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## Recommended citation of this article

Strube, S., Van de Craats, I., & van Hout, R. (2010). Telling Picture Stories: Relevance and Coherence in Texts of the Non-Literate L2 Learner. *LESLLA Symposium Proceedings*, 5(1), 52–63. <https://doi.org/10.5281/zenodo.8004069>

## Citation for LESLLA Symposium Proceedings

This article is part of a collection of articles based on presentations from the 2009 Symposium held at Bow Valley College in Banff, Alberta, Canada. Please note that the year of publication is often different than the year the symposium was held. We recommend the following citation when referencing the edited collection.

Wall, T., & Leong, M. (Eds.) (2010). Low-educated adult second language and literacy Acquisition (LESLLA): Proceedings of the 5th symposium. Bow Valley College.  
<https://lesllasp.journals.publicknowledgeproject.org/index.php/lesllasp/issue/view/470>

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## TELLING PICTURE STORIES: RELEVANCE AND COHERENCE IN TEXTS OF THE NON-LITERATE L2 LEARNER

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### 1 *Introduction*

This paper describes characteristic L2 productions of non-literate L2 learners of Dutch during the telling of a picture story. The data formed part of an oral pre- and post assessment taken in Dutch L2 literacy classrooms at centers for adult education in the Netherlands. The purpose of the overall study was to get a better understanding of the spoken language proficiency and development of non-literate learners. The aim of the picture stories was to study their proficiency in Dutch in telling a short story given a series of pictures depicting separate events or episodes. Five noteworthy characteristics were found to stand out in the telling of these picture stories. These are: picture-by-picture telling, dialoguing, overuse of deictic elements, picture misinterpretation, and an overall lack of coherence. Before illustrating, describing and making further characterizations of the told picture stories, it is necessary to clarify the terms relevance and coherence as used in this paper.

Picture stories are stories that are told with the aid of pictures. Each episode is depicted in a picture. The story teller tells the story guided by each picture as he goes along from one to the next. The telling of the story must have relevance and coherence in order for it to be characterized as a story. Grice describes relevance in his Maxim of Relation as: “. . . (the) contribution to be appropriate to immediate needs at each stage of the transaction” (Grice, 1975:47). In other words the story must: “Be relevant” (op. cit. p. 46). That which is said must have bearing on the topic at hand.

Transferring this to the situation of the picture story, a response is termed relevant, if the words of the speaker have a direct relation to the picture. In this paper, this is called picture relevance. In the words of Sperber and Wilson (1995:125) “An assumption is relevant in a context to the extent that the effort required to process it in this context is small.” In other words, the relationship between what is said by the speaker and what is seen in the picture can easily be perceived.

In telling stories more is involved than conveying relevant meaning for each picture. The utterances within a response must be connected in some way to produce internal relationships. We call this coherence. The text or story is about something. Foster (1990:117) explains that there are two kinds of coherence in a text: horizontal and vertical coherence. Horizontal coherence implies that consecutive utterances are connected to each other, while vertical coherence means that utterances are connected to the topic being developed. In the case of the picture stories this means that the utterances must in some way be connected and it must be easy to infer the relationships between them and the topic of the story depicted through the pictures; there must be connectedness. Such relationships are

called coherence. Coherence is concerned with the continuity of a text. In this case, the text is the picture story telling.

This continuity of a text can be expressed explicitly and implicitly. Coherence expressed explicitly is formed by overt linguistic devices within the text to hold it together (Renkema, 2004; Reinhart, 1980). These devices connect words and utterances of a text and are of a syntactic and lexical nature, such as those of reference, substitution, ellipsis, and conjunction put forth by Halliday and Hassan (1976) and deictic markers identified by Levinson (1983). Reinhart (1980:167) marks this type of coherence as having linear connectedness or cohesion. Within a text each utterance must be formally connected to the previous utterance or adjacent pair. Coherence in a text can also be expressed implicitly by a “connection that is brought about by something outside the text” (Renkema, 2004:49). This type of external coherence involves reasoning, mutual knowledge, and logic. What the speaker says makes sense in the actual context (Renkema, 2004; Stenström, 1994; Blakemore, 1992). The speaker is able to speak in an orderly and logical fashion, producing semantically meaningful utterances and consequently it is easy to infer a relationship between the utterances (Wolf & Gibson, 2006; Blakemore, 1992). Reinhart (1980:165) calls this derived interpretation. This involves “both semantic and pragmatic conditions, . . . , they restrict not only the relations between the sentences of the text but also the relations between these sentences and an underlying discourse topic, or theme, as well as their relations with the context of the utterance” (Reinhart, 1980:164).

In the following sections of this paper, picture stories told by L2 literacy students will be discussed in terms of picture relevance and coherence. To illustrate the particular outcomes obtained from our non-literate L2 learners we first discuss the data from four representative students out of the 41 that were investigated. The data presented make clear how our evaluation procedure works (including the relevance and coherence criteria), what difficulties our students have to cope with, and what the reasons were for distinguishing specific categories. The outcomes for the total group of 41 are presented in a separate section containing the quantitative results.

## *2 Method*

### *2.1 Design*

The picture stories discussed here formed a part of an assessment in a longitudinal study on spoken language development of non-literate L2 learners. For that purpose a pre-post test design was applied. The post-test was administered approximately eight months after the pre-test. The picture stories were part of the assessments.

Six L2 literacy classes at centers of adult education were observed and assessed. A total of 41 students were individually tested. The second assessment was a repetition of the first. Both assessments were audio recorded and later transcribed orthographically.

## 2.2 Participants

Table 1 gives an overview of the learner characteristics of the whole group of 41 students as well as the characteristics of the four students used in the qualitative study. Of the 41 students 29 (70.7%) had had no previous education in their country of origin and were non-literate in their L1 upon arrival in the Netherlands. Approximately 20 students (48.8%) had had no L2 formal schooling prior to the first assessment. The years of residency in the Netherlands varied from a few months to more than 33 years. The students came from ten different countries. In two classes the students were all from Morocco. These two classes were open to women only, 15 women in total. Eligibility to participate in them was restricted to minority women who were long term residents in the Netherlands and who, due to their poor command of Dutch, had little contact outside the immediate family. Schooling was geared to participation in the society and life skills. In the other classes a vast majority, 23 of the remaining 29 students, were women (88.5%).

*Table 1: Learner characteristics of 41 literacy students and four students in detail as of January 2007.*

Literacy students	Age		Gender	Country of origin	Years of schooling				Years in the Netherlands	
	Mean	SD			L1 Mean	L1 SD	DSL Mean	DSL SD	Mean	SD
Total group (41)	39.0	10.8	38F, 3M	various	1.5	2.5	0.5	0.5	9.5	8.5
Four individual students										
Yamina	43		F	Morocco	0		0		20	
Rojah	27		F	Afghanistan	6		0		3	
Gita	28		F	Afghanistan	0		1		2	
Asomi	32		F	Togo	0		0		5	

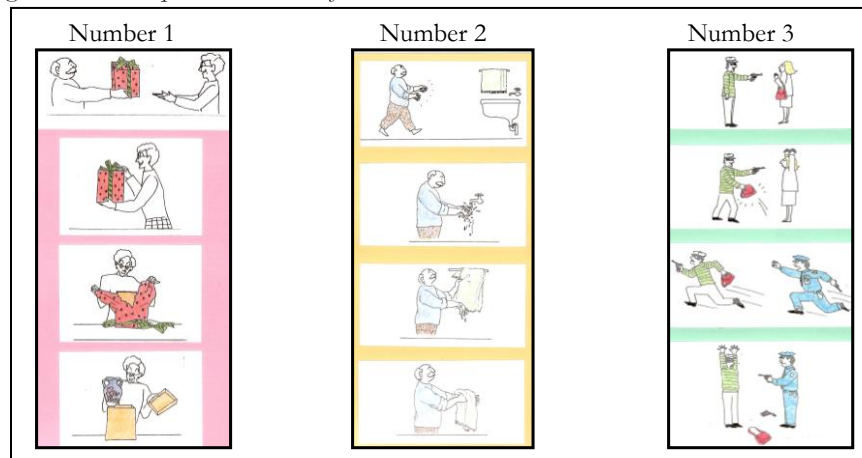
The four selected students Royah, Asomi, Gita and Yamina, represent typical non-literate DL2 learners. Royah, Asomi and Gita were asylum seekers while Yamina was reunited with her family. Royah, a 27 year old Afghan woman, came to the Netherlands in 2004, three years prior to the start of this research project. In Afghanistan she had had some home schooling only, as schools for girls were forbidden by the Taliban. Her school records show that Royah has had the equivalent of six years of elementary school, which is probably not far from the truth as Royah is literate in Dari, her native tongue. Dari uses the Arabic script. She now lives in Amsterdam. Gita, 28 years old, also came from Afghanistan and now lives in a small village near the town of Oss, in the eastern part of the Netherlands with her husband and a one year old child. She came to the Netherlands in 2005, a year and a half before this project started. Although she had never been to school in Afghanistan, she knows a few words of English and has some knowledge of the Roman alphabet. Perhaps she also had had some home schooling as had Royah. Asomi, a 31 year old woman, came from Togo in 2002. Although Asomi had had no schooling, she does speak a smattering of French. She now lives in Haarlem, a city west of Amsterdam. Yamina is 43 years old and is of Moroccan origin. She had never been to school in Morocco and, as a consequence, had never learned to read or write in her native language. She has lived in the city of Haarlem for almost 20 years. Her social contacts are limited mainly to family and close friends with whom

she usually converses in Berber. All these women had had a little DSL schooling previous to this study: Royah eight months (336 hours), Asomi one month (48 hours), Gita a special introduction course of 600 hours and Yamina approximately one year (760 hours). School records keeping track of previous and present L2 schooling are often incomplete and inconsistent. In most cases the number of classroom time was only noted in months, rather than hours. Consequently the above noted hours are approximations and are calculated on basis of the classroom hours per week during the observation period.

### 2.3 The picture stories

The student was confronted with three picture stories, reproduced in Figure 1. Each story was composed of a series of four pictures. For this task each student was instructed to recount the story depicted by the pictures. The assessor gestured and explained that the story started at the top and ended at the bottom of the page. The assessor said essentially: Can you tell the story shown by these pictures? You start here and go to this picture and to the next and finally to the last picture. The student utterances for his/her story were analyzed for picture relevance and coherence. The remaining sections of this paper will focus on picture story Number 1.

Figure 1: The three picture stories used for assessment 1 and 2.



#### 2.3.1 Picture relevance criteria

As stated in the introduction, the relevance of a response depends on the effect it has on the hearer and the effort that has to be taken to process its meaning (Sperber & Wilson, 1995). Grice acknowledges the fact that determining relevancy can be problematic (Grice, 1975:46). In order to avoid ambiguity in determining the picture relevancy of a response as much as possible, elements which are central to the interpretation of the picture were predetermined. These elements concern two categories: the entities on one hand, and activities and properties on the other. The entities are the objects or persons (the nouns) about which something is said and concerns the main figures in the pictures, often the agent of the depicted action.

The activities and properties (the verbs, adjectives, adverbs and nouns) express the actions or describe the entities. These entities, and activities and properties are called the minimal distinctive elements. An utterance is termed relevant if these minimal distinctive elements are present. For some pictures various interpretations can be given, depending on the story teller's perspective. Table 2<sup>10</sup> illustrates the minimal distinctive elements for picture story Number 1 and the picture relevance for the stories told by Royah and Asomi. As can be seen in Table 2 three of Asomi's utterances are relevant and one is partially relevant, while Royah has made two partially relevant utterances and two non-relevant ones, as will be explained in more detail below.

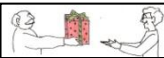



Royah was unable to produce wholly relevant utterances for any of the pictures of the picture story. None of her utterances express the agent of the depicted action, creating obscurity as to what the picture is actually showing. For the first picture Royah only utters the word *gift*. But there is no indication of the action fundamental to the picture – the giving of a gift. Her description of the second picture would have been much more lucid if the agent, *woman*, had been mentioned. Consequently it was marked partially relevant. The third picture is obviously a case of misinterpretation and marked not relevant. In her description of the final picture Royah again, as in the first picture, mentions only the portrayed object, *vase*, but does not place it within the depicted scene.

In contrast, Asomi was able to describe three of the pictures with relevance and the fourth partially relevant. For each picture she mentions the agent and the action performed by the agent as shown in the picture. Only picture two was marked as partially relevant. The verb *looked* did not reflect the main action in the picture; the woman was not looking at the gift, but carrying or holding it.

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<sup>10</sup> For Tables 2 and 3 the original Dutch utterances were translated in English as literally as possible.

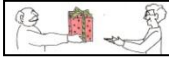



Table 2: Picture Story Number 1 with the distinctive minimal elements and two stories illustrating relevance for each picture (relevant utterance = R, partially relevant utterance = P, non-relevant utterance = 0).

Picture story number 1	Minimal distinctive elements (alternative words between parenthesis; dotted line separates alternative responses)	Story told by Royah	Relevance	Story told by Asomi	Relevance	
	Entities	Activities/properties				
	Man Gift (present) Woman	Give	Gift.	0	This man gives gift for this woman.	R
	Woman Gift (present)	Take (hold, carry)	Also gift take.	P	This woman look at gift.	P
	Woman Gift (present) Woman Paper	Open (look) Open (undo)	That maybe T-shirt or so.	0	This woman open the gift.	R
	Woman Vase (jug, mug) Gift (present) Vase (jug, mug) Vase (jug, mug) Vase (jug, mug)	Get (take out, look, find) Vase (jug, mug) Gift (present) Very pretty	That vase.	P	This woman take the mug.	R

2.3.2 Coherence criteria

Being able to produce relevant utterances for the individual pictures in a picture story does not automatically imply that the story is also coherent. Although, as Foster (1990) states, relevance plays a crucial role in coherence, for a non-relevant picture story is by nature also not coherent, a coherent picture story, however, is not always entirely relevant. Even if individual picture descriptions are partially or not relevant, they may be in some way connected – either horizontally through explicit linguistic devices or vertically through thematic connectedness producing a coherent whole. Table 3 illustrates two pictures stories. One is clearly not coherent due to weak horizontal and vertical coherence while the other is coherent due to its strong horizontal and vertical coherence. The non-coherent story is told by Yamina and the coherent story by Gita.

Table 3: Picture Story Number 1 with two stories illustrating horizontal and vertical coherence.

The picture story	Story told by Yamina	Horizontal coherence		Story told by Gita	Vertical coherence	
		Horizontal coherence	Vertical coherence		Horizontal coherence	Vertical coherence
	Gift, gift. I uuh give.	(Setting the scene.)		The man for this woman passes on gift.	(Setting the scene.)	
	I here to house.	No	No	The woman gift fetches.	Yes	Yes
	Broken.	No	No	Then comes for home, maybe to open.	Yes	Yes
	Jug uuh jug.	No	No	Then look, pretty, the name I don't know.	No	Yes
Coherence	Non-coherent story			Coherent story		

Yamina, in her effort to tell the story, is unable to connect the utterances from picture to picture horizontally, ultimately resulting in a non-coherent story. She goes from picture to picture describing each one separately. At the end she does not make clear that the *jug*, as she calls it, is the gift given in picture one. Even so, there is evidence of a trace of coherence in the vertical connectedness. Her story is not as fragmented as that of Royah. By enacting the actions in the first two pictures by playing the role of the 'leading actor' or protagonist she brings movement into the story – she livens it up<sup>11</sup>. Were it not for the switching of roles Yamina would have produced horizontal coherence. In the first picture she seems to play the role of the man and in the second one she plays that of the woman. In this way the connection between picture one and two is broken, thus the horizontal coherence is also broken. Yamina's utterance *I here to house* for the second picture could have contributed to vertical coherence, through shared knowledge between Yamina and the listener. In Morocco it is customary not to open gifts in the presence of the giver. Yamina saying that she is going home, presumably with the gift, actually fits in the theme of the story. But this piece of information is not connected with the previous nor the following picture and stands, as it were, in isolation – there is no vertical coherence. In the third picture she only says *broken*, presumably describing the torn wrapping paper, although this is not made explicit. In the final picture she identifies the object as a jug, but there is no indication that the breaking of the paper in the previous picture concerns the same object. Distinctly her story, though

<sup>11</sup> Using of 'P' in such utterances under influence of the L1 could also be viewed as a morphological marker of finiteness on the verb as Moroccan Arabic, Yamina's L1, has preverbal person markers.



containing some attempts at forming connectedness, is neither horizontally nor vertically coherent.

Gita's story is an example of a coherent one. She was able to connect the pictures bringing about horizontal and vertical coherence. In picture one the scene is set. In picture two the focus of the action switches from the man to the woman. She explicitly states that the woman is the receiver of the gift. In addition, the word *gift* is repeated, enhancing horizontal coherence. In the third and fourth picture she drops the agent and the object but connects the utterances with the previous pictures by using the temporal conjunction *then* to express sequence of action and maintains horizontal coherence. In the utterance for the fourth picture, Gita compensates her still limited vocabulary by describing the appearance of the vase: *look, pretty*. By not connecting this final utterance to the previous one there is no horizontal coherence, but through inference a connection with the story theme, gift giving, is preserved – resulting in vertical coherence. Gita has connected most of her utterances horizontally and all of them vertically producing a coherent story. She has made it clear that the gift given in the first picture is the object taken out of the box in the final picture.

### 3 Results

All 41 students told six picture stories – three for assessment 1 and, eight months later, the same three stories for assessment 2. The results were calculated for picture relevance and coherence for all three of the picture stories for assessment 1 and 2.

#### 3.1 Results picture relevance

Table 4 shows the mean scores for picture relevance, split out for entities and activities/properties. For each utterance a maximum of two points was given for each relevant entities and relevant activities/properties, 1 point each for partial relevance and no points each for non-relevant elements. In total for each picture story (each story containing four pictures) there is a maximum of 16 points for the minimal distinctive elements. As Table 4 shows story 2 appears to be more problematic, particularly for the entities, than the other two stories, but the differences between the three picture stories are not large. Stories 1 and 3 do not differ greatly in the scores obtained for picture relevance.

*Table 4: Mean scores for picture relevance for the three picture stories in assessment 1 and assessment 2 for 41 students. A distinction is made for relevance on entities and relevance on activities/properties.*

	Assessment 1			Assessment 2		
	Story 1	Story 2	Story 3	Story 1	Story 2	Story 3
Entities (max. 8)	3.95	2.02	3.73	4.27	2.73	4.88
Activities/properties (max. 8)	2.90	2.61	2.63	3.51	3.81	3.88
Total (max. 16)	6.85	5.63	6.36	7.78	6.54	8.76

A reliability test revealed a high consistency between the six scores of assessment 1 and the six scores of assessment 2 ( $\alpha = .900$ ;  $\alpha$  for assessment 1 is  $.865$ , for

assessment 2 .838). All item-total correlations have a value above .500. We computed an overall sum scores for assessment 1 and assessment 2 to test whether there was a difference between the two assessments. The results indicated that the difference was significant, indicating that higher scores were obtained in assessment 2 (mean score for assessment 1 is 17.85, for assessment 2 is 23.14;  $t$  paired samples = 4.165,  $df=40$ ,  $p=.000$ ).

### 3.2 Results coherence

Table 5 shows that the mean scores on horizontal and vertical coherence are also consistent. For each horizontal connection 2 points were given if it was coherent, 1 point for partial coherence and 0 points for no coherence. The same applied for vertical coherence. For each a total of 6 points was possible (coherence was established for pictures 2 to 4). Table 5 shows that story 2 is just as problematic for coherence as it is for relevance. Stories 1 and 2 do not differ greatly.

*Table 5: Mean scores for coherence for the three picture stories in assessment 1 and assessment 2 for 41 students. A distinction is made between horizontal and vertical coherence.*

	Assessment 1			Assessment 2		
	Story 1	Story 2	Story 3	Story 1	Story 2	Story 3
Horizontal coherence (max. 6)	1.63	0.78	1.24	2.20	1.54	1.71
Vertical coherence (max. 6)	1.56	0.85	1.10	2.59	2.17	1.83
Total (max. 12)	3.19	1.63	2.34	4.79	3.71	3.54

A reliability test revealed a high consistency between the six scores of assessment 1 and the six scores of assessment 2 ( $\alpha = 0.931$ ;  $\alpha$  for assessment 1 is 0.925, for assessment 2 0.868). All item-total correlations have a value above .500. We computed an overall sum score for assessment 1 and assessment 2 to test whether there was a difference between the two assessments. The difference was significant, indicating that higher scores were obtained in assessment 2 (mean for assessment 1 is 7.15, for assessment 2 is 10.90;  $t$  paired samples = 4.312,  $df=40$ ,  $p=.000$ ). The increase is not spectacular. But the students showed progress in coherence.

### 3.3 Correlation between picture relevance and coherence

In correlating picture relevance and coherence, assessment 1 had a coefficient of 0.825, and assessment 2 had a coefficient of 0.856. These values indicate a strong relationship between relevance and coherence: low relevance implies low coherence and high relevance implies high coherence, but is the relationship so evident? Figure 2 visualizes the relation in a scattergram and the result points to an important conclusion. It shows that, for the same level of coherence, relevance scores may show variation, but more importantly it shows that relevancy does not automatically lead to coherence. A coherence coefficient of 0 can be as great as 22 for picture relevance. In other words, knowing and using the words for the relevant entities and activities/properties does not guarantee the formation of a coherent story.

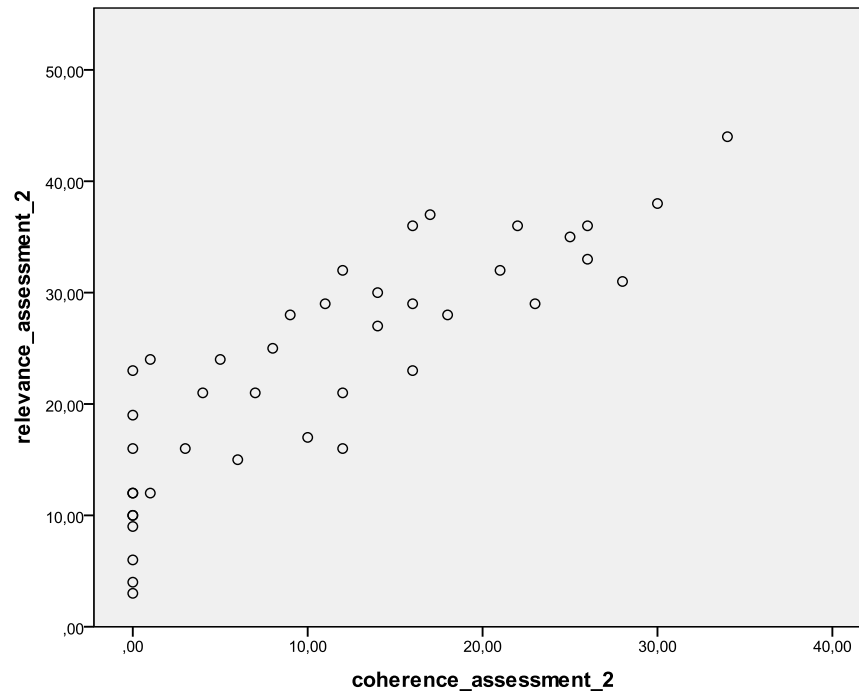


Figure 2: Scattergram of picture relevance and coherence in assessment 2.

#### 4 Discussion and conclusion

The above examples illustrate that producing a coherent story with relevant utterances on the basis of pictures is not an easy task for non-literate learners of Dutch. The percentages given in Table 5 above indicate that picture story telling is complex. The student has to produce utterances relevant to the individual pictures while at the same time he or she has to connect these utterances into a coherent story. These students were also in the process of learning a new language. Often insufficient vocabulary, grammar and knowledge of storytelling conventions make the task of picture story telling even more difficult. Lack of vocabulary cannot explain all low scores on coherence, as shown in Figure 2, where a coherence score of 0 combined with a large range of picture relevance scores. Moreover, a few students were able to effectively apply their limited language resources.

In analyzing the picture stories in terms of relevance and coherence, striking characteristics in the build-up of the stories surfaced. Five characteristics of relevance and coherence were illustrated above. Summarizing, these characteristics are:

(1) Picture-by-picture telling.

The stories told by Royah and Yamina are exemplary for this type of behavior. Each picture stands alone, as it were, separate from all the other pictures.

(2) Dialoguing or enacting

Yamina enacts the actions in the first two pictures of her story. She plays a role in a scenario by saying *I give* and *I here to home*. Such a response is not uncommon and its

occurrence can perhaps be explained by the central position of functional communicative language use in literacy classes as I also observed during this study. Next to this we must also take into account language acquisition processes, which override such assumptions (see notation in footnote 2).

(3) Overuse of deictic elements.

The deictic markers *this*, *that*, and *here* are used frequently to point to a picture being described. Royah demonstrates such use in her story by saying *that maybe T-shirt or so* and *that vase*. Asomi uses the deictic marker *this* where normally a definite or indefinite article or a pronoun would be used in referring to a specific character, *this man/this woman*.

(4) Picture misinterpretation.

Royah clearly misinterpreted picture 3. Such misinterpretations indicate that the student is describing the pictures separately, one by one.

(5) Overall lack of coherence.

We conclude by saying that, although the progress in the time span of eight months between assessment 1 to assessment 2 was shown to be significant, the progress was not spectacular. The maximum difference was just above 3, both for picture relevance and coherence, given a potential gain of more than 10 points. Learning a second language with limited or no education in the L1 is a slow and difficult struggle.

Kurvers' findings (2002) on a picture story task used to ascertain how texts are produced and interpreted are fascinating for this paper. In her study she demonstrated crucial differences in metalinguistic awareness of pre-schoolers, adult non-literates and literates, all with similar ethnic and social backgrounds. In assessing production of texts she used a picture story task. For this task the story could be told in the L1 or L2, whichever the candidate felt most comfortable with. Concerning text coherence Kurvers found that of the stories told by the non-literate adults, 45% were coherent. Of the stories told by the pre-schoolers, 73.7% were coherent, and for the literate adults, 100% were coherent. Even though Kurvers' study and our study used different picture stories and the criteria varied, the similarities are remarkable. For students who have had no formal education nor experience in 'reading' pictures such a task can be overwhelming. Literacy and schooling is more than simply learning print. New ways of information processing and conveying meaning are involved, which need to be learned in combination with and parallel to learning a new language and the principles of the alphabet.

Our results are just a beginning in unravelling the socio-cognitive complexity of becoming literate through an L2 as an adult. Clearly, there is a need for more of this kind of research into how learners undertake and evolve during such learning processes. When more data become available we will perform additional analyses on the impact of learner characteristics and the amount of instruction on learner development.

A final and important conclusion that needs to be drawn is that the use of pictures in literacy education cannot be taken lightly. Even an apparently simple illustration can be interpreted in another way than is customary for the teacher. Learning to 'read' pictures is, therefore, an essential practice for the literacy classroom. Teachers must be alert to the specific struggles of these second language learners in expressing relevance and coherence and not be too quick in understanding the utterances.

References

- Blakemore, D. (1992). *Understanding utterances: An introduction to pragmatics*. Oxford: Blackwell Publishers.
- Foster, S. (1990). *The communicative competence of young children: A modular approach*. London: Longman.
- Foster-Cohen, S. (2000). Review article of: Sperber, D. and Wilson, D. 1995: *Relevance: communication and cognition*. 2<sup>nd</sup> edition. Oxford: Blackwell. *Second Language Research* 16, 77-92.
- Grice, H. P. (1977). Logic and conversation. In P. Cole & J. Morgan (Eds.), *Syntax and Semantics*, (pp. 41-58). New York: Academic Press.
- Halliday, M., & Hasan, R. (1976). *Cohesion in English*. London: Longman.
- Kurvers, J. (2002). *Met ongeletterde ogen: Kennis van taal en schrift van analfabeten* [With unlettered eyes: Knowledge of language and script by non-literates]. Amsterdam: Aksant.
- Levinson, S. (1983). *Pragmatics*. Cambridge: Cambridge University Press.
- Reinhart, T. (1980). Conditions for Text Coherence. *Poetics Today*, 1, 4, 161-180.
- Renkema, J. (2004). *Introduction to discourse studies*. Amsterdam: John Benjamins.
- Sperber, D., & Wilson, D. (1995). *Relevance: communication and cognition*. 2<sup>nd</sup> edition. Oxford: Blackwell.
- Stenström, A-B. (1994). *Introduction to spoken interaction*. London: Longman Group UK Limited.
- Wolf, F., & Gibson, E. (2006). *Coherence in natural language: Data structures and applications*. Cambridge, MA: MIT Press.