論 文 内 容 要 旨

The present thesis aims to provide a Dynamic Model of Grammar (DMG) approach to a variety of linguistic phenomena that have so far been overlooked or left unsettled as topics awaiting solution in the literature of English grammar. It is argued that DMG offers an interesting way of capturing syntactic and semantic properties of grammatical constructions in particular languages, as well as a principled way of distinguishing between core and peripheral phenomena in a universal grammar. DMG will also give us insightful clues to account for the gradual process of transition of grammatical facts from basic to derivative ones.

Learning a natural language amounts to learning a set of rules by which one can unconsciously produce and comprehend an infinite set of sentences of the language. Generally speaking, children learning a language acquire the language by continually restructuring their grammar (G) on the basis of their biologically determined language acquisition device (LAD) as new data become available to them. Thus, a full process of language acquisition, which is supposed to proceed through intermediate stages consisting of the set of {Data, LAD, Grammar}, may be schematized as follows:

$$LAD(0) \Rightarrow G(1) \rightarrow LAD(1) \Rightarrow G(2) \rightarrow ... \Rightarrow G(i) \rightarrow LAD(i) \Rightarrow G(i+1) \rightarrow LAD(i+1) \Rightarrow G(i+2) \ ... \Rightarrow G(n)$$
$$\uparrow \qquad\qquad \uparrow \qquad\qquad\qquad\qquad \uparrow \qquad\qquad\qquad \uparrow$$
$$D(1) \qquad\quad D(2) \qquad\qquad\qquad\quad D(i+1) \qquad\qquad D(i+2)$$

LAD consists of several components, an essential one of which is assumed to be a Universal Grammar (UG) representing the pre-existing innate language faculty. UG and other components interact with each other and enable the language-learner to successfully arrive

at the knowledge of a particular grammar. One of the major goals of linguistic theory is to reveal the nature of UG; that is, we have to ask what kind of information UG contains. What I have claimed in the thesis is that the LAD should contain principles which govern the transition from G(i) to G(i+1) in a step-by-step process in which the acquisition proceeds.

There are two views of LAD. One of them, which may be called 'the stage-specific, output-oriented view,' has been adopted by the generative grammar in accordance with a highly idealized instantaneous model of language acquisition. This view extends principles and constraints of the adult grammar G(n) into far corners of children's tentative grammars reproduced at intermediate stages of the acquisition process. DMG, on the other hand, adopts a second view of LAD, that is, 'the dynamic, process-oriented view,' which allows the possibility that possible grammars are characterized partly by a set of constraints imposed on each stage of the acquisition process. DMG may include information about correlations between two consecutive stages, that is, inter-stage extensional principles which govern transition from an already acquired grammar to the next stage of development. These principles, in a sense, extend or modify existent rules into new ones and innovatively introduce them into the next grammar. Human language is a set of heterogeneous grammatical rules or constructions, ranging from basic to peripheral. DMG makes it possible to theoretically separate basic rules from derivative ones, deriving the latter on the basis of the former.

Among the extension principles proposed by DMG are Model Dependent Extension triggered by syntactico-semantic similarity between base and model structures, and Rule of Syntactic Realization motivated by Meaning Concealment. The former claims that derivative structures are extended from base and model structures that contain their own formal and semantic features, which are to be bequeathed in newly born descendents throughout the acquisition process. The latter adds to an original form a new formal part that corresponds to a meaning syntactically covert but semantically overt in the original form. I have argued that these principles account for extension of strict subcategorization features of a lexical item. When several features are shared by one lexical item, they are supposed to be closely related to one another. Particularly in case that its lexical meaning is invariant, the most basic feature should introduce another one, which, in turn, extends to more peripheral ones, according to the extension principles. I have proposed that idiosyncratic strict subcategorization features of the verbs *turn, prefer, regard, seem* are introduced into the lexicon on the basis of semantic and structural similarity between basic and model structures. As far as complement of verbs of manner of speaking such as *whisper, murmur* and *mutter* is concerned, it ranges diversely from a zero-object to special kinds of noun phrases to sentential *that*-clause. I have argued that a Rule of Syntactic Realization guarantees an initial extension from intransitive zero-object, which is supposed to be the most basic one, to transitive NP object, which must have some relevance with a vocal sound. Our dynamic extensional principles also reveal that a clausal complement cannot be determined discretely as argument or non-argument, but that the scale of its argumenthood constitutes a continuum from absolute to non-absolute to non-argument.

Assuming a model for syntactic extension is necessary to explain syntax of nominal expressions with a gap such as gerundive, action and derived nominals. They are

characterized by the presence of a syntactic or semantic gap in their object position. I have argued that only possible rules for them under the framework of current generative grammar will require a set of ad hoc, complex and peculiar conditions, and proposed that the peculiar properties required can be explained in a principled way under the assumption that they should be derivatively constructed on the basis of the corresponding propositional constructions. A Model Dependent Extension plays a crucial role in this argumentation. It has been suggested that if a grammar contains a rule which generates the structure [...NP$_i$...[s X e$_i$ Y]...], then a rule is newly introduced in the next stage of grammar development which can generates [...NP$_i$...[NP X e$_i$ Y]]. From the earlier days of generative grammar, linguists have purported to establish principles which are able to distinguish marked from unmarked phenomena in natural languages. Among them were kernal vs nonkernal sentences, analogical processes, patching up principles. The three types of nominal expressions I have discussed provide a strong justification for adequacy of dynamic extensional hypotheses. Our assumption is certain to shed some light on the intuitively valid idea that clause-like nominal expressions are in some degree derivative or marked constructions in natural languages.

Like treatment of syntactic change in diachronic linguistics, DMG emphasizes that innovative forms and meanings are gradually actualized into a grammar in a step-by-step manner. DMG assumes the following idealized process of extension:

Stage I: a core linguistic for F1 has a core meaning M1, which is derived compositionally by applying semantic rules to F1.
Stage II: F1 acquires an additional meaning M2, resulting in a situation in which F1 is semantically ambiguous between M1 and M2.
Stage II': F1 may be ambiguously reanalyzed into F2, which semantically corresponds to M2.
Stage III: The pairing of F2 and M2 is strengthened, while F1 is weakened into the background.
Stage IV: The association of F2 with M2 is conventionalized in a grammar

I have traced a gradual extension of *anything like, out NP, since NP* and lexical senses of the verb *appear*. Grammatical extension proceeds with defining properties of an original structure minimally preserved in the next stage. It has been suggested that the proposal of an intermediate stage, in which both preceding and subsequent characteristics coexist side by side, should be amply sufficient for this purpose. A novel structure is to be introduced and ambiguously added over a basic structure through, for example, pragmatic principles. The rise of the new structure has some repercussion on the process of extension. It is promoted into the foreground by way of pragmatic strengthening and outplaces a central status of the original structure. I have suggested that gradualness of extension helps us understand the reason why constructions or phrases in question are what they are, by elucidating the process through which they have come to acquire their distinctive properties.

DMG assumes what may be called Principle of Synergism. DMG supposes that the degree of derivativeness of a rule is determined through the process of language acquisition, and that after completion of language acquisition, it still is to be preserved in a grammar as

part of a native speaker's grammatical knowledge. Then, Principle of Synergism says that applicability of a rule to a structure is affected by the combination of the degree of derivativeness of the rule and the degree of derivativeness of a rule generating the structure. In illustration of Principle of Synergism, I have presented a *stupid/unlikely* type of Hard-Nut Construction with an overt prepositional *wh*-phrase. I have suggested that the ordinary Hard Nut Construction of *stupid/unlikely* type is no less derivative than the wh-fronting of [P+NP] is.

A grammatical construction is a conventionalized amalgam of a number of independent features of syntax, semantics and lexicon. A specific association of a form and a meaning in a construction is learned through a process of categorization and schematization over particular instances into abstract patterns. In the language acquisition process, children initially acquire sentences with light verbs such as *go, do, make, put* and so on. Light verbs, which are the first to be learned and the most frequent ones in the early stages of children's language, denote fundamental atomic senses closely correlated with radicals of our human cognitive experiences. The scenario of acquisition of constructions starting with light verbs is as follows: children first hear tokens of light verb sentences along with their own interpretations on a verb-by-verb basis, then categorize them to the pattern of a construction, schematizing over a number of particular instances, and extends types of verbs in a construction from a basic light verb to other ones on the basis of Force-Dynamic Relation Hypothesis. Light verb constructions, thus, have prototypical formal patterns associated with particular semantics from an acquisition point of view, and play a central role in extending a new type of constructions. In our terms, light verb constructions function as base and/or model structures in a Model-Dependent Extension, with their semantic properties transmitted into new structures.

An Intransitive-Verb Particle Constructions (IVPC) is a good candidate for looking for the way of how a construction emerges in a grammar and extends into a conventionalized grammatical category. An IVPV with a construction particular particle is a phenomenon in which an intransitive verb is apparently transformed into a transitive verb, being inserted into an open verb slot of an idiom-like fixed form of a transitive construction. Among them are included the Time-Away, Removal and Suppression Constructions. I have proposed a process-oriented approach that they are derived on the basis of light verb constructions with *pass-away, take-off* and *put-down*, respectively, and as its result, we can account for every syntactic and semantic properties of the IVPCs, particularly, why particles are fixed and indispensable in these constructions.

Despite persistent doubts having been cast upon too idealistic an acquisition model, the instantaneous output-oriented model has produced a lot of linguistically significant achievements, and has been so widely adopted without any question in a variety of linguistic fields. Doubtless, the study of language acquisition based upon the model has also made far more marked advances than in earlier times, but unfortunately for us, the assumption has never been substantially proved that resultant features of adult grammars should turn up even in an immature form at each stage of the acquisition process. It is fair to say that we have not been able to develop an argument for the intensional non-instantaneous model, which is certain to lead a linguistic theory to more realistic and more descriptively adequate model of grammar, until DMG's method of thought found its way into a world of Chomskyan empirical scientism sweeping over the filed of linguistics.

論文審査の結果の要旨

　自然言語の構造を分析するうえで、伝統的な生成文法理論の基本姿勢は大人の習得済みの文法を直接の対象とする瞬時的モデルであるが、派生的な言語現象の生成過程を十分に説明するには、子供による言語習得の非瞬時性を踏まえた動的文法理論の立場を採用する必要がある。本研究は、主として現代英語の統語論と意味論のレベルにおいて観察される周辺的言語現象に着目し、基本構造から派生構造が法則的に拡大生成される過程を文法の拡張プロセスとして捉え、併せて、言語理論の精密化を探求したもので、全編7章から成る。

　第1章は序論であり、言語理論の外延的瞬時的モデルと内包的非瞬時的モデルの区別を明確にして、動的文法理論の概略と文法拡張の諸原則について述べている。

　第2章は文法の漸次的拡張について、anything like, out the door等の言語現象に見られる特殊性を取り上げ、最も基本的な構造から説き起こして段階的に変容するプロセスから追求している。漸次的説明は語用論的にも言語理論的にも有用な知見である。

　第3章では空所を含む名詞表現がその対応する文に基づいて生成されることを論じ、動的文法理論による拡張の原則が名詞表現の派生的性質を解明する重要な手掛かりになるという新しい見解を示している。

　第4章は補部の拡張について論じる。一つの語彙項目が取る数種類の補部は互いに密接に関連付けられており、最も基本的な補部の形式と意味が中心となって、徐々に特殊なものへと拡大していくことを、turn, prove, grumble等の動詞や名詞、形容詞を基に実証している。

　第5章は文法における規則の適用可能性が、その規則の派生度と、規則が適用される構造の派生度の相互作用によって決定されることを、a hard nut to crack構文を基に論じたもので、構文ネットワークの新しい研究法として注目される。

　第6章では、構文の意味と動詞の意味の関係は、言語習得における構文発生とその拡張のメカニズムの中で捉えるべき問題であることを主張する。ここで提案されている構文発生期、構文拡張期、構文再拡張期から成る構文習得の三段階説は、本論文の中核を成すものであると同時に、語彙意味論、構文文法論、認知意味論を包含する統一理論の構築を目指す新たな試みである。

　第7章は自動詞が他動詞として出現する不変化詞構文が、基本的な他動詞不変化詞構文に基づいて形成されることを論じている。構文を基本から特殊へと漸次的に変化する重層構造として捉え、文法における構文の発生と拡張を実証的に論じたものとして、今後の構文研究に大きな影響を与える可能性がある。

　以上要するに本論文は、動的文法理論の枠組みを用いて英語の諸現象を検討し、記述的および説明的妥当性を目指す言語理論が基本から特殊への拡張の原則を備えていなければならないことを論じたもので、情報科学および認知言語科学の発展に寄与するところが少なくない。

　よって、本論文は博士（情報科学）の学位論文として合格と認める。