RADAR

When referring to this work, the full bibliographic details must be given as follows:

www.brookes.ac.uk/go/radar

OXFORD
BROOKES
UNIVERSITY

Directorate of **Learning Resources**

Appendices

Appendix 1: Summary table of experimental manipulation and results for semantic illusion research (1981 to 2001) in chronological order

[Key: snt = sentence ; SI = semantic illusion; stmttbv = statement-to-be-verified; qu = question; stmt = statement.]

Study	Language	Expt	Method of Presentation	Task	Experimental Manipulation	Version	Mean SI rate	Mean Correct rate	Know-ledge check	Notes
Erickson and Mattson, 1981	English	1	computer, 1 snt at a time, 5s presentation rate	qu	Presented SI questions to document existence of SIs	basic	52.3	??	y	only 4 SI questions
		2	test-booklet, 1 snt per page	stmttbv	turned qus into stmts	basic	26.5	??	y	concluded focus not at root of sis
		3	test-booklet, 1 snt per page	qu	phon. and sem. sim.	basic	35.8	??	y	
						sem.	33.2	??	y	Strange choice of sem. sim.
						phon.	13.5	??	y	Strange choice of phon. sim. & rates 0%, 0%, 1% and 53% respectively
Baker and Wagner, 1987	English	1	aural presentation	stmttbv	embedded snts with false info in either main or subordinate clause	main clause	??	88.9	n	Not si task as such: detection of false info in snts
						subord.clause	??	81.1	n	
		2	short expository paragraphs containing target snts	Under-line false info	within pragraphs, complex (embedded) vs compound ("and") snts	complex (main)	??	80	y	Within complex snts false info in either main or subord clause, within compound snts false info in one of two positions (closer to beginning or closer to end)
						complex (subord)	??	69	y	
						compound (first)	??	78	y	
						compound (second)	??	79	y	
Brédart and Modolo, 1988	French		snts presented individually on sheets of paper	stmttbv	controlled focus by placing substitution/other word in cleft phrase	substitution in "It was"-phrase	9.2	??	y	Research done in French
						other wd in "It was"-phrase	34.1	??	y	
Brédart and Docquier., 1989	French		snts presented individually on sheets of paper	stmttbv	target underlined and in upper case	substitution underlined	13.5	??	y	Research done in French; poss problem with response bias... see also Kamas et al,1996
						other wd underlined	31.7	??	y	
Reder and Cleeremans, 1990	English	1	Computer, one question at a time; answers via microphone	qu	gist vs. literal conditions; few/many terms associated with queried information	gist, few	n/a	66	?	RT advantage for gist vs literal; RT advantage for fewer related terms; significantly more errors in literal task mainly due to SIs. Number of related terms had no impact on performance excepted in literal distorted condition.
						gist , many	n/a	69	?	
						literal, few	??	63	?	
						literal, many	??	34	?	
		2	Computer, one question at a time; answers via microphone	qu	Participants memorised relevant facts before SI task (priming)	gist, primed	n/a	93	?	Primed qus are answered much faster; priming did not make it easier to detect substitutions. Different in correct rate mainly due to fewer don't know answers in primed literal.
						gist, not primed	n/a	77	?	
						literal, primed	34	59	?	
						literal, not primed	40	36	?	

Study	Language	Expt	Method of Presentation	Task	Experimental Manipulation	Version	Mean SI rate	Mean Correct rate	Know-ledge check	Notes
Van Oostendorp and de Mul, 1990	Dutch		snts presented indiv. on screen, press buttons on box for responses	stmttbv	sem. relatedness of substitution was varied	high-related	29	??	y	Also RT data: correct responses ("false") faster than in correct ("true"); for "false" low-related faster, for "true" high-related and low-related not different.
						low-related	16	??	y	
van Oostendorp and Kok, 1990	Dutch		test-booklet, 1 snt per page	stmttbv	paired associate learning task combined with higher and lower related names	non-paired, low-related	17	??	y	In paired assoc learning task, concepts from context of si snt served as stimuli, and substitutions as responses
						paired, low-related	32	??	y	
						non-paired, high-related	30	??	y	
						paired, high-related	44	??	y	
Reder and Kusbit, 1991	English	1	computer, presentation rate controlled by ss, voice key to measure RT	qu	instructions: gist vs literal conditions; number of items associated with queried info also varied	gist, few	n/a	75.6		RT: gist faster than literal; fewer itmes faster then more items but accuracy in literal condition much more affected by no. of items, while accuracy in gist not affected (SI rate only for part of ss of this study)
						gist, many	n/a	75.6		
						literal, few	33	61.7		
						literal, many	33	42.1		
		2	computer, presentation rate controlled by ss, voice key to measure RT	qu	ss studied facts for be answered before si task (priming)	gist, primed	n/a	96.2		RT: literal slower and less accurate; previously studied stmts are answered much faster and more accurately; did not differentially affect SI detection (SI rates for both expts 2 and 3 combined)
						gist, not primed	n/a	74.7		
						literal, primed	31	68.6		
						literal, not primed	35	56.2		
		3	computer, presentation rate controlled by ss, voice key to measure RT	qu	ss memorized facts for be answered before si task (priming)	gist, primed	n/a	92.5		RT: literal slower and less accurate; priming increases speed and accuracy, but does not interact with task; did not differentially affect SI detection (SI rates for both expts 2 and 3 combined)
						gist, not primed	n/a	76.5		
						literal, primed	31	59.3		
						literal, not primed	35	35.5		
		4	computer, ss controlled onset of each word and only one word appeared on the screen at a time (to record reading times)	qu	ss read snt word by word, then gave answer, reading time of words recorded	gist	n/a	76		Reading times: words read slower when errors made; targets read slower than content words when error is made
						literal	32	57		
		5	computer, ss controlled onset of each word and only one word appeared on the screen at a time (to record reading times)	qu	reading time of indiv words combined with priming procedure as in expt 2	gist, primed	n/a	89		Reading times: priming produced much faster reading times; reading times for targets in literal slower when question had been primed, accuracy improved, but not differentially for SIs
						gist, not primed	n/a	75		
						literal, primed	24	74		
						literal, not primed	29	53		

Study	Language	Expt	Method of Presentation	Task	Experimental Manipulation	Version	Mean SI rate	Mean Correct rate	Know-ledge check	Notes
Barton and Sanford, 1993	English	1	short expository paragraphs followed by target question	n/a	Ss were asked where to bury the survivors (cf. injured, wounded, maimed, and surviving...)	survivors	n/a	60	n/a	Detection rates lowest when "is alive" is only presupposed as in "injured" terms. When "is alive" info not readily accessible, it is less likely to be entered into matching process.
						injured/wounded/maimed	n/a	17.5	n/a	
						surviving injure/wounded/maimed	n/a	66	n/a	
		2	short expository paragraphs followed by target question	n/a	Ss were asked where to bury the surviving dead	surviving dead	n/a	23	n/a	"dead" in the phrase "surviving dead" constitutes a perfect match
		3	question embedded in short questionnaire about social issues	n/a	assuming left-right processing:target qu varied passive/active and scenario (bike/plane crash) early/late in snt	early scenario, passive voice, plane crash	n/a	26	n/a	
						early scenario, passive voice, bicycle crash	n/a	80	n/a	
						early scenario, active voice, plane crash	n/a	44	n/a	
						early scenario, active voice, bicycle crash	n/a	73	n/a	
						late scenario, passive voice, plane crash	n/a	31	n/a	
						late scenario, passive voice, bicycle crash	n/a	73	n/a	
						late scenario, active voice, plane crash	n/a	46	n/a	
						late scenario, active voice, bicycle crash	n/a	93	n/a	
		4	question embedded in short questionnaire about social issues, with all qus in a two snts format	n/a	short scenario followed by question "Suppose there was an aircrash with many survivors. Where should they be buried?" if info relevant to the questions of place of burial was included in scenario, detection of "survivors" less likely	basic task/ irrelevant info	n/a	76	n/a	
						relevant info	n/a	49	n/a	
						anomaly focussing ctrl	n/a	100	n/a	

Study	Language	Expt	Method of Presentation	Task	Experimental Manipulation	Version	Mean SI rate	Mean Correct rate	Know-ledge check	Notes
Kamas, Reder and Ayers, 1996	English	1	Computer presentation, one snt at a time	qu	facts with capitalised wds studied before response to qu	target in caps	24	75		performance diffs are likely to reflect a change in bias, not in sensitivity
						answer in caps	33	63		
						no caps	29	70		
		2	Computer presentation, one snt at a time	qu	single-task (monitor for sis only) vs. dual-task (monitor and respond to qus)	single-task	n/a	62	y	again bias seems to be at work
						qu-answering	37	40	y	
		3a	computer presentation, one snt at a time	qu	target in caps vs. nothing in caps in qu asked, instructions also commented upon caps possibly being helpful in deciding if si	target in caps	23	62		again bias at least in part
						nothing in caps	36	48		
		3b	computer presentation, one snt at a time	qu	target in caps vs. nothing in caps in qu asked, but instructions did not comment upon caps, also knowlch included	target in caps	27	66	y	sensitivity to si increase if target in caps, but bias also affected
						nothing in caps	32	53	y	
		4	computer presentation, one snt at a time	qu	features of substitution which differentiate it from the target were made salient by preceding with a qu that either stressed sims or diffs or was irrelevant	distinctive	30	59	y	detection rates improve when pre-qu stresses diffs, detection rates are not impaired by pre-qu stressing sims; additional info hurt performance when relevant to answer, but not when irrelevant (cf. Barton and Sanford, 1993)
						similar	41	48	y	
						irrelevant	42	47	y	
van Jaarsveld, Dijkstra and Hermans, 1997	Dutch	1	computer presentation, one snt at a time	qu	ss were required to decide if the qu presented was accurately phrased. Instructions varied in stress for need of accuracy/speed	accurate	18.3	??	y	ss can control their ability to detect sis, but detection is rather difficult even under favourbale circumstances
						balanced	32.9	??	y	
		2	computer presentation, one snt at a time	qu	qu-answering (ignore sis) vs. detection-task (normal si task); comparing sem similar and dissimilar terms; also looked at RTs	qu-answering, sim	n/a	52.6	y	Diff between qu-answering sim and diss not significant; diff between detection sim and diss is significant. RT data: for qu-answering, diss slower than sim; for detection sim slower than diss.
						qu-answering, diss	n/a	49.1	y	
						detection, sim	n/a	38.8	y	
						detection, diss	n/a	58.6	y	
		3	computer presentation, one snt at a time	qu & stmttbv	qu vs. stmttbv; front and end positions of target, sim and diss substitutions: prediction about in which position and task diss will be more disruptive (sim effect)	stmttbv, sim, front	25.3	34.4	y	Sim effect is based on disruptive effect on ongoing sem interpretation (smaller sim eff = less disruption by diss terms >> more superficial sem procg. For stmttbv, sim effect not significant, and main position effect not sign, but main effect of sim, sign. For qu-answ, sim effect sign at front, but not at end (i.e. more disruption at front). Main effect of position not sign.
						stmttbv, sim, end	24.2	37.8	y	
						stmttbv, diss, front	10.2	51.3	y	
						stmttbv, diss, end	9.8	53.7	y	
						qu-answ, sim, front	n/a	56.9	y	
						qu-answ, sim, end	n/a	53.9	y	
						qu-answ, diss, front	n/a	50	y	
						qu-answ, diss, end	n/a	48.7	y	

Study	Language	Expt	Method of Presentation	Task	Experimental Manipulation	Version	Mean SI rate	Mean Correct rate	Know-ledge check	Notes
Shafto and MacKay, 2000	English	1	Aural presentation over headphones, plus written with blank words to be shadowed, multi-choice answers	qu	Compared sem. related, phonologically related and unrelated substitutions	Sem. Related	??	67	N	Assumption that surname identity=phonological relatedness – but in context surname on its own is a perfect match! compare with goodness-of-fit (Barton and Sanford, 1993).
						Phon. Related	??	77	N	
						Unrelated	??	91	N	
		2	Aural presentation over headphones, plus written with blank words to be shadowed, multi-choice answers	qu	Compared Moses illusion (sem. related), Armstrong illusion (phonologically related) and Mega-Moses illusion (sem. and phonologically related)	Moses	??	70	N	Results not very clearly presented
						Armstrong	??	?	N	
						Mega-Moses	??	51	N	
						Unrelated	??	91	n	
Hannon and Daneman, 2001	English		1 snt at a time on computer screen; read out loud and respond as quickly as possible	qu	Compared effects of context strength (high/low) and substitution relatedness (strong/weak)	Strong subs/high context	??	53	Y	Also took individual differences measures for knowledge access and working memory span from participants – knowledge access is better predictor of detection rate with regard to subs word relatedness; working memory span is better predictor of detection rate when context is strong
						Weak subs/high context	??	64	Y	
						Strong subs/low context	??	56	Y	
						Weak subs/low ctxt	??	68	Y	

Appendix 2: Sentences and primes used in the pilot study

Key: For each sentence the following typographical cues are used to denote each role filler: [Correct term / **potential SI substitution** / *obvious substitution*].

A: Names

A1: Vulnerability to kryptonite is [Superman's / **Batman's** / *Thatcher's*] only weakness.
        Primes: Superman: Lois Lane, Daily Planet, x-ray vision
                Batman: Robin, Catwoman, Gotham City

A2: Sophisticated gadgets were supplied to [James Bond / **James Kirk** / *James Galway*] by Q.
        Primes: James Bond: secret agent, Moneypenny, 007
                James Kirk: starship captain, Spock, Enterprise

A3: The animal into which [Dracula / **Frankenstein** / *Washington*] can transform is a bat.
        Primes: Dracula: vampire, Transsylvania, sucks blood
                Frankenstein: scientist, monster, Mary Shelley

A4: [Robin Hood / **King Arthur** / *Ian Botham*] took from the rich to give to the poor.
        Primes: Robin Hood: Sherwood, longbow, Merry Men
               King Arthur: Guinevere, Excalibur, Round Table

A5: Hercule Poirot is one of [Agatha Christie's / **Jane Marple's** / *Judy Dench's*] most famous characters.
        Primes: Agatha Christie: Dame, whodunnit, Mousetrap
                Jane Marple: Spinster, detective, eccentric

A6: The star of Disney's first cartoon with sound was [Mickey Mouse / **Bugs Bunny** / *Sid James*].
        Primes: Mickey Mouse: Pluto, Donald Duck, Goofy.
                Bugs Bunny: 'Whatsup Doc?', carrot, rabbit

A7: Sex scandals have put [Bill Clinton / **Tony Blair** / *Winston Churchill*] in the news recently.
        Primes: Bill Clinton: Whitewater, USA, Hillary
                Tony Blair: New Labour, Prime Minister, Cheri

A8: Dr Watson recorded the cases his friend [Sherlock Holmes / **Inspector Morse** / *Inspector Clouseau*] solved.
        Primes: Sherlock Holmes: Deerstalker, Baker St., Conan Doyle
                Inspector Morse: Sgt. Lewis, Oxford, Colin Dexter

A9: After [Sleeping Beauty / **Snow White** / *Cilla Black*] pricked her finger, she slept for a hundred years
        Primes: Sleeping Beauty: wicked witch, uninvited guest, spinning wheel
                Snow White: seven dwarves, glass coffin, poisoned apple

A10: The Hollywood suicide of [Marilyn Monroe / **Elizabeth Taylor** / *Anthea Turner*] occurred in the 1960s
        Primes: Marilyn Monroe: Arthur Miller, billowing skirt, pop-art
                Elizabeth Taylor: Cleopatra, Richard Burton, National Velvet

B: Nouns

B1: Guacamole is a Mexican dip made with mashed-up avocados / **artichokes** / *strawberries.*
       Primes: avocado: pear, dip, prawns
              artichoke: starter, heart, dressing,

B2: There are twenty-six letters / **numbers** / *words* in the English alphabet.
       Primes: letters: vowels, consonants, language
              numbers: odd, even, counting

B3: Neil Armstrong was the first man to walk on the moon / **sun** / *carpet.*
       Primes: moon: night, craters, space .
              sun: Summer, daylight, bright.

B4: The young of dogs / **cats** / *fish* are called puppies.
       Primes: dogs: barks, tail, kennel
              cats: purrs, mice, whiskers

B5: Whales / **elephants** / *camels* are the largest aquatic mammals on Earth.
       Primes: whales: ocean, blubber, harpoon
              elephants: Zoo, trunk, tusks

B6: Traditionally, housekeeping is the woman's / **man's** / *gardener's* job.
       Primes: woman: female, mother, wife
              man: male, father, husband

B7: Sunglasses provide protection for the eyes / **ears** / *feet.*
       Primes: eyes: sight, lashes, pupil
              ears: hearing, lobes, pierced

B8: International phone calls are cheaper during the night / **day** / *autumn* .
       Primes: night: late, sleep, dark
              day: early, light, work

B9: Fermented apple / **pear** / *carrot* juice is called cider.
       Primes: apple: pips, sour, Cox's
              pear: bell-shaped, soft, Conference

B10: The Germans with their sausage are like the British with their tea / **coffee** / *tequila.*
       Primes: tea: leaves, bags, spoon
              coffee: beans, instant, roasted

C: Verbs

C1: Too much salt increases / **decreases** / *follows* the risk of heart-disease.
     Primes: increases: grow, multiply, enlarge
               decreases: reduce, lessen, shrink

C2: Grocery shops are where people go to buy / **sell** / *eat* sugar
     Primes: buy: pay, money, purchase
               sell: deal, offer, profit

C3: Getting dust up the nose usually makes people sneeze / **cough** / *laugh*.
     Primes: sneeze: itch, nose, hayfever
               cough: chest, throat, phlegm

C4: An apocryphal news item reports that: "Man bites / **kicks** / *strokes* dog."
     Primes: bites: mouth, teeth, savage
               kicks: strike, foot, boot

C5: In Victorian times, horses were commonly used to pull / **push** / *paint* carts
     Primes: pull: tug, draw, haul
               push: thrust, shove, press

C6: Many small birds sing / **swarm** / *dance* at daybreak.
     Primes: sing: music, choir, voice
               swarm: bees, group, milling

C7: Washing / **wearing** / *knitting* two pairs of socks can help to avoid blisters.
     Primes: washing: water, clean, scrub
               wearing: appearance, dress, garb

C8: It is easy to smudge the ink when you write / **read** / *wave* with a quill.
     Primes: write: pen, paper, script
               read: books, text, meaning

C9: The eruption of the Vesuvius caused Pompeii to be destroyed / **evacuated** / *conquered*.
     Primes: destroyed: damaged, ruined, demolished
               evacuated: people, move, safety, leave

C10: Grapefruit are large citrus fruit that taste / **smell** / *look* bitter.
     Primes: taste: food, flavour, mouth
               smell: nose, odour, aroma

D: Adjectives

D1: People predominantly wear black / **white** / *stylish* garments to funerals.
       Primes: black: dark, pitch, coal
              white: snow, milk, light

D2: After a rain storm everything around is wet / **blue** / *dead*.
       Primes: wet: water, soaked, dripping
              blue: sky, azure, indigo

D3: Gas central heating helps to keep the house warm / **rosy** / *dark*.
       Primes: warm: cosy, comfortable, blanket
              rosy: pink, soft, cheeks

D4: Church mice are usually said to be poor / **cold** / *small*.
       Primes: poor: scanty, penurious, hungry
              cold: ice, frozen, winter

D5: Free / **light** / *strong* as a bird is an expression and also a song-title.
       Primes: free: liberty, unfettered, release
              light: cloud, feather, bubble

D6: The phone directory is usually bound in a soft / **yellow** / *blank* cover.
       Primes: soft: thistledown, pillow, fluffy
              yellow: lemon, sunflower, custard

D7: Chip-pans can easily cause burnt / **scalded** / *clean* hands
       Primes: burnt: charred, blackened, ashes
              scalded: steam, kettle, blister

D8: Living under a flight path does not make for a quiet / **careful** / *full* life.
       Primes: quiet: silent, calm, still
              careful: cautious, thorough, considered

D9:   Motorways have a much higher / **stricter** / *safer* speed limit than other roads.
       Primes: higher: tower, above, upper
              stricter: precise, firm, rigid

D10: Snakes are smooth / **slimy** / *sharp* to the touch.
       Primes: smooth: sleek, even, gentle
              slimy: oozy, gooey, gelatinous

Appendix 3: Examples of questionnaires used in Experiment 1

(Presentation order, questions first or statements first was counterbalanced.)

Questionaire 1. (Statements first; Hollywood)

Statements:
Please read these through as fast as you can and circle for each statement whether you think it is true or false.

Please do not turn the page until you have completed it.

1. Hollywood is the centre of the American Film industry.	**t**	**f**
2. Tony Blair is the Prime Minister of Great Britain.	**t**	**f**
3. Cinderella went to the ball in a pumpkin turned carriage by the Fairy Godmother.	**t**	**f**
4. Wellington's victory is commemorated by his column in Trafalgar Square.	**t**	**f**
5. Sean Connery, the famous actor, is a Welshman.	**t**	**f**
6. Nelson Mandela is the first black president of South Africa.	**t**	**f**
7. The only man-made structure that can easily be seen from the moon is the Great Wall of China.	**t**	**f**
8. Neil Armstrong was the first man to walk on the moon.	**t**	**f**
9. In "Arabian Nights", the genie was released from the lamp by Ali Baba.	**t**	**f**
10. Columbus discovered Australia at the end of the 15th century.	**t**	**f**
11. Marilyn Monroe died in 1962 from an overdose of barbiturates.	**t**	**f**
12. The Eiffel Tower stands in Berlin.	**t**	**f**
13. J.R.R. Tolkien's "The Lord of the Rings" was recently voted to be the book of the century.	**t**	**f**
14. Snow White slept for a hundred years after she pricked her finger.	**t**	**f**
15. Inspector Morse does his policing in Oxford.	**t**	**f**
16. The person behind Microsoft, Windows and so on is Bill Gates.	**t**	**f**
17. Ronald Reagan was an actor before he became the President of the United States.	**t**	**f**
18. Hong Kong went back to the People's Republic of China in July 1997.	**t**	**f**
19. Michelangelo's portrait of the enigmatically smiling Mona Lisa is in the Louvre.	**t**	**f**
20. King Arthur took from the rich and gave to the poor.	**t**	**f**

Questions:
Please read each questions and write down the answer to it as fast as you can. Some questions don't actually make sense, answer those with "can't say".

Please do not turn the page until you have completed it.

1. Who found the disguised wolf in her grandmother's bed?	
2. Which composer wrote the Magic Flute and is sometimes described as a musical genius?	
3. What many-coloured garment was Jacob given by his father?	
4. Which boxer bit off a chunk of his opponent's ear?	
5. How did Richard Branson, the Virgin Man, try to fly around the world?	
6. How many times did King Henry VIII marry?	
7. Where was William Shakespeare born?	
8. Who wrote "The Origin of Species" which caused much controversy when first published?	
9.Which Roman city was destroyed by the eruption of Mount Etna?	
10. In the biblical story, who was swallowed by a whale?	
11. Who is currently Queen of Great Britain?	
12. Why has Bill Clinton recently been in the news?	
13. What was the nationality of Hercule Poirot, the famous detective created by Jane Marple?	
14. Who discovered gravity by having an apple fall on his head?	
15. What is Superman's only weakness?	
16. Which the Spice Girl left?	
17. With what weapon did the Bethlehem shepherd David kill the giant Samson?	
18.When did Mother Theresa of Calcutta die?	
19. What everyday item was invented by Thomas Edison?	
20. Where did the Beatles come from?	

Multichoice questions:
Take as much time over these as you like, and answer them as accurately as possible, please.

1. Whose victory is commemorated by the column in Trafalgar Square?

       a) Napoleon   b) Wellington   c) Churchill   d) Nelson

2. Who slept for a hundred years after she pricked her finger?

       a)Cinderella   b) Sleeping Beauty   c) Snow White   d) Rapunzel

3. The eruption of which volcano destroyed the Roman city of Pompeii?

       a) Mount St Helens   b) Mount Etna   c) Popocatepetl   d) Vesuvius

4. Who created Hercule Poirot, the famous Belgian detective?

       a) Agatha Christie   b) Ruth Rendell   c) Jane Marple   d) Dorothy Sayers

5. Who painted the portrait of the enigmatically smiling Mona Lisa?

       a) Raffael   b) Michelangelo   c) Leonardo   d) Caravaggio

6. What was the name of the giant killed by the Bethlehem shepherd David's slingshot?

       a) Goliath   b) Samson   c) Magog   d) Ezekiel

7. In the "Arabian Nights", who released the genie from the lamp?

       a) Sinbad The Sailor   b) Bluebeard   c) Aladdin   d) Ali Baba

8. Who was given a coat of many colours by his father?

       a) Jacob   b) Joseph   c) Benjamin   d) Isaac

That's it! Thank you very much for taking part in this study.

Questionaire 2. (Questions first; Hollywood)

1. Where is the centre of the American Film industry?	
2. Who is currently the Prime Minister of Great Britain?	
3. Who turned a pumpkin into a carriage so that Cinderella could go to the ball?	
4. What is the monument in Trafalgar Square that commemorates Wellington's victory?	
5. What is the nationality of Sean Connery, the famous actor?	
6. Who became the first black president of South Africa?	
7. Which is often referred to as the only man-made structure that can easily be seen from the moon?	
8. Who was the first man to walk on the moon?	
9. In the "Arabian Nights", from what vessel did Ali Baba release the genie?	
10. In what century did Columbus discover Australia?	
11. Which Hollywood star died in 1962 from an overdose of barbiturates?	
12. Where does the Eiffel Tower stand?	
13. Who wrote "The Lord of the Rings", which was recently voted to be the book of the century?	
14. For how many years did Snow White sleep after she pricked her finger?	
15. In which town does Inspector Morse do his policing?	
16. Who is the person behind Microsoft, Windows and so on?	
17. What profession did Ronald Reagan have before he became the President of the United States?	
18. When was Hong Kong returned to the People's Republic of China?	
19. In which museum is Michelangelo's portrait of the enigmatically smiling Mona Lisa?	
20. Which legendary hero took from the rich and gave to the poor?	

<u>**Statements:**</u>
Please read these through as fast as you can and circle for each statement whether you think it is true or false.

Please do not turn the page until you have completed it.

	t	f
1. Little Red Riding Hood found the disguised grandmother in her wolf's bed.	t	f
2. Wolfgang Amadeus Mozart, composer of the Magic Flute, is sometimes described as a musical genius.	t	f
3. Jacob was given a coat of many colours by his father.	t	f
4. Mike Tyson bit off a chunk of his opponent's ear.	t	f
5. Richard Branson, the Virgin Man, tried to fly around the world in a balloon.	t	f
6. King Henry VIII married six times.	t	f
7. William Shakespeare was born in Stratford-upon-Avon.	t	f
8. Charles Darwin wrote "The Origin of Species" which caused much controversy when first published.	t	f
9. The eruption of Mount Etna destroyed the Roman city of Pompeii.	t	f
10. In the biblical story Jonah was swallowed by a whale.	t	f
11. Elizabeth II is currently Queen of Great Britain.	t	f
12. Bill Clinton has recently been in the news for improprieties in his sex life.	t	f
13. Hercule Poirot, the famous Belgian detective was created by Jane Marple.	t	f
14. Newton discovered gravity by having an apple fall on his head.	t	f
15. Batman has only one weakness: vulnerability to kryptonite.	t	f
16. Ginger Spice has left the Spice Girls.	t	f
17. The Bethlehem shepherd David killed the giant Samson with his slingshot.	t	f
18. Mother Theresa of Calcutta died in September 1997 at an advanced age.	t	f
19. Thomas Edison invented the lightbulb.	t	f
20. The Beatles came from Manchester.	t	f

[The knowledge check used was identical to that used for Questionnaire 1.]

Appendix 4: Example of a questionnaire used in Experiment 2

1. Hollywood is the centre of the American Film industry.	t	f
2. Tony Blair is the Prime Minister of Britain.	t	f
3. Cinderella went to the ball in a pumpkin turned carriage by the Fairy Godmother.	t	f
4. Ali Baba released the genie from the lamp in "Arabian Nights".	t	f
5. Sean Connery, the famous actor, is a Welshman.	t	f
6. Nelson Mandela is the first black president of South Africa.	t	f
7. The only man-made structure that can easily be seen from the moon is the Great Wall of China.	t	f
8. Sigmund Freud pioneered work in psychoanalysis at the turn of the century.	t	f
9. Neil Armstrong was the first man to walk on the moon.	t	f
10. Jane Marple created Hercule Poirot, the famous moustachioed detective from Belgium.	t	f
11. Marilyn Monroe died from an overdose of barbiturates.	t	f
12. Michelangelo painted the portrait of Mona Lisa.	t	f
13. The Eiffel Tower stands in Berlin.	t	f
14. Michael Schuhmacher is a Formula 1 driver for Ferrari.	t	f
15. J.R.R. Tolkien's "The Lord of the Rings" was recently voted to be the book of the century.	t	f
16. His father gave Jacob, one of twelve brothers, a coat of many colours.	t	f
17. Inspector Morse does his policing in Oxford.	t	f
18. The person behind Microsoft, Windows and so on is Bill Gates.	t	f
19. Ronald Reagan was an actor before he became the President of the United States.	t	f
20. Hong Kong went back to the Republic of China in July 1997.	t	f
21. Robin Hood was killed in battle.	t	f
22. In Trafalgar Square, Wellington's victory over the Franco-Spanish navy is commemorated by his column.	t	f
23. The Eurostar is the train that goes through the Channel Tunnel.	t	f
24. Richard Branson, the Virgin Man, tried to fly around the world in a balloon.	t	f
25. William Shakespeare was born in Stratford-upon-Avon.	t	f
26. Little Red Riding Hood found the disguised grandmother in her wolf's bed.	t	f
27. Wolfgang Amadeus Mozart is sometimes described as a musical genius.	t	f
28. The fairytale princess Snow White slept for a hundred years.	t	f
29. Mike Tyson bit off his opponents ear.	t	f
30. Albert Einstein, the Jewish physicist and author of the theory of relativity, emigrated to America.	t	f
31. King Henry VIII married six times.	t	f
32. "Titanic" was director James Cameron's latest success.	t	f
33. Charles Darwin is the author of "The Origin of Species" which caused much controversy when first published.	t	f
34. Macbeth was responsible for the killing of Duncan.	t	f
35. The Bethlehem shepherd David used his slingshot to kill the giant Samson.	t	f
36. In the biblical story Jonah was swallowed by a whale.	t	f
37. Elizabeth II is currently Queen of England.	t	f
38. Bill Clinton has recently been in the news for improprieties in his sex life.	t	f
39. During the 15th century, the Spanish-Italian navigator Columbus discovered islands off the coast of Australia.	t	f
40. Helmut Kohl is the German Chancellor.	t	f
41. Pompeii was destroyed by the eruption of Mount Etna.	t	f
42. Newton discovered gravity by having an apple fall on his head.	t	f
43. Batman has only one weakness: vulnerability to kryptonite.	t	f
44. Ginger Spice has left the Spice Girls.	t	f
45. Mother Theresa of Calcutta died in September 1997 at an advanced age.	t	f

Example of the knowledge check used in Experiment 2.

1. Whose victory over the Franco-Spanish navy is commemorated by the column in Trafalgar Square?

    a) Napoleon   b) Wellington   c) Churchill   d) Nelson

2. Which fairytale princess slept for a hundred years?

    a)Cinderella   b) Sleeping Beauty   c) Snow White   d) Rapunzel

3. Islands off the coast of which continent were discovered by the Spanish-Italian navigator Columbus during the 15th century?

    a) America   b) Asia   c) Australia   d) Africa

4. The eruption of which volcano destroyed Pompeii?

    a) Mount St Helens   b) Mount Etna   c) Popocatepetl   d) Vesuvius

5. Who created Hercule Poirot, the famous moustachioed detective from Belgium?

    a) Agatha Christie   b) Ruth Rendell   c) Jane Marple   d) Dorothy Sayers

6. Who painted the portrait Mona Lisa?

    a) Raphael   b) Michelangelo   c) Leonardo   d) Caravaggio

7. What was the name of the giant killed by the Bethlehem shepherd David's slingshot?

    a) Goliath   b) Samson   c) Magog   d) Ezekiel

8. In "Arabian Nights" who released the genie from the lamp?

    a) Sinbad The Sailor   b) Bluebeard   c) Aladdin   d) Ali Baba

9. Who of twelve brothers was given a coat of many colours by his father?

    a) Jacob   b) Joseph   c) Benjamin   d) Isaac

Appendix 5: Target sentence variations used in Experiment 2

Key: FS=front short, FM=front medium, FL=front long, MS=middle short, MM=middle medium, ML=middle long, ES=end short, EM=end medium, EL=end long

1	FS	Wellington's victory is commemorated in Trafalgar Square.
	FM	Wellington's victory is commemorated by his column in Trafalgar Square.
	FL	Wellington's victory over the Franco-Spanish navy is commemorated by his column in Trafalgar Square.
1	MS	In Trafalgar Square, Wellington's victory is commemorated.
	MM	In Trafalgar Square, Wellington's victory is commemorated by his column.
	ML	In Trafalgar Square, Wellington's victory over the Franco-Spanish navy is commemorated by his column.
1	ES	Trafalgar Square commemorates the victory won by Wellington.
	EM	The column in Trafalgar Square commemorates the victory won by Wellington.
	EL	The column in Trafalgar Square commemorates the victory over the Franco-Spanish navy won by Wellington.

2	FS	Snow White, the fairytale princess, slept for a hundred years.
	FM	Snow White, the fairytale princess, slept for a hundred years, after she pricked her finger.
	FL	Snow White, the fairytale princess, slept for a hundred years, after she pricked her finger on a spindle.
2	MS	The fairytale princess Snow White slept for a hundred years.
	MM	After she pricked her finger, the fairytale princess Snow White slept for a hundred years.
	ML	After she pricked her finger on a spindle, the fairytale princess Snow White slept for a hundred years.
2	ES	The fairytale princess, who slept for a hundred years, is Snow White.
	EM	The fairytale princess, who slept for a hundred years after she pricked her finger, is Snow White.
	EL	The fairytale princess, who slept for a hundred years after she pricked her finger on a spindle, is Snow White.

3	FS	Jacob was given a coat of many colours by his father.
	FM	Jacob, one of twelve brothers, was given a coat of many colours by his father.
	FL	Jacob, an Israelite and one of twelve brothers, was given a coat of many colours by his father.
3	MS	His father gave Jacob a coat of many colours.
	MM	His father gave Jacob, one of twelve brothers, a coat of many colours.
	ML	His father gave Jacob, an Israelite and one of twelve brothers, a coat of many colours.
3	ES	His father gave a coat of many colours to Jacob.
	EM	The father of twelve brothers gave a coat of many colours to Jacob.
	EL	The father of twelve Israelite brothers gave a coat of many colours to Jacob.

4	FS	Australia was discovered by Columbus during the 15th century.
	FM	Australian offshore islands were discovered by Columbus during the 15th century.
	FL	Australian offshore islands were discovered by the Spanish-Italian navigator Columbus during the 15th century.
4	MS	Columbus discovered Australia during the 15th century.
	MM	Columbus discovered islands off the coast of Australia during the 15th century.
	ML	The Spanish-Italian navigator Columbus discovered islands off the coast of Australia during the 15th century.
4	ES	During the 15th century, Columbus discovered Australia.
	EM	During the 15th century, Columbus discovered islands off the coast of Australia.
	EL	During the 15th century, the Spanish-Italian navigator Columbus discovered islands off the coast of Australia.

5	FS	Mount Etna's eruption destroyed Pompeii.
	FM	Mount Etna's eruption destroyed the ancient Roman city of Pompeii.
	FL	Mount Etna's eruption destroyed the ancient Roman city of Pompeii near Naples.
5	MS	The eruption of Mount Etna destroyed Pompeii.
	MM	The eruption of Mount Etna destroyed the ancient Roman city of Pompeii.
	ML	The eruption of Mount Etna near Naples destroyed the ancient Roman city of Pompeii.
5	ES	Pompeii was destroyed by the eruption of Mount Etna.
	EM	The ancient Roman city of Pompeii was destroyed by the eruption of Mount Etna.
	EL	The ancient Roman city of Pompeii near Naples was destroyed by the eruption of Mount Etna.

6	FS	Samson, the giant was killed by David's slingshot.
	FM	Samson, the giant was killed by the Bethlehem shepherd David's slingshot.
	FL	Samson, the Philistine giant was killed by the Bethlehem shepherd David's slingshot.
6	MS	David killed the giant Samson with his slingshot.
	MM	David, a shepherd of Bethlehem, killed the giant Samson with his slingshot.
	ML	David, a shepherd of Bethlehem, killed the Philistine giant Samson with his slingshot.
6	ES	David used his slingshot to kill the giant Samson.
	EM	The Bethlehem shepherd David used his slingshot to kill the giant Samson.
	EL	The Bethlehem shepherd David used his slingshot to kill the Philistine giant Samson.

7	FS	Jane Marple created Hercule Poirot, the famous detective.
	FM	Jane Marple created Hercule Poirot, the famous detective from Belgium.
	FL	Jane Marple created Hercule Poirot, the famous moustachioed detective from Belgium.
7	MS	The crime writer Jane Marple created Hercule Poirot, the famous detective.
	MM	The crime writer Jane Marple created Hercule Poirot, the famous detective from Belgium.
	ML	The crime writer Jane Marple created Hercule Poirot, the famous moustachioed detective from Belgium.
7	ES	Hercule Poirot, the famous detective, was created by Jane Marple.
	EM	Hercule Poirot, the famous detective from Belgium, was created by Jane Marple.
	EL	Hercule Poirot, the famous moustachioed detective from Belgium, was created by Jane Marple.

8	FS	Michelangelo painted the portrait of Mona Lisa.
	FM	Michelangelo painted the portrait of the enigmatically smiling Mona Lisa.
	FL	Michelangelo painted the portrait of the enigmatically smiling Mona Lisa, which hangs in the Louvre.
8	MS	The most famous portrait by Michelangelo is of Mona Lisa.
	MM	The most famous portrait by Michelangelo is of the enigmatically smiling Mona Lisa.
	ML	The most famous portrait by Michelangelo, which hangs in the Louvre, is of the enigmatically smiling Mona Lisa.
8	ES	The portrait of Mona Lisa was painted by Michelangelo.
	EM	The portrait of the enigmatically smiling Mona Lisa was painted by Michelangelo.
	EL	The portrait of the enigmatically smiling Mona Lisa, which hangs in the Louvre, was painted by Michelangelo.

9	FS	Ali Baba released the genie from the lamp.
	FM	Ali Baba released the genie from the lamp in "Arabian Nights".
	FL	Ali Baba released the genie from the lamp in the book known as "Arabian Nights".
9	MS	By rubbing the lamp Ali Baba released the genie.
	MM	In "Arabian Nights", Ali Baba released the genie from the lamp.
	ML	In the book known as "Arabian Nights", Ali Baba released the genie from the lamp.
9	ES	The genie was released from the lamp by Ali Baba.
	EM	In "Arabian Nights", the genie was released from the lamp by Ali Baba.
	EL	In the book known as "Arabian Nights", the genie was released from the lamp by Ali Baba.

Appendix 6: Examples of the German semantic illusion questionnaire

Bitte lesen Sie diese Sätze so schnell Sie können durch und kreuzen für jeden Satz an, ob Sie ihn für whar (w) oder falsch (f) halten.

1. Hollywood ist das Zentrum der amerikanischen Filmindustrie.	w	f
2. Tony Blair ist zur Zeit der britische Premierminister.	w	f
3. Aschenputtel fuhr in einem Kürbis, den die Fee in eine Kutsche verwandelt hatte, zum Ball.	w	f
4. Der Ausbruch des Ätna zerstörte die römische Stadt Pompeii.	w	f
5. Nelson Madela ist der erste dunkelhäutige Präsident von Südafrika.	w	f
6. Das einzige Gebäude, das man vom Mond aus sehen kann, ist die chinesische Mauer.	w	f
7. Die Beatles kamen aus Manchester.	w	f
8. Gerhard Schröder ist zur Zeit Bundeskanzler.	w	f
9. Mozart, der Komponist der Zauberflöte, gilt als musikalisches Genie.	w	f
10. Ein bunter Mantel wurde Jakob von seinem Vater geschenkt.	w	f
11. Marilyn Monroe starb 1962 an einer Überdosis von Barbituraten.	w	f
12. Der Eiffelturm steht in London.	w	f
13. Ali Baba befreite im Märchen in "1001 Nacht" den Geist aus der Wunderlampe.	w	f
14. Neil Armstrong war der erste Mann auf dem Mond.	w	f
15. Robin Hood stahl von den Reichen, um den Armen zu geben.	w	f
16. Kolumbus entdeckte Afrika gegen Ende des fünfzehnten Jahrhunderts.	w	f
17. Wolfram von Eschenbach ist der Dichter des Parzival.	w	f
18. Nachdem sie sich in den Finger stach, fiel Schneewittchen in einen hunderjährigen Schlaf.	w	f
19. Ronald Reagan war Schauspieler, bevor er Präsident der Vereinigten Staaten wurde.	w	f
20. Albrecht Dürer wurde in Nürnberg geboren.	w	f
21. Mutter Theresa von Kalkutta verstarb im September 1997 in fortgeschrittenem Alter.	w	f
22. Jane Marple erfand Hercule Poirot, den berühmten belgischen Detektiv.	w	f
23. Der jüdische Physiker und Nobelpreisträger Albert Einstein wanderte in die USA aus.	w	f
24. Rotkäppchen fand die verkleidete Großmutter im Bett ihres Wolfes.	w	f
25. In der biblischen Geschichte wurde der Prophet Jonah von einem Wal verschluckt.	w	f
26. Sir Isaac Newton entdeckte die Schwerkraft.	w	f
27. Thomas Edison erfand die Glühbirne.	w	f
28. Der Schäfer David aus Bethlehem tötete den Riesen Samson mit Stein und Schleuder.	w	f
29. Martin Luther nagelte 99 Thesen an die Tür der Kirche in Wittenberg.	w	f
30. Beethoven verlor gegen Ende seines Lebens das Gehör.	w	f

Bitte lesen Sie diese Sätze so schnell Sie können durch und kreuzen für jeden Satz an, ob Sie ihn für whar (w) oder falsch (f) halten.

	w	f
1. Hollywood ist das Zentrum der amerikanischen Filmindustrie.	w	f
2. Tony Blair ist zur Zeit der britische Premierminister.	w	f
3. Aschenputtel fuhr in einem Kürbis, den die Fee in eine Kutsche verwandelt hatte, zum Ball.	w	f
4. Die römische Stadt Pompeii wurde durch den Ausbruch des Ätna zerstört.	w	f
5. Nelson Madela ist der erste dunkelhäutige Präsident von Südafrika.	w	f
6. Das einzige Gebäude, das man vom Mond aus sehen kann, ist die chinesische Mauer.	w	f
7. Die Beatles kamen aus Manchester.	w	f
8. Gerhard Schröder ist zur Zeit Bundeskanzler.	w	f
9. Mozart, der Komponist der Zauberflöte, gilt als musikalisches Genie.	w	f
10. Jakob bekam von seinem Vater einen bunten Mantel geschenkt.	w	f
11. Marilyn Monroe starb 1962 an einer Überdosis von Barbituraten.	w	f
12. Der Eiffelturm steht in London.	w	f
13. Den Geist aus der Wunderlampe im Märchen in "1001 Nacht" wurde von Ali Baba befreit.	w	f
14. Neil Armstrong war der erste Mann auf dem Mond.	w	f
15. Robin Hood stahl von den Reichen, um den Armen zu geben.	w	f
16. Kolumbus entdeckte Afrika gegen Ende des fünfzehnten Jahrhunderts.	w	f
17. Wolfram von Eschenbach ist der Dichter des Parzival.	w	f
18. Schneewittchen fiel in einen hunderjährigen Schlaf, nachdem sie sich in den Finger stach.	w	f
19. Ronald Reagan war Schauspieler, bevor er Präsident der Vereinigten Staaten wurde.	w	f
20. Albrecht Dürer wurde in Nürnberg geboren.	w	f
21. Mutter Theresa von Kalkutta verstarb im September 1997 in fortgeschrittenem Alter.	w	f
22. Hercule Poirot, den berühmten belgischen Detektiv, erfand Jane Marple.	w	f
23. Der jüdische Physiker und Nobelpreisträger Albert Einstein wanderte in die USA aus.	w	f
24. Rotkäppchen fand die verkleidete Großmutter im Bett ihres Wolfes.	w	f
25. In der biblischen Geschichte wurde der Prophet Jonah von einem Wal verschluckt.	w	f
26. Sir Isaac Newton entdeckte die Schwerkraft.	w	f
27. Thomas Edison erfand die Glühbirne.	w	f
28. Den Riesen Samson tötete der Schäfer David aus Bethlehem mit Stein und Schleuder.	w	f
29. Martin Luther nagelte 99 Thesen an die Tür der Kirche in Wittenberg.	w	f
30. Beethoven verlor gegen Ende seines Lebens das Gehör.	w	f

Bitte beantworten Sie nun diese 6 Fragen, so gut es geht. Lassen Sie sich dafür so viel Zeit, wie Sie wollen, da es hier nicht mehr um Geschwindigkeit, sondern um Genauigkeit geht.

1. Wer fiel in einen hunderjährigen Schlaf?

    a) Aschenputtel   b) Dornröschen   c) Schneewittchen   d)Rapunzel

2. Der Ausbruch welchen Vulkanes zerstörte die römische Stadt Pompeii?

    a) Mt. St Helens   b) Ätna   c) Popocatépetl   d) Vesuv

3. Wer erfand den berühmten belgischen Detektiv Hercule Poirot?

    a) Agatha Christie   b) Ruth Rendell   c) Jane Marple   d) Dorothy Sayers

4. Wie hieß der Riese, den der Schäfer David aus Bethlehem mit Stein und Schleuder tötete?

    a) Goliath   b) Samson   c) Magog   d) Ezechiel

5. Wer befreite den Geist aus der Wunderlampe im Märchen in "1001 Nacht"?

    a) Sindbad der Seefahrer   b) Blaubart   c) Aladdin   d) Ali Baba

6. Wer bekam einen bunten Mantel von seinem Vater geschenkt?

    a) Jakob   b) Josef   c) Benjamin   d) Isaak

Das war dann alles! Herzlichen Dank für Ihre Teilnahme an dieser Studie.

the reading and cognition research project
Project Director: R.O.Lindsay **Research Coordinator: A.C. Büttner**

Dear participant,

This programme of sentence property rating scales has been designed as part of a research study about sentence processing[1]. Each different scale attempts to tap into an aspect of what makes English sentences comprehensible, readable or even what makes them "comfortable" to process.

Please read the instructions for each of the following scales carefully and rate each sentence according to these instructions on the scale provided.

Please make a response for every sentence on each of the eleven rating scales - it should take about 25 - 30 minutes to complete the programme - and return the booklet using the envelope provided.

All information will of course be handled with complete confidentiality.

Thank you very much for taking part!

Anke Büttner
Research Coordinator
The Reading and Cognition Research Unit
Psychology Department
Oxford Brookes University

Your details:

Date of Birth: _____   Gender: _____

---

[1] If you would like further information about my research, please email:
  abuttner@brookes.ac.uk

1.) What kind of text is it?

Please classify each sentence by indicating the categories you think it fits. You may choose more than one category if you feel that this is appropriate. Also feel free to add other categories if needed: the categories presented are not exhaustive.

1. Noah took two animals of each type on the Ark.

News	Opinion	Fact	Fiction	Description	Speech
Narrative	Textbook	Academic	Response to a question	Magazine	Other: _____

2. Bloodletting, generally accomplished with the aid of leeches, was thought to remove "poisons" from the blood.

News	Opinion	Fact	Fiction	Description	Speech
Narrative	Textbook	Academic	Response to a question	Magazine	Other: _____

3. It was President Kennedy, who was killed in Dallas in 1963.

News	Opinion	Fact	Fiction	Description	Speech
Narrative	Textbook	Academic	Response to a question	Magazine	Other: _____

4. Snow White was sheltered by seven dwarfs before marrying her prince.

News	Opinion	Fact	Fiction	Description	Speech
Narrative	Textbook	Academic	Response to a question	Magazine	Other: _____

5. Calcium phosphate is a mineral salt and is the principal mineral constituent of bones and teeth.

News	Opinion	Fact	Fiction	Description	Speech
Narrative	Textbook	Academic	Response to a question	Magazine	Other: _____

6. In the October revolution of 1917 the Bolsheviks took under the leadership of Lenin the power in Russia.

News	Opinion	Fact	Fiction	Description	Speech
Narrative	Textbook	Academic	Response to a question	Magazine	Other: _____

7. In what mythology was Venus known as the Goddess of Love?

News	Opinion	Fact	Fiction	Description	Speech
Narrative	Textbook	Academic	Response to a question	Magazine	Other: _____

8. The future of Barclays, one of Britain's biggest banking groups, was thrown into doubt yesterday with the shock resignation of its chief executive, Martin Taylor.

News	Opinion	Fact	Fiction	Description	Speech
Narrative	Textbook	Academic	Response to a question	Magazine	Other: _____

9. Inspector Morse who does his policing in Oxford was invented by Colin Dexter.

News	Opinion	Fact	Fiction	Description	Speech
Narrative	Textbook	Academic	Response to a question	Magazine	Other: _____

10. This particular pool of light moving in a mesmeric manner backwards and forwards picked out from time to time a long red island of spilt wine.

News	Opinion	Fact	Fiction	Description	Speech
Narrative	Textbook	Academic	Response to a question	Magazine	Other: _____

11. Subjects averaged 47 seconds longer to name ink colors of incongruent words than solid-color squares.

News	Opinion	Fact	Fiction	Description	Speech
Narrative	Textbook	Academic	Response to a question	Magazine	Other: _____

12. Of course a certain number of scientists have to go mad, just to keep the tradition alive.

News	Opinion	Fact	Fiction	Description	Speech
Narrative	Textbook	Academic	Response to a question	Magazine	Other: _____

13. The archaeologist Schliemann discovered the ruins of the ancient city of Troy.

News	Opinion	Fact	Fiction	Description	Speech
Narrative	Textbook	Academic	Response to a question	Magazine	Other: _____

14. These results are consistent with the current literature on focalizaton and question the Erickson and Mattson (1981) claim that the Moses illusion is not dependent on a misdirection of focus.

News	Opinion	Fact	Fiction	Description	Speech
Narrative	Textbook	Academic	Response to a question	Magazine	Other: _____

15. Away ran the girls, too eager to get in to have time for speech.

News	Opinion	Fact	Fiction	Description	Speech
Narrative	Textbook	Academic	Response to a question	Magazine	Other: _____

2.) How great is the quantity of background knowledge required to understand the sentence?
"This door opens outwards" doesn't require much background knowledge at all (rating 0: not at all great).
"Windows 98 immediately crashed upon first being demonstrated " requires rather more background (rating
probably 3: very great), while "Left and right temporal lobectomy patients, patients with frontal lobe lesions and
healthy control subjects participated in an eyelid conditioning study based on conditional discrimination learning"
needs lots of background knowledge to be made sense of (rating 4: extremely great).

1. Noah took two animals of each type on the Ark.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

2. Bloodletting, generally accomplished with the aid of leeches, was thought to remove "poisons" from the blood.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

3. It was President Kennedy, who was killed in Dallas in 1963.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

4. Snow White was sheltered by seven dwarfs before marrying her prince.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

5. Calcium phosphate is a mineral salt and is the principal mineral constituent of bones and teeth.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

6. In the October revolution of 1917 the Bolsheviks took under the leadership of Lenin the power in Russia.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

7. In what mythology was Venus known as the Goddess of Love?
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

8. The future of Barclays, one of Britain's biggest banking groups, was thrown into doubt yesterday with the shock
resignation of its chief executive, Martin Taylor.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

9. Inspector Morse who does his policing in Oxford was invented by Colin Dexter.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

10. This particular pool of light moving in a mesmeric manner backwards and forwards picked out from time to
time a long red island of spilt wine.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

11. Subjects averaged 47 seconds longer to name ink colors of incongruent words than solid-color squares.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

12. Of course a certain number of scientists have to go mad, just to keep the tradition alive.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

13. The archaeologist Schliemann discovered the ruins of the ancient city of Troy.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

14. These results are consistent with the current literature on focalizaton and question the Erickson and Mattson
(1981) claim that the Moses illusion is not dependent on a misdirection of focus.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

15. Away ran the girls, too eager to get in to have time for speech.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

3.) How important is it to know the context of the sentence in order to understand it?

A sentence like "Bread is made from flour and water" is fairly self-contained and it is not important to know the context in which such a sentence appears (rating 0: not at all important). However, "It would take about an hour" could have different meanings depending on the context it is presented in (rating 4: extremely important).

1. Noah took two animals of each type on the Ark.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

2. Bloodletting, generally accomplished with the aid of leeches, was thought to remove "poisons" from the blood.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

3. It was President Kennedy, who was killed in Dallas in 1963.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

4. Snow White was sheltered by seven dwarfs before marrying her prince.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

5. Calcium phosphate is a mineral salt and is the principal mineral constituent of bones and teeth.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

6. In the October revolution of 1917 the Bolsheviks took under the leadership of Lenin the power in Russia.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

7. In what mythology was Venus known as the Goddess of Love?
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

8. The future of Barclays, one of Britain's biggest banking groups, was thrown into doubt yesterday with the shock resignation of its chief executive, Martin Taylor.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

9. Inspector Morse who does his policing in Oxford was invented by Colin Dexter.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

10. This particular pool of light moving in a mesmeric manner backwards and forwards picked out from time to time a long red island of spilt wine.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

11. Subjects averaged 47 seconds longer to name ink colors of incongruent words than solid-color squares.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

12. Of course a certain number of scientists have to go mad, just to keep the tradition alive.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

13. The archaeologist Schliemann discovered the ruins of the ancient city of Troy.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

14. These results are consistent with the current literature on focalizaton and question the Erickson and Mattson (1981) claim that the Moses illusion is not dependent on a misdirection of focus.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

15. Away ran the girls, too eager to get in to have time for speech.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

4.) How specific are the meanings of the individual words used in the sentence?
The sentences: "There is a piece of paper on the floor" and "There is a reference to Thurstone's classic work in this paper" both contain the word "paper". In the first one, it just refers to any piece made of the material "paper": it could be a bit of newspaper, from a magazine, drawing paper, a letter, or torn out of a book (rating 0: not at all specific). In the second sentence "paper" refers to a piece of academic writing , which would still be called a "paper" even if it were presented in electronic format (rating 4: extremely specific).

1. Noah took two animals of each type on the Ark.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

2. Bloodletting, generally accomplished with the aid of leeches, was thought to remove "poisons" from the blood.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

3. It was President Kennedy, who was killed in Dallas in 1963.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

4. Snow White was sheltered by seven dwarfs before marrying her prince.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

5. Calcium phosphate is a mineral salt and is the principal mineral constituent of bones and teeth.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

6. In the October revolution of 1917 the Bolsheviks took under the leadership of Lenin the power in Russia.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

7. In what mythology was Venus known as the Goddess of Love?
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

8. The future of Barclays, one of Britain's biggest banking groups, was thrown into doubt yesterday with the shock resignation of its chief executive, Martin Taylor.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

9. Inspector Morse who does his policing in Oxford was invented by Colin Dexter.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

10. This particular pool of light moving in a mesmeric manner backwards and forwards picked out from time to time a long red island of spilt wine.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

11. Subjects averaged 47 seconds longer to name ink colors of incongruent words than solid-color squares.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

12. Of course a certain number of scientists have to go mad, just to keep the tradition alive.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

13. The archaeologist Schliemann discovered the ruins of the ancient city of Troy.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

14. These results are consistent with the current literature on focalizaton and question the Erickson and Mattson (1981) claim that the Moses illusion is not dependent on a misdirection of focus.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

15. Away ran the girls, too eager to get in to have time for speech.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

5.) How familiar is the proposition stated in the sentence?

A sentence like "Bill Clinton is a philanderer" expresses an idea that - given recent news about Clinton - is extremely familiar (rating 4: extremely familiar), even if you have not come across that precise sentence before now. In contrast something like "Howard Street is a one-way street." is - for most people at any rate - not at all a familiar idea (rating 0: not at all familiar).

1. Noah took two animals of each type on the Ark.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

2. Bloodletting, generally accomplished with the aid of leeches, was thought to remove "poisons" from the blood.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

3. It was President Kennedy, who was killed in Dallas in 1963.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

4. Snow White was sheltered by seven dwarfs before marrying her prince.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

5. Calcium phosphate is a mineral salt and is the principal mineral constituent of bones and teeth.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

6. In the October revolution of 1917 the Bolsheviks took under the leadership of Lenin the power in Russia.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

7. In what mythology was Venus known as the Goddess of Love?
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

8. The future of Barclays, one of Britain's biggest banking groups, was thrown into doubt yesterday with the shock resignation of its chief executive, Martin Taylor.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

9. Inspector Morse who does his policing in Oxford was invented by Colin Dexter.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

10. This particular pool of light moving in a mesmeric manner backwards and forwards picked out from time to time a long red island of spilt wine.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

11. Subjects averaged 47 seconds longer to name ink colors of incongruent words than solid-color squares.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

12. Of course a certain number of scientists have to go mad, just to keep the tradition alive.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

13. The archaeologist Schliemann discovered the ruins of the ancient city of Troy.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

14. These results are consistent with the current literature on focalizaton and question the Erickson and Mattson (1981) claim that the Moses illusion is not dependent on a misdirection of focus.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

15. Away ran the girls, too eager to get in to have time for speech.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

6.) How grammatical is the sentence?
 "The car is parked in front of the house" is a grammatical sentence, so is "Daffodils, which flower in spring, are yellow" (both: rating 4: extremely grammatical). "The car parking in front of the house" is not grammatical: the verb is missing. Similarly "Daffodils, which grows in spring, is yellow" is not grammatical, as the noun "daffodils" does not match the verbs "grows" and "is". (Both: rating 0: not at all grammatical).

1. Noah took two animals of each type on the Ark.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

2. Bloodletting, generally accomplished with the aid of leeches, was thought to remove "poisons" from the blood.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

3. It was President Kennedy, who was killed in Dallas in 1963.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

4. Snow White was sheltered by seven dwarfs before marrying her prince.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

5. Calcium phosphate is a mineral salt and is the principal mineral constituent of bones and teeth.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

6. In the October revolution of 1917 the Bolsheviks took under the leadership of Lenin the power in Russia.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

7. In what mythology was Venus known as the Goddess of Love?
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

8. The future of Barclays, one of Britain's biggest banking groups, was thrown into doubt yesterday with the shock resignation of its chief executive, Martin Taylor.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

9. Inspector Morse who does his policing in Oxford was invented by Colin Dexter.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

10. This particular pool of light moving in a mesmeric manner backwards and forwards picked out from time to time a long red island of spilt wine.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

11. Subjects averaged 47 seconds longer to name ink colors of incongruent words than solid-color squares.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

12. Of course a certain number of scientists have to go mad, just to keep the tradition alive.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

13. The archaeologist Schliemann discovered the ruins of the ancient city of Troy.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

14. These results are consistent with the current literature on focalizaton and question the Erickson and Mattson (1981) claim that the Moses illusion is not dependent on a misdirection of focus.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

15. Away ran the girls, too eager to get in to have time for speech.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

7.) How complex is the sentence?
"The cat sat on the mat" is a not at all complex sentence (rating 0: not at all complex), where as "The girl from next door's tortoiseshell cat, which she had received from her great aunt before she emigrated to the West Indies four years ago, sat, contentedly washing, on the burgundy doormat" is a lot more complex (rating 4: extremely complex). Complex sentences may have to be read and reread in order to disentangle them, while not complex sentences are usually understood quickly and don't need to be mentally teased apart.

1. Noah took two animals of each type on the Ark.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

2. Bloodletting, generally accomplished with the aid of leeches, was thought to remove "poisons" from the blood.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

3. It was President Kennedy, who was killed in Dallas in 1963.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

4. Snow White was sheltered by seven dwarfs before marrying her prince.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

5. Calcium phosphate is a mineral salt and is the principal mineral constituent of bones and teeth.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

6. In the October revolution of 1917 the Bolsheviks took under the leadership of Lenin the power in Russia.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

7. In what mythology was Venus known as the Goddess of Love?
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

8. The future of Barclays, one of Britain's biggest banking groups, was thrown into doubt yesterday with the shock resignation of its chief executive, Martin Taylor.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

9. Inspector Morse who does his policing in Oxford was invented by Colin Dexter.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

10. This particular pool of light moving in a mesmeric manner backwards and forwards picked out from time to time a long red island of spilt wine.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

11. Subjects averaged 47 seconds longer to name ink colors of incongruent words than solid-color squares.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

12. Of course a certain number of scientists have to go mad, just to keep the tradition alive.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

13. The archaeologist Schliemann discovered the ruins of the ancient city of Troy.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

14. These results are consistent with the current literature on focalizaton and question the Erickson and Mattson (1981) claim that the Moses illusion is not dependent on a misdirection of focus.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

15. Away ran the girls, too eager to get in to have time for speech.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

8.) How formal is the style of the sentence?
 "I punched the sucker in the nose" is very informal (rating 0: not at all formal), but expressed the same sort of idea as "I struck the unseemly fellow a blow on the proboscis" which is extremely formal. (rating 4: extremely formal).

1. Noah took two animals of each type on the Ark.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

2. Bloodletting, generally accomplished with the aid of leeches, was thought to remove "poisons" from the blood.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

3. It was President Kennedy, who was killed in Dallas in 1963.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

4. Snow White was sheltered by seven dwarfs before marrying her prince.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

5. Calcium phosphate is a mineral salt and is the principal mineral constituent of bones and teeth.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

6. In the October revolution of 1917 the Bolsheviks took under the leadership of Lenin the power in Russia.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

7. In what mythology was Venus known as the Goddess of Love?
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

8. The future of Barclays, one of Britain's biggest banking groups, was thrown into doubt yesterday with the shock resignation of its chief executive, Martin Taylor.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

9. Inspector Morse who does his policing in Oxford was invented by Colin Dexter.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

10. This particular pool of light moving in a mesmeric manner backwards and forwards picked out from time to time a long red island of spilt wine.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

11. Subjects averaged 47 seconds longer to name ink colors of incongruent words than solid-color squares.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

12. Of course a certain number of scientists have to go mad, just to keep the tradition alive.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

13. The archaeologist Schliemann discovered the ruins of the ancient city of Troy.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

14. These results are consistent with the current literature on focalizaton and question the Erickson and Mattson (1981) claim that the Moses illusion is not dependent on a misdirection of focus.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

15. Away ran the girls, too eager to get in to have time for speech.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

9.) How natural is the sentence?
 A natural sentence is one that you might have occasion to use in the real world. Thus "The car is parked in front of the house" is a natural sentence (rating 4: extremely natural), whereas "There is a hippo in the fridge" or "My mother has a halo" are not at all natural (rating 0: not at all natural).

1. Noah took two animals of each type on the Ark.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

2. Bloodletting, generally accomplished with the aid of leeches, was thought to remove "poisons" from the blood.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

3. It was President Kennedy, who was killed in Dallas in 1963.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

4. Snow White was sheltered by seven dwarfs before marrying her prince.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

5. Calcium phosphate is a mineral salt and is the principal mineral constituent of bones and teeth.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

6. In the October revolution of 1917 the Bolsheviks took under the leadership of Lenin the power in Russia.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

7. In what mythology was Venus known as the Goddess of Love?
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

8. The future of Barclays, one of Britain's biggest banking groups, was thrown into doubt yesterday with the shock resignation of its chief executive, Martin Taylor.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

9. Inspector Morse who does his policing in Oxford was invented by Colin Dexter.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

10. This particular pool of light moving in a mesmeric manner backwards and forwards picked out from time to time a long red island of spilt wine.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

11. Subjects averaged 47 seconds longer to name ink colors of incongruent words than solid-color squares.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

12. Of course a certain number of scientists have to go mad, just to keep the tradition alive.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

13. The archaeologist Schliemann discovered the ruins of the ancient city of Troy.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

14. These results are consistent with the current literature on focalizaton and question the Erickson and Mattson (1981) claim that the Moses illusion is not dependent on a misdirection of focus.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

15. Away ran the girls, too eager to get in to have time for speech.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

10.) How literally is the sentence meant?

If a sentence is very literal, the words mean what they say. For example, "The jar is on the table" probably does refer to a jar which is placed on top of a table (rating 4: extremely literal), while "It's raining cats and dogs" is not at all about mammals falling from the sky (rating 0: not at all literal). Similarly "Can you open the window?" is not usually very literal at all, as in most cases it would be used in a context that was not about discovering the addressee's ability to open the window (rating 1: slightly literal).

1. Noah took two animals of each type on the Ark.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

2. Bloodletting, generally accomplished with the aid of leeches, was thought to remove "poisons" from the blood.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

3. It was President Kennedy, who was killed in Dallas in 1963.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

4. Snow White was sheltered by seven dwarfs before marrying her prince.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

5. Calcium phosphate is a mineral salt and is the principal mineral constituent of bones and teeth.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

6. In the October revolution of 1917 the Bolsheviks took under the leadership of Lenin the power in Russia.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

7. In what mythology was Venus known as the Goddess of Love?
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

8. The future of Barclays, one of Britain's biggest banking groups, was thrown into doubt yesterday with the shock resignation of its chief executive, Martin Taylor.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

9. Inspector Morse who does his policing in Oxford was invented by Colin Dexter.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

10. This particular pool of light moving in a mesmeric manner backwards and forwards picked out from time to time a long red island of spilt wine.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

11. Subjects averaged 47 seconds longer to name ink colors of incongruent words than solid-color squares.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

12. Of course a certain number of scientists have to go mad, just to keep the tradition alive.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

13. The archaeologist Schliemann discovered the ruins of the ancient city of Troy.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

14. These results are consistent with the current literature on focalizaton and question the Erickson and Mattson (1981) claim that the Moses illusion is not dependent on a misdirection of focus.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

15. Away ran the girls, too eager to get in to have time for speech.
not at all ☐ 0   **slightly** ☐ 1   **moderately** ☐ 2   **very** ☐ 3   **extremely** ☐ 4

11.) Underline the part of each sentence that the main focus is placed upon.
For example, "Newton discovered gravity by having an apple fall on his head" or "The mist has dispersed a bit, but it is still a very gloomy looking swamp".

1. Noah took two animals of each type on the Ark.

2. Bloodletting, generally accomplished with the aid of leeches, was thought to remove "poisons" from the blood.

3. It was President Kennedy, who was killed in Dallas in 1963.

4. Snow White was sheltered by seven dwarfs before marrying her prince.

5. Calcium phosphate is a mineral salt and is the principal mineral constituent of bones and teeth.

6. In the October Revolution of 1917 the Bolsheviks took under the leadership of Lenin the power in Russia.

7. In what mythology was Venus known as the Goddess of Love?

8. The future of Barclays, one of Britain's biggest banking groups, was thrown into doubt yesterday with the shock resignation of its chief executive, Martin Taylor.

9. Inspector Morse, who does his policing in Oxford was invented by Colin Dexter.

10. This particular pool of light moving in a mesmeric manner backwards and forwards picked out from time to time a long red island of spilt wine.

11. Subjects averaged 47 seconds longer to name ink colors of incongruent words than solid-color squares.

12. Of course a certain number of scientists have to go mad, just to keep the tradition alive.

13. The archaeologist Schliemann discovered the ruins of the ancient city of Troy.

14. These results are consistent with the current literature on focalizaton and question the Erickson and Mattson (1981) claim that the Moses illusion is not dependent on a misdirection of focus.

15. Away ran the girls, too eager to get in to have time for speech.

Thank you very much for taking part in this study!

Appendix 8: "The War of the Ghosts" as used by Bartlett (1995[1932])

One night two young men from Egulac went down to the river to hunt seals, and while they were there it became foggy and calm. Then they heard war-cries, and they thought: "Maybe this is a war-party". They escaped to the shore, and hid behind a log. Now canoes came up, and they heard the noise of paddles, and saw one canoe coming up to them. There were five men in the canoe, and they said: "What do you think? We wish to take you along. We are going up the river to make war on the people".

One of the young men said: "I have no arrows".

"Arrows are in the canoe", they said.

"I will not go along. I might be killed. My relatives do not know where I have gone. But you", he said, turning to the other, "may go with them."

So one of the young men went, but the other returned home. And the warriors went on up the river to a town on the other side of Kalama. The people came down to the water, and they began to fight, and many were killed. But presently the young man heard one of the warriors say: "Quick, let us go home, that Indian has been hit".

Now he thought: "Oh, they are ghosts".

He did not feel sick, but they said he had been shot.

So the canoes went back to Egulac, and the young man went ashore to his house, and made a fire. And he told everybody and said: "Behold I accompanied the ghosts, and we went to fight. Many of our fellows were killed, and many of those who attacked us were killed. They said I was hit, and I did not feel sick".

He told it all, and then he became quiet. When the sun rose he fell down. Something black came out of his mouth. His face became contorted. The people jumped up and cried. He was dead.

Appendix 9: Example of the questionnaire used in Experiment 4a

For Section 1.

Below you are going to see a series of 52 statements. Some of these statements are correct and contain everyday trivia or facts. Such sentences are considered to be "NATURAL". Some of the statements contain elements that are incorrect thus making the sentence "UNNATURAL". (Please take myths and legends on their own terms: if that's how the story goes, it's "natural" for the purposes of this quiz.)

Your task is to read each statement and to judge which category each sentence belongs to and then to indicate (by placing an "X" in the brackets [] next to your choice of answer)
EITHER "NATURAL" OR "UNNATURAL".

Please note that this research is as much concerned with your immediate reaction as with your actual answer, so please respond promptly. If you should wish to correct an answer you have made, please indicate this by placing a "1" in the bracket by your immediate response, and a "2" in the bracket by your final response.

For Section 2.

Please do not look at part 2 until you have completed section 1.

Section 2. consists of 12 multiple-choice questions. Please enter the letter corresponding to your choice of answer in the space provided.

Thank you very much for taking part!

Section 1.

1. This year's Olympic Games took place in Sydney.
    NATURAL [   ]   UNNATURAL [   ]

2. The easiest planet to see in the night sky is Venus.
    NATURAL [   ]   UNNATURAL [   ]

3. The Princess of Wales died in a train crash in Paris.
    NATURAL [   ]   UNNATURAL [   ]

4. Aesop is best known for writing fables.
    NATURAL [   ]   UNNATURAL [   ]

5. Kimono-clad Geishas are a type of Chinese courtesan.
    NATURAL [   ]   UNNATURAL [   ]

6. The most famous six-word phrase from the first Star Wars movie is 'May the Force be with you.'
    NATURAL [   ]   UNNATURAL [   ]

7. Every leap year the 29th of February is skipped.
    NATURAL [   ]   UNNATURAL [   ]

8. The longest river in the world is the Thames.
    NATURAL [   ]   UNNATURAL [   ]

9. The Greek hero Paris fell madly in love with Helen, the most beautiful woman in the world.
    NATURAL [   ]   UNNATURAL [   ]

10. The Red Sea separates Africa from Asia.
    NATURAL [   ]   UNNATURAL [   ]

11. Moses took two animals of each kind on the Ark.
    NATURAL [   ]   UNNATURAL [   ]

12. Claustrophobic people are afraid of enclosed spaces.
    NATURAL [   ]   UNNATURAL [   ]

13. Mount Everest is the highest mountain in the world.
    NATURAL [   ]   UNNATURAL [   ]

14. In the mid-nineteenth century Ireland lost much of its population to starvation and emigration.
    NATURAL [   ]   UNNATURAL [   ]

15. In 1789, Abraham Lincoln was made the first President of the United States of America.
    NATURAL [   ]   UNNATURAL [   ]

16. China is the largest country in the world.
    NATURAL [   ]   UNNATURAL [   ]

17. Gershwin wrote a piece of music called 'An American in Paris.'
    NATURAL [   ]   UNNATURAL [   ]

18. The fastest growing plant in the world is the bamboo.
    NATURAL [   ]   UNNATURAL [   ]

19. Because he fell asleep while watching them, King Arthur allowed the cakes to burn.
    NATURAL [   ]   UNNATURAL [   ]

20. Penguins live only in the Antarctic.
    NATURAL [   ]   UNNATURAL [   ]

21. The light from the Sun takes 8 minutes and 20 seconds to reach the Earth.

NATURAL [   ]   UNNATURAL [   ]

22. The fastest thing we know is sound.
    NATURAL [   ]   UNNATURAL [   ]

23. In 1949, Siam became known as Vietnam.
    NATURAL [   ]   UNNATURAL [   ]

24. Robin Hood, the famous outlaw of Sherwood Forest, was enamoured of Maid Marion.
    NATURAL [   ]   UNNATURAL [   ]

25. Hannibal used elephants when he attempted to march on Rome.
    NATURAL [   ]   UNNATURAL [   ]

26. In August 1999 a total eclipse of the sun was visible from parts of England.
    NATURAL [   ]   UNNATURAL [   ]

27. While trying to hide from God, Joshua fell into the sea and was swallowed by a whale.
    NATURAL [   ]   UNNATURAL [   ]

28. The world's worst nuclear disaster took place in 1986 in Chernobyl.
    NATURAL [   ]   UNNATURAL [   ]

29. The laws of divorce allowed Henry VIII to get rid of two of his eight wives.
    NATURAL [   ]   UNNATURAL [   ]

30. The first object invented by humans that travelled faster than the speed of sound was a whip.
    NATURAL [   ]   UNNATURAL [   ]

31. The Trojans lost the war because they brought the wooden horse full of Greek warriors into their city.
    NATURAL [   ]   UNNATURAL [   ]

32. The planet that is closest to the Sun is Neptune.
    NATURAL [   ]   UNNATURAL [   ]

33. Charles Lindbergh was the first man to fly across the Pacific on his own.
    NATURAL [   ]   UNNATURAL [   ]

34. The evil queen was jealous of Snow White's beauty, and so wanted to have her killed.
    NATURAL [   ]   UNNATURAL [   ]

35. The Model T Ford was the world's first mass-produced car.
    NATURAL [   ]   UNNATURAL [   ]

36. There are more numbers in the Cyrillic alphabet than there are in ours.
    NATURAL [   ]   UNNATURAL [   ]

37. If an earthworm is cut in half, both halves survive.
    NATURAL [   ]   UNNATURAL [   ]

38. The imaginary lines that dived the earth from north to south are lines of longitude.
    NATURAL [   ]   UNNATURAL [   ]

39. BBC One now show their main evening news at 10 o'clock.
    NATURAL [   ]   UNNATURAL [   ]
40. The most expensive spice in the world is pepper.
    NATURAL [   ]   UNNATURAL [   ]

41. Captain Nemo was obsessed with hunting down the white whale Moby Dick.
    NATURAL [   ]   UNNATURAL [   ]

42. Tides are caused mainly by the gravitational pull of the Moon, but also by that of the Sun.
    NATURAL [   ]   UNNATURAL [   ]

43. The greatest coral deposit in the world lies off the coast of Australia.
     NATURAL [   ]   UNNATURAL [   ]

44. Braille invented a script of embossed dots to allow deaf people to learn to read.
     NATURAL [   ]   UNNATURAL [   ]

45. The Romans built Hadrian's Wall as the northern boundary of Roman Britain.
     NATURAL [   ]   UNNATURAL [   ]

46. The sense that suffers the greatest damage after someone is struck by lightning is the sense of hearing.
     NATURAL [   ]   UNNATURAL [   ]

47. Catherine the Great was a queen of Sweden.
     NATURAL [   ]   UNNATURAL [   ]

48. The liner ship Titanic hit an iceberg and sank.
     NATURAL [   ]   UNNATURAL [   ]

49. Adolf Hitler was the Leader of the Third Reich.
     NATURAL [   ]   UNNATURAL [   ]

50. To date, Gauguin's Sunflowers have fetched the highest price at auction
         of any painting.
     NATURAL [   ]   UNNATURAL [   ]

51.Grasses are the most common type of plant on Earth.
     NATURAL [   ]   UNNATURAL [   ]

52. The Richter scale measures the force of an earthquake.
     NATURAL [   ]   UNNATURAL [   ]

Section 2. Knowledge check.

Please indicate for each of the following statements which option (a), (b), (c) or (d) best fits in the gap in order to make the statement "natural." If you do not know the answer at all, please indicate this.

1. _____took two animals of each kind on the Ark.
    (a)Noah   (b)Moses   (c)Adam   (d)Esau

2. Because he fell asleep while watching them, King _____cakes to burn.
    a)Edward   (b)Wenceslas   (c)Alfred   (d)Arthur

3.Everyleapyearthe29thofFebruary
    (a)is skipped   (b)is added   (c)is a public holiday   (d)is the first day of Lent

4. In 1789, _____was made the first President of the United States of America.
    (a)Abraham Lincoln   (b) George Bush   (c)George Washington   (d)Teddy Roosevelt

5. Kimono-clad Geishas are a type of _____courtesan.
    (a)Thai   (b)Japanese   (c)Chinese   (d)Turkish

6. Captain _____ was obsessed with hunting down the white whale Moby Dick.
    (a)Ahab   (b)Kirk   (c)Cook   (d)Nemo

7.Charles Lindbergh was the first man to fly across the _____on his own.
    (a)lndian Ocean   (b)Atlantic Ocean   (c)Pacific Ocean   (d)Bering Sea

8. To date, _____ Sunflowers have fetched the highest price at auction of any painting.
    (a)Picasso's   (b) Gauguin's   (c)Monet's   (d)Van Gogh's

9. There are more _____ in the Cyrillic alphabet than there are in ours.
    (a)numbers   (b)letters   (c)syllables   (d)integers

10. Braille invented a script of embossed dots to allow _____ people to read.
    (a)blind   (b)dumb   (c)deaf   (d)lame

11. The laws of divorce allowed Henry VIII to get rid of two of _____wives.

    (a)4   (b)6   (c)8   (d)10

12. While trying to hide from God, _____ fell into the sea and was swallowed by a whale.
    (a)Jonah   (b)Jesus   (c)Jeremiah   (d)Joshua

End of section 2.

Thank you very much for taking part.

Appendix 10: Example of the questionnaire used in Experiment 4b

Sentence puzzle quiz

For Section 1.

Below you will see a series of 26 sentence puzzles. Each of these puzzles consists of a number of meaningful components represented by one or more words in square brackets (e.g. **[Last year's], [took place], [in Sydney], [Olympic Games]**). Please look carefully at the sentence components. **Without** changing any of these components, is it possible to combine all of the components into a truthful statement? Please circle the appropriate answer. If you answer YES, please write down the sentence, if you answer NO, please note down why it does not work. So for the example above, the correct answer would be "YES" and the truthful statement would be "Last year's Olympic Games took place in Sydney." (N.B. the first element of each sentence starts with a capital letter.)

And here is another example:
[released], [Ali Baba], [the lamp], [by rubbing], [the genie]
The correct answer in this case would be NO. While the components could be made into a coherent statement ("Ali Baba released the genie by rubbing the lamp."), the statement itself is not true: Aladdin rubbed the lamp, not Ali Baba.

Alternatively the answer could be wrong for another reason:
e.g. **[the Prime Minister], [Tony Blair], [of the United Kingdom]**
The correct answer in this case is NO because there is no verb, and therefore the components cannot be turned into a truthful complete sentence.

For Section 2.

Please do not look at section 2 until you have completed section 1.

Section 2 consists of 6 multiple-choice questions. Please answer these as accurately as possible.

Thank you very much for taking part in this study.

****

Section 1.

1. [in the night sky] [Venus] [to see] [planet] [is] [the easiest]

    YES   NO

_____

2. [died] [The Princess of Wales] [in a train crash] [in Paris]

    YES   NO

_____

3. [measures] [of an earthquake] [The Richter scale] [the force]

    YES   NO

_____

4. [the first President] [was made] [Abraham Lincoln] [of the United States of America]

    YES   NO

_____

5. [people] [of enclosed spaces] [are afraid] [Claustrophobic]

    YES   NO

_____

6. [mountain] [the highest] [Mount Everest] [in the world] [is]

    YES   NO

_____

7. [in the world] [the fastest growing] [is] [The bamboo] [plant]

    YES   NO

_____

8. [two animals] [of each kind] [Moses] [took] [on the Ark]

    YES   NO

_____

9. [in the Antarctic] [live] [Penguins] [only]

    YES   NO

_____

10. [we know] [The fastest] [thing] [is] [sound]

    YES   NO

_____

11. [the Earth] [The light] [to reach] [takes approximately] [from the Sun] [8 minutes and 20 seconds]

    YES   NO

_____

12. [Robin Hood] [of Sherwood Forest] [Maid Marion] [the famous outlaw] [was enamoured of]

    YES   NO

_____

13. [was visible] [In August 1999] [a total] [of the Sun] [from] [parts of England]

    YES   NO

_____

14. [While] [by a whale] [trying] [Joshua] [fell] [into the sea] [and] [was swallowed] [to hide from God]

YES   NO

_____

15. [The first object] [by humans] [invented] [that] [moved] [the speed of sound] [faster than] [was] [the tip of a whip]

YES   NO

_____

16. [the wooden horse] [The Trojans] [lost the war] [because] [into their city] [they brought] [full of Greek Warriors]

YES   NO

_____

17. [on his own] [Charles Lindbergh] [the first man] [was] [to fly] [across the Pacific]

YES   NO

_____

18. [If] [survive] [an earthworm] [is cut in half] [both halves]

YES   NO

_____

19. [the Nile] [river] [The longest] [in the world]

YES   NO

_____

20. [than there are] [in the Cyrillic alphabet] [There are] [more numbers] [in ours]

YES   NO

_____

21. [The imaginary lines] [the earth] [are] [from north to south] [lines of longitude] [that divide]

YES   NO

_____

22. [Tides] [by that of the Sun] [mainly] [by the gravitational pull] [of the Moon] [but also] [are caused]

YES   NO

_____

23. [off the coast of Australia] [The greatest] [in the world] [coral deposit] [lies]

YES   NO

_____

24. [to read] [Braille] [invented] [to allow] [deaf people] [a script of embossed dots]

YES   NO

_____

25. [The Romans] [of Roman Britain] [built] [Hadrian's Wall] [at the northern boundary]

YES   NO

_____

26. [and] [hit] [an iceberg] [The liner ship] [sank] [Titanic]

YES   NO

_____

End of Section 1.

Section 2. Knowledge Check

Please indicate for each of the following statements which option (a), (b), (c) or (d) best fits the gap in order to make the statement truthful. if you do not know the answer at all, please indicate this.

1. _____ took two animals of each kind on the Ark.

   (a)Noah   (b) Moses   (c) Adam   (d) Esau

2. _____ was made the first President of the United States of America.

   (a) Abraham Lincoln   (b) George Bush   (c) George Washington   (d) Teddy Rooseveldt

3. Charles Lindbergh was the first man to fly across the _____ on his own.

   (a) Indian Ocean   (b) Atlantic Ocean   (c) Pacific Ocean   (d) Bering Sea

4. There are more _____ in the Cyrillic alphabet than there are in ours

   (a) numbers   (b) digits   (c) letters   (d) integers

5. Braille invented a script of embossed dots to allow_____ people to read.

   (a) blind   (b) dumb   (c) deaf   (d) lame

6. While trying to hide from God, _____ fell into the sea and was swallowed by a whale.

   (a) Jonah   (b) Jesus   (c) Jeremiah   (d) Joshua

****

End of Section 2.

Thanks again for taking part!

If you want to know more about my research, email me on <u>abuttner@brookes.ac.uk</u>, and I'll try to answer your questions.

Appendix 11: Screen-captures of the website used in Experiment 5
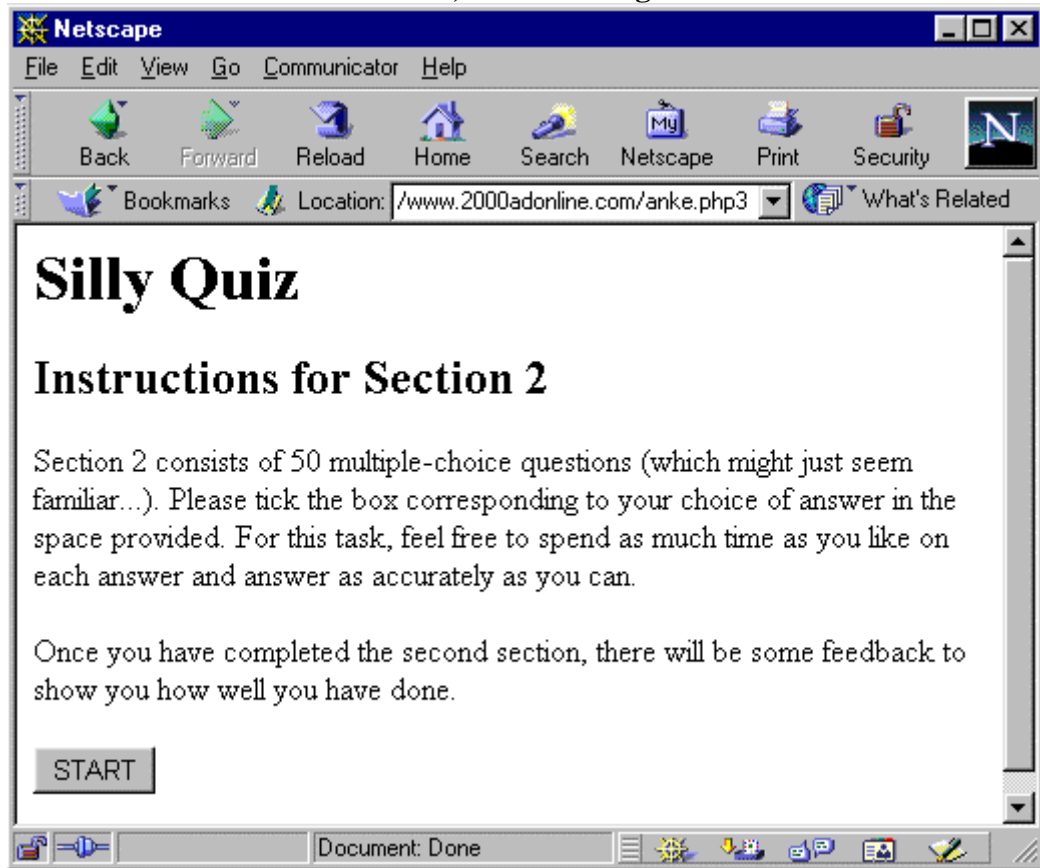
**When opening the website, participants were presented with the following screen:**
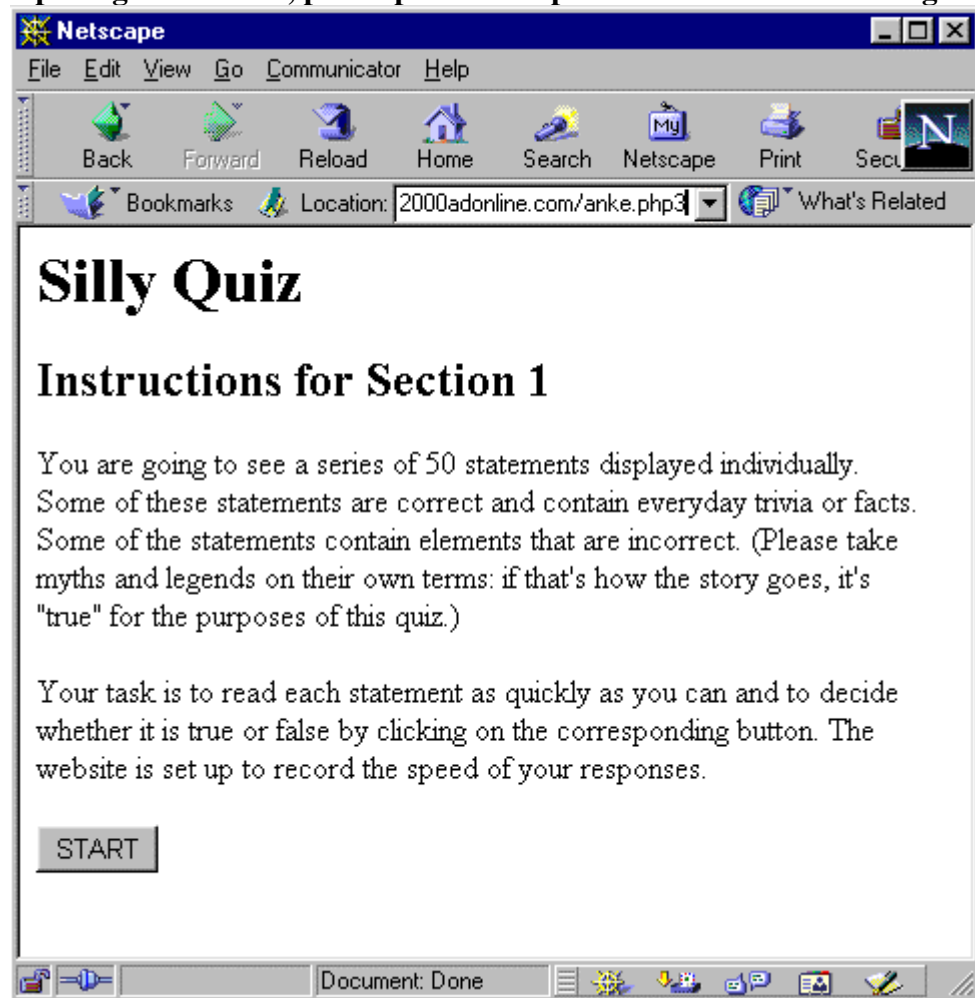
The sentences were presented individually, with true/false buttons for responses:
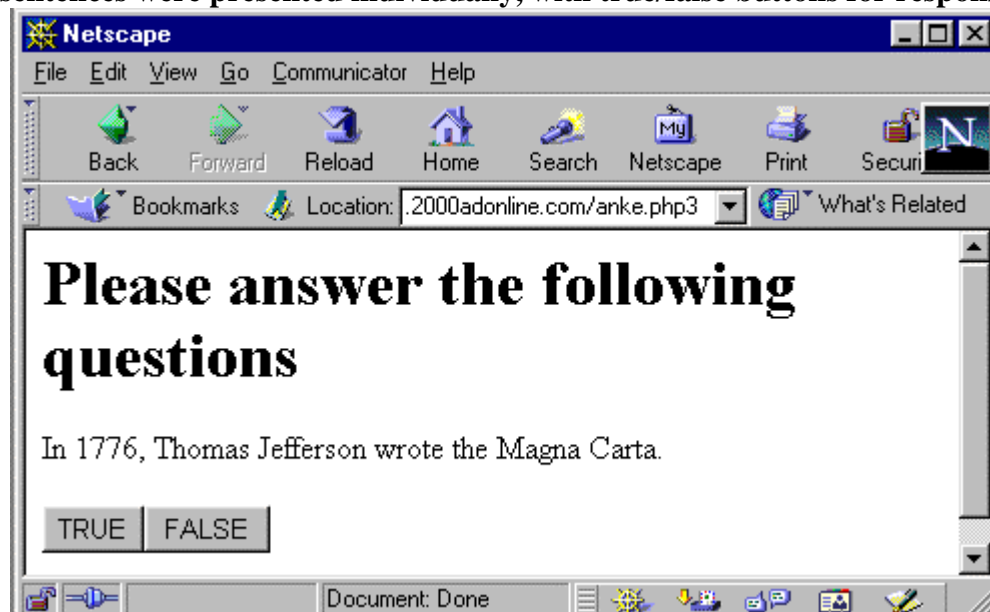
Once the verification task was finished, the knowledge check instructions were displayed:

All knowledge check statements were presented on the same page, with a 'tickable' dot next to each suggested answer, for participants to mark their responses.
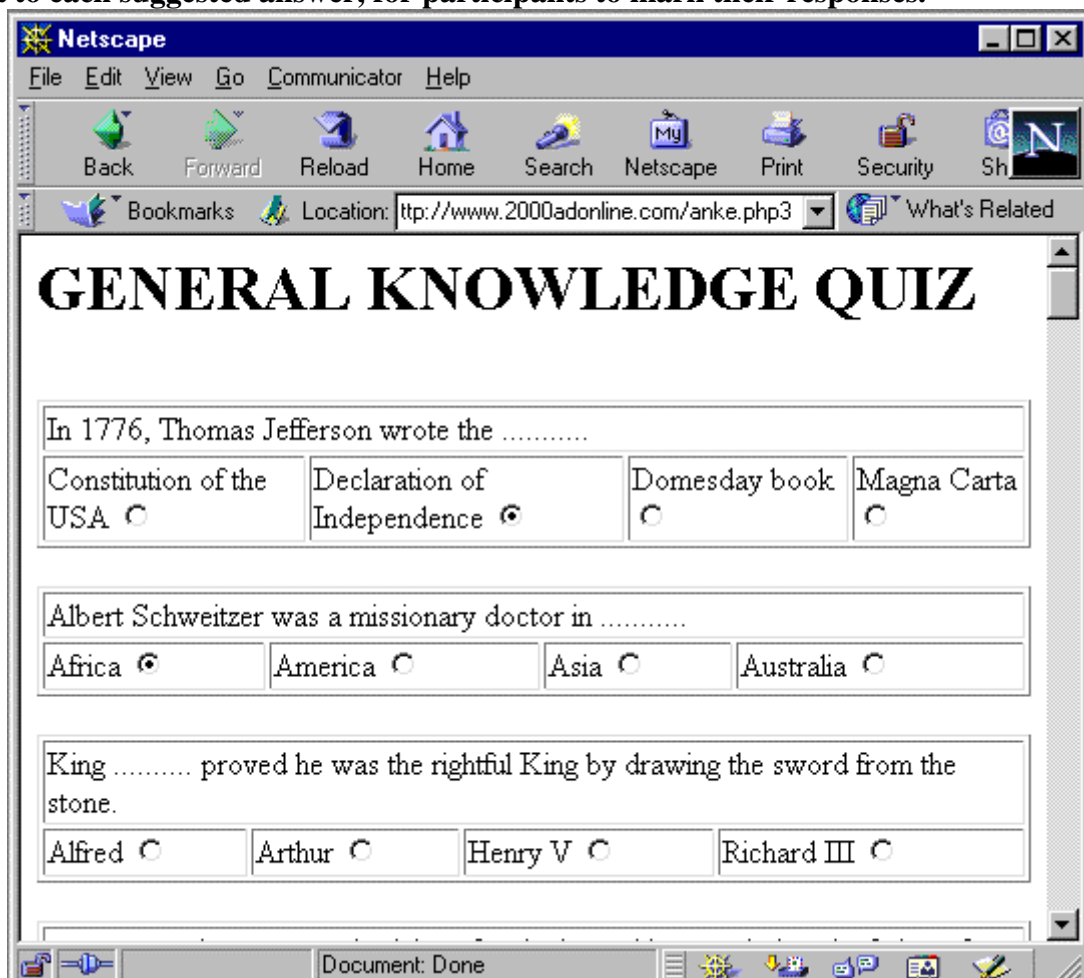
Appendix 12: Filler and target sentences used in Experiment 5

Target sentences were identical for the two groups and are presented in *italics.*

'Mostly False'	'Mostly True'
In 1776, Thomas Jefferson wrote the Magna Carta.	In 1776, Thomas Jefferson wrote the Declaration of Independence.
Albert Schweitzer was a missionary doctor in Africa.	Albert Schweitzer was a missionary doctor in Australia.
King Richard III proved he was the rightful King by drawing the sword from the stone.	King Arthur proved he was the rightful King by drawing the sword from the stone.
Socrates was the greatest physician of antiquity and is regarded as the father of medicine.	***Socrates was the greatest physician of antiquity and is regarded as the father of medicine.***
Pierce Brosnan was the first James Bond actor in the movie "Dr. No" in 1962.	Sean Connery was the first James Bond actor in the movie "Dr. No" in 1962.
"Snow White and the seven Gnomes" was the first full-length animated film produced by Walt Disney.	"Snow White and the seven Dwarfs" was the first full-length animated film produced by Walt Disney.
The Egyptians mummified their dead to help the bodies decompose more rapidly.	The Egyptians mummified their dead to prevent the bodies from decomposing.
Sound waves travel at 1100 meters per second through the air.	***Sound waves travel at 1100 meters per second through the air.***
The first printing press was built by Johannes Gutenberg in Germany and used to print a Bible.	The first printing press was built by Johannes Gutenberg in Switzerland and used to print a Bible.
The surrealist artist M. C. Escher painted many strange pictures, including one of melting clocks and one of swans reflecting elephants.	The surrealist artist Salvador Dali painted many strange pictures, including one of melting clocks and one of swans reflecting elephants.
The young of bats like the young of dogs are called pups.	The young of bats like the young of dogs are called cubs.
Snowdon in Scotland is the highest mountain in the British Isles.	Ben Nevis in Scotland is the highest mountain in the British Isles.
"Also sprach Zarathustra" which has been used as the film music for "2001" was composed by Richard Wagner.	***"Also sprach Zarathustra" which has been used as the film music for "2001" was composed by Richard Wagner.***
Reptiles skin is usually silky to the touch.	Reptiles skin is usually slimy to the touch.
The lead role in the TV series "Buffy the Vampire Slayer" is played by Judy Dench.	The lead role in the TV series "Buffy the Vampire Slayer" is played by Sarah Michelle Gellar.
The scientific name for the Northern Lights is aurora australis.	The scientific name for the Northern Lights is aurora borealis.
To date, "Titanic" was the highest grossing movie of all time.	To date, "Blair Witch Project" was the highest grossing movie of all time.
The River Danube flows through Bucharest, the capital city of Hungary.	***The River Danube flows through Bucharest, the capital city of Hungary.***
The muscles that bend the fingers are located in the elbow.	The muscles that bend the fingers are located in the forearm.
Type AB is the most common type of human blood in the world.	Type 0 is the most common type of human blood in the world.
Braille invented a script of embossed dots to allow deaf people to read.	***Braille invented a script of embossed dots to allow deaf people to read.***
A circle's circumference is calculated by the equation pi-r-squared, where r is the radius of the circle.	A circle's area is calculated by the equation pi-r-squared, where r is the radius of the circle.
Karl Marx and Friedrich Engles were the fathers of capitalism.	*Karl Marx and Friedrich Engles were the fathers of capitalism.*
English Soldiers were nicknamed "Johnnies" during the First World War.	English Soldiers were nicknamed "Tommies" during the First World War.
Queen Elizabeth I ruled England for longer than Queen Victoria.	Queen Elizabeth I ruled England for less long than Queen Victoria.
David slew the giant Samson with a well-aimed stone from his sling-shot.	***David slew the giant Samson with a well-aimed stone from his sling-shot.***

The black widow spider is the largest spider in the world.	The tarantula is the largest spider in the world.
A kelpie was a water spirit in folklore that could slip out of its seal skin to turn into a beautiful human.	A selkie was a water spirit in folklore that could slip out of its seal skin to turn into a beautiful human.
Stonehenge is the most famous stone circle in existence.	Stonehenge is the most famous dolmen in existence.
The Statue of Liberty was given to the USA by England.	The Statue of Liberty was given to the USA by France.
In 1605, the Gun Powder Plot failed when Oliver Cromwell was seized before he could blow up the English Parliament.	In 1605, the Gun Powder Plot failed when Guy Fawkes was seized before he could blow up the English Parliament.
Lady Godiva rode naked through the market-place of Newcastle, so that her husband would reduce the taxes on the populace.	*Lady Godiva rode naked through the market-place of Newcastle, so that her husband would reduce the taxes on the populace.*
Franklin D. Roosevelt was re-elected for a fourth term after 3 terms in office.	Franklin D. Roosevelt resigned after 3 terms in office.
Alexander Graham Bell invented the light bulb.	Alexander Graham Bell invented the telephone.
There are 42 dots on a pair of dice.	There are 36 dots on a pair of dice.
"Give me somewhere to stand," said Pythagoras," and I will move the earth."	*"Give me somewhere to stand," said Pythagoras," and I will move the earth."*
The name for a winged horse that rises from the ashes of its own funeral pyre in classical mythology is Phoenix.	The name for a beautiful bird that rises from the ashes of its own funeral pyre in classical mythology is Phoenix.
Napoleon Bonaparte was born on the Mediterranean island of Jersey.	Napoleon Bonaparte was born on the Mediterranean island of Corsica.
Thieves tried to steal diamonds from the Millenium Dome at Greenwich shortly before it was closed down.	Thieves tried to steal diamonds from the National Maritime Museum at Greenwich shortly before it was closed down.
A claymore was a two-handed sword used by Irish highlanders.	A claymore was a two-handed sword used by Scottish highlanders.
George Washington was the first president of the USA to be assassinated.	Abraham Lincoln was the first president of the USA to be assassinated.
Hitler wrote his book "Mein Kampf" before he came to power in 1945.	*Hitler wrote his book "Mein Kampf" before he came to power in 1945.*
Antarctica is the only continent without reptiles or snakes.	Europe is the only continent without reptiles or snakes.
While trying to hide from God, Joshua fell into the sea and was swallowed by a whale.	*While trying to hide from God, Joshua fell into the sea and was swallowed by a whale.*
Greenwich Mean Time first became accepted in Britain with the growth of the railways in the late 15th century.	Greenwich Mean Time first became accepted in Britain with the growth of the railways in the late 19th century.
Ebenezer Scrooge's catchphrase in Dickens' "A Christmas Carol" was "I don't believe it!".	Ebenezer Scrooge's catchphrase in Dickens' "A Christmas Carol" was "Bah humbug!".
Libra the scales is the only inanimate symbol in the Zodiac.	Libra the scales is the only non-animal symbol in the Zodiac.
The name of the Wednesday before Easter is Ash Wednesday.	The name of the first Wednesday of Lent is Ash Wednesday.
There are 26 numbers in the Roman alphabet.	*There are 26 numbers in the Roman alphabet.*
Psychology is the study of all aspects of human life and culture.	Anthropology is the study of all aspects of human life and culture.

Appendix 13: Target sentences used in Experiments 6a and 6b

(Correct target word in parentheses.)

1. Wellington's (Nelson's) victory is commemorated by his column in Trafalgar Square.

2. Jacob (Joseph) was given a coat of many colours by his father.

3. The eruption of Mount Etna (Vesuvius) destroyed the Roman city of Pompeii.

4. Snow White (Sleeping Beauty) slept for 100 years after she pricked her finger.

5. At the end of the 15th century Australia (America) was discovered by Christopher Columbus.

6. David killed the giant Samson (Goliath) with his slingshot.

7. Jane Marple (Agatha Christie) created Hercule Poirot the Belgian detective.

8. The mysterious Mona Lisa is Michelangelo's (Leonardo's) most famous painting.

9. By rubbing the lamp, Ali Baba (Aladdin) released the genie.

10. Moses (Noah) took two animals of each kind on the Ark.

11. The Beatles began their career in Manchester (Liverpool) at the Cavern Club.

12. Because he fell asleep while watching them, King Arthur (King Alfred) allowed the cakes to burn.

13. The 29th of February is skipped (is added) in every leap year.

14. In 1789, Abraham Lincoln (George Washington) became the first President of the United States.

15. The kimono-clad courtesans who perform the Chinese (Japanese) tea ceremony are called Geishas.

16. Captain Nemo (Ahab) was obsessed with hunting down Moby Dick the white whale.

17. Charles Lindbergh was the first man to fly across the Pacific Ocean (Atlantic Ocean) on his own.

18. Gauguin's (Van Gogh's) Sunflowers have fetched the highest price of any painting at auction to date.

19. There are more numbers (letters) in the Cyrillic alphabet than there are in ours.

20. Braille invented a script of embossed dots to allow deaf (blind) people to read.

21. The laws of divorce allowed Henry the Eighth to get rid of two of his 8 (6) wives.

22. While trying to hide from God, Joshua (Jonah) fell into the sea and was swallowed by a whale.

23. The deadliest of all insects (arachnids) is the black widow spider.

24. Frank Sinatra's (Bing Crosby's) "White Christmas" is the highest-grossing holiday song of all time.

Appendix 14: Ethics approval

As official Ethics approval procedures for psychological research at Oxford Brookes University were not yet formalised for much of the time during which the research for this thesis was carried out, ethics approval for most of the experiments presented was given on a fairly informal basis by the Psychology Department's Ethics Officer. By the time Experiments 6a and 6b were carried out, official procedures had been instated, and an Ethics Approval form (E1) was included in the original printed dissertation.