Task	FALSBEL (v211124)
Duration (s)	318 (plus 10s of reference scans for multi echo, as 'Stay very still' screen shown)
Volume #	318 (12 T1 stabilization, 306 usable, all 318 images saved)
TR (s)	1.00
Stimuli	Stories and questions concerning beliefs and photographs.
Stimuli manipulations	For stories and questions, text is center justified. True and False options are shown below each question.
Task requirements	Participants are instructed to read a 4-6 line passage and then read and respond to a question, using a left index finger button press if the question is true or a right index finger button press if it is false.
# of runs	4
Run creation	Adapted from TOM_set_maker.m (Braga, Hutchison). No story/question is repeated across all runs. Each of 4 runs contains 5 Belief, and 5 Photo stories.
Possibility of more runs?	Only by generating more stimuli. 8 stimuli are currently unused in the testing sessions: 2 are used in the task run-through booklet (to explain each task prior to scans) and 4 as practice stimuli.
Design	B-S = Belief Story, P-S = Photo Story; Q = question, and Q numbers refer to the unique S+Q number from the 48-story stimulus set, also shown in the "Detailed Orders" below as "Q_Num". Each story is presented for 10s and question for 5s.

FALSBEL1
[12s (+)] : 6s (+), [15s (B-S+Q20), 15s (+)], [15s (P-S+Q25), 15s (+)],
[15s (P-S+Q40), 15s (+)], [15s (B-S+Q14), 15s (+)], [15s (P-S+Q48), 15s (+)],
[15s (B-S+Q16), 15s (+)], [15s (P-S+Q28), 15s (+)], [15s (B-S+Q19), 15s (+)],
[15s (B-S+Q13), 15s (+)], [15s (P-S+Q34), 15s (+)]

FALSBEL2
[12s (+)] : 6s (+), [15s (P-S+Q44), 15s (+)], [15s (B-S+Q2), 15s (+)],
[15s (B-S+Q7), 15s (+)], [15s (P-S+Q33), 15s (+)], [15s (B-S+Q10), 15s (+)],
[15s (P-S+Q39), 15s (+)], [15s (B-S+Q21), 15s (+)], [15s (P-S+Q31), 15s (+)],
[15s (P-S+Q24), 15s (+)], [15s (B-S+Q36), 15s (+)]

FALSBEL3
[12s (+)] : 6s (+), [15s (P-S+Q45), 15s (+)], [15s (B-S+Q9), 15s (+)],
[15s (B-S+Q12), 15s (+)], [15s (P-S+Q37), 15s (+)], [15s (B-S+Q22), 15s (+)],
[15s (P-S+Q27), 15s (+)], [15s (B-S+Q8), 15s (+)], [15s (P-S+Q30), 15s (+)],
[15s (P-S+Q26), 15s (+)], [15s (B-S+Q1), 15s (+)]

FALSBEL4
[12s (+)] : 6s (+), [15s (B-S+Q23), 15s (+)], [15s (P-S+Q43), 15s (+)],
[15s (P-S+Q46), 15s (+)], [15s (B-S+Q11), 15s (+)], [15s (P-S+Q47), 15s (+)],
[15s (B-S+Q15), 15s (+)], [15s (P-S+Q35), 15s (+)], [15s (B-S+Q3), 15s (+)],
[15s (B-S+Q4), 15s (+)], [15s (P-S+Q32), 15s (+)]

	1	2	3	4	5	6	7	8	9	10
FALSBEL1	B	P	P	B	P	B	P	B	B	P
FALSBEL2	P	B	B	P	B	P	B	P	P	B
FALSBEL3	P	B	B	P	B	P	B	P	P	B
FALSBEL4	B	P	P	B	P	B	P	B	B	P

Trials/Block/Run	5 S+Q per condition per run x 4 runs = 40 total S+Qs
Trial timing	10s story, 5s question/response, followed by 15s fixation crosshair ISI = 30s ITI
Goal	To probe DN-B and localize regions involved mentalizing.
Other Notes	The False Belief task was created by the SaxeLab – see Dodell-Feder, Koster-Hale, Bedny & Saxe (2011) *Neuroimage*. Additional stimuli provided by R. Saxe; used with permission.

Instruction Screen:

Stories Task

John went shopping and forgot to take his credit card with him. When he got to the shop, he told the assistant he was just browsing.

The assistant knows that John doesn't have his credit card.

True   False

True   False

Example Story:

Lillian titled her novel How to Cook a Grouse and submitted it to her publisher. Her publisher retitled the novel How to Cook a Pheasant and sent it off for publication without informing Lillian.

Example Question:

In the bookstore, Lillian notices the
title is How to Cook a Grouse.

True   False

Fixation Screen:

+

Detailed Orders Below:

Time_Start(s) indicates the start of a story after removal of the 12s for T1 stabilization, starting at 0. Q_Num refers to the unique S+Q number from the 48-story stimulus set.

FALSBEL1

Time_Start(s)	Q_Num	Condition	Story_Text	Question_Text	Answer
6	20	Belief	John told Mary that he had lost his keys. The two of them searched the house with no luck. Then Mary went outside to look in the car. Suddenly John noticed his keys behind the sofa.	By the time Mary comes in, John doesn't know where his keys are.	FALSE
36	25	Photo	The traffic camera snapped an image of the black car as it sped through the stoplight. Soon after the car was painted red and the license plates were changed.	According to the traffic camera, the car is black.	TRUE
66	40	Photo	The girl's middle school pictures showed her wearing a white blouse. Later a red sock was accidentally washed with the blouse and the blouse turned pink.	Today the color of the blouse is white.	FALSE
96	14	Belief	A window wiper was commissioned by a CEO to wipe an entire building. He finished the right side but his platform broke before he could do the left side. The next morning the CEO arrived with foreign investors.	The CEO comes to work and discovers that all of the walls are cleaned.	FALSE
126	48	Photo	When the picture was taken of the house it was one story tall. Since then the renovators added an additional story and a garage.	The house is currently one story.	FALSE
156	16	Belief	Hopeful to catch a prize fish, George went fishing. That afternoon he saw his fishing line bend over as if he had caught a big fish. Actually, George's fishing pole had snagged a small tire.	At the end of the fishing line, George sees a fish.	FALSE
186	28	Photo	A large oak tree stood in front of City Hall from the time the building was built. Last year the tree fell down and was replaced by a stone fountain.	An antique drawing of City Hall shows a fountain in front.	FALSE
216	19	Belief	Susie parked her sportscar in the driveway. In the middle of the night Nathan moved her car into the garage to make room for his minivan. Susie woke up early in the morning.	Susie sees the minivan in the driveway.	TRUE
246	13	Belief	At night a bear broke into a cooler near a tent and drank the soda. Five hours later, the campers woke up and went to their cooler for breakfast.	In the cooler, the campers find no soda.	TRUE
276	34	Photo	A biography describes the room as it was in 1965. Originally the walls were covered in dark wallpaper. By 1965 the paper had been stripped and replaced with cream paint.	The biography says that the room was light.	FALSE

FALSBEL2

Time_Start(s)	Q_Num	Condition	Story_Text	Question_Text	Answer
6	44	Photo	Old maps of the islands near Titan are displayed in the Maritime museum. Erosion has since taken its toll, leaving only the three largest islands.	Near Titan today there are many islands.	FALSE
36	2	Belief	Larry chose a debated topic for his class paper due on Friday. The news on Thursday indicated that the debate had been solved but Larry never read it.	When Larry writes his paper he thinks the debate has been solved.	FALSE
66	7	Belief	Jenny put her chocolate away in the cupboard. Then she went outside. Alan moved the chocolate from the cupboard into the fridge. Half an hour later, Jenny came back inside.	Jenny expects to find her chocolate in the cupboard.	TRUE
96	33	Photo	Part of the garden is supposed to be reserved for the roses. Recently the garden has run wild and dandelions have taken over the entire flower bed.	According to the label, these flowers are roses.	TRUE
126	10	Belief	The girls left ice cream in the freezer before they went to sleep. Overnight the power to the kitchen was cut and the ice cream melted.	When they get up the girls believe the ice cream is melted.	FALSE
156	39	Photo	At the time a portrait was drawn of a young man, he had short brown hair and no facial hair. Now the man's hair is long and gray and so is his beard.	Today the length of the man's hair is long.	TRUE
186	21	Belief	Amy walked to work today. When George woke up, he saw her car in the drive. Her room was quiet and dark. George knows that when Amy is sick, she lies down in a dark room.	In fact, Amy walked to work.	TRUE
216	31	Photo	The family's old video tape recorded the daughter's first birthday party at their house in Chicago. Since then, the family sold their house and moved to San Francisco.	The video shows the family living in Chicago.	TRUE
246	24	Photo	A map shows the ground floor plan. A photocopy was sent to the architect yesterday, but at the time, the kitchen door was missing. It was added to the map this morning.	The architect's photocopy shows the door.	FALSE
276	36	Belief	Sally and Greg called ahead of time to make a reservation for the back-country cabin. The park ranger forgot to write down the reservation and two other hikers got to the cabin first.	When Sally and Greg arrive they see no one in their cabin.	FALSE

FALSBEL3

Time_Start(s)	Q_Num	Condition	Story_Text	Question_Text	Answer
6	45	Photo	To detect intruders, the lab uses an automated system for recording voices. In the empty lab one night, a computer error occurs and a synthetic voice reads the error message.	The number of people in the lab that night is zero.	TRUE
36	9	Belief	When Lisa left Jacob he was deep asleep on the beach. A few minutes later a wave woke him. Seeing Lisa was gone Jacob decided to go swimming.	Lisa now believes that Jacob is sleeping.	TRUE
66	12	Belief	Every day Jill goes to the coffee shop on the corner and orders a latte, her favorite drink. Today, the cashier misunderstands Jill and prepares a mocha instead.	Jill thinks her drink will taste like a mocha.	FALSE
96	37	Photo	A popular attraction in the park, pictured on many souvenirs, was a cliff face covered with ancient petroglyphs. Recently, the petroglyphs crumbled and scientists have not begun to restore them.	Today the petroglyphs can be seen on the souveniers.	TRUE
126	22	Belief	Ken told Andrea that he was going shopping for sandals. At the shoe store, Ken noticed a very nice pair of boots on sale and bought them instead.	Ken's shoestore bag contains sandals.	FALSE
156	27	Photo	Accounts of the country's bustling economic success were recorded in both fiction and non-fiction books from the early 1900s. Soon after, a horrible plague hit the country and the country was sent into an economic depression.	Early 1900s novels portray the country as experiencing economic wealth.	TRUE
186	8	Belief	Anne made lasagna in the blue dish. After Anne left, Ian came home and ate the lasagna. Then he filled the blue dish with spaghetti and replaced it in the fridge.	Anne thinks the blue dish contains spaghetti.	FALSE
216	30	Photo	A golfer's bag had 25 notches carved in it, for every birdie. He once went golfing using a different bag and made two more birdies but never updated the notches.	According to the golf bag there are 27 birdies scored.	FALSE
246	26	Photo	A long time ago, an explorer mapped a small island. Since then, the water levels rose and only a tiny part of the island is now left above water.	On the explorer's maps, the island appears to be mostly submerged.	FALSE
276	1	Belief	The morning of the high school dance Sarah placed her high heel shoes under her dress and then went shopping. That afternoon, her sister borrowed the shoes and later put them under Sarah's bed.	Sarah gets ready assuming her shoes are under the dress.	TRUE

FALSBEL4

Time_Start(s)	Q_Num	Condition	Story_Text	Question_Text	Answer
6	23	Belief	When the class' science test was handed back, Shannon was mistakenly given Adam's test. A large B was written on the front of Adam's test, but Shannon's actual grade was an A.	In reality, Shannon received an A on the exam.	TRUE
36	43	Photo	A volcano erupted on a Carribean island three months ago. Barren lava rock is all that remains today. Satellite photographs show the island as it was before the eruption.	Today, the island is covered in lava rock.	TRUE
66	46	Photo	When the photograph was taken, the boy in it was two meters away from the camera. The Eiffel Tower is beside the boy in the photo.	In 'real life' the boy is bigger than the Eiffel Tower.	FALSE
96	11	Belief	The weather was so warm today that all the tulips in Pam's backyard suddenly bloomed. The tulips next to Pam's office still have not yet flowered, though. Pam has been at work all day.	Driving home after work, Pam supposes her tulips have not bloomed.	TRUE
126	47	Photo	A small leaf was placed on a wet clay flowerpot. When the pot was baked at high temperatures to harden the clay, the leaf crumbled, but its impression remained.	The actual leaf is not intact.	TRUE
156	15	Belief	When Jeff got ready this morning, he put on a light pink shirt instead of a white one. Jeff is colorblind, so he can't tell the difference between subtle shades of color.	In reality, Jeff's shirt is pink.	TRUE
186	35	Photo	Sargent famously painted the south bank of the river in 1885. In 1910 a huge dam was built, flooding out the whole river basin, killing the old forests. Now the whole area is under water.	In the painting the south bank of the river is wooded.	TRUE
216	3	Belief	Laura didn't have time to braid her horse's mane before going to camp. While she was at camp, William brushed Laura's horse and braided the horse's mane for her.	Laura returns assuming that her horse's hair isn't braided.	TRUE
246	4	Belief	Expecting the game to be postponed because of the rain, the Garcia family took the subway home. The score was tied, 3-3. During their commute the rain stopped and the game soon ended with a score of 5-3.	The Garcia family arrives home believing the score is 5-3.	FALSE
276	32	Photo	A photograph was taken of an apple hanging on a tree branch. The film took half an hour to develop. In the meantime, a strong wind blew the apple to the ground.	The developed photograph shows the apple on the ground.	FALSE