FP7 - Information and Communication Technologies

Collaborative Project

Dicta-Sign

**Sign Language Recognition, Generation and Modelling
with application in Deaf Communication**

Grant Agreement Number 231135

Deliverable D6.3: Annotated Parallel Corpora for BSL, DGS, GSL, LSF – Addendum

Leading Partner: University of Hamburg (UHH)

Version: 2.0

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Appendix: The Dicta-Sign Web Portal – Task Descriptions and Content Tags

1 Synopsis

The aim of Workpackage 6 was to create the project language resources. Its objective was to produce reasonably sized annotated corpora and lexicons for the four European sign languages involved in the project (BSL, DGS, GSL, and LSF) and to make the corpus data available to other workpackages and the research community at large by providing annotated video data.
During the project lifetime, it was decided to make use of recent technological advances by including stereo cameras into the data collection process and to provide single-sign recordings in the same camera setup as extra training material for sign recognition.
Deliverable D6.3 comprises of these four subcorpora: The video footage and export files of the transcripts as well as video clips with annotation subtitles are made available on a server. A portal was created in order to present the material and allow convenient access to the data for a larger community. This addendum describes the corpus video production and postprocessing in the four countries as well as the transcription work. It introduces the Dicta-Sign web portal with its different access levels and the layout that allows for different access options to the corpus data.

2 Corpus Content

2.1 Corpus Video Productions

Recordings took place for all four sign languages involved in the project to collect data for Dicta-Sign's multilingual corpus. In preparation of the elicitation sessions the material described in D6.2 was adjusted for each country and task explanations were translated into the respective sign language. The elicitation sessions that took place in all four countries resulted in recorded material of at least 10.5 hours per language. Not taking into account data that had to be excluded for certain reasons (e.g. due to a withdrawal of the informant's consent) as well as parts like introduction, task explanations or feedback the corpus video inventory now consists of at least 8 hours signing time from 14 to 16 different informants per language (see table below for details).

	DGS	LSF	GSL	BSL
Signing Time (hh:min)	09:07	08:20	10:07	08:12
No. of Sessions	7	8	8	8
No. of Informants	14	16	16	16

Table 1: Dicta-Sign video inventory

The complex studio setup that was decided to be used for Dicta-Sign's data collection consisted of seven cameras, two of them stereo cameras (Hanke et al. 2010a). The different camera perspectives (front, side and bird's eye view) were to help annotators interpret the signing. The additional stereo cameras provide footage that allows image analysis to reconstruct 3D information and help automatic processing.
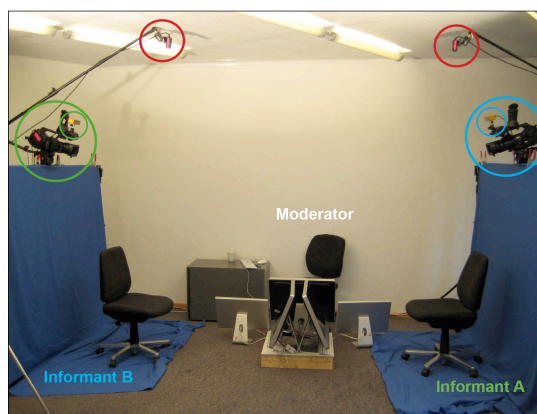
Figure 1: The Dicta-Sign studio at UHH

A variety of postprocessing steps were needed before annotation work could start, most importantly providing backup data, compression of the video files as well as precise frame-by-frame synchronisation. iLex was further developed to handle multi-camera recordings (Hanke et al. 2010b). It now allows synchronising video clips of the different camera perspectives by adjusting the time code information (see Figure 2). In the transcript window (Figure 3) different layout options may be defined to adjust arrangement and size of the different perspectives according to the annotators' individual needs. As an extra step in postprocessing, UHH decided to convert their video clips, recorded at a frame rate of 25 frames per second interlaced, to 50fps by deinterlacing the video footage. This allows for more precise segmentation of the individual signs.[1]

Figure 2: Synchronising camera perspectives in iLex
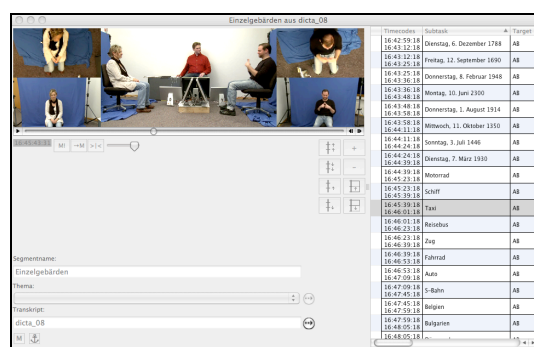
Figure 3: iLex transcript window with multicamera layout

Dicta-Sign's basic lexicon list, initially planned as a bootstrapping phase for corpus annotation, was later decided to be used as a shared list of 1000 concepts for the four sign languages. In order to provide reliable video footage for WP2 at an early stage it was further decided to additionally record the 1000 lemmas in a studio reproduction. For GSL and DGS the recordings comprise of 5-10 times the same sign of one signer (for GSL) or two signers (for DGS) which served as training material for sign recognition. For LSF and BSL lemmas were recorded one time each. Postprocessing was done as for the corpus data. However, an extra step was needed for the DGS data due to recording errors in one of the cameras that caused a loss of frames and made synchronisation of the video clips impossible. The iLex synchronisation function was therefore extended in a way to allow inserting frames where needed.

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[1] With the goal of improving the avatars' performance DGS videos with 50fps were also used to gain more information on the exact timing of individual parameters in signs (cf. Hanke et al. 2011).

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2.2 Corpus Transcription

Corpus transcription work has been carried out for all four sign languages within the project. In a first step, new iLex databases had to be created for BSL, GSL and LSF. For DGS it was possible to take advantage of the already existing database being used at UHH. The video data were then integrated into iLex and transcripts were produced for all tasks. At UHH, where Session Director had been used to run the elicitation sessions (cf. Hanke et al. 2010a), it was possible to provide automatic tagging specifying start and end of the individual tasks and subtasks using time information from the Session Director log files.

Due to the delays in corpus collection the annotation only started in the second year of the project. In order to minimise the impact of these delays on other workpackages, especially WP4, this workpackage determined the order in which the basic annotation was carried out. It was agreed between the project partners to annotate the "Airport Task" (task 4) as a first step (now available for at least 5 sessions per language), followed by annotation of as many different tasks as possible for each partner (see Table 2 for details). The annotation process for all sign languages included segmentation, lemmatisation and form description. With regard to segmentation of the continuous signing it was decided to treat transitional movements between individual signs not as part of either sign (i.e. there are gaps between two signs during which the articulators move from the end of one sign to the beginning of the next). This approach, though more time consuming than segmenting once in the middle of a transition, offers advantages for the subsequent processing within Dicta-Sign: Firstly it results in the fact that a token tag then represents only that part of the signal that is described by HamNoSys. Secondly, variation between tokens is much lower than if the transition would be part of the sign.

After segmentation the individual signs could be lemmatised, i.e. unique glosses were assigned by means of type-token matching in the growing database, and a HamNoSys description was added on type level.

As a further step to enrich the data annotation, individual project partners conducted extra annotation work: For the DGS data mouth patterns were annotated by assigning either written German words to represent mouthings or "MG" as a preliminary tag for mouth gestures. Furthermore, in addition to the annotation of HamNoSys on type level form deviations between types and the respective tokens were tagged as such in order to provide more reliable training data for image processing. The GSL data provide a tagging of clause boundaries, and for LSF pointing, buoys and depicting signs have been annotated using categories close to those proposed in the Auslan annotation guideline provided by Trevor Johnston[2], and for pointing and depicting signs some indication on the use of the signing space have been added. Furthermore, English translation is provided for parts of the German, Greek, and French subcorpora as well as a French translation for the majority of the LSF data.

The elicitation sessions for the Dicta-Sign corpus had been planned in a way to provide more data than initially needed, and therefore not all videos that are now available could be fully annotated in the framework of the project. In order to allow access to all corpus data, it was therefore decided to provide a coarse tagging by assigning content tags that reflect the topics covered by the individual informants (see Table 2).

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[2] http://www.auslan.org.au/video/upload/attachments/AuslanCorpusAnnotationGuidelines30November2011.pdf

Task	Lemmatisation / Content Tags (No. of Sessions)			
	DGS	LSF	GSL	BSL
1	1 / 6	5 / 8	8 / 8	0 / 8
2	1 / 6	5 / 8	8 / 8	0 / 8
3	1 / 6	5 / 8	8 / 8	0 / 8
4	7 / 7	5 / 8	8 / 8	8 / 0
5	0 / 6	5 / 7	0 / 8	0 / 8
6	1 / 6	5 / 8	8 / 8	0 / 8
7	1 / 6	5 / 3	8 / 8	0 / 8
8a	2 / 6	5 / 8	8 / 8	8 / 0
8b	2 / 6	5 / 8	7 / 8	0 / 8
9	1 / 6	8 / 0	0 / 8	0 / 8
10	0 / 5	0 / 0	0 / 0	0 / 0

Table 2: Annotated Video Data

The Dicta-Sign multilingual corpus is not a parallel corpus in the classical sense as the "oral" nature of sign language as well as the risk of influences from written majority languages do not allow for such an approach. Instead, the aim was to elicit semantically close answers without predetermining the choice of vocabulary and grammar. In order to allow finding video sections in the corpus with comparable content across individual informants and languages, consistent naming of the content tags had to be assured. For the majority of the tasks, e.g. "At the airport", many topics covered by informants are directly related to the elicitation material and defining the topics across the different languages was comparably easy. For other tasks, as e.g. "Public transportation", a mapping of information was needed: Station names vary across languages and many different routes were described by the individual informants. In order to allow for consistent content tagging codes were applied to the different routes and pictures were produced accordingly (see Appendix). The topics found in the Dicta-Sign corpus and their occurrences across the different languages are being evaluated and results will be reported at the '5th Workshop on the Representation and Processing of Sign Languages' (LREC2012).[3]

2.3 Metadata

Personal metadata was collected from the informants by means of questionnaires based on the IMDI standard with sign language-specific extensions as defined in Crasborn/Hanke 2003. As that set covers a variety of purposes for metadata (e.g. to support language acquisition studies), but does not explicitly define subparts, Dicta-Sign defined a subset that seemed suitable for the kind of study conducted here and also minimised the questionnaire filling effort for the informants.

When the data collection was planned, it was evident that metadata would be collected in a finer granularity than appropriate for publication. It was therefore communicated to the informants (and agreed by them through the Informed Consents) that only coarsened data would be made available without specifying exactly what that means. We had hoped that projects focussing on metadata (esp. CLARIN and

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[3] Matthes et al. (in preparation): Dicta-Sign – Building a Multilingual Sign Language Corpus.

NaLiDa) would meanwhile define standards how to specify such coarsenings so that the sign language corpus community could fill out the details on sign language data. Unfortunately, although there has been a lot of communication between projects and the Dicta-Sign data were selected as a case study for CLARIN-D, this is not yet the case. Instead, we defined two levels of coarsening for different publicity levels (see below on portal structure) of informant data. E.g. the informant's date of birth is converted to the age in years for restricted access and age range (e.g. 41-50) for public access.

For the time being, data are made available in IMDI session file format. Through cooperation with NaLiDa/CLARIN-D, these data will be converted to the upcoming CMDI component structure.

The coarsenings applied were deliberately chosen to be restrictive. In cases where users of the Dicta-Sign data would require more specific data, it was agreed that they should contact the individual Dicta-Sign partners responsible for the subcorpus concerned. The procedure for verifying the scientific need and contacting the informant to agree is then identical to the one for requests to contact informants for extra data collections.

3 The Dicta-Sign Web Portal

A web portal was developed to allow access to the Dicta-Sign multilingual corpus for public use as well as research purposes. It can be accessed from the Dicta-Sign website: http://www.dictasign.eu/Main/Portal.

3.1 Access Levels

There are three accessibility levels to the corpus data:

- Publicly available on the project site: Metadata and "appetisers" to the video and transcript data. Information on elicitation materials is at the same level of detail as previously published (Matthes et al. 2010).
- Restricted access for researchers: Elicitation materials available for researchers' own purposes as well as to fully understand the data collection. Video and transcript data as available in a standard format (H.264 for video, ELAN and iLex export format for transcripts).
- The third level is not available online, but requires arrangements between the researcher interested and the individual partner owning the data. This includes higher-resolution less compressed video and stereo data and more refined metadata.

Additionally the web portal includes contact forms for researchers who request higher-resolution and stereo data from individual partners or ask to contact informants to be given access to more detailed metadata or to suggest additional data collection.

3.2 Layout

The Dicta-Sign web portal offers different approaches to access the corpus data:

- **By Language & Informants:** For every sign language the available recording sessions (i.e. pairs of informants) are listed. Via the sessions all tasks performed by the respective informants as well as informant metadata information can be accessed.
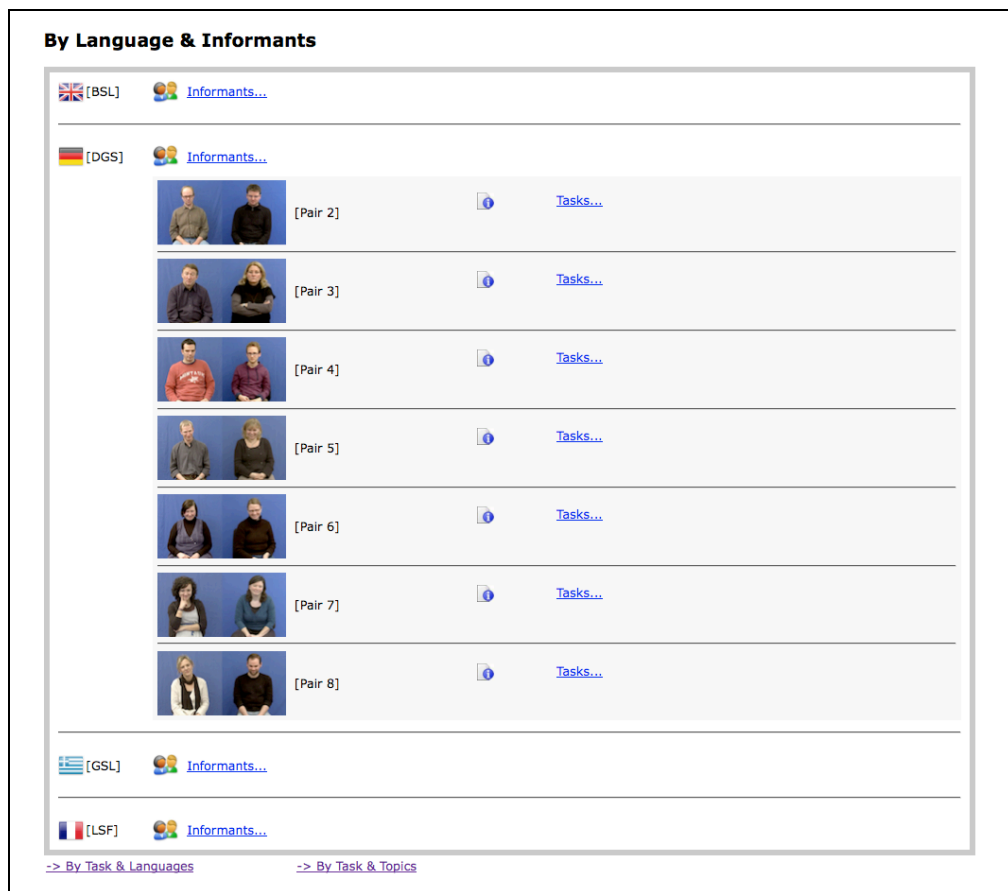
Figure 4

- **By Task & Languages:** For each task that the informants were asked to perform a short description as well as the elicitation material is provided (cf. Appendix). Grouped by languages, all data-by-task items for a certain task are listed and can be accessed. In addition, the content tags defined for each task are presented.
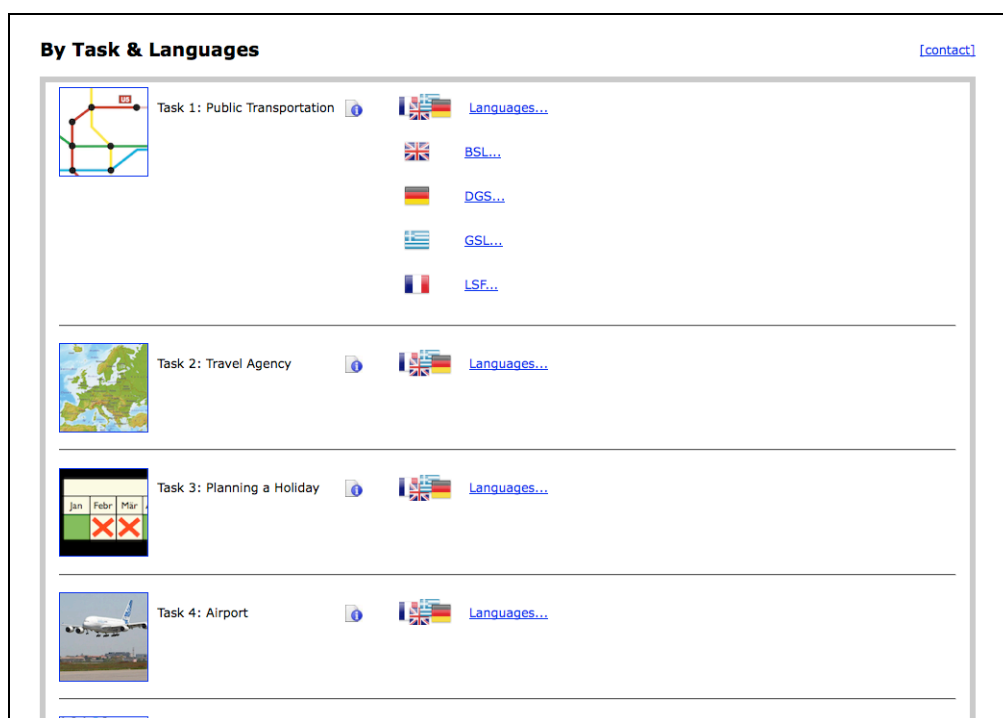
Figure 5

- **By Task & Topics:** This approach makes use of the topics identified as part of the annotation process. By listing all content tags of the individual tasks it allows access to comparable data across individual informants and languages (cf. Appendix).
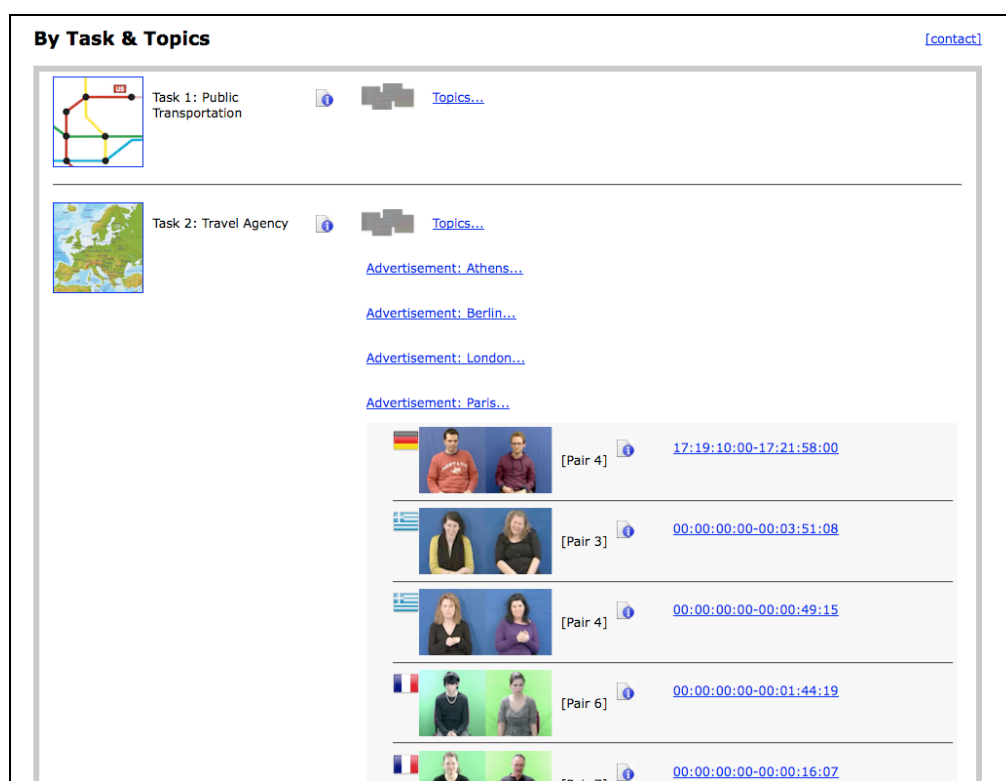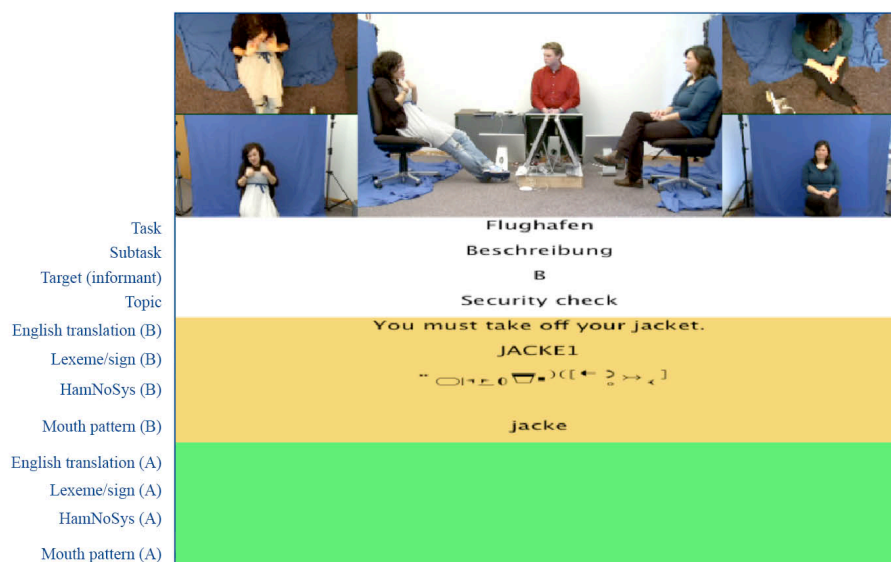
Figure 6

The corpus video and transcription data linked to the portal via the different access options are made available as videos with and without subtitles (cf. Figure 7), in iLex export format as well as ELAN format. The elicitation material including task explanations in the respective sign language is provided as Keynote or PowerPoint documents. The portal also contains a section for access to the 10x1000 lemmas that were recorded based on Dicta-Sign's basic lexicon list.

Figure 7: DGS video with subtitles displaying information from the transcript.

4 References

Crasborn, Onno / Hanke, Thomas (2003). Metadata for sign language corpora. Available online at: http://www.let.ru.nl/sign-lang/echo/docs/ECHO_Metadata_SL.pdf .

Hanke, Thomas / König, Lutz / Wagner, Sven / Matthes, Silke (2010a). DGS Corpus & Dicta-Sign: The Hamburg Studio Setup. In: Dreuw, Philippe et al. (eds.): LREC 2010. 7th International Conference on Language Resources and Evaluation. Workshop Proceedings. W13. 4th Workshop on Representation and Processing of Sign Languages: Corpora and Sign Language Technologies. May 22/23 2010. Valetta – Malta. Paris: ELRA, pp. 106-109.

Hanke, Thomas / Storz, Jakob / Wagner, Sven (2010b). iLex: Handling Multi-Camera Recordings. In: Dreuw, Philippe et al. (eds.): LREC 2010. 7th International Conference on Language Resources and Evaluation. Workshop Proceedings. W13. 4th Workshop on Representation and Processing of Sign Languages: Corpora and Sign Language Technologies. May 22/23 2010. Valetta – Malta. Paris: ELRA, pp. 110-111.

Hanke, Thomas / Matthes, Silke / Regen, Anja / Storz, Jakob / Worseck, Satu / Elliott, Ralph / Glauert, John / Kennaway, Richard (2011). Using Timing Information to Improve the Performance of Avatars. Second International Workshop on Sign Language Translation and Avatar Technology (SLTAT). 23 October 2011. Dundee, U.K.

Matthes, Silke / Hanke, Thomas / Storz, Jakob / Efthimiou, Eleni / Dimou, Nassia / Karioris, Panagiotis / Braffort, Annelies / Choisier, Annick / Pelhate, Julia, Safar, Eva (2010). Elicitation Tasks and Materials designed for Dicta-Sign's Multi-lingual Corpus. In: Dreuw, Philippe et al. (eds.): LREC 2010. 7th International Conference on Language Resources and Evaluation. Workshop Proceedings. W13. 4th Workshop on Representation and Processing of Sign Languages: Corpora and Sign Language Technologies. May 22/23 2010. Valetta – Malta. Paris: ELRA, pp. 158-163.

Matthes, Silke / Hanke, Thomas / Regen, Anja / Storz, Jakob / Worseck, Satu / Efthimiou, Eleni / Dimou, Athanassia-Lida / Braffort, Annelies / Glauert, John / Safar, Eva (in preparation): Dicta-Sign – Building a Multilingual Sign Language Corpus. Accepted for 5th Workshop on the Representation and Processing of Sign Languages, LREC2012, Istanbul, Turkey, May, 2012.

Appendix: The Dicta-Sign Web Portal – Task Descriptions and Content Tags

Task 1: Public Transportation Map

Category:	Route description
Main target:	Informant A/B
Description:	The informants are asked to explain how to get from a certain place to another using public transportation. A map is provided to both of them displaying different means of public transport (underground, connecting busses, closed lines, possibility of walking) and stations (airport, town hall, train station, market, etc.). The task includes five subtasks where different stations are given as departure and destination points, indicated as flags on the map. Each of the informants is asked to suggest one possible route per subtask. *German transportation map for DGS informants:*
Topics:	R1.1a: Einkaufszentrum (U3) - Europaplatz (walking) - Museum (U3) - Flughafen R1.1b: Einkaufszentrum (U3) - Flughafen *[without walking, not possible]* R1.2: Einkaufszentrum (U3) - Europaplatz (U2) - Westbahnhof (U5) - Museum (U3) - Flughafen R1.3: Einkaufszentrum (U3) - Südkreuz (U4) - *unnamed station* (Bus) - Bergweg (U3) - Flughafen *[without walking, not possible]* R1.4: Einkaufszentrum (U3) - Marktplatz (U5) - Museum (U3) - Flughafen R1.5: Einkaufszentrum (Bus) - Schlossallee (U1) - Stadtpark (U5) - Museum (U3) - Flughafen R1.6: Einkaufszentrum (U3) - Messe (U1) - Hauptbahnhof (U4) - Südkreuz (U3) - Flughafen R1.7: Einkaufszentrum (U3) - Messe (U1) - Stadion (U5) - Museum (U3) - Flughafen R1.8: Einkaufszentrum (Bus) - Kino (U1) - Hauptbahnhof (U4) - Südkreuz (U3) - Flughafen R1.9: Einkaufszentrum (U3) - Messe (U1) - Stadtpark (U5) - Museum (U3) - Flughafen

R1.10:	Einkaufszentrum (Bus) - Kino (U1) - Stadion (U5) - Museum (U3) - Flughafen
R1.11:	Einkaufszentrum (U3) - Europaplatz (U2) - Hauptbahnhof (U4) - Südkreuz (U3) - Flughafen
R1.12:	Einkaufszentrum (Bus) - Kino (U1) - Schwimmbad (U5) - *unnamed station* (U2) - Hauptbahnhof (U4) - Südkreuz (U3) - Flughafen
R2.1:	Talstraße (U4) - Südkreuz (U3) - Museum (U5) - Westbahnhof (U2) - Burgstraße
R2.2:	Talstraße (U4) - Hauptbahnhof (U2) - Burgstraße
R2.3:	Talstraße (U4) - Hauptbahnhof (U1) - Stadtpark (U5) - Westbahnhof (U2) - Burgstraße
R2.4:	Talstraße (U4) - Südkreuz (U3) - Museum (walking) - Europaplatz (U2) - Burgstraße
R2.5:	Talstraße (U4) - Hauptbahnhof (U1) - Messe (U3) - Europaplatz (U2) - Burgstraße
R2.6:	Talstraße (U4) - Schwimmbad (U1) - Kino (Bus) - Schlossallee (U1) - Stadtpark (U5) - Westbahnhof (U2) - Burgstraße
R2.7:	Talstraße (U4) - Schwimmbad (U5) - *unnamed station* (U2) - Burgstraße
R2.8:	Talstraße (U4) - *unnamed station* (U5) - Westbahnhof (U2) - Burgstraße
R2.9:	Talstraße (U4) - Schwimmbad (U1) - Kino (Bus) - Einkaufszentrum (U3) - Europaplatz (U2) - Burgstraße
R2.10:	Talstraße (U4) - *unnamed station* (Bus) - (U2) - Europaplatz (walking) - Museum (U5) - Westbahnhof (U2) - Burgstraße
R3.1:	Parkplatz (Nord) (U3) - Einkaufszentrum (Bus) - Schloss
R3.2:	Parkplatz (Nord) (U3) - Marktplatz (U5) - Stadtpark (U1) - Schloss
R3.3:	Parkplatz (Nord) (U3) - Messe (U1) - Schloss
R3.4:	Parkplatz (Nord) (U3) - Einkaufszentrum (Bus) - Schlossallee (U1) - Schloss
R3.5:	Parkplatz (Nord) (U3) - Europaplatz (U2) - Westbahnhof (U5) - Stadtpark (U1) - Schloss
R3.6:	Parkplatz (Nord) (U3) - Europaplatz (walking) - Museum (U5) - Stadtpark (U1) - Schloss
R3.7:	Parkplatz (Nord) (walking) - Schloss
R4.1:	Flughafen (U3) - Bergweg (Bus) - Parkplatz (Ost)
R4.2:	Flughafen (U3) - Südkreuz (U4) -Schwimmbad (Bus) - Krankenhaus (U4) - Parkplatz (Ost)
R4.3:	Flughafen (U3) - Südkreuz (U4) - Hauptbahnhof (U7) - (Bus) - Parkplatz (Ost)
R4.4:	Flughafen (U3) - Museum (walking) - Europaplatz (U2) - Hauptbahnhof (U4) - Schwimmbad (Bus) - Krankenhaus (U4) - Parkplatz (Ost)
R4.5:	Flughafen (U3) - Südkreuz (U4) - *unnamed station* (U5) - *unnamed station* (U2) - *unnamed station* (Bus) - Parkplatz (Ost)
R4.6:	Flughafen (U3) - Südkreuz (U4) - *unnamed station* (U5) - Schwimmbad (Bus) - Krankenhaus (U4) - Parkplatz (Ost)
R4.7:	Flughafen (U3) - Museum (U5) - Schwimmbad (Bus) - Krankenhaus (U4) - Parkplatz (Ost)
R4.8:	Flughafen (U3) - Museum (U5) - *unnamed station* (U4) - Hauptbahnhof (U2) - *unnamed station* (Bus) - Parkplatz (Ost)
R4.9:	Flughafen (U3) - Messe (U1) - Schwimmbad (Bus) - Krankenhaus (U4) - Parkplatz (Ost)

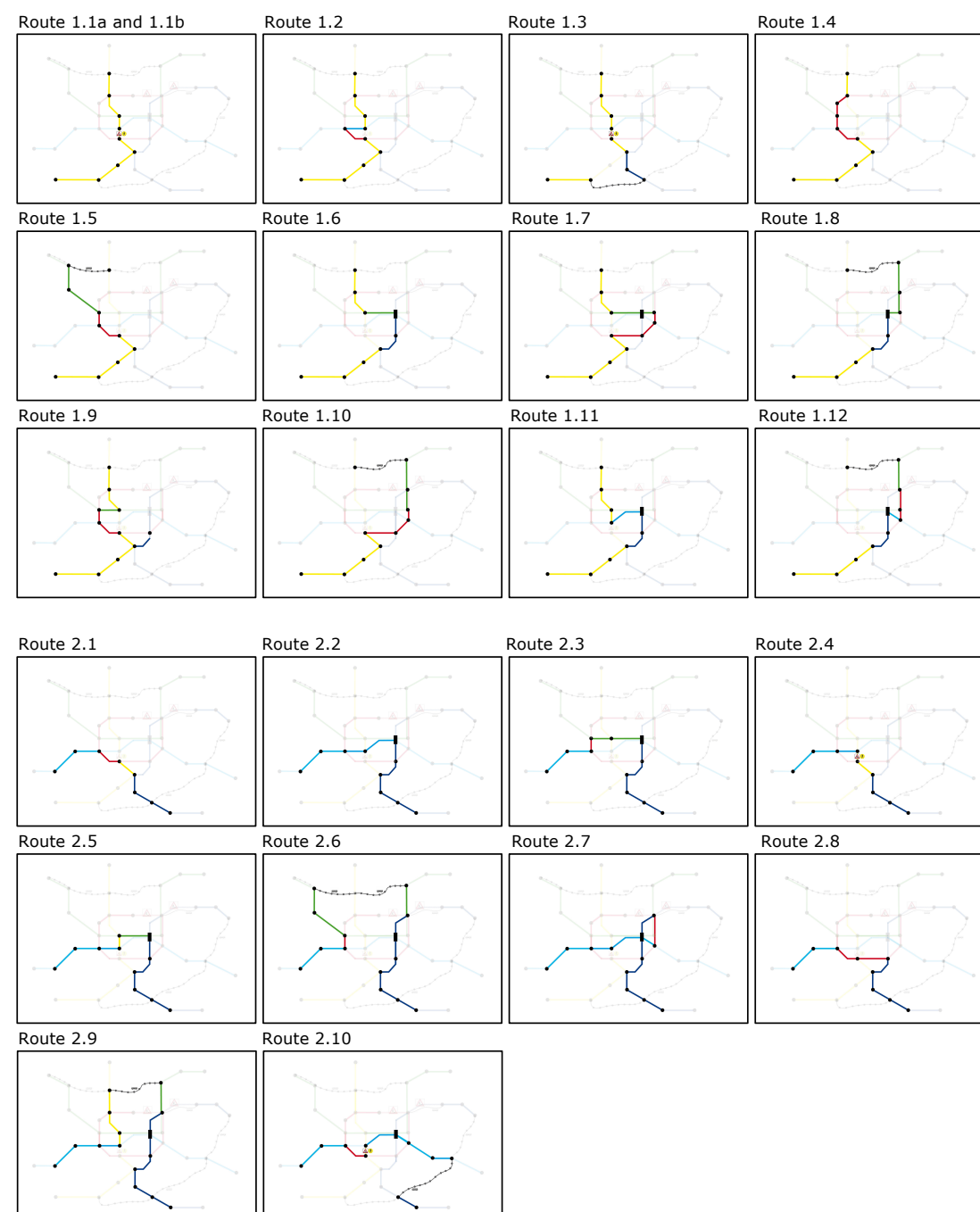|	
	R5.1: Rathaus (walking, taxi, or bike) - Schwimmbad R5.2: Rathaus (U5) - Schwimmbad *(counter clockwise)* R5.3: Rathaus (U5) - Marktplatz (U3) - Einkaufszentrum (Bus) -Kino (U1) - Schwimmbad R5.4: Rathaus (U5) - Marktplatz (U3) - Museum (U5) - Schwimmbad *(without walking, not possible)* R5.5: Rathaus (U5) - Museum (U3) - Südkreuz (U4) - Schwimmbad R5.6: Rathaus (U5) - Stadtpark (U1) - Messe (U3) - Europaplatz (walking) - Museum (U5) - Schwimmbad R5.7: Rathaus (U5) - Marktplatz (U3) - Messe (U1) - Schwimmbad R5.8: Rathaus (U5) - Stadtpark (U1) - Schwimmbad R5.9: Rathaus (U5) - Marktplatz (U3) - Messe (U1) - Hauptbahnhof (U4) - Schwimmbad
	Further discussion: Route Further discussion: Travelling by bus Further discussion: Other

The names of the stations had to be adjusted depending on the target language. Codes were therefore assigned to the different routes found in the data to allow for constistent tagging across languages. Additionally, pictures of the routes were produced to ease the mapping.

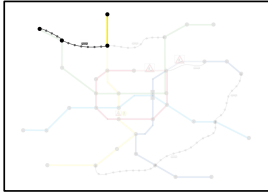*Mapping table for station names:*

English	German	Greek	French
Castle	Schloss	Ολυμπιακό Στάδιο	Château
The Avenue	Schlossallee	Σταθμός Ειρήνη	Avenue du château
Town Park	Stadtpark	Ομόνοια	Jardin Public
Exhibition Centre	Messe	Πανεπιστήμιο	Salon d'exposition
Central Railway Station	Hauptbahnhof	Σύνταγμα	Gare centrale
Stadium	Stadion	Λεωφόρος Αλεξάνδρας	Stade
Swimming Pool	Schwimmbad	Μοναστηράκι	Piscine
Cinema	Kino	Πατήσια	Cinéma
University	Universität	Πλατεία Ζωγράφου	Université
Windsor Road	Falkenberg	Εθνικό Θέατρο	Pars d'attraction
Station Road	Burgstraße	Νοσοκομείο Ευαγγελισμός	Rue de la Tozr
Railway Station West	Westbahnhof	Λόφος Λυκαβητού	Gare de l'Ouest
Europe Square	Europaplatz	Εθνικός Κήπος	Place de l'Europe
London Street	Lübecker Straße	Νέος Κόσμος	Port maritime
Airport	Flughafen	Νέο Φάληρο	Aéroport
Green Lane	Bergweg	Άλιμος	Rue de la montagne
Southern Junction	Südkreuz	Λόφος Φιλοπάππου	Croix du sud
Museum	Museum	Μουσείο Ακρόπολης	Musée
Marketplace	Marktplatz	Πλατεία Ψυρρή	Place du marché

Subtask 2

Route 2.1

Route 2.2

Route 2.3

Route 2.4

Route 2.5

Route 2.6

Route 2.7

Route 2.8

Route 2.9

Route 2.10

Subtask 5

Route 5.1 Route 5.2 Route 5.3 Route 5.4
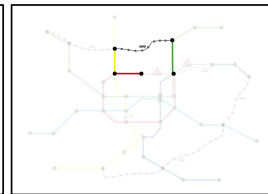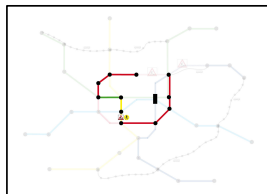
Route 5.5 Route 5.6 Route 5.7 Route 5.8
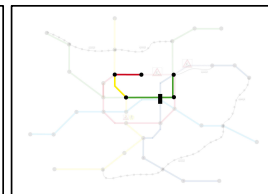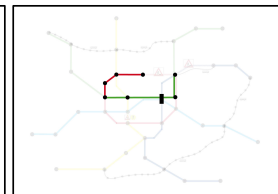
Route 5.9

Task 2: Travel Agency

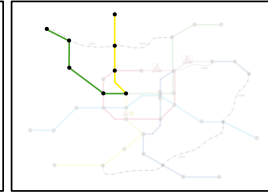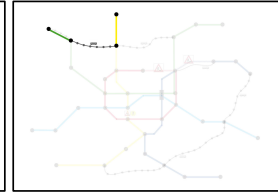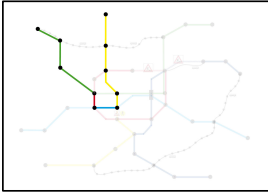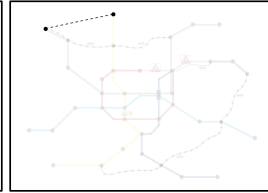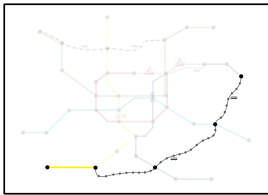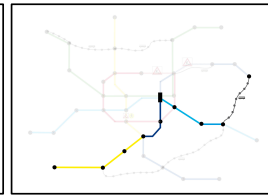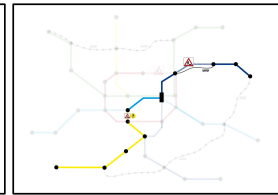| Category:	Description of places and activities
Main target:	Informant A
Description:	The imagined setting for this task is a travel agency. The role of one of the informants is that of a staff member at the travel agency, while the other takes over the role of a customer who wishes to go on holiday but does not know yet where to go to. The staff member is asked to suggest two different destinations to the customer by describing/advertising these places. Afterwards the customer is asked to explain briefly which of the destinations she/he prefers and why. The two destinations, predefined by the elicitation material, are a combination of one capital city and a more general place and vary across the different sessions. For each destination a range of pictures are shown meant to provide ideas of what to talk about. *Destinations to be described:*
Topics:	Advertisement: Athens Advertisement: Berlin Advertisement: London Advertisement: Paris Advertisement: At the beach Advertisement: In the mountains Decision making

Task 3: Planning a Holiday

Category:	Discussion and negotiation
Main target:	Informant A/B
Description:	The informants are instructed to plan a holiday together. They are asked to negotiate the destination, the time period for the holiday and the

means of transport. They should also take into account further aspects relevant for their decision. As a basis of their discussion a picture card is shown to each of the informants displaying flags of several countries/regions, different means of transport, as well as a calendar where certain time periods are blocked (only the calendar is different for the two informants). Additionally certain aspects are shown that should also be taken into account (weather, temperature, costs).

English version for BSL (informant A):
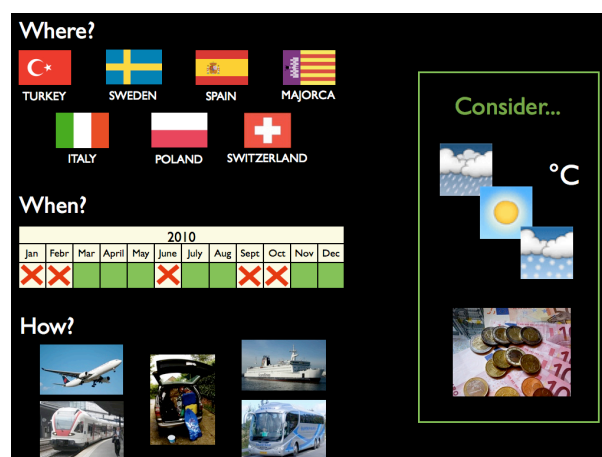
Topics:	Destination
	Time
	Transportation
	Accommodation
	Booking
	Other

Task 4: At the Airport

Category:	Description of places and activities
Main target:	Informant B
Description:	The topic of this task is the situation at an airport and the procedures taking place when travelling by plane. The informant is asked to describe the situation as if the other informant has never travelled by plane before. Pictures displaying different aspects as checking in, security issues, boarding, baggage claim and passport control are shown to the informant in chronological order.

Version for DGS (informant B):

Topics:	Ticket purchase
	Preparation of the trip
	Transport to the airport
	Check-In
	Information board
	Security check
	Getting to the waiting room
	At the gate
	Airplane fuel
	On board: Seating
	On board: Safety instructions
	On board: Food and drinks
	On board: Amusement activities
	Baggage claim
	Customs and passport control
	Other

Task 5: City Map

Category:	Route description
Main target:	Informant A
Description:	Based on a map provided, one of the informants has to describe a walk through the city and to name several landmarks. The informant serving as the information giver has a route marked on her/his map as well as several landmarks. For the information follower a map is provided on paper which has a numbered list of the same landmarks on the side of the map but no route. Taking off from the starting point marked on both maps the information giver's task is to describe the route displayed on the map. Whenever a landmark is passed along the route, the information giver is asked to tell the information follower what it is and where exactly it is located. The latter is supposed to follow the route descriptions and note on her/his map where the landmarks are to be found.

Maps for information followers provided on paper:
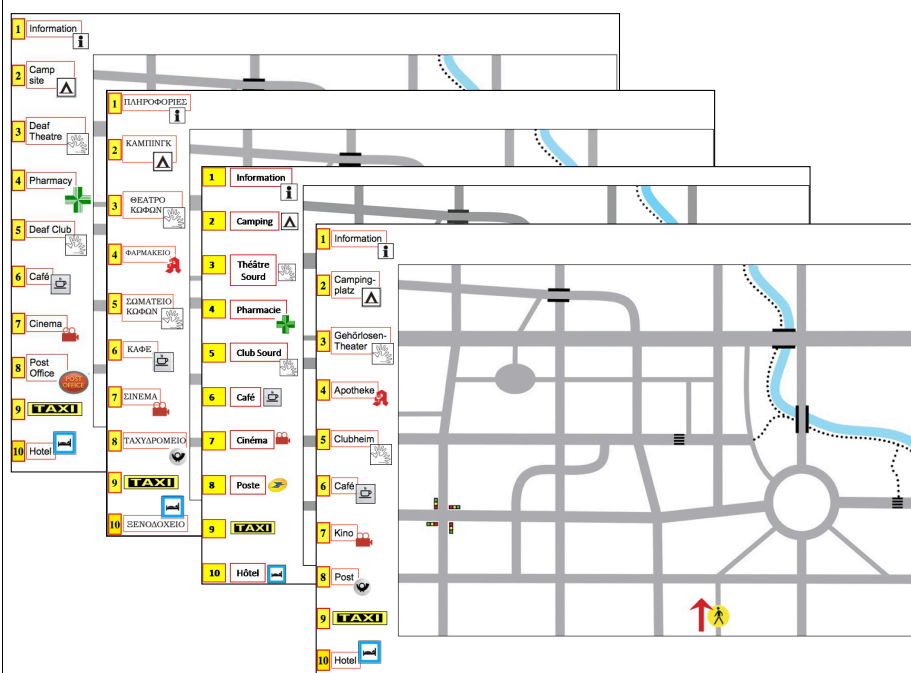
Topics:	Start - Information
	Information - Camping site
	Camping site - Deaf theatre
	Deaf theatre - Pharmacy
	Pharmacy - Deaf club
	Deaf club - Café
	Café - Cinema
	Cinema - Post office
	Post office - Taxi
	Taxi - Hotel
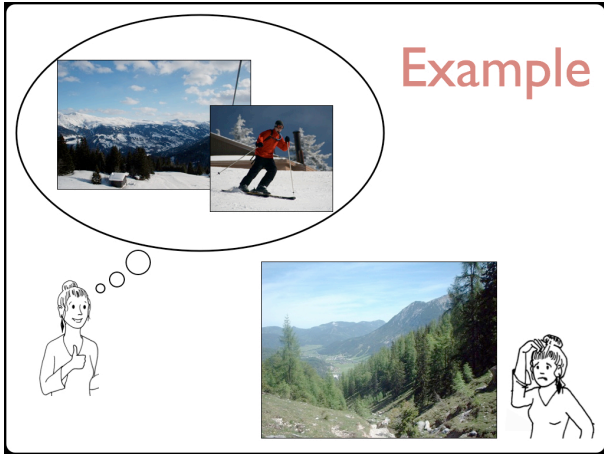
The names of the landmarks had to be adjusted depending on the target language. A translation is given in the mapping table.

Mapping table for landmarks:

English	German	Greek	French
Start	Start	Αρχή	Départ
Information	Information	Πληροφορίες	Information
Camping site	Campingplatz	Κατασκήνωση	Camping
Deaf theatre	Gehörlosentheater	Θέατρο Κωφών	Théâtre Sourd
Pharmacy	Apotheke	Φαρμακείο	Pharmacie
Deaf club	Clubheim	Σωματείο Κωφών	Club Sourd
Café	Café	Καφετέρια	Café

Cinema	Kino	Σινεμά	Cinéma
Post office	Post	Ταχυδρομείο	Poste
Taxi	Taxi	Στάση Ταξί	Taxi
Hotel	Hotel	Ξενοδοχείο	Hôtel

Task 6: Expectation & Reality

Category:	Narration
Main target:	Informant A/B
Description:	The informants are asked to tell short stories based on picture cards showing two opposed occurrences of a certain situation (somebody's expectations and the actual situation). The following situations are included in the task: • Skiing holiday / no snow (example) • Comfortable hotel room / tiny room with small bed • Summer holiday / flight cancelled • Visit to a nice museum/ overcrowded museum • Plenty of food in a restaurant / plate with little food • Garden party with BBQ / bad weather • Sunset at the beach / traffic jam, arriving in the dark The informants are free to tell a true story (where something similar has happened to themselves) or make one up. *Example shown to both informants in the task explanation:*
Topics:	Hotel room: Expectation Hotel room: Reality Flight: Expectation Flight: Reality Museum: Expectation

	Museum: Reality Restaurant: Expectation Restaurant: Reality BBQ: Expectation BBQ: Reality Sunset: Expectation Sunset: Reality

Task 7: Travel Then & Now

Category:	Discussion and negotiation
Main target:	Informant A/B
Description:	The informants are asked to discuss how travelling has changed over time. The task is not restricted to a specific content, however pictures are presented to both informants in order to provide ideas. They show different aspects, e.g. means of transport, passport control, or ticket purchase. *German version for both DGS informants:*
Topics:	Transportation_then Transportation_now Booking_then Booking_now Accommodation_then Accommodation_now Border control_then Border control_now Currency_then Currency_now Luggage_then Luggage_now

	Destination_then
	Destination_now
	Lifestyle_then
	Lifestyle_now
	Technology_then
	Technology_now

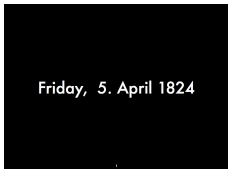# Task 8a: Retelling of a Signed Story
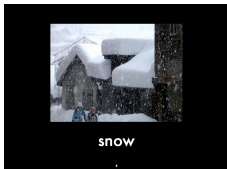
Category:	Narration
Main target:	Informant A
Description:	A short clip of a signed story is shown where a Deaf person tells about what happened during his last holiday trip to Italy: His travel group arrived late at the hotel, and after a drink at the bar he went straight to bed and slept all night. The next morning the others tell him that the fire alarm went off during the night and how they tried to wake him up. The informant is asked to retell the story. *Screenshot of the DGS video clip:*
Topics:	Group journey to Italy At the hotel Going to bed In the morning Reaction of travel companions What happened: Rescue vans and evacuation What happened: Door locked What happened: No keys What happened: Banging the door What happened: Firefighter with axe What happened: False alarm Conclusion / relief

Task 8b: Retelling of a Picture Story

Category:	Narration
Main target:	Informant B
Description:	A picture story by Quino (Lavado 1991) is used for this task, in which a woman explains to a tourist how to get to a certain restaurant (including walking, taking a taxi and a plane). The informant is asked to look at the story picture by picture and tell it to the other informant afterwards. *Pictures b) and e) from the picture story :*
Topics:	a) Introduction b) Looking for a restaurant c) Route description: Get a taxi d) Route description: Go to the airport e) Route description: Take a plane f) Route description: Landing in Paris g) Route description: Maxim's h) Thank you i) Wondering what to do j) Outdoor food stall k) Hiding Additional information

Task 9: Isolated Signs

Category:	Denomination
Main target:	Informant A/B

Description:	Single pictures and, where needed for clarification, written words are used as stimuli. The informants are asked in turns to give isolated signs for the concepts shown. They are also encouraged to add to the other person's answers whenever they know a different sign for a certain concept. The task covers the following areas: Dates, vehicles, European countries, and weather conditions. *Examples from the English version:*
Topics:	Monday, 2. November 2013 Friday, 5. April 1824 Wednesday, 9. January 1570 Saturday, 4. May 2005 Tuesday, 6. December 1788 Friday, 12. September 1690 Thursday, 8. February 1948 Monday, 10. June 2300 Thursday, 1. August 1914 Wednesday, 11. October 1350 Sunday, 3. July 1446 Tuesday, 7. March 1930
	Motorbike Boat Taxi Coach Train Bicycle Car Suburban railway
	Belgium Bulgaria Denmark Germany Estonia Finland France Greece Ireland Italy Croatia Latvia Lithuania

	Luxembourg Malta Macedonia Netherlands Austria Poland Portugal Romania Sweden Switzerland Slovakia Slovenia Spain Czech Republic Turkey Hungary Great Britain Cyprus
	Sun Rain Storm Thunderstorm Fog Hail Snow

Task 10: Personal Experience

Category:	Narration
Main target:	Informant A/B
Description:	Extra task: The informants are asked to tell a short story about a personal travel experience (e.g. their worst or best holiday). *No material is needed for the task.*
Topics:	Egypt Majorca Croatia Italy Holland India Finland Denmark France Black Forest Other

Task 10 serves as an extra task that was only conducted if time was left at the end of the sessions and was therefore only performed by a small number of informants. As the content of the data resulting from this task was not expected to be similar across individual informants it was not tagged in detail. Instead a short summary of the informants' stories was produced. The topics listed above indicate the countries the stories take place in.

References

Lavado, Joaquin (1991): Guten Appetit! Oldenburg: Lappan.