The purpose of this paper is to describe the function of English articles in a functional-pragmatic perspective, to clarify how the functions of the articles are reflected in the discourse, and to give some pedagogical implications for teaching English as a foreign language (EFL). Deixis is a grammatical category involving reference to characteristics of the situation where an utterance takes place; also referred to as "indexicality." The use of English articles is deeply connected with the way cognition is acquired. Articles in English function as old and new information markers in certain contexts, with the definite article used for old information and the indefinite article used to introduce new information. A text-mapping system based on an analysis of cohesion is described that can serve as an important tool in teaching Japanese students the use of the definite article in English. Used in conjunction with a computer text editor, this system has the advantage of presenting cohesive relations in a highly visible way. (Contains 30 references.)

(MDM)
COHESION AND DISCOURSE DEIXIS ON ENGLISH ARTICLES*

Mitsuharu Mizuno

1. INTRODUCTION

Most research on articles so far has treated them like accessories placed before nouns, which do not indicate any meaning or function. Words can be divided into two classes: content words and function words. Content words are those which refer to a thing, quality, state, or action and which have meaning when the words are used such as nouns, verbs, adjectives and adverbs. Function words are those which show grammatical relationship in and between sentences. Articles are a sort of function word as well as conjunctions and prepositions, so that it is very difficult to describe the meaning of function words separating it from its embedded sentences.

It is the function words that have pivotal roles in the performance of language. It is necessary, therefore, to master the function words as early as possible in second or foreign language acquisition. One of the best ways to master the use of function words is to have a thorough grasp of their linguistic functions such as theme, rhyme, information, cohesion, reference, and deixis.

Language is essentially an organic psycho social configuration. The meaning of language comes about from the interaction with the context of situation, such as events or circumstances which spatially surround and temporally follow the language behavior. In order to choose appropriate words, it is prerequisite to understand the func-

tions of words in discourse.

The purpose of this paper is to elucidate the functions of the articles in a functional-pragmatic perspective, to clarify how the functions of the articles are reflected on the discourse, and to give some pedagogical implications for teaching English as a foreign language.

2. FUNCTIONAL PRAGMATICS

When studying the use of articles most researchers emphasize the following three areas:

(i) Qualitative analysis of nouns that co-occur with articles (e.g., concrete/abstract, countable/uncountable).

(ii) Text analysis of endophoric factors in discourse (linguistic level).

(iii) Pragmatic analysis of situational factors in discourse (extra-linguistic level).

Many traditional grammarians have been aware of the importance of discourse analysis for understanding the use of the article system. For instance, Sweet (1906) regards the definite articles as reference pronouns, and further mentions that the reference pronoun has the dual functions of backward pointing and forward pointing, depending on whether it refers to something that has been said or something that is to follow.

In addition, Sapir (1921) was a leader in showing the significance of considering the discourse aspect for understanding the functions of articles (Sapir, 1921: 85-86).

Christophersen (1939) provides three terms to name the different kinds of de ermining bases. Christophersen uses the terms (i) explicit contextual basis and (ii) implicit contextual basis to refer to the situation where the idea in question is explicitly or implicitly described in the context. For instance:
COHESION AND DISCOURSE DEIXIS ON ENGLISH ARTICLES

(1) Once upon a time there lived an old tailor in a small village. The tailor was known all over the village as "Old Harry" (Jospersen, 1933: 162).

The *the*-form (*the tailor*) immediately after the word is introduced is a case of (i). However, after mentioning a *book* you can talk of *the beginning* and *the ending* and *the author*; such a *the*-form is a case of (ii). Christophersen also provides a third term, (iii) *situational basis*, or the situation where the association of ideas derives from the whole situation instead of from some previous word (Christophersen, 1939: 29-30). For instance, imagine yourself in a railroad carriage: you can start a conversation about "the rack," and everybody will understand that it is the rack in that particular carriage that you are talking about. Similarly, you might mention "the train" or "the ticket-collector," etc.

Although there are small differences in their definitions, many grammarians have used the term "anaphoric" (Curme, 1947, p. 106; Kruisinga, 1941, Vol. 3, pp. 70-171; Palmer, 1964, § 3.2.2; Quirk and Greenbaum, 1973, § 10, p. 63; Zandvoort, 1969, p. 363) to explain the function of reference. These grammarians never explicitly formulated a theory of discourse, but the implications embedded in their writings were developed in discourse analysis.

3. TEXTUAL COMPONENT

Halliday (1967, 1968) interprets the nature of discourse in terms of communicative dynamism. He classified the functions of language into three components, the IDEATIONAL, the INTERPERSONAL, and the TEXTUAL. The IDEATIONAL component represents the speaker in his role as observer, while the INTERPERSONAL component represents the speaker in his role as intruder. The TEXTUAL component is the text-forming component in the linguistic system.

Part of the TEXTUAL component is INFORMATION structure,
which is the ordering of the text, into units of information on the basis of the distinction into GIVEN and NEW: What the speaker is treating as information that is recoverable to the hearer (given) and what he is treating as non-recoverable (new) It is realized in English by intonation, the information unit being expressed as one TONE GROUP.

The remaining part of the textual component is that which is concerned with cohesion. It is the means by which elements that are structurally unrelated to one another are linked together through the dependence of one on the other for its interpretation. This has a kind of catalytic function in the sense that, without cohesion, the remainder of the semantic system can be effectively invigorated in no way.

Among others, the main functions of textual component which are concerned with the use of the articles in English are information, cohesion (viz. reference), and deixis.

3.1. The Information System

Halliday (1967, 1968) claims that the function of new and old information is the essence of discourse grammar. Old information is the knowledge that a speaker assumes to be in consciousness by what he says (Chafe, 1970; Halliday, 1967). In English, subject and predicate usually convey old and new information, respectively. Moreover, sentences signal old and new information by accent and stress on particular words. Words and phrases containing focal stress always convey new information (Halliday, 1967). Every language has its own way of representing old and new information in its surface structure (Chafe, 1970: 233).

The concept of old and new information is closely related to (but not identical with) known and unknown elements. A known element is what the speaker considers known to the listener (Inoue, 1979: 24-32; Kuno, 1973: 29).

Let’s consider, through the examples below, the relationship
between old and new information, and known and unknown elements:

(2) A: Which do you like better, tea or coffee?
   B: I prefer coffee.

The noun coffee in B's statement is a known element to A but, because it answers the question, it conveys new information to A. B's I prefer is old information, already mentioned by A. In the following discourse, a cat, is unknown and conveys new information. The cat, on the other hand, is known and conveys old information.

(3) I saw a cat in the tree this morning. but when I looked this afternoon the cat was gone. (Stockwell, et al., 1973: 71)

In the following example, the whole of B is new information, and it is unknown.

(4) A: What happened?
   B: Thieves broke in during the night.

In B of the next example, only the known element Frank is new information; all the rest is old information.

(5) A: Who came to the party?
   B: Frank.

Roughly speaking, articles in English function as old and new information markers in certain contexts. The indefinite article, except in the generic sense, is used to introduce new information as an unknown element marker. The definite article is usually used for old information as a known element marker. However, this is not
always the case. As we have seen above, the night is a known element that carries new information.

### 3.2. Discourse Deixis

The use of English articles is deeply connected with the way our cognition is acquired. That is, the way their cognition should be reflects on their way of verbal expression and results in their measure of selective restriction on the articles. The indefinite article holds the message that the information is new to the listener, and it is something discrete. English native speakers recognize the zero form as something continuous. That is, the zero article is a marker to distinguish something continuous from something discrete. Thus, it is not the case that the zero form has no function in restricting the meaning of the succeeding noun as seen in the case of Japanese nouns.

The reference of the demonstrative this and that stands for the relation between the speaker and the referring object, so they are visible, while the definite article the does not always need such a situation. The definite article has the referring (or referential) function concerning the existence of an object clearly defined by the speaker as well as the member identifying function which is realized by the hearer.

When the form is referring a certain object or thing in a discourse, what kind of knowledge or information is used by the speaker to get some clues to the connection between the expression and the defined object in the real world? They are partly the direct perceptual information from the physical circumstance or such and such a situation of utterance and the context of utterance, and partly the acquired social conventional knowledge, which is independent of the situation or context of utterance.

Tanz (1980) defines deixis as the mechanisms that connect an utterance with its spatio-temporal and personal context (Tanz, 1980: 1). Some point out that there are intimate connections between

The following example illustrates the importance of deictic information for understanding utterances by showing what happens when such information is missing:

(6) I talked with the carpenter yesterday (Chafe, 1976: 43).

We do not know who is speaking or when yesterday is, so we cannot know who talked to the carpenter, or where or when the talking took place. All natural languages have deictic aspects spread through them that are deeply entangled with their grammatical devices (Levinson, 1983: 55).

According to Grice (1967), speakers and listeners engage in speech acts on the co-operative principle, i.e., speakers usually try to satisfy certain maxims. If speakers do not follow these maxims, the communication tends to break down (Grice, 1975: 41-58). In order to communicate precisely and efficiently, participants try to cooperate with one another. Speakers try to be clear, relevant, truthful, and informative, and listeners understand what they say on the supposition that they are trying to meet these requirements.

Theoretically, when the speaker refers to a particular individual, s/he provides any information (not given in the context) that is necessary for the hearer to identify the individual in question. Consider, for example, the following sentence:

(7) The man whom I saw at a restaurant in Shinjuku yesterday was her father.

"The use of the definite article in a singular definite referring
expression suggests that there is one and only one entity that satisfies the descriptive information included in the noun phrase" (Lyons, 1977: 655).

Let's consider the following two insightful studies involving the underlying principles of articles, one by Hawkins and the other by Allen and Hill. Hawkins (1977), on the one hand, is concerned with the contrast between definiteness and indefiniteness in a deictic situation. Allen and Hill (1979), on the other, pay attention to the contrast between _φ_ and _the_.

According to Hawkins (1977), the speaker performs the following acts when using a definite article. He (a) introduces a referent (or referents) to the hearer, (b) instructs the hearer to locate the referent in some shared set of objects, and (c) refers to the totality of the objects or mass within this set that satisfies the referring expression. These acts will only be successful if the following _appropriateness conditions_ are fulfilled:

1. **Set existence condition**: the speaker and hearer must indeed share the set of objects that the definite referent is to be located in.
2. **Set identifiability condition**: the hearer must be able to infer either from previous discourse or from the situation of utterance which shared set is actually intended by the speaker.
3. **Set membership condition**: the referent must in fact exist in the shared set which has been inferred.
4. **Set composition conditions**: (i) there must not be any other objects in the shared set satisfying the descriptive predicate in addition to those referred to by the definite description, i.e., there must not be fewer linguistic referents referred to by the definite description than there are objects in the shared set; and (ii) the number of linguistic referents referred to by the definite description must not exceed the number of
objects of the appropriate kind in the shared set; and (iii) the hearer must either know or be able to infer that the intended object has the property that is used to refer to it in the descriptive predicate (Hawkins, 1978: 167-168).

Condition 1 is a prerequisite for the fulfillment of the other conditions. If the participants don't share a previous discourse set, a breakdown arises as in what follows:

(8) I've just seen the professor again.
    I don't think we've met before, have we?

Hawkins explains that the situation sets shared by participants must have as their focal point either the situation of utterance or the interlocutors' situation of origin. Condition 2 and 3 are not often separable. In the following example, the hearer could gradually use pragmatic cues to identify some common knowledge, even if his knowledge that the referent is not a member of this set makes it impossible to locate. Thus, in the following:

(9) I've just seen the professor again.
    Which professor?
    Oh, didn't I tell you?

It may be the case that "the professor" could not be located in either an association set or a situation set; therefore, the hearer would infer that the speaker was indicating that the referent was to be located in the previous discourse. Even if the hearer had correctly identified the shared set, however, he could not locate the referent there because the hearer's knowledge did not actually encompass a member of this set.

Allen and Hill (1979) are concerned with the contrast between \( \phi \) and \( the \) in a deictic situation. Participants, at any moment of their
discourse, occupy a particular point in space and a particular point in
time. They share a common focus as described by Bull (1960), and are in a state of common awareness, at least concerning space and time. Within speech events that reflect this focus, the participants' spatial and temporal location may be respectively regarded as coding place and coding time, or more generally as coding locus (i.e., a spatiotemporal locus). In addition, they continuously make predications that relate to other points in space and time. These individual points may be respectively regarded as predicated place and predicated time, or more generally predicated locus.

According to Allen and Hill (1979), English speakers identify coding locus by the words here and now: an unmarked part of lexical items expressing common focus on the spatial and temporal location of the speech event. In contrast, predicated locus is identified by the words there and then: a marked pair with the, which is the same phonological element that introduces the marker the. Thus, the may signal that there and then are to be used as an underlying reference point in the speech event, while $\phi$ may signal that here and now are to be used. For example, let us consider the following:

(10) There is a dog in the front of the car. (Figure 1: predicated place / field-based strategy)
(11) There is a dog in front of the car. (Figure 2: coding place / participant-based strategy)
In the first sentence, the word front is preceded by the, which suggests that the speaker is using a field-based strategy, where the verbally established reference point is used as a position that belongs to the referring field. By contrast, in the second sentence, the word front is preceded by $\phi$, which suggests that the speaker is using a participant-based strategy, where the verbally established reference point is viewed as oriented toward the participant near the car.

Now, let us turn to an example of temporal prediction that illustrates a similar contrast:

12. Two weeks ago Frank said he would return next Monday.
13. Two weeks ago Frank said he would return the next Monday.

(Allen and Hill, 1979: 135)

Consider, the both sentences uttered on the same day (e.g., November 18th). In Allen and Hill’s terms, virtually the temporal location of the participants is used as the controlling point in establishing a referent for the expression next Monday.

CODING TIME

\begin{center}
\begin{tabular}{ll}
November 18 & November 23 \\
\end{tabular}
\end{center}

By contrast, the temporal location of the predicated event, Frank’s speech act, is now used as the controlling reference point rather than the temporal location of the participant.

PREDICATED TIME

\begin{center}
\begin{tabular}{ll}
November 1 & November 9 \\
\end{tabular}
\end{center}
as illustrated by the following calendar:

<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>29</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

They explain that the common focus provided by the temporal frame of the discourse is signaled by the unmarked $\phi$. When the predicated time is used as the controlling reference point, this shift must be marked by *the*.

In short, in each instance above, $\phi$ signals the use of more fundamental information in establishing a referent for an NP (nominal phrase): the use of, axiomatic information (in descriptive terms) placed in common focus during the early stages of discourse; in the case of spatial and temporal constructs, it signals the use of information that is in common focus, because of the participants' immediate location in space or time. By way of contrast, *the* signals the use of less fundamental information in establishing a referent for an NP: the use of localized bits of information (in descriptive terms) used
through the discourse in providing any number of particular referents. In the case of spatial and temporal constructs, the signals the use of information provided by predicated reference points. Thus, within spatial and temporal constructs, \( \phi \) expresses the 'here' or 'now' as a controlling reference point, in contrast to the which expresses some 'there' or 'then.'

The notion of binarity is closely interwoven with every grammatical component in English. Among others, the principle of binarity is central to the meaning of the article. It makes contrasts and frames the pattern of the native speaker's thoughts. Hence, the contrast is reflected in the underlying principles of article usages. It may be between specific and general, between definite and indefinite, between continuous and discrete, between countable and uncountable, between old (or given) and new information, between coding locus and predicated locus, between plural and singular, or between preconsonantal and non-preconsonantal.

The flow of information processing

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MEANING POTENTIAL

1. DISCOURSE LABELING FUNCTION
2. CLASS LABELING FUNCTION
3. NUMERIC LABELING FUNCTION

SELECTIVE PRINCIPLE OF THE ARTICLES (Mizuno, 1986: 178)
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3.3. Textual Cohesion

Cohesion is the non-structural text-forming component in the linguistic system. Cohesion is classified into five types: reference, substitution, ellipsis, conjunction, and lexical cohesion. Reference refers semantic relations, and the others refer structural relations. Among others, reference holds the semantic property of definiteness, on specificity.

The article *the* basically identifies a particular individual or a subclass within the class designated by the noun. Halliday and Hasan (1976) categorize its usage in two ways: (a) exophoric (the referent identifiable outside the text, in the context of the situation), and (b) endophoric (the referent identifiable within the text). They explain reference in this relationship as in Figure 3.

They devote little discussion to exophoric reference in their book, because exophoric reference is not textual, and therefore not cohesive.

```
<table>
<thead>
<tr>
<th></th>
<th>[situational]</th>
<th>[textual]</th>
</tr>
</thead>
<tbody>
<tr>
<td>exophora</td>
<td></td>
<td>endophora</td>
</tr>
<tr>
<td>[to preceding text]</td>
<td>[to following text]</td>
<td></td>
</tr>
<tr>
<td>anaphora</td>
<td></td>
<td>cataphora</td>
</tr>
</tbody>
</table>
```

**Figure 3: The Classification of Reference**

(Halliday and Hasan, 1976: 33)

3.4. Pedagogical Implications

Halliday and Hasan (1975) argue that textual cohesion has been neglected in linguistic analysis:

A relatively neglected aspect of the linguistic system is its resources for text construction, the range of meanings that are specifically associated with relating what is being said or written to its semantic environment. The principal component of these
resources is that of cohesion. (Halliday and Hasan, 1976; vii)

The various types of cohesion in English had been outlined by Halliday, and the concept was developed by Hasan. They assert that it has also been neglected in language teaching, but they have not yet created an efficient system for applying this concept to language teaching.

Pointing out several problems in Halliday and Hasan's model of textual cohesion, Hill (1982) has developed a coding scheme which makes it possible to display cohesive relations by mapping them onto the text. In this scheme, each target is numbered and all the arrows that refer to a particular target are given the same number. The visual display of cohesive relations leads to more efficient information processing, and thus makes this system especially appropriate for pedagogical purposes. I will refer to this coding as the Text-Mapping System. The coding rules used in the Text-Mapping System are as follows:

RULES OF TEXT MAPPING SYSTEM

All target items are bracketed and, usually, given a superscript number:

- [ ] = target item
- (CAPS) = target item that does not appear in the text but that may be inferred from the text
- [ ] = the first of two targets that are tied to one another by a conjunction
- [ ] = the second of two targets that are tied to one another by a conjunction
- [ ] = in comparative reference, the target item that is SUBJECT of comparison
- [ ] = in comparative reference, the target item that is BASE of comparison
Any arrow item is underlined in one way or another, and given a subscript number that corresponds with the target item to which it is tied. Each identifying item is also given a small letter, indicating its place in a sequence of identifying items that form a cohesive chain:

\text{word(s)}_{\text{m}} = \text{arrow}^{*} \text{ item that is connected textually to some target item}

\text{word(s)}_{\text{m}} = \text{arrow item that is genuinely exophoric}

\text{word(s)}_{\text{m}} = \text{quasi exophoric identifying item}

Note: A genuinely exophoric arrow item is linked to something in the real world, as opposed to something mentioned in the text. A quasi-exophoric arrow item is linked to something in a make-believe world, such as one created in a piece of fiction. Such an item is found most often in dialogue.

\text{word(s)}_{\text{m}} = \text{arrow item that forms part of a tie that is, although cohesive, contained within a sentence or an independent clause. It is therefore structural.}

A text-mapping system based on an analysis of cohesion is a significant tool in teaching Japanese students the use of the definite article in English. Used in conjunction with a computer text editor, this system has the advantage of presenting cohesive relations in a highly visible way: with directional arrows and with insertion/deletion markers. For example, an inquiry lesson for teaching the coding scheme for THE and this text-mapping system may be given as follows:

Present the assigned passage in Tales from Shakespeare with an OUP, and illustrate the cohesive relations between THE and its targets. Then ask students to pass around two handouts: one is the coding scheme for THE, and the other is the answer sheet for the assignment. After that, explain to students the varied references of
The Varied References of the Definite Article

I. Endophoric Reference (+KNOWN)
   (i) Anaphoric Reference (+OLD)
      1. repetition
         I see (a cat) and (a dog). The dog is running after the cat.
      2. specification
         I found (an old large room). The floor had holes here and there, and the walls were dirty.
         The policeman caught the (robber) by the arm.
         She looked (her husband) in the face.
   (ii) Cataphoric Reference (-OLD)
      1. specification
         What is the price (of this book)?
         It happened the day (before yesterday).
         He had the courage (to speak it out).
      2. superlative
         This is the (most interesting novel I have ever read).

II. Exophoric Reference (+KNOWN, +OLD)
   (iii) Specific Situation
      Open the door, please./The front door is shut.
      I left the station and went to the post office.
   (iv) Homophoric Reference
      1. unitary reference
         The moon goes round the earth.
      2. generalization
         The cow is a useful animal.

Then distribute copies of the coding rules for the textmapping system among the students. Finally, demonstrate how to do mapping on a text as follows:
A MIDSUMMER NIGHT'S DREAM

THERE was a law in the city (of Athens) which gave to its citizens the power of compelling their daughters to marry whomsoever they pleased, for upon a daughter's refusing to marry the man her father had chosen to be her husband, the father was empowered by this law to cause her to be put to death; but as fathers do not often desire the death of their own daughters, even though they do happen to prove a little refractory, this law was seldom or never put in execution, though perhaps the young ladies (of that city) were not unfrequently threatened by their parents with terrors (of it).

At the end of the lesson, ask the students to do mapping on one page of the assignment sheet.

In addition, if you are able to access a text editor, provide students with a handout of instructions for creating the text and correcting/revising it on the text editor. Demonstrate how to use the text editor. Then ask students to use the text editor based on the instructions in the handout. At the end of the class, ask the students to practice on the text editor.

In summary, in this lesson model, the student is central. Planning for teaching, as well as the teaching itself, should be student-centered. The text mapping system and the text editor should be closely related to (1) instructional objectives and content, (2) types of learning experiences, (3) modes or class size, (4) personal roles, (5) materials and equipment, (6) physical facilities, and (7) evaluation of results and improvement of instructional planning.

Research on writing and psycholinguistics advocates that writing should be taught as a multi stage activity to separate clearly the editing stage from the composing stage. In the process of composing sentences, the writer has to generate ideas, form propositions, select
lexical items, plan clauses and sentences, translate phonological and semantic entities into written form, and plan the following units. Therefore, it is ineffective to overload short-term memory, during composing, with concerns about correctness when so much else is going on.

The text editor facilitates some tasks like storing lots of information, correcting spelling, recopying, and formatting. Inasmuch as the text editor eliminates physical barriers that are special inhibitors of the revising activity, writers can compose more quickly, getting ideas onto paper without worrying about mistakes or organization. The various functions of the computer offer specific ways that aid in various aspects of composing and revising.

Consequently, the cohesive function of the articles needs to be explicitly taught because the comprehension and production in English may largely depend upon such knowledge. It suggests that the reference of the definite article is best taught by means of mapping the text based on analysis of cohesion.

REFERENCES


