	tiang	listrik	rumah
+ hill + mass of rock + big +high	+ size + large	+ above the ground + upward	+ upright column + stone or wood + supporter	+ energy + resulting from + chemical process producing current for lighting	+ building + man-made + for people to live

Mountain possesses the characteristic features of big. Big leads to high. The characteristic feature of high is possessed by pole (tiang). Pole used for electricity (listrik). Electricity is distributed to houses.

Chain 2

gunung	lahar	panas	kering	gersang	hutan
+ hill + mass of rock + big + high	+ rock + liquid + coming out of volcano	+ temperature + high	−wet	− wet − fertile	+ land + covered with plants and trees

Mountain has the component of lave (lahar) Lava has the characteristic of hot (panas). Hot leads to dry. Dry characterizes barren (gersang). Barren leads to forest. It means forest which owns the properties of barren.

Chain 3

Rumah	nyaman	tidur	mimpi	indah	bunga
+ building + man-made + for people + to live	+ relaxing + pleasant	+ condition + eyes are closed + muscles, nervous sistem are relaxed	+ sequence of + scenes and feelings − real + occuring in the mind	+ quality + pleasant	+ part of plant + develop into seed or fruit + colourful − long-lasting

House is the most comfortable place. Therefore house is characterized as comfortable (nyaman). Comfortable is when sleeping (tidur). Sleeping leads to dream (mimpi). This dream occurs while sleeping. Dream is characterized as having the properties of beautiful (indah). The characteristic featutes of beautiful is also possessed by flower.

Chain 4

rumah	istana	kaya	pencuri
+ building	+ groups of buildings	+ amount	+ person
+ man-made	+ large	+ large	+ taking things
+ for people to live	+ fortification	+ money or property	+ which do not
	+ occupied by king or		belong to him
	or president's family		+ secretly
			− permission

House leads to castle or istana. It means house which possesses the properties of castle. Castle possesses the features of rich. Rich leads to thief. It means thief who is interested in richness.

Chain 5

Hutan	pohon	kayu	pencuri
+ land	+ plant	+ part of trunk	+ person
+ covered with	+ big	+ hard fibrous	+ taking things
plants and trees	+ has trunk		+ which do not
	+ has wooden stem		belong to him
	+ has branches		+ secretly
	+ bearing leaves		− permission

Forest covered by trees. Tree has the component of trunk which possesses the component of wood. Wood is taken by thief.

Chain 6

hutan	ular	pemangsa	mati	gajah
+ land + covered with plants and trees	+ animal + reptile + crawling – leg + long	+ animal + killing other + eating other	–live	+ animal + mammal + four-footed + has trunk + has tusk + large ears + thick skin + grey fur + live in a group

Forest leads to snake (ular). It means snake which is found in the forest. Snake is categorized as predator (pemangsa). Predator leads to its prey to die. The properties of die are owned by elephant.

Chain 7

Bunga	harum	parfum	mobil

+ part of plant
+ develop into
   seed or fruit
+ colouful
– long-lasting
	+ smell
	+ sweet
		+ substance
		+ liquid
		+ sweet smelling
		+ made from
		   flower
			+ vehicle
			+ wheeled
			+ moved by machine
			+ needs fuel to
			   operate the machine

Flower which possesses the characteristic features of sweet-smelling (harum). Sweet-smelling characterized perfume (parfum). Perfume leads to car. It means pefume to be put in car.

Chain 8

bunga	daun	hijau	sayur	wortel	kelinci

+ part of plant
+ develop into
   seed or fruit
+ root
+ colourful
– long-lasting
	+ part of plant
	+ growing from
	   stem,branches
		+ colour
		+ between yellow
		   and blue in the
		   spectrum
			+ part of various
			   types of plants
			+ eaten as food
			+sauce
				+ plant
				+ vegetable
				+long pointed
				   root
					+ animal
					+mammal
					+hare
					   root family
					+ long ears
					+ short
					   furry tail

Flower leads to daun (leaf). Both concepts are parts of plant. Leaf is associated as having the characteristic features of green. Green leads to vegetable (sayur). It means vegetable which having those properties. Carrot (wortel) is an example of vegetable. Carrot is eaten by rabbit.

Chain 9

pencuri	pengeroyokan	mati	kelinci
+ person	+ process	– live	+ animal
+ taking things	+ people		+ mammal
which do not	+ many		+ hare family
belong to him	+ hit		+ long ears
+ secretly	+ together		+ short furry tail
– permission			

Thief leads to mass-attack (pengeroyokan). Mass-attack causes to die. The features of die are owned by rabbit.

Chain 10

pencuri	miskin	perkampungan	kumuh	kaos kaki
+ person	+ money	+ part of city	– clean	+ stocking
+ taking things	– much	+ goup of houses	+ pollution	+ covering ankle
which do not				or foot
not				
belong to him				
+ secretly				
– permission				

Thief who is poor (miskin). Poor leads to district (perkampungan). It means a district which has the properties of poor. A district may also owns the properties of dirty (kumuh). The properties of dirty are also found on sock.

Chain 11

gajah	belalai	panjang	tali	sepatu	kaoskaki
+ animal	+ animal	+ space	+cord or wire	+ outer cover	+ stocking
+ mammal	+ nose	+extent	+ for fastening	+ person's foot	+ covering
+ fou-footed	+ long	+number		+ stiff sole	ankle or foot
+ has trunk	+ as hand				
+ has tusk	+ as sucker				
+ large ears					
+ thick skin					
+ grey fur					
+ live in a group					

Elephant has trunk. Trunk is long. Long leads to the characteristic of lace (tali). Lace for shoe. Shoe leads to sock. Both are worn on foot.

Chain 12

gajah	besar	mobil	roda	bulat	balon	angin	laut
+ animal	+size	+vehicle	+circular	+shape	+rubber bag	+air	+ earth surface
+ mammal	+large	+wheeled	frame	+circle-like	+filled with	+moving	+ covered
+four-footed		+moved	+turning on	+brightly	air	+the result	with
+ has trunk		by machine	an axle			natuaral	water
+ has tusk		power					+ large
+ large ears		+needs fuel					+ enclosing
+ thick skin		to operate					continents
+ grey fur		the machine					and island
+ live in a group							

Elephant is big. The characteristics of big also possessed by car. Car has wheel (roda). Wheel has the characteristic of circle (bulat) and so does balloon (balon). Balloon filled with air.

Chain 13

rumah	besar	tenda	kemah	hutan
+ building	+ size	+ shelter or	+ place	+ land
+ man-made	+ large	dwelling	+ for live	+ covered with
+ for people		+ made of canvas	+ temporer	plants and trees
to live		+ supported by	+ in tent or hut	
		poles and ropes		
		+ attached to pegs		
		driven into the ground		

House which has the characteristic features of big and so does the tent (tenda). Tent is used for camping (kamp). Camping is in forest.

Chain 14

bunga	matahari	masker	pencuri
+ part of plant + develop into seed or fruit + colourful − long-lasting	+ star + give light + give warmth + planet orbit around it	+ face + cover	+ person + taking things which do not belong to him + secretly − permission

Sun flower is a metaphor. It means flower, which has the the sun (matahari) shaped. Sun leads to use mask (masker) to protect face. Mask is also worn to cover thief's face.

Chain 15

pencuri	masker	karet	lunak	keras	kulit	gajah
+ person + taking things which do not belong to him + secretly − permission	+ face + cover	+ substance + elastic + syntethic + the milky juice of certain tropical plant	− hard + firm to the touch	− soft − firm to the touch	+ substance + outer cover of body	+ animal + mammal + four-footed + has trunk + has tusk + large ears + thick skin + grey fur + live in a group

Thief wearing mask. Mask made of rubber (karet). Rubber is elastic (lunak). Elastic is the opposite of hard (keras). The characteristic of hard may be possesed a certain kind of skin (kulit). Skin is possessed by elephant.

Chain 16

mobil	mesin	tua	kelinci

+ vehicle
+ wheeled
+ moved by
  machine power
+ needs fuel to
  operate the
  machine
	+ apparatus
	+ several moving parts
	+ to perform task
	+ driven by electricity
	+ or human power
		− young	+ animal
			+ mammal
			+ hare family
			+ long ears
			+ short furry tail

Car has a machine (mesin). Machine which has the characteristic features of old (tua) and so does rabbit.

Chain 17

kelinci	wortel	oranye	kaos kaki
+ animal + mammal + harefamily + long ears + short furry tail	+ plant + vegetable + long pointed root + orange	+ colour + reddish-yellow	+ stocking + covering ankle or foot

Rabbit eats carrot. Carrot has the characteristic colour of orange (oranye). The features of orange are possessed by sock.

Chain 18

kaoskaki	sepatu	santai	piknik	pantai	laut
+stocking +covering or foot	+outer cover ankle+person's foot +stiff sole	−anxiety −tenseness	+part of a pleasure trip +meal eats in out door +for fun	+the edge of sea +strech of sand or pebbles +shore between high and low water mark	+earth surface +covered with water +salty +large +enclosing continents and islands

Sock leads to shoe. Shoe leads to relax (santai). It means shoe for relaxed situation or informal situation. The properties of relax possessed by picnic (piknik). Picnic on beach.

IV.1.2.2. The English Semantic Network Structure

Chain 1

Mountain	triangle	maths	dizzy	rest	bed	house
+ hill	+figure	+science	+felling	−work	+ piece of	+buliding
+ mass of rock	+three angles	+number	+ everything	− sleep	furniture	+ man-made
+ big	+three straight	+quantity	turns round		+matress	+for people
+ high	sides	+calculation	−able to balance		+cover	to live
					+for sleeping	

Mountain looks like having triangle-shaped. The term triangle is found in maths. Maths leads to dizy. Dizzy causes rest. Rest leads to bed-rest. Bed is an example of furniture found at house.

Chain 2

mountain	lava	hot	drought	tree	forest
+ hill	+ rock	+ temperature	+ period	+ plant	+ land
+ mass of rock	+ liquid	+ high	+ dry	+ big	+ covered with
+ big	+ coming out	+continuously	+ has trunk		plants and trees
+ high	of volcano		+ has wooden stem		
			+ has branches		
			+ bearing leaves		

Mountain has the component of lava. Lava is hot. Hot leads to drought. Drought leads to tree. Tree covers forest.

Chain 3

house	comfortable	soft	cotton	blouse	beautiful	flower
+ building	+ relaxing	− hard	+ substance	+ garment	+ quality	+ part of plant
+ man-made	+ pleasant		+ fibrous	− cloth	+ pleasant	+ develop into
+ for people			+ white	− man	+ satisfactory	seed or fruit
to live			+soft			+ colourful
						− long-lasting

House leads to comfortable.Soft is comfortable. Soft characterized cotton. Cotton leads to blouse. It means blouse made of cotton. Blouse has the characteristic features of beautiful and so does the flower.

Chain 4

house	family	parent	father	man	thief

+ building
+ man-made
+ for people
   to live
	+ group
	+ parents
	+ children
		+ father
		+ mother
			+ human
			+ parent
			+male
				+ human
				+ male
				+ adult
					+ person
					+ taking things
					   which do not
					   belong to him
					+ secretly
					− permission

House is a building for family to live in. Family consists of parent. Parent includes father. Father is a man. The properties of man, in this association, possessed by thief.

Chain 5

Forest	green	fresh	face	mask	thief

+ land
+ covered with
plants and trees
in the spectrum
	+ colour
	+ between yellow
	   and blue
		+ clear
		+ bright
			+ head
			+ front
				+ face
				+ cover
					+ person
					+ taking things
					   which do not
					   belong to him
					+ secretly
					− permission

Forest is associated with green. Green has the characteristics of fresh. Fresh leads to face. It means face which has those properties. Face covered by mask. Mask worn by thief.

Chain 6

forest	wild	animal	elephant
+ land + covered with plants and tree	+ condition + natural − tame − cultivated − domesticated	+ animate + can move + eat + drink − human − plant	+ animal + mammal + four-footed + has trunk + has tusk + large ears + thick skin + grey fur + leve in a group

Forest owns the properties of wild and so does the animal. An example of animal is elephant.

Chain 7

flower	sun	hot	thirst	water	liquid	gasoline	car
+ part of	+star	+temperature	+feeling	+substance	+substance	+liquid	+ vehicle
plant	+givelight	+high	+needs	+liquid	−solid	+inflammable	+ wheeled
+develop	+give warmth		to drin	−colour	−gas	+fuel	+movedby
into seed	+planets orbit			−smell			machine
or fruit	around it			−taste			power
+colourful							needs fuel
−long-lasting							to operate
							the machine

Sun flower. Sun is hot. Hot leads to thirst. Thirst needs water. Water is liquid. Liquid is the characteristic of gasoline. Gasoline needed by car.

Chain 8

flower	honey	bee	animal	pet	rabbit
+ part of plant	+substance	+insect	+animal	+animal	+ animal
+ develop into	+liquid	+four winged	+can move	+tame	+ mammal
seed or fruit	+sticky	+has a sting	+eat	+ fortreated	+ hare family
+ colourful	+yellowish	+collecting nectar	+drink		+ long ears
− long-lasting	+sweet		−human		+ short furry
			−plant		tail

Flower produces honey. Honey collected by bee. Bee is an example of animal. Pet is part of animal. An example of pet is rabbit.

Chain 9

thief	mask	wool	soft	fur	rabbit
+ person	+ face	+ substance	− hard	+ animal	+ animal
+ taking things	+ cover	+ animal	+ smooth	+ body	+ mammal
which do not		+ hair	+ delicate	+ cover	+ hare family
belong to him		+ soft		+ hair	+ long ears
+ secretly					+ short furry
− permission					tail

. .

Thief covers his face with mask. Mask made of wool. Wool is soft. The characteristics of soft possessed by fur. Fur of the rabbit.

Chain 10

thief	man	casual	wear	sock
+ person	+ human	+ style	+ things	+ stocking
+ taking things which do not belong to him	+ male	– formal	+ for used at body	+ covering ankle or foot
+ male	+ adult			
+ secretly				
–permission				

Thief possesses the properties of man. Man who has a casual style. Casual is also characterized wear. Sock is an example of wear.

Chain 11

elephant	tusk	white	sock
+ animal	+ animal	+ colour	+ stocking
+ mammal	+ tooth	+ pale	+ covering ankle or foot
+ four-footed	+ long		
+ has trunk			
+has tusk			
+ large ears			
+ thick skin			
+ grey fur			
+ live in a group			

Elephant has tusk. Tusk has the characteristic of white. White characterized sock.

Chain 12

elephant	animal	zoo	cage	aquarium	fish	sea
+ animal	+animate	+place	+structure	+pond	+animal	+ earth surface
+ mammal	+can move	+for keeping	+made of	+artifcial	+cold-blooded	+ covered with
+ four-footed	+eat	animal	bars or	+glass	+can swim	+ water
+ has trunk	+drink	+as exhibition	wood	+for fish	+has fins	+ salty
+ has tusk	–human		+ for keeping	+has gills		+ large
+ large ears	–plant		animal			+ enclosing
+ thick skin						continents
+ grey fur						and island
+ live in a group						

Elephant is an animal. Animal is in zoo. Zoo has the component of cage. Cage leads to aquarium. Aquarium is for fish. Fish is found in sea.

Chain 13

house	wall	picture	frame	wood	tree	forest
+ building	+stucture	+imitative object	+structure	+part of trunk	+ plant+	land
+ man-made	+upright	+made by drawing	+border	+hard fibrous	+ big	+ covered with
+ for people	+enclosing		+wood	+ has trunk		plants and trees
to live	+dividing			+ has wooden stem		
	+protection			+ has branches		
				+ bearing leaves		

House has wall. Wall for hanging picture. Picture is put on frame. Frame made of wood. Wood is the component of tree. Tree covers forest.

Chain 14

flower	colourful	rainbow	cloud	dark	night	thief
+ part of plant	+ colour	+ arch	+mass	−light	+ time	+ person
develop into	+ full	+ colourfull	+ water vapour		+ darkness	+ taking things
seed or fruit	+ bright	+ in the sky	+ smoke		+between	which do not
+ colourful	+interesting	+ floating			sunset	belong to him
− long-lasting		+in the sky			and sunrise	+ secretly
						− permission

The characteristic of flower is colourful. Colourful is also the characteristics of rainbow. Rainbow leads to cloud. Cloud is associated with dark. Dark is the characteristics of night. Night leads to thief.

Chain 15

thief	policeman	street	crowd	elephant
+ person	+ human	+ way	+number of animal	+ animal
+ taking things	+ male	+ has sides	+large	+ mammal
which do not	+adult	+with house or	+gather	+ four-footed
belong to him	+member of	the buildings	+together	+ has trunk
+ secretly	the police force	in its sides	+in the open	+ has tusk
− permission				+ large ears
				+ thick skin
				+ grey fur
				+ live in a group

Thief caught by policeman. Policeman directs traffic at the street. Street leads to crowd. Crowd of elephants.

Chain 16

car	elegant	nice	rabbit
+ vehicle	+ manner	+ pleasant	+ animal
+ wheeled	+ appearance	+ agreeable	+ mammal
+ moved by	+ tasteful		+ hare family
machine power	+ stylish		+ long ears
+ needs fuel			+ short furry tail
to operate			
themachine			

Car has the characteristic of elegant. Elegant is nice. Nice leads to rabbit.

Chain 17

rabbit	carrot	soup	delicious	nice	sock
+ animal	+ plant	+ food	+ taste	+pleasant	+ stocking
+ mammal	+ vegetable	+ vegetable	+ smell	+agreeable	+ covering
+ hare family	+ long pointed root	+ meat	+pleasant		ankle or foot
+ long ears	+ orange	+ sauce			
+ short furry tail					

Rabbit eats carrot. Carrot is the component of soup. Soup is delicious. Delicious is nice.
Nice characterizes sock.

Chain 18

sock	wet	rainy	water	sea
+ stocking	– dry	+ period	+ substance	+ earth surface
+ covering ankle	+ soaked	+ rain	+ liquid	+ covered with
or foot+much			– colour	water
			– smell	+ salty
			– taste	+ large
				+ enclosing continents
				and islands

Sock leads to wet. Wet characterize rainy. Rainy possesses the component of water.
Water is the main feature of sea.

IV.1.3. Data analysis of Respondent 30

IV.1.3.1. The Indonesian Semantic Network Structure

Chain 1

gunung	dingin	AC	kamar	rumah
+ hill	+ temperature	+ system	+ part of house	+ building
+ mass of rock	– high	+ to controll	+ enclosed by	+ manmade
+ big		humadity	or walls or	+ for people
+ high		temperature	partitionsto live	
+ floor		of air		
+ ceiling				

The temperature of mountain area is cold (dingin). Cold is produced by air conditioner (AC). AC is put in room (kamar). Room is part of house.

Chain 2

gunung	pohon	hutan
+ hill	+ plant	+ land
+ mass of rock	+ big	+ covered with
+ big	+ has trunk	plants and trees
+ high	+ wooden stem	
	+ has branches	
	+ bearing leaves	

Mountain leads to tree. Tree covers forest.

Chain 3

rumah	taman	bunga
+ building	+ ground	+ part of plant
+ man-made	+ garden	+ develop into
+ for people to live	+ recreation	seed or fruit
		+ colourful
		– long-lasting

House has park (taman). Park planted by plant which produced flower.

Chain 4

rumah	kosong	pencuri
+ building + man-made + for people to live	− content − stuffing	+ person + taking things + which do not + belong to him + secretly − permission

House which has the characteristic features of empty (kosong). Empty leads to thief to enter.

Chain 5

hutan	jati	pencuri

+ land
+ covered with
  plants and trees
  and sunrise
+ secretly
− permission
	+ tree
	+ big soft hairy leaves
	+ producing good
	  quality of wood
	+ for building material
		+ person
		+ taking things
		  which do not
		  belong to him

Forest planted by timber (jati). Timber is stolen by thief.

Chain 6

hutan	binatang	gajah
+ land + covered with plants and trees	+ animate +can move + eat + drink − human − plant	+ animal + mammal + four-footed + has trunk + has tusk + large ears + thick skin + grey fur + live in a group

Forest is home for animal. An example of animal is elephant.

Chain 7

bunga	pengantin	mobil
+ part of plant	+ couple	+ vehicle
+ develop into seed or fruit	+ man	+ wheeled
+ colourful	+ woman	+ moved by machine
− long-lasting	+ on or just married	power
		+ needs fuel to operate the machine

Flower is associated with bridge or bridgroom (pengantin). Bridge or bridgroom leads to car. It is a car for bridge or bridgeroom.

Chain 8

Bunga	kebun	wortel	kelinci
+ part of plant	+ ground	+ plant	+ animal
+ develop into seed or fruit	+ for gorwing plants	+ vegetable	+ mammal
	+ long pointed root		+ hare family
+ colourful	+ orange		+ long ears
− long-lasting			+ short furry tail

Flower leads to garden (kebun). It means garden which is planted by plant producing flower. Garden leads to carrot. It means garden which is planted with carrot. Carrot is eaten by rabbit.

Chain 9

pencuri	lompat	kelinci
+ person	+ motion	+ animal
+ taking things which do not belong to him	+ off the ground	+ mammal
	+ up into the air	+ hare family
	+ using the force of the legs and feet	+ long ears
+ secretly		+ short furry tail
− permission	+ quick	

Thief who does jumping (lompat). Jump characterizes rabbit.

Chain 10

pencuri	lari	kaki	sepatu	kaos kaki
+ person	+ motion	+ part of body	+ outer cover	+ stocking
+ taking things	+ forward	+ lowest part	+ person's foot	+ covering ankle
which do not	+ fast	of leg	+ stiff sole	or foot
belong to him	+ on feet	+ to support body		
+ secretly				
– permission				

Thief who does running. Running on feet. Foot wears shoe. Shoe leads to sock.

Chain 11

gajah	sirkus	lompat	kaki	kaos kaki
+ animal	+ performance	+ motion	+ part of body	+ stocking
+ mammal	+ entertainment	+ off the ground	+ lowest part	+ covering
+ fou-footed	+ action	+ up into the air	of leg	ankle or foot
+ has trunk	+ acrobat	+ using the force	+ to support body	
+has tusk	+ skillful animal	+ oflegs and feet		
+ large ears	+ clown+ quick			
+ thick skin				
+ grey fur				
+ live in a group				

Elephant is a circus (sirkus) animal.Circus is associated with jump. Jumping on feet. Foot covered by sock.

Chain 12

gajah	belalai	air	laut
+ animal	+ animal	+ substance	+ earth surface
+ mammal	+ nose	+ liquid	+ covered with
+ four-footed	+ long	– colour	water
+ has trunk	+ as hand	– smell	+ salty
+ has tusk	+ as sucker	– taste	+ large
+ large ears			+ enclosing
+ thick skin			continents
+ grey fur			and island
+ live in a group			

Elephant has trunk. Trunk sucks water. Water is the component of sea.

Chain 13

rumah	kayu	pohon	hutan
+ building + man-made + for people to live	+ part of trunk + hard fibrous	+ plant + big + has trunk + has wooden stem + has branches + bearing leaves	+ land + covered with plants and trees

House made of wood. Wood is the componet of tree. Tree covers forest.

Chain 14

bunga	taman	rumah	perabotan	pencuri

+ part of plant
+ develop into
  seed or fruit
+ colourful
− long-lasting
	+ ground
	+ garden
	+ recreation
		+ building
		+ man-made
		+ for people
		+ to live
			+ goods
			+ for particular
			  purpose
				+ person
				+ taking things
				  which do not
				  belong to him
				+ secretly
				− permission

Flower founding in park. Park is part of house. House has equipment (perabotan). Equipment is stolen by thief.

Chain 15

pencuri	penjarah	hutan	binatang	gajah

+ person
+ taking things
  which do not
  belong to him
+ secretly
− permission
	+ person
	+ plunding
	+ during a time
	  of riot
		+ land
		+ covered with
		  plants and trees
			+ animate
			+ can move
			+ eat
			+ drink
			− human
			− plant
				+ animal
				+ mammal
				+ four-footed
				+ has trunk
				+ has tusk
				+ large ears
				+ thick skin
				+ grey fur
				+ live in a group

Thief shares most features as plunder (penjarah). Plunder of forest's product. Forest is home for elephant. Elephant is an example of animal.

Chain 16

mobil	cepat	lompat	kelinci

+ vehicle
+ wheeled
+ moved by
  machine power
+ needs fuel to
  operate the
  machine
	+ speed
	+ high
		+ motion
		+ off the ground
		+ up into the air
		+ using the force of
		  legs or feet
		+ quick
			+ animal
			+ mammal
			+ hare family
			+ long ears
			+ short furry tail

Car is associated with fast (cepat). The characteristic of fast owned by jumping. Jumping characterizes rabbit.

Chain 17

kelinci	lompat	kaki	kaos kaki
+ animal + mammal + harefamily + long ears + short furry tail	+ motion + off the ground + up into the air + using the force of + legs and feet + quick	+ part of body + lowest part ofleg + to support body	+ stocking + covering ankle or foot

Rabbit jumps. Jumping on feet. Foot wears sock.

Chain 18

kaoskaki	hangat	air	laut

+ stocking
+ covering ankle
  or foot
+ between cool
  and hot
	+ temperature
	− high
	− low
		+ substance
		+ liquid
		− colour
		− smell
		− taste
			+ earth surface
			+ covered with
			  water
			+ salty
			+ large
			+ enclosing continents
			  and islands

Sock keeps warm (hangat). Warm leads to water, means warmed water. Water is the main feature of sea.

IV.1.3.2. The English Semantic Network Structure

Chain 1

mountain	foot	ladder	stair	house
+ hill	+ part of body	+ structure	+ structure	+ buliding
+ mass of rock	+ lowest part	+ two upright lenghts	+ series or	+ man-made
+ big	of leg	of wood or metal	fixed steps	+ for people
+ high	+ to support body	+ crossbars used	+ for climbing up	to live
		as steps	and dpwn	
		+ for climbing up		
		and down		

The foot of the montain is a metaphor. Foot to climb up ladder. Ladder shares most common features with the concept of stair. Stair of a house.

Chain 2

mountain	tree	forest
+ hill	+ plant	+ land
+ mass of rock	+ big	+ covered with
+ big	+ has trunk	plants and trees
+ high	+ wooden stem	
	+ has branches	
	+ bearing leaves	

Mountain leads to tree. Tree covers forest.

Chain 3

House	living-room	table	vase	flower
+ building	+ part of house	+ piece of furniture	+ vessel	+ part of plant
+ man-made	+ room	+ a flat top	– handle	+ develop into
+ for people	+ for general use	+ supported on one	+ ornament	seed or fruit
to live		or more legs	+ for holding	+ colourful
			cut flowers	+ long-lasting

House has living-room. Living-room leads to table. Table for putting vase. Vase is for holding flower.

Chain 4

house	furniture	wood	box	jewel	thief

+ building
+ man-made
+ for people
   to live
	+ article
	+ movable
	+ put into a house
	   or an office
	+ suitable for living
	   or working in
		+ part of trunk
		+ hard fibrous
			+ container
			+ a flat base
			+ a lid
			+ for holding
			   solid
				+ stone
				+ precious
				+ ornament
					+ person
					+ taking things
					  which do not
					  belong to him
					− secretly
					− permission

House furnished by furniture. Furniture made of wood. Wood is the material of box. Box for keeping jewel. Jewel is taken by thief.

Chain 5

forest	tree	wood	box	jewel	thief

+ land
+ covered with
  plants and trees
	+ plant
	+ big
	+ has trunk
	+ has wooden stem
	+ has branches
	+ bearing leaves
		+ part of trunk
		+ hard fibrous
			+ container
			+ a flat base
			+ a lid
			+ for holding
			   solid
				+ stone
				+ precious
				+ ornament
					+ person
					+ taking things
					  which do not
					  belong to him
					+ secretly
					− permission

Forest is covered by tree. Tree has the component of wood. Wood is the material of box. Box for keeping jewel.

Chain 6

forest	tree	big	elephant
+ land + covered with plants and trees	+ plant + big + has trunk + has wooden stem + has branches + bearing leaves	+ size + large	+ animal + mammal + four-footed + has trunk + has tusk + large ears + thick skin + grey fur + live in a group

Forest covered by tree. Tree, which has the characteristic features of big. Big also characterizes elephant.

Chain 7

flower	beautiful	bridge	honeymoon	travel	car
+ part of plant	+ quality	+ person	+ holiday	+ journey	+ vehicle
+ develop into	+ pleasant	− male	+ newly married	+ abroad	+ wheeled
seed or fruit	+ satisfactory	+ adult	+ couple		+ moved by
+ colourful		on or just			machine power
− long-lasting		married			+ needs fuel to
					operate
					the machine

Flower has the characteristic features of beautiful and so does the bridge. Bridge leads to honeymoon. Honeymoon leads to travel. Travel by car.

Chain 8

flower	small	rabbit
+ part of plant	+ size	+ animal
+ develop into	− large	+ mammal
seed or fruit		+ hare family
+ colourful		+ long ears
− long-lasting		+ short furry tail

Flower, which has the characteristics features of small. The features of small are also found in rabbit.

Chain 9

thief	run	rabbit
+ person	+ motion	+ animal
+ taking things	+ forward	+ mammal
which do not	+ fast	+ hare family
belong to him	+ on feet	+ long ears
+ secretly		+ short furry tail
− permission		

Thief does running and so does the rabbit.

Chain 10

thief	run	foot	sock

+ person
+ taking things
  which do not
  belong to him
+ secretly
−permission
	+ motion
	+ forward
	+ fast
	+ on feet
		+ part of body
		+ lowest part
		  of leg
		+ to support body
			+ stocking
			+ covering ankle
			  or foot

Thief does the running. Running on feet. Foot covered by sock.

Chain 11

elephant	big	fat	body	foot	sock
+ animal + mammal + four-footed + has trunk +has tusk + large ears + thick skin + grey fur + live in a group	+ size + large	+ body + heaviness	+ animate + structure + physical	+ part of body lowest part	+ stocking + covering ankle or foot

Elephant is big. Big leads to fat. Fat is the characterizes body. Body leads to its part that is foot. Foot covered by sock.

Chain 12

elephant	big	wide	sea

+ animal
+ mammal
+ four-footed
+ has trunk
+ has tusk
+ large ears
+ thick skin
+ grey fur
+ live in a group
	+ size
	+ large
		− narrow	+ earth surface
			+ covered with
			+ water
			+ salty
			+ large
			+ enclosing
			  continents
			  and island

Elephant is big. Big leads to wide. Wide is the property of sea.

Chain 13

house	garden	tree	forest

+ building
+ man-made
+ for people to live
	+ ground
	+ for growing
	   plants
		+ plant
		+ big
		+ has trunk
		+ has wooden stem
		+ has branches
		+ bearing leaves
			+ land
			+ covered with
			   plants and trees

House has garden. Garden is planted by tree. Tree covers forest.

Chain 14

flower	beautiful	jewelry	thief

+ part of plant
   develop into
   seed or fruit
+ colourful
–long-lasting
	+ quality
	+ pleasant
	+ satisfactory
		+ ornament
		+ made of metal
		+ set with jewel
			+ person
			+ taking things
			   which do not
			   belong to him
			+ secretl
			– permission

Flower possesses the characteristic of beautiful. Beautiful is also the characteristic of jewelry. Jewelry leads to be taken by thief.

Chain 15

thief	expensive	ivory	tusk	elephant

+ person
+ taking things
   which do not
   belong to him
+ secretly
– permission
	+ price
	+ cost a lot of
	   money
		+ substance
		+ bone-like
		+ creamy-white
		+ forming the tusks
		   of animal
			+ teeth
			+ long pointed
			+ project from
			   the mouth of
			   certain animal
				+ animal
				+ mammal
				+ four-footed
				+ has trunk
				+ has tusk
				+ large ears
				+ thick skin
				+ grey fur
				+ live in a group

Thief leads to steal expensive thing. Expensive leads to the price of ivory. Ivory is made from tusk. Tusk is the feature of elephant.

Chain 16

car	fast	jump	rabbit

+ vehicle
+ wheeled
+ moved by
  machine power
+ needs fuel to
  operate the
  machine
	+ speed
	+ high
		+ motion
		+ off the ground
		+ up into the air
		+ using the force of
		  legs or feet
		+ quick
			+ animal
			+ mammal
			+ hare family
			+ long ears
			+ short furry tail

Car is associated with fast. Fast characterizes jump. Jump is the characteristic of rabbit.

Chain 17

rabbit	jump	foot	sock
+ animal + mammal + harefamily + long ears + short furry tail + quick	+ motion + off the ground + up into the air + using the force of + legs and feet	+ part of body + lowest part of leg +to support body	+ stocking + covering ankle or foot

Rabbit is associated with jump. Jump on feet. Foot covered by sock.

Chain 18

sock	foot	swim	water	sea

+ stocking
+ covering ankle
  or foot
	+ part of body
	+ lowest part
	  of leg
	+ to support body
		+ motion
		+ body
		+ through water
		+ using arms, legs
			+ substance
			+ liquid
			– colour
			– smell
			– taste
				+ earth surface
				+ covered with
				  water
				+ salty
				+ large
				+ enclosing
				  continents
				  and islands

Sock covers foot. Swimming by using feet. Swimming is in the water. Water is the main component of sea.

Referring to the analysis of the semantic features of the associated concepts, the writer, now, classifies the associations. The classification is based on Reed's (1992) theory of several kinds of relations among concepts in a semantic network structure and Palmer's (1981) theory of several types of paradigmatic or sense relations.

As reviewed in chapter two, according to Reed (1992), the kinds of relations among concepts are: *part*, *type*, *characteristic*, and *leads to*. On the other hand, the types of paradigmatic or sense relations of Palmer (1981) are *hyponymy*, *synonymy*, *antonymy*, *relational opposites*, *temporal relationship*, *polysemy*, *homonymy*, *homography*, *metaphor*, and *components*. The analysis of the data of this study, according to Palmer's theory is considered as componential analysis.

The semantic-network theory of Johnson-Laird (1983) suggests that the meaning of a word is thought of as a notation or formalism in which it is set up in terms of a network of 'is a' relationship.

Briefly, here are the classifications of the associations of respondents 7, 19,and 30. They are presented in tables.

Table IV.1. The classification of Respondent 7's Indonesian association chains based on Reed's theory.

Kind of association	Concept 1	Concept 2
Part : concept 1 is part of concept 2	pohon	hutan
	-	-
Type: concept 1 is type of concept 2	mawar	bunga
	melati	bunga
	Jati	kayu
Characteristic: concept 1 is characterized by concept 2	gunung	tinggi
	gunung	hijau
	rumah	besar
	rumah	putih
	rumah	kaya
	kaya	uang
	deposito	uang
	hutan	lebat
	gajah	belalai
	kelinci	putih
	boneka	kelinci
	laut	air
	pohon	hijau
	mawar	putih
	rumput	pijau
	kayu	besar
	melati	putih
	hantu	putih
	malam	dingin
	kaki	dingin
	basah	air
Leads to: concept 2 is caused by concept 1	rumah	penjaga
	hutan	penjaga
	hutan	kayu
	pencuri	uang
	pencuri	jati
	pencuri	kayu
	pencuri	malam
	gajah	rumput
	gajah	besar
	gajah	gambar
	mobil	kredit
	mobil	laju
	kelinci	lari
	kaos kaki	kaki
	kaos kaki	kain
	kaos kaki	bayi
	kaos kaki	basah
	tinggi	besar
	pohon	lebat
	malam	hantu
	gambar	pola

	pola	kain
	belalai	air

Table IV.2. The classification of Respondent 7's English association chains based on Reed's theory.

Kind of association	Concept 1	Concept 2
Part: concept 1 is part of concept 2	mountain	nature
	tree	forest
	tree	garden
Type: concept 1 is type of concept 2	rose	flower
	jasmine	flower
	elephant	animal
	rabbit	animal
Characteristic: concept 1 is characterized by concept 2	mountain	green
	house	beautiful
	house	white
	house	big
	forest	green
	forest	silent
	elephant	big
	elephant	trunk
	car	red
	car	fast
	rabbit	white
	sea	water
	scenery	nature
	scenery	beautiful
	tree	green
	rose	red
	rich	money
	night	dark
	tree	big
	jasmine	white
	run	fast
	water	white
Leads to: concept 2 is caused by concept 1	thief	shop
	thief	money
	thief	night
	thief	jewelry
	thief	police
	thief	run
	elephant	cage
	rabbit	run
	sock	foot
	sock	stink
	white	red
	big	rich
	dark	silent

	shop	jewelry
	police	jail
	jail	cage
	run	foot
	trunk	water

Table IV.3. The classification of Respondent 19's Indonesian association chains based on Reed's theory.

Kind of association	Concept 1	Concept 2
Part : concept 1 is part of concept 2	lahar	gunung
	pohon	hutan
	wortel	sayur
	roda	mobil
	tenda	kemah
Type: concept 1 is type of concept 2	-	-
	-	-
Characteristic: concept 1 is characterized by concept 2	gunung	besar
	rumah	besar
	rumah	nyaman
	bunga	indah
	bunga	harum
	pencuri	miskin
	gajah	belalai
	gajah	besar
	kaos kaki	oranye
	kelinci	Tua
	tiang	tinggi
	lahar	panas
	kering	panas
	kering	gersang
	tenda	besar
	mimpi	indah
	istana	kaya
	pohon	kayu
	masker	karet
	karet	lunak
	kulit	keras
	parfum	harum
	daun	hijau
	sayur	hijau
	mesin	tua
	perkampungan	kumuh
	perkampungan	miskin
	belalai	panjang
	tali	panjang
	mobil	besar
	roda	bulat
	balon	bulat

	balon	angin
	sepatu	santai
	piknik	santai
	rumah	listrik
Leads to: concept 2 is caused by concept 1	rumah	istana
	hutan	gersang
	hutan	kemah
	hutan	ular
	bunga	daun
	pencuri	masker
	pencuri	kaya
	pencuri	kayu
	pencuri	pengeroyokan
	gajah	mati
	gajah	kulit
	mobil	parfum
	kelinci	wortel
	kelinci	mati
	kaos kaki	kumuh
	kaos kaki	sepatu
	angin	laut
	laut	pantai
	besar	tinggi
	tiang	listrik
	nyaman	tidur
	tidur	mimpi
	ular	pemangsa
	pemangsa	mati
	lunak	keras
	matahari	masker
	Pengeroyokan	mati
	Tali	sepatu
	Piknik	pantai

Table IV.4. The classification of Respondent 19's English association chains based on Reed's theory.

Kind of association	Concept 1	Concept 2
Part: concept 1 is part of concept 2	lava	mountain
	wall	house
	tree	forest
	sock	wear
	parent	family
	father	parent
	pet	animal
	fish	aquarium
Type: concept 1 is type of concept 2	elephant	animal
	rabbit	pet
	bee	animal

Characteristic: concept 1 is characterized by concept 2	house	comfortable
	forest	green
	forest	wild
	flower	beautiful
	flower	honey
	flower	colourful
	thief	man
	elephant	tusk
	car	gasoline
	car	elegant
	rabbit	fur
	rabbit	nice
	sea	water
	maths	dizzy
	lava	hot
	drought	hot
	frame	wood
	tree	wood
	cotton	soft
	blouse	cotton
	blouse	beautiful
	father	man
	face	fresh
	animal	wild
	sun	hot
	water	liquid
	gasoline	liquid
	mask	wool
	wool	soft
	fur	soft
	soup	delicious
	delicious	nice
	man	casual
	wear	casual
	tusk	white
	rainy	wet
Leads to: concept 2 is caused by concept 1	mountain	triangle
	house	bed
	house	family
	thief	mask
	thief	night
	thief	policeman
	elephant	crowd
	rabbit	carrot
	sock	wet
	sea	fish
	triangle	maths
	dizzy	rest
	rest	bed
	drought	tree
	wall	picture
	picture	frame
	comfortable	soft

	green	fresh
	face	mask
	policeman	street
	street	crowd
	hot	thirst
	thirst	water
	honey	bee
	elegant	nice
	carrot	soup
	animal	zoo
	zoo	cage
	cage	aquarium
	rainy	water

Table IV.5. The classification of Respondent 30's Indonesian association chains based on Reed's theory.

Kind of association	Concept 1	Concept 2
Part : concept 1 is part of concept 2	kamar	rumah
	taman	rumah
	pohon	hutan
	bunga	taman
	bunga	kebun
	air	laut
Type: concept 1 is type of concept 2	gajah	binatang
	-	-
Characteristic: concept 1 is characterized by concept 2	gunung	dingin
	gunung	pohon
	rumah	kayu
	rumah	kosong
	hutan	jati
	gajah	belalai
	mobil	cepat
	kelinci	lompat
	AC	dingin
	pohon	kayu
	lompat	cepat
	lari	kaki
	lompat	kaki
	air	hangat
Leads to: concept 2 is caused by concept 1	hutan	binatang
	bunga	pengantin
	pencuri	perabotan
	pencuri	kosong
	pencuri	jati
	pencuri	penjarah
	pencuri	lompat
	pencuri	lari

gajah	sirkus
mobil	pengantin
kelinci	wortel
kaos kaki	sepatu
kaos kaki	kaki
kaos kaki	hangat
AC	kamar
rumah	perabotan
penjarah	hutan
kebun	wortel
kaos kaki	sepatu
sirkus	lompat
belalai	air

Table IV.6. The classification of respondent 30's English association chains of based on Reed's theory.

Kind of association	Concept 1	Concept 2
Part: concept 1 is part of concept 2	garden	house
	living-room	house
	tree	forest
	car	travel
	tree	garden
	foot	body
Type: concept 1 is type of concept 2	-	-
	-	-
Characteristic: concept 1 is characterized by concept 2	mountain	tree
	vase	flower
	flower	beautiful
	flower	small
	elephant	big
	elephant	tusk
	car	fast
	rabbit	small
	rabbit	jump
	sea	wide
	sea	water
	furniture	wood
	box	wood
	tree	wood
	jewelry	beautiful
	tree	big
	ivory	expensive
	ivory	tusk
	bridge	beautiful
	jump	fast
	run	foot
	jump	foot
	body	fat

	fat	big
	swim	water
Leads to: concept 2 is caused by concept 1	house	stair
	house	furniture
	thief	jewel
	thief	jewelry
	thief	expensive
	thief	run
	rabbit	run
	sock	foot
	foot	ladder
	ladder	stair
	living-room	table
	table	vase
	box	jewel
	bridge	honeymoon
	honeymoon	travel
	foot	swim
	big	wide

The classification tables of the various kinds of associations based on Reed's theory (1992) show that the most common types of associations appear in semantic network structures are *leads to* for the Indonesian data and *characteristic* for the English data. On the other hand, only few associations are found in 'part' and 'type' relationship on the whole semantic network structures.

The following table shows the mean common responses of the three respondents:

Table IV.7. The mean common responses for the three respondents for the classification of Indonesian responses based on Reed' theory (1992)

Respondent's number	Indonesian Data			
	Part	Type	Characteristic	Leads to
7	1	3	21	23
19	5	0	35	30
30	6	1	14	21
Mean	4	1.3	23.3	24.6

Table IV.8. The mean common responses for the three respondents for the classification of Indonesian responses based on Reed' theory (1992)

Respondent's number	English Data			
	Part	Type	Characteristic	Leads to
7	3	4	18	22
19	8	3	35	30
30	6	-	25	17
Mean	5.7	2.3	26	23

Likewise, the writer also hardly found types of relationships among concepts, which are in paradigmatic or sense relations of Palmer (1981) other than componential analysis. Those, which are found in paradigmatic or sense relations other than componential analysis, are presented in the following tables.

Table IV.9. The classification of Respondent 7's Indonesian association chains based on Palmer's theory.

Sense Relation	Concept 1	Concept 2
Hyponymy: the meaning of a word refers to the class itself.	mawar	bunga
	melati	. bunga
	jati	kayu
Metaphor: the word has both literal and one or more transferred meanings.	bunga	kredit
	bunga	deposito
	rumah	istana
	-	-

Table IV.10. The classification of Respondent 7's English association chains based on Palmer's theory.

Sense Relation	Concept 1	Concept 2
Hyponymy: the meaning of a word refers to the class itself.	rose	flower
	jasmine	flower
	elephant	animal
	rabbit	animal
Metaphor: the word has both literal and one or more transferred meanings.	big	foot
	white	house
	-	-
	-	-

Table IV.11. The classification of Respondent 19's Indonesian association chains based on Palmer's theory.

Sense Relation	Concept 1	Concept 2
Metaphor: the word has both literal and one or more transferred meanings.	bunga	matahari
	-	-
	-	-
	-	-
Antonymy-gradable: the relationship of oppositeness of meaning, in which words do not refer to absolute qualities, but may be the subject to comparison	lunak	keras
	-	-
	-	-
	-	-
	-	-
	-	-
	-	-
	-	-

Table IV.12. The classification of Respondent 19's English association chains based on Palmer's theory.

Sense Relation	Concept 1	Concept 2
Hyponymy: the meaning of a word refers to the class itself.	elephant	animal
	rabbit	animal
	-	-
Metaphor: the word has both literal and one or more transferred meanings.	sun	flower
	-	-
	-	-
	-	-

Table V.13. The classification of Respondent 30's Indonesian association chains based on Palmer's theory.

Sense Relation	Concept 1	Concept 2
Hyponymy: the meaning of a word refers to the class itself.	gajah	binatang
	-	-
	-	-

Table V.14. The classification of respondent 30's English association chains based on Palmer's theory.

Sense Relation	Concept 1	Concept 2
Metaphor: the word has both literal and one or more transferred meanings.	Mountain	foot
	-	-
	-	-
	-	-

The classification tables of types of paradigmatic relations of Palmer (1981) shows that beside the componential analysis, most common types of paradigmatic or sense relations found in the semantic network structures of respondent 7, 19, and 30 are hyponymy and metaphor.

IV. 2. Interpretation of the Data

The objective of seeting up this test is to draw comparison between the valency of L1 (the Indonesian) and L2 (the English). Therefore, the writer uses Paired-T Test (T-Test) of Bhattacharyya and Johnson (1977), which fits to test the hypotheses proposed in this study.

The underlying assumption of the two versions of data is that the Indonesian and the English data, are independent to each other. Based on the theory used, the situation can be examined as a random sample of size 30 is available from the population of students who speak L1, corresponding to treatment 1 that is independent of a random sample of size 30 is available from the population of students who speak L2 corresponding to treatment 2.

According to Bhattacharyya and Johnson (1977), any confidence statements or tests of hypothesis must be based on assumption regarding the structure of the underlying distribution. Here, the structure of the underlying distribution is:

a) $X_1, X_2, ..., X_3$ is a random sample of size n_1 from population 1 whose mean is denoted by μ_1 and whose variance is denoted by σ_1^2.

b) $Y_1, Y_2, ..., Y_3$ is a random sample of size n_2 from population 2 whose mean is denoted by $\mu2$ and whose variance is denoted by σ_2^2.

c) $X_1, X_2, ..., X_{n1}$ are independent of $Y_1, Y_2, ..., Y_{n2}$. In other words, the respond measurements under one treatment are unrelated to the response measurements under the other treatment.

These are the only assumptions required when the samples sizes n_1 and n_2 are both large. For this study, the writer tested 30 respondents, which is considered as standard or larger samples.

Large sample inference for $\mu_1 - \mu_2$

An approximate $100 (1 - \alpha)\%$ confidence interval for $\mu_1 - \mu_2$ is given by :

$$\bar{X} - \bar{Y} \pm z\frac{\alpha}{2} \cdot \sqrt{\frac{S_1^2}{n_1} + \frac{S_1^2}{n_2}}$$

$\bar{X}$= the mean chain length of the Indonesian data

n_1= the number of the Indonesian repondents

S_1^2 = The Indonesian variance

z = z table

$\bar{Y}$= the mean chain length of the English data

n_2 = the number of the English respondents

S_1^2 = the English variance

α = The confidential level

Where $z\frac{\alpha}{2}$ is the upper $\frac{\alpha}{2}$ point of N (0.1) and the null and alternative hypothesis required, H_0: $\mu_1 = \mu_2$

H_1: $\mu_1 \neq \mu_2$

THE STATISTIC TEST

$$Z = \frac{\bar{X} - \bar{Y}}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$$

The null and alternative hypotheses required for this test:

H_0: $\mu_1 = \mu_2$

H_1: $\mu_1 < \mu_2$ with $Z < -z\alpha$ level of rejection

H_1: $\mu_1 > \mu_2$ with $Z > z\alpha$ level of rejection

The descriptive statistic of the data of this study is:

	N	Mean	Std. Deviation	Variance
VAR00001	30	3.3537	.6413	.411
VAR00002	30	3.6389	.8041	.647
Valid N (listwise)	30			

a) Since $1 - \alpha = 92.5\%$, we have $\alpha/2 = 0.0375$ and $z_{0.0375} = 1.44$

Thus a 92.5% confidence interval for $\mu_1 - \mu_2$ is

$$\overline{X} - \overline{Y} \pm z\alpha/2 \sqrt{\frac{S_1^2}{n_1} + \frac{S_1^2}{n_2}}$$

$$= \overline{X} - \overline{Y} \pm z_{0.0375} \sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}$$

$$= 3.3537 - 3.6389 \pm 1.44 \sqrt{\frac{0.411}{30} + \frac{0.647}{30}}$$

$$= -0.2852 \pm 1.44 \sqrt{0.0137 + 0.0216}$$

$$= -0.2852 \pm 1.44 \sqrt{0.0353}$$

$$= -0.2852 \pm 1.44 \times 0.1879$$

$$= -0.2852 \pm 0.2706$$

$$= [-0.0146 ; -0.5558]$$

The writer concludes with 92,5% confidence, that the interval of the Indonesian mean chain and the English mean chain is between - 0.0146 and - 0.5558. The 92.5 % confidence derives from the fact that approximately 92.5%

of the intervals, calculated in this manner from repeated samples of sizes 30 and 30, will cover the true mean difference $\mu_1 - \mu_2$,.

b) Because the confidence interval does not involve zero, the null hypothesis $H_0 : \mu_1 = \mu_2$ is rejected at level $\alpha = 0.075$ in favor of the alternative hypothesis $H_1: \mu_1 \neq \mu_2$.

The choice of a one or two sided rejection region depends on the type of the alternative hypothesis.

The alternative hypothesis of this study is stated as the valency of L2 vocabulary items is bigger than that of L1, which is equal to $H_1: \mu_1 < \mu_2$ with level of rejection $Z < -z$. Thus, the statistic test of this study can be measured as:

$$Z = \frac{\overline{X} - \overline{Y}}{\sqrt{\dfrac{S_1^2}{n_1} + \dfrac{S_2^2}{n_2}}}$$

$$Z = \frac{3.3537 - 3.3689}{\sqrt{\dfrac{0.411}{30} + \dfrac{0.647}{30}}}$$

$$Z = \frac{-0.2852}{\sqrt{0.0353}}$$

$$Z = \frac{-0.2852}{0.1879}$$

$$Z = -1.5178$$

The confidential level or α = 15% = -15%, thus $z_{(-15)}$ = -1.03

The condition required for this statistic test is that H_0 is rejected and H_1 is accepted if,

$$Z < - z\,\alpha$$

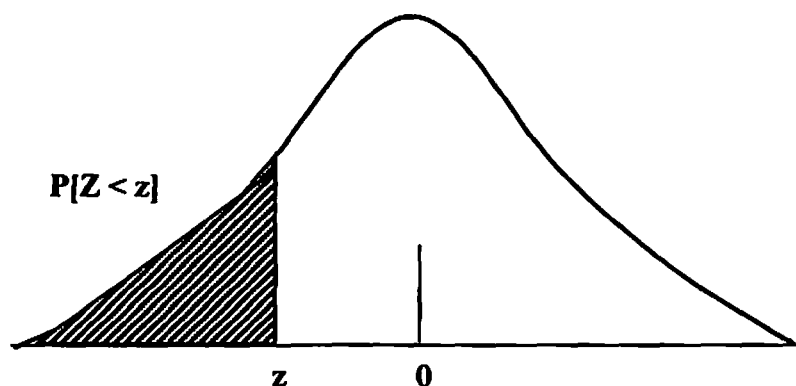$$Z = -1.5178 < z_{(-15)} = -1.03$$

P[Z < z]

z   0

Figure IV.1
The curve

/ From the statistic test, the writer derives that the H_0 of this study that is the valency of L2 that is the valency of L2 vocabulary items is the same as L1 is rejected while the H_1 that is the valency of L2 vocabulary items is bigger than that of L1 is accepted.

Briefly stated that the discovery of this study is that the accessibility of the English vocabulary items to be connected with others in the semantic network structures is bigger that of the Indonesian vocabulary items.

CHAPTER V

CONCLUSIONS AND SUGGESTIONS