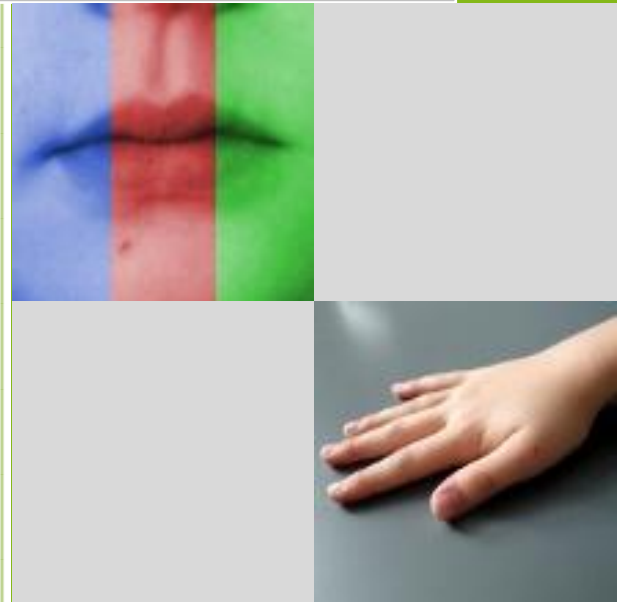


# ICOM – Input Contexts in Multilingualism

Manual for comprehensive  
description of language input  
in bi- and multilingual children



**Ute Ritterfeld, Carina Lüke,  
and Annika Schnöring**

TU Dortmund University  
School of Rehabilitation Sciences  
Department of Language and  
Communication

(CC) 2015

In 2012 German psychologist Ute Ritterfeld and speech and language pathologist Carina Lüke developed a systematic approach to identify the input conditions under which bilingual children are growing up. This method generates a graphic based overview over linguistic contexts that aims to account for the vast complexity and individuality of each case while at the same time fulfilling requirements for an easy to administer interview based approach. In addition, it was supposed to serve both, practitioners and researchers in composing a comprehensive yet reliable data set. Over the last few years we conducted more than 1.000 interviews with parents of bilingual children aged 3 to 7 years and directly with children and teenagers 8 years and up. The experiences and the high demand indicated by several thousand downloads of this open access publication (Ritterfeld & Lüke, 2012) resulted in an upgraded (Ritterfeld & Lüke, 2013) and finally – with the support of rehabilitation scientist Annika Schnöring - in this English version. We are gratefully welcoming feedback to this version. A template for statistical data analysis based upon SPSS is available in exchange for data sharing. Requests may be send to: ute.ritterfeld@tu-dortmund.de

## **Input contexts in multilingualism (ICOM)**

Bilingualism and even multilingualism are phenomena growing worldwide. In line with researchers, speech-language pathologists, and educators we define multilingualism as a generic term encompassing the ability to understand and/or use more than one language in daily live (c.f., Butler, 2013). Multilingualism develops in very different ways, for example as a result of a family's immigration to another country. Children of first or second generation immigrants often acquire one language in their home (native language) and the language of the surrounding community in daily interactions outside of the home with peers, teachers and other individuals as well as by using audio-visual media. In some countries migration background is equaled with multilingualism. However, these phenomena need to be differentiated: Children in families with a migration background are not inevitably growing up multilingual. Vice versa, not all multilingual children descend from families with a migration background. We therefore reject speaking of children with migration background if we intend to describe multilingualism.

Multilingualism is a generic label for an abundance of heterogeneous development processes. We distinguish different types of multilingualism as simultaneous, successive, interrupted or incomplete according to the biographies in which the languages were acquired. A growing body of research contributed to emphasizing the positive effects of multilingualism such as maintaining cultural heritage, contributing to academic skills or preparing for the job market. Experts consent in the observation that children who are exposed adequately to two (or more) languages are able to become proficient in these languages (for overview: Kohnert, & Medina, 2009; Pearson, 2007; Rice, 2010). Consequently, more and more parents tend to regard multilingualism as a desirable goal of education, even if their family has no multilingual background.

The raising number of children growing up with more than one language also affects the number of multilingual children enrolled in speech and language therapy. In Germany for example, more than 40% of children who are receiving speech and language therapy are multilingual (Lüke & Ritterfeld, 2011). Not surprisingly, the topic of multilingualism has become virulent in clinical practice. Discussions evolve around three major themes: (1) the (in)adequacy of monolingual standards, (2) available

diagnostic measures, and (3) the possibilities of effective treatment. Especially distinguishing between a typical multilingual language acquisition and a primary or specific language delay or disorder in a multilingual child poses a tremendous challenge (Dollaghan & Horner, 2011; Lüke & Ritterfeld, 2011). Dollaghan and Horner (2011) conclude from a meta-analysis that so far no single diagnostic measure permits a reliable identification of a primary language delay or disorder in multilingual children. Since this claim is still valid to date gathering detailed information about previous and current input conditions of multilingual children is called upon to approximate an assessment of the children's linguistic potentials. With ICOM we introduce an evaluation approach that will account for the complexity of linguistic socialization contexts in a highly systematic way that even allows for quantification of input related information. A self-explanatory graphical representation combines relevant information on one single page in order to be accessible at one glance. Information gathered in an interview with a school child or with caregivers is to be manually entered into a grid template. A guideline is provided to conduct the interview. Note that ICOM cannot replace any efforts in conducting a clinical interview or applying diagnostic measures. ICOM provides a valuable addition to specifically understand the conditions under which a child acquires different languages.

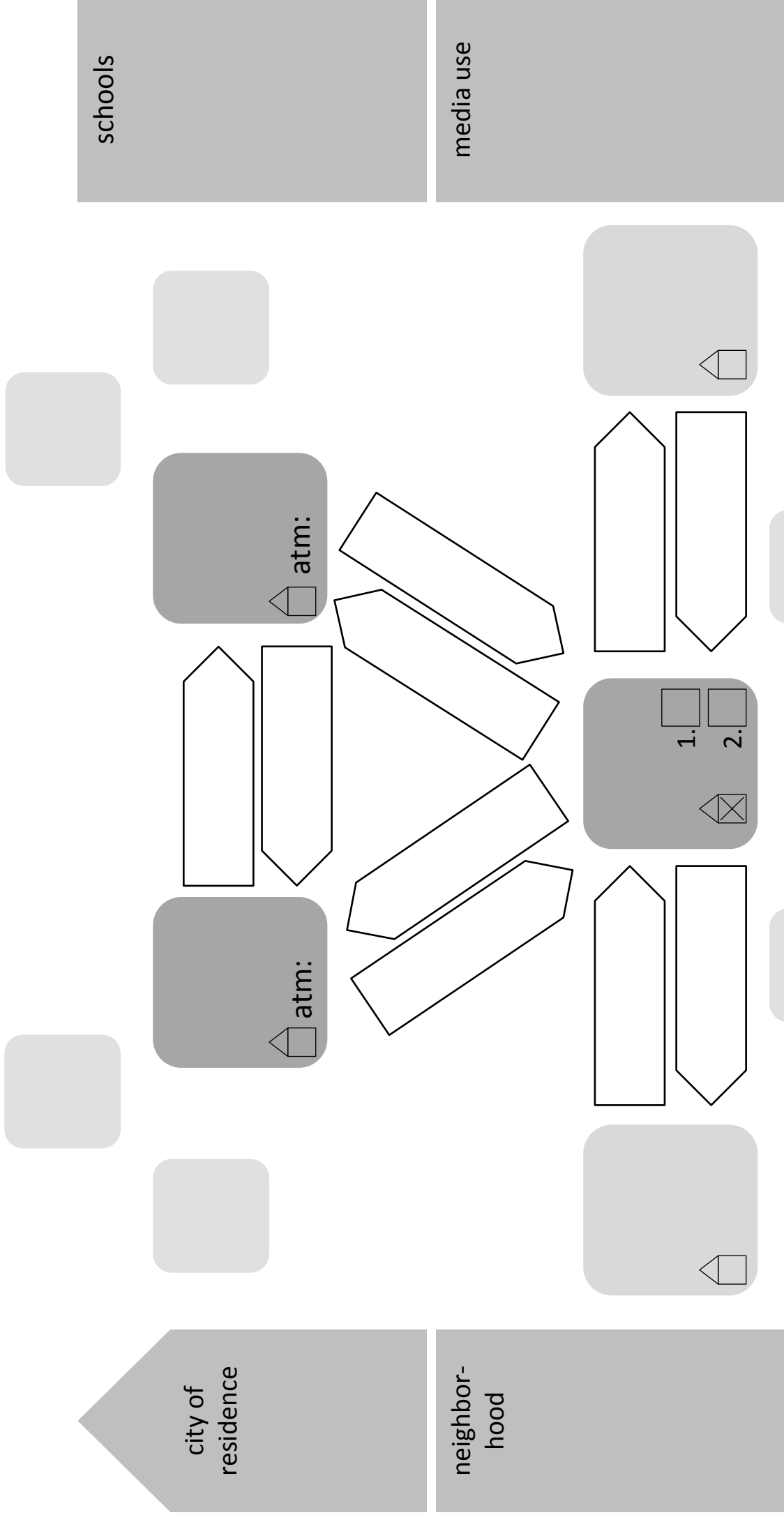
ICOM of \_\_\_\_\_ at the age of \_\_\_\_\_ til \_\_\_\_\_ years

date: \_\_\_\_\_

type:  multilingual  monolingual

interview partner: \_\_\_\_\_

interview language: \_\_\_\_\_



Does the language use change in public?  rather not

adaption towards environment

## ICOM Manual

Attached examples (p. 7-8) and description of symbols used (p. 6) exemplify the usage of the ICOM template. The following order may be followed in the interview and information gathered entered in the template during interviewing. Additional information may be added at the back of the template.

### 1. Time period

Linguistic socialization is not necessarily stable but may vary due to changes in residence, family constellation or usage of language(s) within a family. In order to account for these influences, description of a present situation may be supplemented with ICOMs representing the past. Use one ICOM template for each distinct situation and indicate the respective time period. Start with gathering data about the present and enter at first date, name of child and interviewer, gender, age, and residence. After completion of ICOM for the present, inquire about any changes that occurred in the past. Indicate, if necessary, on present ICOM the time period for which this ICOM holds valid. Add ICOMs for every distinct phase in the past. You may add information what caused any significant changes input contexts.

### 2. Linguistic input

Multilingualism is often characterized by high variability in language usage. Various languages may be spoken by different family members, in different situations or at different times. In addition, the broader social and cultural context may vary, too. Taken together, the input patterns are rather dynamic. ICOM attempts to account for such variability in asking for averaged data entries, allowing even to estimate non-symmetry in conversations and imbalanced multi-language usage in one person. However, with ICOM we also identify a child's primary language use within a specific situation.

The symbol for the child is located at center page. Arrows between the child and her/his relevant caregivers represent language usage in communication. As language usage between two people does not necessarily have to be identical, each person's conversation is represented with an own arrow. Also, the child might use different languages with different people. All arrows are based upon active production of language. Comprehension is not accounted for as interview based data might not deliver valid enough information.

Next to the family, the social and cultural environment is represented by four large boxes on the left and right side of the ICOM graph. Information about language input in the proximate (neighborhood) and extended (place of residence) living environment, schools, and media usage may be entered here. At the very bottom of the page it may be noted if the family uses a different language in public than at home. This item gives some insight into the potential of a family to adapt to social demands in changing their language usage accordingly. Taken together, the entered information provides a quick orientation about the multifarious language input a child encounters, which languages s/he actively uses and if the language input depends on certain contexts (for example family, school or media) or is rather consistently monolingual.

### **3. Attitudes towards multilingualism**

Attitudes towards usage of languages in general and in particular are no minor factor of influence in the development of a child (Paradis, 2007; Pearson, 2007). The social value of the involved languages within a family, the child's attitude towards these languages as well as the development of a dominant language depend - among other factors - on their status as minority or majority language. A language spoken in various social contexts and regarded positively within a community is more likely to become a dominant language compared to a language that is spoken only by a few people in the child's surrounding and that is less appreciated in the community (Genesee, Paradis & Crago, 2004).

To take these influences into account ICOM asks to identify the child's primary caregivers' attitude towards multilingualism (atm). Specifically, you can indicate whether they wish for the child to use both (or more) languages with comparable proficiency or whether they see one language being of higher significance.

### **4. Linguistic personality type**




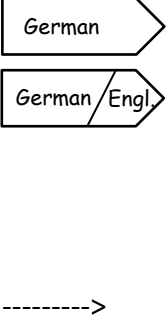






ICOM contains on top of the page a question regarding the child's type of multilingual language acquisition. The term 'type' is referring to differential preferences within multilingual socialization. Our experiences with multilingual children indicate that even children growing up in similar multilingual settings differ quite substantially. They may either show an overall positive and open attitude towards multilingualism or rather reject the usage of two or more languages, expressing a preference for being monolingual. In the first case (*type multilingual*) the children seem to enjoy switching between languages. Those children tend to serve as translator and take pride in their multi-language competence. In the second case (*type monolingual*) the child experiences multilingualism as a barrier that s/he strives to avoid. These children demonstrate a profound preference for one of their languages and are inhibited in switching between languages. We explain these differences as rather input independent but personality based and therefore chose the term 'type' to describe them. Previous research confirms our assumptions but also reveals that children are not sufficiently accurate about self-classification into one of the two types (Ritterfeld, Lüke, & Dürkoop, 2013). We therefore introduced a screening based upon five items that allows a sufficiently reliable assignment of the child as rather mono- or multilingual type. These five items are listed in Table 1 and can be read or shown to the children 5<sup>th</sup> grade and up. For younger children we recommend a cooperative interview of child and caregiver. Children and teenagers who agree to a minimum of four items are categorized as multilingual type. In case of only three or less agreements the child is considered monolingual type (Ritterfeld, Lüke, & Dürkoop, 2013).

Table 1

*Items for identification of child's classification as rather mono- or multilingual type.*

<b>Items</b>	<b>I (rather) agree</b>	<b>I (rather) disagree</b>
<b>It is easy for me to switch between different languages.</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>I consider it special to be able to speak several languages.</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>I enjoy talking to people in several languages.</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Because I am growing up with several languages I will have better career options.</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>During a conversation I enjoy switching between languages.</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Total score</b>		

## Description of symbols

Symbol	Meaning and function
 <b>grey boxes</b>	Grey boxes represent people, the child, her/his family and relevant caregivers. Enter names, relationship (e.g., mother, aunt, sister) and potentially relevant information.
 <b>dark shaded boxes</b>	The three dark boxes in the center of the template represent the child (bottom) and the two primary caregivers (top left and right). If there is only one caregiver available cancel one box.
 <b>light shaded boxes</b>	Use light grey boxes for any further person involved in rather frequent verbal communication with the child. This includes siblings (younger sibling left, older sibling right of the child), other relatives or close family friends (small grey squares above parents' and below child's boxes).
 <b>arrows</b>	Arrows indicate the language/s spoken in communication between child and a communication partner. Enter languages that one person (beginning of the arrow) uses in communication with the other person (end of the arrow). In case a person uses more than one language with the other one divide the arrow space into estimated fractions to enter all used languages proportionally. Add arrows if needed in light grey boxes. It is important to connect each person and the child with two arrows to enter all languages the person uses with the child as well as vice versa all languages the child uses with the other person. In case the child does not (yet) talk (to that particular person) you may print dotted lines within the arrow.
 <b>shared household</b>	Use the small house symbols to indicate if a person lives in the same household as the child. Mark shared household and add - if needed - more house symbols for other people.
<input type="checkbox"/> 1. <b>preference hierarchy of languages</b> <input type="checkbox"/> 2.	Ranks order the various languages the child uses depending on the child's affective evaluation. The abbreviated word for the language the child favors to speak will be entered in the first box. Any further language may be listed below. If there is no obvious ranking cross out both boxes.
<b>Attitude towards multilingualism</b> 	To indicate attitudes of the child's primary caregivers towards the multilingual development of their child use the symbol $\oplus$ for supportive attitude and the symbol $\ominus$ for critical attitude. Neutral or ambiguous attitudes may be represented with the symbol $\emptyset$ .
 <b>city of residence</b>	Enter the child's city of residence for the ICOM phase in question.
 <b>neighborhood</b>	Indicate the child's verbal surrounding outside of home: Is the child in regular contact with neighbors or peers, goes shopping etc. and which languages are spoken.
 <b>schools</b>	You may enter information about schools and regular activities. Enter all relevant institutions and indicate the language(s) spoken.
 <b>media use</b>	Please use the box 'media use' to enter information about the child's media usage: Which media, amount of time (per week), and languages of the relevant media formats.

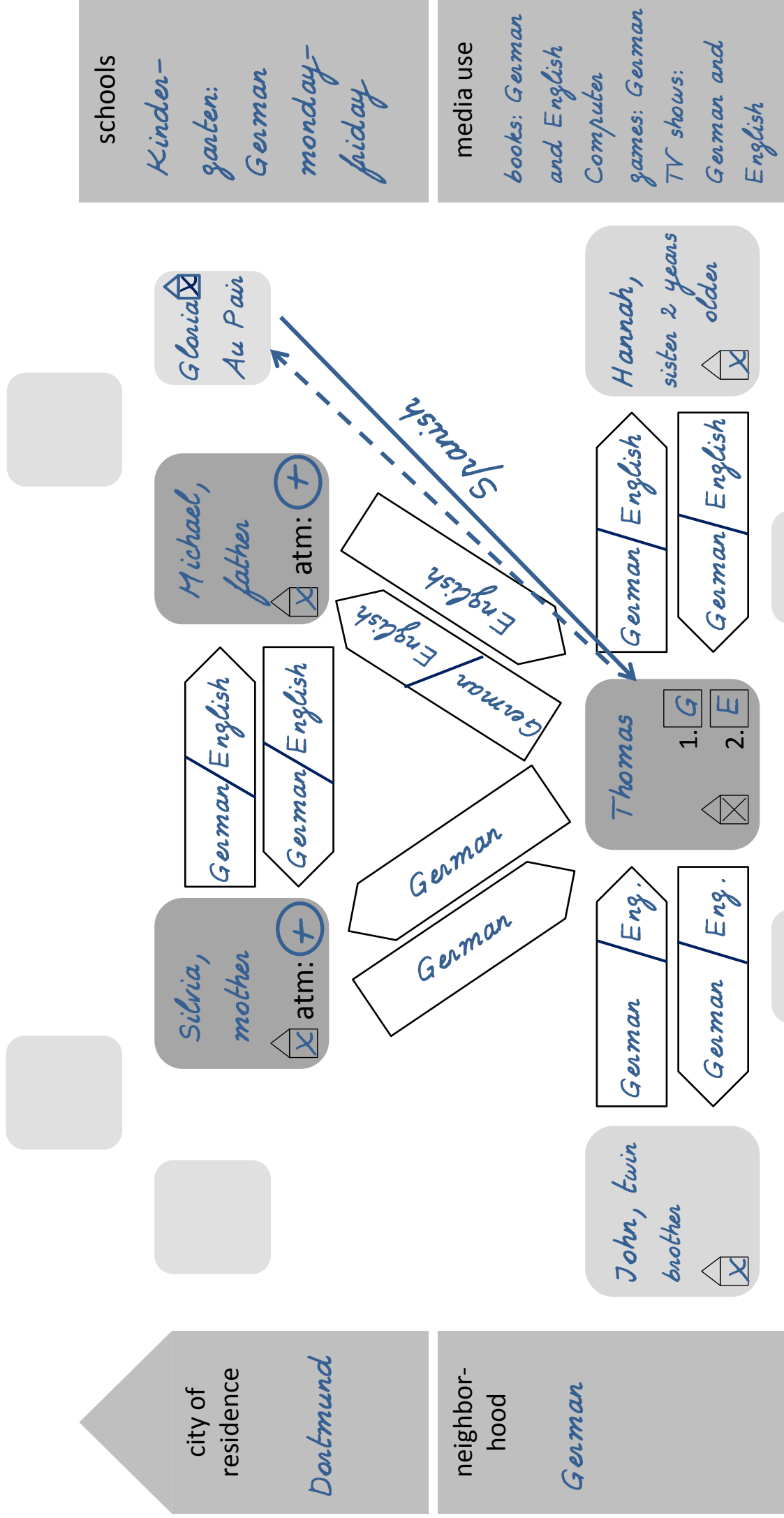


ICOM of Thomas (male) at the age of 5,5 til 5,11 years

date: 09.07.2015

type: multilingual  monolingual

interview partner: mother  
interview language: German



Does the language use change in public?  rather not  adaption towards environment

ICOM of Thomas (male) at the age of 0 til 5;4 years

date: 09.07.2015

type: multilingual  monolingual

interview partner: mother  
interview language: German

city of residence  
Santa Barbara

neighborhood  
English



Michael, father  
atm:

German/English

German/English

Silvia, mother  
atm:

German/English

English

English

John, Twin brother

Ger./English

Ger./English

Thomas  
1.  E  
2.  G

Ger./English

Ger./English

Hannah, Sister 2 years older

schools  
Kinder-  
garten:  
English  
monday-  
friday

media use  
books:  
English and  
German



Does the language use change in public?  rather not  adaption towards environment

## References

- Butler, Y. G. (2013). Bilingualism/multilingualism and second-language acquisition. In T. K. Bhatia & W. C. Ritchie (Eds.), *The handbook of bilingualism and multilingualism* (pp. 109–136). Malden (USA): Wiley-Blackwell.
- Dollaghan, C. A., & Horner, E. A. (2011). Bilingual language assessment: A meta-analysis of diagnostic accuracy. *Journal of Speech, Language, and Hearing Research, 54*, 1077–1088.
- Genesee, F., Paradis, J., & Crago, M. (2004). *Dual language development and disorders: A handbook on bilingualism and second language learning*. Baltimore: Brookes.
- Kohnert, K., & Medina, A. (2009). Bilingual children and communication disorders: a 30-year research retrospective. *Seminars in Speech and Language, 4*, 219–233.
- Lüke, C., & Ritterfeld, U. (2011). Mehrsprachige Kinder in sprachtherapeutischer Behandlung: eine Bestandsaufnahme [Bilingual children in speech therapy: Results of a survey]. *Heilpädagogische Forschung, 37*, 188–197.
- Paradis, J. (2007). Bilingual children with specific language impairment: Theoretical and applied issues. *Applied Psycholinguistics, 28*, 551–564.
- Pearson, B. Z. (2007). Social factors in childhood bilingualism in the United States. *Applied Psycholinguistics, 28*, 399–410.
- Rice, M. L. (2010). Evaluating maturational parallels in second language children and children with specific language impairment. *Applied Psycholinguistics, 31*, 320–327.
- Ritterfeld, U. & Lüke, C. (2013). *Mehrsprachen-Kontexte 2.0. Erfassung der Inputbedingungen von mehrsprachig aufwachsenden Kindern*. Available from: <http://hdl.handle.net/2003/31166>
- Ritterfeld, U. & Lüke, C. (2012). Mehrsprachen-Kontexte. Erfassung der Inputbedingungen von mehrsprachig aufwachsenden Kindern. *L.O.G.O.S. interdisziplinär, 20*, 24-29. Available from: <http://hdl.handle.net/2003/30300>
- Ritterfeld, U., Lüke, C. & Dürkoop, A.-L. (2014). *Differentieller Umgang mit Mehrsprachigkeit: Eine Untersuchung in der Sekundarstufe I [Differential approach to bilingualism: A study in secondary education]*. *German as a foreign language, 14*, 45-67.

Contact information:

Prof. Dr. Ute Ritterfeld  
TU Dortmund University  
Department of Language and Communication  
Emil-Figge-Str. 50  
D-44227 Dortmund (Germany)  
[ute.ritterfeld@tu-dortmund.de](mailto:ute.ritterfeld@tu-dortmund.de)  
[www.sk.tu-dortmund.de](http://www.sk.tu-dortmund.de)



This document is provided under the terms of the creative commons public license: Attribution-NonCommercial-NoDerivatives 4.0 International

Please cite this document as: Ritterfeld, U., Lüke, C., & Schnöring, A. (2015). *ICOM – Input Contexts in Multilingualism*. Available from: <http://www.sk.tu-dortmund.de/cms/de/materialien/ICOM.pdf>