International Journal of Linguistics, Literature and Culture, LLC

June 2019

European Scientific Institute, ESI

The content is peer-reviewed

June 2019 Edition Vol. 6, No. 2

ISSN 2518-3966

About The Journal

The International Journal of Linguistics, Literature and Culture (LLC) is a peer-reviewed journal which accepts high quality research articles. It is a quarterly published international journal and is available to all researchers who are interested in publishing their scientific achievements. We welcome submissions focusing on theories, methods, and applications in Linguistics, Literature, and Culture.

In the past few years, academicians from over 40 countries around the globe have published their papers in the International Journal of Linguistics, Literature and Culture.

Authors can publish their articles after a review by our editorial board. Our mission is to provide greater and faster flow of the newest scientific thought. LLC's role is to serve as a kind of bridge between researchers around the world. LLC is open to all researchers, regardless of their geographical origin, race, nationality, religion or gender, as long as they have an adequate scientific paper in the field of Linguistics, Literature and Culture.

LLC fully supports the open access and open science concept. The full content of the papers is available on LLC website and is free for usage.

LLC Team

Andrew Nelson
Managing Editor
Beth Garcia
Associate Editor

Table Of Contents:

Proverbs in Zhangzhou: Interaction between Language and Culture

Yishan Huang
The Australian National University, Australia

Doi: 10.19044/llc.v6no2a1 URL:http://dx.doi.org/10.19044/llc.v6no2a1

Abstract

This work presents the first attempt to document proverbs of a Southern Min variety of Zhangzhou spoken in Southern China to the audience beyond the Chinese scholarly community. Four different forms of proverbs, namely sayings, allegorical sayings, trisyllabic idioms, and quadrisyllabic idioms, elicited from the field data collected by the author in the urban area of Zhangzhou are described in this study. The various forms differ from each other either in the internal structures, the way the integrated meanings are conveyed, or the number of syllables. Each component of the proverbs is glossed in English and their implied meanings are explained with reference to the associated cultural context of Southern Min. The documentation not only reflects how the local culture is embodied and passed down in terms of speech acts, but also provides valuable evidence for future studies in semantics, pragmatics, and/or anthropological linguistics.

Keywords: Saying; allegorical saying; trisyllabic idiom; quadrisyllabic idiom; Zhangzhou.

Introduction:

Whether called maxims, truisms, idioms, idiomatic expressions, sayings, allusions, and/or adage, proverbs are considered a collection of pithy bits of wisdom and truth that reflect the values and beliefs of a community (Schuster, 1998; Stoch, 2017). They have prevailed for centuries and continue to be used as an effective spoken tool to express various meanings and intentions, ranging from the general truths of advice; values of ambition, virtue, patience, generosity and warning; and summary of human experience; to the instructions that encourage people to act and behave in difficult situations (Mieder, 1993; Schuster, 1998). For example, proverbs like ‘when in Rome, do as the Romans do’, ‘better late than never’ and ‘big fish eat small fish’ are often heard in personal interactions. The proverbs not only have a didactic function to support one’s arguments, educate younger generations, or

enrich daily conversations, but also contribute to the cultures of all nations despite the regional diversities.

The forms of proverbs are diverse. For example, they are understood as Shuyu熟语in Sinitic languages but include saying (Yanyu 谚语), allegorical saying (Xiehouyu歇后语), quadrisyllabic idiom (Chengyu 成语), and other forms of idiomatic expression (Guanyongyu 惯用语). Various forms of proverbs differ from each other with respect to the internal structure (Li, 2016; Ma, 1994; Murar, 2009; Stoch, 2017; Wu, 1995; Yang, 2007). For example, a saying generally involves concise sentence(s). An allegorical saying contains two parts, whereby the first is either a descriptive phrase or a sentence, while the second appears to be an interpretative phrase. Idiomatic expression, instead, is a fixed phrase which functions as a special type of lexeme in full sentences. Thus, it is of linguistic interest to analyse different proverb forms within the formal paradigms of either discourse and/or syntax.

The meanings of proverbs are generally figurative and culturally-grounded (Li, 2016; Murar, 2009). In some circumstances, it appears difficult to deduce the integrated meanings of certain proverbs from their constituents without referencing the associated social-cultural context. In this regard, the insights that a proverb conveys can serve as a window into the history, culture, lifestyle, and mindset of a community being considered (Li, 2016). Learning proverbs of different backgrounds can thus provide a way to expand our multicultural repertoire, and through the sharing of proverbs, we can reinforce the similarities and differences among people around the world (Schuster, 1998).

This paper reports on the first work to document proverbs of a Southern Min variety of Zhangzhou spoken in Southern China to the audience beyond the Chinese community. Four distinct forms—sayings, allegorical sayings, trisyllabic idioms, and quadrisyllabic idioms—are described and interpreted. The chosen examples not only reflect how various forms of proverbs differ in their internal structures and how the local culture is embodied and passed down in terms of speech acts, but also shed light on future studies with respect to semantics, pragmatics, and/or anthropological linguistics.

Zhangzhou and Corpus

Zhangzhou

Zhangzhou 漳州is a prefecture-level city situated in the southern Fujian province in South-eastern Mainland China, at the longitude 116° 54′ 0″ to 118° 08′ 0″ east and latitude 23° 34′ 0″ N to 25° 15′ 0″ north. It faces the Taiwan Strait to the east and borders Xiamen, Quanzhou, and Longyan to the

east, northwest, and west, respectively, in Fujian and, to the southwest, Chaozhou in the province of Guangzhou.

According to the Bureau of Statistics (2017) report, the total registered population of Zhangzhou was around 5.10 million, with a natural growth rate of 9.0%. Although the population is ethnically diverse, at about 98.5%, the Han ethnic group predominates, while the remaining 1.5% or 75,400 inhabitants, most of whom (about 58,000) immigrated to the city either to work or to study, are of 47 nationalities. Zhangzhou has the second largest population of She 畲 ethic group in Fujian and has the largest population of Gaoshan ethic group in Mainland China. Zhangzhou is also well known as the ancestral home of Taiwanese and other overseas Chinese expatriates.

The colloquial language spoken by the majority of inhabitants is Strait Hokkien, which is considered as the ancestor of Southern Min. The southern counties of Dongshan and Zhao'an appear to represent a variety of the adjacent Teochew Southern Min. The two Southern Min varieties have a certain degree of mutual intelligibility, while both are mutually unintelligible in relation to other Sinitic dialects (e.g., Mandarin, Hakka, Cantonese, Wu, Xiang, and Gan).

Mandarin, as the national language of China, is used as a medium of instruction in the educational and public contexts. Hakka is spoken only by a relatively small number of people living in mountainous areas of western Zhangzhou, for example, Hua'an, Nanjing, Pinghe, and Zhao'an counties, bordering a major Hakka-speaking city of Longyan.

Corpus

Ma (1994) and subsequently Yang (2007) documented the proverbs in this Southern Min variety but in the form of Standard Chinese, constraining their accessibility to those scholars outside the Chinese community. Their phonemic transcriptions, especially in the tonal pitch, are considerably different from those examined in Huang's (2018) study that is grounded in field linguistics and acoustic phonetics. In addition, it appears difficult to identify the source of the data for Ma's work, since the descriptions provided by the author appear not as representative of the urban area as he claimed, but are rather a combination of the sound systems adopted in the urban and other counties, such as Zhangpu.

Thus, the aim of the present study was to provide an accessible and up-to-date documentation of this dialect. The corpus presented here was collected in 2015 by the author in conjunction with her field work for her PhD project. Twenty-one native speakers (nine men and twelve women) from the urban area of Xiangcheng and Longwen districts were recorded for the tone sandhi investigation. In addition, another group of six native speakers (four men and two women) was recorded for local vocabulary documentation. All twenty-

seven speakers included in the investigation were asked to offer a short narrative, local stories, proverbs or rhyming songs, or contribute other speech that they wished to share. The recordings of proverbs that were mainly provided by male speakers constitute the corpus presented in this study. All informants were born and raised in the inner city and have spoken Zhangzhou Southern Min as their primary colloquial language since childhood. Their parents and spouses are all native speakers as well. This selection of informants ensures that the obtained data is representative of this Southern Min variety.

In the present study, the transcriptions of both segments and suprasegments are kept consistent with those formulated by Huang (2018). Segments were transcribed using IPA 2005 symbols, whereas the tonal pitch was described using Chao's (1930) notational system with 1 representing the lowest level and 5 the highest of the individual's pitch range. For example, a level tone is represented by two instances of the same number (e.g., [33] or [55]), and a rising or falling tone is represented by increasing and decreasing numbers, respectively (e.g., [25] or [51]). When required, 6 was introduced to denote the tone having extra-high pitch level in the non-utterance final context. In what follows, each component of the proverbs is glossed in English before providing explanation of their implied meanings in italics. The details on the research locality and speaker selection, the data collection procedure, as well as the segmental and suprasegmental system of Zhangzhou Southern Min, can be found in Huang's (2018) thesis.

Sayings

The sayings documented here are understood as Yanyu谚语 in Sinitic culture. They generally involve grammatically full sentence to express an observation, opinion, advice, or a wisdom that exists in a vernacular form and could be memorised easily (Stoch, 2017). The meanings of sayings are not always figurative; instead, they can be explicitly stated. The contents conveyed in sayings are diverse, covering family, education, strength, health, success, and social networking topics, among others.

1. **tsɵ63 kɔŋ35 tsɵ63 kɐ63 ʔɐm63.ɓin33.ɓɔŋ35**
   be grandpa be until late and dark

   'Being a grandpa means being [active] until the day is late and dark.'

   tsɵ63 ɓɛ̃51 tsɵ63 kɐ63 kjɵ63 ʔm32 kɛ̃51
   be grandma be until shout Neg. dare

   'Being a grandma means being [active] until she does not dare to do so.'

Grandparents used to look after their grandchildren while the parents did farm work. This saying draws reference to the long days spent by the grandparents at this task.

2. **kɔŋ33.ɓɛ̃51 sjø63 twɐ32 sun35**
grandparents favour big grandson

'Grandparents like the eldest grandson.'

pɛ32.ɓø51 sjø63 se63 kjɛ̃51
parent favour small kid

'Parents like the youngest kid.'

The idea that grandparents love their eldest grandson for representing the start of a new generation while parents dote on the youngest suggests the differing views that individuals in differing circumstances can have on their surroundings.

3. **ɓɐj35 ɓɐj35 sjø35; ʔɐ sin33.pu33 sɛ̃33 twĩ63**
bad bad cook partial daughter-in-law three quantifier

'The daughter-in-law is bad, but she cooks three meals each day.'

ɦø35 ɦø35 ʔɐ tsɐw55.ʔɐ51 ki33 ɓwe35 ʔjø22
good good partial daughter diminutive branch end shake

'The daughter is good, but she just likes a swaying branch of a tree.'

In this vision of the past, the daughter-in-law, though not desirable, does crucial housework, while the daughter, though desirable, visits her parents only occasionally.

4. **kin55.ʔɐ tsjɛ̃35**
kid dimi. elf

ʔu32 ɦi33 tʰjɛ̃35
have ears listen

ʔu32	**tsʰwi41**	**ɓɐŋ32**	**tsɵ63**	**sjɛ̃35**
have	mouth	does not	make	sound

‘Elf child, listen with your ears, but keep your mouth closed.’

Parents admonish their children to keep silent and not to speak up when adults are having a discussion. The English equivalent is “a child should be seen and not heard.”

5.

pwĩ32	**sin22**	**ɦɔŋ33.te63**	**twɐ33**
meal	deity	emperor	big

‘The dinner god is as big as an emperor.’

Having meals is an important part of daily life, so children are admonished to concentrate on eating and not to be distracted during meal times.

6.

tsjɐ32	**ɗɔ32**	**tʰɐw22;**	**sjɵ63**	**ɗɔ32**	**ɓwe51**
eat	road	head	cherish	road	end

‘Relying (on someone’s help) at the beginning of a journey; cherishing (him) at the end as well.’

This saying advises cherishing forever the persons/things that were helpful at the beginning.

7.

tʰɐn63	**tsĩ22**	**ɓɵ33**	**sɔ41;**	**sɛ̃63.ɓjɛ̃33**	**tjɵ32**	**kɔ41**
earn	money	no	number	life	need	take care

‘However much you earn, you need to take care of your health.’

This saying admonishes individuals not to lose sight of what is more important—their live/health—while they are earning money.

8.

tsɵ63	**ɦi63**	**tʰɐw22;**	**kʰit65.tsjɐ32**	**ɓwe51**
perform	drama	begin	beggar	end

‘An actor at the beginning; a beggar in the end.’

The idea here is that someone living a life of luxury, such as an actor, ends up penniless later in life. Thus, elders would admonish the younger generation not to squander the things that they had. The English equivalent is “Here today, gone tomorrow.”

9.	**sɛ̃33**	**dĩ33**	**kwɛ̃35;**	**dɔ̃32**	**dĩ33**	**ɓwɛ̃51**
	three	year	official	two	year	full

‘A three-year official has had enough in two.’

The proverbial official has a three-year-long mandate but tires of it well before his tenure is up. The notion is that individuals tend to lose their enthusiasm over time, while also suggesting that some officials are unable to devote themselves fully to serving the public.

10.	**tsʰjɵ63**	**tʰɐw33**	**tsʰjɵ63**	**ɓin33**	**tsjɐ32**	**ʔu32**	**sin33.**
	smile	head	smile	face	eat	have	leftover

‘A smiling face leaves one with leftovers.’

ɓin32	**ʔju35**	**ɓin32**	**zjɐw22**	**pɐk65.tɔ51**	**ʔjɐw35.**
face	worried	face	wrinkle	belly	hungry

‘A worried and wrinkled face leaves one with a hungry belly.’

The notion here is that a positive personality brings one more than enough to eat, while a negative personality brings one bad luck and not enough to eat.

11.	**tsɐ33.ɓɔ51**	**swi35**	**ɓɐk32.tsju35;**
	women	beautiful	eyes

‘Women are beautiful for their eyes.’

tsɐ33.pɔ33	**swi35**	**tsʰi63.tsʰju35**
man	beautiful	beard

‘Men are beautiful for their beards.’

The notion here is that different classes of people are judged differently and that individuals view their surroundings in unique ways. This saying conveys an admonishment to have an open and positive attitude and to accentuate what is positive.

12.	**tsʰɛ33.ɓɛ̃33**	**tsiŋ35;**	**ʔɛ̃33.kɐw35**	**dŋ22**
	blind	precise	dumb	effective

‘Though blind, the blind man is precise; though dumb, the dumb man is nimble.’

The disabled compensate for their disabilities; more broadly, individuals tend to have defects but also merits.

13. tʰĩ33.kɔŋ35 sjɵ63 ɠɔŋ32 kjɛ̃51.
heaven deity favour stupid kid

‘The deity of heaven favours stupid kids.’

Even foolish people can prosper.

14. twɐ32 pun51 pwɐ32 ɓɵ33 ɗun51
big capital gamble not fear

‘There is no fear of gambling when one has lots of money.’

This saying expresses the idea that the possession of resources brings confidence and also that officials sometimes squander public funds on themselves.

15. ʔɔ33.ku35 kɛ̃35 twɐ32.ʔjɐ22;
turtle fake big man

‘A turtle is a fake big man.’

kʰit65.tsjɐ22 kɛ̃35 ɗɵ35.tjɐ35
beggar fake offical

‘A beggar is a fake official.’

The notion here is that those without power may behave in an overbearing manner as if they are powerful.

16. kʰi35 tsʰu41 pʰɐj63 pwɛ̃63 ɗjɐw33
build house dispatch half material

‘Offer half the material to build a house.’

This saying describes a negative social phenomenon: some individuals do shoddy work, skimping on the materials and thus their commitments to others.

17. zin33 tsiŋ22 tsun35 tsʰjɔ̃32 ki41;
human relation just like saw

ʔu32 ɗɐj22 kɵ63 ʔu32 kʰi41
have come also have go

'Relationships among people are like a saw going back and forth.'

Maintaining a relationship between individuals requires effort from both.

18. tsjɔ̃32 swɛ̃35 kʰwɛ̃63 swɛ̃33 si41;
climb mountain observe mountain shape

'Climb a mount in to observe its shape.'

zip32 ɓwĩ22 kʰwɛ̃63 ɗɐŋ33 ʔi41.
enter door observe people feeling

'When you to in, observe the host's feelings.'

Here the idea is that one should maintain a flexible attitude and adjust to changing surroundings.

19. si35 ɗjɛ̃w35 kwɐ63 tsʰju32 tʰɐw22,
dead cat hang tree head

'Hang a dead cat on a tree.'

si35 kɐw51 pɐŋ63 tswi35 ɗɐw22.
dead dog place water flow

'Let a dead dog be washed away.'

This saying suggests that each individual has his or her own destination and that different issues have different solutions. It also advises remaining flexible and open to the world.

20. tsʰin33 sɛ̃33 kjɛ̃51 ʔɐ32 tjɵ63 ɓɛ32 ɓɵ35 ʔjɐn22
blood-related birth kid also need father mother destiny

'Kids also need a predestined relationship with their parents.'

This saying suggests that parents have a large influence on their children's lives and that individuals should be tolerant of the unfairness that they may encounter in life. It also reflects a general faith in Sinitic culture.

21.	**tsɐ33.ɓɔ35**	**kin35.ʔɐ**	**tsʰɐj63**	**tsi35**	**ɓjɛ̃33**
	female	kid	vegetable	seed	destiny

'Girls have a destiny like that of vegetable seeds.'

This saying reflects the limited control that women used to have over their lives in the old days, since they left their parents after marriage, like seeds that scatter and grow wherever they end up.

22.	**tsʰɐj32**	**tɵ35**	**ʔm32**	**ɗɐj33; ɗɐj32**	**tsjɐn33**	**si22**
	vegetable	knife	Neg.	sharp	sharp	fry	spatula

'A blunt kitchen knife but a sharp frying spatula.'

This saying inverts the usual situation, in which the knife is expected to be sharper than the spatula; the implication is that, also contrary to expectations, men do not perform better than women.

23.	**pʰɐ63**	**ɦɔ51**	**ɗjɐ32**	**tsʰɐt221**	**tsʰin**	**ɦjɛ̃33.ti33**
	beat	tiger	catch	thief	blood-related	brother

'Blood brothers overcome the tiger and catch the thief together.'

The idea here is that close relations work together at crucial moments to confront threats, meaning that family members are the most supportive individuals in one's life and need to be cherished.

24.	**ɓɵ33**	**ɦɵ35**	**si32.twɐ33;**	**ɗɵ32**	**ɓɵ33**	**ɦɵ35**	**si32.sɐ41.**
	no	good	adults	then	no	good	children

'No-good parents mean no-good children.'

This saying suggests that parents need to be a good role models for the next generation. The English equivalent is "The apple doesn't fall far from the tree."

25.	**sjɐw63**	**ɗjɐn22**	**ʔm32**	**pʰɐ63.pjɛ̃41**
	young	year	Neg.	strive

‘No striving in youth.’

tsjɐ32 dɐw33 ɓə33 ɓjɐ̃33.sjɐ̃35
eat old Neg. reputation

‘No reputation in old age.’

This saying suggests that success in life depends on hard work early on.

26. kɛ33 tsjə35 kʰjə41 kʰɐ63 ɦə35 dɐŋ32 tsjə41
more less collect comparative good active voice borrow

‘Gathering is better than borrowing.’

This saying encourages self-sufficiency, indicating that accumulating a modest amount of resources is better than borrowing from others.

27. tsit32 ɦə32 ɓi51 tsjɐ32 pɛ63 ʔjɔ̃32 dɐŋ22.
one size rice eat hundred type people

‘One type of rice can nourish a hundred kinds of people.’

This saying suggests that those who are raised in the same background can have different personalities, for better or worse.

28. ʔju33.kɐm35 ɦə35 ɓwe35 ɓi33;
gooseberry good final flavor

‘The gooseberry is sweet in the end.’

kɐm33.tsjɐ41 tʰɐw33 ɓwe35 tĩ35.
sugarcane head end sweet

‘The sugar cane is sweet from one end to the other.’

The idea here is that some experiences are pleasurable all the way through and others only at the end, suggesting that even those whose lives begin in difficulty may find sweetness in old age

Allegorical Sayings

Allegorical sayings, known as Xiehouyu 歇后语in Sinitic languages, as one kind of proverbs, are unique in terms of form (Lai, 2008). They contain two parts: one portraying an image of an object, an event, or a situation, and

the other indicating the meaning to be derived from the first part. The first part can be either a phrase or a cause that functions as a subject; while the second part appears to be a predictive phrase. Their combination forms a full sentence that conveys information to be derived through conceptual mechanisms. In this section, nine allegorical sayings are presented, all of which are rooted in the folk knowledge with a high degree of colloquialism and reflect general opinions of Zhangzhou community. The two constituent parts mentioned above are separated by an em-dash.

1. **pʰɐ63.tsi22** **tsʰju35kut41**
beat break hand bone

— **tɵ63** **ʔjɔŋ51**
instead strong

'A fractured hand is that much stronger.'

The idea here is that hardship makes an individual stronger.

2. **tsʰit65 ʔe** **pwɛ̃63 ʔɐ55.ʔɐ**
seven Poss. half duck

— **ʔm32** **tsɛ̃j33** **si51**
Neg. know death

'Ducks on the mid-July don't foresee their deaths.'

In Southern Min culture, thanksgiving offerings, mainly cooked poultry, including duck, are presented to deceased family members in the middle of the seventh month of the Chinese calendar (corresponding to mid-July), something of which the ducks are of course unaware. The idea is that individuals are often unprepared for momentous events in their lives.

3. **tsʰɛ̃33.ɓɛ̃33** **ʤɛ̃w35** **ʤɐw2.tjɵ** **si35** **ʤɛ̃w35. tsʰi51**
blind cat catch dead mouse

— **tʰɐw63.tu35.kʰɐm51**
as luck would have it

'A blind cat catches a dead mouse.'

Since a blind cat would be a poor hunter of mice, its luck in coming across a dead mouse suggests the possibility of a happy coincidence.

4. **ɦwe33.sjɔ̃35** **ɗjɐm32** **kiŋ35**
monk recite scripture

— **ʔu32** **tsʰwi41** **ɓɵ33** **sim35**
have mouth no heart

'A monk recites the scripture with his mouth but not in his heart.'

This saying describes an individual who is merely going through the motions when performing an important task.

5. **tsʰɐw35.ɗɛ̃41** **ɗɐŋ32** **ke33** **kɐŋ35**
grasshopper tease chicken male

— **tsʰwe32** **si41**
seek death

'The grasshopper teases the rooster to its peril.'

This saying describes individuals who take risks foolishly or in ignorance,

6. **pɐŋ63** **pʰwi41** **tʰwĩ63** **kʰɔ41**
release fart take off trouser

— **kɛ33** **kɐŋ35**
add **effort**

'He takes his pants off to fart.'

This saying describes an individual prone to taking unnecessary actions.

7. **ɓɵ33** **kʰi51** **tsjɐ32** **tɐw32** **ɦu33**
no tooth eat bean curd

— **tu35** **ɦɵ51**
just fine

'The toothless man has no problem eating bean curd.'

This saying describes how individuals find ways to meet their needs despite obstacles.

8. ɦɵ35 ɗjɛ̃w35 kwɐn35 pɛ32 kɛ35
good cat look after hundred home

— **kɛ33 pɵ22**
home old lady

'A good cat looks after hundred homes.'

In Southern Min culture, old women are often regarded as involving themselves in affairs that are and are not their concern, so the saying criticizes meddlesome individuals.

9. sɛ̃33 ke33 ɗwĩ35 ɓɵ22; pɐŋ63 ke33 sɐj51 ʔu33
bear hen egg no place hen shit yes

—**ɓɵ33.ɗɔ32.ʔjɔŋ33**
useless

'When a hen bears an egg, don't keep it in chicken shit.'

This saying describes an unproductive action.

Trisyllabic Idioms

Trisyllabic idioms are referred to as conventionalised expression (Guanyongyu 惯用语) in Sinitic languages. They differ from sayings and allegorical sayings in terms of the internal structure, while differing from other forms of idiomatic expressions in the number of syllables and/or the source/origin. The trisyllabic idioms are colloquialisms that are created and formed by the community members in the course of their everyday activities. They are mostly used to express emotional attitudes, such as disappointment, disgust, or appreciation. They function as a single lexeme in full sentences, but differ from other common lexemes by virtue of their conventional implications, which is difficult to deduce based on the literary meanings of individual components. Below, 18 trisyllabic idioms that are commonly heard in the local society are introduced.

1. ɓɵ33 ɓɐk32.tsju35
no eye

'Eyeless.'

This term describes individuals who are indifferent to the world around them.

2. ɓɵ33 tsʰɐj35.kɐŋ35
no effort

'No effort.'

This saying describes an individual who wastes effort on something unworthy.

3. ɓɛ̃j35 tsʰju35si41
bad hand posture

'Bad gesture'

This saying describes an individual who is unlucky at gambling.

4. ɠɔ32 ki33 tsʰju35
five quantifier beard

'Five beards.'

This saying describes a lustful man, known as a 'cat' in Southern Min culture.

5. kĩ63 tsĩ33 si51
see money death

'Die of seeing money.'

This saying describes an individual who places financial gain above all else.

6. ʔjɐw35 sju32 pɔ33
shorten longevity strategy

'A fatal strategy.'

This saying describes an unworkable strategy.

7. ʔɔ33 ʔɐ33 tsʰwi41
black crow mouth

'With a crow's black mouth.'

This saying describes an individual who says something undesirable and ominous; the crow represents bad luck in Sinitic culture.

8. tɐk65 tsʰwi63 kɔ51
fight mouth drum

'Bicker.'

This saying describes individuals who are joking around.

9. pwɛ̃63 tʰɐw33 tsʰɛ̃35
half head immature

'With a head half-grown.'

This saying describes an individual whose actions and decisions show a lack of maturity.

10. ʔm32 kɐw63 kwi51
Neg. enough ghost

'Not enough of a ghost.'

This saying describes an individual who acts or dresses in an inappropriate manner.

11. hɵ35 tsʰwi63 tswi51
good mouth status

'He keeps his mouth good.'

This saying describes an individual who likes to greet others with soothing words.

12. tsʰɛ̃33.ɓɛ̃33 ɠu22
blind cow

'A blind cow.'

This saying describes an illiterate individual suited only to menial labour.

13. kɐw32 ʔwɐ32 sɐj51
thick speech shit

'Diarrhoea mouth.'

This saying describes an individual who is overly talkative.

14. sɐŋ63 kɛ63 ʔm41
send marriage aunt

'An aunt of the bride duties.'

This saying describes an individual is knowledgeable about the surrounding culture and also likes to dictate orders. In Southern Min culture, this term also refers to a professional (usually female) who provides services relating to traditional weddings.

15. kɛ33 pɵ33 sɵ51
home elder woman sister-in-law

'The old sister-in-law in the house.'

This saying describes a woman who likes to involve herself in the affairs of others. Traditionally, women stayed at home to do housework and, when they met together, were thought to gossip.

16. tʰɐw33 tsjɐ32 pɔ33
steal eat step

'Gain sth. by trickery'

This saying describes individuals who take advantage of the rules to further their own purposes.

17. kʰjɐw63 tsʰwi63.tswi51
bend upwards mouth lips

'Purse up one's lips.'

This saying describes an individual who is unhappy with an outcome or decision.

18. ɗɐw63 ʔɛ32 ɦɐm35
drop lower jaw

'He's dropping his jaw.'

This saying describes an individual who is overstating something.

Quadrisyllabic Idioms

Quadrisyllabic idioms known as chengyu 成语in Sinitic culture are distinguished by form and function from sayings and allegorical sayings, while being distinct from trisyllabic idioms in terms of the number of syllables and sources. The quadrisyllabic idioms of Zhangzhou are largely colloquial, and their meanings appear deducible from their constituents. They are full of rhythm and cadence that can be divided into two feet, a tempo that is easy to verbalise and memorise (Wu, 1995). Due to their colloquial and rhythmic features, the quadrisyllabic idioms are commonly used by native speakers in everyday conversations to congratulate, attract attention, advise, suggest, or to warn. In this section, 18 quadrisyllabic idioms are presented to reflect the interaction between Southern Min language and culture.

1. **ɦwɛ̃33 tʰɐw33 ɦi35 ɓin33**
   happy head happy face

   'Happy thoughts, happy face.'

   This saying suggests that happiness is an honest emotion.

2. **tsjɐm33 kʰɐ33 ʔju63 tsʰju51**
   needle foot tender hand

   'With a needle foot and a tender hand.'

   This phrase describes an individual who is pampered.

3. **tʰɐj33 ke35 kɐ63 kɐw22**
   kill chicken teach monkey

   'Kill the chicken to teach the monkey.'

   This saying describes punishing one individual as a warning to others.

4. **ɗun35 kʰi41 kju33 tsɐj22**
   tolerate breath pursuit wealth

   'Put up with [bad] breath to pursue wealth.'

   This statement suggests that one should not lose out on business opportunities because of another's unpleasant personal characteristics.

5. **ɗĩ33 sjɛ̃35 ɓɛ35 ɦɐw51**
   donkeyvoice horse cry

‘The voice of a donkey and the braying of a horse.’

This saying is used to describe harsh voices or songs.

6. pɐ35 dĩ33 pɐ33 tse41
full year full festival

‘Full year, full festival.’
This saying describes abundance at new year’s festivals.

7. kʰɐŋ33 tsʰwi63 pɔ32 tsi22
empty mouth chew tongue

‘Empty your mouth and chew your tongue.’

This saying is used to describe individuals who gossip and say foolish things.

8. ʔɔ33 ku35 pi63 tswɐ22
black turtle tortoisesnake

‘Black turtles, tortoises, and snakes.’

This saying is used to describe a group of undesirable individuals.

9. ɗwĩ35 tʰɔ22 tsʰim33 kut221
soft soil deep dig

‘Dig deep in soft soil.’

This saying describes individuals who are easily bullied.

10. ɗɐŋ33 ɗɐj33 kɛ63 kʰi41
people come guest go

‘People come, guests go.’

This saying emphasizes the importance of mutual interactions for maintaining a relationship.

11. tsʰɐw63 tʰɐw22 kɐw32 ʔjɵ22
stinking head thick medicine

‘Stinking head, thick medicine.’

This saying indicates that individuals with a certain disease encounter a series of troubles.

12. ʤjɐ32 ku35 tsɐw35pi41
catch turtle escape tortoise

'Catch one turtle, lose tortoise.'

This saying describes individuals who lose one thing while attending to another.

13. sɐm33 put65 ʤɔ32 si22
three unlike five hour

'More like three than five hours.'

This saying is used to describe something that happens very frequently.

14. ɓɵ33 ʤu22 sɐj35 ɓɛ51
no cow use horse

'If there's no cow, use a horse.'

This saying describes the need to adjust to the changing circumstances.

15. put65 sɐm35 su32 ʤjɐŋ51
unlike three like two

'More like two than three.'

This saying is used to refer to things or people that appear strange and are difficult to classify, are 'neither fish nor fowl.'

16. pi35 tsʰju35 ʔwɐ32 tɵ35
gesture hand draw knife

'Use hands to draw a knife.'

This saying describes an individual who likes to use body language and also indicates that some individuals like to involve themselves in others' business.

17. ʔu32 ʔjɐn22 ɓɵ33 tsʰjɐn22
have fate no decline

'Don't decline a person who has a predestined relationship.'

To express that people emphasize a predestined relationship in their social activities.

18. tsʰɛ̃33 tʰɐw33 tsʰɛ33 ɓin33
immature head immature face

'Youthful face, youthful mind.'

This saying describes an individual who is indifferent and arrogant.

References:

1. Chao, Y. (1930). ə sɪstəm əv "toun-lɛtəz" (A system of "tone letters"). *Le Maître Phonétique*, 45, 24-27.
2. Huang, Y. (2018). *Tones in Zhangzhou: Pitch and beyond* (PhD dissertation: Australian National University). Retrieved from https://openresearch-repository.anu.edu.au/handle/1885/144938
3. Lai, H.-l. (2008). Understanding and classifying two-part allegorical sayings: Metonymy, metaphor, and cultural constraints. *Journal of Pragmatics*, 40, 454-474.
4. Li, Y. (2016). Comparison of the comprehension of three types of Chinese colloquial idioms by advanced Chinese L2 learners. (PhD dissertation: The University of Iowa). Retrieved from https://ir.uiowa.edu/etd/2112/
5. Ma, C. (1994). *Studies of Zhangzhou dialect (Zhangzhou Fangyan Yanjiu)*. Hongkong: Zongheng Publishing House.
6. Murar, I. (2009). Pragmatic and functional uses of idioms. *Analele Universităţii din Craiova. Seria Ştiinţe Filologice. Lingvistică*, XXXI, 1-2
7. Schuster, & Ellen. (1998). Proverbs: A Path to understanding different cultures. *Journal of Extension*, 36(1). Retrieved from https://www.joe.org/joe/1998february/tt2.php
8. Stoch, N. (2017). Distinctive Features of Chinese proverbs: A comparative study of suyu and yanyu and other types of shuyu. *Annals of Arts*, 64(9), 47-68.
9. Wu, C. H. (1995). On the cultural traits of Chinese idioms. *Intercultural Communication Studies*, 5, 61-82.

10. Yang, X. (2007). *Proverbs and songs in Zhangzhou dialect (Zhangzhou Fangyan Shuyu Geyao)*. Fuzhou, China: Fujian People's Publishing House.

Computational Linguistics: Analysis of The Functional Use of Microsoft Text Word Processor Text Corrector

Priscilla Chantal Duarte Silva
Prof. Dr. Ricardo Luiz Perez Teixeira
Victoria Olivia Araujo Vilas Boas
Federal University of Itajubá, Brazil

Doi: 10.19044/llc.v6no2a2 URL:http://dx.doi.org/10.19044/llc.v6no2a2

Abstract

Computational linguistics is a field of study that lies at the interface between Linguistics and Computer Science. Though, it is an area that lacks the cooperation of both areas of knowledge as well as other areas of the Cognitive Sciences. The field of Computational Linguistics has the posturing of attending to Computation with regard to the treatment of linguistic data, analyzing the approach and the application of the computational components that try to reproduce the natural language phenomenon. The present study aims to show the advance of computational linguistics, its motivations, applications, as well as the relation with the natural language, comparing the form of application of the computation with the linguistic functioning of the language of Portuguese Language. The study proposes a linguistic analysis of the text correctors with the approach of its limitations and inaccuracies compared to the natural language. Some phrases in the mother tongue were selected and inserted into Word as tests to fix possible grammatical errors and to check the current text corrector limitations, for later analysis and collection of results. The results revealed that Microsoft Word language reviser can not correct all Portuguese language errors. This indicates that it is necessary to review the conditions and operations of the Microsfot Word reviser engine.

Keywords: Computational Linguistics, Text Corrector, Natural language, Natural language processing.

Introduction

The process of architecting characteristics of the human being to the machine has undergone some transformations over the years. When, in 1950, Alan Turing - a mathematician, cryptanalyst and British computer scientist -

proposed to the scientific community, for the first time, a thinking machine, in its article "Computing Machinery and Intelligence", researchers in the area directed works in search of expressing humans in bytes. However, over the years they have not made much progress, and therefore have segmented the approach. Today, the study of artificial intelligence is subdivided into areas such as computer vision, voice analysis and synthesis, fuzzy logic, artificial neural networks, computational linguistics, and the like.

Computational linguistics, even as a subdivision of Artificial Intelligence - in addition to areas such as Statistics, Linguistics and Information Technology - precedes these studies, for in the mid-1950s Americans tried to automatically translate documents written in other languages in order to speed up the work to process information they obtained from, for example, spies infiltrated into Soviet environments. At the time, the computer was gaining strength in calculating complex mathematical expressions, such as the precise routes of airplanes and rockets launched by NASA; if the algebraic calculations had a precision that goes beyond human efforts, the same could apply to natural languages such as English, Russian, German, and others.

However, although the range of automatic translators of the time had a small result, it was not perfect and therefore the computational scientist community understood that there is a great complexity in the treatment of natural languages and began to devote greater efforts to the creation of algorithms and software capable of doing this work. Good and Howland (2017) argue whether natural language might be a preferred notation to traditional programming languages, given its familiarity and ubiquity. They describe and destille empirical studies investigating the use of natural language for computation and the ways in which different notations, including natural language, can best support the various activities that comprise programming.Today, computational linguistics is subdivided into some areas such as: corpus linguistics, syntactic analysis, part-of-speech tagging, knowledge representation, information retrieval, semantic web and machine translation.

One of the most popular applications is the automatic correction in word processors like LibreOffice Writer, Microsoft Word and Apple Pages. They are used for writing simple texts to professional and complex files; simulate a typewriter, but also have tools that aid in textual production, formatting, and editing. However, none of today's word processors and brokers are completely efficient, and this is what drives computer scientists and linguists to continue their research in an attempt to develop the perfect tool whose ability is to syntactically and semantically correct a text with property, resembling human thought. Some softwares are being developed to meet people's daily need for writing.

The most efficient do not encompass the needs of the Portuguese-speaking writer, since they tend to restrict themselves in the English language. Grammarly, of the large company Grammarly, located in San Francisco, for example, is a word processor that proposes a greater efficiency in the correction of writing in the English language; is the most popular software in North America, being developed about six years ago - it can be used as an extension of Microsoft's Word (the most popular processor in the world) and of browsers like Google Chrome. In addition, the Language Tool - another example of a textual correction tool - was developed about 10 years ago, and DeepGrammar about a year ago. However, of the above textual correction tools, only the Language Tool is available in the Portuguese language, and even promising to go beyond Word, you can not detect some of the errors that will be exposed in this article.

Even with the emergence of word processors that promise greater efficiency in dealing with natural languages through newer and more innovative technologies, this study has as its main focus the analysis of Word by addressing its limitations and inaccuracies when it comes to to the vast amount of information - syntactic, semantic, morphological that need to be known for the rescue of the signifier. After all, there is a real difficulty on the part of linguists and engineers of language in articulating, understanding, processing speech and writing. These are characteristics of the human being, and even if scientists believed it to be easy to reproduce, the practice of systematizing this human function confers its complexity. For the complete interpretation of sentences of a given language it is necessary to have a kind of knowledge of syntactic rules of a sentence, which according to the linguist Noam Chomsky in his book Language and Mind (2006) is intrinsically formed in the speaker's mind - he they have somehow internalized - and this is the ability to associate sounds and meanings according to rules of their mother tongue. Thus, textual correction faces the same difficulty, and therefore tends to be imprecise.

Knowing that the human mind has a peculiar organization in its way of processing ideas, inferring terms and decoding information, it is understood that the process of rectifying texts is not based on only a comparison of right and wrong, but a procedure of understanding that is not done with excellence by existing platforms. Artificial intelligence, in the area of Deep Learning - AI sphere that proposes the deep learning of the machine through the elaboration of neural networks to compose the layers of unnatural thinking - has shown many results in researches and in the creation of modern word processors. Thus, the considerations made by some linguists regarding the intrinsic knowledge of language by human beings will also be approached in the present article, in the search to understand about the inefficiency of the

available brokers in Portuguese language, and how Deep Learning can prove useful for the Portuguese in relation to the orthographic correction.

The general objective of this work is to analyze linguistically the comprehension dimensions of text correctors in dealing with the mother tongue, verifying their limitations and inconsistencies. For this, it will be necessary to: raise a historical panorama on the advances of the artificial intelligence in the field of text correctors; to get an overview of the contributions of computational linguistics in the area of Artificial Intelligence, to understand the mechanism of computational and linguistic functioning of the Microsoft Word broker - because it is the most widely used around the world - investigating syntactic verification means, semantic and morphological aspects of this software based on grammatical and semantic inaccuracies. Finally, present and analyze the results, pointing out suggestions for improvement.

2. Computational Linguistics: a general overview

Our main research is conducted on the basis of one IT company, which simultaneously develops equipment, software, and also provides a range of services to its customers. The main business of the company is the development of satellite-based monitoring system for different types of customer objects. Computational Linguistics consists of an area of knowledge that explores the relationships between Linguistics and Informatics (Vieira and Lima, 2001), in an attempt to formulate systems capable of recognizing and producing information in natural language. Deprecating the operation of the rules of a language and, of course, what allows recognizing the system of all others is the challenge of computational linguistics, in order to approach the formal language of the natural. According to Vieria and Lima (2001), some works in Computational Linguistics are focused on the processing of natural language. For this, it is necessary to understand the structural functioning of the language. Lingusitic processing is the task of the syntactic parsers so that they recognize the lexicon and grammar of a language. It is known that the syntax of natural language is much more complex than any form of formal processing.

Yang et al. (2017) identify in their ontogenesis of child language some evidences of learning mechanisms and principles of efficient computation, i.e, that children make use of hierarchically ('Merge') language. Edelman (2017) suggests that the brain learning mechanisms remain dynamically controlled constrained navigation in concrete or abstract situation spaces. Love (2017) speculate how languaging about language might give rise to the idea of a language. The author observes the role of reflexivity and the development of writing in facilitating the decontextualisation, abstraction and reification of linguistic units and languages themselves.

Normally, a native speaker is able to recognize a sequence of expressions as valid in their language. This is because there is a set of internalized rules, which Chomsky (2006) has classified as part of the formal functioning of language or the formal nature of language. It is known that there is a complexity in dealing with the approach and systematization of this area of knowledge that makes it difficult to find a uniformity in theses. In this respect, (Câmara Junior, 1973, p. 50, apud Alkmin T. M, p.23) argues that according to Schleicher, each language is the product of the action of a complex of natural substances in the brain and in the speech apparatus. Studying a language is therefore an indirect approach to this complex of matters[...] he argued that language is the most appropriate criterion for the rational classification of humanity.

Within this conception, the study of a language encompasses notions that are sometimes foreign to science and often pervade philosophical debates. What is proposed by the author bears great resemblance to the work and defense of the linguist, philosopher and political activist Noam Chomsky; the famous debate with Michel Foucault, a French philosopher, in the year 1971 illustrates the above disagreements: For Chomsky, contrary to Foucault, human nature does not change essentially in the different cultures and historical periods, since humans have characteristics correlated to rudimentary existence. Chomsky (2006) argues that there is a difference in each culture and period of history that does not allow one to speak in an immutable human nature, or in an innate species. Chomsky (2006), in turn, emphasizes the creativity of to illustrate the process of language learning by children; argues that it is not limited to the performance of external agents. In Linguagem e Mente, the linguist claims that the study of Natural Languages - a term referring to what is naturally developed by the human being, such as the Portuguese Language, English Language, and the like - is directly related to the human essence and to the qualities of the mind that are unique to man and independent of phases or factors of life.

Chomsky (2006) defends the idea that in general sentences have an intrinsic meaning determined by a system of rules internalized by the speaker of a language. However, it stresses that they are not just connections between sound and meaning. In other words, it is not only a matter of interpreting what is said from the application of linguistic principles that determine phonetics the semantic properties of an utterance, but believes that extralinguistic factors confer on the speaker the role of determining how the language is produced, identified and understood. Linguistic performance is governed by principles of a cognitive structure.

The grammar of a language consists of a cognitive model composed of a set of pairs (s, I), where s is the phonetic representation of a certain linguistic sign and I is the semantic interpretation. There is, in fact, a perceptual model

that can be described as a sign that functions as an input and allows for syntactic, semantic, and phonetic representation. In this sense, this perceptual model incorporates the grammar of a language. Chomsky (2006) emphasizes, in turn, that the perceptual model makes use of much information that lies behind the intrinsic association between sound and meaning. The grammar of a language involves issues of memory, time and organization of perceptual strategies that go beyond formal grammar. Considering the grammar of a language in this perceptual model, one can better understand the notion of universal grammar proposed by Chomsky (2006), which consists of a system of representation that serves any particular language, although it considers the arbitrariness of the linguistic sign, in the sense that a language has an infinity of signs of semantic interpretation.

For Chomsky (2006), the grammar of a language is a system of rules that comprise a pair of sound and meaning, surrounded by a syntactic, semantic and phonological component. This is the formal aspect of language. The proposed method for personalized e-learning can be described within further sta The syntactic component is a certain infinite class of abstract objects (D, S), where D is a deep structure and S is a surface structure. The deep structure contains all information relevant to the semantic interpretation; the surface structure all information for the phonetic interpretation. The semantic and phonological components are purely interpretive (Chomsky, 2006, p.111). The structure of the syntactic component of a grammar contains certain network of grammatical functions followed by rules or system of rules of the deep structure combined with rules of the surface structure. In Computational Linguistics, syntactic parse.

In Computational Linguistics, syntactic parsers are able to recognize and validate a sequence of expressions as being of a given language. In this case, it is necessary to specify a grammar. In this case, it is necessary to specify a grammar accompanied by its lexicon so that the system performs the checks. According to Vieira and Lima (2001), the procedure is similar to checking the syntax of a program in a programming language. In natural language, the system is much more complex. This type of treatment is useful for the development of spelling and grammar correctors. The applications developed to deal with language, however, go beyond syntactic processing, considering the postulations of Chomsky (2006), there is a frustration that goes through the study of Linguistics, related to the complexity of human language. After all, even with all the progress of studies and approaches, sometimes the systematizations or reproductions of languages run into the same dilemmas of the Human Language. Thus, for an efficient approach to language elements, linguistics being the field of scientific study of language and natural languages was, over time, formulated on campus that shaped a deeper understanding for the analysis of phenomena.

The areas of morphological, phonological, syntactic, semantic, pragmatic and historical are the most important in the science of language. The morphological one is concerned with the study of the composition of words through the minimal units that carry meaning; the phonological studies the signifier of the language, the phonic differences related to the differences of meaning; the syntactic field that is, among others, most frequently addressed, refers to the way words are related in the search for sentence composition. Semantics, in turn, deals with the signifier of the meaning of words and phrases; already the pragmatic one tries to understand the motivation of the interlocutor in the construction of the speech. Finally, historical linguistics studies the processes of language transformation throughout history. What we are suggesting is that the notion of "understanding a sentence" is explained in part in terms of the notion of "linguistic level." To understand a sentence, then, it is first necessary to reconstruct its analysis at each linguistic level; and we can test the appropriateness of a given set of abstract linguistic levels by ascertaining whether the grammars formulated in terms of these levels allow us to provide a satisfactory analysis of the notion of "understanding" or not (Chomsky, 1956, p.81).

For a long time, the scientific community has focused attention on syntax and since the 19th century there has been a great desire to establish it as an autonomous discipline; even by standardizing her study, differences in approaches have emerged. Two main lines of thought related to language stand out: the functionalist and the formalist. The first sees language as a system that is born of the individual's need for communication. The excerpt from the book Introduction to Linguistics clarifies the explanation: to think of syntax from a functionalist perspective implies, then, to extend the analysis beyond the limits of the sentence. Syntactic processes are understood here by the relations that the syntactic component of the language maintains with the semantic and discursive components. It is only possible to understand what is happening in Syntax, also looking at the context (text and / or communicative situation) in which the sentence is inserted. (Chomsky 2004, 212)

The second line of thought concerns the formal aspect of language. That is, the formalists argue questions related to the linguistic structure, and approaches are given, in this case, the sentence and its structuring. The great systematiser of formalism was Noam Chomsky; by his work, this linguistic theory became known as Transformational Grammar or Generative Grammar. It was a priori introduced in the work of the linguist "Synthetic Structures" in the 1950s, and its main purpose was to provide a general method of selecting a grammar for each language given a corpus of phrases of that particular language. The ultimate goal, therefore, was an ideal model

for all known languages. In view of this, this branch of linguistics was a great attraction for mathematicians and computer scientists, as they sought, at the same time, a formulation and computational processing of language. In other words, in an attempt to speed up the translation of Russian scientific papers after the launch of Sputnik in 1957, for example, the researchers imagined that syntactic transformations based on Russian and English grammars and the substitution of words with the use of an electronic dictionary would be sufficient to preserve the exact meanings of utterances. Different languages have different morphological tendencies. Computational methods of analysis that are perfectly suitable for languages of morphological shortage (such as English), or with agglutination morphology (such as Turkish), may not be the best methods for non-flexions languages (such as Russian) (Ledeneva, Y; Sidorov, G. 2010, p.5).

The fact is that translation requires general knowledge of the subject to resolve ambiguities and establish the content of the sentence - the famous translation of "the spirit is willing but the flesh is weak" as "vodka is good, but the flesh is rotten" illustrates the difficulties encountered. If indeed there is a precise formulation of all languages, then reproducing it in algorithms generates, as a consequence, efficient processing.

In this way, Computational Linguistics arises; according to the Association for Computational Linguistics, or ACL - a scientific and professional society dedicated to the problems involved in the study of language from the computational point of view - is the scientific study of language from a computational perspective that is interested in providing computational models for the various types of linguistic phenomena, with the aim of reproducing them in computational processes in the treatment of natural languages.

The area deals with applications that, even with all the advances over the 70 years of research, are still difficult to reproduce. After all, if we start from Chomsky's (2006) assumption that there are human abilities related to language that are intrinsic to his existence, then how to reproduce them in a machine? For this reproduction to be efficient is, therefore, necessary to integrate a set of human characteristics into the machine? In order to answer questions such as these, the various fronts of computational linguistics - speech recognition, speech synthesis, search engines, machine translation, automatic correction and word processing, extracting text information and automatic summarization - deal with semantic and encompass questions such as "Is a given solution the best solution?" or "Given any program, is this program correct?", classic computer theory questions.

That is, to appropriate resolution requires the ability to process information and act in decision making on top of what has been processed. This goes beyond the use of a grammatical corpus for the statistical mapping

of possibilities, although this is one way of doing it. However, the problem sometimes involves human characteristics, such as the capacity to think. In the field of automatic translation of texts, this has meant over the years of research: In the most recent systems competitions promoted by the National Institute of Standards and Technology (NIST, 2008), the best automatic translation system (Google) did not even reach 50% of the human reference. [...] None of the available systems, derived from the market initiatives, are derived from the academic research, produced until today, results that could dispense with human edition (Martins, 2011, page 287).

On top of very syntactic analyzes, the Theory of Computing encompasses finite automata; recognizers of regular languages that work as follows: Given any language and taking a sequence of x elements that compose it, an automaton responds "yes" if it encounters x and "no" if it comes across any other sequence not known. That is, it works on aspects of that language that are known and therefore do not make decisions. In general, they are programmed to deal with comparison instructions that follow pre-established standards and encompass concepts that are responsible for defining what is grammatically acceptable to a native speaker and what he / she is not. Note that to establish grammar goals significantly, it is sufficient to assume a partial knowledge of sentences and non-sentences. That is, we will admit, in this discussion, that certain phoneme sequences are clearly sentences and that other sequences are not. In many intermediate cases, we will have no hesitation in leaving the decision to the grammar itself, when it is constructed in the simplest form, so as to include clear sentences and exclude sequences that are clearly non-sentences (Chomsky 1993, 8).

The semantic questions mentioned in the previous paragraph require that the word intelligence be reproduced in its literal sense. By the dictionary Aurelio (2016), the general definition of intelligence is: "Set of all the intellectual faculties (memory, imagination, judgment, reasoning, abstraction and conception)"; in other definitions, the word learning is also present. This means that for a semantic understanding there are elements that are directly related to the mental faculties, and issues that, at times, the human being himself has no conclusions. A concrete example of the above is the MIT platform called Moral Machine, which reproduces a stand-alone car in a decision-making situation. The vehicle warns the user that an accident will occur at some point and asks for help in deciding which people to take their lives - a group of children, or a group of elderly people; thugs or doctors and children.

In modern times, machines and tools designed from computational linguistics are very useful in people's daily lives. Some tools make up daily work and study routines, such as word processors; other tools, has been the focus of research on applicability. The chatbot - a chat robot that simulates a

human being in a conversation - is an example of the second case and has been used in a variety of applications; language courses, shops, classes, etc. After all, the tendency of computing is to facilitate the routine of people in the streamlining of processes that once demanded time and work. The focus of this study is the approach of word processors, especially Microsoft's Word, and its various limitations - syntactic factors, semantic factors, etc. For this, computational linguistics can work with a textual corpus that has probabilistic models based on the most adequate grammar of a given language. The ability to produce and recognize grammatical statements is not based on notions of statistical approximation and the like. The custom of considering as grammatical sentences those that "may occur" or that are "possible" has been responsible for some confusion ... I believe that we must consider that grammar is autonomous and independent of meaning and that probabilistic models do not provide some insight into some of the basic problems of syntactic structure (Chomsky, 1998, p.11, 12).

This for the author can be a mistake because using a corpus to statistically map the most possible sentences leads to the thought that language, because of its complexity, can not be properly described, and then there must be contentment to a schematized version, making probability low - a certain word has a low frequency of use - impossible. The statistical study of language has relevance, but it can not determine or characterize the set of grammatical statements. For non-inflected languages this method is highly suitable; others, however, need algorithms responsible for processing them properly. One extreme point is storing all grammatical forms in a dictionary (database). Such method of analysis is known as "bag of words". This method is useful for inflective languages, but it is not recommended for agglutinative or polysynthetic ones […] Algorithmic (non- "bag-of-words") solutions have a number of additional advantages. For example, suck algorithms have the possibility to recognize unknown (new) words. This is a crucial feature for a morphological analyzer since new words constantly appear in the languages, not speaking of possible incompleteness of the dictionary (Ledeneva, Y, Sidorov, G. 2010, p.6).

3. Computational processes involving the processing of a text

Automatic text processors are part of everyday digital users. The most used to write long texts - contrary to those found in smartphone operating systems and the like - is Microsoft's Word. This tool, among many other functions, works with "Grammar checking" and "Style checking". The first concerns the checking of errors that are usually handled by a grammar book: syntax errors stand out. The second deals with errors discussed by books about writing style: we can take as an example the exacerbated use of "que", called “queísmo” in Portuguese or the exaggeration in the use of the passive voice.

The treatment of problems that a usual grammar addresses and discusses is best handled by word processors such as Word. This is because it concerns a kind of comparison made between user input and a kind of library of possible structures, similar to the use of compilers in computer programming - text style checking, in turn, involves semantic problems, which as discussed in the previous chapter, are difficult to interpret by the machine. Thus, for a better approach to the computational processes that involve the automatic processing of text, a brief introduction to the use of the compilers is necessary. Put simply, a compiler is a program that reads a program written in a language - the source language - and translates it into an equivalent program in another language, the target language. As an important part of this translation process, the compiler reports to its user the presence of errors in the source program (Aho, A. Sethi, R., Ullman, J., 1995, 8).

In general, the compilation of a program is divided into its central parts: analysis and synthesis. In the first part of the process, the structure and meanings of the program will be explored from the creation of intermediate representations for the verification of errors. In the analysis, the program will recognize if character structuring has meaning for the grammar of a given language, a process called "sentence recognition" and is part of the lexical analysis procedure. Thus, if a particular programming language defines an integer as int or "integer" - for example, Fortran -, the declaration of a variable of the integer type must be accompanied by an integer.

Otherwise, the compiler will convert the variable to the declared type (a real number 5.4895, will be understood as 5). If the declaration of a numeric type - in the chosen language: real, integer or complex - is accompanied by a string, called a string, the compiler will acknowledge an error, because when declaring a number, a character is not expected.

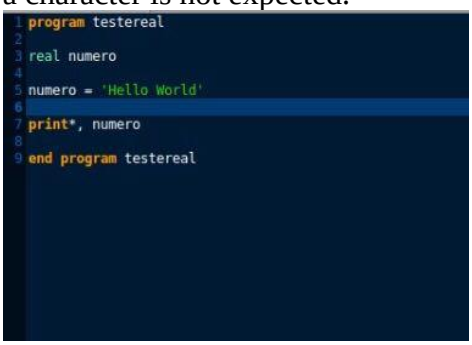


Fig.1- Using the Compiler Program Code.

As the code example, a real variable was created, and a string was assigned to it, so the compiler says that the conversion is impossible.

Fig. 2 - Description of errors.

The compilation, according to the above-mentioned book Compilers - Principles, Techniques and Tools (Aho, A. Sethi, R., Ullman, J.,1995), is divided into three parts: Linear Analysis, Hierarchical Analysis and Semantic Analysis. Linear Analysis, also known as Lexical Analysis, is responsible for the detailed reading of the program - character to character -, and its separation into tokens, which are its minimum structures; equivalent in Linguistics to words; they carry the signifier of each element. The '+' symbol, for example, can be a token that carries addition direction, just as '=' can mean assignment.

Hierarchical Analysis, or commonly called Syntactic Analysis, associates tokens in usually syntactic trees for the summarization of outputs and for the evaluation of the disposition of these elements in sentences - in linguistics, syntax is the part of the grammar that studies the association of the words in a sentence and the acceptability of the formal relations that interconnect them. The semantic analysis, in turn, verifies errors of semantic order in the code. A classic example of an error identified at this stage is the division of a number by zero, considered a mathematical indeterminacy; or the division of an integer by a floating point number.

A basic principle of compilation, and therefore essential for the understanding of word processing, is the classification of formal grammars described by Chomsky in 1959. For a better understanding of what these grammars are, it is necessary to elucidate some concepts and structures that Chomsky expounded in his book Synthetic Structures (1957). As a simple example of the new form of grammar associated with the analysis of constituents, consider the following:

(13)
(i) Sentence -> SN + VP
(ii) SN -> T + N
(iii) SV -> Verb + SN
(iv) T -> o, a
(v) N -> man, ball, etc.
(vi) verb -> kicked, caught, etc.
[...] where the numbers to the right of each line of the derivation refer to the rule of the "grammar" (13) used to construct the line from a preceding line.
(Chomsky, 1957, p.20)

Thus, to form the sentence "the man kicked the ball", Chomsky (1956) follows the logic of formation, starting from that the numbers to the right of each line of the derivation refer to the rule of the one of the declared grammar above. In this way:

(14) Judgment
SN + SV (i)
T + N + SV (ii)
T + N + Verb + SV (iii)
or + N + Verb + SN (iv)
the + man + Word + SN (v)
the + man + kicked + SN (vi)
the + man + kicked + T + N (vii)
the man + kicked the N (viii)
the man kicked the ball

Thus, the second line is (14) is formed from the first line by the rewrite of the Sentence as SN + SV, according to rule (i) in (13); the third line is formed from the second line by the rewriting of SN as T + N, according to rule (ii) of (13), etc. We can represent derivation (1) in an obvious way through the following diagram:

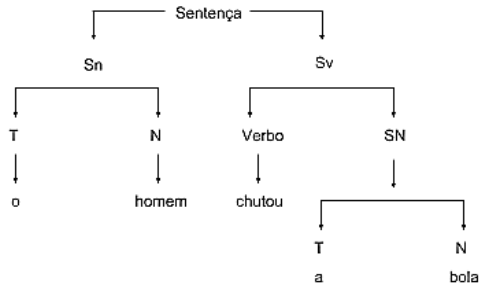


Fig. 3 – Chomsky diagram
Chomsky (1957, p. 20, 21).

Thus, if a sequence is the last, it can be said that it is a terminal derivative. This concept is essential for the understanding of the terminal and non-terminal symbols that form the formal grammars. That is, a non-terminal symbol corresponds to the range of symbols upon which grammar rests to define laws for the composition of sentences of that language. In contrast, terminal symbols are the ultimate derivation of grammar and cannot be altered by its rules. In programming languages they are Tokens and are usually treated as synonyms so that they can be manipulated by syntactic parsers that provide their proper meanings - as previously discussed.

This diagram became known as the Chomsky tree, and its explanation as Noam Chomsky's Generative Theory. From understanding these syntactic trees it becomes simple to understand the classification of grammars that he theorized years later. Chomsky hierarchized the formal grammars into 4 levels - from level 0 to level 3 - with zero level grammars being more general, or with more level of freedom in their norms. The Type 0 grammar, where alpha -> beta (any number of variables or terminals can occur in any order within a production) is called unrestricted and is capable of generating recursively enumerable languages, which are formal languages for which they exist turing machines - abstract model of a computer, which is restricted only to the logical aspects of its operation (memory, states and transitions) - to enumerate all the valid language chairs in order to perform steps recursively an arbitrary number of times. Because it is a more general grammar, the type 0 has limitations as to the applicability to the compilers, because there are great obstacles regarding its treatment due to the generality of its composition.

A subset of sentence structure grammars are context-sensitive grammars, or type 1 grammars can be surrounded by a terminal symbol context and non-terminal symbol on the left or right side of their production rule - the alpha side and the (alpha -> beta) both terminal variables and non - terminal variables are allowed, but the alpha side must necessarily be less than or equal to the beta side - and are ordered enough to be verified by a Turing machine with limited memory .

Subsequently, context-free grammars are subsets of the others mentioned above; they were invented by Chomsky in the search for the processing and comprehension of any natural language through the propositions that govern them with the description of the structure of the sentences and words, but were not originally used for this purpose, having later great applicability in the science of computation, to the description of programming languages and, recently, the creation of the eXtensible Markup Language (XML) recommendation for the generation of markup languages by the World Wide Web Consortium (W3C). The concept of context-free languages was of paramount importance in order for XML to achieve its goal of being a simple and readable language, both for humans and for computers.

The last subset of Chomsky's hierarchy contains the regular grammars, which are responsible for the constraints on the forms of production and, therefore, are simple and adequate to obtain recognizers, also called regular expressions, of great applicability in computer science and therefore in the development of software. A common example of using regular expressions is the validation of email by forms available on the network to the standard example@example.com:

^([A-Za-z0-9._%+-]+@[A-Za-z0-9.-]+.[A-Za-z]{2,4}){0,1}$

The first part of the expression, for example, validates that the user can type letters A through Z, uppercase and lowercase, numbers from 0 to 9; the characters "underline", percent, more, and dash. Almost all human languages, or natural languages, source of study for the correction and for the automatic translation of texts are part of the set of context-sensitive grammars. The treatment of these grammars is within the set of problems of complexity and computation theory called decision problem, in which it is verified whether or not a given string belongs to a set of characters called formal language; this question is answered with yes or no. This is important for a proper understanding of the operation of a word processor such as Microsoft's word, because in a simple way, Microsoft's natural language processing system parses in essentially the same way the languages of at the time of compilation - described earlier. In addition, they work with a database for comparison, where the decision-making complexity method fits as in the following example: Is this word written to fit any of the available records? Yes or no.

The NLP system that is behind the Microsoft grammar checker is a full-fledged natural language processing system that is also intended to be used for many other applications. It consists of a programming language and a runtime environment that are both specially tailored to the needs of an NLP system. The programming language, which is called G, has basically the syntactic appearance of the C language, but it gives special notational support to attribute-value data structures, called records, and provides an additional programming construct, called rules. The runtime system, which is usually referred to as NLPWin, is a Microsoft Windows application that is written mostly in C and provides a grammar development environment and the functions needed to do natural language processing. That part is the processing that is written in G, such as the English analysis grammar, is translated into C by a program called Gtran, and then it is compiled and linked into the NLPWin executable (Dale, R; Moisl, H; Somers, H. 2000, p.182)

In general, there is a set of predetermined records - such as a database for consultation - a set of rules also predetermined and a method of grammar analysis, which considers in complexity of decision making if a given test is correct or not; if it is not, it will accuse, as in the compilers. This analysis is done in six stages. The first stage of processing is lexical, where the input text is segmented into individual tokens, which are primarily words and punctuation marks. [...] The second stage of processing is called the syntactic sketch, and corresponds to what is typically called parsing. [...] The third stage is called the syntactic portrait, because it is a refinement of the syntactic sketch. The purpose of this processing is to produce more reasonable attachments for some modifiers, such as prepositional phrases and relative clauses that are merely attached to their closest possible modificand as a simplification in sketch. [...] The fourth stage of processing produces logical

forms, which are intended to make explicit the underlying semantics of the input text. [...] The fifth stage of processing deals with lexical disambiguation [determining the most appropriate sense (or senses) of each word in the input text]. [...] The sixth, and final, stage of processing deals with discourse phenomena. These six stages can be compared to the three fundamental parts of analysis made by the compilers described above: Linear, Hierarchical and Semantic. The first stage described can be compared to Linear Linear Analysis, according to the fourth stage it fits into the Hierarchical Analysis, and the last stage in the Semantic Analysis. The description of the Analysis made by word will be of great value for the analysis of some sentences grammatically incorrect; tested in Word, but that he did not give them any kind of error.

4. Methodology

The present study has a bibliographic and descriptive bias. Therefore, at first, a bibliographic review was carried out. According to Cervo et al (2006) the bibliographic research is one that tries to explain a problematic from the use of already published theoretical references. This research can be carried out independently or and analyze the scientific contributions on the topic in question. When this research is carried out with the purpose of making a survey of previous information and knowledge in relation to a problem for which answers are sought, or in relation to a hypothesis that one wishes to try, this type of research composes part of the descriptive research, or experimental. In a second moment, some phrases in the mother tongue were selected and inserted into Word as tests to fix possible grammatical errors and to check the current text corrector limitations, for later analysis and collection of results.

5. Systemic analysis of word processor behavior on grammatically incorrect sentences

From the analysis of some linguistic tests done in Word with the purpose of identifying grammatical errors that are not pointed out, it was possible to obtain a list of grammatical mistakes in Portuguese that are easily identified by an attentive reader. Some of them, such as problems of verbal agreement, use of commas and crass, semantics, anaphora.

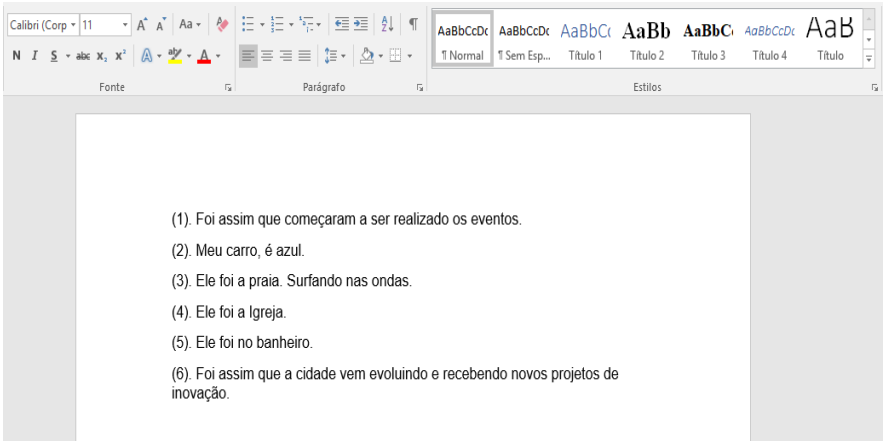


Fig. 4 - Examples of grammatical errors that Word does not identify as an error

This is how the events began to take place, (2) My car, is blue, (3) He went to the beach. Surfing the waves, (4) He went to church., (5) He went in the bathroom, (6) This is how the city has been evolving and receiving new innovation projects.

The non-corrective IDs of the Word text corrector will be explained at the time of the systemic linguistic analysis of the broker's functioning, with a relation to Compilers of Computing languages. In example (1) "*This is how the events began to take place*", there is a problem of verbal agreement, which was not identified by the Word broker. In a reversal of order of terms, one can observe the inadequacy of grammatical rules: This is how the events began to be performed. Note, in this case, that the broker cannot identify issues that run away from the order subject, verb and predicate. In some cases, one observes only an attempt of agreement between nouns and adjuncts like in: "Many accidents happened". The forms "happened many accidents"; "Accident happened a lot"; "Accidents happened a lot."

Note, therefore, a non-compliance with grammatical rules. The same happens in: "Buy want the students"; "Students buy them want"; the students want to buy ", in which semantics is not identified. In (2), "My car is blue", the use of the comma after the subject, separating predicate subject does not follow the grammar rules of punctuation. The same thing happens in "My car is. Blue ", in which the lack of the predicate of the subject is not identified; nor the predicative of the object "The teacher. left. John disconsolate ". just like "They hit. Hours on the Clock ", where there is a comma-separated verb and direct object. In (3), "He went to the beach. Surfing in the waves ", the absence of the crass is not marked, as in (4) and there is still a misused comma separating the sentences with semantic link. It is believed that there is a problem in identifying semantic and structural elements. In (5), "He was in the bathroom," the use of the regency "ao" is also not identified, accepting the

wording with the preposition "no." In (6), there is no concern with the use of semantically connected verbal time with the use of gerund, which in this case gives idea of continuity. It is noted, therefore, that Microsoft's Word broker is only returning to verify spelling indicia without pragmatic linkage, that is, its contextual and semantic articulation. There is every reason to believe that this type of broker should be programmed for a more complete recognition of the language, involving more notions of grammatical and semantic order.

The work developed sought the systemic analysis of the use of word corrector word. For this to be possible, it was necessary to clarify all the topics of the area of Computational Linguistics that surround the processing of text done by the automatic correction of Word. Firstly, an introduction to Linguistics in general, from basic concepts to the most complex ones, and that provide the basis for the understanding of other areas that were important for this research; secondly Computational Linguistics - guiding all work -, which gives base to all the works involving the computational processing of sentences; thirdly it was necessary to understand how the previously learned concepts in the two mentioned parts are important so that the machine is able to gauge the ability to correct a text.

From this, it was possible to make the analysis of some sentences for a more systematic understanding of how a program such as word, - with all the research that involves it and any advances that it has obtained over the last 5 to 7 years - can fail. This is because the human mind has a peculiar organization in its way of processing ideas, inferring terms and decoding information, and it is understood that the process of rectifying texts is not based on just a comparison of right and wrong or a certain input of data compared to a pre-established base of expected inputs, but a procedure of understanding data that a machine has not yet achieved complete success and which resembles the process performed by the human brain.

Artificial intelligence, in the area of Deep Learning - AI sphere that proposes the deep learning of the machine through the elaboration of neural networks to compose the layers of unnatural thinking - has shown many results in researches and in the creation of modern word processors. One case studied for this work was Jonathan Mugan, a computer scientist living in Texas: DeepGrammar. This textual broker uses deep learning to create language models, and these models are used to analyze the test in a few steps, which consider the semantic meanings of words.

This method proved to be a great success, and in a year of work the researcher alone achieved results close to the results presented by word in more than 10 years of research and with a great team of researchers. The analysis made by the system becomes, in this case, more similar to human analysis; This is because, for a human being to correct in a speech a wrong word, he must first know the meaning of that word.

6. Conclusion

From this study it was possible to understand how Microsoft Word reviser works. The reviser presents some limitations of verbal agreement, use of commas and crass, problems of semantic order and of anaphora. The results show that many corrections made by Word's text editor are not done correctly. It is possible to observe that the corrector of texts makes only corrections of grammatical nature

In fact, there needs to be a review of the functions of the Word broker. This may be an opportunity for future work in computational linguistics and also for computer engineering itself. After all, the software should be able to do the correction in multiple languages. It was noticed that the correction made by Word focuses more on the spelling correction. Semantics is still a more difficult field because it concerns the human capacity to think.

References:

1. Aho, A. Sethi, R., Ullman, J. (1995). Compiladores: Princípios, Técnicas e Ferramentas. Rio de Janeiro: LTC, 8.
2. Angelo, T. N. (2011). Behaviorismo Radical e Inteligência Artificial: Contribuições além das Ciências Cognitivas. Faculdade de Engenharia Elétrica e Computação da Unicamp. Disponível em: <http://www.dca.fee.unicamp.br/~gudwin/courses/IA889/2011/IA889-19 >Acesso em 15 set. 2016.
3. Chomsky, N. (1956). Estruturas Sintáticas. Cambridge: Department of Modern Languages and Research Laboratory of Eletronics.
4. Chomsky, N. (1998). Linguagem e Mente. Brasília: Editora da Universidade Federal de Brasília.
5. Chomsky, N. (2006). Language and mind. New York: Cambridge.
6. Dale, R., Moisl, H., Somers, H., 2000. Handbook of Natural Language Processing. New York: Marcel Dekker.
7. Delmonto, R. (2008). Computational Linguistic Text Processing: Lexicon, Grammar, Parcing and Anaphora Resolution. New York: Nova Science Publishers, Inc., 375. – ISBN 978-1-60456-749-6
8. Edelman, S. (2017). Language and other complex behaviors: unifying characteristics, computational models, neural mechanisms. Language Sciences, 62, 91-123.
9. Gardner, H. (2003). A Nova Ciência da Mente. São Paulo: Edusp.
10. Good, J., & Howland, K. (2017). Programming language, natural language? Supporting the diverse computational activities of novice programmers. Journal of Visual Languages & Computing, 39, 78-92.
11. Ledeneva, Y, Sidorov, G. (2000). Recent Advances in Computational Linguistic. Informativa, México. Disponível em:

<http://www.informatica.si/index.php/informatica/article/view/271/>. Acesso em: 25 set. 2017.
12. Love, N. (2017). On languaging and languages. Language Sciences, 61(6), 113-147.
13. Martins, R. (2011). O pecado original da Linguística Computacional. São Paulo: Alfa, 287.
14. Mira, M., Villalva, A. (2006). O Essencial Sobre a Linguística. Lisboa: Caminho.
15. Mussalim, F.(Org.), Bentes, A. C. (2004). Introdução à linguística. São Paulo: Cortez, 23.
16. Norvig, P. (1992). Paradigms of artificial intelligence programming: case studies in common lisp. San Francisco: Elsevier, 655-680.
17. Riezler, S. (2014). On the Problem of Theoretical Terms in Empirical Computational Linguistics. MIT Press Journals, Computational Linguistic, vol.40, n.1, Cambridge, 235-245.
18. Russell, S.; Norvig, P (2004). Inteligência artificial. Tradução de PubliCare Consultoria. Rio de Janeiro: Elsevier, 9a reimpressão.
19. Silva, B. C. D. da. (2006). O estudo Linguístico-Computacional da Linguagem. Porto Alegre: Letras de Hoje, 2006.
20. Yang, C., Crain, S., Berwick, R. C., Chomsky, N., & Bolhuis, J. J. (2017). The growth of language: Universal Grammar, experience, and principles of computation. Neuroscience & Biobehavioral Reviews

'The River that Dies Thirsty': Murdering Black Womanhood in Toni Morrison's Bluest Eye

Dr. Amal Galal Mohammad Morsy
Department of English Language and Literature, Faculty of Arts, Fayoum University, Egypt

Doi: 10.19044/llc.v6no2a3 URL:http://dx.doi.org/10.19044/llc.v6no2a3

Abstract

Since their arrival at the colonial American society, Black females started their journey of suffering. They used to be perceived within this oppressive racial and capitalistic society as an item of commodity whose basic function is to reproduce as many black bodies as possible to increase the capital of their white masters. However, in spite of the bitterness of slavery and its consequent troubles such as poverty, illiteracy, self-split, violence, oppression and exploitation - which continued even after the emancipation - Black women were able to adjust to these surrounding conditions because they were accompanied by another partner in such journey of suffering, namely Black man. Indeed Black woman suffered physical and psychological violence at the hands of the Whites, but her exploitation by the Black man was more torturous. Tyranny and dominance of the White society was so clear and obvious for the Black women and thus some of them decided to challenge it while others felt that the best way is to adapt the Whites' values in order to ensure their survival. In this regard, this paper is devoted to shed the light on black women who fell victims of their racist and sexist society. It is an attempt to examine the factors that prevented black women from self-recognition and led to the murdering of their womanhood. Adopting the psycho-analytical technique, one of Toni Morrison's novels, *The Bluest Eye*, was selected to demonstrate how black womanhood was lost in such context of social injustice.

Keywords: Racism, Toni Morrison, Zero-image, *The Bluest Eye*, Black women.

Introduction

At a time when the American society is guided by the norms of whiteness and maleness White women have to fight for their feminism, Black men for their blackness but Black women have to fight their battle on two

fronts because the Black woman suffers both racial and sexual invisibility. (Juneja 79).

Since their arrival at the British colony of Virginia, Black females started their journey of suffering. They were separated from their spouses, children, and their families at their homelands and came to this New Land to find all forms of violence, oppression, as well as physical and psychological exploitation. Some of these black women were brought from rich societies in which women were traders, agriculturalists, and leaders. However, they were perceived within this oppressive capitalistic society of America as an item of commodity whose basic function is to reproduce as many black bodies as possible to increase the capital of their white masters. Thus, they were exposed to rape and sexual exploitation by their white masters, and were forced to have children earlier and regularly.

In spite of the bitterness of slavery and its consequent troubles such as poverty, illiteracy, self-split, violence, oppression and exploitation, which continued even after the emancipation, Black women were able to adjust to these surrounding conditions because they were accompanied by another partner in such journey of suffering, namely Black man. Indeed Black woman suffered physical and psychological violence at the hands of the Whites, but her exploitation by the Black man was more torturous. Tyranny and dominance of the White society was so clear and obvious for the Black women and thus some of them decided to challenge it while others felt that the best way is to adapt the Whites' values in order to ensure their survival. In this regard, this paper is devoted to shed the light on black women who fell victims of racism, gender, economic oppression, sexism and other forms of violence practiced by both white and black men within the American society, adopting the psycho-analytical approach to explain one of Toni Morrison's masterpieces, *The Bluest Eye*. The current research tends to demonstrate how "black women can never become fully empowered in a context of social injustice" (Collins, 3).

Black Woman's Identity and the 'Zero Image'

Tyranny and violence practiced by Black men over their black female partners were much bitter and had stronger impact rather than that of the Whites. The black woman shared the black man in his feeling of isolation within the colonial American society and hence she considered him a partner in her quest for freedom and self-recognition, but she, unfortunately, discovered that she got deceived and that she was a victim of both White and black males. Now, she has to confront two oppressors, White and Black men, in order to assert her being.

They adopted one of the defense mechanisms to challenge both oppressors through initiating another cycle of violence in order to assert her

existence. Exploring the motive of such struggle, Houston Baker writes, "Black woman's struggle for identity is originated by the black person's sudden awareness that she represents what Fowler calls a ' zero image' " (152). For this reason, the Black woman struggles to defy her "zero image" within this patriarchal society where men dominate everything and women's voices are excluded or silenced. Thus, in her struggle to defy this "zero image" Black woman started another cycle of violence that is "violence- revenge-violence", or as Martha J. Cutter describes, "a reciprocal violence"(162). This new cycle is masterly depicted in Morrison's novels.

Morrison's *Bluest Eye*: A try to hear the silenced

In her masterpiece *The Bluest Eye*, Toni Morrison criticizes "the dominant ideology, [the] system of thought that establishes masculinity and whiteness as culturally central and normative by constructing femininity and blackness as Other" (Parker 4). Through her novels, Morrison is known by her interest in giving a voice to her female characters to defy their imposed silence. However, this does not mean that all her female characters are resisting characters or that all of them have that ability to achieve wholeness and self-recognition. In contrast, some of these female characters are characterized by their passivity and lack the ability to resist or to change their humiliating conditions.

Pecola Breedlove and her mother, Pauline, belong to this category of the Blacks who accept the white standards of beauty unquestionably and are, accordingly, convinced that they are ugly. Pecola, for example, "represents the most powerless and the most dispossessed character in the novel. She is situated on the lowest rung of society; she is 'black' in a racist society, she is female in a sexist society, and she is a child in a world of adults" (Koo 97). The "scapegoat" and the "victim" are other descriptive titles suggested by Royster and Cynthia A. Davis about Pecola. For Royster, Pecola is "the novel's central scapegoat" made by the society, the Black community, and her parents (Samuels and Hudson-Weems 14). In a similar context, Cynthia A. Davis views Pecola as "the epitome of the victim in a world that reduces persons to objects and then makes them feel inferior as objects. In this world, light-skinned women can feel superior to dark ones, married women to whores, and so on and on" (Davis 14).

Indeed Koo, Royster, and Davis may be right in their claim that Pecola is a victim of the dominant culture of the whites, her Black community and her family, but it is also clear that she herself shares in her victimization. Pecola's failure in her journey for selfhood lies also in her inability "to recognize that she is responsible for defining a life for herself" (Samuels and Hudson-Weems 14). Because she lacks the ability to realize this responsibility, Pecola builds her life on illusion. In addition to the external factors (racism,

black community, and Pecola's parents) that lead to her victimization, Pecola is also responsible for what happens to her. Thus, these external factors shall not be explained in isolation from Pecola's "Bad Faith" or her inability to change the oppressive reality around her (as her friend Claudia does). Together, both (external factors and her passivity) lead to her destruction and her insanity at the end of the novel.

As for the first factor (i.e. racism) that cripples Pecola's quest of selfhood, it is clear throughout the novel that Pecola "suffers an identity crisis when she falls victim to the standard set by an American society that ascribes what is beautiful to a certain image of white women" (11). The hegemony of these standards deprives her of discovering her own beauty. She is invisible and neglected by her peers and "Her teachers [who] always treated her this way. They tried never to glance at her" (*Bluest Eye* 45). If she leaves this humiliating gaze at the school, she faces the same gaze in the outer society as if she escapes the fire into the hell. This is very clear in Mr. Yacobowski's, the storekeeper, attitude towards Pecola when she goes to buy Mary Janes, her favorite candy:

She looks up at him and sees the vacuum where curiosity ought to lodge. […] The total absence of human recognition--the glazed separateness. She does not know what keeps his glance suspended. […]. But she has seen interest, disgust, even anger in grown male eyes. Yet this vacuum is not new to her. […]. She has seen it lurking in the eyes of all white people. So, the distaste must be for her, her blackness. All things in her are flux and anticipation. But her blackness is static and dread. And it is the blackness that accounts for, that creates, the vacuum edged with distaste in white eyes. (*BE* 44)

Pecola is neglected by Mr. Yacobowski and "all white people" because "for [them] there is nothing to see" (44; 48). She is always invisible for the white eyes, and when she is seen she is met by a hostile gaze. "Because of the completeness of this hostile gaze, Pecola would never know her own beauty. She would see only what there was to see: the eyes of other people," as Leger points out (9). Pecola is now sure that she is valued based on the racist standards of beauty and thus she has no place in this society. Wherever she turns, she is neglected or degraded by the whites for something she has no control on, her blackness.

In an attempt to transcend such predicament and find herself a place in this oppressive world, Pecola "internalize[s] white supremacist values and aesthetics, a way of looking and seeing the world that negates her value" (Fulton 26). She spends hours and hours looking in the mirror to discover the reason of her ugliness but all she can see are her eyes. Thus, she prays day and night for "big blue pretty eyes, storybook eyes. Morning glory eyes" (*BE* 40). She also becomes loyal to everything associated with the world of the whites;

prefers candies of Mary Jane and drinks milk in Shirley Temple's cup. Being loyal to the norms and standards of the white society does not, however, protect Pecola or provide her with the honorable place she dreams of. Instead, she falls a victim of this society "which deliberately deprives her of her personhood through its material and psychological conditions" (Davis 14). As a result, her misery is intensified and her psyche is devastated.

It has been possible for Pecola to overcome the injury of the first factor (racism) if she finds any support from her community. Disappointedly, her community shares in her trauma the same as the whites have done. She is thus a victim of both racial and interracial violence. In other words, it is both the "racist and sexist society [that] is to [be] blame[d] for her situation" (Humann 109). Pecola is avoided and neglected by her black community not for anything but for being black and ugly. This is clear in the humiliating behavior of the black boys who make a circle around Pecola and begin singing: "Black e mo. Black e mo. Yadadsleepnekked" (*BE* 55). This humiliating behavior makes "Pecola edged around the circle crying. She had dropped her notebook, and covered her eyes with her hands" (59). She is blamed and degraded for things that she does not have a hand in and cannot even change or control, namely the color of her skin and her father's sleeping habits. It is Pecola's black skin and the ugliness of her family that determine the shape of her life, a practice that implies a kind of social injustice.

This communal abandonment, represented in the behavior of the black boys, has become a fertile incident for critical analysis. Fulton examines this humiliating behavior psychologically and concludes that it is a kind of projecting one's feeling of self-hatred onto another person: "The intense self-hatred the black community feels toward its blackness is both self-perpetuating and self-regulating within a white supremacist society" (27). Pecola is thus a victim of a community that takes her as a scapegoat to project their feelings of failure and worthlessness. Claudia, the narrator, herself admits after Pecola goes insane that "we honed our egos on her" (*BE* 185).

Not only does the black community was unable to support Pecola in her dilemma, but it also increases her self-destruction. Pecola's community finds in her a prey to project their feelings of degradation and weakness, the feelings that had been initiated within the Blacks' psyche since slavery and never stopped agonizing them. Instead of revenging the hunter- the white racists- the black community chooses an easy prey to satisfy their thirst for pride and dignity. They hate Pecola for being a personification of their ugliness. For them, she is a living testimony of their funkiness, and that is why the adults in her community believe that she would "be better off in the ground" (*BE* 189-90). They neglect her presence and if they communicate with her they shoot her with shower of humiliating words.

Psychologically, when a person is avoided and neglected by others, he/she usually finds in isolation a refuge from the hostility of the outer world. This is true with Pecola. The shameful attitude of Pecola's community instills in her feelings of shame and a desire for isolation. Pecola tries to escape her oppressive reality but, unfortunately, she becomes "schizophrenic" (Bump 162). It is psychologically known that in schizophrenia the person escapes his/her reality into an imaginative world in order to fulfill his/her suppressed desires. In Pecola's case, she escapes her oppressive world where she is unwelcomed and rejected by everyone into her dreams of possessing blue eyes. Unable to achieve her dream and deprived of any help, Pecola's tragedy is worsened more and more.

It is possible for a person to suffer marginalization and oppression in the outer society but when he returns home, he finds the required support to transcend his/her ordeal. In Pecola's case the opposite is her reality. Indeed Pecola encounters various forms of violence and degradation within her society, but her feelings of self-contempt and defectiveness are mainly intensified due to her parents' abusive treatment. Pecola does not find at her home the refuge that helps her transcend her plight. She belongs to a family that is completely defeated by severe economic conditions and poverty. The father is one of the sharecroppers who suffer oppressive economic conditions and injustice. This leads the mother, Pauline, to work in order to help her husband provide the family with food and life necessities.

However, it is not only poverty that controls the life of the Breedloves, but also the dominant ideology plays an important role in their devastation. The Breedloves are described, even by their community members, as ugly. Strangely, the Breedloves themselves have adopted these dominant standards of beauty and have accordingly believed that they are ugly and unworthy. They accept to be an easy prey for the judgment of their unjust society; a judgment that totally devastates their lives, especially that of Pecola. These "dangerous and terrifying conditions of Pecola's household" fuels her desire "to be everything she is not," as Humann states (71; 112). Pecola's parents share in her psychic devastation the same as the society and the black community have done.

Violence is a routine in the daily life of the Breedloves as it is clear in the permanent fights between her parents. It can be said that Pecola's home life plays an important role in her destruction. Explaining the destructive nature of Pecola's family, Morrison writes, "Love is never any better than the lover. Wicked People love wickedly, violent people love violently, weak people love weakly, stupid people love stupidly" (*BE* 206). Psychologically, "many psychotherapists believe that those who did not feel enough love and acceptance in the family of origin experience … fear of nothingness on some

level" and Pecola experiences this fear at the hand of her parents, especially her mother Pauline (Bump 155).

Pauline Williams Breedlove belongs to this category of Black women who adopt norms of the whites to ensure their safety; that is why she is never satisfied with her husband or her ugly children (Sammy and Pecola). She always feels ashamed and this feeling makes her " bent [her children] toward respectability, and in so doing taught them fear: fear of being clumsy, fear of being like their father, fear of not being loved by God, fear of madness […] fear of other people, fear of life" (*BE* 116). As a result, Pauline's children learn from their mother that fear and surrender to the dominant culture are the best strategies for survival and respectability.

It can be said then that Pecola's sense of defectiveness is basically instilled and strengthened by the passive model of her mother. Pecola has acquired from her mother a "general feeling of separateness and unworthiness" which, inevitably, produces Pecola's feeling of "self-contempt" (*BE* 111; 122). From the first moment the reader meets Pauline he feels that she is totally damaged by such sense of defectiveness due to her ugliness and her deformed foot. To escape her feelings of inferiority and her pains for being neglected by her community members, Pauline throws herself into the world of the whites until she is entirely absorbed by its norms and its standards of beauty.

Pauline is depicted throughout the novel as an aggressive wife and a careless mother. She is a woman of many contrasts. While she is described as an "ideal servant" (100) in her employer's house, she is a hostile woman within her own home. She devotes all her time and her love for her master's family, the Fishers, especially his little blue-eyed and blond-haired daughter, and deprives her own children of her love. She is called by the Fishers as "Polly" and is the "black mammy" for the Fisher's little girl. In contrast, she forces her children to call her Mrs. Breedlove. But a genius writer like Morrison is not to leave her reader with such "unsympathetic portrait" of one of her characters without justifying this portrayal. Thus, she enables her reader to delve into past memories of Pauline's childhood through Pauline's own words in order to understand the circumstances that produced such "tragic figure" (Fulton 35).

Notably, Pauline's family of origin did not protect her from other people's disgraceful reactions to her physical deformity, which is caused by the penetration of a rusty nail into her foot at the age of two. The ninth of eleven children of Ada and Fowler Williams, Pauline is treated differently from her brothers and sisters and is neglected by everyone around her due to her limp. This creates within her a "general feeling of separateness and unworthiness" (*BE* 111). She spends her childhood mostly at her home separated from any form of friendship or communal communication. This,

accordingly, affects her psychological growth, as Morrison describes: "Restricted, as a child, to this cocoon of her family's spinning, she cultivated quiet and private pleasures. She liked most of all, to arrange things. To line things up in rows-jars on shelves at canning, peach pits on the step, sticks, stones leaves- and the members of her family let these arrangements to be" (88).

Moving from this restricted stage of childhood into adulthood, Pauline dreams of love and a man to provide her with "tenderness with strength and a promise of rest" (90). She wants an ideal man to rescue her from her oppressive reality. When she meets Cholly for the first time she loves him for his tenderness and his physical strength (things that she dreams of). Admitting the magic effect of Cholly's appearance on her life, Pauline states that "she had not known there was so much laughter in the world" (116), and that he adds to her life the lost colors that she has been deprived of since her childhood.

In pursuit of the dream of finding in each other things that they lack, Pauline and Cholly marry and spend a normal type of marital life before their move to the north where there are promises of adequate life and plenty of jobs for the blacks in steel mills. Unfortunately, Cholly and Pauline face many hardships and various forms of oppression and injustice in that North. Thus, they discover that the North is not the paradise they once dreamed of and that it is not more than T.S. Elliot's wasteland. In other words, the north is found to be a lie that they naively believed. Cholly and Pauline suffer from poverty and oppressive economic conditions that pervade the forties at that time. Pauline suffers from isolation and loneliness as she is separated from her family in the south. In addition, she finds that black people in Ohio are "no better than whites for meanness. They could make you feel just as no-count" (93).

Instead of being supportive for one of their kinsfolk, some of the black women in Pauline's community start to ridicule Pauline for her way of talking (saying chi'ren) and dressing. This, of course, intensifies Pauline's feeling of loneliness and creates a sense of self-contempt inside her. As a result, she decides to make her own life and her husband's absence at work for long time besides her feeling of loneliness support this decision. She finally finds in going to the movies her solace. Movies for Pauline seem to be like the river that could satisfy her thirst for love and tenderness. However, this river is found to be a mirage and will later destroy her life. The more Pauline goes to the movies and watch Hollywood films, the more her sense of self-hatred increases and the crack in her marital relationship with Cholly is deepened.

She imitates fashions and hairstyles of white actresses, especially the hairstyle of the American film actress Jean Harlow who was known as the Blonde Bombshell of the thirties. She becomes totally absorbed and obsessed

by white standards of beauty displayed through the Hollywood films. This fascination with the American movies may signify her desire to escape her severe reality. She is fond of going to the cinema because "in the dark her memory was refreshed, and she succumbed to her earlier dreams. Along with the idea of romantic to another-physical beauty" (*BE* 122). She seeks love and physical beauty in these movies, things that she lacks in her real life. She tries to fulfill her *self* through these movies, but, unfortunately, these movies destroy her life. Pauline starts to hate everything that is black and, therefore, she hates her own daughter for being a living reminder of her blackness or the ugliness that she constantly tends to escape.

It is difficult then for a mother like Pauline with such sense of self-hatred to become a nurturing mother for her daughter. Adrienne Rich tries to depict the devastating effect of a mother's self-contempt on a daughter that "A mother's victimization does not merely humiliate her, it mutilates the daughter who watches her for clues as to what it means to be a woman. Like the traditional foot-bound Chinese woman, she passes on her own affliction. The mother's self-hatred and low expectations are the binding-rags for the psyche of the daughter (Koo 114). In a similar context, Koo believes that "the cruelty and hate expressed in Mrs. Breedlove's physical violence towards her daughter suggests the total estrangement between mother and daughter" (115).

When Pauline goes to deliver Pecola, she suffers humiliation and mistreatment at every moment she spends at the hospital. Overhearing the white doctors' description of black women as animals as "they deliver right away and with no pain, just like horses", Pauline starts to groan "something awful" to prove to the white doctors that delivering a baby is "more than a bowel movement" and that black women suffer like all other women (*BE* 124-25). It is inevitable then for Pauline to project her feeling of self-contempt onto her baby daughter, and to see her newborn baby through a white- gaze not a motherly gaze. From the first moment she sees her daughter she describes her as ugly "head full of pretty hair, but Lord she was ugly" (126). It can be said that from the first moment of Pecola's existence in life she is unwelcomed by her mother. Because of Pecola's ugliness Pauline sees her as a living reminder of her own ugliness; that is why she (Pauline) attempts to detach herself from such reminder and dives more and more into the world of the whites searching for security and self-fulfillment.

Unfortunately, this absorption within the world of the whites does not provide Pauline with safety and happiness that she seeks. Her feeling of self-contempt is stronger. That is why when she loses her front tooth (during her pregnancy with her second child, Sammy), she disappointedly feels that "Everything went then" and resigns herself "to just being ugly". Commenting on this incident of Pauline's loss of her front tooth, Lara Fulton argues, "the loss of Pauline's tooth is one of Morrison's clearest metaphors for the

insidious effect of white ideology on black identity" (36). This incident leaves Pauline with a sense of self-fragmentation. It might be possible for Pauline to transcend such psychological ordeal if she found support from the members of her black community, but, unfortunately, they disappoint her with their shameful treatment with her and her family. She and her family are avoided and neglected for being black and ugly.

Now identified as ugly and inferior based on the norms of the dominant culture of the whites and degraded by her community, Pauline pursues her journey for self-fulfillment. Again, she seeks self-completion in the realm of the whites, but this time will be at the Fisher's house instead of the Hollywood films. Working as a servant for the Fishers, Pauline devotes all her time and efforts for the Fisher's "perfect world and their perfect little girl" at the expense of her own family (*BE* 101). "She neglected her house, her children, her man… they were after thoughts" (101). At this stage, Pauline is considered a perfect personification of the negative image of the black mothers who fail to nurture their own children for the favor of their masters.

Pauline totally neglects her own children, especially her daughter Pecola, while dedicating her efforts and her love for the little daughter of her master's family. For Carolyn Ann Wayne, "[Pauline's] negative feelings toward her children are a result of her inability to adequately provide for them. [She] feels more comfortable in the luxurious home of her white employer, so she rejects her own culture of poverty and everyone associated with that culture" (3). At the Fisher's house Pauline finds the home she dreams with for her own home. She admires the luxury of the house, its fine kitchen, its fully-stocked panty and its clean plush white towels. Another important thing that Pauline is deprived of and finds at the Fisher's house is respect. At the Fisher's Pauline is given a nickname ("Polly") and she becomes "what was known as an ideal servant, for such a role filled practically all her needs" (*BE* 100).

Pauline duly loves her employer's house more than hers and his blue-eyed and blonde-haired daughter more than her own daughter. At the time that she is considered "the black mammy" to the blond girl, who is also permitted and welcomed by Pauline to call her "Polly," Pauline's children, Pecola and Sammy, are forced to call her Mrs. Breedlove. A perfect example of Pauline's loyalty to the Fishers at the expense of her children is very clear through her shameful and unexpected behavior towards her daughter Pecola when she spills the blueberry juice on the Fisher's kitchen's floor.

When Claudia and Frieda go to Pecola at the place where her mother works and wait with her in the Kitchen, Pecola, unintentionally, spills the blueberry juice on "the floor, splattering blackish blue berries everywhere. Most of the juice splashed on Pecola's legs, and the burn must have been painful, for she cried out and began hopping about just as Mrs. Breedlove entered" (108-09). Driven by maternal instinct any mother at Pauline's

situation shall relieve her daughter and cures her pain. Shamefully and unexpectedly, Pauline does not pay any attention for her daughter's injury. In addition, she cruelly knocks "her to the floor" and, then, "yanked her up by the arm, slapped her again, and in a voice thin with anger, abused Pecola directly and Frieda and me [Claudia, narrator of the incident] by implication" (109). She thinks only of how to relieve and comfort the upset white girl with a soft and sweet voice.

This scene has drawn the attention of many critics and scholars for its strangeness and its powerful effect on the formation of Pecola's identity. For example, Barbara Frey Waxman sees in " Pauline's distaste for her pathetic daughter [an expression of] her embrace of the Master Narrative" (Humann 113). Relating this embracement of white norms by Pauline to Pecola's psychological death Margaret Delashmit writes, "when Pauline embraces the white family she works for, especially the little white girl with blue eyes, to the extent that she neglects her own family, blue eyes become for Pecola a metaphor for her mother's love" (113). Pauline thus plays an important role in Pecola's victimization and her failure to achieve self- completion.

Other critics such as Samuels and Hudson-Weems admit that "through her mother's blurred vision of the pink, white, and golden world of the Fishers, Pecola learns that she is ugly, unacceptable, and especially unloved", but at the same time they see Pauline's loyalty to the Fishers seems to Samuels and Hudson-Weems as a strategy adopted by a weak woman to acquire the "power" that she needs for her survival. Indeed Pauline's presence at the Fisher's home provides her with the power she lacks but it also teaches her the language of violence as a way of relieving her suppressed outrage. According to Fulton, "tragically, in succumbing to the anaesthetizing, sterilizing whiteness of the Fisher household, Pauline turns to violence to awaken her numbed senses and feel physically and spiritually alive" (38).

Strangely enough, both Cholly and Pauline fight severely and strongly as if each one is keen to kill the other, however, they had agreed not to kill each other. They love each other but their love is abused by their oppressive and frustrating economic conditions. These conditions nurture only destructive love. This is very clear in the following description of their fights:

Cholly and Mrs. Breedlove each other with a darkly brutal formalism that was paralleled only by their lovemaking. Tacitly they had agreed not to kill each other. He fought her the way a coward fights a man-with feet, the palms of his hands, and teeth. She, in turn, fought back in a purely feminine way-with frying pans and pokers, and occasionally a flatiron would sail toward his head. They did not talk, groan, or curse during these beatings. There was only the muted sound of falling things, and flesh on unsurprised flesh. (*BE* 38)

In spite of the abusive manner of her husband Cholly and his constant fights and beatings, Pauline "needs him and his failings in order to feel righteously indignant" (Beckmann 416). This drives her to align with him and blame her daughter only for the vicious act of rape. In an attempt to examine such strange reaction by Pauline , Samuels and Hudson-Weems argue that, "both [Pauline and Cholly] …have such split of the self or, in other words, unfulfilled self" (28). She sees in Cholly her fragmented self, and, in turn, transfers her feelings of self-contempt and defectiveness to her children, especially Pecola.

But if Pauline personifies a negative image of a black mother, she also symbolizes the "familiar role for Africana women", as Beckmann puts it (416). She represents the hardships and sufferings that black women were burdened with throughout their history within the oppressive racist society of America. Indeed her work as a servant at the Fisher's home is sometimes explained as a means to a acquire power and to fulfill her self, but she, like many black women, is forced to work in order to help her husband and to provide her family with food and necessities of life. In addition, she faces the same destiny that other black women faced when her husband, Cholly, leaves her by the end of the novel to deal with a pregnant daughter who has lost her mind in the illusion that she has the bluest eyes.

Indeed the role of Pecola's parents and her community in her victimization cannot be overlooked, but she herself is a participant and not simply a victim. In order for a person to realize self- completion, he/she shall accept his/her self and his/her own identity, a condition that Pecola fails to realize. She has participated in her plight "because she fails to recognize that she must define a life for herself" (Bouson 45).

Her flaws are that she does not have a resisting spirit to defy the norms around her, but she behaves as same as her community members who are totally absorbed by these norms. This may explain why she seeks survival and self-completion but in an opposite direction. She tends to detach herself from her African-American characteristics to survive within this racist society of America, the same attitude adopted by Pecola's mother, Pauline. Pecola's plight is initiated basically from "her inability to achieve a positive reading of blackness in an urban setting dominated by pervasive white standards" (Awkward 205).

A clear evidence of Pecola's weakness and powerlessness is that she has not the ability or the voice to tell her own story. Her story is told by her friend Claudia. Pecola has no voice to tell her story, and this silence is "the void that is Pecola's 'unbeing'," as Morrison states (Koo 122). Helen Cixous in "Castration or Decapitation" explains the symbolic meaning of female silence and hysteria: "Silence is the mark of hysteria. The great hysterics have lost speech, they are aphonic, and at times have lost more than speech: they

are pushed to the point of chocking, nothing gets through. They are decapitated, their tongues are cut off" (Koo 122).

Conclusion

Notably, Pecola and Pauline's flaw lies in their defeated spirit. They have not the strength or courage to resist their oppressive reality. Pecola is completely defeated by her sense of shame and unworthiness for being black. She lacks the pride that Claudia and Frieda have; that is why passivity is always her response for any situation she encounters. For example, when Maureen insults her with her demoralizing words, Pecola's sense of shame and inferiority silences her and makes her blame always confined to one reason, her blackness. It is also this sense of shame and inferiority that drives Pecola to be "backed out of the room [in Geraldine's house] outside, the March wind blew into the rip in her dress. She held her head down against the cold" (*BE* 76). It is this lack of pride that enables others to victimize Pecola. When she looks for wholeness and tries to achieve her dream of the blue eyes, she consults the wrong person, Soaphead Church, who drives her into madness not happiness. At the end of the novel, Pecola "has no claim to an identity and wholeness but has instead been divided into two, inside and outside the mirror… There is no victory for Pecola, she is completely defeated" (Napieralski 61).

It can thus be said that Pecola, her parents and her community are all participants in her plight , and all of them are also victims of the dominant white culture "that reduces persons to objects and then makes them feel inferior as objects" (Bouson 44). At the end of the novel , Pecola goes insane and is silenced. She losses the ability to give a voice to tell her story till the reader knows her story through Claudia's words "that *Pecola's silence* was because *she* was having her father's baby*; an incestuous act that prevents* the marigolds' *growth*" (Italics added; *BE* 9).

Through the analysis of the characters of Pecola and her mother Pauline, it becomes clear that

Morrison reveals to us that insight without action is not transformative for those struggling against oppression. Without actively resisting ideological constructs of racial superiority and reworking racial representation, the "land" will; continue to kill 'of its own volition' and society will 'acquiesce and say the victim had no right to live.' (Fulton 52)

In a nutshell, this category of black women, Pauline and Pecola, fail to realize their dream of self-completion because [the] soil is bad for certain kinds of flowers. Certain seeds it will not nurture, certain fruit it will not bear, and when the land kills of it own violation, we acquiesce and say the victim had no right to live. We were wrong, of course, but it doesn't matter. It is too late. (*BE* 160)

Just as the land will not nurture certain seeds, American society under racism is hostile to the growth of this category of black women. Within this hostile society, black women have been burdened by many roles, which, in turn, result in black women's feelings of loss. Murdering their sense of identity and womanhood, some black women have failed to perform their assigned roles as mothers and daughters. It was such racial and sexist society in which black women are involved that actually led to the murdering of black womanhood.

References:

1. Awkward, Michael. "The Evil of Fulfillment: Scapegoating and Narration in *The Bluest Eye*." In *Toni Morrison: Critical Perspectives Past and Present*. Eds. Henry Louis Gates, Jr., and K.A. Appiah. New York: Amistad, 1993. 175-209.
2. Baker, Houston. *Blues, Ideology and Afro-American Literature: A Vernacular Theory*. Chicago: Chicago UP, 1985.
3. Beckmann, Felicia. "The Portrayal of Africana males in Achebe,
4. Marshall, Morrison, and Wideman." *The Journal of Black Studies* 4.32 (Mar., 2002): 405- 421.
5. Bouson, J. Brooks. *Quiet As It's Kept: Shame, Trauma, and Race in the Novels of Toni Morrison*. State University of New York Press, 2000.
6. Bump, Jerome. "Racism and Appearance in *The Bluest Eye*: A
7. template for An Ethical Emotive Criticism." *College Literature* 37 (1 Jan., 2010): 148-170.
8. Collins, Patricia Hill. *Black Sexual Politics: African Americans, Gender, and the New Racism*. New York: Routledge, 2004.
9. Cutter, Martha J. "Philomela Speaks: Alice Walker's Previsioning of Rape Archetypes in *The Color Purple*." *MELUS* 25.3/4 (Autumn/Winter 2000): 161-80.
10. Davis, Cynthia A. "Self, Society, and Myth in Toni Morrison's Fiction." *Modern Critical Views: Toni Morrison*. Ed. Harold Bloom. New York: Chelsea House Publishers, 1990. 7-25.
11. Fulton, Lara. *An Unblinking Gaze Readerly Response-Ability and Racial Reconstructions in Toni Morrison's The Bluest Eye and Beloved*. Diss. Wilfrid Laurier University, 1997. Canada: National Library of Canada, 1997.
12. Humann, Heather Duerre. *Engendered Violence: Domestic Abuse and the Contemporary American Novel.* Diss. The University of Alabama, 2009. U.M.I., 2009.
13. Juneja, OMP. "The Purple Colour of Walker Women: Their Journey from Slavery to Liberation." *Bloom's Modern Critical Interpretations:*

Alice Walker's The Color Purple. Bloom's Literary Criticism: Infobase Publishing, 2008. 79-87.

14. Koo, Eunsook. *The Politics of Race and Gender: Mothers and Daughters in the Novels of Toni Morrison, Alice Walker, Maxine Hong Kingston, and Joy Kogawa*. Diss. State University of New York, 1993. UMI, 1993.
15. Leger, Janice L. "Behind the Strange Land of Shadows: Discursive Violence in the Novels of Toni Morrison." Diss. The University of New Brunswick, 1997.
16. Morrison, Toni. *The Bluest Eye*. New York: Holt, Rinehart and Winston, 1970.
17. Napieralski, Edmund A. "Morrison's *The Bluest Eye*." *The Explicator* 53 (1 Jan., 1994).
18. Parker, Emma. "A New Hystery: History and Hysteria in Toni Morrison's *'Beloved'*." *Twentieth Century Literature* 1.47 (Spring, 2001): 1-19.
19. Samuels, Wilfred D., and Clenora Hudson-Weems. *Toni Morrison*. Boston: Twayne, 1990.

Homophonous Realization of Contrastive English Lexical Items: The Case of the English Spoken in Some Ghanaian Schools

Isaac Danquah Darko, M.Phil.
Ghana Technology University College, Ghana

Doi: 10.19044/llc.v6no2a4 URL:http://dx.doi.org/10.19044/llc.v6no2a4

Abstract

This study explores the lexical difference between the British Standard English – the Received Pronunciation (RP) and the English spoken by students in Ghanaian Senior High Schools, and identifies homophonous realizations in the students' (Ghanaian) pronunciations. This was based on the findings of earlier research on English pronunciation in Ghana: Dako (2001), Adjaye (2005), Koranteng (2006), etc., that the English spoken in Ghana is distinctive in its features, and thus different from other English accents. It was further based on the Accent Phonology Theory by Trubetzkoy (1931) that accents may vary at various levels, and that two accents may have the same set of phonemes but differ in the selection of phonemes for words (Lexical differences). Data for the study comprised two sets of words and sentences which respondents had to read out for recording and transcription, using RP as a reference point. The result showed that out of 100 pairs of words looked at in the study, 67 were rendered homophonous in the respondents' pronunciations, although such words have contrastive pronunciations in RP.

Keywords: Homophones, pronunciation, vowel and consonant sounds, monophthongs, diphthongs.

Introduction

All languages structure meaning at the level of the word, sentence or discourse. At all the levels of meaning, the *word* is very crucial since the meaning of a sentence or discourse depends on the meaning of the words which are its constituents. Words have form and meaning. There are spoken forms and conventionally accepted written forms. It is necessary therefore to distinguish a word (considered as a composite unit) from both the form and its meaning, in-order to reduce the ambiguity associated with some words. One spoken form (homophones) may have different written forms and meanings (Lyons, 1995:25). Homophones has in recent years become a subject that is of

interest to Linguistics and Communications scholars. The confusion of homophones has very serious negative implications on writing. Inappropriate use of homophones can create confusion and problems in the writing industry, business or academic papers. It also makes students get low grades. (Shoemaker, 2008).

Second language situations are no exception to the problems associated with homophones. And in Ghana, where English, although prestigious (plays an important role in politics, business, justice administration, the mass media, commerce, religion, and education), is a second language, it is not uncommon for students to write sentences such as these:

He toured the hole country. (whole)

The teacher will site an example in the class. (cite)

There was mud on the souls of her feet. (soles)

Second language varieties are however characterized by some linguistic features that might not be present in native-speaker varieties. In Ghana therefore, it is once again not uncommon for students to write such sentences as:

He will consult as. (us)

He forced her to drink the staff. (stuff)

The student was sucked for stealing. (sacked)

It must be noted that words like *as/us, staff/stuff,* and *sack/suck* are not homophones in the English language, but tend to be pronounced the same way in Ghana (making them homophones,) hence their confounding.

Although context helps in disambiguation, there are some situations that context cannot help much. An example is when at a stadium, a police officer intending to command his subordinates to shoot into the clouds, as a warning to calm irate spectators, ordered, "Shoot into the crowds." The result of this was disastrous. The context could not help to disambiguate the command the officer gave.

It is important therefore for studies to be conducted in this area of sense relations to create awareness of such words in the English Language.

Although scholars like Prator (1968) have registered their objection to the acceptance of second language varieties as valid, second language varieties of English continue to emerge, and are acknowledged by scholars such as Bamgbose (1996:9), Owusu Ansah (1997:24) and Adjaye (2005:277). Koranteng (2006) believes that the pronunciation of English in Ghana must be seen as a distinctive form that distinguishes the Ghanaian from other speakers of English; a form that can be called Ghanaian English (GhE).

Taking into consideration the propositions and assertions based on research conducted by the aforementioned linguists and researchers, it would be so unfair to base this study on British English or American English norms,

instead of a Ghanaian English norm. Words which are pronounced the same (homophones) in Ghana may not have the same pronunciation in other English norms, and vice versa. There is the need therefore to initially find the words which are not homophones in the English language, and yet are pronounced the same way by Ghanaians. Such words, in Ghana, are of the same features as the established homophones in the English language – they are pronounced the same way, though they have different spelling and different meaning. Ghanaians don't speak English with the RP (Koranteng, 2006), the basis for most of the established homophones in the English Language. Moreover, RP has lost the recognition and prestige it used to enjoy (Quartey, 2009:3).

Purpose of the study

This study sought to identify words that are not homophones in RP and yet have the same pronunciation in GhE. GhE differs from RP at various levels. The research therefore aimed to identify and present a compilation of such homophones in the English spoken by students of some SHSs. In so doing, awareness of the situation will be created.

Research questions

Questions which helped to achieve the research objectives included these:
- What are the words that are not homophones in English, and yet are pronounced the same way
  by SHS students in Ghana?
- What are the causes of such homophones?

Literature and theoretical basis

Homophones are words which have the same pronunciation, but different spelling and meaning. This is what Lyons (1995:25) refers to as one spoken form with different written forms and meanings. Yule (1996:120) asserts that when two or more different (written) forms have the same pronunciation, they are described as homophones, while the term homonymy refers to one form (written and spoken) with two or more unrelated meanings. In other words, words which have the same pronunciation and spelling but different meanings are homonyms. Thus homophony (same pronunciation) and homography (same spelling) make homonymy (same pronunciation and same spelling but different meanings). For example:

bank (side of a river) *bank* (turn, as in aeroplane)
capital (of a country) *capital* (blown out of proportion)

However, if the meanings of such words (with the same pronunciation and the same spelling) are related, they are *polysemous*. Such words include:

cup (a vessel for drinking) *cup* (the hand)
mouth (part of human body) *mouth* (bottle)

There is the need therefore to differentiate homophony from *homography, homonymy*, and *polysemy*. Lyons (1995: 55) asserts that the traditional definition that, homonymy is different words with the same form, is "to say the least, imprecise." The term *word* is ambiguous and could be substituted for 'lexeme.' However the definition remains defective since it fails to take into account that most lexemes in most languages have several forms. The definition also says nothing about grammatical equivalence. He therefore establishes a concept **absolute homonymy**, as opposed to **partial homonymy**. Absolute homonyms must have unrelated meaning and identical forms which are grammatically equivalent, e.g. *sole* (bottom of foot or shoe), *sole* (kind of fish). Partial homonyms have identity (minimal) of one form and at least another (not all) of the conditions stated for absolute homonymy. E.g. *found* (past/past participle of find), *found* (to establish).

According to Sekyi-Baidoo (2002:172), for words to be considered pure homophones, they should exhibit the same *suprasegmental* features (stress pattern), apart from having the same phones. This means that such words should be pronounced the same way. He is of the view that homophones and homographs (homonyms) are the most common source of lexical ambiguity. In the case of homophones, it is only in speech that the ambiguity can be noticed; in spelling their difference is clear. The problem with homophones however is the difficulty to select the appropriate writing form for a particular context. This may result in sentences which are absurd.

Shoemaker (2008) on the other hand describes homophones as words that sound alike, while having different meanings. He draws a difference between the confusion of homophones and *malpropism*, which is an intentional misuse of words to create confusion and humor.

The source of homophones in the English language can be traced to the lack of correspondence between the pronunciation and spelling of English words. A study of English (British or GAE) pronunciation and spelling has shown that there is absurdity in English spelling. This absurdity is attributed to the lack of regularized correspondence between the sound of a word in standard speech and its expression in written symbols. Valins (1949) attributes this to various reasons:

> In the first place the English alphabet or stock of symbols is deficient in written letters, and contains others that are not necessary. Indeed, twenty vowel sounds (pure vowels and diphthongs) are represented by just five written letters. The result is that one letter or symbol may represent more than one sound and one sound may be represented by more than one symbol, thereby creating homophones and homographs – homonyms.

> Eg. /s/ is represented by different symbols in the homophones *cite* / *site, cell* / *sell*, while /ɔ:/ has different representation of symbols in *laud* / *lord*.
>
> Secondly, the modern fixed spelling system, which dates only from the eighteenth century, is based on history (the original formation of words) rather than their actual sound in present day speech; it is etymological, rather than phonetic. Words that have different spelling and different meanings may therefore have the same pronunciation (homophones). Eg. *Air* / *heir, eyes* / *ice*.
>
> Finally, changes in the sound of words naturally may be faster than changes in their written form. Spelling lags behind pronunciation. The pronunciation of some words can change to coincide with other pronunciations, but spelling may remain the same over a long period, resulting in homophones. (P. 110 - 129)

The final situation is true of English in the Ghanaian situation - pronunciation of English words by some Ghanaians change to coincide with other pronunciations.

Though it is quite challenging to deal with homophones, scholars suggest regular reading as a means by which their confusion can be minimized, if not prevented. Reading enhances knowledge of the meanings and different spellings of words which are pronounced the same way, and the spelling that is appropriate in a particular context.

Judith Backley (2009) in an article, *Easy Ways to Distinguish Difficult Homophones,* suggests that homophones can be distinguished by their meanings, usage, word class and their compounds. For example, 'affect/effect,' 'bare/bear,' and 'passed/past' can be distinguished by word class (their parts of speech), while 'cite/site/sight' could be distinguished by their compounds such as 'recite/website/eyesight.' It must be noted here that *re-cite → recite* is more of affixation than compounding, suggesting that homophones can also be distinguished by the affixes they take.

Writing in the Daily Graphic (December 19, 2008:11), Africanus Owusu Ansah states that it is imperative to consider words which are often confused, "not because they are homophones or homonyms but because they often get mixed up." Such words include 'border/bother,' 'cease/seize,' and 'faithful/fateful.' For example, "Both speakers highlighted important issues bothering on race, education, conflict resolution …" Although Owusu Ansah did well by drawing attention to such words, what he failed to recognize is that the confounding of such words emanates from same pronunciation (i.e. homophones) by those who confuse them.

Dolphyne (1999:97) states that most of the mistakes that are made in spelling can be traced to mispronunciation of words, in which pairs like 'tend/turn'; 'touch/torch' and 'leaving/living' are given the same

pronunciation. Huber (2008:75) on the same phenomenon states that there is the tendency in GhE to neutralize the distinction that exists between some RP vowels, resulting in homophony of RP minimal pairs. In all of this, they don't disagree with Adjaye in their general findings, though the details or statement (wording) may have some variations.

Similar to Huber (2008), Dako (2001) and Koranteng (2006), Adjaye (2005) which provides the basis for this work gives revealing features that make GhE distinctive. She used a total of 38 respondents whose educational level ranged from first cycle to tertiary. With regard to their L1, 15 spoke Akan, 12 spoke Ewe while 11 spoke Ga (p.30-34). She concluded that there is a Ghanaian English accent. It has a '16 – term vowel system' that is characteristically Ghanaian. There can however be up to '20 terms' in some individuals' idiolects. The difference between RP vowels and GhE vowels is the absence of /ʌ, ʊ, ə, ɜ: / in GhE. RP /ɜ:/ is merged with /ɜə/ and both realized as [ɛ:], /ʌ/ is merged with /æ/ and realized as [a], or with /ɒ/, realized as [ɔ]; /ʊ/ is merged with /u:/ and realized as [u]; final open /ə/ with /æ/ is realized as [a], non-final, broadly as [ɛ, a, ɔ] according to spelling. In addition RP diphthongs /eɪ/, /əʊ, and /ɛə/ are monophthongized into [e:], [o], and [ɛ:] respectively.

With regard to consonants, Adjaye (2005) asserts that out of the 24 RP consonants - / p, b, t, d, k, g, f, v, θ, ð, s, z, ʃ, ʒ, h, tʃ, dʒ, m, n, ŋ, l, r, j, w/, GhE has 20. /θ/, /ð/, /ʒ/, and /ŋ/ are not phonemes in GhE. /ʒ/ and /ŋ/ may be realized as variants of /ʃ/ and /n/ respectively. There can however be all the 24 RP vowels in the idiolects of some GhE speakers.

Apart from its segments, other features that make GhE distinctive include the tendency for:

- Vowel Elision
  The shwa vowel /ə/ in a non-final position is elided. E.g. *bursary* [bɛzri]
- Consonant Cluster Deletion
  Yod – deletion, i.e. /j/ deletion in initial clusters of words like *student, human, stupid* and *during*.

  At word-medial cluster, /k, g/ is elided before another consonant. For example: *accident* [ˈasidɛnt~ˈasɪdənt]; *exept* [ɛˈsɛpt]; *exam* [ˈɛzam]; *exactly* [ɛˈzatli].

  Reduction in two term, three term and four term final clusters, like *affect* [aˈfɛt]; *contact* [ˈkɔntat~kɔŋtat]; *context* [ˈkʰɔntɛst]; *next* [nɛst]; *texts* [tʰɛsts~t̪ɛst~tʰɛks]
- Metathesis of /s/ and /k/ in /_sk/ clusters, as in *ask* [ɑks~aks]; *desk* [dɛks~d̪ɛks]

- Vowel nasalization in the vicinity of nasal consonants. For example *mean* [mĩ:n]; never [nɛ̃va]. (Dolphyne 1965:50, cited by Adjaye 2005).
- Realizing the past/past participle {_ed} as voiced (_d/_əd) irrespective of its environment.
- Realizing the noun plural/ possessive or third person singular {_s} as voiceless (_s/_ɪs) irrespective of its environment.
- Stress shift in multi-syllabic words. (Koranteng, 2006:333)

The work uses these findings to identify mergers in GhE, of RP contrastive pronunciations.

This work is also within the purview of the Accent Phonology Theory propounded by Trubetzkoy (1931) and re-echoed by Gimson (2001:84) to show the differences between accents. It states that the differences that exist between accents can be looked at on four levels:

- Systemic differences.
- Realization differences.
- Lexical differences.
- Distributional differences.

This work compares the RP accent with the accent that is used by the respondents (GhE) to particularly identify the incidence of lexical variations resulting in the same pronunciation (homophones) of contrastive pronunciations in RP.

Methodology and Data Collection

Selection of Educational Level

The Senior High School (SHS) level was selected for this work, particularly because that is the highest level at which all students receive intensive tuition with regard to the English language. This does not mean that English is not taught at levels higher than SHS; there are Departments of English and Linguistics which offer undergraduate and postgraduate programs for some university students. However, except for a year or less lessons on communication skills for all tertiary level students, and tuition in the teaching of English for teacher trainees, most educated Ghanaians cease intensive studies of the English language after SHS. The kind of English they speak is basically what they learnt from the primary level up to SHS level, in spite of their higher education. In addition to the SHS being the level at which there is serious teaching and learning of English for all students, it is also the point of convergence for students from different parts of the country. Those whose English show features of L1 transference not shared by other Ghanaians therefore have the opportunity to reshape the way they speak English. This means that using the SHS for this study will help identify the shared features

of English as it is spoken by Ghanaians. The SHS level is therefore crucial when it comes to the kind of English Ghanaians speak.

Selection of Schools

Four public senior high schools were randomly selected for this study. The schools were selected from two regions for other reasons apart from convenience. They have students from all parts of the country, and therefore cannot be said to represent just one Ghanaian ethnic group. In addition to that, it has been established that there are features of GhE that are common to all Ghanaians irrespective of their L1 or the part of Ghana they come from (Dako, 2001) (Huber, 2008:74). One category 'A' school and one category 'C' school (GES Categorization of Schools, 2010) were selected in each of the two regions (Eastern and Greater Accra). The category 'A' class of schools has a higher intake of students/children from English-speaking urban schools and homes than those in the other categories. The two categories were selected so that the findings can neither be said to be that of the privileged schools only, nor that of the under-privileged schools only, but a representation of the SHS system in Ghana. The category 'A' schools were, Presbyterian Boys Secondary School – Legon, and Aburi Girls Secondary School, while West Africa Secondary School – Accra, and Presbyterian Secondary School – Begoro, constituted the category 'C' schools selected.

Selection and Description of Respondent

Five students were selected from each of the four schools making a total of twenty respondents. Eight were General Arts students, six were Business students, and six were from the Sciences. This was once again to ensure that the respondents fairly represent SHS students. To ensure gender fairness, ten of the respondents were females while the other ten were males. To qualify as a respondent one needed to have been a student of the selected school for at least one year, and must speak at least one Ghanaian language. It was to ensure that the respondents had spent some time at the SHS level and so must have had the opportunity to reshape the way they speak English. In other words, they must have the shared features of English as it is spoken by Ghanaians, having spent at least a year in the school. The table below provides information on respondents' sex, age, home town, place of residence, and the languages they speak, apart from English.

Data Collection

The data for analysis in this study consisted of sentences which respondents had to read out. Their readings were recorded with a very good quality recorder (Zoom H2) and saved on a computer for later listening and transcription. Before a respondent read the sentences, s/he was engaged in an

interview to find his or her linguistic, educational and social background. It offered the chance for free speech, as well as providing information for respondents' description.

Reading material

The reading material was made up of two lists (A and B) of 100 sentences. Each sentence in list A contains a word which may be pronounced the same with a word in a corresponding sentence number in list B. Such words are not homophones in RP, but may be realized as such in Ghana due to the distinctiveness of GhE discussed in the literature.

Procedure

The respondents from Presbyterian Boys' Secondary School, Legon, were the first to be recorded. Five students were selected, but it was ensured that there was at least one student from the Sciences, Arts, and Business. The respondents were recorded one after the other in a quiet room. First was the interview, after which Set A sentences were read, followed by Set B sentences. The same procedure was repeated in the other schools.

Before every recording however, it was ensured that permission had been given by a respondent's school's authority, and the respondent had been given prior information of the recording, and that s/he was willing and ready to be recorded.

Data Analysis and Discussion

The recordings were transferred from the recorder to a computer and were transcribed using RP as a reference point. For each pair of words, the respondents' pronunciations were analyzed. If more than 50% of the respondents pronounced the pair the same way, then they could be said to have realized as homophones. However, if there was more than one same pronunciation of any pair of words, any pronunciation that qualified as a realization of the homophones was required be the realization of at least 25% of respondents. That was meant to forestall any situation where a respondent's idiolect would be taken as a general way of pronunciation of a pair.

All the symbols used by various phoneticians to represent the twenty English vowel phonemes (adapted from Awonusi, 1999:10 by Koranteng 2006:57) were considered. Gimson's (1980) was adopted for this study; however, a change was made in the transcription of vowel number 3. Vowel number 3 has been transcribed in this study as /ɛ/, after Ida Ward (1958), Wells & Colson (1971), and Fromkin & Rodman (1974), instead of Gimson's /e/. That permitted differentiation between respondents' realization of vowel number 3 - /ɛ/ and [e], the initial vowel sound in the diphthong /eɪ/. There is the tendency among Ghanaians to realize the diphthong /eɪ/ as [e:]

Homophonous Realization of RP Contrastive Pronunciations

67 out of the 100 pairs of words looked at in this study are homophonous. 50% or more of respondents have the same pronunciation for the words that make each pair:

Number	Words and RP pronunciations		Homophonous realization in GhE
1	accent /ˈæksənt/	assent /əˈsɛnt/	/ˈasɛnt/
2	adder /ˈædə/	other /ˈʌðə/	/ˈada/
3	back /bæk/	buck /bʌk/	/bak/
4	bad /bæd/	bud /bʌd/	/bad/
5	bag /bæg/	bug /bʌg/	/bag/
6	bat /bæt/	but /bʌt/	/bat/
7	bed /bɛd/	bird /bɜ:d/	/bɛd/
8	brace /breɪs/	braise /breɪz/	/brez/
9	branch /brɑ:ntʃ/	brunch /brʌntʃ/	/brantʃ/
10	brash /bræʃ/	brush /brʌʃ/	/braʃ/
11	cancel /ˈkænsəl/	counsel /ˈkaʊnsəl/	/ˈkansəl/
12	cap /kæp/	cup /kʌp/	/kap/
13	cease /si:s/	seize /si:z/	/si·z > si:z/
14	cheek /tʃi:k/	chick /tʃɪk/	/tʃɪk/
15	consort /kənˈsɔ:t/	consult /kənˈsʌlt/	/kɔnˈsɔt/
16	crash /kræʃ/	crush /krʌʃ/	/kraʃ/
17	crate /kreɪt/	create /kriˈeɪt/	/kret/
18	damp /dæmp/	dump /dʌmp/	/damp/
19	dare /dɛə/	there /ðɛə/	/dɛ·/
20	deal /di:l/	dill /dɪl/	/dɪl/
21	den /dɛn/	then /ðɛn/	/dɛn/
22	dough /dəʊ/	though /ðəʊ/	/do·/
23	drag /dræg/	drug /drʌg/	/drag/
24	edge /ɛdʒ/	urge /ɜ:dʒ/	/ɛdʒ/
25	fault /fɔ:lt/	fort /fɔ:t/	/fɔ·t/
26	flash /flæʃ/	flush /flʌʃ/	/flaʃ/
27	grant /grænt/	grunt /grʌnt/	/grant/
28	hag /hæg/	hug /hʌg/	/hag/
29	hat /hæt/	hut /hʌt/	/hat/
30	hatch /hætʃ/	hutch /hʌtʃ/	/hatʃ/
31	heal /hi:l/	hill /hɪl/	/hɪl/
32	high /haɪ/	hire /ˈhaɪə/	/haɪ/
33	just /dʒʌst/	jest /dʒɛst/	/dʒɛst/
34	keel /ki:l/	kill /kɪl/	/kɪl/
35	lack /læk/	luck /lʌk/	/lak/
36	ladder /ˈlædə/	lather /ˈlæðə/	/ˈlada/
37	lamp /læmp/	lump /lʌmp/	/lamp/
38	last /læst/	lust /lʌst/	/last/
39	launch /lɔ:ntʃ/	lunch /lʌntʃ/	/lantʃ/

40	leave /li:v/	live /lɪv/	/li·v/
41	look /lʊk/	luke /lu:k/	/luk/
42	mad /mæd/	mud /mʌd/	/mad/
43	mast /mæst/	must /mʌst/	/mast/
44	match /mætʃ/	much /mʌtʃ/	/matʃ/
45	nest /nɛst/	next /nɛkst/	/nɛst/
46	peel /pi:l/	pill /pɪl/	/pɪl/
47	pool /pu:l/	pull /pʊl/	/pul/
48	potable /ˈpəʊtəbəl/	portable /ˈpɔ:təbəl/	/ˈpɔtabʊl/
49	price /praɪs/	prize /praɪz/	/praɪs/
50	quiet /ˈkwaɪət/	quite /kwaɪt/	/kwaɪɛt ~ kwaɪt/
51	rash /ræʃ/	rush /rʌʃ/	/raʃ/
52	sack /sæk/	suck /sʌk/	/sak/
53	scheme /ski:m/	skim /skɪm/	/skim/
54	slam /slæm/	slum /slʌm/	/slam/
55	span /spæn/	spun /spʌn/	/span/
56	stab /stæb/	stub/ stʌb/	/stab/
57	staff /stæf/	stuff /stʌf/	/staf/
58	stamp /stæmp/	stump /stʌmp/	/stamp/
59	steal /sti:l/	still /stɪl/	/stɪl/
60	tamper /ˈtæmpə/	temper /ˈtɛmpə/	/ˈtɛmpa/
61	taught /tɔ:t/	thought /θɔ:t/	/tɔt/
62	tend /tɛnd/	turn /tɜ:n/	/tɛn/
63	test /tɛst/	text /tɛkst/	/tɛst/
64	tie /taɪ/	tyre /ˈtaɪə/	/taɪ/
65	tongs /tɒŋz/	tongues /tʌŋz/	/tɔŋs > taŋs/
66	track /træk/	truck /trʌk/	/trak/
67	wean /wi:n/	win /wɪn/	/win/

Tendencies that Result in Homophony of RP Contrastive Pronunciations

The homophony of the words was as a result of certain 'tendencies' (Huber, 2008) that Ghanaian speakers of English exhibit. They are the same tendencies that mark out the Ghanaian from other speakers of English, (Dako 2001). The conversion of the pairs into homophones was due to one or a combination of these tendencies:

- Merger of two or more RP sounds and given one realization (coallescence). Words that are contrastive only in such sounds become homophonous. The data reveal that /æ/, /ʌ/, and /ə/ were realized as /a/. Words like *staff/stuff, damp/dump, slam/slum*, etc. which are contrastive only in /æ/ and /ʌ/, therefore become homophonous.
- Replacement of segments of some words with others. The resulting pronunciation in such cases may coincide with others, making them homophonous. In the homophony of *wean/win*,

steal/still, and peal/pill, the long front high vowel /i:/ is replaced with the short one /ɪ/.

- Deletion of segments.
  Deletion of a segment of a word may also result in homophony. That is when the elided segment or syllable is what differentiates the word's pronunciation from that of other words. For instance deletion of /k/ from the cluster /_kst/ results in the homophony of *test/text*, and *nest/next*. In *accent/assent*, /k/ is deleted from the cluster /_ks_/.
- Reduction in the number of syllables of some words.
  The homophony of some RP contrastive lexical items is as a result of reduction in the number of syllables of some words. *Crate/create* are homophonous because *create*, a di-syllabic word, is realized as mono-syllabic.
- Insertion of sounds or segments in words.
  Homophony of RP contrastive words may also be due to insertion of a segment or segments in some words. The pronunciation of such words may change to coincide with those of others. For example the shwa vowel in *quiet*/ˈkwaɪət/ is replaced with /ɛ/. The removal of this segment from *quiet* or it's insertion in *quite* renders them homophonous – *quiet/quit* /ˈkwaɪɛt ~ ˈkwaɪt/.
- Monophthongization of RP diphthongs and diphthongization of RP triphthongs.
  Two words may be the same in all segments, except that one has a diphthong and the other has a monophthong. Such words are different in their realizations. However if the diphthong is monophthongized, the pronunciation of both words become the same, and therefore renders them homophonous. A word that contains a triphthong too may change to coincide with the pronunciation of other words, if the triphthong is reduced to a monophthong. *Cancel/counsel* become homophonous because the diphthong in *counsel* /_ɑu_/ is made a monophthong /a/ which is also the realization of /æ/ in *cancel*. The two words therefore become homophonous. Similarly, *high/hire*, and *tie/tyre* become homophonous because the triphthong in *hire*, as well as *tyre* /aɪə/ is diphthongized.
- Voiced realization of segments which are voiceless in RP.
  Words may be different in pronunciation only because a segment in one differs just in voicing from a similar segment in a similar position of the other. Such words become homophonous when the voicing of the contrastive segments are made the same. *Cease/seize*, and *brace/braise* are homophonous because the voiceless alveolar fricative sound /s/ in *cease* and *brace* are made voiced /z/ to coincide with the pronunciation of *seize* and *brace* respectively.

Other Tendencies

Respondents exhibited other additional tendencies. These are tendencies which may not directly result in homophony of RP contrastive words, but are worthy of note since they confirm the findings of earlier research in GhE pronunciation. Such tendencies may also lead to contrastive pronunciation of RP homophones such as *miner/minor/ˈmaɪnə/* → *miner/ˈmaɪna/and minor*/ˈmaɪnɔ/, *one/won* /wʌn/ → *one* /wan/, and *won* /wɔn/.

- Absence of Weak forms.
  RP weak forms are made strong but are said on a low tone to differentiate them from stressed syllables. Thus a low tone replaces an unstressed syllable, and the shwa vowel which marks most unstressed syllables in RP is therefore seldom used. For instance, *ladder*/ˈlædə/ is realized as /ˈlada/, *temper*/ˈtɛmpə/ as /ˈtɛmpa/, and *lather*/ˈlæðə/ as /ˈlada/.
- Reduction in the length of long vowels. This does not result in homophony, but may make homophones differ in pronunciation. It must be noted that short vowels differ from long vowels not only in length but in quality too. Just reducing the length of a long vowel will therefore not make it coincide with a short vowel. Both the length and quality need to change to coincide with a short vowel, before homophony may result. It cannot therefore be just reduction in length of a long vowel but rather a Replacement. /u:/, /ɔ:/, and /i:/ are reduced in length in *pool*/pul/, *taught*/tɔt/, and *wean*/win/ respectively.
- Absence of secondary stress. With word stress the data revealed that stress placement in two/three syllable words is not different from that of RP. However secondary stress in words such as *ideal* is not realised – *ideal*/ˌaɪˈdɪəl/ is realized as /aɪˈdɪl >aɪˈdil/.
- Substitution of the glottal stop for plosive sounds. This is a tendency among young Ghanaians, and could be attributed to the inroads that American English is making into Ghanaian English. This usually happens to the voiceless alveolar stop in the final position of words like *but* [baʔ]. (Page 47).

Factors Leading to the Tendencies

- L1 transference.
  The influence of the L1 of Ghanaian speakers of English may also result in coalescence of RP segments, which may also result in homophony of RP contrastive pronunciations. Two or more sounds may be merged and given a preferred realization based on speakers' L1 e.g. /æ/, /ʌ/, /ə/ → /a/. RP words which are contrastive only in those

segments become homophones. The combinatorial factors of speakers' L1 too may be taken over to English. Vowel harmony requires that only vowels of one set occur in polysyllabic words. This may make certain words select other sounds than what is in RP. The result then will be replacement or coalescence, which may further result in homophony. *Accent* and *assent* are pronounced the same way partly due to the transfer of vowel harmony to English. (Page 41)

- Simplification of English
  Little or slight differences in the pronunciation of certain words are taken for granted. The production and pronunciation therefore, of similar but not same sounds and words, are made the same; usually by the realization of the most popular or frequently occurring.
- Spelling pronunciation
- Analogy.
  Some words are pronounced based on analogy. That is pronouncing a word based on experience with similar words, and the result may not be the same as it is in RP. It may result in insertion, replacement, deletion, etc. and may result in homophony. For instance, words like *pool* /pu:l/, *tool* /tu:l/, *food* /fu:d/, inform the pronunciation of *look* /lu:k/, which is homophonous with *luke* /lu:k/; however /u:/ is reduced in length, making both *look* and *luke* realized as /luk/.
- GhE operates on a reduced number of sounds, compared with RP.

Thus the forgoing tendencies as exhibited by the respondents (second language speakers of English) resulted directly or indirectly in the homophonous realization of contrastive English words. These are tendencies that characterize second language varieties, making them distinctive from other varieties.

Conclusion

This study sought to identify and compile RP contrastive pronunciations that are homophonous in the English spoken by the respondents. It was also to create awareness of the situation and confirm the findings of earlier research on GhE pronunciation, which also provide the basis for this study.

The Accent Phonology Theory by Trubetzkoy (1931), re-echoed by Gimson (2001) was used to identify particularly, the lexical variations that exist between RP and the English spoken by the respondents and which result in the homophony of RP contrastive pronunciations. It was also to find the causes of the homophonous realizations.

67 out of one hundred pairs of contrastive words were found to be homophonous in the English spoken by the respondents. (Refer – Data Analysis and Discussion)

It was also found that some RP homophones like *miner/minor*, *one/won* are pronounced differently. All these differences in RP and the English spoken by the respondents come about due to one or a combination of certain tendencies, which are further due to certain factors that affect the way they speak English.

The findings go to confirm earlier research findings that the English spoken by Ghanaians is distinctive. Words which are homophonous therefore in GhE may not be homophonous in RP and other accents of English, and vice – versa. The way such words are treated (whether pronounced the same or not) may affect spelling and usage, which may in turn affect meaning and communication in general.

Although, the decision to give recognition to such homophonous realizations of contrastive RP words is beyond the scope of this work, if the findings of earlier research on GhE is anything to go by, then such homophonous realizations of contrastive RP words may provide useful information for students, teachers, journalists and all those who use English for communication either in Ghana or with Ghanaians. If Ghana would however still regard its English as British Standard, and therefore continue to use RP to examine students who neither speak with that accent nor are taught by teachers who can speak with it, then a lot more needs to be done to provide the right models for teachers and students in order to improve on the prevailing situation.

References:

1. Adjaye, S. A. (2005). Ghanaian English Pronunciation. New York: The Edwin Mellen Press.
2. Ahulu, S. (1944). How Ghanaian is Ghanaian English? English Today 38: 25 – 29.
3. Awonusi, V. O. (1999). Coping with English Pronunciation. Obaroh & Ogbinaka Publishers Ltd.
4. Backley, J. (2009). Easy Ways to Distinguish Difficult Homophones. Retrieved from http//research-writing-tecniques.suit101.com/article.cfm//.
5. Bamgbose, A. (1996). Non-Native Englishes on Trial. In M. E. Kropp Dakubu, (Ed) pg. 9 - 22, English in Ghana. Accra: Black Mask Publishers.
6. Dalton, C. & Seidlhofer, B. (1994). Pronunciation. Oxford: Oxford University Press.

7. Dako, K. (2001). The Sound System of Ghanaian English. In Exploration: Journal of the English Department. Vol. 1, No.1: pg. 107-119.
8. Dolphyne, F. A. (1999). The Teaching of Spoken English. In M. E. Kropp Dakubu, (Ed), Teaching English in Ghana. Accra :Ghana English Studies Association.
9. Ellis, R. (1994). The Study of Second Language Acquisition. Oxford University Press.
10. Gimson, A. C. (2001). Gimson's Pronunciation of English (6th ed) revised by A.Cruttenden. Arnold Publishers.
11. Grieve, D. W. (1964). English Language Examining. African University Press.
12. Huber, M. (2008). Ghanaian English: Phonology. In Varieties of English: Africa, South and Southeast Asia, pg. 67 - 91. Berlin:Mouton de Gruyter.
13. Jenkins, J. (2000). The Phonology of English as an International Language: New Models, New Norms, New Goals. Oxford University Press.
14. Jones, D. (1960). An Outline of English Phonetics (9th ed), London: CambridgeUniversity Press.
15. Koranteng, L. A. (2006). Ghanaian English: A Description of its Sound System and Phonological Features. Unpublished Ph.D. Thesis, University of Ghana.
16. Longman (1995). Dictionary of Contemporary English. Edinburgh: Pearson EducationLimited.
17. Lyons, J. (1977). Semantic 2. Cambridge: University Press.
18. Lyons, J. (1995). Linguistic Semantics: An Introduction. Cambidge: University Press.
19. McArthur, T. (1992). The Oxford Companion to the English Language. Oxford
20. University Press.
21. Owusu-Ansah, A. (2008). Homophones and Homonyms. Daily Graphic, Dec.19, pg.11.
22. Owusu-Ansah, L. (1997). Nativisation and the Maintenance of Standards in Non-Native
23. Varieties of English. In M. E. Dakubu (ed.) pg.23-33 English in Ghana. Accra:
24. Black Mask Publishers.
25. Prator, C. H. (1968). The British Heresy in TESL. In J. A. Fishman, C. A. Ferguson and
26. J. Das Gupta(eds.), Language Problems of Developing Nations. New York: John

27. Wiley & Sons pp. 459-76.
28. Quartey, E. (2009). Phonological Features of English as Spoken by Some Final Year
29. Senior High School Students in Ghana. Unpublished M.Phil. Thesis, University
30. of Ghana.
31. Roach, P (1991). English Phonetics and Phonology. Cambridge: Cambridge University
32. Press.
33. Sackey, J. (1997). The English Language in Ghana: A Historical Perspective. In M.E.
34. Dakubu (ed.) pg.126-139 English in Ghana. Accra: Black Mask Publishers.
35. Sekyi-Baidoo, Y. (2002). Semantics: An Introduction. Kumasi-Ghana: Wilas Press Ltd.
36. Sey, K. A. (1973). Ghanaian English: An Exploratory Survey. London: Macmillan.
37. Shoemaker, R. (2008). Grammar Help: Homophones.2008. Retrieved from
38. http://languagestyle.suit101.com/article.cfm//.
39. Trubetzkoy, N. S. (1949), Principles de Phonologie. transl. J. Cantineau, Paris: Klinksiek.
40. Trudgil, P. (1944). The Dialects of England. Cambridge: Blackwell Publishers.
41. Valins, G. H. (1949). The Making and Meaning of Words. London: Adam and Charles
42. Black.
43. Winford, D. (2003). An Introduction to Contact Linguistics. Malden: Blackwell.
44. Yule, G. (1996). The Study of Language. Cambridge: Cambridge University Press.

APPENDICES

WORD LIST A

Accent, adapt, adder, aerial, author, back, bad, bag, bat, beach, beat, bed, boot, brace, branch, brash, breather, cancel, cap, cease, cheek, chide, consort, corporate, crash, crate, damp, dare, deaf, deal, defile, den, dine, dose, dough, drag, each, eat, edge, fault, flash, formal, grant, hag, hat, hatch, heal, heat, high, ideal, intend, just, keel, lack, ladder, lamp, last, laud, launch, leak, leap, leave, look, mad, mast, match, miss, nest, packet, peak, peel, pool, potable, price, quarry, quiet, rash, read, reap, sack, scheme, seat, seek, seep, slam, sleep, span, stab, staff, stamp, steal, tamper, taught, tend, test, thin, tie, tongs, track, wean, Miner, one.

WORD LIST B

Assent, adopt, other, area, utter, buck, bud, bug, but, bitch, bit, bird, booth, braise, brunch, brush, breeder, counsel, cup, seize, chick, child, consult, culprit, crush, create, dump, there, death, dill, defy, then, thine, those, though, drug, itch, it, urge, fort, flush, former, grunt, hug, hut, hutch, hill, hit, hire, idle, in-turn, jest, kill, luck, lather, lump, lust, loud, lunch, lick, lip, live, luke, mud, must, much, mix, next, pocket, pick, pill, pull, portable, prize, query, quite, rush, rid, rip, suck, skim, sit, sick, sip, slum, slip, spun, stub, stuff, stump, still, temper, thought, turn, text, tin, tyre, tongues, truck, win, Minor, won.

Issues of Foreign Language Learning Through Formulaic Language Translation

Jolita Horbacauskiene
Lukas Volskis
Kaunas University of Technology, Lithuania

Doi: 10.19044/llc.v6no2a5 URL:http://dx.doi.org/10.19044/llc.v6no2a5

Abstract

Formulaic language acts as an important part of our language which is reflected in the use of multi word units such as collocations, idioms, proverbs or other expressions. The use of those elements is mostly referred to maintaining our social interactions for communication purposes. The aim of this paper is to analyse translation procedures of formulaic language elements from the source language to the target language and disclose the challenges and advantages of such assignments for foreign language learning.

Keywords: foreign language learning, Formulaic language sequences, translation assignments.

Introduction

Formulaic language acts as an important part of our language which is reflected in the use of multi word units such as collocations, idioms, proverbs or other expressions. The use of those elements is mostly referred to maintaining our social interactions for communication purposes. Combinations of words, such as fixed phrases or idiomatic expressions are considered to be formulaic. Numerous studies revealed that formulaic language has an immeasurable impact to the processes of acquiring, learning and producing the language. Despite the fact that until now this area is still considered as developing it is agreed that mainly formulaic language focuses on how words tend to group together and while being in units, operate as single wholes. The instances of formulaic language are frequent in the text of popular science texts if compared to any other kind of scientific texts where the vocabulary is less expressive. A number of studies conducted on formulaic language elements focused on the frequently they tend to occur, in which linguistic discourses they were found most commonly and what problems the learners of foreign language faced while dealing with them. This paper

analyses what translation strategies are taken into consideration by a translator when doing the translation in the discourse of popular science texts.

Formulaic Sequences and their Functions

Texts are compiled of a large number of multi word sequences, in which some of the words co-occur with other ones and they form fixed word combinations. This phenomenon is referred to as formulaic language, and each individual case of it is called a formulaic sequence. According to Wood (2010) "formulaic sequence is a sequence of words or other meaning elements, which is, or appears to be, prefabricated. It is, stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the grammar of the language". Usually formulaic sequences are found in the forms of collocations, idioms, proverbs or sayings – despite the fact, that those units consist of more than one word, they operate as single wholes. Schmitt (2004) states that there might be some difficulties developing a comprehensive definition of formulaic language due to the fact that examples of it exist in many different forms, and, they are diverse, so it remains one of the main problems in this area of linguistics, while Moon suggests to define this phenomenon as "multi-word items" (2011, p. 44). Formulaic language facilitates efficient language processing from the perspective of two modes, namely - processing word sequences as single units and analysing them into smaller segments based on grammatical rules. Another aspect which should be taken into account, is that formulaic language is ubiquitous: at least 55% of the words in an English text form parts of prefabricated multi-word units (Hsu, 2014). Despite the prevalence of formulaic language, there are many disagreements about which sequences and multi word units are considered formulaic. As mentioned before, idioms, phrasal verbs, set phrases, proverbs and proper names are relatively fixed word sequences and they reflect one aspect of formulaic language. On the other hand, lexical bundles are also considered as subgroups of formulaic language, since they are recurrent word combinations. As Schmitt (2004) states diversity remains one of the main reasons why it is difficult to draw explicit definition of formulaic sequences. They are commonly used for different purposes: to express a message or an idea, function, or to transact specific information in a precise and understandable way. The term formulaic sequence covers a wide range of phraseology, but, as mentioned above, since there is much diversity in this field, there is no absolute criterion by which those sequences could be defined.

One common type of function that is often realised by formulaic sequence is to maintain social interaction employing light conversations to pass the time. The content of conversation becomes less important that the whole process of communication. During this process, people usually rely upon sets of conversationalized phrases, which do not impose any personal

life issues and just let the conversation flow. Another specific function of formulaic sequences is the realisation of the discourse organisation. Sometimes the purpose of using those sequences is to transact information in precise and efficient manner. Scientific words in this discourse accomplish this purpose, but it does not mean that scientific dictionary is ought to be limited into single words. The specific type of scientific formulaic sequences is likely to be prevalent in scientific discourse, as Wray (2002) states, there are numbers of other purposes that formulaic sequences accomplish. Because of the fact, that formulaic sequences are frequently used in language, they act up as not important only to efficient, but also to appropriate use of language.

Translation Issues of Formulaic Sequences

When translating into English, there are many obstacles that translators deal with: complex sentences, specific terminology, unknown words in the source text. First, if source and target languages have sentences with different syntactical and lexical features, they have to be completely clear, or, in other words, become readable and comprehensible. It may be achieved by choosing appropriate meaning and forms of words. Secondly, technical and/or scientific text has to be concise. Conciseness might be described as a phenomenon, which improves the basic organisation of original document. Poorly organised document will not let the reader smoothly go through the text. It can be improved by omitting unnecessary words, which do not contribute to the meaning. By doing that, the translator must ensure that every idea remains included and transferred from the original. Lastly, the translation has to be correct. The phenomenon of correctness can be described in two ways - the accurate rendering of the main ideas and terminology from source to target language and to produce an accurate document in the target language despite any mistakes and inaccuracies in the source document.

One more aspect of technical vocabulary that should be taken into account when translating is a distinction between technical and descriptive terms. The writer of a source language could use a descriptive term when writing about technical objects as based on Newmark (1988) pointed three main reasons to explain this: the object is new and yet there is no name to describe it; the descriptive term is used as a familiar alternative seeking to avoid repetition; the descriptive term is used in order to make a contrast with another term.

Usually the translator takes into account technical and descriptive terms according to their counterparts, and, avoids showing his or her personal knowledge by translating a descriptive term according to a meaning of a technical term. However, in such instances when descriptive terms in source language are being used because of the fact, that appropriate terms do not exist, or the object might seem to be unknown to the audience, then the translator is

ought to translate a descriptive term by a technical term. It is agreed, that technical terms are more precise, clear and more narrow semantically if compared to descriptive terms, so it could be argued that maintaining this kind of preciseness will help the reader to feel more comfortable when reading, or even going quickly through the text in the cases of looking for specific information. On the other hand, descriptive terms could serve various communicative purposes, e.g. when a technical term is rare, or there is a lack of it in the dictionary of a source language.

Technical texts, according to Wright et al. (1993) are considered to be special language texts as they include not only specific terminology, but also require certain knowledge and understanding of the subject field. Translators of such texts are usually highly trained linguists, who develop specialised skills in specific technical or scientific areas.

When analysing scientific discourse of a collocation, it is important to mention, that there are no specific terminology or specialised collocations that could possibly include different combinations of verbs, adjectives, adverbs or nouns. When a translator has to deal with identifying this kind of register, it becomes very important to render such instances into accurate and natural equivalents, in order to make that specific scientific topic understandable to a non-specialised audience. The process of identifying might be a challenge, because until now multi word terms and collocations consisting of noun-noun or adjective-noun are not strictly distinguished. Consequently, each word combination, which can be recognised as a technical collocation, requires certain knowledge to analyse a particular combination is an example of one exact concept, and which is a substitute example of a related concept. Heid (2001, p. 788-9) developed four main principles that could be helpful to identify and analyse collocations: every collocation involves two lexemes and one of them two must be a term, which probably has a conceptual description; elements of a collocation could be collocations themselves, especially if there is an instance of such collocation: (adjective + noun = collocation) + verb; most of European languages have collocational categories for two lexemes, based on noun + noun, noun + adjective, noun + verb, adverb + adjective, verb + adverb structure; a relationship between components of a collocation exist when one lexeme is a base (determined element), while the other is collocate (determining element).

One more approach proposed by Manning and Schutze (1999, p. 172-3), is a three-criteria- system: non-compositionality, non-substitutability, and non-modifiability. The first criterion refers to the fact that the meaning of a collocation could not be compared as equal to the meanings of its separate parts. The second criteria of non-substitutability states that none of collocation components can be replaced with synonyms. And, finally, the last criteria of

non-modifiability states that collocations cannot be freely modified by adding lexical material or transforming them grammatically.

When discussing the translation problems of collocations, the issues raised by Baker (1992) should be taken into account: as long as a collocation is found in the target language, and it conveys the same or a similar meaning to the one from source language, the translator will not get confused; in the source text, a collocation may be easily misinterpreted due to the interference from translator's native language. This occurs in such cases when a collocation corresponds in form to a common collocation in the target language; when rendering unmarked collocations from source language into native language, the translator usually aims at producing a collocation which will be typical in his /her language, and at the same time, he or she will preserve the meaning associated with the source language collocation. The problem is that this aim cannot be always accomplished: there is always tension between choosing what is typical, and what is accurate. The nearest suitable collocation in the target language will often involve some shifts in the meaning. Those shifts may be slight or they can be significant. The significance of those meaning differences result in producing inaccurate translation, consequently there are smooth translations, which sound like original, and the ones, which may seem clumsy and sound foreign; collocations, which reflect the cultural setting in which they occur when texts are based on different cultural contexts, in the source text there will be examples of collocations that convey some unfamiliar meanings and ideas to the target reader. Like words, which are culturally specific, those collocations refer to some concepts, which will not be easily understandable to the target reader. It is unavoidable, that there will be a partial increase of information, because unfamiliar ideas cannot be easily introduced in the target text without providing some more accurate information, but, on the other hand, the translator does not have to reproduce whole amount of information, that he has in the source text; in order to create or convey new images, uncommon word combinations are used in the source text. Preferably, the translation of a marked collocation will be consequently marked in the target text. The reader will be alerted with the writers wish to communicate indirectly, writing words in bold font or marking them with commas, but in the target text the translator will most likely highlight those words.

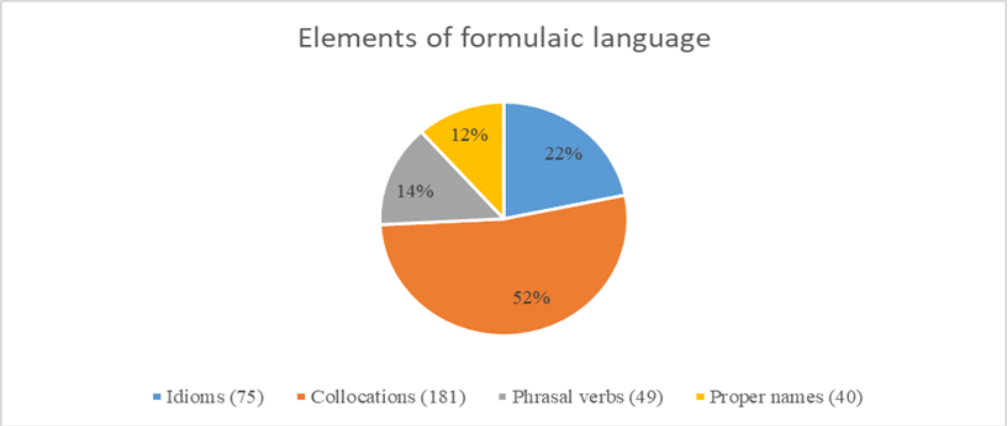
As far as idioms are concerned, the first obstacle that the translator meets is the recognition of the idiom he or she is dealing with – it is never obvious because of the fact that there are various types of idioms and some of them are more easily recognisable than the other ones. Those easily recognisable are expressions, which violate truth conditions, e.g., it's raining cats and dogs, food for thought (Baker, 1992, p. 65). They also include expressions, which do not follow the grammatical rules, e. g. the powers that be, the world and his friend. Moreover, expressions, which have a word like

at their beginnings, tend to be identified as the ones, which should not be translated or interpreted literally. In other words, the more difficult it becomes to understand the expression, the less sense it makes in a context given, and the more the translator will start recognising this unit as an idiom. It is strongly recommended to a translator, that, when translating a text full of idiomatic expressions, to have an access to monolingual dictionaries of idioms, and to be able to consult with native speakers of the language. In addition to this, Baker (1992) notes that most often there are two instances where an idiom might be easily misinterpreted, if a translator is unfamiliar with it. In order to translate an idiom correctly, the translator has to make sure, if he recognised and interpreted it correctly. Baker (1992) discusses four major problems that the translator has to face when translating idioms: when an idiomatic or fixed expression has no equivalent in the target language.; when an idiomatic or fixed expression has a similar counterpart in the target language, but may be used in a different context; when an idiomatic or fixed expression in the source text is used in its both – literal and idiomatic – meanings at the same time; during the process, when the use of idioms is conventionalized in written discourse, contexts where they can be used and the use of frequency becomes different in both source and target languages. Bassnett-McGuire argues that "translator, when putting the particular phrase into target language, should contend with the problem of the non-existence of a similar convention in target language culture" (1980, p. 21).

Results and Discussion

The texts representing a popular science register were chosen for the analysis. 165 sentences (in source and target languages respectively) were analysed and 345 occurrences of formulaic sequences were found and classified according to their types and translation strategies used.

The figure 1 represents the frequency of formulaic sequences in the analysed text in the source language, namely, collocations (52%), idioms (22%) were at significantly high rate of usage, phrasal verbs (14%) and proper names (12%) were found throughout the analysis.



When analysing the translation issues, there were 345 formulaic sequences classified according to their types and the translation strategy applied. Collocations made up most of the examples that were found. However, not many translation strategies were applied to formulaic language elements as literal and equivalent translation was performed in more than half of all instances. The analysis showed that paraphrasing when using related or unrelated word was applied on most of the instances. It might be due to the fact, that English and Lithuanian both have lexical differences and the collocational environments are particularly distinctive. When dealing with idioms, most of them were also translated literally or replaced by an equivalent, but there were considerable numbers of translation strategies applied on idioms and idiomatic expressions. Some of the cases revealed, that idioms with propositional meanings made some difficulties to the translator whether they were misinterpreted or translated literally without considering their referential or emotive meanings. The largest group of formulaic sequences found was collocations. They were translated mostly employing Baker's proposed taxonomy (translation by a more general word; translation by a more neutral or less expressive word; translation by paraphrase when using unrelated words; translation by paraphrase when using a related word; translation by omission; translation by illustration; equivalent and literal translation). Some examples are presented further:

There is the serious cost of time and effort spent foraging, hunting or cropping vegetation, time vulnerable to predators or competitors.
Maisto rinkimui, medžioklei ar derliaus nuėmimui reikia skirti daug daugiau laiko ir jėgų, o šį laiką savo naudai gali išnaudoti plėšrūnai ir konkurentai.

The example above contains an adjective collocation *serious cost*, what in Lithuanian refers to spending large amounts of assets. In the translated version the collocation is paraphrased into "*reikia skirti daug daugiau laiko ir jėgų*", what is spending more time and money if back translated. The translaton strategy employed represents the paraphrase using unrelated words.

The cost of living for a mammal in the cold is a hundred times that of a lizard.
Žinduolio gyvenimo „sąnaudos“ šaltoje aplinkoje yra 100 kartų didesnės nei driežo.

This example represents the collocation *cost of living*, in English it referes to the financial everyday spendings while in the translated text "*sąnaudos*" is written in quotation marks because it refers and is used in different contexts, that is why the translator used illustration strategy in order to convey the original meaning in a metaphoric manner.

The obvious answer is niche expansion.
Atsakymas akivaizdus – kad galėtume užimti teritorines „nišas”.

This example represents the strategy of translation by paraphrase when using a related word as niche expansion, is a verb collocation that in Lithuanian refers to the process of developing a certain field, but is translated into "*teritorines nišas*", that is expressed in a different lexical form and semantically it refers to a certain territory.

Another group of formulaic elements – idioms were also quire frequent in the texts under analysis. The biggest group (33) was translated employing translation strategies, literal translation was chosen also quite often (22) as well as equivalent translation (20). Below are some examples to illustrate:

For a long time, then, it was hard to tease out the origins of hot blood in the fossil record.
Ilgą laiką iš iškastinių suakmenėjusių palaikų buvo sunku nustatyti šilto kraujo kilmę.

It can be noticed that expression to tease out figuratively refers to the process of separating hair by combing or separating facts from a great deal of information. It is translated as "*sunku nustatyti*" which is a general expression representing the core meaning, so strategy of choosing more general word was implied due to the lack of an equivalent in the target language.

The period came hot on the heels of the greatest mass extinction in the entire history of our planet, the Permian extinction, which is thought to have wiped out about 95 per cent of all species.
Šis laikotarpis, pasižymintis didžiausiu masiniu rūšių išnykimu visoje mūsų planetos istorijoje – vadinamasis permo išnykimas, manoma, nušlavė apie 95 % visų rūšių.

One more example can be illustrated by employing the translation by a more general word. An idiom *hot on the heels* in English usually refers to following directly behind someone, but in the target language is translated into "*pasižymintis*", which means known, distinguished. The translator decided to generalize the sentence without transferring the idiomatic expression.

The long and short of it is that turbocharging the organs is not genetically difficult to do – it can be controlled by just a handful of genes – but it's

energetically extremely costly, and will only be selected if the payback is worth it.
Trumpai tariant, „įkrauti" organus energija genetiškai nėra sudėtinga – tam pakanka nedaugelio genų, – tačiau energijos požiūriu tai labai brangu, vadinasi, atrankos būdu ši savybė gali būti įtvirtinta tik tada, jei ji tikrai to verta.

Another example of choosing less expressive vocabulary is provided in the passage above. Idioms *the long and short of it* and *payback is worth it* that are replaced with equivalents in the translation will not get as much attention as the other one – *a handful of*, which refers to something or someone that is difficult to manage, but in the target text we have "*nedaugelio*", what may refer to a very small quantity or amount, so once again, the translation in this case sounds more neutrally and is less expressive, according to the vocabulary chosen.
How these lizards survived the Permian extinction is another question for another place.
Kaip šie driežai išgyveno permo išnykimo metu, yra atskiras klausimas, kurio čia nenagrinėsime.

The idiomatic expression containing figurative meaning *another question for another place*, in the target language is translated into "*atskiras klausimas, kurio čia nenagrinėsime*". Performing back-translation, it might sound like *another question, which will not be discussed here*. Although both variants are similar, but the second part of the expression was paraphrased and engaged in a different form than was the original.
For those who like mouth-filling terms, it's called 'inertial endothermy'.
Mėgstantiems sąvokas, kurias tariant galima nusilaužti liežuvį, paminėsiu, kai tai vadinama inercine endotermija.

The idiomatic expression *mouth-filling terms* is paraphrased into "*sąvokas, kurias tariant galima nusilaužti liežuvį*". The following one in Lithuanian refers to something, what could be spelled very hardly. In the source language *mouth-filling* refers to impressive sentences or clumsy phrases. The perception of a thought remains the same, but the paraphrase was implied while employing different vocabulary because the source meaning is complex, and there is no equivalent in the target language.
Grab at a lizard and it will disappear in a flash, streaking to the nearest cover as fast as the eyes can see.
Pamėginkite pačiupti driežą, ir jis akimirksniu išnyks iš akių, pasislėpdamas po artimiausia priedanga.

The above example represents the strategy of omission where two idioms: *in a flash* and *as fast as the eyes can see* are translated in the target text in the following manner- the first one is replaced with an equivalent "*akimirksniu*". But the second one is omitted. *As fast as the eyes can see* refers

to reacting very quickly. The option of equivalent was not considered, so the translator did not want to exaggerate the passage with adjectives and this idiom was omitted as a piece which is not important to the whole of the text.
For the analysis of translation of phrasal verbs some illustrations are presented below:
But according to a quietly significant paper that slipped into a quietly obscure journal, Ecology Letters, in 2008, the vegetarians may have a lot more to be smug about than I've given them credit for.
Tačiau jei tikėtume gana svarbiu straipsniu, kuris 2008 m. pasirodė gana nežymiame Ecology Letters žurnale, vegetarai turi kur kas daugiau kuo didžiuotis, nei maniau iki šiol.

A phrasal verb *slip into* is usually used to refer to *putting clothes on quickly and easily*, this time it is used in a different context: Lithuanian word "*pasirodė*" means *showed up*, or in this case – *was released*. It may be presumed that in such instance when there is no equivalent the translator decided to convey the meaning while choosing more general word which covers the propositional meaning in the target language.
Maximal metabolic rate is all about getting oxygen out to the muscles, but at rest muscles contribute little to oxygen consumption
Didžiausia medžiagų apykaitos sparta susijusi su raumenų aprūpinimu deguonimi, tačiau ramybės būsenoje raumenys deguonies suvartoja nedaug.

Structural change in a sentence might lead to a totally different use of formulaic language elements (see example above), to get out usually refers to leaving or escaping, expressing some feeling, emotion or condition, producing or manufacturing something. In the target translation *getting oxygen out* stands for "*aprūpinimu deguonimi*", which belongs to different semantic field and if back-translated would refer to *supplying, providing oxygen.* Presumable, as the solution to paraphrase the phrasal verb was chosen but the whole sentence was paraphrased too without taking into consideration its propositional meanings.
In recompense we have the boon of staying up at night and hanging out in the cold.
Tačiau dėl to sugebame keltis naktį ir pakęsti šaltį.

Following strategies of paraphrasing with the use of unrelated words (example above), two phrasal verbs *stay up* and *hang out* in the illustrated examples are translated by replacing the first one with an equivalent while the second one was paraphrased, back-translated from the target text "*pakęsti šaltį*" would refer to *surviving the cold*, while *hanging out* is more associated to *spending time aimlessly*, but not to, as listed here in the example, *surviving extreme conditions*. From this perspective it could be considered that paraphrasing was employed in order to convey the meaning in other words, which were more direct and less complex semantically.

The only case more or less ruled out is meteorite impact; there's little evidence of an impact like the one that finally brought the curtains down on the long reign of the dinosaurs, nearly 200 million years later
Vienintelis veiksnys, daugiau ar mažiau atmestas, – tai meteorito poveikis, nes nėra pakankamai įrodymų poveikio, panašaus į tą, kuris po 200 mln. m. galiausiai lėmė dinozaurų viešpatavimo pabaigą.

This example includes not only phrasal verbs, replaced by equivalents (ruled out, brought down), but also there is an idiom *to bring the curtains down*, which is also replaced by an equivalent: "*lėmė pabaigą*" and it refers to the same field as the source language idiom.

As for the translation of proper names, most frequently they were translated employing the strategy of preservation as well as they were localized due to the requirements of state language regulation committee.

Concluding remarks

Collocations, idioms, phrasal verbs, proper names and other fixed sets may be taken as formulaic language sequences for analysis in various types of discourse. As the results of the research demonstrate sometimes the translation assignments of such origin may be a challenge to the translator when there are no equivalents or literal translation could not be performed, so various translation strategies should be considered in order to transfer the text to the source language while presenting it not only textually but also maintaining its connotative meanings and other features in accordance with the target culture. The analysis indicates that the paraphrasing when using related or unrelated words was applied on most of the instances where a particular translation strategy was employed. It may be due to the fact that the source and the target languages have lexical differences and the collocational environments are particularly distinctive. When translating idioms, most of them were also translated literally or replaced by an equivalent as well as there was a considerable number of translation strategies applied on idioms and idiomatic expressions. Some of the cases revealed that idioms with propositional meanings made some difficulties to the translator whether they were misinterpreted or translated literally without considering their referential or emotive meanings.

References:

1. Baker, M. (1992). *In Other Words*. New York: Routledge.
2. Bassnett-McGuire, S. (1980) *Translation studies*. London and New York: Methuen.
3. Heid, U. (2001). Collocations in Sublanguage Texts: Extraction from Corpora. *Handbook of Terminology Management, Volume 2:*

Application Oriented Terminology Management. (pp.788-808). Amsterdam: John Benjamins Pub.

4. Hsu, W. (2014). The most frequent opaque formulaic sequences in English-medium college textbooks. *System*, 47, 146-161. doi:10.1016/j.system.2014.10.001
5. Manning, Ch. & Schutze, H. (1999). *Foundations of Statistical Natural Language Processing*. London: The MIT Press Cambridge.
6. Moon, R. (2011). Vocabulary connections: multi-word items in English. In N. Schmitt (ed.) *Vocabulary: Description, Acquisition and Pedagogy* (pp.40-63). Cambridge: Cambridge University Press.
7. Newmark, P. (1988). *A Textbook of Translation*. New York: Prentice Hall.
8. Schmitt, N. (2004). *Formulaic Sequences*. Amsterdam: John Benjamins Pub.
9. Wood, D. (2010). *Perspectives on Formulaic Language*. London: Bloomsbury Pub.
10. Wray, A. (2002). *Formulaic Language and the Lexicon*. Cambridge: Cambridge University Press.
11. Wright, S., Leland D. (1993). *Scientific and Technical Translation*. Amsterdam: John Benjamins Pub