Image schemas in *the Great Gatsby*: A cognitive linguistic analysis of the protagonist's psychological movement

Zhou Jun, Hicham Lahlou & Yasir Azam

Published online: 09 Nov 2023.

Submit your article to this journal ⬚

View related articles ⬚

View Crossmark data ⬚

*Corresponding author: Hicham Lahlou, English Language Studies, School of Humanities, Universiti Sains Malaysia, Gelugor, Penang 11700, Malaysia
E-mail: hicham@usm.my

Reviewing editor:
Jeroen van de Weijer, College of International Studies, Shenzhen University, China

Additional information is available at the end of the article

LINGUISTICS | CRITICAL ESSAY

Image schemas in *the Great Gatsby*: A cognitive linguistic analysis of the protagonist's psychological movement

Zhou Jun[1], Hicham Lahlou[1]* and Yasir Azam[1]

Abstract: Most research on image schema examined the meaning configuration of words connotation. However, previous studies of adjectives are meaningful in cognitive linguistics because they provide insight into how those adjectives are involved with psychological movement. In this sense, from the perspective of cognitive linguistics, one's conceptualization and cognition are closely associated with their bodily experience and surroundings; adjectives are no exception. The varieties of transformations of image schemas lay the foundation for the conception and perception. Accordingly, this study is an investigation into the perception of adjectives and psychological activities associated with image schema. Data in this study come from adjectives in the novel *The Great Gatsby,* which were tagged and calculated with the help of software *Python* and the *NLTK* package. The results demonstrate that a significant amount of adjectives were used in the novel. Moreover, Nick's psychological activities changed significantly from the SOURCE to the DESTINATION schematic stage, which is uncovered by his expression of adjectives. Finally, the results further suggest that transformations of image schema as BALANCE, CONTAINER, and PATH work together to motivate one's linguistic expression of adjectives. The present findings have several implications for research on lexicons and literacy interpretation from cognitive linguistics.

Subjects: Applied Linguistics; Semantics; Literature

ABOUT THE AUTHORS

Zhou Jun is a Ph.D. candidate at Universiti Sains Malaysia. In 2010, she completed her Master's degree in the Department of Foreign Languages at Anhui University. She has been pursuing her doctorate degree at Universiti Sains Malaysia since 2021. Her research interests include cognitive linguistics, sociolinguistics, and semantics.

Hicham Lahlou (Ph.D.) is a Senior Lecturer at the English Language Studies Section, School of Humanities, Universiti Sains Malaysia. His research interests include cognitive linguistics, semantics, morphology, and corpus linguistics.

Yasir Azam (Ph.D.) is a Lecturer at the English Language Studies Section, School of Humanities, Universiti Sains Malaysia. His research interests include morphological processing, lexical semantics, and psycholinguistics.

Zhou Jun

1. Introduction

One's expression of adjectives is highly associated with his or her attitude and thought (e.g., Allport & Odbert, 1936; McNally & Stojanovic, 2017). These are actually processes of one's concept-building through the interactive and embodied experience between subjectivism and the physical world (Geeraerts, 2006). According to Johnson (1987), image schema plays a critical role in structuring the concept and reasoning from the mind, as the various transformations of schema can give order and connection to our perceptions and conceptions. SOURCE-PATH-DESTINATION schema, for example, supplies a creative and cognitive way to analyze actual events and one's mental configuration (Lakoff & Núñez, 2000), and thus it has attracted much attention from cognitive linguists.

Francis Scott Fitzgerald's *The Great Gatsby* is recognized as a twentieth-century masterpiece. The work effectively depicted the tragic story of pursuing the American Dream. Gatsby, a young boy from the lower classes, tried to win back his lover's heart but was killed in the process. The story depicted the hypocritical American lifestyle of the Jazz Age. After becoming a mysterious billionaire, Jay Gatsby was still profoundly in love with Daisy Buchanan, his former lover, but was set up for manslaughter by Daisy's husband, Tom Buchanan. First-person narrator Nick Carraway watched all of the people, events, and actions, so his perception, interpretation, and psychological status altered as the story progressed.

By focusing on the adjectives employed in this novel, the present study aims to uncover the psychological world of Nick Carraway and the forms of image schema taking effect on his choice of adjectives. This, in turn, will provide a deeper insight into the operation and working system of image schema in deciding one's views and choosing the proper linguistic forms for his thought. In the journey of life, one has to go through a lot from the source to the destination stage. As the result of bodily activities and experiential interactions (Johnson, 1987; Lakoff & Johnson, 1980) with the object world, one gains his image schemas, which in turn establish his conceptualization of the world.

Since image schema instructs one's meaning expression, is there any specific and intuitive connection between one's adjective choice and image schema? Most research on image schema has been devoted to closed-class words' meaning. Very little effort was made to analyze open-class words like an adjective and its user's mental activities. To examine how image schema motivates one's choice of words, the current research focuses on Nick's expression of adjectives from beginning to end. With the theoretical framework of image schema (Johnson, 1987), we can explore the character's inner world from his description and attitude toward the exterior world.

2. Literature review

The vital role of image schema in shaping concepts and triggering conceptual metaphors has been extensively studied so far (Lahlou, 2023; Lahlou & Rahim, 2022; Lakoff, 2008). The embodied experience is the source and originality needed to construct one's concept, especially the abstract ones (Lakoff, 2008). But how are those experiences transformed into one's conception, and how does the embodied experience exert a profound influence on one's conception changes? The core theory of image schema in cognitive linguistics supplies the best explanation for the above two questions. "Schema" given by Kant in the 18th century, was defined as "a bridge between percepts and concepts". Cognitive linguists grew it into schema theory until the 1970s, when it became one of the main cognitive models. Lakoff and Johnson (2008) used image schema to analyze metaphor in their second edition of the book *The Metaphor We Live By.* Thereafter, Talmy (1988) discussed the theory of "image schema of force dynamic," which was regarded as a great contribution to the academic field; Turner (1996) pointed out that image schema coming from

perception and interactivities is a repetitive framework model in our sensory experience; and Langacker (2000) stressed that image schema is "highly abstract, primarily configurationally". Ungerer and Schmid (2013) also agreed that image schema is a basic cognitive model established through interaction with the daily world. For instance, the concept of BALANCE is acquired through a series of experiential activities and then formed into a concept with metaphorical meaning. A baby trying to keep his upright posture without falling sideways acquires his primary understanding of balance; one feels uncomfortable when he or she is thirsty because of the physical imbalance in the body; then, on the surface of the abstract world, *balanced personalities*, a *balanced system*, and a *balance of justice* all require the status of spiritual equilibrium (Johnson, 1987). The posture of standing, the fullness of the body, and the state of spiritual equilibrium both are the phenomenon of forces with balance. Johnson (1987) then illustrated the schema of twin-pan balance in Figure 1.

The "twin-pan" balance can also be understood as a "seesaw" balance, as the force vectors on the opposite sides constitute the balance of force. The weight of two sides is not always the same when asymmetrical forces happen. Below are examples taken from *Merriam-Webster's Online Dictionary* in sentences (1) and (2) to illustrate the use of balance in physical and abstract terms.

(1) *She lost her balance and fell.*
(2) *He accumulated a healthy balance with the saving bank.* (*Merriam-Webster's Online Dictionary*)

The sentences listed above exemplify the balance status physically and abstractly in separate. Bodily upright is a posture representing a healthy and abled status. Walking upright is one of the basic abilities that humans have fully evolved and outperform other species in. If one cannot control his muscle and balance, such as a baby or a disability, he may fall aside, which usually causes damage and hurt. At the abstract level, balance can also be applied to explaining a healthy and pleasant condition, such as financially, politically, and emotionally. In sentence (2), a metaphorical expression, one can avoid bankruptcy by maintaining a balanced account, which is called a "*healthy balance*". The expenditure over the income shows a vicious circle and leads to personal crises. This expression is based on the schema of BALANCE, as both the concrete and the abstract worlds need to maintain a state of equilibrium.

The transformations of image schema can be categorized into six kinds: Container Schema, Part-Whole Schema, Link Schema, Center-Periphery Schema, Source-Path-Destination Schema, and other Schema (Lakoff, 1987), for their "dynamic analog representations of spatial relations and movements in space" (Geeraerts, 2006, p. 240). For example, the structural metaphor "LIFE IS A JOURNEY" contains several forms of image schema. Imagining one's whole life has two important dots: birth and death, you can easily connect one's life with a journey that also has a start point and an endpoint. The stages of life are components for the container of life, all of which link one's whole life or journey. During the whole journey, we may set a goal or target but may be distracted by unexpected events. The people are similar to the trajectory which moves along in the landmark or the journey. Thus, Lakoff and Núñez (2000) pointed out that the SOURCE_PATH_GOAL schema is primarily adopted to describe how image schema is involved with the actual event and how image schema are established and changed accordingly in Figure 2. Hedblom et al. (2015) even applied the PATH schema to concept creation in artificial intelligence.

Figure 1. Twin-pan balance (adopted from Johnson, 1987).
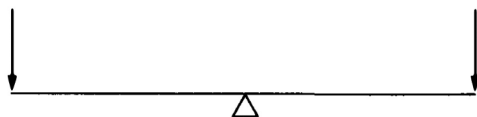
"Every language includes ways of expressing spatial sources (e.g., 'from') and goals (e.g., 'to,' 'toward') and paths intermediate between them (e.g., 'along,' 'through,' 'across')" (Lakoff & Núñez, 2000, p. 37). In the schema illustrated in Figure 2, there involve several terms such as trajectory, landmark, source location, route, and destination. As a moving entity called a trajector moves along with the landmark from a source location toward its intended destination within a fixed routine. A path can be expanded or shrunk, physical or conceptual but still remain a path. When something blocks the assumed path, the trajector will move to the end location which may not correspond to the goal location.

Based on the definition and classification provided above, a number of researchers have reported the analysis of closed-class words such as prepositions and conjunctions. Brugman (1981) was the first to make an analysis of "over" based on image schema, and he found several semantic extensions of *over* with respect to the different relationships of trajector, landmark, and path, which include above-across sense, above sense (static), covering sense, reflexive schema, excess schema, repetition schema, and metaphorical sense. Taylor (1989) classified the semantic meaning of *over* into four major clusters of senses: upward movement, covering relationship, upward in static, and destination of the path. Apparently, the story of *over* still continues (Coventry & Mather, 2002; Deane, 2005; Dewell, 1994; Mori, 2019). They both applied the theory of image schema to study the semantic meaning of "over".

Moreover, the preposition word "*on*" has the same situation, and its polyfunctional in spatial semantic application has been extensively discussed (Goddard, 2002). Inspired by the theory of cognitive semantic framework, Goddard proposed Four *Ons* of physical contact as "simple contact and resulting stability of position; part-to-part contact, attachment, and resulting stability of position; part-to-part contact and resulting part-whole relation; visual feature with resemblance to simple contact".

For further exploring the meaning with image schema in a dynamic way, Leonard Talmy (1983, 1988, 2000) proposed the term Force Dynamic which means "how entities interact with respect to force" (p.49) and adopted into explaining conjunctions. Force in the words is not limited to the *causative* meaning but also *overcome, blockage, resistance*, and other notions. In order to manifest his point of view, he adopted the terms *Agonist* and *Antagonist* to explain the opposing force in the lexical meaning. For example, conjunction words like *because* of and *despite* represent that the entity is overcome or not be overcame by the opposite forces, respectively, in the sentence (1a) and (1b).

(1) a. *The ball kept rolling because of the wind blowing on it*
    b. *The ball kept rolling despite the stiff grass.*
    (Talmy, 1988, p. 55)

Figure 2. The SOURCE-PATH-GOAL schemas as illustrated by Lakoff and Núñez (2000).
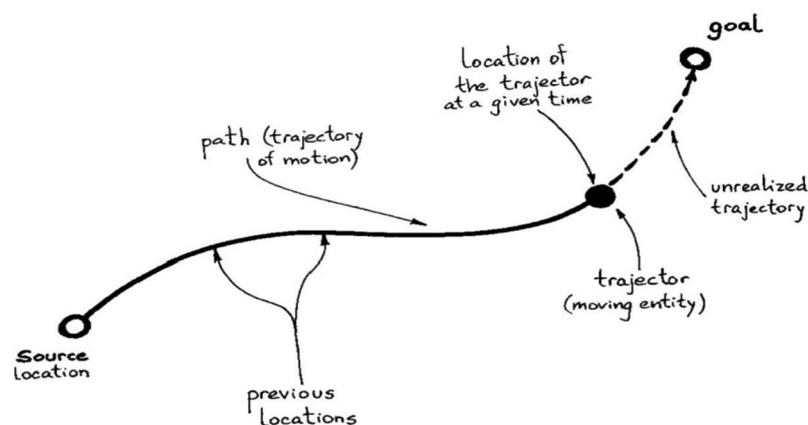
In sentence (1a), the ball involving an Agonist with an intrinsic tendency toward rest is propelled by the force of wind playing as the Antagonist that overcomes the ball's resistance and forces it to move. On the contrary, in sentence (1b), the Agonist's inside tendency is to move and overcome an external force given by stiff grass that stands for Antagonist. The separate scale of forces in the two sentences is indicated by the lexical terms *because* and *despite*. Modal phrases are more easily to prove the force in the words. "*Should do*" illustrate a strong sense of force opposing the subject, which originated from the well-accepted social norm, while "*have to*" implicitly gives an external authority that affects the result.

The powerful potential of image schema is not limited to the interpretation of isolated semantics but also to triggering the expression of conceptual metaphors. Since the moment it was introduced (Johnson, 1987; Lakoff & Johnson, 1980), image schema have been used to explain the operation of metaphorical expressions and their conceptual metaphors. Lakoff and Johnson's revolutionary work *The Metaphor We Live by* (1980) started a re-think on the metaphors in our mundane life, and they suggested that the conceptual system is substantially metaphorical, "the way we think, what we experience, and what we do every day is very much a matter of metaphor" (p.8). The conceptual metaphors, which are grouped into structural metaphor, ontological metaphor, and orientational metaphor can be illustrated by the image schema. For example, orientational meta-phors like *happy is up, sad is down* are triggered by the UP-DOWN schema, so there are lots of expressions as *I am feeling up, my spirits rose, he is in high spirits*, and *I'm feeling down, I'm depressed, he is really low*. Johnson restated the essential position of image schema for metaphor in his book *The Body in the Mind: The Bodily Basis of Meaning, Imagination, Reason* (1987). He focused on two types of imaginative configuration: image schema and metaphorical projections, and claimed that "Image schema can be metaphorically projected and propositionally elaborated to constitute our network of meanings" (p.xvi). Metaphors involved with the mapping process, by which we can compare A with B and understand novel things. Image schema constrains the metaphorical projections based on its various transformations (Johnson, 1987). He used *goals* to explain the grounding function of the PATH schema whose definition had been explained pre-viously. *The way toward changing his personality*, *getting a Ph. D.*, *finding happiness*, are goals in the mental field, and also have starting point and end point. Another projective structure is metonymy, which involves with PART-WHOLE relations, and PART-WHOLE itself is one of the transformations of image schema. Thus, Johnson concluded metaphoric and metonymic projections are based on image schematic structure.

In addition to image schema, there are numerous published studies describing the features and roles of adjectives. Fitzgerald portrayed and visualized the scenes and images of the story to the readers by substantial adjectives. Originating from Latin, the affix *ad* in the word *adjective* means additional segment. Similar to *adverb*, adjectives, and adverbs are categories of words attached to other ingredients as a function of modification. The categories or the use of adjectives can be classified into two parts: attribution and prediction (Bolinger, 1967; Kamp, 2013). Bolinger (1967) gave a clear differentiation between the two kinds of modification and addressed the close relationship between predicative and attributive adjectives quantitatively and qualitatively.

The use of adjectives attracted many studies on syntax and semantics, and one of the points worth mentioning is that the use of adjectives is deeply involved with one's experience (Bylinina, 2014; Pearson, 2013), especially aesthetic adjectives (McNally & Stojanovic, 2017) like *beautiful* and *ugly*. "There are many adjectives whose semantic structures arguably also entail an experiencer, yet which are readily used in expressing aesthetic judgments" (p.1). Adjectives that are derived from the verbs that contain experiencing, such as exciting, moving, and touching can be the supportive evidence for the above theory. They also proposed a series of diagnostic rules to distinguish adjectives with an experiencer or connected with personal experience, like the feasi-bility of adding *to* or *for* in the sentence (2c) and 2(d).

(2) a. *the situation shocked us.*
b. *the situation was shocking to us.*
c. *we enjoyed the experience.*
d. *the experience was enjoyable for us* (p.8).

However, this diagnostic has a shortcoming when it comes to adjectives that are not derived from verbs. For example in the sentence (3)

(3) a. ? *this cake was delicious to/for me.*
b. ? *the food was salty to/for me* (p.8).

McNally and Stojanovic (2017) then suggested the co-occurrence of *find* (e.g., *I find it's good*) to differentiate the evaluative and aesthetic adjective. But it turned out to be unreliable after they made research with the *British National Corpus* which revealed a small proportion of evaluative adjectives co-occurrence with *find*. Though they failed to give a measurement for the evaluative and aesthetic adjectives, it is evident that the feature of evaluative adjectives lies in offering an expression of judgment and value from the individual.

Furthermore, the division of psychological adjectives supplies supportive evidence for the present research in a further stage, which is the type of adjectives representing people's psychological feelings and individual differences. Based on 18,000 common psychological words, the research conducted by Allport and Odbert (1936) put forth its classification of psycho-adjectives into four kinds which include personal trait words, state words, evaluations, and metaphorical adjectives describing physical features. The first category (containing 4,504 words) represents *personal-trait* words, prescribing one's stable modes to the environment, for example, "outgoing" and "sociable". The second category like sad, happy, and mad is used to show one's mood. The third category refers to evaluative words like important and meaningless, and the last category includes strong and skinny which are the features of physical status.

Later, Beauvois and Dubois (1992, 2000) simplified the categories of psycho-adjectives by the theories of target behaviours (TBs) and others' behaviors toward targets (OBs). In other words, TBs mean descriptive content about others, while OBs mean evaluative content about others.

Dixon's (2004) classification also highlighted the characteristics of adjectives associated with psychological status. Based on his typological research, Dixon divided adjectives into core and peripheral semantic types. The core semantics adjectives cover "DIMENSION, AGE, VALUE, and COLOUR, while the peripheral ones denote PHYSICAL PROPERTY, HUMAN PROPENSITY, and SPEED" (P.3–5).

Patrick Mollaret (2009) explored the psychological adjectives in particular and proved his hypothesis that psychological vocabulary is polysemous in essence, and the part with the semantic meaning dominating over the other part is governed by users' social community.

Marina B. Antonova (2020) examined the conceptual underpinning of adjectives in English referring to human propensities, both mental and moral, as the "connection between words and the outside world is mediated through" (Cruse, 2017, p. 241). Adjectives are certainly no exception. He obtained 409 and 426 adjectives denoting mental and moral qualities from The Original Roget's Thesaurus of English Words and Phrases (1987). The findings revealed that the CONTAINER image schema contributes significantly to the conceptual underpinning, accounting for up to 20% of the adjectives studied. Meanwhile, he stated that "it is the container element's feature that predetermines the evaluative function for the adjectives." Container characteristics like soft, rigid, or small, trigger the words like *soft-minded, big-headed*" (p.15).

Malicka-Kleparska ([2023](#)) analysed psychological property adjectives in Polish from a morpho-syntactic standpoint, as the root itself has mental property in Polish. The author also advised that the research of mental property lexicons should be re-examined in a fresh perspective, and that it is not sufficient to investigate it from a purely syntactic standpoint.

The publication of *The Great Gatsby* started a storm in American literature because of its defined plot design and unique storytelling style. A large and growing body of literature has investigated the significance of this novel in terms of various perspectives. There is a consensus on social issues conveyed in this novel. The labels given to this period time like "The Lost Generation", "The Jazz Age" "The Roaring Twenties" and "Gilded Age" exhibited and reflected the complexity of the 1920s in America. Previous research has indicated that social background has a far-reaching impact on the novel correlated with that period time. American dream (Cain, [2020](#); Schwarzerová, [2019](#)), racism (Goldsmith, [2003](#)), feminism (Phillips, [2018](#); Zeven & Dorst, [2021](#)) and social equality (Chetty et al., [2014](#); Durlauf & Seshadri, [2018](#); Jerrim & Macmillan, [2015](#)) have been addressed in a large scale.

At the same time, several studies have been carried out on understanding this novel with theory from cognitive linguistics. Reuven Tsur ([1971](#)) adopted the cognitive method to analyze literature in his Ph.D. dissertation and proposed the term *cognitive poetics* in 1970s (Tsur, [1971](#)). Till the publication of *Cognitive Poetics: An Introduction* (Stockwell, [2002](#)) and *Cognitive Poetics in Practice* (Gavins & Steen, [2003](#)) there emerged a large number of literature papers centered on cognitive poetics. In a word, "Cognitive Linguistics contributes scientific explanation for the findings of literary critics and thus provides a means whereby their knowledge and insight might be seen in the context of a unified theory of human cognition and language on the process of literacy creation, interpretation, and evaluation" (Freeman, [2010](#)). The theories of Cognitive linguistics used in literature include the theory of conceptual metaphor (e.g., Holland, [1988](#); Sweetser, [2017](#)) to explore authors' conceptual attitudes and motivations; structuring metaphor (e.g., Gibbs & Kearney, [1994](#)) to explore the cultural background of the novel and people who lived in it; image schema in interpreting author and characters' though and feelings (Gavins & Steen, [2003](#); Stockwell, [2019](#)). Under the theories application listed above, there emerged lots of related studies to *The Great Gatsby*.

For one thing, it is worth mentioning that the studies related to the conceptual metaphor (e.g., Ameel, [2019](#); Gleason, [2013](#); Stakytė-Šegždienė, [2019](#); Назарова, [2015](#) …) have always been conducted in a large-scale through interpretive analysis. They identified that blue light represents the hope and dream of Gatsby; east and west egg represent old money and new money, respectively; the eyes on the advertisement board means the crime and deception cannot be hidden; even the name of the characters have their metaphoric meaning, for example, the female role Daisy whose name means purity and virginity but turns up to be the rhetoric of irony (Vaca ink, [2021](#)).

For another thing, there are several studies have attempted to explain the significance of adjectives in this novel. Liu ([2010](#)) adopted the method of stylistic analysis (Leech & Short, [2007](#)) to make a relatively completed and objective analysis of lexical items and grammatical categories used in *The Great Gatsby*. Through the explanation of example sentences extracted from the text, she pointed out that the extensive use of adjectives in sentences helps to transmit the author's interpretation of the scene and is typical of Fitzgerald's use of subjective description (Liu, [2010](#)). In order to find the differences of adjectives in literary and non-literary text, Romanić ([2011](#) made a comparative analysis of the adjectives according to "position, formation, grading and semantic group" between the text of *The Great Gatsby* and *A History of Women*. The statistical result showed that in the chosen sample of pages, the number of adjectives in *The Great Gatsby* was substantially larger than *A History of Women* by 51% (Romanić, [2011](#)). His descriptive experiment can be used to explain the fact that non-literary books are formal and objective, while literary texts express personal views. Remzije Nuhiu ([2021](#)) took the quantitative method to calculate the number of

adjectives and their frequency of occurrence. The total number was up to 2701 and 66% of them were repeated from 2 to 80 times. Based on the data above he (Nuhiu, 2021) intensified the subjective feeling of the narrators because Nick Carraway was a narrator of the story. As the spectator and protagonist, the story was narrated and partly motivated by him. He concluded that F. Scott Fitzgerald used rich adjectives to modify things, places, and people in his novel.

Based on the well-rounded review of the previous studies, the related research had already explored *The Great Gatsby* from different specialties. Even though they pointed out that attention should be paid to the adjective, limitations and blanks still remain. There is no analysis of Nick Carraway's psychological status based on image schema theory with the connotation of adjective use. In response to the research gap, the present study aims to incorporate the transformations of schema as the theoretical background into the analysis of character's psychological movement by investigating the adjectives used in the novel.

3. Research method

The purpose of this paper is to collect adjectives that are used in *The Great Gatsby* written by Francis Scott Fitzgerald, and then explore their underlying image schemas in detail to reveal Nick's starting point and destination in his psychological world. This study is a descriptive qualitative study based on the theoretical framework of image schema, which employed corpus linguistics as a support method. Based on the txt. version of the novel as corpus data, this article intended to calculate all the adjectives in each chapter with the help of the software Python and NLTK package to realize the function of tagged words. Only the plain text format can be applied into the following data processing,

Import profile,

First step: convert the downloaded e-book PDF version into txt.version. The base of *pdfplumber* and *codecs* in Python can easily complete the task:

– set the target: transform Data.pdf into Data.txt profile

– import two bases: *pdfplumber* and *codecs*

– open PDF profile in pdfplumber and read it in pages.

– open TXT profile in *codecs* and the parameters was tuned in *encoding* with *UTF-8*

– close the program after extracting the current text

All the code instructions are shown in Figure 3.

Figure 3. Convert the profile format.

```python
import pdfplumber
import codecs

with pdfplumber.open('The Great Gatsby.pdf') as pdf:
    for page in pdf.pages:
        f = codecs.open('The Great Gatsby.txt', 'a', encoding='utf8')
        f.write(page.extract_text())
        f.close()
```

Second step: tag the words with four kinds (Noun, verbs, prepositions, and adjectives) in the NLTK package. In natural language processing with Python, it is possible to lexically tag words with Python into the nltk.pos_tag() method, because NLTK pre-trains a lexical tagger using several corpora, this lexical tagger can tag the list of words.

– import *nltk* package

– set four categories of word

– scan the profile in chapters

– separate sentence with the parameter tuned in *tokenize*

– tag the words by terms

NN = noun, singular or mass; NNS = noun, plural; NNP =proper noun, singular form.

VB = verb, base form; VBD = verb, past tense; VBN= verb, past participle; VBP = verb, non-3rd person singular; VBZ = verb, 3rd person singular present.

JJ = adjective; JJR = adjectives, comparative; JJS = adjective, superlative.

IN = preposition or subordinating conjunction.

– collect words separately by the order of *append*

All the code instructions are shown in Figure 4

Third step: collect the adjective words from chapter 1 to chapter 9 in Figure 5.

Finally, the selected data will be re-checked and calculated carefully. In order to make the data accurate and clear, the data results will be examined again, and only adjectives will be left. Some of the errors and mistakes will be deleted carefully.

Figure 4. Tag the words.

```
8
9   nouns, verbs, adjectives, prepositions = [], [], [], []
10  for chapter in documents:
11      noun, verb, adjective, preposition = 0,0,0,0
12      sentences = nltk.sent_tokenize(chapter)
13      for sent in sentences:
14          tags = nltk.pos_tag(nltk.word_tokenize(sent))
15          for tag in tags:
16              if tag[1] == 'NN' or tag[1] == 'NNS' or tag[1] == 'NNP':
17                  noun += 1
18              if tag[1] == 'VB' or tag[1] == 'VBD' or tag[1] == 'VBN' or tag[1] == 'VBP' or tag[1] == 'VBZ':
19                  verb += 1
20              if tag[1] == 'JJ' or tag[1] == 'JJR' or tag[1] == 'JJS':
21                  adjective += 1
22              if tag[1] == 'IN':
23                  preposition += 1
24      nouns.append(noun)
25      verbs.append(verb)
26      adjectives.append(adjective)
27      prepositions.append(preposition)
28
29  print(nouns)
30  print(verbs)
31  print(adjectives)
32  print(prepositions)
33

    [1769, 1459, 1773, 1813, 1371, 1296, 3057, 1272, 1542]
    [1046, 764, 1036, 987, 811, 782, 1864, 842, 978]
    [580, 382, 538, 462, 388, 364, 771, 386, 445]
    [801, 571, 798, 695, 596, 520, 1082, 577, 647]
```

cogent ·· arts & humanities

Figure 5. Collections of the adjectives.

```
In 3    ▶ | ▶I | ↑ ↓ | 🗑 ⋮
     1  l = []
     2  for chapter in documents:
     3      sentences = nltk.sent_tokenize(chapter)
     4      for sent in sentences:
     5          tags = nltk.pos_tag(nltk.word_tokenize(sent))
     6          for tag in tags:
     7              if tag[1] == 'JJ' or tag[1] == 'JJR' or tag[1] == 'JJS':
     8              # if tag[1] == 'NN' or tag[1] == 'NNS' or tag[1] == 'NNP':
     9              # if tag[1] == 'VB' or tag[1] == 'VBD' or tag[1] == 'VBN' or tag[1] == 'VBP' or tag[1] == 'VBZ':
    10              # if tag[1] == 'IN':
    11                  l.append(tag[0])
    12  print(l)

    ['younger', 'vulnerable', 've', ''', 'more', 've', 'communicative', 'reserved', 'great', 'more', 'many',
    'curious', 'few', 'abnormal', 'quick', 'normal', 'secret', 'wild', 'unknown', 'Most', 'hostile',
    'unmistakable', 'intimate', 'intimate', 'young', 'least', 'plagiaristic', 'obvious', 'infinite', 'little',
    'fa', 'Free', 'fundamental', 'hard', 'wet', 'certain', ''', 'last', 'uniform', 'moral', 'ed', 'riotous',
    'privileged', 'human', 'exempt', 'unaffect', 'unbroken', 'successful', 'gorgeous', 'intricate', 'creative',
    'extraordinary', 'romantic', 'such', 'other', 'likely', 'abortive', 'short', 'prominent', 'well-to-do',
    'middle-western', 'ac', 'tual', 'wholesale', 'special', 'hard-boiled', 's', 'little', 'later', 'mi', 'warm',
    'middle-west', 'ragged', 'universe—so', 'east', 'more', 'single', 'grave', 'hesitant', 'various', 'practical',
```

Table 1. Adjectives in the Novel

Chapter	1	2	3	4	5	6	7	8	9
Total words	4183	3177	4145	3957	3166	2962	6744	3077	3663
Adjectives	577	382	538	462	388	364	771	386	452
Percentage %	13.8	12.2	12.9	11.7	12.3	12.3	11.4	12.5	12.3

4. Results and discussion

The tokens of adjectives in *The Great Gatsby* range from 382 to 771 from Chapter 1 to Chapter 9 [in Table 1], while the ratios of the adjectives tokens with the total words keep quite stable which accounts for around 12% in each chapter.

The opening chapter which takes a ratio of 13.8% of adjectives comprises the internal monologue of Nick and the debut of the main characters including Nick, Daisy, Tom, and Jordan. Chapter 1 plays a prominent role in finding Nick's attitude and judgment toward the exterior world and Chapter 9 includes Nick's changes in his behavior and expression, so we will focus on adjectives in those chapters.

4.1. Adjective use in Source stage

PATH schema literally can be understood as the motion fictively and factively like the moving from point A to point B. A is the starting point or SOURCE, while B is the goal or destination. Point A and point B belong to a static image, but moving toward endpoint is the dynamic schema that can be adapted to guide and orient people's behavior and decisions. The whole dynamic process is influenced by one's empirical perception and philosophical thinking.

Thus, at the very beginning of the story, we can easily find evidence of adjectives to reveal the SOURCE schema of Nick. Chapter 1, as the leading chapter, inaugurate the intricate story with the interior monologue of Nick and uncover his spiritual changes after his journey from East Egg.

For example

(4) *In my younger and more* **vulnerable** *years, my father gave me some advice that I've been turning over in my mind ever since* (p.3).

Nevertheless, in a young age, Nick's conceptualization of the world had not been fully established so he described himself as *vulnerable*. His father taught him the first doctrine of life: *reserving*. We will analyze these two words in detail and explore how image schema motivates those linguistic forms.

First, the word *vulnerable* in the sentence (4) had conspicuously exhibited Nick's mental image which is triggered by the BALANCE and COUNTERFORCE Schema. We can easily find some examples as follows from the literal explanation in the dictionary

vulnerable: *capable of being physically or emotionally wounded.* (*Merriam-Webster's Online Dictionary*).

The linguistic form of *vulnerable* entail two schemas in it: COURNTFORCE and BALANCE. The origin of the word exhibits the Counterforce Schema primarily. *Vulnerable* originated from Latin means *to wound*, and now it is used to indicate *defenselessness against non-physical attacks.* Apparently, attack involved the counterforce among more than one group of power. The troops fight against each other with physical arms and weapons, whereas the weak or the defenseless one without great strength tends to be wounded to a great extent. A young man like Nick without a determined mind and strong spiritual endurance can be hurt easily. If he wanted to be an *unaffected* man that cannot be influenced or changed physically, mentally, and chemically, he has to make solutions to keep Balance for the exterior attack and interior defense. For example, a troop cannot stay intact when it loses a battle, and a man cannot stay calm when he loses his marriage. It is clear that no matter the troop or the divorced man, the balance status cannot be kept because the defense or the marriage is lost. To a large degree, *vulnerable* is commonly referred to weak people or entities, which are easily affected by others. In detail, there are several forces that can help a troop in an undefeatable stage, like the leadership, strategies, number of the soldiers, and fighting ability of the soldier. Only fully equipped with these forces can a troop keep a balance of safety from the exterior attack. There is the same situation with one's life that requires the harmonious status of health, work, and marriage. The loss of the marriage equals the loss of part of the force that sustains him standing straightly. Without defense, a troop can be easily attacked by their enemy; by breaking up with his wife, the man is attached by the emotion of sadness. They no longer stage in a safe or fulfilled state. Such usages involve the projection of structure from our experience of counterforce of physical entities onto our understanding of cases as military defense and divorce. As for Nick, he is still a weak and immature person for the shortage of life experience in the beginning of the story, so he urgently needs some doctrine to help him establish a balance status of getting along with the world. We can make clear the forces in this word with the help of Figure 6.

The arrows represent forces to keep the straight status of the object. The lost or missing part of the forces will lead to falling of the object. Thus, balance as matter of fact is also the result of forces interaction. So, how could Nick keep his balance status? The answer is that he adopted his father's philosophy of life: *reserving*.

(5) *He didn't say any more but we've always been unusually communicative in a **reserved** way* (p.3).
(6) *In consequence I'm **inclined** to **reserve** all judgments, a habit that has opened up many curious natures to me and also made me the victim of not a few veteran bores* (p.3).

Reserving in the sentence (5) and (6) coincidentally represents another form of schema: CONTAINER schema. From its definition *"restrained in words and action"* (*Merriam-Webster's Online Dictionary*), we can perceive the feeling of contradiction by keeping one's judgment and behavior in his mind even though he has a great desire to state or take action. At the same time, reserved has another definition as *"kept or set apart or aside for future or special use"* (*Merriam-Webster's Online Dictionary*). Figure 7 lists below can illustrate the force motion in the container.
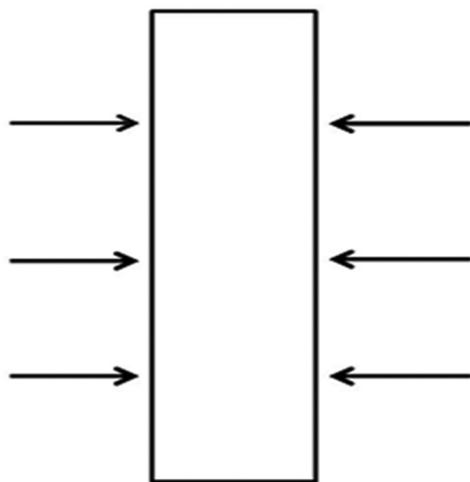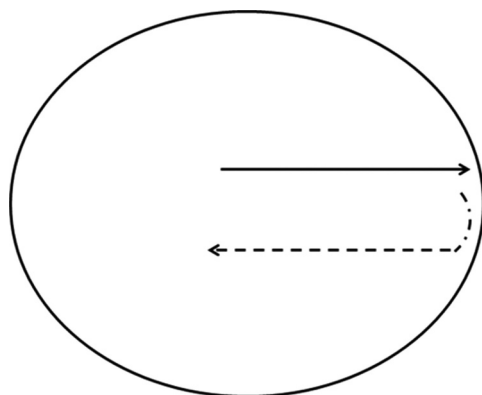
Figure 6. Balance schema.

Figure 7. Container Schema.

Primarily as a noun, *reserve* itself means a container or tank for some object such as oil reserve or food reserve. Then, when something is reserved it will be kept in a container and not visible or open to others, for instance, a reserved seat or reserved cookies. The reserved row or other object is kept for some special group of people who has the right to access them. The people without such rights are excluded from this container. The projection has a strong connection with our daily experience. Surely, we cannot touch the cookie kept in the bottle container. In the attempt to express one's idea or take action, he is reluctant to do that because of the norms of society or the lessons from past experience. He has to withhold desire in a container of mind. For example, people also regard marriage as a container, so we usually have expression like *step/go/enter into a marriage* or *step/come out of one's marriage*. The prepositions of *into* and *out* indicate one's relationship with the other is a closed space like a container. In the container of marriage, one has to resist the temptation of the outside world, abide by society's requirements for the fidelity of marriage, and not act recklessly.

(7) *Reserving judgments is a matter of infinite hope* (p.3).

The same is with Nick; in the sentence (7), Nick clearly showed his preference for the way of philosophy of living. Simply in Chapter 1, the writer used *reserving* three times to emphasize Nick's attitude toward the outer world. Next, lots of evidence can be found in the following chapters to describe that he kept his dissatisfaction with Daisy and Tom in mind. For Nick who *communicated in a reserved way* and *inclined to reserve all judgment*, he placed his thoughts and views about the surroundings into the container of his interior mind. Meanwhile, *inclined* indicates the movement

of the force that is checked by others. Such movement is also the representation of Nick's surrender at a young age.

In general, Fitzgerald portrayed a visualized and distinct role in a brief sketch by his ingenious use of adjectives. By analyzing the adjectives triggered by one's Image Schema, it can be proved that Nick was a sensitive and controlled person. In the majority of situations, his education taught him to be an insensitive and bearable man even confronted with some unfavorable person or events. The power or the vector of him is inward and concealing.

4.2. Adjective use in Path-Destination stage

The social norms and doctrine of reserving received from his early years form the vectors to push Nick move along his path, but the fresh character of Gatsby set off waves for Nick's outlook on life. He kept his routine path when he met Tom and Daisy who used to be the same. However, Gatsby like a fresh flood rushed into Nick's life and stand as a brand-new image he never met before. Gatsby's perseverance and innocence contrast sharply with Tom and Daisy's hypocrisy and cunning, and the outrageous attitudes and behaviors inflicted on Gatsby were even more shocking to Nick who started to rebel against his previous life philosophy and paved another way to destination.

When Nick confronted Daisy and Tom in their reunion plot, he kept his way as usual which can be demonstrated by the adjectives used for Tom and Daisy in the sentence (8) and (9).

(8) *Now he was a **sturdy straw haired** man of thirty with a rather **hard** mouth and a **supercilious** manner. Two **shinning, arrogant** eyes had established dominance over his face and gave him the appearance of always leaning **aggressively** forward* (p.9).

(9) *The other girl, Daisy . . . she leaned slightly forward with a **conscientious** expression—then she laughed, an **absurd, charming little** laugh . . . I looked back at my cousin who began to ask me questions in her **low, thrilling** voice. Her face was **sad and lovely** with bright things in it, **bright** eyes and a bright **passionate** mouth—but there was an excitement in her voice that men who had care for her found difficult to forget: a **singing** compulsion, a whispered . . .* (p.11).

The above two paragraphs describe Tom and Daisy's first appearance, through which the writer exhibited two characters with distinctive features. Especially in the first paragraph, there are lots of adjectives to describe the trait of Tom, but obviously, they have nothing to do with positive evolution. From the words *supercilious* and *arrogant*, it's not difficult to speculate that Tom did not leave a good impression on Nick. Without any restraint from money, Tom was born to be a conceited and contemptuous person. Surely the insolent and disrespected features of Tom are mainly due to his wealthy family background. Those adjectives indicated Nick and Tom differ from each other concerning their inner force-control. We have mentioned above that Nick restrained his force inwardly, while Tom spilled out his force and power extravagantly. To Nick, the behaviors and words from Tom are conceptualized as a force standing in the opposite way which cannot be reconciled with Nick's nature. Such opposite force triggered the asymmetry of balance schema that will highly augment one's uncomfortable feeling. Just like hunger and thirst mentioned above also represent physical imbalance which will impel people into an uneasy stage. From the following plot, it is not difficult to prove that even though Nick was born in a similar family background with Tom and Daisy, he still keeps his sincerity and kindheartedness. Thus, Nick did not evaluate highly of Tom. The negative descriptive words like *supercilious* and *arrogant* are consistent in introducing the following stories.

As for Daisy, Nick expressed his negative judgment in a veiled way. These adjectives are very interesting and intricate because they usually seem to contradict each other. For example, *absurd and charming, sad and lovely, low and thrilling,* absurd means extremely silly or ridiculous which are not compatible with charming. The repetition of *bright* and *passionate* is likely to present a positive and enlightened image of Daisy. However, *sad* denies the previous proposition. The

description of Daisy's voice also reveals deep meaning. *Low and thrilling*, thrilling in particular would generate uncomfortable feelings in the hearers. Together with her beautiful face, her voice testifies to the following comment from Gatsby in the sentence (10):

(10) *Her voice is full of money* (p.128).

This sentence appears as a metaphorical expression, through which it proves that image schema laid the basic foundation for the creation of metaphor use. Voice is a sound or tone produced by the speech apparatus, while money is the currency used every day. Apparently, they belong to different domains, but they are motivated by the FULL-EMPTY and CONTAINER schema. *Be full of* reveals that there are lots of things filled into a container. For example, in the concrete world, there are expressions like *the bottle is full of water, the classroom is full of students*; in the abstract world, there are statements as *he is full of anger, children are full of beam*. No matter water, students or anger and beam all stands for the highest and greatest degree or a complete status within their containers. In this sentence with conceptual metaphor, the container as the source domain is mapped to the target domain of the articulatory organ: voice. The voice itself does not have any material within because it is a form of a sound wave. Money or other objects cannot be filled into the sound wave in the real world, whereas in the conceptual world people use such metaphorical expression by comparing the similarities of "voice" and container. There are expressions in the novel as "*in a warning voice*" (p.18) and "*in an impassioned voice*"(p.41), and further "*her voice broke off*" (p.20). The material contained in the voice is applied to exaggerate the speakers' features, characteristic, and personalities. Here, the expression "*her voice is full of money*" is intended to portray the plutolatry and flamboyant nature of Daisy. Thus, the density occurrence of adjectives well visualized the image of Daisy who was not simple and pure as her name implies but was a hypocritical and insincere person.

Above all, Nick still kept his primary PATH as usual. Even though Nick was unfavorable to both Tom and Daisy, he reserved his comment inside and still got along politely with them. He smiled, and complimented them in the sentence (11) and (12).

(11) *The whole town is **desolate**. All the cars have the left rear wheel painted black as a mourning wreath and there's a persistent wail all night along the North Shore* (p.12).
(12) *You make me feel **uncivilized**, Daisy* (p.15).

Apparently, Nick kept the relationship with Tom and Daisy in harmonious and balanced way because this was his PATH of dealing with the surroundings. The forces associated with the surrounding people and cases were reserved and then endured by Nick. His psychological world had not been impacted at present.

Nevertheless, his cognition about human nature was greatly devastated after he witnessed the tragedy of Gatsby. His image schema changed gradually, and his PATHI was changed as well which can also be proved by some evidence of adjectives in Chapter 1.

(13) *I wanted no more **riotous** excursion with **privileged** glimpses into human heart … Gatsby who represented everything for which I have an **unaffected** scorn. If personality is an **unbroken** series of successful gestures, then there was something **gorgeous** about him … it was an **extraordinary** gift for hope, a **romantic** readiness such as I have never found in any other person and which it is not likely I shall ever find again. No—Gatsby turned out all right at the end; it is what preyed on Gatsby, what foul dust **floated** in the wake of his dreams that temporarily closed out my interest in the **abortive** sorrows and short winded elation of men* (p.4).

Unlike those negative evaluative adjectives used for Daisy and Tom, Nick appreciated Gatsby to a great extent. *Gorgeous, extraordinary, and romantic* are adopted to depict the unsophisticated

and sincere character of Gatsby who is deeply immersed in the warm and sweet memory with Daisy and tried deliberately to win back her heart. For Nick who used to live in a world full of sophistication and hypocrisy, Gatsby was unique for his purity, goodness, and perseverance.

Through the response and utterance in the end of this novel when he met Tom again in the street in Chapter 9, the adjectives can be explored to explain Nick's changing from the previous one. As a polite and educated gentleman, he even refused to shake hands with Tom and insisted on inquiring about what he said to Wilson that afternoon. He suspected Tom was responsible for the death of Gatsby and scolded him in the public. Tom even talked to him as in sentence (14)

(14) *You are **crazy**, **crazy** as hell.* (p.190)

In order to get rid of his *provincial squeamishness forever* (p.191), Tom ended the conversation in haste. Here adjectives ***provincial*** and ***crazy*** reveal Nick's schema clearly.

The definition of *provincial* is *a person of local or restricted interests or outlook/a person lacking urban polish or refinement* (*Merriam-Webster's Online Dictionary*).

By using the word provincial to devaluate himself, Nick is actually being sarcastic with Tom. From the definition, provincial means someone who is brought up in the countryside and has some limitations in his etiquette and horizon. As a matter of fact, Nick came from a wealthy and educated family in the east, and he even went to Cambridge University. However, to the majority's general knowledge, the countryside is lower and worse than cities in terms of economics and literacy. Such bias of cognition also reflects the kind of schema of CENTER-PERIHERY. The central place is usually the best. In one's mind, some things or people in the central place are more important than others. For example, from the physical usage of phrases like city center, in the center of the stage to the non-physical phrases as financial center, business center, the center of the team. The center part either plays an essential role in the geographical location or takes charge of the whole entirety as a leader, who must equip with incomparable advantages and strong ability. Thus, the person who is staged in the central place is usually considered an outstanding and crucial one. Oppositely, PERIHERY symbolize the object or person with less significance. For instance, countryside (the place is located in the surrounding of the city center), side-effect (besides the main medical feat, there may be some overlooked phenomenon). In the general experience, center is superior to the sides. The people from the center cities have a broad horizon and civilized etiquette, whereas the people from the province or lower rank places are narrow-minded and illiberal. Such schema are listed in Figure 8.

The expressions as *provincial attitude* or *being provincial* well demonstrate a fastidious character that is not welcome by others. Similarly, the out of control and absence manner from Nick was not welcome by Tom because Nick suspected Tom of relating to Gatsby's death in public. Nick behaved in a different way than what he used to as his cognition was changed with the past event.

Then, the word *crazy* offers more powerful evidence for the presupposition by analyzing the forced movement in this word.

4.2.1. Crazy
- *not mentally sound*
- *being out of the ordinary*

(*Merriam-Webster's Online Dictionary*).

If the word *reserved* in Chapter 1 is onward of force, *crazy* can be understood as outward of force which cannot be held in the CONTAINER anymore with SCALE increasing. The MORE IS UP is based on SCALE SCHEMA (Johnson, 2013) as the "world can be viewed as a massive expanse of

Figure 8. CENTER-PERIPHERY (Johnson, 1987).
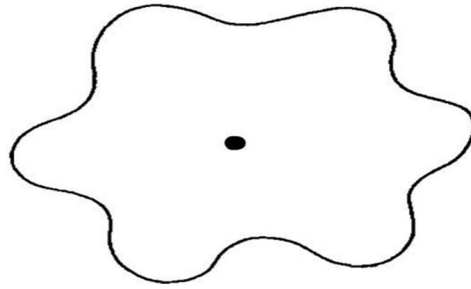
quantitative amount and qualitative degree or intensity" (p.122). Emotion is largely associated with scale, so one can *lack of interest, be absent of motivation, cheer up* and *be depressed*. *Crazy* is connected with a situation of extreme abnormality physically or mentally. People use crazy to exaggerate people or events outrageous and do not conform to common sense. The expressions *go crazy*, *be crazy* and *like crazy* are the figurative speech of overstatement to show the situation beyond regular endurance. If the emotion is also regarded as a CONTAINER, the force in a CONTAINER sometime bounces back inward just like a *reserved* one, but sometimes the force increasing in scale explodes through the frame of endurance and becomes a *crazy* trend in Figure 9. To be specific, conceptual expressions like a *crazy idea* or a *crazy plan* are mainly due to the fact that people feel they are beyond the scope of understanding, ability, or implementation. Given that experience, the person who looks crazy is definitely not a good etiquette and con-servative one. Such evaluation from Tom contrasted distinguished with the situation in chapter 1 "*he approved of me and wanted me to like him with some harsh, defiant wistfulness of his own*" (p.5.). Finally, as a crazy man, Nick expressed an unfavorable attitude toward Tom instead of pretending a polite and conservative one he used to be.

Such changing schemas made Nick the opposite of the previous one. That is to say, the death of Gatsby, the attitude of Daisy, and the deluding of Tom gave a tremendous impact to Nick whose original routine cannot be adhered any more. Owing to personal experience his path deviated to a disparate way. He chose to express his viewpoints and judgments unrestricted instead of holding them in his inner mental world. His force finally broke through the philosophy and ethical standard he used to believe in and expressed his thought explicitly by saying "*I couldn't forgive him or like him … they were* **careless** *people*." The changes in terms of behavior and utterance actually are driven by the changes in the surface of cognition and psychology. In this way, it can be proved that people experience the world through various Image Schema patterns which in turn constrains or decides our understanding and conception. Just like the listed figure, one may not follow his previous way of destination through his path of life. On the contrary, he is likely to abandon the previous one and choose another way of destination as in Figure 10 when he interacts with the world.
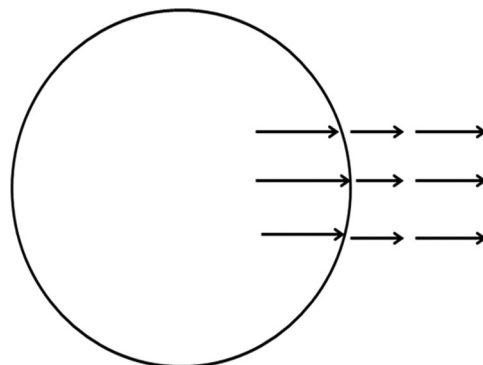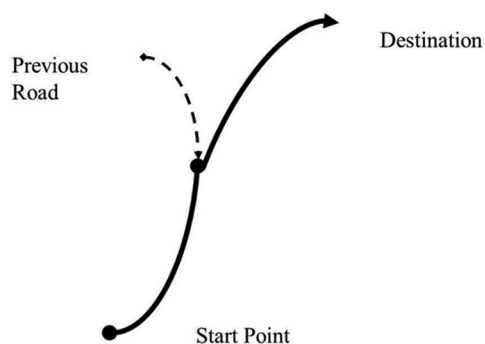
Figure 9. Container Schema.

Figure 10. Path-destination schema.

5. Conclusion

The current article aimed at explaining how the image schema affected one's conceptualization of adjectives usage based on the novel *The Great Gatsby*. Utilizing the software of Python to calculate data, the study found that the novel contained a large number of adjectives, with more than 10% of adjectives in each chapter. The use of these adjectives is one of the stylistic features of the novel and the success of the novel in describing its characters. The study's findings further indicated that the cluster of images like CONTAINER, BALANCE, and PATH-DESTINATION stimulate one's adjective usage, especially those adjectives involving psychological evaluation, namely *reserved, vulnerable, squeamish* … As for Nick, the protagonist in the novel, his psychological movement and conceptualization of the physical world has been revealed by the adjectives he adopted in describing himself and others. The study also found that his SOURCE-PATH-DESTINATION schema has greatly changed from beginning to the end of the novel, providing a deep insight into how the exterior world and one's experience help in constructing one's understanding and attitude. At the very beginning, Nick hid in his philosophy of life to maintain a balanced posture, cautiously conservative and restrained. The words *vulnerable* and *reserved* are affected by the BALANCE and CONTAINER schema separately, illustrating the conserved and restrained way of living for Nick. He still kept his Path as usual during his reunion with Tom and Daisy, even though Nick did not highly value the disingenuous couple by using the word *arrogant* and *supercilious* … but after what had happened with Gatsby, Daisy, and Tom, he recognized the hypocrisy and ruthlessness of these people. He decisively abandoned his previous way of life by questioning Tom strongly and cut off contact with them. The word *crazy* reveals the scale of forces raising up until break the bondage of thought. Finally, Nick changed his DESTINATION throughout his life PATH.

The findings of the present study deepen the understanding of the strong connection between one's psychological movement and image schema. People draw the schema images through the physical experience, and then put them into mental space for processing. The concept of the world is formed at last based on the above process. The study findings also show that the bodily experience generates force and vector to push the event or people to move forward. People's understanding of the world is highly affected by their past experience. Thirdly, the transformations of image schema are not isolated but work together in multi-dimension. SOURCE PATH schema is adopted to explain the main change, but in some important nodes, other schemas may work together like BALANCE, CONTAINER and CENTER schemas.

The significance of the present study lies in that the current research attempted to make an explanation of adjectives from the perspective of the theory of cognitive linguistics. The previous studies have not treated adjective and their image schema connotation in much detail. This attempt supplies a well-rounded understanding of the formation and use of adjectives from the theory of Image Schema. At the same time, further research on Image Schema, utilizing more literary works is promising to gain more insight into it.

cogent ··arts & humanities

Author details
Zhou Jun[1]
Hicham Lahlou[1]
E-mail: hicham@usm.my
ORCID ID: http://orcid.org/0000-0003-2796-9877
Yasir Azam[1]
ORCID ID: http://orcid.org/0000-0002-9411-4329
[1] English Language Studies, School of Humanities, Universiti Sains Malaysia, Gelugor, Penang, Malaysia.

References
Allport, G. W., & Odbert, H. S. (1936). Trait-names: A psycho-lexical study. *Psychological Monographs, 47* (1), i. https://doi.org/10.1037/h0093360

Ameel, L. (2019). The 'valley of ashes' and the 'fresh Green Breast': Metaphors from the Great Gatsby in planning New York. *Planning Perspectives, 34*(5), 903–910. https://doi.org/10.1080/02665433.2019.1602847

Antonova, M. (2020). The container image schema as the conceptual basis of English adjectives' semantics. *Journal of Language and Education, 6*(1), 8–17. https://doi.org/10.17323/jle.2020.9751

Beauvois, J. L., & Dubois, N. (1992). Traits as Evaluative Categories. *Cahiers de Psychologie Cognitive/Current Psychology of Cognition, 12*(3), 253–270.

Beauvois, J. L., & Dubois, N. (2000). Affordances in social judgment: Experimental proof of why it is a mistake to ignore how others behave towards a target and look solely at how the target behaves. *Swiss Journal of Psychology/Schweizerische Zeitschrift für Psychologie/Revue Suisse de Psychologie, 59*(1), 16. https://doi.org/10.1024//1421-0185.59.1.16

Bolinger, D. (1967). Adjectives in English: Attribution and predication. *Lingua, 18*, 1–34. https://doi.org/10.1016/0024-3841(67)90018-6

Brugman, C. (1981). The Story of Over [Unpublished MA thesis]. University of California.

Bylinina, L. (2014). *The grammar of standards: Judge-dependence, Purpose-Relativity, and comparison classes in degree constructions*. Netherlands Graduate School of Linguistics.

Cain, W. E. (2020). American dreaming: Really reading the Great Gatsby. *Society, 57*(4), 453–470. https://doi.org/10.1007/s12115-020-00510-6

Chetty, R., Hendren, N., Kline, P., & Saez, E. (2014). Where is the land of opportunity? The geography of intergenerational mobility in the United States. *The Quarterly Journal of Economics, 129*(4), 1553–1623. https://doi.org/10.1093/qje/qju022

Coventry, K. R., & Mather, G. (2002). *The real story of over? Spatial language: Cognitive and computational perspectives*. https://doi.org/10.1007/978-94-015-9928-3_9

Cruse, D. A. (2017). The lexicon. *The Handbook of Linguistics*, 235–254. https://doi.org/10.1002/9781119072256.ch12

Deane, P. (2005). Multimodal spatial representation: On the semantic unity of over. From perception to meaning: Image schemas in cognitive linguistics. *29*, 235–282.

Dewell, R. B. (1994). Over again: Image-Schema Transformations in Semantic Analysis. https://doi.org/10.1515/cogl.1994.5.4.351

Dixon, R. M. (2004). Adjective classes in typological perspective. *Adjective Classes: A Cross-Linguistic Typology*, 1–49. https://doi.org/10.1093/oso/9780199270934.003.0001

Durlauf, S. N., & Seshadri, A. (2018). Understanding the Great Gatsby curve. *NBER Macroeconomics Annual, 32*(1), 333–393. https://doi.org/10.1086/696058

Freeman, M. H. (2010). *Cognitive linguistic approaches to literary studies: State of the art in cognitive poetics*. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199738632.013.0045

Gavins, J., & Steen, G. (2003). *Cognitive poetics in practice*. Routledge London.

Geeraerts, D. (Ed.). (2006). *Cognitive linguistics: Basic readings*. Mouton de Gruyter.

Gibbs, R. W., & Kearney, L. R. (1994). When parting is such sweet sorrow: The comprehension and appreciation of Oxymora. *Journal of Psycholinguistic Research, 23* (1), 75–89. https://doi.org/10.1007/BF02143177

Gleason, D. (2013). *Exploring metaphor in the Great Gatsby*.

Goddard, C. (2002). On and on: Verbal explications for a polysemic network. *Cognitive Linguistics, 13*(3). https://doi.org/10.1515/cogl.2002.019

Goldsmith, M. (2003). White skin, white mask: Passing, posing, and performing in the Great Gatsby. *MFS Modern Fiction Studies, 49*(3), 443–468. https://doi.org/10.1353/mfs.2003.0050

Hedblom, M. M., Kutz, O., & Neuhaus, F. (2015). Choosing the right path: Image schema theory as a foundation for concept invention. *Journal of Artificial General Intelligence, 6*(1), 21–54. https://doi.org/10.1515/jagi-2015-0003

Holland, N. N. (1988). *The brain of Robert Frost: A cognitive approach to literature*. Routledge.

Jerrim, J., & Macmillan, L. (2015). Income inequality, intergenerational mobility, and the great gatsby curve: Is education the key? *Social Forces, 94*(2), 505–533. https://doi.org/10.1093/sf/sov075

Johnson, M. (1987). *The body in the mind: The bodily basis of meaning, imagination, and reason*. University of Chicago press.

Johnson, M. (2013). *The body in the mind: The bodily basis of meaning, imagination, and reason*. University of Chicago Press.

Kamp, H. (2013). Two theories about adjectives. In *Meaning and the dynamics of interpretation* (pp. 225–261). Brill. https://doi.org/10.1163/9789004252882_011

Lahlou, H. (2023). The cognitive mechanisms underlying the concept of سرعة (speed) in Arabic. *Arab World English Journal for Translation and Literary Studies, 7*(1), 21–32. https://doi.org/10.24093/awejtls/vol7no1.2

Lahlou, H., & Rahim, H. A. (2022). Conceptual metaphors in North African French-speaking news discourse about COVID-19. *Indonesian Journal of Applied Linguistics, 11*(3), 589–600. https://doi.org/10.17509/ijal.v11i3.35949

Lakoff, G. (1987). Image Metaphors. *Metaphor and Symbol, 2*(3), 219–222. https://doi.org/10.1207/s15327868ms0203_4

Lakoff, G. (2008). *Women, fire, and dangerous things: What categories reveal about the mind*. University of Chicago press.

Lakoff, G., & Johnson, M. (1980). Conceptual metaphor in everyday language. *The Journal of Philosophy, 77*(8), 453–486. https://doi.org/10.2307/2025464

Lakoff, G., & Johnson, M. (2008). *Metaphors we Live by*. University of Chicago press.

Lakoff, G., & Núñez, R. E. (2000). *Where mathematics comes from: How the embodied mind brings mathematics into being* (1st ed.). Basic Books.

Langacker, R. W. (2000). *Grammar and conceptualization* (Vol. 14). Walter de Gruyter.

Leech, G. N., & Short, M. (2007). Style in fiction: A linguistic Introduction to English fictional prose *(issue 13)*. Pearson Education.

Liu, X. (2010). Stylistic analysis of the Great Gatsby from lexical and grammatical category. *Journal of Language Teaching and Research, 1*(5), 662–667. https://doi.org/10.4304/jltr.1.5.662-667

Malicka-Kleparska, A. (2023). The source of eventive implications of mental property adjectives and Nouns in Polish. *Poznan Studies in Contemporary Linguistics, 59* (2), 359–380. https://doi.org/10.1515/psicl-2022-2008

McNally, L., & Stojanovic, I. (2017). Aesthetic adjectives. *Semantics of Aesthetic Judgements*, 17–37. https://doi.org/10.1093/acprof:oso/9780198714590.003.0002

Mollaret, P. (2009). Using common psychological terms to describe other people: From lexical hypothesis to polysemous conception. *Theory & Psychology, 19*(3), 315–334. https://doi.org/10.1177/0959354309104157

Mori, S. (2019). A cognitive analysis of the preposition OVER: Image-schema Transformations and metaphorical extensions. *Canadian Journal of Linguistics/ Revue Canadienne de Linguistique, 64*(3), 444–474. https://doi.org/10.1017/cnj.2018.43

Nuhiu, R. (2021). *Quantitative approach to adjectives in the novel "the Great Gatsby"*. 2.

Pearson, H. (2013). A judge-free semantics for predicates of personal taste. *Journal of Semantics, 30*(1), 103–154. https://doi.org/10.1093/jos/ffs001

Phillips, T. (2018). Passing for white in the Great Gatsby: A spectroscopic analysis of Jordan Baker. *The Explicator, 76*(3), 150–154. https://doi.org/10.1080/00144940.2018.1489769

Romanić, J. (2011). *A comparative analysis of adjectives in the novel the Great Gatsby and the Historical text a history of Women*.

Schwarzerová, P. (2019). *The image of the 1920s in the USA in the Great Gatsby by FS Fitzgerald*.

SchwarzerovaP_TheImage_OR_2019.pdf.(n.d.). Retrieved February 22, 2022, from https://dk.upce.cz/bitstream/handle/10195/73339/SchwarzerovaP_TheImage_OR_2019.pdf?sequence=1&isAllowed=y

Stakytė-Šegždienė, E. (2019). *Metaphors of emotional states in Scott Fitzgeralds novel The Great Gatsby and their translation into Lithuanian* [Master's thesis].

Stockwell, P. (2002). *Cognitive poetics: An Introduction*. Routledge.

Stockwell, P. (2019). *Cognitive poetics: An Introduction*. Routledge.

Sweetser, E. (2017). The suburbs of your good pleasure': Cognition, culture and the bases of metaphoric structure. In *The Shakespearean international yearbook* (pp. 24–55). Routledge. https://doi.org/10.4324/9781351145329.

Talmy, L. (1983). How language structures space. In Pick, Jr H. L. & Acredolo L. (Eds.), *Spatial Orientation: Theory, Research, and Application* (pp. 225–282). Springer. https://doi.org/10.1007/978-1-4615-9325-6

Talmy, L. (1988). Force dynamics in language and cognition. *Cognitive Science, 12*(1), 49–100. https://doi.org/10.1207/s15516709cog1201_2

Talmy, L. (2000). *Toward a cognitive semantics: Volume 1: Concept structuring systems*. Bradford Book.

Taylor, J. R. (1989). Possessive genitives in English. *Linguistics, 27*, 663–686.

Tsur, R. (1971). *A rhetoric of poetic qualities* [PhD thesis]. University of Sussex.

Turner, M. (1996). *The literary mind: The origins of thought and language*. Oxford University Press.

Ungerer, F., & Schmid, H. J. (2013). *An Introduction to cognitive linguistics*. Routledge.

Vaca Vink, S. (2021). *Knowledge through Fiction: Characters as Social Metaphors in F. Scott Fitzgerald's The Great Gatsby*. Stockholm University. https://urn.kb.se/resolve?urn=urn:nbn:se:su:diva-189626

Zeven, K., & Dorst, A. G. (2021). A beautiful little fool? Retranslating Daisy Buchanan in *the Great Gatsby*. *Perspectives, 29*(5), 661–675. https://doi.org/10.1080/0907676X.2020.1778047

Назарова, Л. В. (2015). The particular structure of the metaphorical cohesion of the novel by FS Fitzgerald *The Great Gatsby*. *Proceedings of the Seventh European Conference on Languages*, Vienna (p. 9). Literature and Linguistics.