LITERARY CRYPTOLOGY: MAKING THE UNREADABLE READABLE IN CUMMINGS' SELECTED POEMS 'ygUDuh' and 'r-p-o-p-h-e-s-s-a-g-r'

YACINE MOULAI HACENE

Department of English, Faculty of Foreign Languages, University of Mostaganem Abdelhamid Ibn Badis, Algeria

ABSTRACT

As if poetry is not complicated enough, with its sophisticated use of language and deviations, concrete poetry does not make it any easier and therefore leads to a lack of literary appreciation. Unfortunately, this is vivid in the Algerian literary classes where most of the students (undergraduates and graduates) try to avoid dealing with poetry. This paper reports a study that is designed to facilitate the process of reading poetry, in particular, concrete poetry for non-native English learners. Therefore, a set of research questions were probed: 1. Why do non-native English learners depreciate concrete poetry? 2. To what extent can cryptology contribute in facilitating reading concrete poetry? A pre-test was directed to measure the participants' unfamiliarity with concrete poetry. Then sessions in cryptology were conducted to make students acquainted with the field of cryptology and provide them with a methodology of how to apply its tools to e.e. cummings' selected poems ygUDuh and r-p-o-p-h-e-s-s-a-g-r. After a thorough examination, two main findings arose: First, the participants in this research got familiar with the field of cryptology and its strategies; second, they also found a walkthrough to read concrete poetry and how to implement those strategies to facilitate reading the selected poems.

KEYWORDS: Concrete Poetry, Cryptology, e.e. Cummings' Poetry, Encryption/ Decryption & Literary Appreciation see the Comments

Received: Sep 20, 2018; **Accepted:** Oct 29, 2018; **Published:** Nov 08, 2018; **Paper Id.:** IJELDEC20187

INTRODUCTION

Dealing with concrete poetry, perhaps, would not be of sufficient value without dealing first with the importance of reading. Indeed, reading can be considered as one of the most must-dealt-with skills in literary studies; as it is considered the key element towards a literary interpretation. Yet, many non-native English learners generally, and Algerian English students, specifically, are unaware of the importance of reading, and the first hindrance they encounter when reading a concrete poem is the failure to read it. The latter can be observed at the linguistic level where readers find the language encrypted in a way that seems impossible to decrypt, let alone other obstacles. Accordingly, Hayne (2007) classifies the common difficulties that students face when reading literature into (i) linguistic difficulties (ii) connection difficulties (iii) cultural difficulties.

What is interesting about the language of poetry is that poets hardly ever use a straightforward and clear way of saying what they mean; they always leave it to the reader to read and interpret the poem. In this case, the reader is obliged to read, understand, and analyze the poem so that s/he reaches its significance. However, this process is hard to accomplish when it comes to concrete poetry. Readers find themselves facing a poem with a big question mark, asking: **what kind of poem is this?** (assuming that they are aware that it is a poem) and **how can I read it?** To put it differently, readers here are facing a coded text, or rather say an encrypted text that needs a

decryption. Therefore, this paper will provide readers with a model that facilitates the reading of concrete poems, dealing with e.e. Cummings' selected poems 'ygUDuh' and 'r-p-o-p-h-e-s-a-g-r'.

LITERATURE REVIEW

Defining Cryptology

Cryptology is believed to be "The art of recording one's thoughts in such a way as to make them unreadable to others. Particularly, moreover, it enables two persons to correspond under cover of complete secrecy at least in theory." Langie (1922, p.1). Effectively, cryptology is all about secure communication, nevertheless, this cannot happen unless the rules of cryptology are obeyed.

If there is anything in the field of cryptology that one must be acquainted with, that would be the terms **encryption** and **decryption**. Talbot and Welsh (2006), Stamp and Low (2007) and Pretty Good Privacy [PGP] (2003) considered encryption and decryption as the core of cryptology, they allow users to encrypt and decrypt any text. However, perhaps it will not be appropriate if we don't speak about the content of messages. Data that can effortlessly be read, understood, and is easily accessed is called **plaintext** or **cleartext**, and the data that is coded and cannot be read at first sight is called **ciphertext**. Both encryption and decryption deal with plaintext and ciphertext. Consequently, PGP (2003) define these terms accordingly, whereby, **Encryption** means the process of converting a readable text (that is plaintext) into an unreadable one (which is ciphertext). Whereas **Decryption** is the reverse of the encryption process, that is to say, going backward from ciphertext to the original plaintext. The key to the ciphertext must be available; thanks to the key which is shared between these two people (sender/receiver) this procedure can be successful. The figure below provides an illustration of how the mechanism of cryptology functions.

Figure 1: The Mechanism of Cryptology

As simple as it can get, figure 1 shows how the process of cryptology functions. Dooley (2013) asserted that "Alice and Bob(they are always called Alice and Bob) want to exchange messages with each other and Eve wants to eavesdrop" (pp.88-89). Indeed, the participants in figure 01 are divided into two parties. The first party is that's of Alice and Bob. The latter, are the ones who apply cryptology as it should be without breaking any maxim, that is to say, converting what is readable (plaintext) into the unreadable text (ciphertext) and of course, they must agree upon a pre-shared key so that they reverse the operation when communicating. So far, what Alice and Bob are doing seems so typical and familiar in the domain of cryptology, why? Simply because they are breaking no rule that this field necessitates. On the other hand, the second party is that of Eve. The latter is not another random name given to a character, it is like Alice and Bob, Eve's name is derived from the word "Eavesdropper". By eavesdropper, it means listening to a

conversation without being noticed, it is much more like spying. In cryptology, Eve is considered as the third-party which is not allowed to take part in Alice's and Bob's communication. Here, Eve is going to intercept the communication and tries to decode the plaintext and sometimes even plays the role of Alice or Bob when possible. In other word she performs the role of the sender or the receiver. However, Eve's decoding of Alice's encrypted message is totally different from that of Bob's, in the sense that Eve neither possesses nor obeys any presupposed set of rules.

Types of Cryptology

If we step on the stage of history of Cryptology, we are going to see that one of the most known types of enciphering is Caesar's Cipher, also known as the substitution cipher. This type, so to speak, is considered to be one of the first methods of concealing written messages. In addition to that, other cryptosystems emerged through time naming, for example, The Shift Cipher, The Substitution Cipher, The Affine Cipher, The Vigenere Cipher, The Hill Cipher, The Permutation Cipher, Stream Ciphers (Stinson, 2006). However, these methods are not the only methods that cryptography witnessed, so many sophisticated approaches developed through the ages especially that we are living now in a digital world. Yet again, light is shed on a particular cryptologic approach, so to speak, **steganography**, this approach as Vaudenay (2006) defines is the "Science of information hiding. Here we do not want to protect the secrecy of an information only, we also want to make sure that any unauthorized party has no evidence that the information even exists (for instance, by watermarking)". (p.3)

The Notion of Concrete Poetry

If we iconize each artist out of his domain, we are going to find that s/he is a masterpiece maker at what s/he does; Beethoven in music, Shakespeare in playwriting, Leonardo da Vinci in painting and so many more. When it comes to poetry, it is really amazing what poets can do with words, there are great poets out there such as Robert Frost, Pablo Neruda, Emily Dickinson, Edgar Allan Poe, etc. However, for some poets doing amazing things with words was not really enough, they took poetry to a whole new level; by mixing and merging it with visual art and by using language in contrast to any norm that its grammar stands for. This gave birth to a new kind of poetry which is called Concrete Poetry. As its name implies; Draper (1971) defines concrete poetry as:

The creation of verbal artifacts which exploit the possibilities, not only of sound, sense, and rhythm—the traditional fields of poetry—but also of space, whether it be the flat, two-dimensional space of letters on the printed page, or the three-dimensional space of words in relief and sculptured ideograms. (pp. 329-40)

Concrete poetry is a mixture of words and symbols; words become live into a shape of symbols, that's why when dealing with concrete poetry one may come across words such as visual poetry and calligramme. However, each type has evolved to have a distinct meaning of its own. Concrete poetry may seem new as it is true that it was till 1950's its concept made an appearance by a group of Brazilian writers called the *Noigandres* led by Carlos Drummond de Andrade and Augusto de Campos who made an interest in this kind of poetry (Greene et al, 2012). However, concrete poetry once was known as '*Pattern Poetry*' and its origins root back to Greek Alexandria of the third century B.C, where poems used to be written on objects such as vases, swords, axe hand, even on eggs (Vaughn 2008). One of the oldest shaped poems is the poem written by George Herbert (1593-1633) during the Elizabethan movement using a shape of wings and altar in titled '*Eastern Wings*' as cited in Wilcox (2007, p.143):

Lord, who createdst man in wealth and store,
 Though foolishly he lost the same,
 Decaying more and more,
 Till he became
 Most poor:
 With thee
 O let me rise
 As larks, harmoniously,
 And sing this day thy victories:
 Then shall the fall further the flight in me.
 My tender age in sorrow did beginne
 And fill with felicitie and shame
 Thou didst so punish mine,
 That I became
 Most thine.
 With thee
 Let me combine,
 And feel this day thy victories:
 For, if I imp my wing on thine,
 Affliction shall advance the flight in me.

Most people are not familiar with this kind of poetry; at this point (as illustrated in the previous poem) it may seem like an ordinary poem written in the shape of wings and an altar, however, concrete poetry is more difficult and complicated than that and it could get really confusing. 'r-p-o-p-h-e-s-s-a-g-r' a poem written by e. e. Cummings (poem 13 from the 1935 volume *No Thanks* (CP 396-397)) could be very challenging and hard even to read, as scrambled words are used along the with nonsensical use of punctuation.

r-p-o-p-h-e-s-s-a-g-r
 who
 a)s w(e loo)k
 upnowgath
 PPEGORHRASS
 eringint(o-
 aThe):l
 eA
 !p:
 S a
 (r
 rlvInG .gRrEaPsPhOs)
 to
 rea(be)rran(com)gi(e)ngly
 ,grasshopper;

At first sight, it may seem, for anyone who is not familiar with concrete poetry, that this text is far beyond what poetry looks like. Similarly, one might think that whoever wrote 'r-p-o-p-h-e-s-s-a-g-r' loaded some words and punctuations in a shotgun, cracked it, and then fired it on the paper, however, Cummings' poem is far beyond that, as it deals with natural and physical creatures, and is thus intentional and rational as well.

METHODOLOGY

The study at hand aims at facilitating the reading of concrete poetry for non-native English students and raising their awareness of reading literary texts. In this regard, Cummings' selected poems 'r-p-o-p-h-e-s-s-a-g-r' and 'ygUDuh' is neither coincidental nor arbitrary, yet, it is intentional and deliberate based on a specific kind of criteria. The poems at hand, so to speak, share particular aspects such as newness, ambiguity, vagueness...etc. Indeed, few people are acquainted with this kind of poetry and few can read them after multiple tries. These poems display the treats of Cummings' way of writing, starting with his name, which is associated with the unconventional use of capitalization and punctuation leading to his relying on unusual skills, techniques, and forms. The latter, disturb readers' both conscious and subconscious levels as they encounter this unfamiliar way of writing poetry and challenge their impatience. In this regard, Abdel Azim

ElShiekh et al (2012) assert:

Cummings' ideogram poems are puzzles waiting solved. This type of poetry was a dramatic change to the common poetry people were used to reading. Using this irrational form, E. E. Cummings encouraged people to open their minds to alternative ways of thinking. (p.104)

Indeed, the unfamiliarity of this kind of poems leads readers to opt for alternative ways to decode the language used, as this genre can teach us in the most extraordinary manner the tastefulness, the importance and the appreciation of the fusion between poetry and art, sound and sense, and image and form.

Participants and the Procedure

The participants are thirty Master students of Literature from the Department of English – University of Mostaganem, Algeria. The procedure that the researcher adopted has been divided into two stages:

The first stage is a kind of a pre-test in which students are given a questionnaire to check their familiarity/unfamiliarity with Cummings' selected poems. This is done, also, to confirm the difficulty of the selected poems and the students' unfamiliarity with its genre. The second stage is a set of sessions scheduled for a whole semester, two sessions per week. As a matter of fact, students at the University of Abdelhamid Ibn Badis in the department of English do not study Cryptology since it is not included in their syllabus. Thus, these sessions aim at making the participants acquainted with the field of cryptology and making them conversant with its characteristics, processes, and implementation.

Pre-Test

Thirty answers are collected from the participants in order to measure their familiarity with the selected poems 'ygUDuh' and 'r-p-o-p-h-e-s-s-a-g-r' by e.e. cummings (see appendix A). It is pretty obvious that the students did not recognize any of the aforementioned poems; some of their reactions are as follows where student one asserted: *'...I can see a text with no coherence or cohesion. Yet I know it must have a meaning.'* Student two stated: *'This figure seems very complicated to understand, full of symbols and words that we cannot understand'*. Where student three declared: *'It is a kind of unorganized, chaotic figure. I think the speaker wants to describe something but he finds a difficulty.'* On the other hand, student four points out: *'What kind of English is this figure? It is meaningless, ambiguous, and senseless.'* Finally, the fifth student responses: *'It seems just like kind of game in which we are supposed to get the meaning of the text.'*

To this end, students seem so perplexed as they find the poems so puzzling and hard to read. At the time of the test, the participants looked so confused; some of them even were skeptical that the text given to them is really a literary genre. They did not know where to start reading the poem of 'r-p-o-p-h-e-s-s-a-g-r' or even correctly pronounce the word 'ygUDuh' from the second poem.

The researcher has concluded from the pre-test that all the participants have no idea how to read the selected poems or, for that matter, have any idea what concrete poetry is. All of them failed completely to read the word 'r-p-o-p-h-e-s-s-a-g-r' let alone the rest of the poem. Similarly, most of them did not realize that the poem of 'ygUDuh' is really written in the English language.

Lecturing Sessions

Before providing the students with an alternative way to read the poems, it is important to provide them with a background knowledge about the field of cryptology. To achieve this end the researcher designed a syllabus that makes the students equipped with the appropriate knowledge and tools so that they will be able to read unreadable poems. Since the field of cryptology is a wide field and requires a heavy knowledge and the participants have no idea about this field, the designed syllabus is an introduction to the field. In this context, the students are introduced to the notion of cryptology where the most key concepts are defined. In addition to that, a brief historical background is provided for the sake of providing them with a bigger picture of how rooted and ancient this field is. After that, the researcher presents the most well-known methods/types of cryptology; this section is essential as it provides the students with different processes that they can use to decrypt a given encrypted/coded text.

Cryptology has a systematic way of dealing with encrypting and decrypting texts (as illustrated in figure 01) however, sometimes the cryptologist finds himself unable to decrypt the coded text because he does not possess the right key, therefore, he is obliged to improvise and hack the target text, by doing so, he is adopting cryptanalysis. The latter is a very indispensable asset in this research, therefore, the researcher made sure that the students comprehend the importance of this process, in case they encounter a ciphered text where they do not possess the right key to decipher it, then they are required to improvise and bring new methods to decrypt it.

Post-Test

By the end of the lecturing sessions, which took a whole semester, the researcher has noted that students' literary appreciation towards concrete poetry has improved. Thanks to the lectures provided to them about cryptology, they were able to decode the language used in both poems, whereby, 'r-p-o-p-h-e-s-s-a-g-r' means 'grasshopper' when unscrambled and the word 'ygUDuh' means 'you got to'. Most students could extract cryptologic elements from the poems, therefore, reading them became much easier unlike their first attempt in the pre-test. Their gained knowledge concerning cryptology really helped them see through the coded language used in the selected poems.

To support the findings of the research, another questionnaire was distributed to the same participants in order to see the effect of implementing cryptologic techniques on the way of decoding and reading encrypted concrete poems. The results showed that most of the students agree that cryptology really helped them and provided them with a bird's eye to decode encrypted language in general and literary language in particular. The findings also revealed that students' literary appreciation towards concrete poetry has increased unlike before when they were not able to read/decode its language.

The questionnaire that was given to the participants included the following questions about cryptology. At this point, the students were asked to choose one of the following answers:

After the lecturing sessions and having established a considerable knowledge about the field of cryptology and concrete poetry, I would say that:

- Cryptology techniques helped me read the encrypted poems.
- Cryptology is a complicated and puzzling field, I could not grasp its content.
- Concrete poems are difficult to read even with the use of cryptology.

The table below shows the students' reaction to the use of implementing, cryptology in the field of literature. Prior to the given results, most of the participants agreed that the use of cryptology can be beneficial and prosperous in raising students' literary appreciation.

Table 1: Students' Feedback

Questions	Students' Answers	
	Number	Percentage
Question One	26	87%
Question Two	3	10%
Question Three	1	3%

CONCLUSIONS

The study at hand attempted to help non-native English learners to easily read a concrete poem without effecting or directing their own literary interpretation. Therefore, based on the final results that were gathered from the post-test, the researcher concluded that cryptology as a scientific tool has a place among literary studies and revealed that it is an appropriate approach to the facilitation of reading concrete poems. The fusion between these two scientific fields such as cryptology and literature upgrades the field of interpreting literary texts to a more advantageous level, as well as, it increases students' literary appreciation not only for concrete poetry but also for most of the literary genre.

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APPENDIX

‘ygUDuh’

The first poem entitled ‘ygUDuh’ (E. E. Cummings, 1923:547) is selected from *lxl [One Times One]* (1944) under the sequence of ‘l’.

ygUDuh

ydoan

yunnuhstan

ydoan o

yunnuhstandem

yguduhged

yunnuhstandemdoidee

yguduhgedriduh

ydoan o nudn

LISN bud LISN

dem

gud

‘r-p-o-p-h-e-s-s-a-g-r’

The second poem entitled ‘r-p-o-p-h-e-s-s-a-g-r’ (E. E. Cummings, 1923:396) is selected from *No Thanks*, the 1935 manuscripts under the sequence of ‘*Initial Dedication*’.

r-p-o-p-h-e-s-s-a-g-r

who

a)s w(e loo)k

upnowgath

PPEGORHRASS

Eringint(o-

aThe):l

eA

!p:

S a

(r

rIvInG .gRrEaPsPhOs)

rea(be)rran(com)gi(e)ngly

grasshopper;