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Supplementary material

Additional analysis for Experiment 1: Effect of lag between successive targets

The analysis included data from Experiment 1 (Thematic-matching), at the faster speed of presentation (1.1s), and examined accuracy as a function of the number of distractors since the last target. Results revealed poorer performance towards the end of each category across all lags (see Figure 1). ANOVA on the data revealed a significant main effect of 'within-category' decline: F(1, 4) = 17.20, p = .014, there was no main effect of 'lag' (p > .1), and a trend-level interaction between 'lag' and 'within-category' decline: F(1, 4) = 14.72, p = .064.

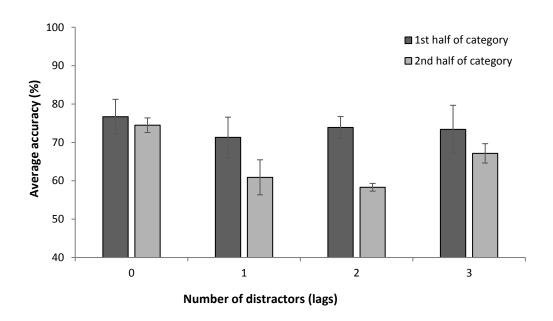


Figure 1: Average accuracy based on the number of distractors presented between targets, across the first half and second half of each category and across all participants in Experiment 1 (Thematic-matching). Error bars show *SE* of the mean.

Table 1: Signal detection scores for Experiment 1: Thematic-matching.

1.1 seconds	Within-category	Relatedness	Hits	Misses	False Alarms	Correct Rejections	d' score	Average RT (SD)
	1st half of catagony	Strong	60.8	39.2	6.9	93.1	1.76	816.5 (40.9)
1 st half of session	1 st half of category	Weak	51.4	48.6	6.9	93.1	1.52	875.6 (61.8)
session	2 nd half of category	Strong	51.3	48.7	5.5	94.5	1.63	833.4 (56.2)
	2. Hall of category	Weak	47.9	52.1	5.5	94.5	1.55	870.8 (67.1)
	1st half of category	Strong	60.3	39.7	6.1	93.9	1.81	821.7 (49.1)
2 nd half of	1 Mail of Category	Weak	50.5	49.5	6.1	93.9	1.56	849.8 (54.0)
session	2 nd half of category	Strong	45.8	54.2	4.7	95.3	1.57	835.1 (73.4)
	2 mail of category	Weak	41.8	58.2	4.7	95.3	1.47	866.7 (26.1)

2 seconds	Within-category	Relatedness	Hits	Misses	False Alarms	Correct Rejections	d' score	Average RT (SD)
	1st half of category	Strong	76.4	23.6	7.3	92.7	2.17	1008 (73.3)
1st half of	13. Hall Of Category	Weak	71.4	28.6	7.3	92.7	2.01	1135 (117.3)
session	and if f	Strong	72.9	27.1	6.5	93.5	2.13	1060 (84.6)
	2 nd half of category	Weak	72.1	27.9	6.5	93.5	2.10	1155 (117.3)
	4st balf of ontone	Strong	74.1	25.9	5.5	94.5	2.24	1015 (106.4)
2 nd half of session	1 st half of category	Weak	55.4	44.6	5.5	94.5	1.73	1091 (122.4)
	2nd half of satagemy	Strong	67.9	32.1	4.7	95.3	2.14	1055 (75.6)
	2 nd half of category	Weak	49.6	50.4	4.7	95.3	1.67	1122 (106.9)

Footnote: Data expressed as percentages of target-present and target-absent trials. Data were divided into the first and second half of each category, allowing within-category fatigue to be assessed. They were also divided into the first and second half of each experimental session, allowing between-category fatigue to be assessed. These data are broken down into the two presentation speeds and strong/weak targets. The distractors are shared and equally distributed 'within' each category; resulting in an equal number of false alarms and correct rejections for the strong/weak targets. RT reported in milliseconds (standard deviations)

Table 2: Signal detection scores for Experiment 2: Taxonomic-matching.

Between- category	Within-category	Hits	Misses	False Alarms	Correct Rejections	d' score	Average RT (SD)
1st half of	1st half of category	79.7	20.3	3.1	96.9	2.81	857.5 (29.5)
session	2nd half of category	75.2	24.8	3.7	96.3	2.60	850.9 (39.7)
2nd half of	1st half of category	79.0	21.0	3.2	96.8	2.90	867.5 (27.5)
session	2nd half of category	71.9	28.1	3.9	96.1	2.50	865.9 (38.2)

Footnote: Data expressed as percentages of target-present and target-absent trials. Data were divided into the first and second half of each category, allowing within-category fatigue to be assessed. They were also divided into the first and second half of each experimental session, allowing between-category fatigue to be assessed. RT reported in milliseconds (standard deviation

Table 3: Signal detection scores for Experiment 3: Feature-matching.

Between- category	Within-category	Hits Misse		False Alarms	Correct Rejections	d' score	Average RT (SD)
1 st half of	1 st half of category	58.94	44.77	7.88	92.12	1.62	887.8 (37.0)
session	2 nd half of category	56.70	48.30	7.29	92.71	1.59	892.4 (52.2)
2 nd half of	1 st half of category	59.17	44.92	7.29	92.71	1.66	874.0 (45.2)
session	2 nd half of category	52.16	52.84	7.88	92.12	1.43	878.1 (55.1)

Footnote: Data expressed as percentages of target-present and target-absent trials. Data were divided into the first and second half of each category, allowing within-category fatigue to be assessed. They were also divided into the first and second half of each experimental session, allowing between-category fatigue to be assessed. RT reported in milliseconds (standard deviations).

Table 4: Signal detection scores for Experiment 4: Effect across modalities.

Modality	Within-category	Hits	Misses	False Alarms	Correct Rejections	d' score	Average RT (SD)
Pictures	1 st half of category	87.2	12.8	4.5	95.6	3.02	715 (63.5)
rictares	2 nd half of category	85.7	14.3	5.6	94.4	2.97	716 (77.6)
Words	1 st half of category	88.1	11.9	8.8	91.2	2.66	948 (38.1)
words	2 nd half of category	87.7	12.3	8.8	91.2	2.65	949 (39.5)
Interleaved Pictures	1 st half of category	86.1	13.9	10.8	89.2	2.30	731 (62.8)
interieaveu Fictures	2 nd half of category	84.3	15.7	15.7	84.3	1.97	700 (69.2)
Interleaved Words	1 st half of category	87.6	12.4	8.4	91.6	2.46	981 (52.1)
	2 nd half of category	87	13	10.4	89.6	2.21	982 (60.1)

Footnote: Data expressed as percentages of target-present and target-absent trials. Data were divided into the first and second half of each category, allowing within-category fatigue to be assessed. They were also divided into the first and second half of each experimental session, allowing between-category fatigue to be assessed, shown individually for the pictures, words and the interleaved (split by pictures and words) modalities. RT reported in milliseconds (standard deviations).

Table 5: Signal detection scores for Experiment 5 (Effect of divided attention)

Single condition	Within-category	Hits	Misses	False Alarms	Correct Rejections	d' score	Average RT (SD)
Chun an it ama	1st half of category	77.2	22.8	5.3	94.7	2.64	840 (42.7)
Strong items	2nd half of category	71.8	28.2	4.9	95.1	2.49	853 (39.7)
Weak items	1st half of category	44.8	55.2	5.3	94.7	1.67	911 (43.6)
Weak items	2nd half of category	39.6	60.4	4.9	95.1	1.56	920 (46.6)
5 1 100				False	Correct	.,	Average
Dual condition	Within-category	Hits	Misses	Alarms	Rejections	d' score	RT (SD)
C	1st half of category	76.8	23.3	5.5	94.5	2.47	852 (43.6)
Strong items	2nd half of category	67.1	32.9	5.1	94.9	2.27	865 (41.5)
Weak items	1st half of category	39.5	60.5	5.5	94.5	1.39	919 (48.8)

Footnote: Data expressed as percentages of target-present and target-absent trials. Data were divided into the first and second half of each category, allowing within-category fatigue to be assessed. They were also divided into the first and second half of each experimental session, allowing between-category fatigue to be assessed. These data are broken down into the two conditions (single/dual) and strong/weak targets. The distractors are shared and equally distributed 'within' each category; resulting in an equal number of false alarms and correct rejections for the strong/weak targets. RT reported in milliseconds (standard deviations).

Table 6: Signal detection scores for Experiment 6 (Semantic control deficits in patients with semantic aphasia and age-matched controls)

SA patients	Relatedness	Within-category	Hits	Misses	False Alarms	Correct rejections	d' score
	Chana	1st half of category	87.1	12.9	9.1	90.9	2.47
C-1.4	Strong	2nd half of category	86.3	13.7	7.6	92.4	2.53
Set 1	14/I.	1st half of category	58.5	41.5	7.6	92.4	1.65
	Weak	2nd half of category	60.8	39.2	9.1	90.9	1.61
	C.	1st half of category	85.2	14.8	8.8	91.3	2.40
Set 2	Strong	2nd half of category	84.7	15.3	8.6	91.4	2.39
Jet 2 -	Weak	1st half of category	61.3	38.7	8.8	91.3	1.64
	vveak	2nd half of category	56.2	43.8	8.6	91.4	1.52

Older adults	Relatedness	Within-category	Hits	Misses	False Alarms	Correct rejections	d' score
	Strong	1st half of category	94.4	5.6	10.1	89.9	2.87
Cot 1	Strong	2nd half of category	95.2	4.8	8.4	91.6	3.04
Set 1 -	Weak	1st half of category	78.7	21.3	10.1	89.9	2.07
	vveak	2nd half of category	75.7	24.3	8.4	91.6	2.07
	Ctrong	1st half of category	94.3	5.7	9.6	90.4	2.89
6.13	Strong	2nd half of category	94.9	5.1	9.9	90.1	2.93
Set 2	WI-	1st half of category	79.4	20.6	9.6	90.4	2.12
	Weak	2nd half of category	77.0	23.0	9.9	90.1	2.03

Footnote: Data expressed as percentages of target-present and target-absent trials. Data were divided into the first and second half of each category, allowing within-category fatigue to be assessed. They were also divided into the first and second half of each experimental session (i.e., 'set'), allowing between-category fatigue to be assessed. These data are broken down into the two groups and strong/weak targets. The distractors are shared and equally distributed 'within' each category; resulting in an equal number of false alarms and correct rejections for the strong/weak target.

APPENDIX A: Experiment 1 – Thematic matching (mean lexical frequency (LF) = 19.7, SD = 40.07)

Christmas	(LF = 58)	Bedrooi	m (LF = 81)	Bathroom	ı (LF = 87)	Living Roon	n (LF = 94)	Supermark	et (LF = 83)	Garden (LF = 50)
Strong (51)	Weak (65)	Strong (58)	Weak(103)	Strong (63)	Weak (110)	Strong (36)	Weak (151)	Strong (98)	Weak (67)	Strong (36)	Weak (65)
tree	religion	bed	hanger	Bath	tiles	armchair	remote	shop	health	flowers	party
card	bible	chamber	chair	scales	house	bookcase	brick	store	provision	lawn	wall
cake	reindeer	curtains	books	soap	wallpaper	carpet	fire	basket	street	hose	path
pudding	family	carpet	robe	water	brush	cushion	cottage	money	queue	fence	peas
December	star	floor	linen	towel	rack	curtains	door	shelf	carrier	grass	hut
tinsel	manger	pillow	bunk	sink	bedroom	telephone	house	cash	handbag	shed	pest
snow	elves	suite	apartment	toilet	apartment	television	hearth	bargains	container	plant	fete
mistletoe	holiday	sheets	house	shower	roll	sofa	shelter	counter	goods	weeds	butterfly
cracker	stable	clock	desk	tap	cloth	lamp	ceiling	bag	warehouse	shrub	roots
present	queen	slippers	chest	basin	door	magazine	family	food	trade	gate	umbrella
Unrelated	(LF = 62)	Unrelate	ed (LF = 70)	Unrelated	i (LF = 35)	Unrelated	(LF = 46)	Unrelated	d (LF = 42)	Unrelated	(LF = 44)
economics	staff	staff	fish	army	rat	forest	buttons	hospital	drama	ship	dog
doctor	army	news	Z00	uniform	tie	nurse	football	homework	flute	teacher	flute
rugby	ballet	physics	tune	staff	patient	farm	ballet	dentist	subject	drama	injury
bed	forest	tiger	teacher	teacher	exam	Z00	injury	reptiles	history	guitar	reptiles
rat	school	injury	captain	coat	injury	guard	grammar	exam	birds	rugby	piano
dentist	sailor	farm	cat	physics	drama	rugby	clerk	palace	ballet	ambulance	radio
football	university	nurse	grammar	flute	violin	captain	hockey	fur	rat	medicine	cat
captain	typist	sailor	coat	doctor	lion	typist	tie	library	guard	economics	Z00
buttons	cat	exam	football	grammar	guitar	tiger	shirt	clerk	Z00	army	buttons
basin	clerk	forest	economics	economics	nurse	drama	staff	typist	soccer	surgery	news
waiter	physics	army	English	harp	captain	sailor	news	ship	violin	captain	typist
window	cricket	birds	sheep	birds	utensil	post	lion	piano	grammar	instrument	grammar
guard	farm	post	flute	fur	tiger	history	guitar	injury	cat	post	doctor
shower	injury	ballet	gear	reptiles	cook	tune	flute	radio	coat	mouth	ballet
patient	grammar	school	university	hockey	king	economics	dog	king	forest	uniform	harp
dog	nature	drama	subject	cricket	cat	doctor	teacher	ambulance	captain	violin	king
ambulance	ship	guard	elephant	ballet	suit	reptiles	army	buttons	tiger	tune	trousers
sheep	skirt	nature	reptiles	English	forest	uniform	gear	cricket	nature	utensil	gear
uniform	study	history	office	piano	guard	nature	cricket	hockey	physics	fish	patient
Z00	utensil	fur	cricket	instrument	gear	birds	physics	farm	patient	staff	tiles

Farm (L	F = 100)	School (L	F = 114)	Hospital	(LF = 72)	Office (LF = 130)	Kitchen (LF = 105)	Builder (LF = 126)	Police I	F = (66)
Strong (121)	Weak (79)	Strong (121)	Weak (106)	Strong (41)	Weak (104)	Strong (151)	Weak (109)	Strong (117)	Weak (93)	Strong (204)	Weak (48)	Strong (72)	Weak (60)
yard	truck	children	revise	doctor	matron	work	rank	sink	door	house	block	car	gun
stable	stock	uniform	trip	ward	sick	desk	gossip	table	fire	bricks	permission	jail	helmet
plough	harvest	desk	meal	injury	death	secretary	record	food	dinner	stone	trade	crime	beat
field	timber	teacher	room	accident	ache	staff	department	utensil	stool	trowel	master	station	dogs
country	eggs	class	noise	sterile	fracture	file	clerk	saucepan	cabinet	cement	yard	uniform	blue
house	food	bell	milk	pain	care	suit	accounts	larder	bottle	contract	dig	crook	patrol
cow	mud	bus	cap	wound	bone	stationary	money	oven	sweep	site	plan	criminal	trial
tractor	land	exam	tie	illness	baby	typist	trade	bread	store	materials	dump	cop	force
dung	gate	homework	period	nurse	X-ray	firm	union	knife	smoke	work	wire	law	emergency
dogs	manager	pupils	results	ambulance	bed	hours	profit	mother	warm	saw	metals	inspector	file
Unrelated	d (LF = 79)	Unrelated	l (LF = 42)	Unrelated	l (LF = 35)	Unrelate	d (LF = 30)	Unrelated	l (LF = 54)	Unrelated	d (LF = 56)	Unrelate	d (LF = 50)
beach	ambulance	manufactur e	cow	sheep	forest	tractor	birds	beach	coast	beach	eggs	fish	dung
sail	firm	reptiles	farm	beach	plough	wound	yard	sheep	football	sail	cow	sick	tiger
desk	tutor	nurse	hospital	sail	sailor	crime	ship	sail	ambulance	desk	nurse	yard	maid
swim	needle	chimney	police	tractor	lion	waves	shell	tractor	island	swim	anchor	tent	picnic
office	army	sail	army	boat	crime	exam	grass	boat	file	gun	sea	shell	beach
clerk	guard	captain	court	grass	ocean	cow	anchor	grass	sailor	class	clerk	mud	homework
class	hockey	sailor	sale	farm	lessons	blood	hat	jail	forest	waves	elephant	anchor	sale
waves	ocean	ambulance	factory	teacher	manufactur e	criminal	tent	teacher	desk	maid	matron	hat	holiday
boat	lion	tiger	plough	jail	sun	chimney	forest	tent	mud	exam	lessons	ship	camp
exam	lessons	waitress	tractor	football	anchor	lion	sail	trade	foam	jail	tutor	forest	dairy
surf	teacher	anchor	horse	tiger	saucepan	injury	nurse	anchor	sweep	doctor	picnic	sail	surf
сор	illness	sheep	ship	coast	elephant	matron	giraffe	police	lessons	reptiles	student	teacher	student
book	yachts	crime	ocean	cow	hockey	saucepan	beach	books	knife	fish	sheep	broom	party
bed	waitress	merchant	patient	captain	chimney	sheep	patient	tiger	contract	holiday	court	ocean	milk
nurse	typist	waves	swim	waitress	bees	larder	hens	surf	dung	camp	patrol	tractor	waitress
staff	matron	blood	boat	surf	mop	swim	ambulance	clerk	figures	surf	illness	cow	island
captain	secretary	dung	coast	factory	guard	mop	stable	bed	warm	police	mop	doctor	hens
carpet	seaweed	elephant	yachts	sale	trade	foam	ocean	bus	typist	sailor	crime	swim	plank
patient	crime	sand	forest	kennel	Clingfilm	bees	hockey	horse	stationary	lion	lettuce	counter	merchant
sailor	uniform	surf	beach	waves	sand	cake	camp	lion	gun	book	ambulance	plough	field

Beach (LF = 52)	Clothes Shop (LF = 121)	Picnic (I	LF = 70)	Library (I	LF = 126)	Dentist	(LF = 31)	Restauran	it (LF = 98)	Birthday Pa	arty (LF = 131)
Strong (59)	Weak (45)	Strong (95)	Weak (144)	Strong (68)	Weak (72)	Strong (156)	Weak (96)	Strong (44)	Weak (17)	Strong (67)	Weak (129)	Strong (193)	Weak (69)
sea	birds	store	factory	field	BBQ	books	table	tooth	glasses	food	owner	cake	age
boat	hat	counter	return	rug	cake	card	coffee	drill	floss	tip	vegetarian	present	dance
seaweed	anchor	town	street	lunch	holiday	novel	service	doctor	tool	menu	chips	card	crisps
sun	tree	wardrobe	goods	grass	friends	work	poems	surgery	mould	meal	sauce	games	greetings
sand	crowd	rail	wrap	sandwiches	lettuce	information	study	filling	decay	chef	party	candles	shop
pebble	chips	money	bag	napkins	rest	reference	magazine	chair	tongue	table	spices	gift	photographs
waves	foam	sale	buttons	Clingfilm	wasp	shelf	notes	injection	ache	bill	utensil	food	voucher
sail	wind	model	discount	sun	basket	author	literature	gum	medicine	waiter	service	friends	candy
swim	holiday	fashion	work	countryside	cook	papers	knowledge	dentures	hygiene	diner	window	money	baby
ball	port	changing rooms	assistant	lunchbox	weather	archive	glasses	mouth	saliva	bistro	money	children	cook
Unrelated	d (LF = 59)	Unrelated (L	F = 54)	Unrelated	l (LF = 56)	Unrelated	l (LF = 38)	Unrelate	ed (LF = 49)	Unrelated	d (LF = 35)	Unrelate	ed (LF = 48)
office	tie	farm	swim	jail	hospital	football	sauce	harp	shirt	hockey	reptiles	exam	lion
reptiles	library	hospital	teacher	crime	clerk	farm	injury	typist	grammar	sailor	grammar	grammar	gear
class	factory	police	elephant	office	police	tune	mouth	rat	drama	sledge	tune	cricket	birds
nurse	plough	beach	waves	gun	army	nurse	gear	tiger	ship	drama	linen	homework	snow
teacher	uniform	court	law	sheep	sale	fur	Z00	reptiles	uniform	zoo	typist	football	army
chimney	trade	field	typist	typist	factory	dog	ship	tie	rugby	nurse	injury	cat	soccer
gun	lion	cow	exam	library	boarding	cavity	cat	hockey	piano	tiger	teacher	teacher	window
desk	court	army	surf	uniform	plough	fish	piano	fish	ambulance	economics	fur	bed	dentist
file	window	plough	ocean	tiger	tractor	shirt	tie	song	gear	instrument	religion	buttons	ambulance
carpet	patient	tractor	mop	exam	homework	birds	guard	flute	tune	buttons	lion	desk	zoo
staff	criminal	bed	ship	street	trade	rugby	ambulance	school	coat	farm	captain	basin	hockey
cow	matron	nurse	captain	nurse	guard	utensil	trousers	skirt	buttons	tie	reindeer	rat	reptiles
door	sheep	hockey	patient	staff	сор	instrument	hockey	guard	nature	cavity	physics	tiger	university
army	tractor	tiger	jail	chimney	counter	army	buttons	forest	fur	lawn	cat	sailor	clerk
exam	ward	sun	lion	tutor	shelf	sailor	coat	physics	violin	sheep	dog	tiles	injury
sweep	economy	tree	injury	illness	buy	soccer	patient	guitar	z00	surgery	rugby	carpet	coat
metals	jail	сор	ambulance	mop	sailor	tiger	captain	university	history	gift	nature	nurse	patient
hens	tiger	tutor	forest	anchor	sand	violin	news	soccer	sailor	post	ambulance	doctor	forest
clerk	thieves	horse	lorry	lion	ambulance	suit	diner	cat	football	bed	hammer	farm	economics
suit	saucepan	bees	matron	duty	blood	sheep	screw	teacher	wood	chamber	clerk	history	weapon

APPENDIX B: Experiment 2 – Taxonomic matching (mean lexical frequency (LF) = 19.7, SD = 40.07)

Kitchen It	ems (LF = 15)	Vehicles	(LF = 35)	Tools (L	.F = 6)	Furniture	(LF = 39)	Vegetal	bles (LF = 6)	Stationa	ary (LF = 10)
R	elated	Rela	ated	Relat	ed	Rela	ited	R	elated	R	elated
knife	grater	car	truck	screwdriver	wrench	chair	wardrobe	potato	turnip	paper clip	pencil sharpener
fork	ladle	bus	ferry	tape measure	chisel	dining table	stool	carrot	parsnip	rubber	stapler
teaspoon	sieve	lorry	yacht	hacksaw	drill	desk	mirror	onion	courgette	pen	scissors
saucepan	tongs	bicycle	taxi	Stanley knife	clamp	dresser	sofa	peas	butternut squash	pencil	folder
corkscrew	jug	motorcycle	jeep	hammer	torch	cabinet	bench	beans	pepper	post-it notes	label
frying pan	spatula	tram	helicopter	trowel	ladder	bookcase	cupboard	celery	cucumber	highlighter	ring binder
rolling pin	whisk	tractor	scooter	nails	crowbar	bed	couch	broccoli	lettuce	ruler	notebook
bowl	cup	train	coach	screws	chainsaw	drawers	shelves	cauliflower	mushroom	protractor	marker pen
jar	plate	van	speedboat	pliers	shears	recliner	coffee table	sweet potato	cabbage	compass	plastic wallet
mug	wooden spoon	aeroplane	ship	wire cutters	axe	lamp	armchair	leek	radish	clipboard	drawing pin
Unrela	ted (LF = 26)	Unrelate	d (LF = 14)	Unrelated	(LF = 14)	Unrelated	l (LF = 25)	Unrela	ted (LF = 22)	Unrelat	ted (LF = 15)
saxophone	notebook	passion fruit	scone	beans	tulip	t-shirt	tangerine	mosquito	screws	raspberry	dress
yacht	eyebrow	accordion	lily	lettuce	broccoli	lemonade	aeroplane	trombone	mirror	lager	coffee
socks	armadillo	church	scorpion	milkshake	skirt	pigeon	cider	lorry	cymbals	parrot	whale
locust	jeans	mango	sofa	library	chicken	jeep	jellyfish	dolphin	cabinet	doughnut	beetle
museum	trumpet	daisy	orange juice	melon	celery	lobster	flapjack	vest	torch	rain coat	falcon
pliers	crow	monkey	apricot	flea	shark	cherry	zebra	lamb	squid	orchid	bun
post office	screwdriver	cardigan	freezer	shrimp	cheesecake	donkey	water	hoover	tiger	canary	courgette
jacket	compass	cake	mockingbird	gorilla	sheep	daffodil	town hall	butterfly	wire cutters	sieve	armchair
wolf	chapel	oyster	whisk	shirt	leopard	pasty	apple	stapler	bookcase	tram	tuna
axe	horse	plate	trousers	muffin	owl	cabbage	scooter	telephone	violin	piano	cockroach
owl	ship	beer	pig	primrose	gin	blackcurrant	lilac	rhinoceros	computer	tumble dryer	stingray
chainsaw	cello	shelves	marigold	mushroom	café	hawk	cattle	hammer	panda	moth	ginger bread
speedboat	chisel	lettuce	clothes shop	eel	bank	helicopter	wasp	mussel	shorts	sunflower	socks
cinema	train	hamster	banana	hoodie	carnation	cinema	radish	cd-player	neck	jellyfish	teaspoon
camel	crocodile	t-shirt	Meerkat	guinea pig	duck	flute	wine	kingfisher	eagle	trowel	theatre
scorpion	police station	croissant	wardrobe	bagel	waffle	pepper	onion	suit	hairdryer	ladle	grapes
vulture	leopard	harp	nightclub	brandy	sunflower	bread	tractor	giraffe	bear	haddock	cupcake
rain coat	earlobe	bowl	guitar	art gallery	sparrow	shorts	clarinet	taxi	dragonfly	television	reindeer
bed	centipede	lion	raspberry	peach	scarf	train station	spider	protractor	lamp	kiwi	рорру
motorcycle	suit	microwave	peacock	crumpet	whiskey	elephant	seahorse	cat	rubber	bench	motorcycle

Musical instr	uments (LF = 5)	Beverage	s (LF = 52)	Town centre bi	uildings (LF = 53)	Fruits	(LF = 6)	Clothing	(LF = 23)	Sea creat	ures (LF = 4)
Re	elated	Rel	ated	Rel	lated	Rel	ated	Rela	ated	Re	elated
piano	oboe	water	beer	church	bakery	plum	kiwi	dress	jacket	dolphin	plaice
trumpet	saxophone	orange juice	wine	town hall	nightclub	apricot	blackberry	trousers	rain coat	crab	cod
flute	recorder	coffee	vodka	bank	library	peach	pear	tights	shorts	seahorse	jellyfish
clarinet	accordion	tea	gin	clothes shop	art gallery	raspberry	nectarine	shirt	hoodie	shark	haddock
French horn	drum kit	hot chocolate	whiskey	train station	museum	apple	grapes	tie	cardigan	octopus	lobster
trombone	harp	coke	cocktail	cinema	post office	mango	blackcurrant	skirt	jeans	squid	mussel
bassoon	violin	lemonade	cider	cafe	chapel	strawberry	passion fruit	socks	jumper	eel	shrimp
cymbals	cello	milkshake	port	hotel	theatre	tangerine	melon	t-shirt	scarf	seal	oyster
cornet	xylophone	apple juice	brandy	shopping mall	police station	banana	cherry	cagoule	blouse	tuna	starfish
organ	guitar	lager	sherry	pub	restaurant	orange	pineapple	vest	suit	whale	stingray
Unrelat	ed (LF = 10)	Unrelate	d (LF = 15)	Unrelate	ed (LF = 10)	Unrelate	d (LF = 12)	Unrelated	d (LF = 21)	Unrelat	ed (LF = 26)
ferry	chimpanzee	paper clip	microwave	spatula	tractor	trousers	iris	cow	highlighter	nightclub	art gallery
orange	sweet pea	recliner	moth	lily	tea	grasshopper	squid	trumpet	nails	desk	rose
jar	seal	van	hoodie	rain coat	shears	spatula	sparrow	orange juice	van	cider	mosquito
cheetah	cricket	plate	clipboard	chisel	tomato	stool	leopard	chimpanzee	bluebell	hotel	robin
couch	oven	plaice	drill	turnip	cider	bassoon	Stanley knife	sieve	telephone	carnation	gorilla
hacksaw	dresser	skirt	tractor	helicopter	shirt	pub	ladybird	parsnip	beetle	jumper	radio
bowl	vodka	pie	French horn	dolphin	mosquito	hot chocolate	shoulder	restaurant	vulture	pasty	cheesecake
brownie	dishwasher	ant	cauliflower	centipede	passion fruit	cheetah	parrot	raspberry	sunflower	blackberry	drawing pin
quail	squid	drawers	lobster	hoover	mussel	aeroplane	louse	waffle	coffee table	whiskey	library
caterpillar	kettle	crowbar	iron	meerkat	vulture	yacht	cardigan	tuna	organ	pepper	strawberry
lavender	thistle	xylophone	bagel	sparrow	ladle	seahorse	spatula	chainsaw	banana	cupboard	plate
shrimp	goose	tape measure	hippopotamus	dining table	recliner	hawk	cornet	ring binder	flapjack	coach	bus
jumper	jeans	crab	tie	tangerine	wardrobe	chicken	axe	tram	bear	theatre	socks
rolling pin	shopping mall	chapel	screwdriver	ship	sherry	toaster	shark	folder	cheek	cherry	oven
post office	pencil	shortbread	cupcake	crab	socks	drum kit	woodpecker	apricot	goat	kettle	ginger bread
strawberry	starfish	forget-me-not	grater	peas	violets	museum	mussel	cheesecake	scorpion	hamster	crowbar
cookie	Swiss roll	bee	lamp	calf	stingray	cup	stereo	marigold	violets	forehead	carrot
marker pen	knee	leg	duck	waffle	notebook	bicycle	accordion	lion	oyster	dragonfly	trombone
leek	scissors	starfish	raven	blouse	peach	hacksaw	screws	tooth	tongs	rubber	coke
ladder	cagoule	hummingbird	tulip	frying pan	pliers	dragonfly	rain coat	scooter	car	clarinet	wasp

Flowers (LF = 9)	Creepy craw	lies (LF = 4)	Foreign/Zoo an	nimals (LF = 9)	Birds	s (LF = 3.8)	Body part	s (LF = 39)
Relate	ed	Relat	ted	Relat	ted	ı	Related	Rela	ated
lily	lavender	ladybird	moth	bear	gorilla	pigeon	woodpecker	ankle	mouth
thistle	lilac	spider	flea	lion	meerkat	owl	kingfisher	chest	lip
carnation	marigold	bee	dragonfly	wolf	panda	eagle	peacock	cheek	tooth
rose	orchid	mosquito	caterpillar	elephant	reindeer	sparrow	hawk	elbow	earlobe
daffodil	sunflower	ant	centipede	giraffe	leopard	crow	canary	fingers	forehead
bluebell	рорру	wasp	cricket	rhinoceros	chimpanzee	parrot	quail	wrist	neck
primrose	sweet pea	beetle	scorpion	hippopotamus	crocodile	robin	hummingbird	knee	shoulder
forget-me-not	daisy	grasshopper	cockroach	tiger	armadillo	vulture	falcon	jaw	toes
iris	tulip	butterfly	louse	fox	monkey	dove	raven	leg	chin
hyacinth	violets	fruit fly	locust	zebra	cheetah	blackbird	mockingbird	arm	eyebrow
Unrelated ((LF = 16)	Unrelated	(LF = 29)	Unrelated	(LF = 17)	Unrela	ated (LF = 22)	Unrelated	d (LF = 26)
pig	Swiss roll	clarinet	coach	hacksaw	jumper	coffee	pasty	kiwi	pineapple
bookcase	lion	lemonade	jug	pencil	scooter	cinema	restaurant	knife	cabbage
ruler	truck	hotel	spatula	grater	cello	mango	cherry	milkshake	chainsaw
coffee	couch	apple	cat	blackberry	bank	drawers	hoover	giraffe	coach
cookie	label	cabinet	croissant	harp	blender	chisel	bagel	brownie	tea
elbow	vodka	broccoli	gorilla	clamp	speedboat	tongs	corkscrew	cabinet	café
fox	desk	scissors	blender	hoodie	rain coat	tie	bakery	plum	orange
shrimp	library	recorder	cocktail	computer	lettuce	dog	piano	wrench	bluebell
hoodie	wolf	cider	teaspoon	bagel	radish	muffin	pub	jeep	dove
drum kit	jacket	cup	van	lily	theatre	radio	oven	hotel	fruit fly
chainsaw	waffle	knee	lettuce	compass	lilac	sofa	pie	flea	dress
spatula	leopard	t-shirt	cymbals	wine	ferry	taxi	telephone	stapler	truck
train station	hammer	parrot	pear	marker pen	accordion	plate	shortbread	donkey	stool
goat	armchair	cow	bed	chapel	armchair	hairdryer	screws	flapjack	violin
leg	helicopter	toaster	dove	passion fruit	cupcake	guitar	ship	panda	bank
dove	brandy	crumpet	tooth	cider	lavender	spider	train	chapel	radio
moth	jellyfish	cucumber	television	whisk	xylophone	beetle	wardrobe	library	parrot
cod	cockroach	shears	sweet pea	muffin	melon	seal	ring binder	iris	daisy
shorts	calf	leek	scarf	heater	bowl	cardigan	whiskey	eagle	haddock
kettle	toes	gin	arm	orchid	pepper	wrench	waffle	scone	beetle

Domestic ani	imals (LF = 24)	Home applianc	es (LF = 32)	Bakery prod	ucts (LF = 10)
Rel	ated	Relate	d	Rel	ated
cat	guinea pig	blender	television	muffin	crumpet
dog	duck	toaster	refrigerator	cookie	doughnut
horse	goose	hoover	oven	brownie	Swiss roll
cow	parrot	heater	microwave	croissant	pie
goat	hamster	washing machine	stereo	scone	ginger bread
pig	turkey	kettle	telephone	pasty	waffle
chicken	calf	hairdryer	iron	bread	flapjack
donkey	sheep	computer	radio	bagel	cheesecake
camel	cattle	dishwasher	freezer	bun	cupcake
rabbit	lamb	tumble dryer	cd-player	cake	shortbread
Unrelate	d (LF = 21)	Unrelated (I	LF = 11)	Unrelate	d (LF = 10)
dining table	parsnip	potato	aeroplane	screwdriver	trowel
onion	lemonade	trousers	rose	crab	meerkat
town hall	strawberry	wolf	crumpet	beetle	peacock
primrose	bread	cocktail	mushroom	giraffe	violin
pie	microwave	carrot	starfish	guitar	wardrobe
jeans	ship	centipede	locust	yacht	leopard
blackberry	suit	kingfisher	cupcake	crow	eagle
recliner	daffodil	shark	vodka	rhinoceros	ankle
beans	refrigerator	goat	rain coat	jellyfish	lorry
whiskey	oboe	bun	carnation	woodpecker	fox
shears	cabbage	sherry	canary	crocodile	tumble dryer
jar	jeep	pineapple	duck	blouse	chimpanzee
telephone	bowl	harp	caterpillar	scooter	falcon
broccoli	nectarine	squid	tiger	camel	rubber
cornet	shortbread	hoodie	suit	jacket	compass
beer	wrench	sunflower	courgette	bank	saxophone
chair	motorcycle	sparrow	pear	paper clip	cinema
ferry	bench	lobster	ginger bread	guinea pig	centipede
muffin	brownie	bagel	reindeer	whale	armadillo
computer	freezer	turnip	oyster	scarf	scorpion

APPENDIX C: Experiment 3 – Feature matching (mean lexical frequency (LF) = 28.9; SD = 56.8)

Flat (LF	= 32)	Strong-sme	lling (LF = 41)	Green (LF = 10)	Brown (LF = 18)	Heav	y (LF = 52)	Black (LF = 10)
Relat	ted	Re	lated	Rela	ated	Rela	ited	F	Related	Rel	ated
plate	key	detergent	skunk	emerald	guacamole	acorn	pine cone	gravestone	statue	peppercorns	spider
magazine	paper	soap	garlic	broccoli	lettuce	gravy	bread	bowling ball	tyre	record	liquorice
pancakes	blackboard	nail polish	sewage	jade	spinach	cork	whisky	computer	bed	coal	mascara
coins	CD	landfill	sweat	frog	moss	walnut	cocoa	elephant	piano	leather jacket	soot
towel	comb	socks	sulphur	cactus	grass hopper	bear	cigar	truck	tumble dryer	ravens	crow
TV	mirror	lemons	garbage	runner beans	peas	potato	pretzel	anchor	wardrobe	tar	prunes
iron	laptop	cheese	petrol	kiwi	garden string	bagel	conkers	car	log	gorilla	panther
spatula	rug	sour milk	onions	grass	lime	coconuts	cello	dumbbells	vending machine	ebony	treacle
biscuit	tiles	bread	feet	ivy	pistachio	wood	cardboard	couch	luggage	bat	tyres
coaster	postcard	cigarettes	fish	Christmas tree	caterpillar	cinnamon	chocolate	television	mattress	blackboard	sunglasses
Unrelated	(LF = 31)	Unrelate	ed (LF = 24)	Unrelated	d (LF = 23)	Unrelated	l (LF = 24)	Unrela	ited (LF = 22)	Unrelate	d (LF = 17)
palm tree	elves	napkins	wall	ginger	ravens	cd	apple	pillow	lighter	jade	peas
eggs	aeroplane	clarinet	saucer	caramel	mustard	emerald	cherry	biscuit	ruler	butter	milk
shower block	strawberry	statue	kettle	bone	London bus	mango	wedding dress	cling film	towel	apple	sea gull
hose	blender	wrench	brush	horse	marshmallows	roses	candy floss	cushion	whistle	broccoli	moss
onion	waves	poster	blanket	cranberries	snow	water	zebra	paper	tin foil	egg	lettuce
dumbbell	cucumber	glass	map	ebony	sheep	clouds	lettuce	pencil	trainers	coriander	olive oil
paint	nuts	handbag	desk	cherry	stop sign	mayonnaise	postman's van	needle	mug	ivy	rice
conditioner	apple	pillow	butterfly	butter	lobster	glass	nectarine	lollipop	wafer	runner beans	meringue
bird cage	bridge	ladder	mattress	coffee	raspberries	whipped cream	London bus	balloon	wire	bone	marshmallows
milkshake	tree	necklace	scissors	lipstick	meringue	Santa	tongue	stamp	crepe	caramel	pistachio
plant	sweet jar	scales	bicycle	eggs	post-box	needle	whale	grass	t-shirt	foam	mango
car	moon	guitar	watch	bat	milk	milk	tomato	silk	salad	blood	lawn
earth	bulb	pen	tissue box	crows	record	checkered flag	peas	plate	tray	emerald	pineapple
panda	cow	tray	CD	coal	mascara	carrots	lime	feather	ticket	chalk	kiwi
basin	open fire	spatula	camera	flour	chips	polar bears	soccer ball	gas	key	flour	salt
wasp	bucket	chair	umbrella	rodent	sea gull	leprechaun	oranges	shorts	sheets	cheese	lime
tulip	sun	lipstick	envelope	foam	salt	grapes	sweetcorn	thread	bowl	chef hat	oranges
glue	bees	tap	photograph	blood	ruby	bone	panda	postcard	debit card	cherry	mustard
sofa	glass	nuts	flour	blackboard	panda	shamrock	penguin	bread	skewer	frog	polar bear
cone	ear phones	pencil	trophy	chocolate	cow	radiator	snow	butterfly	umbrella	grass	candy floss

Rough	(LF = 13)	Hot (I	LF = 24)	Runny	(LF = 62)	Sticky (L	F = 9)	Cold (LF = 12)	Soft (LF	= 22)
Re	lated	Re	lated	Re	lated	Relate	ed	Rel	ated	Relat	ed
Christmas tree	crocodile	porridge	oven	milk	custard	cello tape	mango	beer	air conditioner	flowers	tie
door mat	wood chippings	stove	fireplace	sweat	shampoo	glue	cement	glaciers	Antarctica	marshmallows	sandwiches
rose bush	charcoal	radiator	iron	water	honey	dough	lollipops	freezer	grapes	mattress	feather
sandpaper	tyre	lava	toaster	coffee	petrol	caramel	paste	polar bears	popsicle	scarf	grass
tree bark	sand	sun	hair straightener	wine	glue	honey	syrup	ice cream	yogurt	dough	slippers
hay	mesh	chilli pepper	coals	blood	olive oil	jelly	sweets	snow	skating rink	robe	rug
brush	rope	candle	BBQ	gravy	milkshake	spiders web	treacle	salad	sleet	scone	towel
gravel	potpourri	kettle	furnace	paint	perfume	candy floss	paint	Pluto	snowman	cushion	linen
bricks	coconut	engine	heater	tea	ketchup	duct tape	slug	icicles	fridge	bread	blanket
basket	beard	light bulbs	Jacuzzi	beer	treacle	stamps	blue tack	igloo	milkshake	cake	hamsters
Unrelate	ed (LF = 23)	Unrelate	ed (LF = 11)	Unrelate	ed (LF = 30)	Unrelated (LF = 37)	Unrelate	d (LF = 39)	Unrelated ((LF = 29)
Clingfilm	piano	pudding	banana	guitar	poles	briefcase	horse	computer	chef hat	wall	boat
beer	milkshake	apple	cucumber	photographs	wasp	cash machine	hair brush	stamp	coal	Frisbee	desk
coffee	shampoo	mattress	ice cream	sunglasses	peanuts	box	guitar	car	bone	cage	chimney
glue	silk	post-box	salt	bill	diary	aeroplane	mattress	paper	cigarette	barrel	pegs
cushion	linen	flower pot	pencil	walkie talkie	mannequin	bench	mug	wedding dress	feather	statue	tablets
grass	milk	yogurt	holly	brick	record	bicycle	ladder	light bulbs	sunglasses	trophy	scissors
blood	mattress	magazine	cupcake	box	bottle	basket	magazine	ball	steam	lorry	fossils
cd	olive oil	feather	cherry	Clingfilm	wheel	book	laptop	iron	olive oil	rake	fridge
feather	scarf	snowman	pineapple	napkins	skipping rope	airbag	fridge	Jacuzzi	tin foil	bicycle	coins
bread	petals	shopping trolley	refrigerator	glass window	stone	camera	kettle	engine	plug	tray	computer
aubergine	perfume	sugar	petals	scissors	rug	car	petals	rug	kettle	flower pot	dumbbell
hamsters	petrol	bicycle	body lotion	timber	wrench	boots	feather	bees	mascara	lectern	chairs
honey	paint	acorn	Clingfilm	rake	drums	caravan	Antarctica	toaster	butterfly	blackboard	building
custard	mirror	leaf	rake	television	novel	cloth	napkins	saucepan	television	bone	shell
dough	scone	chalk	scissors	bunting	hanger	bus	lettuce	books	lava	wrench	van
cake	sandwiches	beer	violin	piano	wood chippings	chair	curtains	firewood	umbrella	injection	bricks
flowers	photographs	microphone	rubber	saucepan	stick	bottle	computer	coffee	hair brush	tap	fence
postcard	robe	nectarine	apron	door	cracker	blender	frame	chalk	hairdryer	bucket	ladder
ketchup	marshmallows	juice	brush	light bulb	laptop	carpet	necklace	eggs	photographs	bowl	television
gravy	rug	coins	banana	manuscripts	hair net	bridge	coins	sun	tongue	stairs	train

Shiny (L	F = 41)	Smooth ((LF = 22)	Slippery (LF = 26)	Black & Wi	nite (LF = 15)	Noisy (LF	= 16)	Round	(LF = 25)
Rela	ted	Rela	ited	Relat	ed	Rel	ated	Relate	ed	Rel	ated
saxophone	lighter	glass	petals	detergent	satin	chequered flag	Oreo	horn	gong	satellite dish	peas
spanner	mirror	computer screen	spoons	gel	oil	killer whale	newspaper	vacuum cleaner	dogs	tyre	cookie
cufflinks	kitchen foil	diamond	grapes	noodles	silk	panda	dominos	fireworks	microphone	apple	plate
gold ring	eyes	hummus	body lotion	icicle	ice cubes	football	pirate flag	snoring	babies	clock	doughnut
sink	motorbike	postcard	ice rink	rink	butter	penguin	Dalmatian	aeroplane	drums	marbles	coin
nail clippers	sunglasses	key	leaf	frog	lotion	crosswords	skunk	guns	stereo	ladybird	Frisbee
coins	sequins	cream cheese	aubergine	slug	soap	cow	referee shirt	alarms	lawnmowers	globe	ring
puddle	spoon	feather	apple	snake	fish	Guinness	zebra	racing car	thunder	wheel	button
fire	bulb	pebble	silk	bath tub	banana peel	piano	dice	speakers	whistle	eye	football
chandelier	keys	coins	CD	bouncy castle	grease	checkerboard	barcode	washing machine	lion	CD	saucer
Unrelated	(LF = 28)	Unrelated	l (LF = 12)	Unrelated	(LF = 20)	Unrelate	d (LF = 27)	Unrelated (LF = 24)	Unrelate	d (LF = 23)
daisy	timber	sandpaper	fibre sponge	clippers	brush	grass	apple	ketchup	cheese	stable	lock
newspaper	peanuts	porcupine	wood chippings	fibre sponge	basket	Santa	petals	lipstick	needle	toothbrush	cleaver
letter	towel	alligator	potpourri	barbed wire	tablets	honey	cherry	binoculars	books	speakers	boat
eye shadow	tea bag	razor	rose bush	gloves	butterfly	coins	peanuts	giraffe	plug	stairs	knife
horse	crow	hair rollers	clippers	fossils	pillow	mirror	wasp	napkins	rope	sofa	display board
curtains	paper	Frisbee	ginger	sandpaper	cactus	peas	tree	salt	blanket	socks	gloves
forest	pillow	net	fence	armadillo	roof tiles	kiwi	sandwiches	daffodil	cherry	tissue box	carrier bags
manuscripts	weeds	doormat	Velcro	Velcro	desk	foam	gas	towel	soap	pew	bus
blanket	shorts	grater	hay	hair brush	building	tomato	tongue	spoon	spinach	towel	cheque
blueberries	receipt	mesh	bricks	napkins	crocodile	wine	wood chippings	apron	pudding	post-box	books
monkey	panda	sand	coconut	bread	paper	lava	sun	pencil	bed	oven	label
flour	tiger	pine cone	tree bark	cow	ring	Clingfilm	lion	raspberries	thread	tongs	bread
cow	tablets	scratching post	building	shorts	biscuit	globe	forest	windows	teabag	shorts	dogs
elephant	smoke	toast	Christmas tree	wood chippings	hairdryer	lipstick	lager	grass	gloves	wallet	camera
coffee beans	soil	barbed wire	crocodile	cupcake	tooth	custard	weeds	rubber	mug	wardrobe	hutch
mattress	throws	dry skin	hedgehog	sugar cubes	bone	tangerine	shark	ice cream	postcard	podium	computer
cloth	socks	roof tiles	rocks	sea gull	skewer	lettuce	leprechaun	petals	pie	rucksack	grass
bread	sheets	armadillo	cactus	mesh	toaster	cigarette	mango	caramel	onion	seatbelt	comb
lion	sand	rope	beard	rust	microphone	ladybird	blood	mustard	bowl	ticket	apron
blusher	sandwiches	firewood	brush	ice cubes	bricks	teeth	chips	flour	charcoal	lighter	robe

Square/Rect	angle (LF = 69)	Red (LF	= 20)	Hard	l (LF = 47)	White	(LF = 36)
Re	lated	Relat	ed	F	Related	Re	ated
postcard	toaster	roses	tongue	clothes pegs	statue	snow	tooth
envelope	ice cubes	ketchup	strawberries	barrel	shell	salt	sea gull
books	blackboard	cherry	blood	nails	fossils	chalk	swan
door	mattress	phone box	lipstick	stone	pebble	meringue	rice
stamp	shopping trolley	ruby	Santa	saucepan	door	flour	bone
bed	placemat	holly	tomato	helmet	hammer	sugar	lard
dice	television	Ferrari	London bus	plank	chopping board	chef hat	wedding dress
passport	laptop	postman's van	post-box	tooth	table	paper	milk
chopping board	tissue box	stop sign	рорру	brick	sculpture	marshmallows	envelope
brick	briefcase	lobster	fire engine	blackboard	bone	foam	sheep
Unrelate	ed (LF = 11)	Unrelated	(LF = 27)	Unrela	ited (LF = 23)	Unrelate	d (LF = 34)
shark	macaroni	trolley	coffee	sofa	fuel	crisps	wasp
ice cream cone	stocking	sugar	gold	shampoo	linen	bees	post box
ramekin	tyre	mosquitoes	ladder	socks	chef hat	blood	sun
doughnut	sausage	spider web	lion	paint	gloves	chips	lion
exercise ball	blueberries	wire	sea gull	oil	baking paper	fire	wooden stick
barrel	tie	silver foil	cockroach	syrup	cloth	gold	holly
scissors	wheel	rake	mirror	pillows	beer	bricks	ketchup
bone	wellies	pool	moon	shorts	flowers	cherry	timber
skipping rope	roses	stable	bread	towel	cake	biscuit	tongue
horse	cello tape	receipt	Clingfilm	napkins	doughnut	blackboard	lifeguard
pebbles	vegetables	spanner	milk	sauce	cupcake	firewood	tree
lettuce	tinsel	tongs	lettuce	scone	flour	forest	pepper
screws	globe	wasp	cement	milk	exercise ball	barrel	tractor
crab	hazelnuts	sea	crisps	sandwiches	curtain	coffee	seatbelt
saucepan	umbrella	snow	fossils	pudding	carpet	bonfire	oil
holly	bubbles	panda	charcoal	rug	chips	grass	sea
slippers	trowel	pond	chips	tinsel	apron	dung	wood chippings
chandelier	star	piano	ice cubes	tea	ice cream	broom	mosquitoes
cow	tomato	peas	bone	tongue	butterfly	cockroach	woodlouse
peas	candy floss	grass	weeds	mattress	tie	charcoal	weeds

APPENDIX D: Experiment 4 – Across modalities (mean lexical frequency (LF) = 57.7, SD = 112)

Airpor	t (LF = 49)	Café	(LF = 31)	Clothes shop	(LF = 108)	Football m	atch (LF = 31)	Hospita	I (LF = 68)	Hotel	(LF = 62)
Strong (33)	Weak (65)	Strong (31)	Weak (31)	Strong (82)	Weak (134)	Strong (36)	Weak (25)	Strong (62)	Weak (73)	Strong (99)	Weak (26)
terminal	lift	scone	sofa	money	return	player	t-shirt	illness	care	holiday	toothbrush
passport	stairs	coffee	syrup	bag	discount	team	advertisement	doctor	fracture	double bed	cafe
flight	restaurant	tea	candle	store	factory	stadium	water bottle	bed	isolation	room service	lounge
customs	belt	coffee maker	receipt	model	town	goal post	alcohol	ambulance	death	reception	trolley
suitcase	officer	spoon	meeting	assistant	rail	yellow card	lights	X-ray	sick	luggage	window
check-in	hall	cake	display counter	sale	goods	scarf	gloves	patient	mask	room	Jacuzzi
aeroplane	alcohol	snack	apron	mannequin	work	score board	boots	sterile	baby	receptionist	shampoo
runway	perfume	menu	card machine	mirror	counter	referee	pub	accident	matron	tourist	curtains
security	control	waiter	tip	fashion	wardrobe	ball	refreshments	ward	crèche	En-suite	kettle
luggage	notice board	biscuit	wallet	changing rooms	buttons	pitch	stairs	injury	bone	bed	sofa
Unrelat	ed (LF = 27)	Unrelate	ed (LF = 42)	Unrelated	(LF = 42)	Unrelat	ed (LF = 34)	Unrelate	ed (LF = 62)	Unrelat	ed (LF = 23)
trophy	slippers	chamber	tape measure	weeds	sink	wall paper	caravan	postcard	house	sale	tongue
sweep	director	cemetery	stopwatch	saucepan	lettuce	curtains	briefcase	ham	ship	bees	patrol
teacher	homework	bone	tractor	envelope	pillow	coffee	fashion	trainers	bouncer	Frisbee	track
field	red card	carpet	oxygen mask	coach	tank	hair net	salt	manuscripts	baking paper	leaflet	eggs
cake	collars	bed	referee	clippers	tablets	ocean	rock pool	mud	chimney	chalk	officer
saucepan	club	hens	exhibits	tray	pier	throws	litter tray	grass	beer	glass screen	display board
candles	tip	cage	nurse	beach	card	smoke	diary	sand	hymn	perfume	chopping board
vegetarian	tyre pump	wardrobe	model	motorway	milk jug	dinner	carrier	pulpit	beach	basket	VIP box
fan	sermon	research	blockage	fish	skipping rope	basket	student	diesel	advertisement	warehouse	seatbelt
chef	steak	December	den	food	bin	blanket	engineer	palm tree	bonfire	customs	ear protection

Living roo	om (LF = 85)	Petrol statio	n (LF = 215)	Railway s	tation (LF = 38)	Shed (LF = 20)	Bathrooi	m (LF = 66)	Chocolate fact	ory (LF = 20)
Strong (105)	Weak (66)	Strong (119)	Weak (310)	Strong (27)	Weak (49)	Strong (27)	Weak (14)	Strong (75)	Weak (58)	Strong (28)	Weak (11)
carpet	brick	fuel	bin	track	policemen	screws	cupboard	toilet	cloth	consumer	pipe
ceiling	remote	petrol pump	chocolate	train	newspaper	padlock	firewood	tap	rack	machine	chemicals
armchair	hearth	motorway	can	ticket	bench	paint tin	clippers	shower	door	hair net	overalls
cushion	bookcase	cars	fire	display board	shop	garden	BBQ	water	bedroom	plastic mould	gloves
curtains	cottage	tanker	toilet	conductor	yellow line	toolbox	woodlouse	bath	brush	wrapper	canteen
lamp	door	diesel	pricelist	briefcase	holiday	lawnmower	chairs	basin	cologne	worker	lorry
house	extension	shop	magazine	steam	bag	spade	bulb	towel	scales	manufacture	fridge
sofa	magazine	money	flowers	luggage	stairs	ladder	spider web	sink	apartment	conveyor belt	wage
television	fire	cash machine	coffee shop	clock	automatic doors	tools	bucket	tiles	pipes	box	warehouse
family	telephone	tyre pump	loyalty card	waiting room	engineer	hose	drawer	soap	plumber	shop	building
Unrelate	ed (LF = 46)	Unrelated	(LF = 67)	Unrel	ated (LF = 58)	Unrelate	d (LF = 96)	Unrelate	ed (LF = 52)	Unrelated	(LF = 35)
trip	nurse	ship	flip-flops	hanger	membership card	pub	sun	stationary	microphone	aeroplane	tie
coffee shop	trowel	cruise	organ	cloth	waves	ambulance	food	debit card	cross	book	fracture
manager	car	groceries	jail	mould	grill	gossip	blood	bell	remote	injection	dentures
hose	flip-flops	sand	camp	mixer	table	chef	literature	photographs	safety goggles	stadium	traffic
swimmer	classroom	armchair	woodlouse	plastic mould	bible	Clingfilm	sofa	meal	torch	resort	maid
statue	drivers licence	cement	apron	sand	cleaning equipment	post-box	money	guitar	flag	conductor	elephant
yellow card	holiday	stairs	bench	music	scratching post	goalkeeper	barmaid	bread	cookie	runway	houses
cheque	padlock	tiger	house	sail	bed	milk	class	menu	wage	swimsuit	cement
Shower	sick	student	baby	menu	pen knife	van	card	saw	gum	straightener	sweat
hairdryer	lighter	flour	panda	mop	stage	archive	oxygen mask	shop	chips	bell	drums

Drivir	ng (LF = 65)	Hairdress	sers (LF = 55)	Birthday party	(LF = 141)	Lecture ha	all (LF = 47)	Pet shop	(LF = 41)	Police (LF	= 61)
Strong (32)	Weak (98)	Strong (37)	Weak (72)	Strong (77)	Weak (205)	Strong (52)	Weak (43)	Strong (61)	Weak (20)	Strong (68)	Weak (55)
motorway	light	curler	money	games	crisps	projector	table	birds	bell	jail	hat
indicator	tank	salon	shower head	Food	Cook	student	row	cage	collars	criminal	dogs
wheel	wash	comb	mop	Friends	Money	screen	file	bowl	tablets	car	court
driver	radio	shampoo	radio	candles	Voucher	pen	water bottle	cat	treats	helmet	statistics
gear	air conditioning	straightener	wedding	Photographs	Baby	lecturer	speakers	hutch	toys	emergency	defence
license	go-cart	hair	spray	balloon	dance	information	pointer	fish	brush	constable	file
pedal	window	mirror	stool	Card	children	handouts	podium	hamsters	nuts	uniform	desk
traffic	bridge	scissors	tea	Cake	suit	blackboard	laptop	wood chippings	leads	patrol	lights
brakes	clamp	hairdryer	silver foil	Present	Candy	books	computer	food	shampoo	crime	duty
fuel	crossing	brush	magazine	hat	roast	exam	doodle	aquarium	litter tray	station	collar
Unrela	ated (LF = 45)	Unrelat	ed (LF = 54)	Unrelated (L	F = 82)	Unrelate	d (LF = 53)	Unrelated	(LF = 53)	Unrelated (LF	= 57)
dairy	island	wristband	beat	preview	toothbrush	bills	roll	law	chairs	oil	BBQ
birds	spray	drill	eggs	path	water bottle	wash	scales	open fire	cash machine	row	curtains
dinner	piano	crab	baptism	trolley	rake	goods	wallpaper	glasses	captain	stairs	cattle
stairs	manager	ball	water bottle	razor	Shop	ticket	whistle	archaeology	throws	remote control	cat
wasp	table	gate	fossils	luggage	sink	money	cutter	pillar	truck	field	Candy
oyster	cake	projector	fete	Umbrella	Religion	soap	hut	phone	holiday	lunch	seaweed
union	homework	aircraft	mosquitos	octopus	Clock	loin	oven	timetable	painting	poster	Author
canteen	hat	hearth	party	Fence	work	countryside	bus	Christmas cards	trees	pain	art
label	plan	sandwiches	cupcake	vending machine	toilet	island	sand	Jacuzzi	ice cubes	porter	milk
aquarium	charcoal	garden	water fountain	period	window	tracks	dog	pipes	weight	snow	steam

The sea	(LF = 38)	Zoo (LF = 90)	Supermark	et (LF = 97)	Restauran	t (LF = 92)	Foreign Holi	iday (LF = 51)	Museur	n (LF = 45)
Strong (48)	Weak (28)	Strong (110)	Weak (71)	Strong (60)	Weak (134)	Strong (80)	Weak (103)	Strong (47)	Weak (39)	Strong (37)	Weak (53)
holiday	camera	giraffe	leaflet	trolley	container	meal	utensil	Hotel	cockroach	archaeology	ticket
lifeguard	island	elephant	playground	food	counter	waiter	chips	cruise	flag	statue	research
coast	rock pool	keeper	turn style	shelf	mother	menu	cloth	passport	First aid kit	exhibits	animals
surfboard	treasure	children	map	basket	carrier	food	money	beach	ski	fossils	pamphlet
ocean	salt	monkey	school	car park	handbag	chef	carpet	suitcase	Life jacket	sculpture	map
waves	towel	panda	field	goods	flowers	tip	vegetarian	photos	mosquitos	painting	extinct
shore	pier	tiger	uniform	cash	family	bill	spices	camera	museum	exhibition	archive
beach	octopus	cage	den	bargains	bag	bistro	suit	sun	postcard	guide	shop
swimsuit	lighthouse	tourist	camera	shop	money	table	party	abroad	book	gallery	security guard
fish	port	souvenirs	glass window	store	warehouse	diner	window	sunglasses	snow	art	students
Unrelate	d (LF = 53)	Unrelate	ed (LF = 29)	Unrelated	(LF = 33)	Unrelated	l (LF = 27)	Unrelate	d (LF = 58)	Unrelate	ed (LF = 84)
doctor	sachets	plumber	indicator	tinsel	dancer	gallery	muscles	chair	utensil	bell	ladder
treadmill	belt	pebble	pulpit	choir	sick	wound	Decay	sausages	knowledge	runway	country
comb	slicer	hotel	cake	souvenir	pupils	Novel	stamp	sofa	death	pudding	manger
money	carriage	altar	cabinet	holiday	illness	newspaper	Lawn	helmet	cracker	food	jukebox
fashion	recipe	kitchen	hearth	sailor	suitcase	military	shampoo	Spider web	stool	meal	sand
sauce	dung	bicycle	holly	gate	vault	tractor	mud	class	mistletoe	festival	speaker
cigarette	glow stick	Clingfilm	chair	cross-trainer	friends	aisle	Medicine	revise	scone	gun	screen
knife	postman	laptop	dumbbell	sofa	forest	stable	clamp	Silver foil	instructor	countryside	pebble
receipt	prayer	candles	cigarette	cement	passport	ache	valve	laptop	Football match	towel	tree
clock	darts	exam	bible	hike	apartment	nurse	trimmer	party	dumbbell	clerk	hose

Kitchen	(LF = 121)	Bank ((LF = 68)	Gym (LF	= 39)	Dentist	(LF = 27)	Campin	g (LF = 42)	Bakery (LF = 37)
Strong (85)	Weak (157)	Strong (78)	Weak (59)	Strong (31)	Weak (48)	Strong (25)	Weak (30)	Strong (47)	Weak (36)	Strong (25)	Weak (49)
bread	slice	queue	gold	treadmill	t-shirt	mouth	ache	fire	repellent	cookie	mixer
oven	party	cheque	card	personal trainer	television	surgery	chair	sleeping bag	marshmallows	baker	knife
larder	parlour	safe	branch	cross-trainer	Pilates	filling	saliva	grass	Frisbee	pastry	coffee
stool	door	statement	glass screen	weight	shorts	dentures	tongue	trees	pegs	roll	recipe
dinner	smoke	money	notes	workout	fan	tooth	decay	tent	rope	bun	spices
maid	waiter	manager	vault	exercise mat	music	injection	medicine	caravan	pen knife	bread	tongs
sink	farm	counter	robbery	trainers	ear phones	gum	mould	torch	shower block	oven	menu
food	mother	coins	office	sweat	mirror	floss	glasses	rucksack	cool box	pie	staff
table	bottle	balance	pen	sport	sauna	hygiene	tool	hike	lighter	cake	tray
cabinet	sweep	ATM	clerk	muscles	socks	drill	doctor	forest	friends	dough	chef hat
Unrelate	d (LF = 40)	Unrelate	ed (LF = 64)	Unrelated (LF = 27)	Unrelate	ed (LF = 36)	Unrelate	ed (LF = 56)	Unrelate	ed (67)
branch	life jacket	camera	garden	restaurant	butterfly	carving	yard	spotlight	bulb	treasure	airbag
car	policemen	dogs	chocolate	timeline	hutch	leads	passenger	hair	sweep	ATM	t-shirt
doodle	sprinklers	wrap	yard	station	peas	footpath	holiday	stationary	counter	wire	bell
computer	locker	concert	bible	post-box	bowl	discount	security guard	return	factory	scenery	party
stationary	gear	mirror	school	stable	fuel	Street	truck	tap	sofa	bikini	postcard
anchor	pointer	diner	monkey	criminal	milkshake	lion	Handbag	overalls	information	pamphlet	chapel
dance	letter	fire	lunchbox	display counter	lawn mower	sport	exhibition	control	doctor	sports TV	accounts
mud	Reindeer	printer	bucket	candle	double bed	substitute	luggage	ladder	curtains	stop	dump
card	shower	pictures	coast	handouts	boat	breakfast	cottage	turn style	military	land	plunger
dung	sun	check-in	waiter	decoration	camera	coffee maker	pond	oven	fan	pool	tanker