MAIN
*M*ultilingual *A*ssessment *I*nstrument
for *N*arratives

Revised version

in **English** as a base for all language adaptations

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MAIN: Revised version in English

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The Multilingual Assessment Instrument for Narratives (MAIN) was designed in 2012 in order to assess narrative skills in children who acquire one or more languages from birth or from early age. MAIN has been developed primarily for children from approximately 3 to 10 years; recent work has found that it can also be used with older children, adolescents and adults. Its design allows for the assessment of comprehension and production of narratives in several languages in the same child and in different elicitation modes: Model Story, Retelling, and Telling.

The 2012 version was developed on the basis of extensive piloting with more than 500 monolingual and bilingual children aged 3 to 10, for 15 different languages and language combinations.

The present 2019 English version has been revised on the basis of over 2,500 transcribed MAIN narratives as well as ca 24,000 responses to MAIN comprehension questions, collected from around 700 monolingual and bilingual children in Germany, Russia and Sweden between 2013−2019.

MAIN contains four parallel stories, each with a carefully designed six-picture sequence based on a multidimensional model of story organization. The stories are controlled for cognitive and linguistic complexity, parallelism in macrostructure and microstructure, as well as for cultural appropriateness and robustness.

Even though MAIN has not been normed yet, its standardised procedures can be used for evaluation, intervention and research purposes. For more detailed information on how to use MAIN, please see the chapter "*Background on MAIN − Revised, how to use it and adapt it to other languages*" in the *ZAS Papers in Linguistics* 63 (2019, pp. iv−xii) which can be accessed via www.leibniz-zas.de/en/research/publications.

This document contains:

- Guidelines for assessment

- Protocols, Scoring Sheets for *Cat*, *Dog*, *Baby Birds*, *Baby Goats*

- Background questions

- Story scripts

Guidelines for Assessment

MAIN is intended primarily for children from approximately 3 to 10 years, but can also be used with older children, adolescents and adults. MAIN assesses both comprehension and production of narratives. It also allows for different elicitation modes: Model Story, Retelling, Telling. The choice of elicitation procedure (e.g. model story/retelling followed by telling, or telling only) depends on the goals and needs for assessment. (Examiners may use their own discretion.)

The MAIN design allows for the assessment of several languages in the same child. Either language can be assessed first. For bilingual children, the testing interval between the two languages should ideally be 4 to 7 days, in order to minimise cross-language influence as well as training and carry-over effects. Ideally, the child should not be assessed by the same person in both languages, in order to promote a monolingual context and to discourage code switching.

Materials

- 4 picture sequences: *Baby Birds*, *Baby Goats*, *Cat* and *Dog* (three copies of each story (colour printouts), each copy in a separate envelope: 12 separate envelopes in total)
- 4 story scripts/stimulus texts: *Baby Birds*, *Baby Goats*, *Cat* and *Dog*
- Recording equipment (audio or video)
- Scoring protocols for macrostructure analysis, internal state terms and comprehension questions
- Background questions (parental questionnaire)

Instructions

How to prepare the materials

1. To download the pictures visit www.leibniz-zas.de/en/service-transfer/main

2. Print each PDF file (i.e. each picture sequence/story) three times, in colour on a high-quality printer on white A4 paper, each picture in size 9 x 9 cm.

3. Number the pictures (1-6) at the back.

4. Cut out the two rows of pictures.

5. Paste the pictures together into a 6-picture strip as illustrated below and fold them twice (pic 1, pic 2, fold, pic 3, pic 4, fold, pic 5, pic 6).

   Note: Do not cut out and use the small pictures from the how-to-fold instructions.
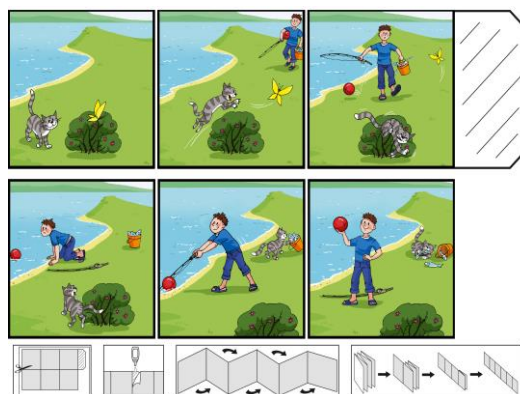
6. Put each picture strip/sequence (6 pictures) into a separate envelope, marked by colour or some other distinguishing mark (e.g. dots) to identify the story.

How to conduct the assessment

- Make sure that you have thoroughly familiarised yourself with the story protocols and the instructions.

- Prepare the audio/video equipment for recording the session. Start recording before the warming-up phase. Make sure that you record the entire session, including the child's answers to the comprehension questions.

- The warming-up phase should be based on your previous experience and cultural environment. While talking with the child, establish rapport and ask some questions to ensure that the child is able to understand simple wh-questions. Ask for example: *Who is your best friend? What do you like to watch on TV? Do you like telling stories? Do you like listening to stories?*

- Make sure that the three envelopes containing the same picture sequence are on the table before assessment begins. (The purpose of this presentation format is for the child to think that the examiner does not know which story is in the envelope s/he has chosen, thus controlling for the effect of shared knowledge during the presentation of the picture sequences.)

- Administer the assessment according to the instructions in the story protocol(s). Please adhere to the recommendations for prompts (see also the prompts below).

- Additional information about the presentation of the pictures: During the experiment you should sit opposite the child so that the child can hold the pictures facing towards him/her, but away from you. When the child takes the pictures out, tell him/her to unfold the pictures and to look at the whole story starting from the first picture and say: "*Look at the pictures but don't show them to me. Only YOU must see the story.*" (If the child cannot hold and unfold the pictures him/herself, you may hold the pictures instead, facing away from you and towards the child.)

- When the child is ready to tell the story, help him/her to fold the pictures into 3 parts again. You can direct the folding process without looking at the pictures while the child is still holding them. Instruct the child to start telling the story whilst looking at the first two pictures. When he/she has finished with pictures 1 and 2, direct the unfolding of the next two pictures (pictures 1–4 will be unfolded now). When the child has finished, direct the unfolding of the next two pictures so that the whole story is now unfolded.

- When the child has finished telling/retelling the story, introduce the comprehension questions by saying "*Now I am going to ask you some questions about the story*". When asking the comprehension questions, keep the picture sequences unfolded and fully visible to both child and experimenter on the table.

- After the session is finished, transcribe the narrative(s) and score the child's production and comprehension on the scoring sheets.

- **Remember:** The list of options in the scoring sheet is not exhaustive. Credit is given when a macrostructure component (Goal, Attempt, Outcome, Internal State term) is expressed by any appropriate wording. Consult the manual for guidance.

Prompts

1. Don't start the story for the child, encourage the child to tell the story by him/herself by saying: *"Tell me the story"* (point to picture).

2. Give prompts only after waiting at least 10 seconds and only when it appears that the child is not going to say anything. Only then should the child be prompted, first by saying, "*Okay…", "Well…", "Your turn…".* Please be VERY careful with the prompts in order to avoid differences between research groups, i.e. experimenter effects. Wait up to approx. 10 seconds; if the child is still silent, prompt by saying: "*Tell me what is happening".* If the child is silent in the middle of the story, encourage her/him to continue and tell you more: "*Anything else?", "Continue", "Tell me more", "Let's see what else happens in the story".*

3. It does not matter how the child refers to the protagonists during the narration; do not correct the child. If the child cannot find the word for an action, protagonist, etc. and seems to be stuck or asks for help, encourage her/him by saying "*You can call it anything you like", "What would you call it?".*

4. Refrain from asking questions such as:

   a) "*What is he doing here?", "Who is running?"*

   b) "*What's this*?", "*What/who do you see on the picture*?"

   (in order not to disrupt or influence the child's narration, to discourage the use of incomplete sentences, and to avoid deictic references).

5. If the child starts telling a story from his/her own experiences, e.g. "*I saw such a bird in the morning"* or "*I will go with my mom to the supermarket after school…",* give the child some time to talk about his/her own experience and then gently ask to tell the story in the pictures. (Exclude this irrelevant part of the narration from the analysis.)

6. Based on your previous experience and cultural environment, you may want to give a word of encouragement, e.g. "*Good", "Fine*", after each pair of pictures (and before unfolding the next pair). (This will also help the transcriber/coder assign utterances to a specific picture pair.) Don't do this however if you feel that it disrupts the child's narrative and train of thought.

How (not) to compare results between stories

- When testing a bilingual child in two languages, avoid using the Cat and/or Dog story for one language and the Baby Birds and/or Baby Goats story for another language.

- Also avoid using the Cat and/or Dog stories at one testing point and comparing them with Baby Birds and/or Baby Goats at another testing point.

- Why? The MAIN stories cannot straightforwardly be compared in every way. As recent results have shown, there are some nuances for which the four stories differ, especially with regard to the comprehension questions. Baby Birds and Baby Goats are roughly parallel; Cat and Dog are also parallel but differ from Baby Birds and Baby Goats in some respects, e.g. plotline, number of characters and some of the comprehension questions.

  Therefore make sure that you are not comparing apples with pears.

- When testing groups of children with MAIN, make sure that you use appropriate counterbalancing procedures, in order to minimise effects of story and/or effects of elicitation mode (retelling, model story, telling).

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Counterbalancing procedures for research purposes

The order of presentation should be counterbalanced with regard to language and story (Cat/Dog – (primarily) Model Story/Retelling and Baby Birds/Baby Goats – (primarily) Telling). Use the following counterbalancing procedure (if only one language is tested, then use the randomisation procedure for children either number 1, 2, 5 and 6 or number 3, 4, 7 and 8):

Child number	Lang.	Model Story/ Retelling	Telling	Lang.	Model Story/ Retelling	Telling
1	L1	Cat	Baby Birds	L2	Dog	Baby Goats
2	L1	Cat	Baby Goats	L2	Dog	Baby Birds
3	L2	Cat	Baby Goats	L1	Dog	Baby Birds
4	L2	Cat	Baby Birds	L1	Dog	Baby Goats
5	L1	Dog	Baby Birds	L2	Cat	Baby Goats
6	L1	Dog	Baby Goats	L2	Cat	Baby Birds
7	L2	Dog	Baby Goats	L1	Cat	Baby Birds
8	L2	Dog	Baby Birds	L1	Cat	Baby Goats

Note that the results for different stories and for elicitation modes cannot straightforwardly be compared (see above).

Protocol for Cat

Telling/Retelling/Model Story

Name of child: _____

Date of birth: _____

Date of testing: _____

Age of testing (in months): _____

Gender: _____

Name of examiner: _____

Exposure to L2 (in months): _____

Kindergarten entry date: _____

Name of kindergarten: _____

Be sure that all the envelopes are on the table before testing begins. Prepare the audio recorder in order to record the session. Begin recording before warming up.

Warming-up

Ask for example: Who is your best friend? What do you like to watch on TV? Do you like telling stories? Do you like listening to stories?

Instructions

Instructions for Telling

Sit opposite the child. Say to the child: *Look, here are 3 envelopes. There is a different story in each envelope. Choose one and then you can tell me a story.* Unfold the pictures so that the whole sequence is visible to the child only. *First look at the whole story.* (pause) *Are you ready?*

Unfold the first 2 pictures. Say to the child: *Now I want you to tell the story. Look at the pictures and try to tell the best story you can.* Allowable prompt if the child is reluctant to begin: *"Tell me the story"* (point to picture). When the child has finished telling the first 2 pictures, unfold the next (so that all pictures from 1 to 4 are visible). Repeat the process until the end of the story.

Allowable prompts if the child is silent in the middle of the story**:** *"Anything else?", "Continue", "Tell me more", "Let's see what else is in the story".* If the child stops talking without indicating that he/she has finished, ask: *"Tell me when you are finished".*

When the child has finished, praise the child and then ask the comprehension questions.

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Instructions for Retelling

Sit opposite the child. Say to the child: *Look, here are 3 envelopes. There is a different story in each envelope. Choose one and then I will tell you the story.* Unfold the pictures so that the whole sequence is visible to the child only. *First look at the whole story.* (pause) *Are you ready? I am going to tell you the story and then you can tell it to me again.*

Unfold picture 1 and 2. *The story starts here:* (point to picture 1).
One day there was a playful cat who saw a yellow butterfly sitting on a bush. He leaped forward because he wanted to catch it. Meanwhile, a cheerful boy was coming back from fishing with a bucket and a ball in his hands. He looked at the cat chasing the butterfly.

Unfold picture 3 and 4 (so that all pictures from 1 to 4 are now visible).
The butterfly flew away quickly and the cat fell into the bush. He hurt himself and was very angry. The boy was so startled that the ball fell out of his hand. When he saw his ball rolling into the water, he cried: "Oh no, there goes my ball!". He was sad and wanted to get his ball back. Meanwhile, the cat noticed the boy's bucket and thought: "I want to grab a fish."

Unfold picture 5 and 6 (so that all pictures from 1 to 6 are now visible).
At the same time the boy began pulling his ball out of the water with his fishing rod. He did not notice that the cat was grabbing a fish. In the end, the cat was very pleased to eat such a tasty fish and the boy was happy to have his ball back.

And that is the end of the story.

Unfold the pictures so that the first 2 pictures are visible to the child only. Say to the child: *Now I want you to tell the story. Look at the pictures and try to tell the best story you can.* Allowable prompt if the child is reluctant to begin: *"Tell me the story"* (point to picture). When the child has finished telling the first 2 pictures, unfold the next (so that all pictures from 1 to 4 are now visible). Repeat the process until you have reached the end of the story.

Allowable prompts if the child is silent in the middle of the story: *"Anything else?", "Continue", "Tell me more", "Let's see what else is in the story".* If the child stops talking without indicating that he/she has finished, ask: *"Tell me when you have finished".*

When the child has finished, praise the child and then ask the comprehension questions.

Instructions for Model Story

Sit opposite the child. Say to the child: *Look, here are 3 envelopes. There is a different story in each envelope. Choose one and then I will tell you the story.* Unfold the pictures so that the whole sequence is visible to the child only. *First look at the whole story.* (pause) *Are you ready? I am going to tell you the story and then I will ask you some questions.*

Unfold picture 1 and 2. *The story starts here:* (point to picture 1).
One day there was a playful cat who saw a yellow butterfly sitting on a bush. He leaped forward because he wanted to catch it. Meanwhile, a cheerful boy was coming back

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from fishing with a bucket and a ball in his hands. He looked at the cat chasing the butterfly.

Unfold picture 3 and 4 (so that all pictures from 1 to 4 are now visible).
The butterfly flew away quickly and the cat fell into the bush. He hurt himself and was very angry. The boy was so startled that the ball fell out of his hand. When he saw his ball rolling into the water, he cried: "Oh no, there goes my ball!". He was sad and wanted to get his ball back. Meanwhile, the cat noticed the boy's bucket and thought: "I want to grab a fish."

Unfold picture 5 and 6 (so that all pictures from 1 to 6 are now visible).
At the same time the boy began pulling his ball out of the water with his fishing rod. He did not notice that the cat was grabbing a fish. In the end, the cat was very pleased to eat such a tasty fish and the boy was happy to have his ball back.

And that is the end of the story.

After you told *And that is the end of the story* ask the comprehension questions.

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Scoring sheet for Cat

Section I: Production

A. Story Structure; B. Structural complexity; C. Internal State Terms (IST)

A. Story Structure

		Examples of correct responses[1]	Score
A1.	Setting	Time and/ or place reference, e.g. once upon a time/ one day/ long ago... by a lake/ at the lake/ at the river bank/ by the water/ by the shore/ in a meadow…	0 1 2[2]
Episode 1: Cat (Episode characters: cat and butterfly)			
A2.	IST as initiating event	**Cat** was playful/ curious **Cat** saw a butterfly	0 1
A3.	Goal	**Cat** wanted to catch/ get/ chase the butterfly/ play with the butterfly (In order) to + VERB (catch, get, play)	0 1
A4.	Attempt	**Cat** jumped forward/ up **Cat** chased/ started to chase **Cat** tried to + VERB (catch, get, grab, take)	0 1
A5.	Outcome	**Cat** fell into the bush/ did not get the butterfly/ was not quick enough **Butterfly** escaped/ flew away/ was too quick	0 1
A6.	IST as reaction	**Cat** was disappointed/ angry/ hurt **Butterfly** was happy/ glad	0 1
Episode 2: Boy (Episode character: boy)			
A7.	IST as initiating event	**Boy** was sad/ unhappy/ worried about his ball **Boy** saw the ball in the water	0 1
A8.	Goal	**Boy** decided/ wanted to get his ball back/ (In order) to + VERB (get)	0 1
A9.	Attempt	**Boy** was/is pulling/ tried to pull the ball out of the water	0 1
A10.	Outcome	**Boy** got/had his ball back/ again **The ball** was saved	0 1
A11.	IST as reaction	**Boy** was glad/ happy/ pleased/ satisfied/ relieved (to get/have his ball back)	0 1
Episode 3: Cat (Episode character: cat)			
A12.	IST as initiating event	**Cat** was hungry/ curious/ keen on the fish **Cat** noticed/ saw the fish	0 1
A13.	Goal	**Cat** wanted/ decided to get/ grab/ eat/ have/ steal the fish (In order) to + VERB (eat, get)	0 1
A14.	Attempt	**Cat** was/is grabbing/pulling/ taking/ stealing the fish **Cat** grabs/ pulls/takes the fish (out of the bucket)/ reached for the fish **Cat** tried to + VERB (get, take)	0 1

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[1] If in doubt or the response of the child is not on this scoring sheet consult the manual.

[2] Zero points for wrong or no response, 1 point for one correct response, 2 points for reference to both time and place.

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A15.	Outcome	**Cat** ate/ got the fish	0	1
A16.	IST as reaction	**Cat** was satisfied/ glad/ pleased/ happy/ not hungry (any more)	0	1
A17.		**Total score out of 17:**		

B. Structural complexity

Number of AO sequences	Number of single G (without A or O)	Number of GA / GO sequences	Number of GAO sequences
B1.	B2.	B3.	B4.

C. Internal State Terms (IST)

C1.	Total number of IST in tokens. IST include:
	Perceptual state terms e.g. *see, hear, feel, smell;*
	Physiological state terms e.g. *thirsty, hungry, tired, sore*, *hurt(ing);*
	Consciousness terms e.g. *alive, awake, asleep;*
	Emotion terms e.g. *sad, happy, glad, angry, worried, disappointed*, *afraid, scared, proud, brave,* (feel) *safe, pleased, surprised;*
	Mental verbs e.g. *want*, *think, know, forget, decide, believe, wonder, have/ make a plan;*
	Linguistic verbs/ verbs of saying/ telling e.g. *say, call, shout, warn, ask.*

Section II: Comprehension

		Examples of correct responses	Examples of wrong responses	Score	
0	Did you like the story?	Warm-up question, not scored			
D1.	Why does the cat jump/ leap forward? *(point to pictures 1-2)* (Episode 1: Goal)	Wants to get/ catch/ chase the butterfly/ to play with the butterfly Wants the butterfly (In order) to + VERB (get, take) the butterfly	Is leaving/ running/ wanted to jump Cats are always jumpy/ running	0	1
D2.	How does the cat feel? *(point to picture 3)* (IST as reaction)	Angry/ bad/ disappointed/ hurt/ in pain/ not good/ not comfortable	Good/ happy	0	1
D3.	*(Only ask D3 if the child gives a correct response without explanation/ rationale in D2. If a correct explanation is provided in D2, then give a point in D3 and proceed to D4.)* Why do you think that the cat is feeling angry/ disappointed/ hurt etc.?[3]	Couldn't catch the butterfly/ fell into the bush It hurts to fall into a prickly bush Butterfly escapes/ got away	Inappropriate/ irrelevant answer	0	1
D4.	Why does the boy hold the fishing rod in the water? *(point to picture 5)* (Episode 2: Goal)	Wants to get/ take his ball (back) Wants his ball (back) (In order) to + VERB (get, take) his ball (back/ out)	To play in the water	0	1
D5.	How does the boy feel? *(point to picture 6)* (IST as reaction)	Good/ fine/ happy/ satisfied/ pleased	Bad/ angry/ mad/ sad	0	1
D6.	*(Only ask D6 if the child gives a correct response without explanation/ rationale in D5. If a correct explanation is provided in D5, then give a point in D6 and proceed to D7.)* Why do you think that the boy is feeling good/ fine/ happy/ satisfied etc.?[4]	Has/ got the ball back Could/ was able to + VERB (get, take)	He is smiling/ he looks like that/ other inappropriate answer	0	1
D7.	Why does the cat grab the fish? *(point to picture 5)* (Episode 3: Goal)	Decided/ wants to eat/ have/ steal the fish Takes the chance/ opportunity when the boy is not looking	Wants to play with the fish	0	1

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[3] Use the same IST provided by the child in response to D2.
[4] Use the same IST provided by the child in response to D5.

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		Didn't get the butterfly/ Couldn't get/take the butterfly Cats like fish (generic meaning) Fish are tasty/ yummy			
D8.	Imagine that the boy sees the cat. How does the boy feel? *(point to picture 6)* (IST as reaction)	Bad/ angry/ sad/ mad/ not good	Fine/ good/ happy/ satisfied/ pleased	0	1
D9.	*(Only ask D9 if the child gives a correct response without explanation/ rationale in D8. If a correct explanation is provided in D8, then give a point in D9 and proceed to D10.)* Why do you think that the boy feels bad/ angry/ mad etc.?[5]	Cat ate/ is eating/ took/ has taken his fish Boy wanted to eat/ have the fish (himself) It was the boy's fish	Fishing rod is on the ground or other inappropriate answer	0	1
D10.	Will the boy be friends with the cat? Why?	No - give at least one reason (cat ate/ stole the fish) or any other appropriate answer	Yes/ I don't know/ other irrelevant answer	0	1
D11.			**Total score out of 10:**		

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[5] Use the same IST provided by the child in response to D8.

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Protocol for Dog

<u>Telling/Retelling/Model Story</u>

Name of child: _____

Date of birth: _____

Date of testing: _____

Age of testing (in months):   _____

Gender: _____

Name of examiner: _____

Exposure to L2 (in months):   _____

Kindergarten entry date: _____

Name of kindergarten: _____

Be sure that all the envelopes are on the table before testing begins. Prepare the audio recorder in order to record the session. Begin recording before warming up.

Warming-up

Ask for example: Who is your best friend? What do you like to watch on TV? Do you like telling stories? Do you like listening to stories?

Instructions

Instructions for Telling

Sit opposite the child. Say to the child: *Look, here are 3 envelopes. There is a different story in each envelope. Choose one and then you can tell me a story.* Unfold the pictures so that the whole sequence is visible to the child only. *First look at the whole story.* (pause) *Are you ready?*

Unfold the first 2 pictures. Say to the child: *Now I want <u>you</u> to tell the story. Look at the pictures and try to tell the <u>best</u> story you can.* Allowable prompt if the child is reluctant to begin: *"Tell me the story"* (point to picture). When the child has finished telling the first 2 pictures, unfold the next (so that all pictures from 1 to 4 are visible). Repeat the process until the end of the story.

Allowable prompts if the child is silent in the middle of the story**:** *"Anything else?", "Continue", "Tell me more", "Let's see what else is in the story".* If the child stops talking without indicating that he/she has finished, ask: *"Tell me when you are finished".*

When the child has finished, praise the child and then ask the comprehension questions.

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Instructions for Retelling

Sit opposite the child. Say to the child: *Look, here are 3 envelopes. There is a different story in each envelope. Choose one and then I will tell you the story.* Unfold the pictures so that the whole sequence is visible to the child only. *First look at the whole story.* (pause) *Are you ready? I am going to tell you the story and then you can tell it to me again.*

Unfold picture 1 and 2. *The story starts here:* (point to picture 1).
One day there was a playful dog who saw a grey mouse sitting near a tree. He leaped forward because he wanted to catch it. Meanwhile, a cheerful boy was coming back from shopping with a bag and a balloon in his hands. He looked at the dog chasing the mouse.

Unfold picture 3 and 4 (so that all pictures from 1 to 4 are visible).
The mouse ran away quickly and the dog bumped into the tree. He hurt himself and was very angry. The boy was so startled that the balloon slipped out of his hand. When he saw his balloon flying into the tree, he cried: "Oh no, there goes my balloon!" He was sad and wanted to get his balloon back. Meanwhile, the dog noticed the boy's bag and thought: "I want to grab a sausage."

Unfold picture 5 and 6 (so that pictures from 1 to 6 are now visible).
At the same time, the boy began pulling his balloon out of the tree. He did not notice that the dog was grabbing a sausage. In the end, the dog was very pleased to eat such a tasty sausage and the boy was happy to have his balloon back.

And that is the end of the story.

Unfold the pictures so that the first 2 pictures are visible to the child only. Say to the child: *Now I want <u>you</u> to tell the story. Look at the pictures and try to tell the <u>best</u> story you can.* Allowable prompt if the child is reluctant to begin: *"Tell me the story"* (point to picture). When the child has finished telling the first 2 pictures, unfold the next (so that all pictures from 1 to 4 are visible). Repeat the process until you have reached the end of the story.

Allowable prompts if the child is silent in the middle of the story: *"Anything else?", "Continue", "Tell me more", "Let's see what else is in the story".* If the child stops talking without indicating that he/she has finished, ask: *"Tell me when you have finished".*

When the child has finished, praise the child and then ask the comprehension questions.

Instructions for Model Story

Sit opposite the child. Say to the child: *Look, here are 3 envelopes. There is a different story in each envelope. Choose one and then I will tell you the story.* Unfold the pictures so that the whole sequence is visible to the child only. *First look at the whole story.* (pause) *Are you ready? I am going to tell you the story and then I will ask you some questions.*

Unfold picture 1 and 2. *The story starts here:* (point to picture 1).
One day there was a playful dog who saw a grey mouse sitting near a tree. He leaped forward because he wanted to catch it. Meanwhile, a cheerful boy was coming back from shopping with a bag and a balloon in his hands. He looked at the dog chasing the mouse.

Unfold picture 3 and 4 (so that all pictures from 1 to 4 are visible).
The mouse ran away quickly and the dog bumped into the tree. He hurt himself and was very angry. The boy was so startled that the balloon slipped out of his hand. When he saw his balloon flying into the tree, he cried: "Oh no, there goes my balloon!" He was sad

and wanted to get his balloon back. Meanwhile, the dog noticed the boy's bag and thought: "I want to grab a sausage."

Unfold picture 5 and 6 (so that pictures from 1 to 6 are now visible). *At the same time, the boy began pulling his balloon out of the tree. He did not notice that the dog was grabbing a sausage. In the end, the dog was very pleased to eat such a tasty sausage and the boy was happy to have his balloon back.*

And that is the end of the story.

After you told *And that is the end of the story* ask the comprehension questions.

Scoring sheet for Dog

Section I: Production

A. Story Structure; B. Structural complexity; C. Internal State Terms (IST)

A. Story Structure

		Examples of correct responses[6]	Score
A1.	Setting	Time and/ or place reference, e.g. once upon a time/ one day/ long ago… in a forest/ in a park/ in a meadow/ in a field/ by a tree/ near a tree/ by the road	0 1 2[7]
Episode 1: Dog (Episode characters: dog and mouse)			
A2.	IST as initiating event	**Dog** was playful/ curious **Dog** saw a mouse	0 1
A3.	Goal	**Dog** wanted to catch/ get/ chase the mouse/ play with the mouse (In order) to + VERB (catch, get, play with)	0 1
A4.	Attempt	**Dog** jumped forward/ up **Dog** chased/ started to chase **Dog** tried to + VERB (catch, get, grab, take)	0 1
A5.	Outcome	**Dog** bumped his head/ bumped into the tree/ did not get the mouse/ was not quick enough **Mouse** escaped/ ran behind the tree/ was too quick	0 1
A6.	IST as reaction	**Dog** was disappointed/ angry/ hurt **Mouse** was happy/ glad/ relieved	0 1
Episode 2: Boy (Episode character: boy)			
A7.	IST as initiating event	**Boy** was sad/ unhappy/ worried about his balloon **Boy** saw the balloon in the tree	0 1
A8.	Goal	**Boy** decided/ wanted to get his balloon back (In order) to + VERB (get) back	0 1
A9.	Attempt	**Boy** was/is pulling/ tried to pull the balloon down from the tree **Boy** jumped after the balloon/ reached for (the balloon)/ was/is climbing (the tree)	0 1
A10.	Outcome	**Boy** got his balloon back/ again **Balloon** was saved	0 1
A11.	IST as reaction	**Boy** was glad/ happy/ satisfied/ pleased/ relieved (to get/have his balloon back)	0 1
Episode 3: Dog (Episode character: dog)			
A12.	IST as initiating event	**Dog** saw/ noticed the sausages (in the bag) **Dog** was hungry/ curious/ keen on the sausages	0 1
A13.	Goal	**Dog** wanted/ decided to get/ grab/ eat/ have/ steal the sausages (In order) to + VERB (eat, get)	0 1

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[6] If in doubt or the response of the child is not on this scoring sheet consult the manual.

[7] Zero points for wrong or no response, 1 point for one correct response, 2 points for reference to both time and place.

17

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A14.	Attempt	**Dog** was/is grabbing/pulling/ taking/ stealing the sausages **Dog** grabs/pulls/takes the sausages (out of the bag)/ reached for the sausages **Dog** tried to + VERB (get, take)	0	1
A15.	Outcome	**Dog** ate/ got the sausages	0	1
A16.	IST as reaction	**Dog** was satisfied/ glad/ pleased/ happy/ not hungry (any more)	0	1
A17.		**Total score out of 17:**		

B. Structural complexity

Number of AO sequences	Number of single G (without A or O)	Number of GA / GO sequences	Number of GAO sequences
B1.	B2.	B3.	B4.

C. Internal State Terms (IST)

C1.	Total number of IST in tokens. IST include: **Perceptual state terms** e.g. *see, hear, feel, smell;* **Physiological state terms** e.g. *thirsty, hungry, tired, sore, hurt(ing)*; **Consciousness terms** e.g. *alive, awake, asleep*; **Emotion terms** e.g. *sad, happy, glad, angry, worried, disappointed; afraid, scared, proud, brave,* (feel) *safe, pleased, surprised;* **Mental verbs** e.g. *want, think, know, forget, decide, believe, wonder, have/ make a plan*; **Linguistic verbs/ verbs of saying/ telling** e.g. *say, call, shout, warn, ask.*

Section II: Comprehension

		Examples of correct responses	Examples of wrong responses	Score	
0	Did you like the story?	**Warm-up question, not scored**			
D1.	Why does the dog jump/ leap forward? *(point to pictures 1-2)* (Episode 1: Goal)	Wants to get/ catch/ chase the mouse/ to play with the mouse Wants the mouse (In order) to + VERB (get, take) the mouse	Is leaving/ running/ wanted to jump Dogs are always jumpy	0	1
D2.	How does the dog feel? *(point to picture 3)* (IST as reaction)	Angry/ bad/ disappointed/ hurt/ in pain/ not good/ not comfortable	Good/ happy	0	1
D3.	*(Only ask D3 if the child gives a correct response without explanation/ rationale in D2. If a correct explanation is provided in D2, then give a point in D3 and proceed to D4.)* Why do you think that the dog is feeling angry/ disappointed/ hurt etc.?[8]	Couldn't catch the mouse/ he bumped his head/ bumped into the tree It hurts when you bump into a/the tree The mouse escaped/ got away	Inappropriate/ irrelevant answer	0	1
D4.	Why does the boy jump/ leap upwards? *(point to picture 5)* (Episode 2: Goal)	Wants to get/ take his balloon (back) Wants his balloon (back) (In order) to + VERB (get, take) his balloon (back)	To climb the tree/ climb trees	0	1
D5.	How does the boy feel? *(point to picture 6)* (IST as reaction)	Good/ fine/ happy/ satisfied/ pleased	Bad/ angry/ mad/ sad	0	1
D6.	*(Only ask D6 if the child gives a correct response without explanation/ rationale in D5. If a correct explanation is provided in D5, then give a point in D6 and proceed to D7.)* Why do you think that the boy is feeling good/ happy etc.?[9]	Has/ got the balloon back Could/ was able to + VERB (get, take) the balloon	He is smiling/ he looks like that/ he is standing or other inappropriate answer	0	1
D7.	Why does the dog grab the sausages? *(point to picture 5)* (Episode 3: Goal)	Decided/ wants to eat/ have/ steal the sausages/ Takes the chance/ opportunity when the boy is not looking	Wants to play with the bag	0	1

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[8] Use the same IST provided by the child in response to D2.
[9] Use the same IST provided by the child in response to D5.

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		Didn't get the mouse/ couldn't get/ take the mouse Dogs like sausages/ meat (generic meaning) Sausages are tasty/yummy			
D8.	Imagine that the boy sees the dog. How does the boy feel? *(point to picture 6)* (IST as reaction)	Bad/ angry/ sad/ mad not good	Good/ fine/ happy/ satisfied/ pleased	0	1
D9.	*(Only ask D9 if the child gives a correct response without explanation/ rationale in D8. If a correct explanation is provided in D8, then give a point in D9 and proceed to D10.)* Why do you think that the boy feels bad/ angry/ mad etc.?[10]	Dog ate/ is eating/ took/ has taken his sausages Boy wanted to eat/ have the sausages (himself) They were the boy's sausages	Inappropriate answer	0	1
D10.	Will the boy be friends with the dog? Why?	No - give at least one reason (dog ate/ stole the sausages) or any other appropriate answer	Yes/ I don't know/ other irrelevant answer	0	1
D11.			**Total score out of 10:**		

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[10] Use the same IST provided by the child in response to D8.

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Protocol for Baby Birds

<u>Telling/Retelling/Model Story</u>

Name of child: _____

Date of birth: _____

Date of testing: _____

Age of testing (in months):   _____

Gender: _____

Name of examiner: _____

Exposure to L2 (in months):   _____

Kindergarten entry date: _____

Name of kindergarten: _____

Be sure that all the envelopes are on the table before testing begins. Prepare the audio recorder in order to record the session. Begin recording before warming up.

Warming-up

Ask for example: Who is your best friend? What do you like to watch on TV? Do you like telling stories? Do you like listening to stories?

Instructions

Instructions for Telling

Sit opposite the child. Say to the child: *Look, here are 3 envelopes. There is a different story in each envelope. Choose one and then you can tell me a story.* Unfold the pictures so that the whole sequence is visible to the child only. *First look at the whole story.* (pause) *Are you ready?*

Unfold the first 2 pictures. Say to the child: *Now I want <u>you</u> to tell the story. Look at the pictures and try to tell the <u>best</u> story you can.* Allowable prompt if the child is reluctant to begin: *"Tell me the story"* (point to picture). When the child has finished telling the first 2 pictures, unfold the next (so that all pictures from 1 to 4 are visible). Repeat the process until the end of the story.

Allowable prompts if the child is silent in the middle of the story**:** *"Anything else?", "Continue", "Tell me more", "Let's see what else is in the story".* If the child stops talking without indicating that he/she has finished, ask: *"Tell me when you are finished".*

When the child has finished, praise the child and then ask the comprehension questions.

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Instructions for Retelling

Sit opposite the child. Say to the child: *Look, here are 3 envelopes. There is a different story in each envelope. Choose one and then I will tell you the story.* Unfold the pictures so that the whole sequence is visible to the child only. *First look at the whole story.* (pause) *Are you ready? I am going to tell you the story and then you can tell it to me again.*

Unfold picture 1 and 2. *The story starts here:* (point to picture 1).
One day there was a mother bird who saw that her baby birds were hungry. She flew away because she wanted to find food for them. A hungry cat saw that the mother bird was flying away and meowed: "Mmm, nice, what do I see here in the nest?".

Unfold picture 3 and 4 (so that all pictures from 1 to 4 are visible).
The mother bird came back with a big worm for her children, but she did not see the cat. She was happy about the juicy worm for her babies. Meanwhile the mean cat started climbing up the tree because he wanted to catch a baby bird. He grabbed one of the baby birds. A brave dog that was passing by saw that the birds were in great danger. He decided to stop the cat and save them.

Unfold picture 5 and 6 (so that pictures from 1 to 6 are now visible).
He said to the cat: "Leave the baby birds alone". And then he grabbed the cat's tail and pulled him down. The cat let go of the baby bird and the dog chased him away. The dog was very glad that he could save the birds, and the cat was still hungry.

And that is the end of the story.

Unfold the pictures so that the first 2 pictures are visible to the child only. Say to the child: *Now I want <u>you</u> to tell the story. Look at the pictures and try to tell the <u>best</u> story you can.* Allowable prompt if the child is reluctant to begin: *"Tell me the story"* (point to picture). When the child has finished telling the first 2 pictures, unfold the next (so that all pictures from 1 to 4 are visible). Repeat the process until you have reached the end of the story.

Allowable prompts if the child is silent in the middle of the story: *"Anything else?", "Continue", "Tell me more", "Let's see what else is in the story".* If the child stops talking without indicating that he/she has finished, ask: *"Tell me when you have finished".*

When the child has finished, praise the child and then ask the comprehension questions.

Instructions for Model Story

Sit opposite the child. Say to the child: *Look, here are 3 envelopes. There is a different story in each envelope. Choose one and then I will tell you the story.* Unfold the pictures so that the whole sequence is visible to the child only. *First look at the whole story.* (pause) *Are you ready? I am going to tell you the story and then I will ask you some questions.*

Unfold picture 1 and 2. *The story starts here:* (point to picture 1).
One day there was a mother bird who saw that her baby birds were hungry. She flew away because she wanted to find food for them. A hungry cat saw that the mother bird was flying away and meowed: "Mmm, nice, what do I see here in the nest?"

Unfold picture 3 and 4 (so that all pictures from 1 to 4 are visible).
The mother bird came back with a big worm for her children, but she did not see the cat. She was happy about the juicy worm for her babies. Meanwhile the mean cat started

climbing up the tree because he wanted to catch a baby bird. He grabbed one of the baby birds. A brave dog that was passing by saw that the birds were in great danger. He decided to stop the cat and save them.

Unfold picture 5 and 6 (so that pictures from 1 to 6 are now visible).
He said to the cat: "Leave the baby birds alone". And then he grabbed the cat's tail and pulled him down. The cat let go of the baby bird and the dog chased him away. The dog was very glad that he could save the birds, and the cat was still hungry.

And that is the end of the story.

After you told *And that is the end of the story* ask the comprehension questions.

Scoring sheet for Baby Birds

Section I: Production

A. Story Structure; B. Structural complexity; C. Internal State Terms (IST)

A. Story Structure

		Examples of correct responses[11]	Score
A1.	Setting	Time and/ or place reference, e.g. once upon a time/ one day/ long ago... in a forest/ in a meadow/ in a garden/ in a field/ in a bird's nest/ up a tree	0 1 2[12]
Episode 1: Mother/ Bird (Episode characters: mother bird and baby birds)			
A2.	IST as initiating event	**Baby birds** were hungry/ wanted food/ cried for food/ asked for food **<Mother/ Bird/ Parent, etc.>** <u>saw</u> that baby birds were hungry/ wanted food	0 1
A3.	Goal	**Mother bird** wanted to feed baby birds/ to catch/ bring/ get/ find food/ worms (In order) to + VERB (get food)	0 1
A4.	Attempt	**Mother bird** flew away/ went away/ looked for food/ was fetching food **Mother bird** tried to + VERB (get food)	0 1
A5.	Outcome	**Mother bird** got/ caught/ brought/ came back with food/ a worm/ fed the babies **Baby birds** got food/ a worm	0 1
A6.	IST as reaction	**Mother bird** was happy/ satisfied/ pleased **Baby birds** were happy/ satisfied/ pleased/ not hungry any more	0 1
Episode 2: Cat (Episode characters: cat and baby bird(s))			
A7.	IST as initiating event	**Cat** <u>saw</u> mother flying away/ <u>saw</u> that baby birds were all alone/ <u>saw</u> that there was food **Cat** was hungry/ thought "yummy"	0 1
A8.	Goal	**Cat** wanted to eat/ catch/ kill baby bird/-s (In order) to + VERB (eat, catch, kill, get)	0 1
A9.	Attempt	**Cat** was/ is climbing up the tree **Cat** tried to reach/ get baby bird **Cat** climbed/ jumped up (the tree)	0 1
A10.	Outcome	**Cat** grabbed/ got baby bird **Cat** nearly/almost + VERB (caught, got)	0 1
A11.	IST as reaction	**Cat** was happy **Bird/-s** was/ were scared/ crying/ screaming with pain	0 1
Episode 3: Dog (episode characters: dog, cat and baby bird(s))			
A12.	IST as initiating event	**Dog** <u>saw</u> that the bird was in danger/ <u>saw</u> that cat caught/ got the bird **Bird/-s** was/were in danger	0 1
A13.	Goal	**Dog** decided/ wanted to stop the cat	0 1

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[11] If in doubt or the response of the child is not on this scoring sheet consult the manual.

[12] Zero points for wrong or no response, 1 point for one correct response, 2 points for reference to both time and place.

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		Dog decided/ wanted to help/ protect/ save/ rescue the bird(-s) (In order) to + VERB (stop, rescue, help)		
A14.	Attempt	**Dog** was/is pulling/ dragging the cat down/ biting/ attacking the cat/ grabbing the cat's tail **Dog** tried to + VERB (pull, drag, get down) **Dog** pulled/ dragged the cat down/ bit/ attacked the cat/ grabbed the cat's tail	0	1
A15.	Outcome	**Dog** chased the cat (away)/ scared the cat off/ away **Cat** let go of the baby bird/ ran away **Bird/-s** was/ were saved/ rescued	0	1
A16.	IST as reaction	**Dog** was relieved/ happy/ proud (to have saved/ rescued the baby bird) **Cat** was angry/ disappointed/ feeling bad/ mad/ scared/ in pain/ cat's tail hurt **Bird/-s** was/ were relieved/ happy/ safe **Mother bird** was relieved/ happy	0	1
A17.		**Total score out of 17:**		

B. Structural complexity

Number of AO sequences	Number of single G (without A or O)	Number of GA / GO sequences	Number of GAO sequences
B1.	B2.	B3.	B4.

C. Internal State Terms (IST)

C1.	Total number of IST in tokens. IST include: **Perceptual state terms** e.g. *see, hear, feel, smell;* **Physiological state terms** e.g. *thirsty, hungry, tired, sore, hurt(ing);* **Consciousness terms** e.g. *alive, awake, asleep;* **Emotion terms** e.g. *sad, happy, glad, angry, worried, disappointed, afraid, scared, proud, brave,* (feel) *safe, pleased, surprised;* **Mental verbs** e.g. *want, think, know, forget, decide, believe, wonder, have/ make a plan;* **Linguistic verbs/ verbs of saying/ telling** e.g. *say, call, shout, warn, ask.*

Section II: Comprehension

		Examples of correct responses	Examples of wrong responses	Score	
0	Did you like the story?	**Warm-up question, not scored**			
D1.	Why does the mother bird fly away? *(point to pictures 1-2)* (Episode 1: Goal/ IST as initiating event)	Wants to get/ bring food/ worms to baby birds/ (In order) to + VERB (feed) the baby birds Baby birds are hungry	Is leaving/ going to work Is going to fetch daddy Is scared/afraid	0	1
D2.	How do the baby birds feel? *(point to picture 1)* (IST as initiating event)	Bad/ hungry Want food	Good/ fine/ happy/ surprised/ lonely/ scared/ frightened	0	1
D3.	*(Only ask D3 if the child gives a correct response without an explanation/ rationale in D2. If a correct explanation is provided in D2, then give a point in D3 and proceed to D4.)* Why do you think that the baby birds are feeling bad/ hungry etc.?[13]	Their mouths are open/ asking for food Are screaming: "We want food/ are hungry" Mother went to get food/ came back with a worm to feed them Baby birds are always hungry (generic meaning)	Are happy/ singing/ Wanted to come along with mummy/ Are scared of the cat/ scared because they saw the cat/ Bad/ scared because the mother is flying away	0	1
D4.	Why does the cat climb the tree? *(point to picture 3)* (Episode 2: Goal)	Wants to get/ kill/ eat the baby bird/ Wants the baby bird (In order) to + VERB (get, kill, eat) a/the baby bird Couldn't resist the baby bird/ takes the opportunity when mother is gone/ away Cats like to eat/catch birds (generic meaning)	To play with the baby birds	0	1
D5.	How does the cat feel? *(point to picture 5-6)* (IST as reaction)	Bad/ (still) hungry/ angry/ mad/ sad/ scared/ hurt/ stupid/ disappointed	Good/ fine/ happy/ playful/ running	0	1
D6.	*(Only ask D6 if the child gives a correct response without an explanation/ rationale in D5. If a correct explanation is provided in D5, then give a point in D6 and proceed to D7.)* Why do you think that the cat is feeling bad/ hungry/ scared etc.?[14]	Did not get the baby birds/ failed to succeed Is afraid/ scared of the dog The dog is attacking/ biting/ chasing it/ pulling/ biting the cat's tail *If response to D5 is "bad/angry", the answer to D6 can also be:* is still hungry	Happy/ playful/ starts to fly/ looks like that Dog took the cat's food/ Dog wants to eat the cat I don't know	0	1

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[13] Use the same IST provided by the child in response to D2.

[14] Use the same IST provided by the child in response to D5.

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				0	1
D7.	Why does the dog grab the cat's tail? *(point to picture 5)* (Episode 3: Goal)	Decides/ wants to save/ rescue/ help/ protect the birds Decides/wants to stop the cat/ to make the cat let the bird go (In order) to + VERB (save, rescue, help, protect) So that the bird(s) will not be eaten/ killed/ hurt	Wants to eat the bird himself/ Wants to eat the cat/ To play with the cat Dogs hate/ don't like cats (generic meaning)	0	1
D8.	Imagine that the dog sees the birds. How does the dog feel? *(point to picture 6)* (IST as reaction)	Good/ fine/ happy/ relieved/ pleased/ satisfied/ proud/ helpful Like a protector/ hero Likes to protect them	Bad/ angry/ mad/ sad/ sorry/ stupid/ hungry "I must get the cat"	0	1
D9.	*(Only ask D9 if the child gives a correct response without an explanation/ rationale in D8. If a correct explanation is provided in D8, then give a point in D9 and proceed to D10.)* Why do you think that the dog feels good/ fine/ happy/ satisfied etc.?[15]	Stopped the cat/ gets/ got the cat out of there Saved/ rescued/ helped the birds Sees that the birds are safe/ happy/ unharmed Now the cat won't come back	He is smiling/ looks like that Didn't get the cat Wants to eat the birds himself Angry at the cat	0	1
D10.	Who does the mother bird like best, the cat or the dog? Why?	The dog – give at least one reason (he saved/ helped the baby bird/ chased the cat away/ was kind to the birds)	The cat/ I don't know/ other irrelevant answer	0	1
D11.			**Total score out of 10:**		

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[15]   Use the same IST provided by the child in response to D8.

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Protocol for Baby Goats

<u>Telling/Retelling/Model Story</u>

Name of child: _____

Date of birth: _____

Date of testing: _____

Age of testing (in months): _____

Gender: _____

Name of examiner: _____

Exposure to L2 (in months): _____

Kindergarten entry date: _____

Name of kindergarten: _____

Be sure that all the envelopes are on the table before testing begins. Prepare the audio recorder in order to record the session. Begin recording before warming up.

Warming-up

Ask for example: Who is your best friend? What do you like to watch on TV? Do you like telling stories? Do you like listening to stories?

Instructions

Instructions for Telling

Sit opposite the child. Say to the child: *Look, here are 3 envelopes. There is a different story in each envelope. Choose one and then you can tell me a story.* Unfold the pictures so that the whole sequence is visible to the child only. *First look at the whole story.* (pause) *Are you ready?*

Unfold the first 2 pictures. Say to the child: *Now I want <u>you</u> to tell the story. Look at the pictures and try to tell the <u>best</u> story you can.* Allowable prompt if the child is reluctant to begin: *"Tell me the story"* (point to picture). When the child has finished telling the first 2 pictures, unfold the next (so that all pictures from 1 to 4 are visible). Repeat the process until the end of the story.

Allowable prompts if the child is silent in the middle of the story**:** *"Anything else?", "Continue", "Tell me more", "Let's see what else is in the story".* If the child stops talking without indicating that he/she has finished, ask: *"Tell me when you are finished".*

When the child has finished, praise the child and then ask the comprehension questions.

Instructions for Retelling

Sit opposite the child. Say to the child: *Look, here are 3 envelopes. There is a different story in each envelope. Choose one and then I will tell you the story.* Unfold the pictures so that the whole sequence is visible to the child only. *First look at the whole story.* (pause) *Are you ready? I am going to tell you the story and then you can tell it to me again.*

Unfold picture 1 and 2. *The story starts here:* (point to picture 1).
One day there was a mother goat who saw that her baby goat had fallen into the water and that it was scared. She jumped into the water because she wanted to save it. A hungry fox saw that the mother goat was in the water and growled: "Mmm, nice, what do I see here on the grass?".

Unfold picture 3 and 4 (so that all pictures from 1 to 4 are visible).
The mother goat pushed the baby goat out of the water, but she did not see the fox. She was glad that her baby did not drown. Meanwhile the mean fox jumped forward because he wanted to catch the other baby goat. He grabbed the baby goat. A brave bird that was flying by saw that the baby goat was in great danger. He decided to stop the fox and save the baby goat.

Unfold picture 5 and 6 (so that pictures from 1 to 6 are now visible).
The bird said to the fox: "Leave the baby goat alone". And then he flew down and bit the fox's tail. The fox let go of the baby goat and the bird chased him away. The bird was very happy that he could save the baby goat, and the fox was still hungry.

And that is the end of the story.

Unfold the pictures so that the first 2 pictures are visible to the child only. Say to the child:
Now I want you to tell the story. Look at the pictures and try to tell the best story you can. Allowable prompt if the child is reluctant to begin: *"Tell me the story"* (point to picture). When the child has finished telling the first 2 pictures, unfold the next (so that all pictures from 1 to 4 are visible). Repeat the process until you have reached the end of the story.

Allowable prompts if the child is silent in the middle of the story: *"Anything else?", "Continue", "Tell me more", "Let's see what else is in the story".* If the child stops talking without indicating that he/she has finished, ask: *"Tell me when you have finished".*

When the child has finished, praise the child and then ask the comprehension questions.

Instructions for Model Story

Sit opposite the child. Say to the child: *Look, here are 3 envelopes. There is a different story in each envelope. Choose one and then I will tell you the story.* Unfold the pictures so that the whole sequence is visible to the child only. *First look at the whole story.* (pause) *Are you ready? I am going to tell you the story and then I will ask you some questions.*

Unfold picture 1 and 2. *The story starts here:* (point to picture 1).
One day there was a mother goat who saw that her baby goat had fallen into the water and that it was scared. She jumped into the water because she wanted to save it. A hungry fox saw that the mother goat was in the water and growled: "Mmm, nice, what do I see here on the grass?".

Unfold picture 3 and 4 (so that all pictures from 1 to 4 are visible).

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The mother goat pushed the baby goat out of the water, but she did not see the fox. She was glad that her baby did not drown. Meanwhile the mean fox jumped forward because he wanted to catch the other baby goat. He grabbed the baby goat. A brave bird that was flying by saw that the baby goat was in great danger. He decided to stop the fox and save the baby goat.

Unfold picture 5 and 6 (so that pictures from 1 to 6 are now visible).
The bird said to the fox: "Leave the baby goat alone". And then he flew down and bit the fox's tail. The fox let go of the baby goat and the bird chased him away. The bird was very happy that he could save the baby goat, and the fox was still hungry.

And that is the end of the story.

After you told *And that is the end of the story* ask the comprehension questions.

Scoring sheet for Baby Goats

Section I: Production

A. Story Structure; B. Structural complexity; C. Internal State Terms (IST)

A. Story Structure

		Examples of correct responses[16]	Score
A1.	Setting	Time and/ or place reference, e.g. once upon a time/ one day/ long ago... in a forest/ in a meadow/ in a field/ by a lake/ at the lake/ at the pond	0 1 2[17]
Episode 1: Mother/ Goat (episode characters: baby goat and mother/ goat)			
A2.	IST as initiating event	**Baby goat** was scared/ in danger/ needed help/ cried (for help)/ called the mother **<Mother/ Goat/ Parent, etc.**> <u>saw</u> that the baby goat was scared/ in danger/ drowning/ couldn't swim **<Mother/ Goat/ Parent, etc.**> was worried about the baby goat in the water	0 1
A3.	Goal	**Mother goat** wanted to help the baby/ to save/ rescue the baby/ to push the baby out of the water/ to get it out of the water (In order) to + VERB (rescue, help) the baby	0 1
A4.	Attempt	**Mother goat** ran/ went into the water **Mother goat** is pushing/ helping **Mother goat** tried to + VERB (help, push)	0 1
A5.	Outcome	**Mother goat** pushed the baby out of the water/ saved/ rescued/ helped the baby out **Baby goat** was saved/ out of the water	0 1
A6.	IST as reaction	**Mother goat** was happy/ relieved **Baby goat** was relieved/ satisfied/ happy/ glad/ not scared any more	0 1
Episode 2: Fox (episode characters: fox and baby goat)			
A7.	IST as initiating event	**Fox** <u>saw</u> mother looking away/ <u>saw</u> that the baby was alone/ <u>saw</u> that there was food **Fox** was hungry/ thought "yummy"	0 1
A8.	Goal	**Fox** wanted to eat/ catch/ kill the baby goat (In order) to + VERB (eat, catch, get, kill)	0 1
A9.	Attempt	**Fox** jumped up/ out/ jumped towards the baby goat **Fox** tried to reach/ grab/ catch the baby goat	0 1
A10.	Outcome	**Fox** got/ grabbed/ caught the baby goat **Fox** nearly/almost + VERB (got, caught)	0 1
A11.	IST as reaction	**Fox** was happy **Baby** goat was scared/ crying/ screaming with pain	0 1
Episode 3: Bird (episode characters: bird, fox and baby goat)			
A12.	IST as initiating event	**<Bird, Crow, etc.>** <u>saw</u> that the goat was in danger/ <u>saw</u> that the fox caught/ got the goat **Baby goat** was in danger	0 1

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[16] If in doubt or the response of the child is not on this scoring sheet consult the manual.

[17] Zero points for wrong or no response, 1 point for one correct response, 2 points for reference to both time and place.

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A13.	Goal	**Bird** decided/ wanted to stop the fox **Bird** decided/ wanted to help/ protect/ save the baby goat (In order) to + VERB (stop, rescue, help)	0	1
A14.	Attempt	**Bird** was/is biting/ dragging the fox's tail/ the fox **Bird** bit/ dragged/ got the fox's tail/ attacked the fox **Bird** tried to + VERB (get fox off)	0	1
A15.	Outcome	**Bird** chased the fox (away)/ scared the fox off/ away **Fox** let go of the baby goat/ ran away **Baby goat** was saved/ rescued	0	1
A16.	IST as reaction	**Bird** was relieved/ happy/ proud (to have saved/ rescued the baby goat) **Fox** was angry/ disappointed/ feeling bad/ mad/ scared/ in pain/ fox's tail hurt **Baby goat/ -s** was/were relieved/ happy/ safe **Mother goat** was relieved/ happy	0	1
A17.		**Total score out of 17:**		

B. Structural complexity

Number of AO sequences	Number of single G (without A or O)	Number of GA / GO sequences	Number of GAO sequences
B1.	B2.	B3.	B4.

C. Internal State Terms (IST)

C1.	Total number of IST in tokens. IST include: **Perceptual state terms** e.g. *see, hear, feel, smell;* **Physiological state terms** e.g. *thirsty, hungry, tired, sore, hurt(ing);* **Consciousness terms** e.g. *alive, awake, asleep;* **Emotion terms** e.g. *sad, happy, glad, angry, worried, disappointed, afraid, scared, proud, brave,* (feel) *safe, pleased, surprised;* **Mental verbs** e.g. *want, think, know, forget, decide, believe, wonder, have/ make a plan;* **Linguistic verbs/ verbs of saying/ telling** e.g. *say, call, shout, warn, ask.*

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Section II: Comprehension

		Examples of correct responses	Examples of wrong responses	Score	
0	Did you like the story?	**Warm-up question, not scored**			
D1.	Why was the mother goat in the water? *(point to pictures 1-2)* (Episode 1: Goal/ IST as initiating event)	Wants to save/ to help/ rescue the baby goat (In order) to + VERB (help, save, rescue) the baby goat Worried about the baby goat Baby goat was crying for help/ is in danger/ scared	Is swimming/ playing/ wants to take a bath/ to wash herself/ to wash the baby goat/ to cool off/ to drink	0	1
D2.	How does the baby goat feel? *(point to baby goat in the water, picture 1)* (IST as initiating event)	Bad/ scared/ in danger/ horrified Wants to be rescued	Good/ fine/ happy/ playing/ freezing/ refreshed/ cold/ hungry/ thirsty/ dirty/ clean/ stupid	0	1
D3.	*(Only ask D3 if the child gives a correct response without explanation/ rationale in D2. If a correct explanation is provided in D2, then give a point in D3 and proceed to D4.)* Why do you think that the baby goat is feeling bad/ scared/ in danger etc.?[18]	Has fallen into the water/ is not able to get out of the water/ is drowning/ cannot swim Is shouting/ screaming "Help, I'm drowning!" Babies cannot swim (generic meaning)	He is hungry/ thirsty/ swimming/ playing in the water/ wasn't allowed to stand there	0	1
D4.	Why does the fox jump/ leap forward? *(point to picture 3)* (Episode 2: Goal)	Wants to get/ kill/ eat the baby goat/ Wants the baby goat (In order) to + VERB (get, kill) the baby goat Couldn't resist the baby goat/ takes the opportunity when mother is not looking/ is far away Foxes like to eat (baby) goats (generic meaning)	To play with the baby goat	0	1
D5.	How does the fox feel? *(point to picture 5-6)* (IST as reaction)	Bad/ (still) hungry/ angry/ mad/ sad/ scared/ hurt/ stupid/ disappointed	Good/ fine/ happy/ playful/ running	0	1
D6.	*(Only ask D6 if the child gives a correct response without explanation/ rationale in D5. If a correct explanation is provided in D5, then give*	Did not get the baby goat/ failed to succeed Is scared/ afraid of the bird Bird was/ is attacking/ biting/ chasing him/ biting the fox's tail	Fox is running away/ looks like that Bird took the fox's food Bird wants to eat the fox I don't know	0	1

[18] Use the same IST provided by the child in response to D2.

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	a point in D6 and proceed to D7.) Why do you think that the fox is feeling bad/ scared/ hungry/ disappointed etc.?[19]	*If response to D5 is "bad/angry", the answer to D6 can also be:* is still hungry			
D7.	Why does the bird bite the fox's tail? *(point to picture 5)* (Episode 3: Goal)	Decides/ wants to save/ rescue/ help/ protect the baby goat Decides/wants to stop the fox/ to make the fox let the goat go (In order) to + VERB (save, rescue, help) So that the goat will not be eaten/ killed/ hurt	Wants to eat the goat himself Wants to eat the fox To play with the fox Birds hate/ don't like foxes (generic meaning)	0	1
D8.	Imagine that the bird sees the goats. How does the bird feel? *(point to picture 6)* (IST as reaction)	Good/ fine/ happy/ relieved/ pleased/ satisfied/ proud/ helpful Like a protector/ hero Likes to protect them	Bad/ sad/ angry/ mad/ sorry/ stupid/ hungry "I have to get the fox"	0	1
D9.	*(Only ask D9 if the child gives a correct response without explanation/ rationale in D8. If a correct explanation is provided in D8, then give a point in D9 and proceed to D10.)* Why do you think that the bird is feeling good/ fine/ happy etc.?[20]	Stopped the fox/ gets/ got the fox out of there Saved/ rescued/ helped the goat Sees that the goats are safe/ happy/ unharmed Now the fox won't come back	He is smiling/ looks like that Didn't get the fox Wants to eat the baby goat himself Is angry at the fox	0	1
D10.	Who does the mother goat like best, the fox or the bird? Why?	The bird – give at least one reason (he saved/ helped the baby goat/ chased the fox away/ was kind to the goats)	The fox/ I don't know/ other irrelevant answer	0	1
D11.			**Total score out of 10:**		

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[19] Use the same IST provided by the child in response to D5.
[20] Use the same IST provided by the child in response to D8.

Background Questions

1. Child's name (forename, surname) _____

2. Date of birth _____

3. Does your child currently go to a kindergarten/ day care/ school?

○ Yes, kindergarten
   from _____ (year, month)
	○ Yes, school
	   from _____ (year, month)

○ No	○ No

If yes, what kind of kindergarten? | If yes, what kind of school?

○ Bilingual

○ Monolingual L1 = child's native language

○ Monolingual L2 = child's second language

○ Other, what kind of other?

_____

○ Bilingual

○ Monolingual L1 = child's native language

○ Monolingual L2 = child's second language

○ Other, what kind of other?

_____

4. In what country was your child born?

○ In country of L1, which?_____   ○ In country of L2, which?_____   ○ In other country, which?_____

5. Since when has your child lived in the country of L2?_____ (year, month)

6. Birth order

○ 1   ○ 2   ○ 3   ○ Put the number ____

7. How old was your child when he/she spoke the first words?

___ year(s) ___ month(s)

8. Have you ever been concerned about your child's language?

○ No   ○ Yes, specify why? _____

9. Has anyone in your family had any speech or language difficulties?

○ No   ○ Yes, specify who? _____

               e.g., mother, father, sibling(s)

10. Has your child ever had hearing problems?

Hearing impairment   Frequent ear infections

   ○ No

   ○ Yes

   ○ No

   ○ Yes, how many? _____

   ○ grommets (ear tubes)

11. In your opinion, does your child hear normally?

○ No   ○ Yes

12. Information about the parents

	Specify your native language (L1)	Specify your second language (L2)	Specify other languages you speak	How long have you been living in XX country	Your education	Your occupation
Mother/ Parent 1						
Father/ Parent 2						

13. What language do you speak with your child?

Mother/ Parent 1
- ○ My native language (L1)
- ○ My second language (L2)
- ○ Both native and second language
- ○ Other language(s), specify which
  _____

Father/ Parent 2
- ○ My native language (L1)
- ○ My second language (L2)
- ○ Both native and second language
- ○ Other language(s), specify which
  _____

14. What languages does your child speak now?

- ○ Child's L1, which is: _____
- ○ Child's L2, which is: _____
- ○ Other languages, which are: _____

15. What languages is your child exposed to?

- ○ Child's L1
- ○ Child's L2
- ○ Other languages, which are: _____

16. At what age did your child's exposure for L2 begin?

- ○ From birth
- ○ Before age 1
- ○ Before age 2
- ○ Before age 3
- ○ Before age 5
- ○ From age _____

17. Is your child exposed to L2 in

- ○ Kindergarten or school
- ○ With friends
- ○ With siblings/ parents/ other relatives
- ○ TV/ computer/ books
- ○ Other _____

18. Estimate, in terms of percentages, how often your child is exposed to different languages per day (in all daily activities combined)?

His/ her native language (L1)	His/ her second language (L2)	Other language(s)
○ 25%	○ 25%	○ 25%
○ 50%	○ 50%	○ 50%
○ 75%	○ 75%	○ 75%
○ 100%	○ 100%	○ 100%

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19. Please, estimate your child's language skills by ticking the appropriate box	Very well	Quite well	Quite badly	Very badly
How well does your child <u>understand</u> his/ her native language (L1)				
How well does your child <u>understand</u> his/ her second language (L2)				
How well does your child <u>speak</u> his/ her native language (L1)				
How well does your child <u>speak</u> his/ her second language (L2)				

20. In your opinion, which language does your child speak best?

○ His/ her L1
○ His/ her L2
○ Other language, which is _____

21. In your opinion, does your child like/ prefer any of the languages more than others?

○ No
○ Yes, which? _____

22. Please, indicate the frequency of the following activities carried out with your child during the last month	His/ her native language (L1)				His/ her second language (L2)			
	Never	Twice a month	Once or twice a week	Almost every day	Never	Twice a month	Once or twice a week	Almost every day
Telling stories								
Reading books								
Listening to songs or singing								
Watching TV/ DVD/ Films/ Computer games								

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Story scripts

The following story scripts serve as stimuli for Model Story and/or Retelling. The scripts are parallelised for macro- and microstructure and can be used to guide coding and analysis.

Furthermore, these story scripts should be used for translation and adaptation to other languages (see the chapter "*Background on MAIN – Revised, how to use it and adapt it to other languages*" in *ZAS Papers in Linguistics* 63 (2019, pp. iv–xii) which can be accessed via www.leibniz-zas.de/en/research/publications).

The marking of story structure components and internal state terms in the scripts below is given in the following way:

goal   attempt   outcome   *internal state terms*

Baby Birds (Total number of words: 178)

Pictures 1/ 2: One day there was a mother bird who *saw* that her baby birds were *hungry*. She flew away because she wanted to find food for them. A *hungry* cat *saw* that the mother bird was flying away and *meowed*: "Mmm, nice, what do I see here in the nest?".

Pictures 3/ 4: The mother bird came back with a big worm for her children, but she did not *see* the cat. She was *happy* about the juicy worm for her babies. Meanwhile the *mean* cat started climbing up the tree because he wanted to catch a baby bird. He grabbed one of the baby birds. A *brave* dog that was passing by *saw* that the birds were in great danger. He decided to stop the cat and save them.

Pictures 5/ 6: He *said* to the cat: "Leave the baby birds alone". And then he grabbed the cat's tail and pulled him down. The cat let go of the baby bird and the dog chased him away. The dog was very *glad* that he could save the birds, and the cat was still *hungry*.

Baby Goats (Total number of words: 185)

Pictures 1/ 2: One day there was a mother goat who *saw* that her baby goat had fallen into the water and that it was *scared*. She jumped into the water because she wanted to save it. A *hungry* fox *saw* that the mother goat was in the water and *growled*: "Mmm, nice, what do I see here on the grass?".

Pictures 3/ 4: The mother goat pushed the baby goat out of the water, but she did not *see* the fox. She was *glad* that her baby did not drown. Meanwhile the *mean* fox jumped forward because he wanted to catch the other baby goat. He grabbed the baby goat. A *brave* bird that was flying by *saw* that the baby goat was in great danger. He decided to stop the fox and save the baby goat.

Pictures 5/ 6: The bird *said* to the fox: "Leave the baby goat alone". And then he flew down and bit the fox's tail. The fox let go of the baby goat and the bird chased him away. The bird was very *happy* that he could save the baby goat, and the fox was still *hungry*.

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Cat (Total number of words: 178)

Pictures 1/ 2: One day there was a *playful* cat who *saw* a yellow butterfly sitting on a bush. He <u>leaped forward</u> because he <u>wanted to catch it</u>. Meanwhile, a *cheerful* boy was coming back from fishing with a bucket and a ball in his hands. He *looked* at the cat chasing the butterfly.

Pictures 3/ 4: The <u>butterfly flew away</u> quickly and the <u>cat fell into the bush</u>. He *hurt* himself and was very *angry*. The boy was so *startled* that the ball fell out of his hand. When he *saw* his ball rolling into the water, he *cried*: "Oh no, there goes my ball!". He was *sad* and <u>wanted to get his ball back</u>. Meanwhile, the cat *noticed* the boy's bucket and *thought*: "I want <u>to grab a fish</u>."

Pictures 5/ 6: At the same time the boy began <u>pulling his ball out</u> of the water with his fishing rod. He did not *notice* that the <u>cat had grabbed a fish</u>. In the end, the cat was very *pleased* to <u>eat such a tasty fish</u> and the boy was *happy* to <u>have his ball back</u>.

Dog (Total number of words: 174)

Pictures 1/ 2: One day there was a *playful* dog who *saw* a grey mouse sitting near a tree. He <u>leaped forward</u> because he <u>wanted to catch it</u>. Meanwhile, a *cheerful* boy was coming back from shopping with a bag and a balloon in his hands. He *looked* at the dog chasing the mouse.

Pictures 3/ 4: The <u>mouse ran away</u> quickly and the <u>dog bumped into the tree</u>. He *hurt* himself and was very *angry*. The boy was so *startled* that the balloon slipped out of his hand. When he *saw* his balloon flying into the tree, he *cried*: "Oh no, there goes my balloon!". He was *sad* and <u>wanted to get his balloon back</u>. Meanwhile, the dog *noticed* the boy's bag and *thought*: "I <u>want to grab a sausage</u>."

Pictures 5/ 6: At the same time the boy began <u>pulling his balloon out of the tree</u>. He did not *notice* that the dog had <u>grabbed a sausage</u>. In the end, the dog was very *pleased* to <u>eat such a tasty sausage </u>and the boy was *happy* to <u>have his balloon back</u>.