Visuospatial Recognition of Words for Children through Concrete Poetry

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Abstract

Concrete poetry – a rigidly defined sub-genre of visual poetry – creatively operates with an awareness of graphic space as its structural agent – an additional expressive element – by arranging words in non-linear patterns across a given page. It encompasses the material dimension of language, its visual, acoustic and semantic aspects to create autonomous linguistic realities, in which the perceptual qualities of the signifiers or the signs instead of just merely the signified (i.e., the concepts they refer to) are emphasized. Its key emphasis is on structure, method, functional construction and a rejection of subjective expression. It draws on both textual and visual modes of signification that result in a hybrid between text and image. Hence, readers of concrete poetry are compelled to oscillate between reading and viewing the modes. Although concrete poetry is today considered as outdated, it has also attempted to respond creatively to the rapid changes in the visual media landscape, as in the frequent use of emoji faces, and for conceptual affinities to emerging technical languages as used in WhatsApp emoticons and SMS abbreviations.

Key words: Concrete Poem, Pattern Poem, Shape Poem, Words, Word Recognition

Introduction

Concrete poetry has its roots in the works of literature coupled with, enhanced by, and/or written as a series of images (YourDictionary, 2016, para.3) from the times of the medieval writers such as Geoffrey Chaucer (b.1343-d.1400) of *The Canterbury Tales* fame. Concrete poetry coupled poetry with images but the form was lost over time. Over the 20th century AD, a number of established poets such as Ezra Weston Loomis Pound (b.1885-d.1972) and E.E. Cummings (b.1894-d.1962) attempted to depict visually the significance of the words in their poems.

Concrete poetry has become a notable movement since the World War II. In fact, during the early 1950s, concrete poetry emerged simultaneously in Brazil in South America as well as in Germany and Sweden in Europe, and then it spread promptly to other European countries as well as the United States. According to Schaffner (2010; cited in Clüver & Corrêa, 2011), the Swiss-Bolivian poet Eugen Gomringer and the Brazilian Noigandres poets have been honored as the founding fathers of poetry. Several well-known poets including Ian Hamilton Finlay (b.1925-d.2006), John Hollander (b.1929-d.2013) and Stéphane Mallarmé (b.1842-d.1898) as well as more recent poets such as David Schonodelmeyer, Courth Smith and Paula Claire have written successful concrete, pattern and/or shape poems. Concrete poetry reached its peak in the 1960s, and gradually fizzled out in the early mid-1970s.

There are two representative collections of concrete, pattern and shape poems: An Anthology

of Concrete Poetry edited by Emmett Williams (1967) and Concrete Poetry: An International Anthology edited by Stephen Bann (1967). In addition, readers, who are interested to explore more about concrete poetry, should read Concrete Poetry: A World View edited by Mary Ellen Solt (1970) and a more recently published Concrete Poetry: An International Perspective edited by Claus Clüver and Marina Corrêa (2011).

What is Concrete Poetry?

Concrete poetry can be regarded as a more rigidly defined sub-genre of visual poetry. It creatively operates with an awareness of graphic space as its structural agent – an additional expressive element – by arranging words in non-linear patterns across a given page. According to Clüver and Corrêa (2011), concrete poetry draws on both textual and visual modes of signification that result in a hybrid between text and image. Hence, readers of concrete poetry are compelled to oscillate between reading and viewing the modes.

Concrete poetry encompasses the material dimension of language, its visual, acoustic and semantic aspects to create autonomous linguistic realities, in which the perceptual qualities of the signifiers or the signs instead of just merely the signified (i.e., the concepts they refer to) are emphasized (Clüver & Corrêa, 2011). Its key emphasis is on structure, method, functional construction and a rejection of subjective expression. Although concrete poetry is today considered as outdated, it has also attempted to respond creatively to the rapid changes in the visual media landscape, as in the frequent use of

emoji faces, e.g., J and L, and for conceptual affinities to emerging technical languages as used in WhatsApp emoticons, e.g., ; (and :) and SMS abbreviations, e.g., LOL, b4, 10Q.

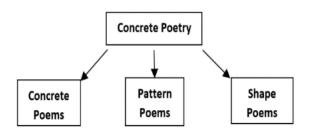
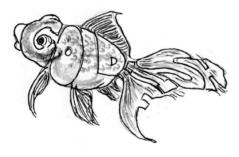


Figure 1. The three types of concrete poetry

Concrete Poems

A concrete poem is defined as "a poem that forms a picture of the topic or follows the contours of a shape that is suggested by the topic" (Pravada, 2007, p.1). It "does not have a title, line, rhyme, rhythm and even stanza" (Chia, 1988, p.5). The letters in a given word (usually is a noun, verb or adjective) are shaped in such a way that they form the picture that depicts the meaning of that word. Chia (2006) has defined concrete poem more narrowly by referring to a word whose string or sequence of constituent letters take the form of the referent that the word names. He argues that a concrete poem can come in various shapes (e.g., oval, star, triangle), sizes (e.g., big, small, dot), colors (e.g., blue, green, yellow), textures (e.g., coarse, jaggy, smooth) and even flavors (e.g., lavender, rosewood, vanilla) in terms of smell and taste. Examples of poets who have created concrete poems include Ian Hamilton Finlay, Simon Cutts and Stuart Mills.

Here is one example of a concrete poem of a goldfish that I have created:



Here is yet another example of a concrete poem created by Aaron Guo (cited in Chia, 1988, p.6):

Personally, I would subdivide concrete poetry into three forms or categories: concrete poems, pattern poems and shape poems (see Figure 1).



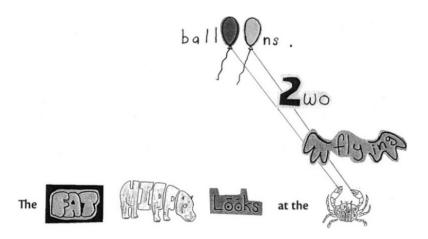
Pattern Poems

A pattern poem is also known as "figure poem, shaped verse or carmen figuratum, i.e., a verse in which the typography or lines are arranged in an unusual configuration, usually to convey or extend the emotional content of the words" (Encyclopedia Britannica, 2016, para.1). Some of the best pattern poems can be found in the Greek Anthology that has included some excellent pieces composed between 7th century BC and the early 11th century AD. Examples of poets who had composed pattern poems include the English metaphysical poet George Herbert's (b.1593-d.1633) Easter Wings of the 16th century AD, the French symbolist poet Stéphane Mallarmé's (b.1842-d.1898) Un Coup de dés (1897; "A Throw of Dice") and the well-known American poet E.E. Cummings' ((b.1894-d.1962) O sweet spontaneous earth.

Here is an example of a pattern poem created by Ieky Harto (cited in Chia, 1988, p.6):

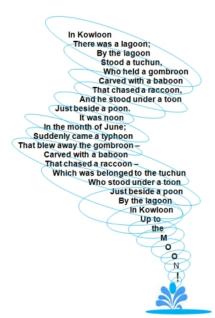
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On the next page is an interesting sentence taken from a children's storybook – *The fat hippo looks at the crab flying two balloons* – that uses content words, i.e., fat, hippo, looks, crab, flying, two, and balloons, to create concrete poems as shown (see the next page):



Notice that the two balloons are flying up into the air while the crab tries to hold tight to the strings tied to the two balloons while the hippo looks at what is happening. The hippo and the crab are on the ground while the two balloons are flying into the air. There are two patterns you can see here. The first pattern involves the words at the ground level: The fat hippo looks at the crab. The second pattern involves the words flying upwards: flying 2wo (two) balloons.

Below is a third example of a pattern poem – *Suddenly came a Typhoon* – with words repeated in a reverse sequence, and it is written to shape like a typhoon. I have re-illustrated it using ovals repeatedly to make them appear as if they are spiraling upwards to represent the typhoon. This poem can be considered as a hybrid of pattern and shape poems that I created back in 1988 (see Chia, 1988, p.10):



Shape Poems

A shape poem resembles a concrete poem but it can contain more than just one word or a phrase. It is shaped the same as the object that the poem is depicting. In other words, "[A]s the name implies, a shape poem has to do with the physical form of the words on the paper" (YourDictionary, 2016, para.1). According to YourDictionary (2016), the meaning of such a poem is very much impacted by the word, the physical form that the word for the shape poem takes, writing style and literary devices. When the content and the form of the word are put together, they help "to create one powerful effect in the field of such poems" (YourDictionary, 2016, para.1). Some good examples of shape poems are Mary Ellen Solt's Forsythia and Lilac, Dorthi Charles' Concrete Cat and David Schonodelmeyer's Butterfly. It is Schonodelmeyer's shape poem Butterfly that impresses me most, using phrases like "it floats by" and "it flutters high", making the poem really come to life! Another of my favorite shape poem is The Mouse's Tale written by Lewis Carroll in the shape of a mouse's tail! Other good examples of such poems can be found in John Hollander's Idea: Old Mazda Lamp, Robert Yehling's Uplifting and Dylan Thomas' Vision and Prayer.

Here is one example of a shape poem of an "earthworm: a burrowing annelid worm" that I have created:



On the next page, a second example of a shape poem of a pizza I created (see Chia, 1988, p.10):



IS DELICIOUS!

Here is a third example of a shape poem of a Christmas tree that Grace Chia (2008) has created:



Hosts of heaven declared right away.

"Rejoice, everyone, rejoice,
Immanuel (God with us) is here to stay.
Star of Bethlehem will show you the way.

The shepherds in the field and
Magi – the three wise men – from lands of faraway
Announcing their visit to worship Him and pray
"Saving grace of God: His Son is born today."



What are Words?

Concrete poetry involves a creative play of words and hence, words play an important role in creating concrete, pattern and shape poems to express their meanings explicitly. It is important for us to know and understand everything about words and what they are all about, especially in recognizing, identifying, discriminating and/or differentiating them from others.

A word is the smallest linguistic unit that can exist on its own in spoken and written language, though its meaning will be determined by the context in which it is found (Chia, 1998). Linguistically speaking, a word is composed of a lexeme – an abstract unit – that may have or not several inflected forms, e.g., the word *give* belongs to the class of verbs with the following inflected forms: *gives*, *given*, *gave*, *giving* and *gie* (a Scottish variant).

A word consists of three interactive elements: orthographic (letters), phonological (sounds) and semantic (meaning) elements (Chia, 1996). Briefly, the orthographic element has two sub-elements: (i) logographic features (i.e., letter shapes and sequencing), and (ii) spelling rules and conventions. For example, the word cat is made up of three letters (orthographic element) and is spelled c-a-t in that consonant-vowel-consonant (CVC) order with c at the beginning, a in the middle, and t at the end. The initial consonant c is

pronounced /k/, the middle short vowel a is pronounced /æ/ and t is pronounced /t/ (phonological element). Finally, the word cat can mean different things in different sentential contexts. For example, the cat in this sentence – The cat caught a mouse – means a feline, while in this other sentence, the cat in – The prisoner-of-war let the cat out of its bag to the interrogator – means to tell a secret.

In order to recognize a word, a child must be able to spell out the word in terms of its constituent letters spoken in their respective names, i.e., converting the word into its letters as seen in print, or say the letters in their correct sounds, i.e., pronouncing the individual letter sounds and then blending them to say the word as an entity. To be able to perform the task of word recognition, the child must possess abilities in visual discrimination and spatial perception. In other words, visuospatial perceptual processing is essential in word recognition in addition to visual-auditory perceptual processing.

According to the online Dictionary.com, the term *visuospatial* consists of two words *visuo* – a prefix referring to vision or relating to seeing or sight – and *spatial* – a word referring to space or having an extension in space – and together it means "pertaining to perception of the spatial relationships among objects within the field of vision" (Dictionary.com, 2016).

Word decoding involves word perception, which, in turn, involves word recognition/identification and phonetic analysis. Word recognition and word identification are two cognitive processes that occur during the process of word perception, but only one of them can take place at any one time in word decoding process. In word identification, a listener/reader deals with an unknown word, but word recognition involves a word previously met in print. Manzo and Manzo (1994) have defined word recognition as a reader's attempt to identify a word quickly with little attention to letter-to-sound association. This process depends heavily on visuospatial or eidetic imagery, i.e., "the ability to hold an image in the short-term memory while physically moving past it to other words or images in the working memory, to test to see if the word should be called one thing or another" (Chia, 1998, p.14). In word recognition, a reader depends on two additional aids - the most distinguishing features of the word (Gibson & Levin, 1975) and the context in which it is used. According to Marchbanks and Levin (1965), every word has its special distinguishing features, i.e., its configuration or shape, e.g., *line* is shaped like the letter L while *sail* is shaped like a reversed \rfloor or *pine* is shaped like an inverted Γ . Concrete poetry offers that special

visuospatial feature to aid in word recognition as well as word identification or discrimination.

Word discrimination comes into play when a reader notices the differences in words, especially in the visual sequencing of constituent letters and outlines, overall shapes and/or sounds (Harris & Hodges, 1995). For example, the word *lamp* looks and sounds different from *lamb* and *lame*. Word discrimination also involves letter discrimination, letter omission/addition and letter sequencing, e.g., three/there, stair/star/start/, stop/pots. As a result, word meanings will change as words change their forms. Concrete poetry involves word decoding skills through word recognition, identification and discrimination in order to highlight the meaning of a word explicitly in its visuospatial or eidetic form.

The Three Perspectives on Concrete Poetry

As mentioned earlier in the introduction, concrete poetry reached its peak in the 1960s. It began to fizzle out in a gradual manner in the early mid-1970s. In other words, "[T]he moment of concrete poetry is already past" (Chia, 1993, p.41). However, there are three perspectives we can take to examine the usefulness of concrete poetry today.

Firstly, from the literary perspective, concrete poetry can be seen as "an episode in the continuing assertion of an internationalist *avant-garde* that has sought to break with the past and establish formal structures reflecting the scale of alteration that technology has unleashed on the world" (Ousby, 1988, p.212).

From the pedagogical perspective, concrete poetry offers teachers in mainstream schools a stimulating technique to introduce poetry to create interest and excitement in their students. Moreover, there are four main goals for teaching concrete poetry in schools. According to Chia (1991), concrete poetry "serves to increase visuospatial awareness of shape, size and physical layout of letters that form a meaningful word; secondly, it allows the meaning of a word to be expressed explicitly through its shape, size and physical layout of its letters; thirdly, it enhances eidetic memory for word shapes so as to enable an individual to write recognizable words pertinent to written needs; and lastly, it provides the individual with a channel for his or her creative expression" (p.24).

When concrete poetry is taught in class, the key emphasis is on the visuospatial appearance of letters. In other words, the following factors must be noted in creating a concrete, pattern or shape poem (Chia, 1991):

- The shape of each letter in a chosen word;
- The size of each letter in the word; and

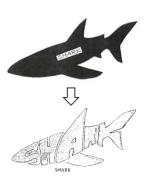
 The physical layout of all the letters in the word.

From the *heilpädagogical* perspective (referring to special education), i.e., a German term which means "to lead by assisted teaching", concrete poetry can offer a way to help children with special needs to learn to recognize, identify, discriminate and differentiate letters seen in words as well as to derive correct meanings explicitly from these words. A few studies (e.g., Chia, 2006; Chia, Wong, & Ng, 2009; Poh, 2010) have been done using concrete poetry to teach word recognition and reading comprehension to children with special needs, especially those with language delay, hyperlexia and autism spectrum disorder.

Creating Concrete, Pattern & Shape Poems

As a pedagogical strategy, concrete poetry provides teachers a stimulating and creative means to enhance word recognition and word knowledge (explicit vocabulary) in their students. When creating concrete, pattern and/or shape poems, students should be guided to take into consideration visuospatial appearance of constituent letters found in each word, the physical layout of the letters that constitute the word as well as the pictorial representation of the word. By transforming its pictorial representation and symbol, a word can be created as a concrete poem.

Concrete poetry as a heilpädagogical strategy can help students with special needs (e.g., those with language delay) to make meaningful association between target words and their appropriate referents. This means that a targeted word is drawn in some kind of a form to explain the thing it represents in an explicit way. In this way, students with special needs will be able to make sense of the words they encounter in word recognition using concrete poetry which becomes a means for these students to easily conceive and make sense of the words they read or see. I have illustrated this explanation with an outline of the cutout in a shape of a shark and then transforming it by using its letters S-H-A-R-K to form a concrete poem of a shark.

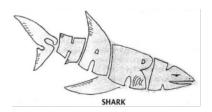


In creating the concrete poem of a shark using the uppercase letters S-H-A-R-K, three features are being carefully considered: (1) the shape of each letter in a word, (2) the size of each letter in a word, and (3) the physical layout of all the letters in a word when creating a concrete, pattern or shape poem (Chia, 1996). As a result, students are allowed to pay attention to the visuospatial appearance of letters in a selected word during the process of creating the concrete, pattern or shape poem. It benefits those students with language delay as they do not have to be overly concerned about lines, rhyme, rhythms, title etc. With the focus on the visuospatial appearance of letters, creating such poems may stimulate students' thinking in terms of how the shapes, size and physical layout of letters can be used to construct these unique poems, and how these can influence the final form of the poems. For instance, the shapes, size and physical of letters of a word ("SHARK") change when they are fitted on different sides of cut-out as shown below.

THIS ...



OR ... THIS ...



Using the concrete poem of SHARK as my illustration here, students can recognize and understand almost at once the meaning of the word expressed explicitly through the various letter shapes, sizes and physical layout of the constituent letters. If all the words can be written in concrete, pattern and/or shape poems, they may enhance the students' understanding of the content in a storybook during story-reading, and subsequently improve their ability in comprehending. However, in reality, it is more difficult to create concrete poems out of functional and abstract words (e.g., a, an, the, of, if, hope, faith) than content and action words (e.g., tall, fat, snail, dive, run, elephant, love).

During a concrete poetry session in class, teachers and their students can always discuss how they can improve their word recognition and/or enhance their word knowledge. For instance, one way to do this is for teachers to provide their students with three parts of concrete poems in sequence, and ask them how effective these concrete poems are in passing messages or meanings that the creators of these poems intend to convey (Poh, 2010). This activity is based on the fact that visuospatial or eidetic forms of concrete poems provide self-explanatory meanings of words and passages in a given context. In other words, it suggests that stringing concrete poems together can provide the contextual meaning of a sentence.

There are three difficulty levels – basic, standard and higher – in creating concrete, pattern and/or shape poems. Based on these levels, teachers can decide on the appropriate difficulty level when teaching their students to create concrete, pattern and shape poems using words and their appropriate referents (see Table 1). Each level is influenced by the provision of words, forms, or both words and forms.

Table 1. Teaching strategy for each difficulty level (Chia, 1996)

Difficulty Level	Form	Word	
Basic level	Given	Given	
Standard level	Not given	Given	
Higher level	Not given	Not given	

At the basic level, words and forms are being given to the students by their teacher. This provides students with difficulties in word recognition or naming an opportunity to identify the pictorial representations of things and/or animals and say their names quickly, easily and accurately. As these students become more familiar with concrete poetry, word recognition and naming will improve

and teachers can proceed to the next difficulty level.

At the standard level, provision of forms is removed or not given at all. Students are given an opportunity or compelled to use their creativity to construct their concrete, pattern or shape poems and showcase their masterpieces. In fact, students with special needs should be given more

opportunities to tap on their own creative juice to come up with their own perceived concrete, pattern and/or shape poems. Here are some examples of such poems created by them (names are not mentioned to ensure their anonymity):



At the higher level, words are removed or not provided at all. This allows teachers to take into consideration their students' capability to create their own concrete, pattern or shape poems without being prompted in terms of what and how to produce. In other words, in knowing their students' capability level, teachers can now decide on the kind of resources (i.e., form, words, both form and word, or neither form nor word) to be provided. This benefits those with moderate language delay as the teaching strategy can be used to cater to their appropriate developmental levels rather than based on the typical developmental timetable.

Concluding Remarks

The underlying main goal of introducing and promoting concrete poetry as an approach (pedagogical or heilpädagogical) to teach word recognition and naming is more to bring joy and fun to students with or without special needs when learning new words. Both mainstream school and special school teachers can use concrete poetry to teach word recognition and naming by bringing relevance and meaning to their students. This suggests that as students find relevancy and purposefulness in the required learning of new and/or unknown words, they are more likely to be motivated to engage in the activity (i.e., creating concrete, pattern and shape poems) and, in some way, will help to enhance their performance in acquired learning of those words. With fun involved, the concrete poetry activity creates interest as well as motivates students with or without special needs to express their creativity in their acquired learning experiences as illustrated in Figure 2 below (see Chia, 2016, for detail).

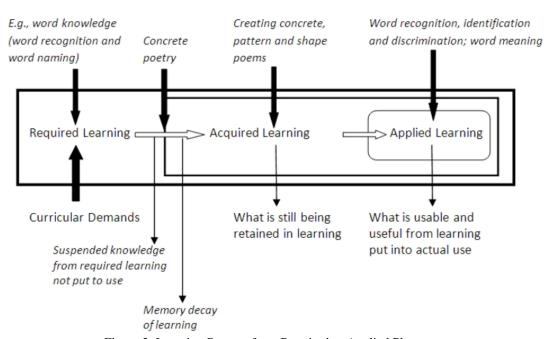


Figure 2. Learning Process from Required to Applied Phase

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