

A Pedagogical Study on English Cloze Test Items in the Junior High School Entrance Examination

-- Based on Gestalt Theory

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Abstract

Gestalt theory emphasizes holistic thinking and structural cognition, suggesting analyzing complex systems via the dynamic relationship between the whole and its components. This research uses English Cloze Test Items in the Fujian Junior High School Academic Proficiency Examination (2020-2024) as analysis subjects, exploring through “theoretical alignment” and “practical strategies”. “Theoretical alignment” focuses on the internal connections between the core principles of Gestalt theory and the design logic of cloze test questions. It clarifies how these questions evaluate students’ holistic language perception through discourse coherence, vocabulary integration, etc. Practical strategies use examples to propose combined teaching strategies. This approach enables students to overcome the constraints of isolated problem-solving and boosts their ability to form a comprehensive text representation. This study provides both a theoretical basis and practical perspectives for optimizing English cloze tests in the Junior High School Entrance Examination framework and innovating teaching methods. Furthermore, it holds significant potential for cultivating students’ structured thinking and comprehensive language application skills.

Keywords

Gestalt theory, cloze test, junior high school English, teaching strategies, discourse integration.

1. Introduction

The English Curriculum Standards for Compulsory Education (2022 Edition) emphasize the integrated development of language, cultural awareness, thinking quality, and learning ability. It mandates that test questions design reflect “the ability to use language to solve problems in real contexts” [1]. The cloze test’s design concept is in line with this requirement. This assessment format demands students to finish the text by filling in the blanks, making use of options, initial hints, Chinese prompts, pictorial cues, or directly assigned blanks in the passage. It aims to assess students’ ability to flexibly use nouns, verbs, adjectives, and conjunctions in the essay context and their command of grammatical elements like verb tenses and adjective comparative forms [2]. The cloze tests have always been an essential part of the English section in the senior high school entrance examination, and their importance cannot be overlooked. This kind of test offers a thorough assessment of students’ integrated language application capabilities, aiming to turn the core concepts of the new curriculum standard into a practical evaluation instrument, thus cultivating talents meeting contemporary requirements. Consequently, the research and discussion of cloze tests are of great significance.

The core principles of Gestalt theory offer a vital theoretical basis for the cloze test design. At the end of the 19th century, Wilhelm Wundt-led psychologists promoted structuralism in

psychology, introducing the “bundle hypothesis” which Gestalt theorists oppose [3]. Gestalt psychology then emerged in Germany, challenging structuralism [4]. Its foundation is credited to Max Wertheimer, Wolfgang Köhler, and Kurt Koffka, the pioneers of this significant modern Western psychology school. Over time, the influence of Gestalt theory has extended beyond the boundaries of psychology, infiltrating various disciplines including philosophy, aesthetics, art, and education. Ernest Ropiequet Hilgard delved into the challenge Gestalt Psychology presented to traditional learning theories and its implications for modern educational practices, especially in grasping the wholeness and context of learning [5]. Rudolf Arnheim [6] applied Gestalt principles to the study of art and visual perception, and his theories have not only had a profound impact on psychology but have also been widely applied in art, design, and education.

Existing research shows that the concept of Gestalt was introduced to the Chinese academic scene in the early 20th century [7]. Chinese scholar Liu Yongkang applied Gestalt theory to reading instruction, showing text comprehension is a process of activating holistic schemata via partial info [8]. Since then, examining the translation process through the psychological lens of Gestalt has broadened the horizons of translation studies [9]. Additionally, this theory has been widely and deeply incorporated into various aspects of Chinese literary and artistic creation and education [10]. It has constantly breathed new life into these art forms and enriched their connotations. However, the application of Gestalt psychology in basic education is still restricted, deserving further exploration and research.

2. The Logical Connection Between Gestalt Principles and Cloze Tests

The fundamental tenets of Gestalt psychology encompass the principle of wholeness, closure, proximity, and similarity [4]. Collectively, they emphasize Gestalt's stance that human perception and cognition are innately shaped by holistic organization rather than the passive aggregation of discrete stimuli.

The principle of integrity in Gestalt psychology states that the human cognitive system aims to integrate fragmented info into a coherent whole [11]. He pointed out that when faced with incomplete stimuli, the brain fills in missing parts via the Gestalt closure mechanism, focusing on extracting meaning from the overall structure. In language cognition, this principle shows that discourse understanding isn't just a linear combination of separate words or sentences. Instead, overall meaning is built via thematic frameworks and contextual coherence [12]. English short essays with cloze tests, usually around 200 words, have specific parts omitted, which is in line with the Gestalt integrity principle. These omissions disrupt the text's surface integrity yet maintain profound semantic coherence via its semantic, logical, and stylistic features [13]. Meanwhile, this format necessitates that students engage their contextual Gestalt abilities, synthesizing grammatical rules, lexical collocations, and pragmatic reasoning to complete the missing information.

The principle of similarity in Gestalt psychology posits that humans group stimuli with common attributes into one cognitive unit [4]. In language cognition, it shows in semantic field and syntactic parallelism sensitivity. Learners build an associative language info network by identifying similarities, reducing cognitive load. In English cloze tests, the omitted parts usually fall into similar semantic fields or specific categories and often evaluate grammatical categories. Based on the similarity principle, students can infer the missing answers using synonyms, antonyms, or analogous parts of speech and meanings, enabling more efficient decoding of complex texts.

The principle of proximity in Gestalt psychology asserts that nearby elements are more likely to be seen as a unified whole [14]. In English cloze tests, adjacent information often provides crucial logical reasoning clues [15]. This proximity enables test-takers to quickly form meaning

about the blank space. By applying this principle, students can deduce the answers to the blanks from content closely linked to the context. Text words and sentences are often logically ordered and semantically associated, with surrounding words relevant to a keyword. These associations help students better understand sentence structure and meaning, allowing for more precise word selection and a firmer grasp of text integrity, thus boosting problem-solving accuracy and efficiency.

The principle of closure in Gestalt psychology posits that people interpret incomplete data as wholes when perceiving info [4]. This shows the brain's info-supplementing ability [16]. It can be applied to fill blanks in English passages via context. Particularly, English cloze tests frequently have omitted parts, which might be words, phrases, or sentence components. Despite seeming incomplete, students can infer the most suitable words or phrases for the blank via contextual clues, integrating text themes, logical connections, and grammatical structures. Implementing the closure principle not only helps students better understand the article's content but also improves their language perception and usage ability. As a result, students can integrate fragmented information into a coherent text, filling in the blanks more accurately. Cultivating this ability is crucial for improving students' reading and logical skills.

3. Analysis of the Cloze Tests Based on Gestalt Theory

As evidenced in Table 1, in accordance with the principle of integrity, the cloze test genres in Fujian junior high school English proficiency exams from 2020-2024 are narrative and explanatory texts in a specific sequence. The themes cover a wide range of topics like culture, history, health, etc. Each narrative has a clear structure, presenting stories such as the building and innovation of Zhaozhou Bridge, the development of clay sculpture, and the introduction of rice to China. These two expository works clarify Tai Ji Chuan and Xi'an's profound history and modern significance. They provide abundant details and arrange them in a consistent, logical order, with well-defined messages and clear writing logic. By understanding the overall theme, students can better understand the context of each blank, which reflects the integrity principle in Gestalt theory. This principle emphasizes that students should view scattered elements as a whole to make sound judgments about incomplete parts.

Table 1. Topics and Genres of the Cloze Tests (2020-2024)

Year	Main Content	Topic	Genre
2020	The story of how rice first came to China and its importance to the Chinese people	Agriculture and Culture	Narrative
2021	The origin, popularity, and benefits of Tai Chi, as well as suggestions for learning Tai Chi	Culture and Health	Expository
2022	The history, reconstruction, and innovative design of the Zhaozhou Bridge and its impact on later generations	Engineering and History	Narrative
2023	The development and inheritance of colored clay sculpture handicraft in Niejiazhuang Village, Weifang, and personal contributions to the art	Traditional Craft and Culture	Narrative
2024	The historical evolution, cultural relics, modern progress of Xi'an, and its standing in software research	History and Modern Development	Expository

Under the principle of similarity, it is shown via speech, semantics, and structure. Using the 2020 cloze test as an example, Table 2 reveals semantic, part-of-speech, and sentence-structure similarities crucial for students. For example, in the blank of question 66, taking into account the recurring leading words in the context and those introducing the attributive clause, one should fill it with “that” or “which”. Such semantic and structural similarity cues greatly assist students in understanding the article’s overall content, allowing for more accurate gap-filling word selection. Implementing this principle improves the precision and efficiency of students’ problem-solving, and promotes their discourse comprehension and logical reasoning skills to a higher level.

Table 2. Analysis of Similarity Principle (2020)

Question	Blank	Similarity Principle Illustrated	Analysis
61	that/which	Semantic and Structural Similarity	The context often employs relative pronouns like “that” and the structure requiring to introduce attributive clauses.
62	hungry	Part-of-Speech and Semantic Similarity	The context frequently uses adjectives (e.g., happy), and semantically requires an adjective meaning “hungry”.
63	caught	Part-of-Speech and Semantic Similarity	The context frequently uses verbs (e.g., felt, told), and semantically requires a verb meaning “to catch”.
64	a	Semantic and Structural Similarity	The context frequently uses articles (e.g., a), and the structure requires an article to modify “magic song”.
65	greatly	Part-of-Speech and Semantic Similarity	The context frequently uses adverbs (e.g., very), and semantically requires an adverb to modify “surprised”.
66	into	Semantic and Structural Similarity	The context frequently uses prepositions (e.g., to, for), and semantically requires a preposition meaning “to become”.
67	us	Part-of-Speech and Semantic Similarity	The context frequently uses pronouns (e.g., we), and semantically requires an object pronoun “us”.
68	is	Part-of-Speech and Semantic Similarity	The context often uses verbs like “has been” and semantically demands a “to be” verb.
69	farmers	Part-of-Speech and Semantic Similarity	The context frequently uses nouns (e.g., people, land), and semantically requires a noun meaning “farmers”.
70	save	Part-of-Speech and Semantic Similarity	The context often uses verbs like “do”, “work” and semantically demands a verb meaning “to save”.

Based on the principle of proximity, using the 2021 cloze test as an example, Table 3 shows the context is vital for the correct answer. Like in question 82, “the most popular sports” after the blank requires “the” for superlative grammar. Such proximity cues greatly aid candidates in handling questions in higher education scenarios when they might have difficulty fully understanding the article. Through careful analysis of vocabulary, sentence structures, and semantic relationships around the blank, candidates can more accurately infer the suitable vocabulary, thus improving their comprehension of the article’s overall content and logical structure. The shrewd employment of contextual cues quickens students’ problem-solving pace and efficiently fosters their key information identification ability.

Table 3. Analysis of Proximity Principle (2021)

Question	Blank	Specific Analysis
81	developed	The phrase “was first” before the blank indicates the need for a past participle form of a verb.
82	the	The phrase “most popular sports” after the blank suggests the use of the definite article “the” to modify the superlative form.
83	countries	The phrase “more than 150” before the blank indicates the need for a plural noun.
84	slow	The phrase “breathing, meditation and” before the blank suggests the need for an adjective to modify “movements”.
85	deeply	The phrase “you breathe” before the blank indicates the need for an adverb to modify the verb “breathe”.
86	free	The phrases “helps you” before and “from relax and pressure” after the blank suggest the need for a verb in its base form.
87	at	The phrase “be good” before the blank indicates the need for a preposition.
88	or	The phrases “local clubs” before and “ask at school about classes” after the blank suggest the need for a conjunction.
89	online	The phrase “take an” before the blank suggests the need for an adjective to modify the noun “class”.
90	spending	The preposition “after” before the blank calls for a gerund. Given “a tiring day”, it should mean “to spend”.

Based on the principle of closure, students need to use context to complete missing info and uncover implied details. Even with omitted words, context clues help fill in the blanks. This psychological mechanism drives students to convert an incomplete text into a coherent entirety, deepening their comprehension of the article’s content. Take, for example, the sentence “The Weifang government has 61 (encourage) local people to learn traditional handicraft and make more money to get rid of poverty,” from the 2023 cloze test. Students are required to infer the

correct answer for the blank based on the context. This process not only tests their language proficiency but also their ability to analyze and understand the given information. By filling in the blank, students engage with the text on a deeper level, making connections and drawing conclusions. This active participation enhances their overall understanding of the passage and helps them develop critical thinking skills. Additionally, it allows them to gain insights into the specific topic being discussed, in this case, the efforts of the Weifang government to promote traditional handicraft and alleviate poverty. Through this exercise, students are better equipped to handle similar tasks in the future and are more likely to retain the knowledge and skills acquired from the text. Moreover, students are required to uncover and utilize concealed information to avoid confusion. Through analyzing the auxiliary verb “has” and the verb form in the prompt, students can determine that the missing word should be in the present perfect tense. Meanwhile, they should identify the hidden information related to “make” after the conjunction, clarifying the parallel verb structure to prevent misunderstandings. Therefore, the correct answer is “encouraged”. When dealing with cloze tests, contextual cues and extracting implicit info are vital for boosting problem-solving skills.

4. Teaching Enlightenment

Top-down discourse analysis method proceeds from the whole to the part and from the macro to the micro. It starts with the overall text framework, deducing specific details by grasping the theme, logical context, and genre features [17]. Guided by Gestalt integrity, it demands rapid passage reading to identify the core theme and understand text integrity. Concurrently, by incorporating the principles of proximity and similarity, students concentrate on the logical coherence between paragraphs and the internal structure of sentences, deducing answers via vocabulary or grammatical cues closely related to the context. The closure principle prompts students to actively supply the missing information and enrich the text with contextual clues.

In pedagogical practice, teachers can use mind-mapping to clarify the article’s structure, show topic sentence positions, and design paragraph reorganization tasks, thus enhancing students’ analytical ability.

Bottom-up clue reasoning proceeds from the particular to the general. It stresses linguistic minutiae and builds an overall text understanding by analyzing vocabulary, grammar, and local context clues. Concerning microscopic language elements like vocabulary and grammar, students should learn to heed part-of-speech cues, fixed collocations, and relevant grammatical structures near the blanks, making reasonable inferences based on these details [18]. Subsequently, the logical connections between sentences or paragraphs are employed to strengthen contextual links, enabling students to effectively validate their answers and personal judgments.

In instruction, educators should emphasize students’ command of basic language components, assisting them in recognizing and applying basic word formation like root affixes, while pinpointing standard logical cohesion methods and fundamental sentence markers.

5. Conclusion

The integration of the top-down discourse analysis method and bottom-up clue reasoning method needs to be adjusted according to the article genre and students’ individual situations. For articles with a clear hierarchical structure, especially in expository or argumentative genres, top-down discourse analysis is more beneficial. Conversely, the bottom-up clue reasoning method is more fittingly applied when the article emphasizes narration with a linear plot progression and clearly defined local context cues. The top-down and bottom-up approaches are not antagonistic but complementary techniques that should be flexibly adjusted according to the test questions’ characteristics and students’ capabilities.

Hence, when instructing cloze tests, educators ought to concentrate on cultivating students' comprehensive text awareness and strengthening their logical reasoning skills. By adopting these strategies, teachers can better grasp the text's overall structure and logical connections, thus notably enhancing students' problem-solving abilities and linguistic application in cloze test situations. By fostering students' discourse awareness, logical reasoning ability, and context clue sensitivity, these strategies enable learners to apply knowledge more confidently, accurately complete blanks, and improve reading and writing skills.

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