

Text and Image Interplay in Selected Primary School English Textbooks in Ekiti State

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Abstract: This study sought to establish the relationship between text and images in selected primary school English textbooks and the ways in which text and image interplay supports interaction between pupils and materials in selected primary school English textbooks. Four English textbooks of primary 1 to 2 were selected for the study. The framework for the analysis in this study was based on the system of image text relations by Martinec and Salway (2005). Using both quantitative and qualitative analysis, the findings demonstrate that the total amount of instances of image-text relations in each textbook is 97 (18.5%), 202 (39.6%), 50 (8.8%) and 136 (26.1%) respectively. The study found out that there is a significant relationship between text and image in primary school English textbooks. Just as the image exemplifies the written text, the text also modifies the images. Through this, pupils are presented with concrete and familiar concepts that they can easily relate with. Thus, attention and interest of pupils are aroused, sustained and their reading speed and comprehension enhanced. The study concludes that, better understanding of the inter-semiotic relations between visual images and verbal texts helps textbook designers to design more suitable textbooks; enhances language learning and use through the learners' proper interpretation of the pictures, words and design, as these elements come together to produce a visual-verbal narrative which is disregarded when there is a focus on the words only. The study, therefore offers more insights on how to interpret and understand how different modes in the textbooks relate to achieve the goal of language learning.

I. INTRODUCTION

Textbooks are necessary tools in the classroom for both teachers and students. Without the provision of required texts, teaching and learning of English language in our schools will become handicapped.

Texts in the textbooks for instruction in nearly all levels of education most often occur in combination with images or picture. (Text in this context refers to word-based communication in the textbooks). Scholars in the field of language and communication as well as education have acknowledged images or pictures as important part of communication in any context. Graham (1990) claims that "visual representations are believed to have been part of human society for almost five thousand years". Goddard (1998,p.114) comments on the importance of pictures in advertisement and affirms that pictures work alongside the verbal text to create a whole reading. She also points out that neither the text nor the pictures work well in isolation. This is also the case in the textbooks for instruction in the classroom – the verbal text work

with the pictures to create the instruction in the textbook. Thus, teaching materials, such as textbooks are multimodal in nature and the interaction of the two modes (text and image) is very significant in language pedagogy especially at the pre-primary/primary school levels in a second language situation.

The interpersonal meaning promoted by such multimodal teaching materials is very significant since it reflects the pedagogical views about the learner's role in the construction of knowledge. Thus, affecting the quality and effectiveness of the learning experience supported by the use of these materials. This meaning is particularly important for the preschool years when children develop their first systematic learning experiences, which extensively rely on their interaction with multimodal texts. Reading books to children is a common pedagogical practice in many primary school classrooms in Nigeria. There is a general conception that when images that illustrate text are incorporated in text, this can diminish the reluctance of young readers to return to the pleasure of reading books. Although, much has been written on second language learning in relation to reading development, there is a need for an in-depth study on the level at which images are incorporated into the texts in English textbooks and how this affects the reading ability of pupils. Thus, this study is set out to examine the interplay between texts and images in primary school English textbooks in Ekiti State, Nigeria.

Purpose of the Study

This study aims to evaluate text and image interplay in selected primary school English textbooks in Ekiti State. Specifically, this study sought to:

- i. find out the relationship between text and images in selected primary school English textbook.
- ii. determine the extent to which text and image interplay in English textbooks aid reading rate and comprehension in primary school.
- iii. establish the ways in which text and image interplay supports interaction between pupils and materials in selected primary school English textbook.

II. LITERATURE REVIEW

Many scholars have written about visual representations in children's textbooks for different subjects (Doonan, 1993). Indeed, several studies have been carried out using different schemes or frameworks to describe the

perceived interaction of pictures and words in primary school English textbooks. Agosto (1999) differentiates between parallel storytelling, where the text and illustrations simultaneously tell the same story in a picture storybook, and interdependent storytelling.

Lai (2018) studied the applicability of Martinec and Salway's (2005) framework of image-text relation on the interpretations of the relations between visual images and verbal language in the six junior high school EFL textbooks. The findings shed some lights on cultivating students' multimodal literacy in the pedagogical context of Mainland China.

Pantaleo (2018) explores the first grade students' responses to and interpretations of eight picture books with metafictional devices. The study examines the visual and written responses of children to the picture books by analysing the relationship between the students' visual and verbal texts with respect to storytelling. The two main categories in a categorization scheme that describes text image relationships in picture books parallel storytelling and interdependent storytelling were adapted to analyze the students' visual and written responses. The study revealed that half of the children's visual and verbal texts were categorized as interdependent storytelling in seven out of the eight picture books. Thus, to a certain extent, the children's images and text emulated the interdependent storytelling nature of the picture books used in the study. In the conclusion, the article discussed the importance of developing children's visual literacy skills.

The study of Koutskou et al (2021) examines verbal text-image relations regarding the interpersonal meaning dimensions of address (the way the reader is addressed), social distance (the kind of the relationship between the reader and represented participants), and involvement (the extent to which the reader is engaged with what is represented) in multimodal text excerpts from science-related books for preschool children. The sample consisted of 300 randomly selected units which were analysed for the verbal and the visual content along each dimension to determine the verbal text-image relation. Results of the analysis indicated that relations of convergence are significantly frequent than relations of complementarity and divergence in terms of address and involvement while the analysis concerning social distance, relations of complementarity and divergence were observed more frequently than relations of convergence. Findings indicate that a greater emphasis on the interpersonal meaning and a more systematic analysis of the interaction and interrelation between verbal text and image in texts for young children is necessary to facilitate their understanding and support them in learning of science. In fact, it has been shown that verbal text-image convergence facilitates successful association and coordination of the two modes, thus supporting children's comprehension of multimodal texts.

The present study, however takes Martinec & Salway's System of Text-Image Relations to determine the level of relationship between texts and images in the selected primary school English textbooks.

Theoretical Framework

The theory that guides this study is the Multimodality theory of Kress and Leeuwen (2006) and the framework of Martinec & Salway's System of Text-Image in multimodality theory. Multimodality refers to the interplay between different representational modes. Multimodal representations mediate the sociocultural ways in which these modes are combined in the communication process (Kress & Van Leeuwen 2006). The interplay could be for instance, between images and written words. Images and written words are different representational modes. A visual grammar was developed by Kress and Leeuwen (2006) for the images' investigation in communication. According to them, "just as grammars of language describe how words combine in clauses, sentences and texts, so our visual grammar will describe the way in which depicted people, places, and things combine in visual statements of greater or lesser complexity and extension". They posit that the visual structures point to particular interpretations of experience and forms of social interactions like the linguistic structures. They expressed further that what is expressed in language through the choice between different word classes and clause structures, in visual communication may be expressed through the choice between different uses of colour or different compositional structures. They also affirms that expressing something verbally or visually makes a difference, it affects meaning. (cf. Kress and van Leeuwen 2006).

Martinec and Salway's (2005) framework is an extension of Barthes' typology of text and image relations by a further division of the image-text pairs of equal status into a Complementary and Independent status. This was combined with Halliday's logico-semantics relations, which originally had been developed to distinguish text clauses. Martinec and Salway adapt these grammatical categories to capture the specific logical relationships between text and images regardless of their status. The framework is adopted in this study to analyse the relationship between the images and texts in the selected primary school English textbooks. By focusing on the relationship between texts and images, this study offers more insights into how to interpret and understand how different modes in the textbooks relate to achieve the goal of language learning.

III. METHODOLOGY

The four selected primary school English textbooks were taken and critically studied. The textbooks are: Nigerian Primary English 1 (P1-1 hereafter) and Premier English for Nigeria Primary Schools, Book 1 (P1-2 hereafter) published in 2014 and in Primary 2, Nigerian Primary English 2 (P2-1 hereafter) and Premier English for Nigeria Primary Schools BK 2 (P2-2, hereafter) were sampled for the study. These series of textbooks are officially recommended by State Universal Basic Education Board (SUBEB) for all primary schools in Ekiti State, Nigeria. Only Primary one and two pupils' English textbooks are used because at this stage, images are more pronounced in the textbooks to serve as illustrations for pupils to relate the text to the concrete world. Notable features and relationship between

text and images in the textbooks are recorded and analyzed using Martinec & Salway's System of Text-Image relations to determine the level of relationship between texts and images in the selected primary school English textbooks. The analysis was done quantitatively and qualitatively. The quantitative analysis uses simple percentage to rate the frequency of occurrence of each of the elements of Martinec & Salway's System of Text-Image Relations to support the qualitative discussion of the instances of the text-image relations.

Analysis

Descriptive statistical analysis of the data obtained is summarized in Table 1 below. It illustrates the distribution of the relationship that exists between texts and images in the selected primary school English textbooks in line with the thirteen categories of text-image relations in Martinec and Salway's (2005) framework of multimodal theory.

Table 1: Text- Image Relation in the selected Primary School English Textbooks

TEXT AND IMAGE INTERPLAY			BOOK 1 PS1-1	BOOK 1 PS1-2	BOOK 2 PS2-1	BOOK 2 PS2-2	TOTAL	
STATUS	EQUAL	Image & text independent	6	4	2	5	18(2.8)	
		Image & text complementary	19	46	15	22	102(22.2)	
	UNEQUAL	Image subordinate to text	33	74	11	74	183(37.8)	
		Text subordinate to Image	2	3	-	1	6(0.9)	
LOGICO- SEMANTICS	EXPANSION	ELABORA-TION	Exposition (i&t same generality)	6	14	4	3	27(4.7)
			Exemplification	13	16	2	5	36(8.8)
		EXTENSION		2	2	1	2	7(1.1)
		ENHANCE-MENT	Temporal	-	-	-	-	(0)
	Spatial		3	2	2	1	9(1.4)	
	Causal (reason/purpose)		2	1	1	1	5(0.8)	
	PROJECTION	Locution (wording)	9	32	13	16	70	
		Idea (meaning)	1	2	2	3	8.8(1.3)	
	TOTAL			97(18.5)	202(39.6)	50(8.8)	136(26.1)	485(100)

The statistics in Table 1 above show that the total amount of instances which present image-text relations in each textbook is 97 (18.5%) in P1-1, 202 (39.6%) in P1-2, 50 (8.8%) in P2-1 and 136 (26.1%) in P2-2 respectively. These are illustrated with samples from the selected textbooks.

Unequal Status In Text-Image Relations

According to Martinec & Salway, (2005), Image and text are said to be **unequal** when one of the two modes modifies the other. The modifying element is considered to be dependent on the modified one.". In other words, one mode (either the text or the image) is subordinate to the other. Such unequal relations can be in either an "image subordinate to text" relation, or a "text subordinate to image" one.

1. Image Subordinate to Text

Table 1 indicates that "image subordinate to text" makes up a major proportion - more than one third (182/485=37.8%) in the image-text relations of the four textbooks. This is realized by the image relating to a part of the text. Therefore, the relationship between the image and the text is 'unequal'. Figure 1 below is an example illustrating such an unequal relationship from Primary English 1 (Sample 2) Unit 30, p.186.

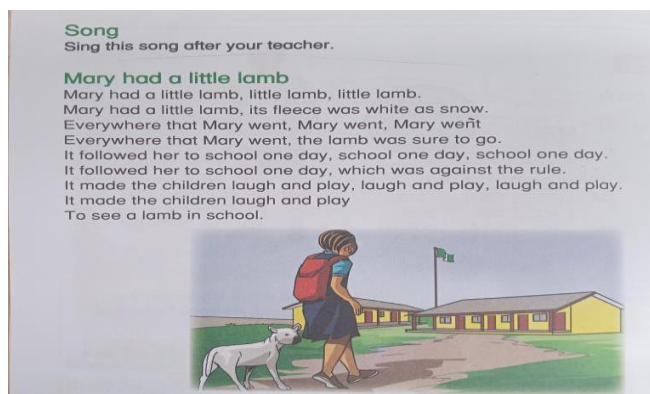


Figure 3: Example of "image subordinate to text" [from Primary English 1 (Sample 2) Unit 30, p.186]

The picture in Figure 1 depicts two human and animal characters in a song, Mary (human character) and a little Lamb (animal character). Mary had a little lamb which was white as snow. The lamb follows Mary Everywhere. One day, it followed her to school. What is depicted in the picture frame relates with four sentences in verbal texts "Mary had a little lamb. Everywhere Mary went, the lamb was sure to go." and "It followed her to school one day". "It made the children laugh to see a lamb in the school." For the remaining texts, there is no picture to illustrate the point. Image subordination plays a

dominant role in the image-text relations of the four textbooks. Perhaps due to the limited space, textbook editors cannot and do not necessarily print out all pictures of teaching contents, but just provide some vital relevant pictures in the text-image relation type of “image subordinate to text” to sketch out the key theme of certain teaching unit and offer some background information of teaching contents. In this way, readers can picture characters and establish settings in comprehension passages. This enables pupils to obtain an idea of the questions they are going to answer in the exercises whenever they process the pictures in the four textbooks. Thus, learners’ attention is attracted and proximity is achieved through the text and images

2. Text Subordinate to Image

Table 1 displays that “text subordinate to image” ranks eleventh in all text-image relations in the four textbooks, and nearly all the instances of “text subordinate to image” can be further categorized as “extension”. Text being subordinate can be “realized by deixis from text to image, either by reference or present tense combined with material or behavioral process” (Martinec and Salway, 2005). For example, Figure 2 is extracted from Primary English 2 (Sample 2), Unit 29, p.184. Pupils are asked to study the image below and write about daily activities of Kola by filling in the gaps in the sentences given.

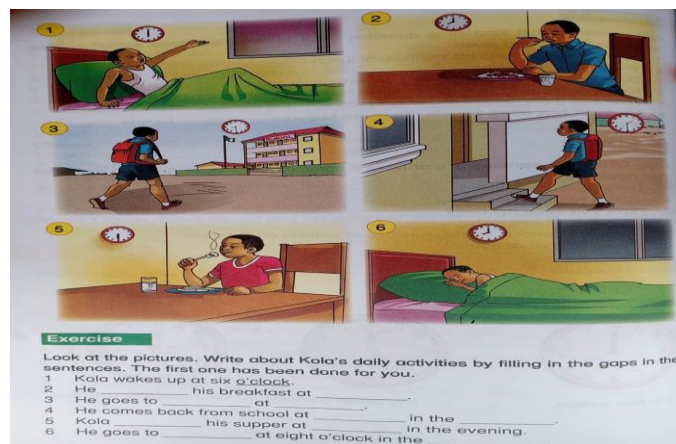


Figure 3: Example of “text subordinate to image: extension” [from Primary English 2 (Sample 2) Unit 29, p. 184]

In Figure 2, the whole text in the exercise relates to the portrait of Kola which visually presents his daily activities. The six images are about Kola who is seen in the various pictures performing different actions such as waking up, eating, walking in the school uniform towards a building that is assumed to be a school, sleeping, among others. The text cannot be interpreted without the picture. The exercises pupils are expected to perform are embedded in the picture. This could be to test the descriptive and expressive ability of the pupils. They are meant to describe the actions represented in the image. In the data, the text-image relation of “text subordinate to image: extension” usually appears in the description of actions or places, mostly in Book II which is in the form of images of events (person performing a task) or location (school, market etc) with accompanying verbal text, directing pupils to write a

composition about what they have seen in the images or filling the gaps with concrete things from the image.

Equal Status In Text-Image Relations

While the above subsection illustrates how words and images in textbooks may be unequal in status, there are also instances where they relate with each other in an equal manner, either independently or complementarily.

3. Image & Text Independent

From Table 1, we can see that there are not many “image and text independent” relations in the four textbooks, which ranks sixth in all text-image relations of these textbooks. According to Martinec & Salway (2005), “image and text independent” is an inter-semiotic relation between an image and a text in which the whole image relates with the whole text in an equal and independent manner. For instance, Figure 3 was taken from Primary English 2 (Sample 2), Unit 31, p.205.

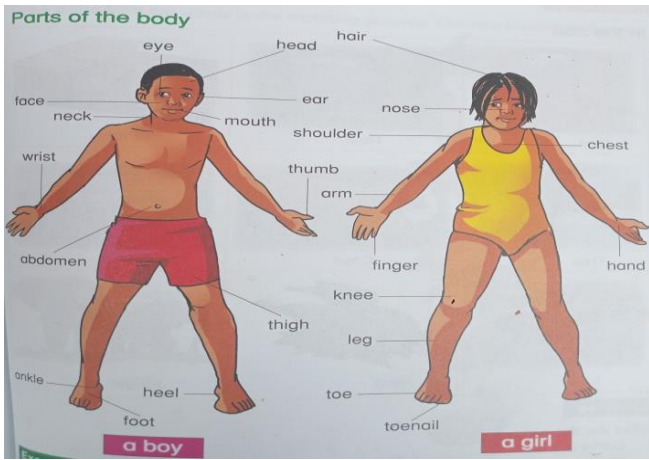


Figure 5: Example of “image & text independent” [from Primary English 2 (Sample 2), Unit 31, p.205]

The whole image in Figure 3 relates with the whole text “football field, dining hall, classroom block, principal’s office, staff room, garden, gate house, school farm, library, female hostel” in an equal and independent way. The whole image is related to the whole text and both the text and image do not modify the other but the information they provide exist in parallel. In other words, each has own separate process configuration without depending on each other. This kind of image-text relation usually appears in the units which elaborate on how pupils use language based on their daily experiences. The images present concrete and familiar experiences that need little text to explain

Image & Text Complementary

Another kind of equal status in text-image relations is called “image and text complementary”. Table 1 shows that “image & text complementary” ranks second. Text and image are complementary when the whole image is related to the whole text, both depend on and modify each other and the two modes together form one single process configuration.

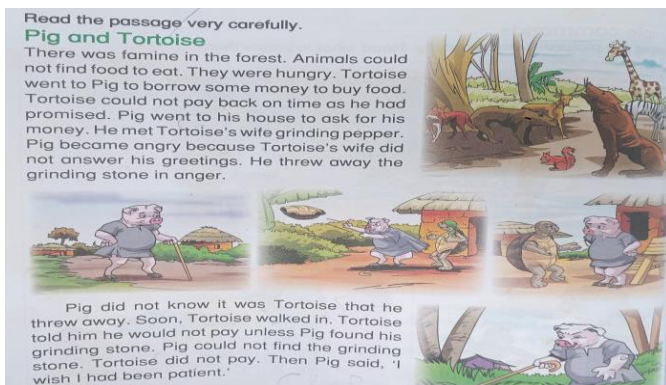


The whole texts and images in Figure 4 complements each other. The exercise is about parts of the body. The texts present the language mode while the image complements the language by exemplifying the text. Eye, face, nose, legs, mouth, neck among others are expanded with the pictorial image of human parts which links effectively the text “eye” to what it is in the real world. This simultaneously activate pupils’ sensory channels (visual and verbal) which can be an effective way to reduce their cognitive load and to achieve pedagogical purposes. As proved by some psychological experiments, “images are far more likely to be attention-getters in perception than language and can also be memorized much more easily and effectively” (Stock, 2004). Pictorial perception is considered to be much more effective in teaching than language perception because without much parsing, images directly tap into the emotions and provide immediate sensory input

Logical-Semantic Image-Text Relations

Elaboration in Logical-semantic Image-text Relations

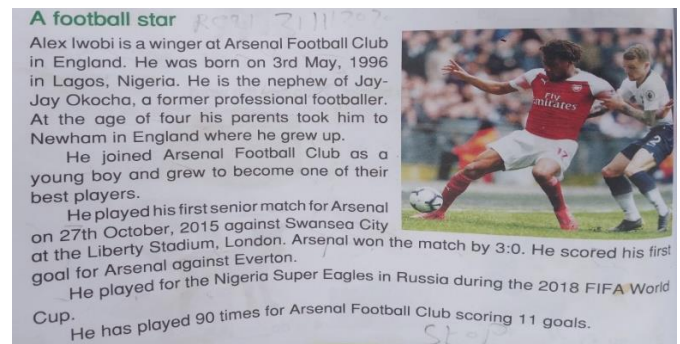
Elaboration comprises exposition and exemplification. If images and texts have the same kind of generality, the image-text relation is exposition (i&t same generality). If image and text have different kinds of generality, the image-text relation is exemplification, either ‘text more general’ or ‘image more general’. Table 1 demonstrates that “exposition (i&t same generality)” ranks fifth (27, 4.2%) in all image-text relations of the four textbooks. Whereas, “exemplification: text more general” accounts for 8.9% in all text-image relations of the four textbooks.



In figure 5, the image elaborates the intended meaning of the text. The image does not provide additional information when related to the text nor additional element added by the image if related to the text. Rather, it exemplifies the information in the elaborated mode. The readers link the text with the image and gains knowledge of the story in the comprehension passage. It suggests that textbook editors take primary school pupils’ cognitive features into consideration, and they provide concrete examples to illustrate abstract concepts and create vivid picture of the actions and actors been described for targeted readers

Extension in Logical-semantic Image-text Relations

The second kind of expansion in logical-semantic image-text relations is extension. Table 1 illustrates that there are only a few examples of “extension” (7, 1.1%) among all text-image relations of the four textbooks. Extension can be defined as a relationship between an image and a text in which “one mode extends or adds new information to the other mode, because it goes beyond what is represented in the image or text”.



For example, Figure 6 illustrates the verbal text of a football star, Alex Iwobi, with the image of footballers in action on the field providing further information than what is outlined in the text. The image gives readers the illustration of what footballing is as profession and how footballers display their professionalism. This cannot be seen. directly in the text and is therefore a new information

Enhancement In Logical-Semantic Image-Text Relations

Another kind of expansion in logical-semantic image-text relations is enhancement which is further distinguished by temporal, spatial, and causal (reason/purpose).

Enhancement: spatial

Table 1 indicates that “enhancement: spatial” ranks eighth in all image-text relations of the four textbooks. Enhancement can be defined as a relationship between an image and a text in which “one mode enhances the other mode by referencing it with circumstantial information like a time, a place, a reason, and a purpose” (Martinec & Salway, 2005). A text enhancing an image or an image enhancing a text should be associated with its ideational content. To illustrate this, Figure 7 was taken from *Primary English 2* (Sample 1) Unit 2, p.19.

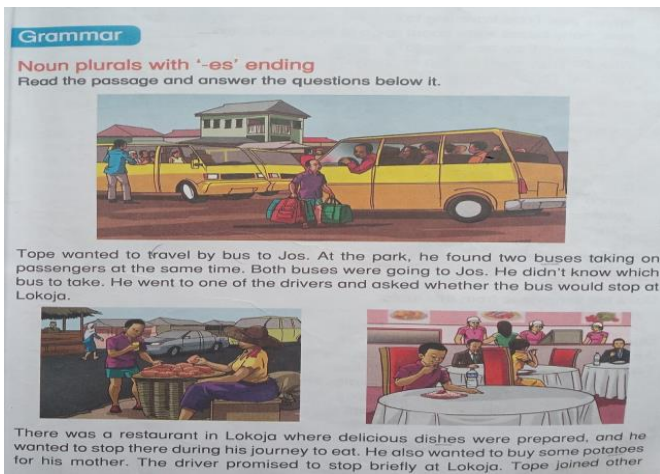
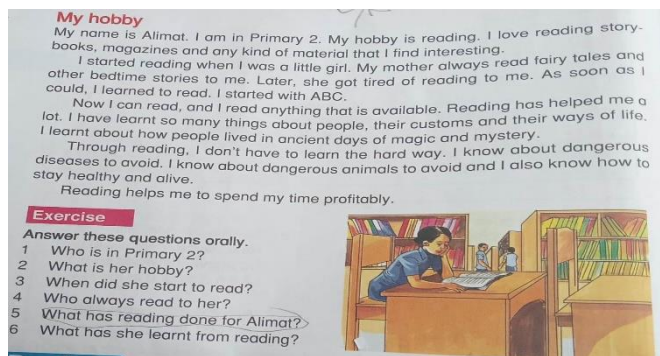


Figure 7: Example of “enhancement: spatial” [from Primary English 2 (Sample 1) Unit 2, p.19]

In Figure 7, the images of “park”, “potato stall” and “restaurants” relates with the text by enhancement, and the images qualify the text circumstantially. To be more specific, the image of “the park” enhances the text by space, and the image specifies the place where Tope went to board bus to Jos. Another image also enhances the text (the first thing that Tope did was buy some potatoes for his mother and then, he ran down to the canteen to eat his favourite dish) by providing the image of “potato stall” and “restaurants” which helps readers see the atmosphere in which the actions takes place. There are many other examples of “enhancement: spatial” in all of image-text relationship of the four textbooks in order to represent the text in concrete, familiar experience which can help pupils use their own imagination and judgment to predict and interpret what is going on in the story

Enhancement: causal (reason/purpose). Only a small proportion (5, 0.8%) of “enhancement: causal (reason/purpose)” image-text relations was identified in the four textbooks. Figure 8 demonstrates the image-text relation of “enhancement: causal (reason/purpose)” which is extracted from Primary English 2 (Sample 2) Unit 4, p.24.



In Figure 8, the image enhances the text by way of ‘causal (reason/purpose)’, as the visual image depicts why pupils should read. The image denotes that pupils should engage in reading habit as early as possible as it equips them with knowledge to live a meaningful life. This enhances the meaning denoted by the verbal text of ‘My hobby’.

4. Enhancement: temporal

From Table 1, there is no “enhancement (temporal)” image-text relation in the four textbooks, perhaps because time is an abstract concept and it is not easy to display physically.

Projection in Logical-semantic Image-text Relations

The other main type of logico-semantic relations, deals with relations between "events that have already been represented. Projection is useful to account for cases when content that has been represented by text or image is re-represented in the other mode" (Martinec & Salway, 2005). “Locution (wording)” and “idea (meaning)” are two kinds of projection in logical-semantic image-text relations

Locution (Wording)

Table 1 shows that “locution (wording)” ranks third (70, 16.4%) among 13 categories of text-image relations in the four textbooks. Locution (wording)” is one of two kinds of projection which repeats or projects the information in one mode from the other mode via “talking bubble” linking with a sayer, and another kind of projection is information transmission inter-modally via “thinking cloud” linking with a thinker. Below is an example extracted from Primary English 2 (Sample 1) Unit 2, p8,

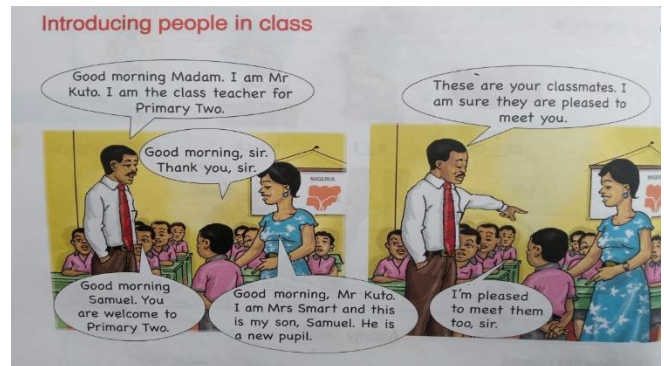


Figure 9: Example of “locution (wording)” [from Primary English 2 (Sample 1) Unit 2, p.8]

The image-text relation in Figure 9 exemplifies locution (wording), because information transmission from the visual mode (speaker) to the verbal mode (utterance) is achieved through “speech bubble”. The text represents the wordings of dialogue among Mr Kuto, Mrs Smart and Samuel who are shown in the image. Both the text and image present the same information but in different modes. The context of the text is re-represented in the image. The image is the diagram that explains the content of the text. Textbook editors present the locution (wording) via “speech bubble” in order to catch readers’ attention and make it easier for pupils to process verbal texts through visual images easily. Through locution, pupils can easily match words with the sayer in the textbooks. This could increase reading speed and comprehension.

Idea (Meaning)

Idea is a projection of what has been thought and "it tends to be projected by a mental process and the meanings

rather than exact words are reported. There are a total of only eight “idea (meaning)” image-text relations. The function of information projection from the visual mode (thinker, usually a person using his/her finger to scratch his/her head) to the verbal mode (what the thinker is thinking) via “thought cloud”. It is a mental process that involves thoughts and perceptions. Because primary school pupils are much less incapable of concrete thoughts and ideas, it is less pronounced in their textbooks.

IV. DISCUSSION OF FINDINGS

This study has attempted to establish the interplay between text and image in four selected primary school textbooks in Ekiti State, Nigeria by referring to Martinec and Salway’s (2005) framework as the basis of our analysis.

After presenting the distribution of text-image relations in the four textbooks using Martinec and Salway’s (2005) image-text relations framework, the findings reveal that the total amount of instances which present image-text relations in each textbook is 97 (18.5%), 202 (39.6%), 50 (8.8%) and 136 (26.1%) respectively. These figures suggest a significant decrease in the number of images in the textbook designed for higher classes. There is a gradual change from image-based to text-based in the textbook design.

“Image subordinate to text” (182, 37.8%), “image & text complementary” (102, 22.2%), and “locution (wording)” (70, 16.4%) are the three major types of image-text relations in the four primary school English textbooks used in this study

There are a small number of remaining types of image-text relations such as exemplification: text more general (36, 8.8%), exposition (image & text same generality) (27, 4.2%), image & text independent (18, 2.8%), exemplification: image more general (15, 2.3%), enhancement (spatial) (9, 1.4%), idea (meaning) (8, 1.3%), extension (7, 1.1%), text subordinate to image (6, 0.9%), and enhancement (causal/reason/purpose) (5, 0.8%). There is, however, no “enhancement (temporal)” image-text relation in the four textbooks. Meanwhile, the implication of these is not far-fetched. The primary school pupils need more visual images in their textbooks to develop their cognition.

Comparatively speaking, the textbook designers focus too much on the intermodal relations of image subordinate to text, while other types of image-text relations such as “exemplification: text more general”, “exemplification: image more general”, “enhancement: causal (reason/purpose)”, and “idea (meaning)” should be used more because of primary school pupils’ immature cognitive ability. So, they need more examples and visual images to scaffold to understand abstract concepts, logical reasoning, and implicitly articulated meanings.

V. CONCLUSION

Better understanding of the inter-semiotic relations between images and texts may help textbook designers to

design more suitable textbooks as it also helps teachers to better elicit teaching contents, and enhances learners’ acquisition of multimodal literacy. This study has revealed that there is an inseparable relationship between text and images in meaning making in primary school English textbooks. The interplay between text and images enables language use through the learners’ interpretation of the pictures, words and design, as these elements come together to produce a visual-verbal narrative which is disregarded when there is a focus on the words only. This has corroborated Ahmed (2019) that verbal text–image convergence facilitates successful association and coordination of the two modes, thus supporting children’s comprehension of multimodal texts.

This study concludes that there is a significant relationship between text and image in primary school English textbooks. Just as the image exemplifies the written text, the text modifies the images. Through this, pupils are presented with concrete and familiar concepts that they can easily relate with. Thus, attention and interest of pupils are aroused, sustained and their reading speed and comprehension enhanced. Thus, this study offers more insights on how to interpret and understand how different modes in the textbooks relate to achieve the goal of language learning.

REFERENCES

- [1] Agosto, Denise E. (1999). One and inseparable: Interdependent storytelling in picture storybooks. *Children's Literature in Education*, 30(4), 267-280.
- [2] Doonan, Jane. (1993). *Looking at pictures in picture books*. Stroud, England: Thimble Press
- [3] Goddard, A (1998) *The language of advertising*. Routledge
- [4] Graham, Judith. (1990). *Pictures on the page*. Sheffield, UK: National Association for the Teaching of English.
- [5] Koutsikou, M.; Christidou, V.; Papadopoulou, M.; Bonoti, F. (2021) *Interpersonal Meaning: Verbal Text–Image Relations in Multimodal Science Texts for Young Children*. *Education. Science*. 2021, 11, 245. <https://doi.org/10.3390/educsci11050245>
- [6] Kress, G. (2009). What is mode? In C. Jewitt (Ed.), *The Routledge handbook of multimodal analysis* (pp. 54-68). Abingdon: Routledge.
- [7] Kress, G. (2012). *Multimodal discourse analysis*. In P. Gee & M.
- [8] Kress, G. and van Leeuwen, T. (2006). *Reading images: A grammar of visual design* (2nd edition). London: Routledge.
- [9] Lai, H. (2018) *Image-text Relations in Junior High School EFL Textbooks in China: A Mixed-methods Study*. *Journal of Language Teaching and Research*, (9), 6, pp. 1177-1190,
- [10] Lemke, J. (2012). *Multimedia and discourse analysis*. In P. J. Gee and M. Handford (Eds.), *The Routledge handbook of discourse analysis* (pp. 79-89). London: Routledge.
- [11] Liu, X., & Qu, D. (2014). *Exploring the multimodality of EFL textbooks for Chinese college students: A comparative study*. London & New York: Routledge.
- [12] Martinec, R & Salway, A. (2005). A system for image-text relations in new (and old) media. *Visual Communication*, 4(3), pp. 337-371.
- [13] Pantaleo, Sylvia. (2005). *Young children engage with the metafiction in picture books*. *Australian Journal of Language and Literacy*, 28(1), 1937.