Ailian Yu
School of Foreign Languages, Xianyang Normal University, Xianyang, Shaanxi, China

Abstract: Systemic functional linguistics holds that language has three metafunctions: ideational metafunction, interpersonal metafunction, and textual metafunction. This paper studies discourse “The Middle Eastern Bazaar” and analyzes it from ideational metafunction and textual metafunction. Ideational function refers to the use of language to express the objective external world in language users’ minds and their subjective judgments of the objective external world, reflecting the experiential and logical functions of language. Ideational metafunction analysis consists of the analysis of six types of processes as well as the analysis of voice. Textual function of language refers to the actual use of language as a discourse that expresses relatively complete ideas, rather than grammatical units such as words or sentences. Textual metafunction analysis is carried out from the aspects of macro discourse structure, theme-rheme structure and discourse cohesion. Discourse “The Middle Eastern Bazaar” describes a bazaar in the Middle East with very typical local characteristics. The analysis finds that more material process and verbal process are applied than mental, behavioral, relational and existing processes. More non-middle voice is applied than middle voice in the discourse. The theme-rheme structure and different cohesive devices make the thematic information flow naturally and smoothly.

Keywords: Discourse; Systemic Functional Linguistics; Ideational Metafunction, Textual Metafunction; the Middle Eastern Bazaar

1. Introduction
Discourse refers to the actual language unit used in communication. It is a language entity with more than one paragraph or sentence and formal coherence and semantic coherence between its components. Functionally speaking, it is equivalent to a communicative behavior. In real communication, in order to achieve various communication goals, people must convey information in clear and complete discourse. The discourse mentioned here includes both oral communication discourse and written communication discourse. As an emerging discipline, discourse analysis is an interdisciplinary field gradually developed in the mid-1960s, involving disciplines such as linguistics, semiotics, sociology, psychology, philosophy, etc. Discourse analysis is to enable readers to scientifically and systematically analyze how the relative positions of language materials in a discourse generate meaning, and identify the structural patterns in the text and the language means used to specify these pattern markers [1]. The most practical discourse analysis approach is based on the systemic functional linguistics theory represented by Halliday. Therefore, this paper will use the relevant theories of systemic functional linguistics to explore the practical path of discourse analysis.

2. Theoretical Basis
British linguist M. A. K. Halliday began constructing the theory of systemic functional linguistics in the 1950s and 1960s. Systemic functional linguistics views language as a systematic source of meaning, a vast and complex system of symbols [2]. The process of people choosing a system is constrained by the conceptual meaning to be expressed by the speaker, the language system itself, and the context. Therefore, systemic functional linguistics is also known as applied linguistics, emphasizing the understanding of language characteristics and laws from the actual use process or the functions that language should perform. The meaning and function of language are very important to functional linguists, and without the specific environment
in which language is used, it is difficult to determine the meaning of language. Systemic functional linguists believe that people’s requirements for language are the functions that language must possess, and this function is infinite and ever-changing. The selection of a language system is a process of actual language use, which is also constrained and influenced by the speaker’s conceptualized cognition of the objective world and their own inner world, the characteristics and functions of the language system used by the speaker, and the immediate contextual context of the discourse. Therefore, the systemic functional language communication theory suggests that people’s understanding of the characteristics and usage patterns of language should be based on the actual process of language communication or the practical functions that the speaker wants to achieve through language use. Halliday holds that all abstract functions of language can be specifically summarized as its meta-functions. He believes that language has three main meta-functions: ideational function, textual function, and interpersonal function [3]. Ideational function is to the use of language to express the objective external world in language users’ minds and their subjective judgments of the objective external world, reflecting language experiential function and logical functions [4]. Experiential function is the reflection of language on processes and things that exist in the subjective and objective world; logical function is the expression of logical relationships between two or more semantic units in language. The ideational metafunction is specifically manifested through transitivity, voice, interdependence, and logical semantic relationships. The interpersonal function is the speakers’ meaning potential. It is also the language participatory function. Interpersonal function refers to the function of language to establish, maintain, and reflect interpersonal relationships, manifested as the social roles of all parties involved in communication [5]. This function makes the speaker engage in a certain situational context in which he expresses himself and influences others. It reflects the identity, status, attitude, motivation, and inference and evaluation of the language user towards the surrounding world. It is the process of communication and information exchange between people and the surrounding world when using language to complete activities with specific meanings. The manifestations of interpersonal meta-functions include tone, modality, and intonation. The textual function of language refers to the actual use of language as a discourse that expresses relatively complete ideas, rather than grammatical units such as words or sentences. The textual metafunction reflects the second-order nature of language which is not an essential attribute of the objective world, but nature of the symbolic world or meaningful reality constructed by the language system [6]. The discourse referred to in systemic functional linguistics is a semantic category of discourse, which is a semantic unit that reflects practical meaning. It connects language symbols with the actual environment in which language is used, determining the choice of language symbols and the way language is used by language users in a specific context. Speakers must choose appropriate thematic and rhyme structures, as well as appropriate cohesive techniques, in order to achieve correct information flow. Textual metafunction is achieved through thematic structure and cohesion.

The functional linguistic school attaches great importance to the analysis of discourse, which is a meaningful and coherent discourse for the functional linguistic school. The study of discourse can be conducted from both micro and macro perspectives. Macro research refers to the study of genre structures. Micro research refers to the study of transitivity, voice, mood, modality, theme and rhyme, and cohesive devices. This paper will take discourse “The Middle Eastern Bazaar” as an example to analyze how to use systemic functional linguistics theory to analyze discourse from two aspects: ideational function, and textual function. It will explore how to use appropriate discourse techniques in specific contexts to effectively communicate one’s cognition and understanding of external objective things with others.

3 Discourse Analysis Paths

3.1 Ideational Function

Systemic functional linguistics believes that ideational function, including experiential and logical functions, uses language to express people’s experiences. Experiential function
expresses various experiences of people in the real and inner world through voice and transitivity. Transitivity, a semantic system, divides people’s experiences in real life into several processes and identifies the association of the participants and the circumstantial elements in each process. Systemic functional linguistics believes that there are six types of processes: mental process, material process, behavioral process, relational process, existing process and verbal process. A process of doing is the material process, usually represented by dynamic verbs, with logical actions and action targets typically being nouns or pronouns. Mental process represents a process of thinking like perception, reaction and cognition. Mental process usually involves two participants, one senser who is the subject of the psychological activity, the other the phenomenon perceived by the senser. Relational process is a process of being. It reflects the relationship between things. Halliday’s systemic functional linguistics divides voice into middle voice and non-middle voice. If a discourse is in a middle voice, the process itself is only related to one participant, such as: He cried. However, if the process involves two or more participants, the process is in a non-middle voice, such as: The mother made the baby cry. Different voices bring different information to readers, allowing them to have a clearer understanding of the objective world.

Table 1. Type of Process in Para.1 in “The Middle Eastern Bazaar”

<table>
<thead>
<tr>
<th>Type of process</th>
<th>material process</th>
<th>mental process</th>
<th>relational process</th>
<th>behavioral process</th>
<th>verbal process</th>
<th>existing process</th>
</tr>
</thead>
<tbody>
<tr>
<td>number</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1 can clearly present the different processes in this paragraph, which presents an objective picture of the bazaar. There are more material and verbal processed than the others. Examples of material process are:
The Middle Eastern bazaar takes you back hundreds…
You pass from the heat and glare of a big, open square into…
…a cool, dark cavern which extends…
Little donkeys …thread their way among …
…the throngs of people entering and leaving the bazaar.
…porters clearing a way…
The din…makes you dizzy.
Examples of verbal process are:
…the stall-holders crying their wares by shouting…
…the would-be purchasers arguing and bargaining…

The discourse vividly but objectively depicts what the bazaar is like. Sentences with material process present the physical feature. The Gothic style gateway of aged brick and stone shows the very long history. It has a totally different outside view and inside atmosphere. The little donkeys threading their way seem to bring you to the crowded bazaar where you walk together with the throngs of customers, porters. However, it is also a place full of life, which is expressed in sentences containing verbal process. There you can hear stall-holders shout to sell their goods, would-be purchasers argue and bargain to make a deal.

Voice in this paragraph is mainly non-middle voice which involves two or more participants. This non-middle voice is in appropriate accordance with the topic, which is a bazaar where people interact with each other as well as the environment.

3.2 Textual Function

3.2.1 Macro discourse structure analysis
Systemic functional linguistics believes that analysis of discourse structure can be conducted from both macro and micro levels. Macro structure is the high-level semantic structure of a text manifested as a tree structure of themes, sub themes, etc. Macro structure of a discourse includes the relationship between paragraphs in the discourse, the relationship between various parts of the discourse and the theme of the discourse, discourse types, discourse formats [7]. The semantic propositions in the upper
level of a discourse are composed of lower level propositions, and the semantic structure of the discourse is hierarchical, while propositions that can encompass the entire discourse are the macro structure of the discourse [8]. Readers can utilize their existing mastery of language knowledge and understanding of discourse genres to analyze the macro structure of the text, in order to better understand the text they are reading.

“The Middle Eastern Bazaar” introduces the ancient and mysterious bazaar in the Middle East. Its macro discourse structure is as follows: The author starts from the entrance of the bazaar and introduces the overall overview of the entrance. People first need to pass through a wide and hot square, enter the ancient brick and stone Gothic gate, and then come to a dark street. The endless street is filled with camels carrying goods, bustling crowds, and constant cries of selling and bargaining. Subsequently, the author introduces several major commercial areas with distinctive local characteristics, including the cloth market, the copper market, the carpet market, the spice market, and the oil mill. Each specific market is described in detail, selecting the most typical things or activities, the quiet atmosphere of the cloth market and the leisurely customers who choose clothes, as well as the continuous tinkling sound of the copper market, with busy apprentice form a fairyland, with colorful and diverse carpets in the carpet market, and spices in the spice market. Finally, the author focuses on describing the bustling work scene in the linseed oil mill, seemingly taking the reader back to decades ago for a real-time on-site inspection.

Obtaining the macro structure of a discourse plays an important role in understanding the overall meaning of the discourse. The process of obtaining the macro structure of a discourse is a hierarchical reasoning process that summarizes the propositions and semantic context of the discourse as a whole. From the above analysis, it can be seen that macro discourse structure plays an effective role in helping senior English learning. As long as you master this discourse structure method, the entire thread of the article is in your mind. You may even feel as if you are strolling through this bustling and peaceful, busy and leisurely Middle Eastern market, or enjoying a landscape painting with stillness and activity. You will also feel that you are listening to a symphony that is sometimes passionate and sometimes profound and lengthy. You will not be limited to learning vocabulary or only understanding grammar points in discourse reading. At the same time, you will also feel that learning English can be a relaxed, joyful, and nurturing activity.

3.2.2 Theme-rheme structure analysis
Systemic functional linguistics holds that theme is the starting point of the message, the known or clear information in the discourse context, and it is the ground from which the clause is taking off and the point from which the speaker begins the conversation. That is to say, the first element in a clause is the theme, while the remaining elements are the rheme. Halliday divides themes into discourse themes that represent cohesion and discourse meaning, interpersonal themes that represent speakers’ attitudes and other interpersonal meanings, and conceptual themes or topic themes. Rheme refers to the content related to the speaker’s statement or the starting point of the speech. Under normal circumstances, rhyme tends to be the main source of information of the small sentence. Rheme is the main ways to integrate the information in discourse construction. Rheme expresses the significant choice in the system, and rhyme characterizes the choice of understandable information. In the overall discourse, rhyme is often the source of information in discourse building.

Halliday considers that theme can be analyzed and determined through different angles. Theme can be divided into marked theme and unmarked theme if analyzed from the starting composition of the speaker. In a declarative sentence, when the theme and subject are consistent, it is an unmarked theme structure; when the theme is filled with other components, it is the marked theme structure. The following example sentences can clearly present theme and rhyme.

Mary (unmarked theme) // cleaned the blackboard (rheme).
Who (unmarked theme) // said that (rheme)?
What (marked theme) // will you do this summer holiday (rheme)?
Despite the cold weather (marked theme) //, they still went to the farm (rheme).

The theory of thematic structure is one main theory of Prague School. This concept was put
forward by the Czech linguist Matthey Hughes in 1939. One of the main viewpoints of the Prague School is that sentences can be analyzed from both a grammatical and a functional perspective. Halliday and linguists from the systemic functional school accepted the Prague thought and developed this theory. Under normal circumstances, in the thematic structure, theme is certainly put in the first place; while in the structure of information, it can be said that the ingredient in the first place of a sentence is known information, and that at the end of the sentence is the new information [9]. Thematic structure constitutes a central element in an article, which is based on the structure of discourse.

The following is a specific analysis of the methods and effects of thematic structure analysis in discourse analysis, taking the first paragraph of “The Middle Eastern Bazaar” as an example.

The Middle Eastern bazaar (theme, unmarked) // takes you back hundreds—even thousands—of years (rheme). The one I am thinking of particularly (theme, unmarked) // is entered by a Gothic-arched gateway of aged brick and stone (rheme). You (theme, unmarked) // pass from the heat and glare of a big, open square into a cool, dark cavern (rheme). Little donkeys with harmoniously tinkling bells (theme, unmarked) // thread their way among the throngs of people entering and leaving the bazaar (rheme). The road (theme, unmarked) // is about twelve feet wide, (rheme) but it (theme, unmarked) // is narrowed every few yards by little stalls.... (rheme). The din of....and bargaining (theme, unmarked) // is continuous and makes you dizzy(rheme) .

The thematic structure in this paragraph can clearly show how information is transferred. First and for most “the bazaar” (the one in the second sentence) is presented as the first theme, with “you” in the third sentence, then “little donkeys”, “throng of people”, then “the roadway”, the “din” (in the last sentence). As long as we read through these themes, we can clearly see the author’s ideas: in this paragraph, he mainly describes the entrance of the Middle East market. The first sentence describes the Middle East bazaar as a whole, followed by a specific market. The following themes tell readers that in this market, you can see donkeys with bells on their necks, streets with distinctive market features, and various noisy selling sounds. Additionally, we found that almost all of the themes in this segment are unmarked. But in these unmarked themes, the starting point of the discourse is constantly changing. All the starting points discussed are the unique characteristics of Middle Eastern markets. The organization method of theme constructs the information flow mode of this discourse, allowing readers to keep up with the author’s ideas while obtaining relevant information. At the same time, we can find that almost every paragraph theme in this article is the theme sentence of that paragraph. If these paragraph themes that play a guiding role in the theme of each sentence within the paragraph are connected, the main idea of the article will be clearly obtained.

The thematic structure is linear sequencing, while the performance of information is lined by the value of information from up to down and from unknown to known. All the elements transform constantly in the process of discourse information development. These dynamic changes also affect the development of information flow in the discourse. The known information triggers new information; new information is continually becoming known information, and use it as the starting point and then trigger another new information.

3.2.3 Discourse cohesion analysis

Language is a tool for people to exchange information, and discourse is the main way for people to communicate with each other. Coherent communication discourse is associated with the cognitive model of both communication sides. It can help people effectively deliver information, and then achieve the communicative purpose in the specific context.

Cohesion, like discourse, is a semantic concept. It refers to the semantic connections between language components in a discourse. In a discourse, if the meaning of one part depends on the interpretation of another part, there arises cohesive relationship. Halliday divides cohesion into two types: grammatical cohesion and lexical cohesion [10]. There are four types of grammatical cohesion. The first one is reference which refers to the phenomenon of one component being used as a reference point for another component in a discourse, including the anterior and posterior reference relationship. The second is ellipsis which
refers to the omission of a certain component or elements in a discourse. The third is substitution which refers to the use of substitute words to replace a certain component, including verb substitution, noun substitution, and clause substitution. The last one is conjunction which refers to the means of using various connecting elements to reflect the logical relationships in a discourse. There are also four types of lexical cohesion. The first one is repetition which refers to the repeated use of a same language component. The second one is synonyms/antonyms. The third one is hyponymy/meronymy. The last one is collocation which means lexical co-occurrence also has the function of linking sentences into discourse. Take some discourse parts in “The Middle Eastern Bazaar” as examples to show how coherence is achieved in this discourse.

In the first paragraph, reference is the prevailing method. In the second sentence, “the one” is used to refer to “the bazaar” in the first sentence which demonstrates reference. In the last sentence of the first paragraph, the subject part consists of three parallel parts, but the key expression “the din” is omitted in the last two structures, which shows ellipsis. When the author comes to describe the linseed oil mill, more coherent approaches are used. Expressions like “cavern”, “wheel”, “pole”, “camel” are repeated several times. Synonymies like “vast”, “massive”, “huge”, and “largest” also help to achieve discourse coherence. When comes to the concept “cavern”, hyponyms like “walls”, “roof” are used to show the discourse relationship between being partial and being overall.

By analyzing the different discourse cohesive methods, readers will fully understand and appreciate the content they are reading from the perspective of the discourse and the context of language use, rather than isolating the language and unilaterally understanding it. Therefore, their reading ability can be greatly improved.

4. Conclusion
Discourse analysis allows language learners to break free from the constraints of vocabulary and grammar, and fully experience the charm of language as a language learner. Systemic functional linguistics provides a practicable analytical framework for discourse analysis.

References
