

WORD ORDER TYPOLOGY OF ENGLISH AND JAPANESE:
The Direction of Syntactic Organization and a
Common Structural Principle (1) The Word Order
and the Position of the Head

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WORD ORDER TYPOLOGY OF ENGLISH AND JAPANESE

—The Direction of Syntactic Organization
and a Common Structural Principle—

(1) The Word Order and the Position of the Head

Fumio Miyahara

1. The Word Order in the Simple Declarative Sentence

1.1. The Position of S, V, and O

The basic elements of the simple declarative sentence (or rather clause) are the subject (S), the verb (V), and the object (O). The regular order of S, V, and O in the unmarked simple declarative sentence is SVO in English, and SOV in Japanese. The term "unmarked sentence" here refers to the kind of sentence in which the subject carries the topic in the given context. The topic, or "theme" as it is often called in a different terminology (Cf. Halliday, 1967: 199; Vennemann, 1974b: 340, and others.), usually comes at the beginning of the sentence, and when this coincides with the subject, the sentence is called unmarked. Examples (1)-(3) below have the subject at the beginning. They show how V and O follow S in unmarked sentences.

(1)a. He speaks Japanese well.

[S] [V] [O]

b. Kare-wa Nihongo-wo jozuni hanasu.

S(he-NOM) O(Japanese-ACC) [well] V(speak)

(2)a. He is always making jokes.

[S] [V] [O]

b. Kare-wa itsumo jodan-wo itteiru.

S(he-NOM) [always] O(jokes) V(is saying)

(3)a. I sent her a telegram.

[S] [V] [O] [O]

b. Watashi-wa kanojo-ni dempou-wo utta.

S[I-NOM] O(her-DAT) O[telegram-ACC] V(sent)

Both in English and Japanese, the sentences can be made "marked" by having a word order different from the regular one, with some element other than S coming first as topic as in the following:

(1)a'. Japanese he speaks well. (But Chinese he doesn't.)

[O] [S] [V]

b'. Nihongo-wa kare-wa jozuni hanasu. (Demo ...)

O[Japanese-TOPIC] S[he-NOM] [well] V[speak] ((but)...) .

(2)a'. Jokes he is always making. (But ...)

[O] [S] [V]

b'. Jodan-wa kare-wa itsumo itteiru. (Demo ...)

O[joke-TOPIC] S[he-NOM] [always] V[is saying] ((but)...) .

(3)a'. This much he told me. (But ...)

[O] [S] [V] [O]

b'. Koredake-wa kare-wa bokuni itta. (Demo ...)

O[this much-TOPIC] S[he-NOM] O[me-DAT] V[told] ((but)...) .

It should be noted here, however, that even in the marked sentences in (1)a'-(3)b' above, V in English comes between S and the remaining elements, keeping the English norm of SV...order, while V in Japanese always comes at the end of the sentence, keeping the Japanese norm of the S/O..V order.

It is true that in colloquial Japanese, V does not always come at the end of the sentence. It can come before O or even before S. This mainly occurs for emphasis, which is marked by an emphasis marker like yo (EMP). Accordingly, S can sometimes come at the end, and we seem to have word orders like SVO, VSO, and even OVS, as can be seen from the following examples:

(1)b''. Kare-wa jozuni hanasu-yo, Nihongo-wo.

S[he-NOM] [well] V[speak-EMP], O[Japanese-ACC]

b'''. Jozuni hanasu-yo, kare-wa, Nihongo-wo.

[well] V[speak-EMP] S[he-NOM], O[Japanese-ACC]

b'''. Nihongo-wo jozuni hanasu-yo, kare-wa

O[Japanese-ACC] [well] V[speak-EMP], S[he-NOM]

The elements which follow V in these examples, however, strike us

as afterthoughts. They do not really combine with the other elements to form complete sentences. In the written form, they are separated by a comma from the main body of the sentence, except perhaps in verse. And it must be noted that in the main body of the sentence, V always comes at the end, keeping its regular end position.

The above observations help us confirm that the regular position of the basic elements in the simple declarative sentence is SVO in English and SOV in Japanese as in Figure 1.

ENGLISH	JAPANESE
SVO	SOV

Figure 1. The Position of S, V & O
in the Simple Declarative Sentence

1.2. The Word Order in the Noun Phrase

1.2.1. Kinds of Noun Modifier

A noun phrase consists of a noun and its modifiers. Modifiers of nouns in English can be classified into (i) determiners (D), (ii) adjectives (A), (iii) adjectival phrases (AP), and (iv) adjectival clauses (AC).

Determiners include (a) articles (ART), (b) demonstrative pronouns (DEM), (c) genitive nouns and pronouns (GEN), and (d) numerals (NUM). Under the heading of adjectives, we include (a) single adjectives, (b) co-ordinated adjectives, (c) compound adjectives, and (d) adjectives modified by adverbs, (e) adjectives followed by objects in a similar way to prepositions, and (f) adjectives followed by prepositional phrases (PREP P).

By adjectival phrases, on the other hand, we mean those which have words other than adjectives as head. They are (a) prepositional phrases, (b) to-infinitive phrases, and (c) participle phrases. Adjectival clauses are those which are headed by relative pronouns or adverbs, or by connectors of other kinds.

1.2.2. The Position of Modifiers in Relation to Nouns

In English, (i) determiners and (ii) adjectives of the kind (a)

single, (b) co-ordinated, (c) compound, and (d) adjectives modified by adverbs are placed before the noun. On the other hand, adjectives (e) followed by objects and (f) followed by prepositional phrases, and (iii) adjectival phrases and (iv) adjectival clauses are placed after the noun.

In Japanese, on the other hand, all modifiers are placed before the noun. Not only determiners and adjectives, but also structures which more or less correspond to the English adjectival phrases and clauses are placed before the noun they modify.

The preposing and postposing of modifiers of nouns in English and the uniform preposing of the same in Japanese can be seen from the examples (4) - (21).

(i) Determiners: DN order both in English and Japanese

(a) Articles

(4)a. The man.

[ART] [N]

b. Sono otoko.

[the] [man]

(b) Demonstrative Pronouns

(5)a. This lady.

[DEM] [N]

b. Kono fujin.

[this] [lady]

(c) Genitive Nouns and Pronouns

(6)a. Taro's desk.

[GEN] [N]

b. Taro-no tsukue.

[Taro-GEN] [desk] (where -GEN stands for a genitive case marker)

(d) Numerals

(7)a. Three sisters.

b. San shimai.

[three] [sister]

(ii) Adjectives: AN order both in English and Japanese except in (e) & (f).

(a) Single Adjectives

(8)a. His three lovely daughters.

[GEN] [NUM] [A] [N]

b. Kare-no sannin-no kawaii musumetachi.

[he-GEN] [three-POSTP] A[lovely] N[daughters]

(where POSTP stands for a postposition)

(b) Co-ordinated Adjectives

(9)a. A conservative, serious, and wealthy man.

[ART] [A] [A] [A] [N]

b. Hoshuteki-de, majime-de, soshite yuufukuna otoko.

[conservative] [serious] [and] [wealthy] N[man]

(c) Compound Adjectives

(10)a. The soon-to-be-released movie.

[ART] [A] [N]

b. Mamonaku koukaisareru yotei-no eiga.

AP/AC[soon released scheduled] N[movie]

(d) Adjectives Preceded by Adverbs

(11)a. Very important documents.

[ADV] [A] [N]

b. Taihen juuyouna bunsho

[very] [important] N[document]

(e) Adjectives Followed by Objects: NA order in English and AN order in Japanese.

(12)a. A ring worth \$5,000.

[N] [A] [O]

b. \$5,000-no neuchino yubiwa.

[\$5,000-of] [worth] [ring]

(13)a. A language like Japanese.

[N] [A] [O]

b. Nihongo -no youna gengo.

[Japanese-POSTP] A[like] N[language]

(f) Adjectives Followed by Prepositional Phrases: NA order
in English and AN order in Japanese

(14)a. A speech full of humour.

[N] [A] [PREP P]

b. Yuumoa-ni michita hanashi.

[humour-POSTP] A[full] N[speech]

(15)a. A company good to its employees.

[N] [A] [PREP P]

b. Shain-ni shinsetsuna kaisha.

[to employee] A[kind] N[company]

(iii) Adjectival Phrases: N AP order in English: AP N order in
Japanese.

(a) Prepositional Phrases

(16)a. The garage behind the house.

[NP] [AP]

b. Ie-no ushiro-no gareeji.

AP[house-POSTP behind-POSTP] N[garage]

(17)a. A house with a red roof.

[NP] [AP]

b. Akai yane-no ie.

AP[red roof-POSTP] N[house]

(b) To-Infinitive Phrases

(18)a. Water to drink.

[N] [AP]

b. Nomu tameno mizu.

AP[drink for] N[water]

(c) Participle Phrases

(19)a. A baby sleeping in its mother's arms.

[NP] [AP]

b. Hahaoya-no ude-ni nemutteiru osanago.

AP/AC [mother-GEN arm-in sleeping] N[baby]

(20)a. Leaves fallen on the sidewalk.

[N] [AP]

b. Hodou-ni ochita konoha.

AP[sidewalk-on fallen] N[leaf]

(iv) Adjectival Clauses: N AC order in English and AC N order
in Japanese

(a) Relative Clauses

(21)a. A woman who does not know how to cook.

[NP] [AC]

b. Ryouri-no shikata-wo shira-nai onna.

AP/AC[[cooking-of way-ACC] [know-not]] N[woman]

(22)a. Mr. Smith, who speaks Japanese well.

[NP] [AC]

b. Nihongo-wo jouzuni hanasu Sumisu-san.

AC[Japanese-ACC well speak] N[Smith-MR]

(b) Appositive Clauses

(23)a. The fact that he failed in the exams.

[NP] [AC]

b. Kare-ga shiken-ni ochita toyuu jijitsu.

AC[he-NOM exam-in failed] COMP] N[fact]

(where COMP stands for a complementizer)

(24)a. The question why the train derailed.

[NP] [AC]

b. Ressha-ga naze dassenshitaka-toyuu gimon.

AC[[train-NOM why derailed-Q]-COMP] N(question)

(25)a. A look as if he would annihilate me. (Curme, 1931)

[NP] [AC]

b. Watashi-wo massatsu shitai-kanoyouna metsuki.

AC[[me-ACC annihilate would]-as if] N[look]

1.2.3. A Common Feature

We have seen in the preceding section that in English the noun modifiers in (i) and (ii) (a)-(d) — the determiners and those adjectives which are single, co-ordinated, compound or preceded by adverbs — come before the noun, while those in (ii) (e) & (f) as well

as those in (iii) and (iv) — adjectives followed by objects or prepositional phrases, adjectival phrases and adjectival clauses — come after the noun. In Japanese, on the other hand, all types of modifiers uniformly come before the noun.

The above generalization admittedly ignore some exceptional cases in English: the adjectives in set phrases such as God Almighty, Postmaster General, attorney general, poet laureate, heir apparent, sum total, Asia Minor, etc. These are structures mainly patterned on foreign phrases, and are small in number.

Apart from those exceptional cases, (ii) (e) and (f) show that adjectives are placed after the noun when they are in turn followed by other words. They are adjectives like worth and like, which require objects as in sentences (12) and (13), or adjectives followed by prepositional phrases as in (14) and (15). These structures have an adjective at the front in contrast to those in (ii) (a)-(d). In other words, the element in the structure which directly modifies the noun comes at the front.

On this point the structures in (e) and (f) have a feature in common with the adjectival phrases and clauses in (iii) and (iv), which are also postposed. In these phrases and clauses too, the element which directly relates to the noun comes at the front. Adjectival phrases have either a preposition, to-infinitive, or participle at the top as their leading element. The adjectival clauses have a connector like a relative pronoun or adverb, an interrogative pronoun or adverb, or a subordinate conjunction at the top.

We can perhaps generalize that in English, noun modifiers with their leading element at the end are placed before the noun while those with their leading element at the beginning are placed after the noun so that in both cases the key element may come in direct contact with the noun.

In Japanese, on the other hand, all adjectivals have their head at the end, and they come before the noun, so that their head comes in

direct contact with the noun. We can say that on this point both languages follow the same principle of ordering of noun modifiers: the principle is: "Place noun modifiers in such a way that their head can come in direct contact with the noun they modify." This principle applies to both English and Japanese in spite of the fact that on the surface it appears as if they place noun modifiers in a radically different way.

The positions of the modifiers and the head in the noun phrase in the two languages can be summarized as in Figure 2.

ENGLISH	JAPANESE
D/A N A/AP/AC	D/A/AP/AC N

Figure 2. The Word Order in the Noun Phrase

1.3. The Word Order in the Verb Phrase

1.3.1. The Verb Phrase and the Auxiliaries

A verb phrase here refers to a structure which consists of a lexical verb and one or more auxiliary verbs or equivalent particles. Our concern here is the order of auxiliaries in relation to the lexical verb as well as in relation to one another.

Both in English and Japanese, more than one auxiliary verb can be used with a given lexical verb. In English, we find auxiliary verbs of the passive voice, the progressive aspect, the perfect phase (the term "phase" here borrowed from Joos, 1964: 81), and those of modality. In addition, the inflection for the past tense is regarded here as part of the auxiliary system.

Japanese uses more auxiliaries than English does. The Japanese auxiliary system is more complex. It has causative, honorific, negative and other auxiliaries in addition to those of tense, aspect and modality. The auxiliary systems of the two languages, therefore, do not correspond with each other well. In the below, a contrast is attempted (as far as it seems possible) between the two systems with the English as the basis. The auxiliaries, including the past tense inflection, are represented by the lower case letter v, while the main

verb is represented by the upper case letter V.

1.3.2. The Position of the Auxiliaries in English

Auxiliary verbs in English are placed before the main verb, and this order can be represented as v v v ... V. Each auxiliary verb requires that the element which comes after it should be in a particular form. The passive auxiliary BE requires that the lexical verb V should be in the past participle form (-N). The form of the passive voice is thus: BE + -N.

In a similar way, the progressive aspect auxiliary BE requires that the lexical or auxiliary verb that follows it should be in the present participle form (-ING). The form of the progressive aspect therefore is: BE + -ING.

The auxiliary verb of the perfect phase HAVE requires that the verb or auxiliary verb after it should be in the past participle form. The category of the perfect phase is thus: HAVE + -N.

Auxiliaries of modality require that the verb or auxiliary verb that follows them should be in the infinitive form. The form of modal assertion (Cf. Joos, 1964: 81) therefore is: MOD AUX + — (where — represents the infinitive form).

The past tense is formed by suffixing the past tense morpheme -D to the word which happens to be at the beginning of the verb phrase. If a modal auxiliary verb is there, this is combined with -D. If there is no modal but the auxiliary of phase, then this takes -D. If there is no auxiliary of assertion or phase but is the auxiliary of aspect, then this becomes the -D form. And if there are no auxiliaries but only a lexical verb, then this lexical verb itself takes -D.

In order to obtain the correct form of one category, therefore, a decision has to be made in advance whether or not to use the marked form in each of the categories on the right hand side. Before obtaining a modal form, for instance, we have to decide whether to use the perfect phase or not, the progressive aspect or not, and the

passive voice or not. This means that the verb receives application of voice, aspect, phase, modality and tense in this order. The auxiliaries are thus arranged next to the lexical verb in this order. The tense morpheme is suffixed to the leftmost word of the verb phrase.

Voice, aspect, and phase can appear in the non-finite form, but modality cannot. Modality is always in the finite. Modal auxiliaries have to be either in the present tense or the past tense. Tense, which is the last category of verb modification, is the mark of finiteness

The above five categories compose the English auxiliary system. The passive is the marked form of voice, the progressive of aspect, the perfect of phase, the modal of assertion, and the past of tense. The marked forms of tense, modality, phase, aspect and voice can be symbolized as v_1 , v_2 , v_3 , v_4 , and v_5 respectively. The English auxiliary system then can be represented as in Table 1.

CATEGORY	TENSE	ASSERTION	PHASE	ASPECT	VOICE	(VERB)
MARKED FORM	PAST -D	MODAL MOD AUX	PERFECT — HAVE -N	PROGRESSIVE BE -ING	PASSIVE BE -N	(INFINITIVE) (———)
SYMBOL	v_1	v_2	v_3	v_4	v_5	(V)

Table 1. The English Auxiliary System

An example of the English verb phrase with all the five categories marked can be seen in the following sentence:

- (26)a. He said that the bogus notes might have been being made there for three months.

And the verb phrase can be analyzed as in (26)a':

(26)a'. might have been being made

 V₁ V₂ V₃ V₄ V₅ V

 (PAST) (MODAL) (PERF) (PROG) (PASS) (VERB)

1.3.3. The Position of the Auxiliaries in Japanese

A roughly corresponding table for the Japanese verb phrase may be something like Table 2. The Japanese auxiliary system does not correspond with the English system well. There are no auxiliaries of aspect proper in Japanese. Aspect is expressed by combinations of particles and verbs of existence as in -te + iru and tsutsu + aru. Moreover, the Japanese category of assertion presented here is not exactly the same as that in English. There are, however, some auxiliaries which express a variety of meanings of conjecture, and they are treated here as auxiliaries of modal assertion.

CATEGORY	(VERB)	VOICE	ASPECT	PHASE	ASSERTION	TENSE
MARKED FORM	(INFINITIVE)	PASSIVE	PROGRESSIVE	PERFECT	MODAL	PAST
	(—)	-reru -rareru	(-teiru) (-tsutsuaru)	-ta	-youda -rashii -darou	-ta
SYMBOL	(V)	V ₅	V ₊	V ₃	V ₂	V ₁

Table 2. The Japanese Auxiliary System

Examples corresponding to those in English in (26)a and (26)a' might be something like those in (26)b and (26)b'.

(26)b. Nisesatsu-wa nikagetsukan sokode tsuku-rare

 (bogus notes-NOM) [for two months] [there] VP[(make-PASS)]

 -te-i-ta -rashikat-ta to kare-wa it-ta.

 (PROG-PERF) [appear-PAST]] [that] [he-NOM] [say-PAST]

(26)b'. tsukura -re -tei -ta -rashikat -ta.

V v₅ v₄ v₃ v₂ v₁
 {VERB} {PASS} {PROG} {PERF} {MODAL} {PAST}

Tables 1 and 2 show that the orders of auxiliaries in the two languages are the reverse of each other. In English, the auxiliaries are lined up in the order v₁ v₂ v₃ v₄ v₅. In Japanese, on the other hand, the auxiliaries are lined up in the order v₅ v₄ v₃ v₂ v₁. The orders in the verb phrase in English and Japanese present a mirror image of each other.

1.3.4. A Common Feature

In spite of the apparent discrepancy, however, there is a common feature in their ordering observed above. In both languages, v₅ comes closest to V, and v₁ farthest. This suggests that there is a common principle of ordering of auxiliaries in the two languages. The category expressed by v₅ is concerned with the kind of event—active event or passive event—for the subject. The event expressed by a passive form could equally have been expressed by the active form of some other verb of inherently passive meanings. This means that the passive form of a verb is essentially a substitute for another verb which might be found elsewhere in the vocabulary of the language or which could be coined. It is only natural that voice is the first category of verb modification, because the other categories are all concerned with temporal or modal modifications of the kind of event determined by voice. It is also natural that tense comes farthest from the main verb, because it is the category for making the verb phrase finite once and for all.

We can now represent the word order in the verb phrase in the two languages as in Figure 3.

ENGLISH	JAPANESE
v ₁ v ₂ v ₃ v ₄ v ₅ V	V v ₅ v ₄ v ₃ v ₂ v ₁

Figure 3. The Word Order in the Verb Phrase

1.4. The Word Order in the Adverbial Modification

1.4.1. The Position of Adverbials in Relation to their Head

Adverbs, adverbial phrases, and adverbial clauses (all these collectively called here as adverbials) modify (i.e., in a broad sense of the word) adjectives, adverbs and verbs, and even nouns in some cases. What we are here concerned with is whether adverbials are placed before or after the word they modify in normal unemphatic, non-focusing and non-contrastive use.

In English, positions of adverbials present a rather difficult and complicated problem, and in spite of a large amount of study expended on it, we still have no clear formulations of adverbial positions. What we need here, however, is not a detailed description of the positions, but their general tendency in contrast with those in Japanese.

An evident contrast between the two languages is that while adverbials in English are placed before or after the word they modify (which is their head) depending upon their kind and other factors, all kinds of adverbials in Japanese are invariably placed before the head they modify. We may tentatively describe here the positions of adverbials in English as: ADVERBIALS + HEAD + ADVERBIALS, and those in Japanese as ADVERBIALS + HEAD.

In the below, some observations will be given concerning the positions of adverbials according to whether they are single adverbs (ADV), adverbial phrases (ADVP) or adverbial clauses (ADVC) as well as what kind of head (H) they modify.

1.4.2. The Single Adverb

1.4.2.1. Modifying an Adjective or Adverb

Single Adverbs modifying an adjective or adverb in English (with some exceptions) are normally placed before their head. On this point, English and Japanese show the same ordering.

(27)a. This flower is very beautiful.

[ADV] [A(=H)]

b. Kono hana-wa taihen utsukushii.

{this flower-NOM} ADV{very} A{beautiful}

(28)a. The train ran very slowly.

{ADV} {ADV(=H)}

b. Ressha-wa taihen yukkurito hashitta.

{train-NOM} ADV{very} ADV(=H){slowly} {ran}

Normal positions of adverbs modifying an adjective or adverb are thus ADV H(=A/ADV) in both languages.

1.4.2.2. Modifying a Verb

Adverbs modifying a verb in English, on the other hand, take a variety of positions. Some take end positions, others mid-positions, and still others front positions.

Adverbs of definite time (or time-when, or time position) like today, yesterday, tomorrow, etc. are placed after the verb. Similarly, adverbs of definite place (or spatial positions) like here, there, home, upstairs, etc. are placed after the verb. Both these two kinds of adverb in English come after the head, while their counterparts in Japanese uniformly come before their head, as can be seen from the following examples.

(29)a. I wrote a letter to him yesterday.

{V(=H)} {ADV}

b. Watashi-wa kinou kareni tegami-wo kaita.

{I-NOM} ADV{yesterday} {him-DAT} {letter-ACC} V{wrote}

Adverbs of manner often come after the verb they modify.

(30)a. It's raining hard.

{V} {ADV}

b. Ame-ga hidoku fut-teiru.

{rain-NOM} ADV{hard} V{fall-PROG}

(31)a. She kissed his little forehead softly many times.

{V} {ADV}

b. Kanojo-wa karen hitai-ni nandomo sotto

{she-NOM} {his forehead-to} {many times} ADV{softly}

kuchizukewoshita.

V(kissed)

They can, however, also be placed before the verb.

(32)a. "Oh, Enoch," she softly said at last.

[ADV] [V]

b. "Aa, inokku," to kanojo-wa yatto hosoikoede itta.
[Oh, Inoch] [COMP] [she] [at last] ADV[softly] V[said]

(33)a. He had deliberately driven the car into the sea.

[v] [ADV] [V]

b. Kare-wa koini kuruma-wo umi-ni
[he] ADV[deliberately] [car-ACC] [sea-DAT]
noriiretanodatta.

V[had driven into]

Adverbs of relative time like always, often, etc.; first, finally, etc.; already, still, etc. usually come before the verb.

(34)a. He usually waits for me at the bus-stop.

[ADV] [V]

b. Kare-wa taitei basuteide boku-wo matsu.
[he-NOM] ADV[usually] [at bus-stop] [me-ACC] V[wait]

(35)a. He finally told me the truth.

[ADV] [V]

b. Kare-wa yatto boku-ni hontonokoto-wo hanashita.
[he-NOM] ADV[finally] [me-DAT] [truth-ACC] V[told]

(36)a. It still remained at the same place.

[ADV] [V]

b. Sore-wa izentoshite onaji tokoro-ni atta.
[it-NOM] ADV[still] [same place-DAT] V[existed]

Adverbs of intensifying and focusing functions like simply, really, almost, nearly, etc. are normally placed before the verb.

(37)a. I simply cannot imagine such a thing.

[ADV] [v] [V]

b. Boku-wa sonna koto mattaku souzou-dekinai.
[I-NOM] [such] [thing] ADV[simply] V[imagine-cannot]

(38)a. He nearly lost his life.

[ADV] [V]

b. Kare-wa hotondo inochi-wo ushinau-tokoro-datta.

[he-NOM] ADV[nearly] [life-ACC] V[lose-to the point-PAST]

Adverbs of conjunctive or disjunctive functions, on the other hand, normally come at the front of the sentence, although they can also be in the middle or at the end. In all these cases, however, they are generally separated from the body of the sentence with commas. They are sentence, or rather clause (C), modifiers.

(39)a. I think; therefore, I exist.

[ADV] [C(=HEAD)]

b. Ware omou, yueni ware ari.

[I] [think] ADV[therefore] C[[I] [exist]]

(40)a. Unfortunately, this isn't the case.

[ADV] [C(=HEAD)]

b. Zannennagara kore-wa jijitsu de-nai.

ADV[unfortunately] C[[this-NOM] [fact] [ASSERT-NEG]]

(where ASSERT stands for a particle of assertion)

(41)a. Obviously, I will never win half-a-million pounds.

[ADV] [C(=HEAD)]

b. Akirakani, boku-wa 50-man pondo mouke-wa

ADV[obviously] C[[I-NOM] [500,000] [pound] [win-POSTP]

shinai-darou.

[do-NEG-will]

Simple adverbs in English thus come before or after the verb, and their positions can be represented as ADV H(=V) ADV.

1.4.3. The Adverbial Phrase

Adverbial phrases in English, whether they are prepositional, to-infinitive, or participle phrases, are generally placed after their head when this is an adjective or adverb: H(=A/ADV) ADVP

(42)a. You are right on that point.

[A(=H)] [ADVP]

b. Kimi-wa sono ten-de tadashii.

[you-NOM] ADVP[that point-on] A(right)

(43)a. I'm glad to see you.

[A(=H)] [ADVP]

b. Anata-ni oaishite ureshii-desu.

ADVP[[you-DAT] [POL-see-because]] A(glad-POL)

(where POL stands for an auxiliary verb of politeness)

(44)a. He is now strong enough to walk.

[ADV(=H)] [ADVP]

b. Kare-wa mou arukeru hodo joubuda.

[he-NOM] [now] ADVP[[walk-can] [degree]] A(strong)

Adverbial phrases modifying a verb in English also follow their head in non-thematic, and non-contrastive use: H(=V) ADVP.

(45)a. We shall never again travel by underground.

[V] [ADVP]

b. Nidoto zettaini chikatetsude yukanai.

[again] [never] ADVP[by underground] VP[go-NEG]

(46)a. The ship sailed on and on ... hardly rocking.

[V] [ADVP]

b. Fune-wa hotondo yure-zu-ni dondon koukoushita.

[ship-NOM] ADVP[[almost] [rock-not]] [on and on] VP[sailed]

(47)a. The girls passed by, singing together merrily.

[V] [ADVP]

b. Shoujotachi-wa isshoni tanoshigeni utainagara

[girls-NOM] ADVP[[together] [merrily] [singing]]

toorisugite-itta.

VP[passing by-went]

1.4.4. The Adverbial Clause

The position of adverbial clauses in English in unmarked, non-thematic, and non-contrastive use is after the main clause. It is true that we find a lot of sentences with preposed adverbial clauses. We find the following sentences, for example:

(48)a. When I looked more closely, I saw he was dead.

[ADVC]

[H]

- b. Motto yoku miruto, karega shindeiru-noga
 ADVC[more closely look-when] H[he-NOM is dead-COMP
 wakatta.
 be seen]

(49)a. If you ever come to Japan, you must look me up.

[ADVC]

[H]

- b. Nihon-ni kuru kotoga areba, tachiyora-nakerebadamedayo.
 ADVC[Japan-to come-COMP exist] H[look up-must-EMP]
 (where EMP stands for a particle of emphasis.)

In these cases, however, the adverbial clauses come at the front as topics. When they do not function as topics, they are generally placed after the main clause as in the following:

(48)a'. I saw he was dead when I looked more closely.

(49)a'. You must look me up if you ever come to Japan.

And this is the normal and neutral position of the adverbial clauses. Witness example (50) below, which sounds quite natural even out of context, while it would sound very strange if the order was reversed unless some appropriate context was given. Japanese, on the other hand, regularly places adverbial clauses before the main clause:

(50)a. I will help you if I can.

[H]

[ADVC]

- b. Dekire-ba, boku-ga tetsudao-u.

ADVC[can-if] H[([I-NOM] [help-will])]

The unmarked position of adverbial clauses in English is thus after the main clause. When they are placed at the front, they are marked, and serve some kind of textual purpose. This is why we have a statement like "Despite the overall tendency towards final subordination, certain types of adverbial clauses favour initial subordination." (Quirk et al., 1985:1040. Undelines mine.) These exceptional types are clauses called "conjuncts," "subjuncts," "style adjuncts," etc. (loc. cit.), which more or less serve the textual purpose of connecting the sentence with the preceding one

semantically.

Further evidence for regarding the final position as the norm is that adverbial clauses at the front position are regularly separated from the main clause by a comma while those at the end are not. This convention points to the fact that the final position is taken to be unmarked for adverbial clauses while the front position is taken to be marked and out of the ordinary.

Our conclusion here, therefore, is that the unmarked position of adverbial clauses in English is after the head clause as: H ADVC, and that the same in Japanese is before the head clause as: ADVC H.

1.4.5. The Positions of Adverbials Summarized

The positions of adverbials in English as observed in the above are: (1) single adverbs: (a) ADV H(=A/ADV), (b) H(=V) ADV, (c) H(=V) ADV or ADV H(=V); (2) adverbial phrases: H ADVP, and (3) adverbial clauses: H ADVC. Those in Japanese are simply ADV H, ADVP H, and ADVC H. The orders in each language can be collapsed into one formula as in Figure 4.

ENGLISH	JAPANESE
ADV H ADV/ADVP/ADVC	ADV/ADVP/ADVC H

Figure 4. The Word Order In the Adverbial Modification

1.5. The Word Order in the Adpositional Phrase

1.5.1. The Adposition

Adpositions are particles used for indicating various case relations which nouns have with other elements (including nouns) in the sentence. According to their place in relation to the noun, they are called either prepositions or postpositions. Their positions, therefore, are self-evident.

1.5.2. The Adposition in English and Japanese

Adpositions used in English are prepositions. They are the chief means of expressing case relations in English except the nominative and the accusative, which are not marked by prepositions but are

generally construed from their relative positions in relation to the verb.

Japanese uses postpositions in contrast. They are called "joshi" ("auxiliary particles"), and they mark the subject (the nominative), the direct object (the accusative), the indirect object (the dative), the genitive, the locative, the instrumental, the ablative, etc.

Examples in (51) show how the two languages use the different kinds of adposition.

(51)a. He is writing a letter to her with my pen.

[S] [V] [O] [DAT NP] [INSTR NP]

b. Kare-wa boku-no pen-de kanojo-ni tegami-wo

S[he-NOM] [I-GEN] [pen-INSTR] [her-DAT] O[letter-ACC]

kaiteiru.

V[is writing]

The preposing of adpositions in English and the postposing of the same in Japanese can be represented as in Figure 5.

ENGLISH	JAPANESE
PREP NP	NP POSTP

Figure 5. The Position of the Adposition

2. The Word Order in the Derived Sentences

2.0. The Kinds of Sentence

The simple declarative sentence is the most basic form of sentence in English, because it has the same structure as the clause. The clause, which has the basic structure SVO, can be made into a subordinate clause through an addition of an appropriate connector, and can work as part of a sentence. But it can also be an independent sentence by itself without having any special marker added to it, and this is the simple declarative sentence. This is the most basic form of sentence, and can carry by itself the discourse function of declaration, or statement.

The other kinds of sentence are formed by adding some kind of marker to the clause structure. These derived sentences are the

interrogative, both yes-or-no and wh-, the imperative, and the exclamatory sentences. The following sections will examine the structures of these derived sentences, and determine how the marker and the clause structure are ordered in each type.

2.1. The Position of the Question Marker

2.1.1. In the Yes-or-No Interrogative Sentence

2.1.1.1. Formation of the Yes-or-No Interrogative Sentence

The yes-or-no interrogative sentence in English is formed by moving a finite auxiliary verb to the front of the subject. If there are two or more auxiliary verbs in the verb phrase, the left-most one, which is always finite, is moved to the front of the subject. If there is no auxiliary as a constituent of the verb phrase, the auxiliary verb do is placed in front of the subject.

Interrogative sentences in Japanese, on the other hand, are formed by placing the particle ka after V at the end of the sentence. This particle is a question marker, and it can be represented by the symbol Q. The word order in the interrogative sentence in Japanese, therefore, is: SOV Q.

The following examples show the difference in formation of the yes-or-no interrogative sentence in the two languages.

(52)a. Can he speak Japanese?

[v] [S] [V] [O]

b. Kare-wa nihongo-wo hana-seru-ka?

S[he-NOM] O[Japanese-ACC] V[speak-can] [-Q]

(53)a. Does he speak Japanese?

[v] [S] [V] [O]

b. Kare-wa nihongo-wo hanasu-ka?

S[he-NOM] O[Japanese-ACC] V[speak] [-Q]

2.1.1.2. The Question Marker in English

We have seen in the preceding section that while Japanese has a clearly identifiable question marker morpheme, English does not have a

correspondingly identifiable question marker. We have seen instead that English marks the yes-or-no question by placing a finite auxiliary in front of the subject S. The marker of the question in English is the presence of a finite auxiliary verb at the front of the sentence. The fronted auxiliary verb thus functions as the question marker. This marker can be represented as Q, and then the word order in the yes-or-no interrogative sentence in English can be analyzed as: Q(=v) SVO, or simply as Q SVO.

The structure of the yes-or-no question in English and Japanese then can be generalized in such a way that while in Japanese the question marker is placed at the end of the clause, that in English is placed at the beginning, and this contrast can be represented as in Figure 6.

ENGLISH	JAPANESE
Q SVO	SOV Q

Figure 6. The Position of the Question Marker
in the Yes-or-No Question

2.1.1.3. The Question Marker in Older English

Older English did not have to use the auxiliary do to mark questions even when there was no modal or temporal auxiliary in the sentence. Questions could be formed simply by moving the full verb (V) to the front of S as can be illustrated by the following example:

(54) Revolt our subjects? (Shakespeare, Richard II, III,ii,10.)

(V) [S]

In a case like this, the placing of V in front of S, or rather, the preposed V itself, should be regarded as the question marker, and (54) can be analyzed as in (54)':

(54)' Revolt our subjects?

[V(=Q)] [S]

For both Modern English and older English, therefore, question is marked by the presence of a finite verb in front of S, whether this is an auxiliary verb or a main verb. The marking of yes-or-no questions

without any auxiliary verb as in older English can be formulated as Q(=V)SO, while that in Modern English has been formulated as Q(=v)SVO or simply as Q SVO as in Figure 6. What we should note here is that the question marking in Modern English and older English is essentially the same in that Q is always placed in front of S at the beginning of the sentence in sharp contrast with Japanese, where Q is always placed after V at the end of the sentence.

2.1.1.4. Different Strategies

The different strategies in marking question between English and Japanese seem to have both merits and demerits.

In English, you can generally tell whether a sentence is a question or a statement as soon as you begin to hear or read it. This is because the marker appears at the beginning. On the other hand, the ending word of the sentence gives you no clue at all about it. When you have a very long and complicated sentence in front of you, it may sometimes happen that you have forgotten how the sentence began, and accordingly are not sure whether it was a question or not by the time you come to the end of it. In such cases, the interrogation mark "?" in written English and the rising tune in spoken English plays a vital role.

In Japanese, in contrast, it is impossible to tell whether you have a question or a statement just by looking at the beginning part of the sentence. The ending part, however, makes it clear. If the sentence ends with -ka, you can generally say that it is a question. This suggests that the interrogation mark and the rising tune might not have so important a role in Japanese as in English. And in fact, in Japanese books and newspapers, we find a number of questions which have no interrogation marks.

An extreme case of doing without the interrogation mark can be found in Japanese translations of the Bible. The first yes-or-no question in the New Testament, for example, appears in Verse 14, Chapter 3 of the gospel from St. Matthew. It goes as follows, for

example.

(55) "...comest thou to me?" (The Authorised Version.)

(56) "Do you come to me?" (The New English Bible.)

The standard Japanese translation of the same part, both in Classical and Modern Japanese goes without the question mark as in the following.

(57) "... kaette wareni kitaritamafuka."

(The Classical Japanese Version.)

(58) "... anataga, watashino tokoroni oideni narunodesuka."

(The New Japanese Bible.)

This style is, in fact, carried on with utmost consistency throughout the translations. All yes-or-no questions, and all wh-questions as well, go without interrogation marks in these two versions. The translators obviously decided to dispense with the interrogation mark entirely. To such an extent is this punctuation mark unessential in Japanese.

In spoken Japanese, by the same token, we might expect that questions can generally dispense with rising tunes. Intonation, however, involves a lot of pragmatic factors, and it is not easy to tell whether a question goes without a rising tune just because the use of -ka makes it unnecessary.

Nevertheless, we often find genuine cases of question for information uttered with falling tunes. For instance, a student, asking his teacher whether he has passed an examination he has recently taken, may say as in (59):

(59) Boku toottadeshou-ka.

(Have I passed, sir?)

and he would say this with a falling tune. If he used a rising tune here, he would sound a bit too informal and hence impolite. Similarly, a person at a bus-stop may be heard asking a stranger a question like (60):

(60) Sanbanno' basu mou detadeshou-ka?

(Has the No. 3 bus left yet?)

and he would be using a falling tune here.

These Japanese sentences are marked as questions solely by the presence of -ka. This has something to do with the optionality of rising tunes in questions when used with the marker -ka. The use of this marker makes it clear that the sentence is a question even when it is said in a falling tune.

It should be noted in this connection that we find a reverse situation in colloquial Japanese: a lot of questions go without -ka and only with a rising tune. At the end of a question, these two devices do not really need to appear together: just one of them is enough generally.

Thus the end position of the grammatical question marker in Japanese and the front position of the same in English yes-or-no questions seem to have something to do with the different degrees of optionality of the interrogation mark and the rising tune in the two languages.

2.1.2. In the Wh-Question

Wh-questions are questions all right, and as such they require the same operation as for yes-or-no questions: the finite auxiliary (v) is placed at the front of the subject in English, while -ka is added at the end of the sentence in Japanese.

A wh-question, however, has a wh-word in addition. It functions as a proper constituent of the sentence, such as S, O, the complement of the verb, the object of a preposition, or an adverbial modifier.

In English, the wh-word is regularly placed at the beginning of the sentence away from the place where it properly belongs as a constituent. A wh-question, therefore, generally begins with a wh-word. This marker of wh-question even precedes the fronted finite auxiliary v when it happens to be the subject of the sentence.

In Japanese, on the other hand, the wh-word usually stays where it belongs as a constituent of the sentence. If it is O, it usually comes after S and before V. If it is an adverb, it usually comes

after S and O but before V. If it is a noun phrase modified by a genitive noun, it comes after the genitive. No particular movement is necessary. It is not, however, that wh-words cannot be moved to elsewhere in Japanese. We often find, in fact, a number of wh-questions which begin with a wh-word. When a wh-word is fronted, however, this usually means emphasis. The normal wh-question in Japanese has the wh-word in the place where it belongs as an element of the sentence structure. Thus normal wh-questions keep the normal SOV order.

The difference in word order in the wh-question in the two languages can be seen in examples (61)-(63).

(61)a. What language does he speak?

{WH O} {Q(=v)} {S} {V}

b. Kare-wa nani-go-wo hanasu-ka?

S{he-NOM} O{what-language-ACC} V{speak} {-Q}

(62)a. Where did he buy it?

{ADV} {Q=(v)} {S} {V} {O}

b. Kare-wa sore-wo dokode katta-ka?

S{he-NOM} O{it-ACC} ADV{where} V{bought}

(63)a. How much would a car like that cost now?

{WH O} {Q=(v)} { S } {V}

b. Sono-youna kuruma-wa ima ikura suru-deshou-ka?

S{that-like car-NOM} {now} ADV{how much} V{cost-would} {-Q}

In English, both the wh-fronting and the finite auxiliary fronting operate at the same time, but the wh-fronting always takes precedence over the other: the wh-word should come before the finite auxiliary verb, which in its turn should come before the subject. When the wh-word happens to be the subject, however, the two operations conflict with each other, and the finite auxiliary fronting has to be cancelled. This sort of conflict cannot occur in Japanese. The status of question is marked by the addition of -ka at the end of the sentence invariably, and the wh-word need not be moved either to the front or to the end. The difference can be seen from (64).

(64)a. Who's playing the lead?

[S] [v] [V] [O]

b. Dare-ga shuyaku-wo yat-teimasu-ka?

S[who-NOM] O[lead-ACC-] V[play-PROGR] [-Q]

To sum up, English wh-questions are marked with a double fronting: a wh-word fronting and a finite auxiliary fronting whenever this is possible. In Japanese, on the other hand, wh-questions are marked syntactically merely with the end position of the question marker -ka. This can be represented as in Figure 7.

ENGLISH	JAPANESE
WH Q SVO	SOV Q

Figure 7. The Position of the Question Marker in Wh-Questions

2.2. The Position of the Imperative Marker

Imperative sentences in English have no apparent markers of their own to be added to them, nor do they involve any movement of elements. However, they differ from other types of sentence in two points. They regularly have no overt subjects, and accordingly they begin with the verb. Imperative sentences are thus marked with a lack of S and, as a result, with the presence of V at the initial position.

It is true that subjects sometimes appear even in imperative sentences. When they do, however, they are regularly stressed. These stressed subjects appear either for emphasis or for contrast. Imperative sentences with subjects, therefore, are "marked" imperatives. Ordinary, unmarked imperatives are thus characterized by a lack of S and the initial position of V.

This double characteristic of the imperative sentence in English does lead to an interesting question: which is the decisive characteristic, the lack of S or the front position of V? What is noteworthy in this regard is the word order in imperative sentences in older English. Imperative sentences without subjects began with V as they do in Modern English as shown in (65) below. Those with expressed subjects, however, also began with V, the subject being

generally placed after it, producing the VSO order in general. (Cf. Quirk and Wrenn, 1957: 93, and Bacquet, 1962: 232-273.) This can be illustrated by examples (66)-(67).

(65) Do swa þu wille. (From Bacquet, 1962: 237)

[V] [ADVC]

(Do as you want.)

(66) Onscuna þu a leasunga. (From Bacquet, 1962: 234)

[V] [S] [ADV:EMPH] [O]

(You avoid lying at any time.)

(67) Haebbe aelc monn his wif. (From Bacquet, 1962: 252)

[V] [S] [O]

(Each man have his wife.)

This was carried on to Middle English, and the placing of the subject pronoun after the verb rather than before seems to have been more common (Cf. Mustanoja, 1960: 475-6, and Mossé, 1952: 128.):

(68) Go þu 3und Pharaon a3en. (From Mustanoja, 1960: 475.)

[V] [S]

(You go unto Pharaoh.)

(69) take every womman heede. (From Mossé, 1952: 128)

("let every woman take heed," (Mossé), or rather

'Every woman take heed.')

Even in Modern English we have some remnants of this VSO order imperative as witnessed by the following examples.

(70) Mind you, they do make shopping very easy.

[V] [S]

(71) Don't you forget it!

[v] [S] [V] [O]

These facts seem to support the view that the decisive character of the imperative is the front position of V. This fronted V itself is the imperative marker (IMP) in English. The position of the imperative marker can thus be represented as IMP*V O. (The asterisk signifies an inseparable combination of IMP and V.)

In Japanese, on the other hand, imperative sentences are either

marked with inflections of the verb, or use of some particular auxiliary verbs. Inflections used for marking the imperative verbs are, for example, : kak-e < kaku (write), se-yo < suru (do), nobe-yo < noberu (state), etc., all ending with the fifth and final conjugation. Auxiliaries used for marking imperative sentences are: nasai, kudasai, tamae, etc. These markers all appear at the end of the sentence. The imperative sentences in Japanese can, therefore, be represented as OV IMP.

Subjects are usually omitted in Japanese imperatives as in English, but they can appear for emphasis or contrast as in English as shown by (77)b.

(72)a. Go home early.

[IMP*V] [ADV] [ADV]

b. Hayaku ieni kaere.

ADV[early] ADV[home] V[go back-IMP]

(73)a. Prepare your lessons every day.

[IMP*V] [O] [ADV]

b. Mainichi yoshuu-wo se-yo.

ADV[every day] O[review-ACC] V[do-IMP]

(74)a. Tell the truth.

[IMP*V] [O]

b. Shinjitu-wo ii-nasai.

O[truth-ACC] V[tell-IMP]

(75)a. Wait a moment, please.

[IMP*V] [ADV]

b. Chotto matte-kudasai.

ADV[moment] V[wait-IMP]

(76)a. Don't tell a lie.

[IMP-NEG] [V] [O]

b. Uso-wo tsuku-na

O[lie-ACC] V[tell-IMP*NEG]

(77)a. You stay here.

[S] [V*IMP] [ADV]

b. Omae-wa kokoni i-nasai.

S[you-NOM] ADV[here] V[stay-IMP]

In example (76)a, the imperative marker is the auxiliary verb do, which is combined with the negative marker NOT. Negative imperative sentences in English are thus also marked by the front position of the auxiliary do, as we have already seen in (71).

In example (74)b, the particle na is a marker of negative imperative, of prohibition. It is impossible to analyze this word into the imperative marker and the negative marker. This na, by the way, is different from the colloquial positive imperative marker na as used in the following:

(78) Boya-wa yoiko -da, nenneshi-na.

S[boy-NOM] C[good boy] V[-is], V[go to sleep-IMP]

This na has an origin different from the negative imperative na.

The position of the imperative marker in English and Japanese as observed in this section can be represented as in Figure 8.

ENGLISH	JAPANESE
IMP*V O	O V IMP

Figure 8. The Position of the Imperative Marker

2.3. The Position of the Exclamatory Marker

Exclamatory sentences in English begin with what or how, the former generally followed by a noun phrase and the latter by an adjective or an adverb phrase. The rest of the sentence observes the normal order of SVO. The regular exclamatory marker (EXCL) in English is thus preposed what or how. This is similar to the preposing of wh-words in the case of wh-questions we have seen in the preceding section.

Equivalent exclamatory sentences in Japanese also have words like nantoyuu (=what) and nanto (=how). However, these words are not always placed at the beginning of the sentence. In a similar way to the wh-question words, they usually stay at the place where they belong as constituents of the sentence. If nantoyuu is part of a noun

phrase which functions as O, for instance, it stays with its head at the place where O should keep, i.e., between S and V.

However, the use of these wh-words alone is not enough to mark a sentence as exclamatory in Japanese. Just as wh-questions required ka or some other particle in addition to wh-words, the imperative sentence requires a word or phrase at the end as the definitive exclamatory marker in addition to wh-words. Some of the expressions used as such markers are -noda, -nodarou, -nodesu (colloquial-polite), -kotoka, -kotoyo (a bit archaic), etc. All these phrases have a particle of assertion or exclamation at the end. Exclamatory sentences with wh-markers nantoyuu or nanto would not be complete if they did not end with one of these exclamatory particles.

Here are some examples from the two languages.

(79)a. What a stupid thing she did!

[O{EXCL}]{ NP } (S) {V}

b. Kanojo-wa nantoyuu bakana koto-wo shita-noda!

S{she-NOM} O{what stupid thing-ACC} V{did} {-EXCL}

(80)a. How elegant her dance is!

ADJ{EXCL ADJ} { S } {V}

b. Kanojo-no odori-wa nanto yuugana-nodeshou!

S{her dance-NOM} ADJ{how elegant} {-EXCL}

(81)a. How elegantly she dances!

{ADV{EXCL ADV}} (S) {V}

b. Kanojo-wa nanto yuugani odotteiru -kotoka!

S{she-NOM} ADV{how elegantly} V{is dancing} {-EXCL}

The Japanese wh-words nantoyuu and nanto can also come at the beginning of the sentence. Preposing of these words seems to mark the sentence as strongly emotional. Examples (79)b and (81)b above can be reordered as follows:

(79)b'. Nantoyuu bakana koto-wo kanojo-wa shita-noda!

(81)b'. Nanto yuugani kanojo-wa odotteiru-kotoka!

In (80)b, on the other hand, nanto yuugana cannot be preposed, because yuugana is a predicative (a part of V), which requires an end

position. On the other hand, nanto by itself, as an adverb, can be preposed as in the following:

(80)b'. Nanto kanojono odori-wa yuugana-nodeshou!

The position of the exclamatory marker in English and that in Japanese as we have observed in the above can be represented as in Figure 8.

ENGLISH	JAPANESE
EXCL SVO	SOV EXCL

Figure 8. The Position of the Exclamatory Marker

2.4. Summary of the Word Orders

The results of the observations of the word orders in the foregoing sections can be summarized as in Table 3:

	ENGLISH	JAPANESE
Figure 1. (Basic Sentence)	SVO	SOV
Figure 2. (Noun Phrase)	D/A N AP/AC	D/A/AP/AC N
Figure 3. (Verb Phrase)	v v v v v V	V v v v v v
Figure 4. (Adverbials)	ADV H ADV/ADVP/ADVC	ADV/ADVP/ADVC H
Figure 5. (Adpositional)	PREP N	N POSTP
Figure 6. (Yes-or-No Q)	Q SVO	SOV Q
Figure 7. (Wh-Q)	WH Q SVO	SOV Q
Figure 8. (Imperative)	IMP*V O	OV IMP
Figure 9. (Exclamatory)	EXCL SVO	SOV EXCL

Table 3. Summary of the Word Orders in Syntactic Structures

3. The Position of the Head

3.0. Head-Dependent Relationship in Syntactic Structures

In the preceding sections, we have examined the word orders in the main syntactic structures, beginning with the basic sentence (or clause) through phrases up to the derived sentences both in English and Japanese. And we have established the regular order of the elements in each type of syntactic structure. A summary of the results is given in Table 3. The following short sections will

examine head-dependent relationships in these structures.

The "head-dependent relationship" here means basically the same as the traditional "head-modifier" relationship, but it is used in strictly syntactic terms in line with the concept of dependency expounded by Tesnière (1959) in Europe, and somewhat differently formalized by D. G. Hays (1964) in the United States. (Cf. Matthews, 1981: 118-9.) It is a relationship of purely syntactic nature, of how one word is related to another to form larger structures in the sentence. In the below, a brief discussion will be given of the head-dependent relationship in the syntactic structures, and it will start with the easier structures and proceed to the more difficult.

3.1. In the Noun Phrase

It is well established that the noun in the noun phrase is the head of the structure, and that the other elements such as articles and adjectives are its "modifiers". These accompanying words do not affect the syntactic status of the noun. The noun is still a kind of noun, and behaves as a noun, functioning as the subject, the object of a verb, or of a preposition. The accompanying words are thus dependent on the noun, and by virtue of being dependents, they can modify the meanings of the noun. And this is why they deserve the name "modifiers".

In the noun phrase in Japanese, all the dependents precede the head noun. In English, on the other hand, not all but most of the dependents follow the noun. (Figure 2) Thus in the noun phrase the head comes at the end in Japanese while the same tends to come at the front in English.

3.2. In the Adverbial Modification

Adverbials accompany adjectives, adverbs or verbs. When adverbials accompany adjectives, the resulting structures are still a kind of adjective. When adverbials accompany adverbs, the resulting structures are still a kind of adverb. And when adverbials accompany

verbs, the resulting structures are still a kind of verb. Adverbials in these structures do not affect the syntactic status of the words they accompany. They merely become part of the structures. In this sense the adverbials are dependents, and the elements they accompany are the heads.

All adverbial modifiers come before the head in Japanese, while most of those in English come after the head. (Figure 4.) In other words, the head invariably comes at the end in Japanese while the same tends to come at the front in English. This is in parallel with the case in the noun phrase. (Section 3.1.)

3.3. In the Verb Phrase

In the verb phrase, which usually consists of a lexical verb and auxiliary verbs, the auxiliaries come after the lexical verb in Japanese while those in English come before the lexical verb. (Figure 3.) Our question here is: Which is the head of the structure, the lexical verb or the auxiliary?

The lexical verb has generally been called the "main verb." This implies that the lexical verb has been regarded as the head of the verb phrase. This view, however, comes from the semantic observations that the lexical verb bears the main portion of the semantic content of the phrase while the auxiliary verbs merely give some qualifications and modifications to this main content.

Syntactically speaking, however, the main element of the verb phrase is not the lexical verb, but rather the auxiliary verb which is in the finite. The syntactic function of the verb phrase is to complete the predication by specifying the tense and mood in which the sentence is presented. This specification is done by the finite part of the verb phrase, and it is always the auxiliary verb, and not the 'main' verb, that is in the finite wherever an auxiliary verb is used. In other words, it is the auxiliary verb that gives the verb phrase the function of 'being the predicate.' The essence of the verb phrase is located in the auxiliary verb. From this point of view, the finite

auxiliary is the head of the verb phrase, and not the lexical verb.

When no auxiliaries are used, we have the lexical verb alone, and in this case, the lexical verb functions as the finite by itself, like plays in She plays the piano. If the auxiliary verb is added to the verb as in She is playing the piano, the finiteness, and its capacity of predication, is transferred to is. The lexical verb recedes to the status of a non-finite verb. It is no more than a present participle and is not quite different from an adjective. What makes a verb phrase a predicate verb phrase is the finite auxiliary part, and not the lexical.

The head of the verb phrase consisting of a lexical verb and an auxiliary verb is thus the auxiliary verb. When there is more than one auxiliary verb used in the verb phrase, the leftmost one is put in the finite, and this is the head. This applies to every verb phrase in English. The head of the verb phrase in English is always at the front of the structure.

In Japanese, on the other hand, the auxiliary part always comes after the lexical verb in sharp contrast with that in English. If the sentence is in the present tense, the auxiliary of assertion comes at the end, and when in the past, the auxiliary of the past tense comes at the end.

To sum up, the head of the verb phrase comes at the beginning in English, while that in Japanese comes at the end, and the contrast is in parallel with those in the noun phrase and the adverbial modification. (Sections 3.1-2.)

3.4. In the Adpositional Phrase

The adposition used in English comes before the noun while that used in Japanese comes after the noun. (Figure 5) The adposition in English is thus the preposition, and that in Japanese is the postposition. Our concern here is how to interpret the relationship between the adposition and the noun.

Semantically speaking, the noun could be regarded as the main

element of the adpositional phrase, and the adposition as dependent on it. (Keenan regards adpositions as functions taking noun phrases as arguments, and hence the latter as head. See Keenan, 1978: 10.) The semantic function of the adposition do no more than serve to give some spatial or temporal qualifications on the meaning of the noun.

Syntactically speaking, however, the relation is the other way around. The noun accompanied by an adposition is no longer a noun. The adpositional phrase is not a noun phrase. It functions as something else. It functions as an adverbial modifier or an adjectival modifier. It modifies a noun phrase, an adjectival phrase, an adverbial phrase or a verb phrase. It can function that way solely because it has an adposition. The noun is now no more than a mere part of the adpositional phrase, and is related to some element in the sentence by virtue of the adposition. In this sense, the noun is dependent on the adposition, and this is the syntactic status of the noun in the adpositional phrase. The adposition is the head of the adpositional phrase.

Having established that the adposition is the head and the noun the dependent, we can now say that in the adpositional phrase the head comes at the beginning in English while that in Japanese comes at the end. And this is again perfectly in line with the position of the head in the noun phrase, the verb phrase, and the adverbial modification we have seen in the above. (Sections 3.1-3.)

3.5. In the Derived Sentences

In the derived sentences in the forms of interrogative (both the yes-and-no and the wh-), imperative, and exclamatory, the markers come at the front in English while those in Japanese come at the end. (Figures 6-9.)

The structures of the derived sentences can be viewed as consisting of two parts—the basic sentence (or clause) and the marker. Those in English, for instance, can be described as [Q]+[SVO], [WH-Q]+[SVO], [IMP]+[SVO], and [EXCL]+[SVO]. Our question

here is: which of the two constituents is the head and which the dependent.

The basic sentence does indeed form the larger part of the derived sentence, and expresses most of the semantic content. However, it is no longer an independent sentence. It is only part of the whole. As soon as it has one of the markers added to it, it ceases to be an independent sentence, and turns into a part of the derived sentence. The marker here is vital. It is what makes the derived sentence as it is. Remove the marker, and we have a basic, declarative sentence. The derived sentence depends upon the marker for its status. The marker, in this sense, governs the structure. And if it governs the structure, it is the head, and not the other way around. The head comes at the front in the derived sentences in English.

The above arguments hold even more clearly in Japanese. The markers Q, IMP, and EXCL can be clearly separated from the structure SOV. They all come at the end, and turn the basic sentences into derived ones. The derived ones now obtain new discourse functions such as question, command, and exclamation. The markers are none other than discourse markers: they determine the discourse functions of the sentence. They thus determine the kind and status of the derived sentences, and therefore they are the heads. The head comes at the end in the derived sentences in Japanese.

Our conclusion here is that in the derived sentences the head comes at the front in English while the same comes at the end in Japanese. This is in parallel with the cases in the noun phrase, the adverbial modification, the verb phrase, and the adpositional phrase. (Sections 3.1-4.)

3.6. In the Basic Sentence

3.6.0. The Problem

The last point which remains to be discussed is the head-dependent relationship in the basic sentence. We have observed

in the previous sections that the head of the structures in Figures 2-9 comes at the end in Japanese while that in English predominantly comes at the front. What kind of light does this fact throw on the structure of the basic sentence in Figure 1? How can the fact that English places heads at the front in Figures 2-9 be related to its SVO structure in the basic sentence? And how can the fact that Japanese regularly places heads at the end in those structures be related to its SOV structure?

3.6.1. V and O

We have seen that the verb is the element that performs the function of predication. (Section 3.3.) The verb does this with the help of O. O is part of the predication. The dependency relation between V and O is evident. V can be without O. There are a lot of verbs which do not require objects, and they are called intransitive verbs. Even transitive verbs can often be without objects. O, on the other hand, cannot be without V. O in VO constructions is dubbed as O solely because it accompanies V. Not only noun phrases and pronouns but also structures like gerundial phrases and that-clauses can be O, and they can be such exactly because they accompany V. Without V, there can be no O's. Therefore, O depends upon V. V is the head and O its dependent.

In the VO structure in English, the head V thus comes before its dependent O. This is in line with the head-dependent ordering in Figures 2-9 we have observed above. In the OV structure in Japanese, on the other hand, the head V comes after its dependent O. This is also in line with the ordering of the head and the dependent in the other structures we have observed in Figures 2-9.

3.6.2. V and S

The same argument as with V and O applies to the relationship between V and S' as well. Just as the element O presupposes the existence of V, so does the element S.

There is no such function as "S" that can be conceived independently of V. S is generally realized by a noun phrase. O, however, is also generally realized by a noun phrase. When there is a noun phrase accompanying V, how can we say that it is S, and not O, or vice versa? It is solely with reference to V that we can do so. Thus the very concept of S presupposes the existence of V. A noun phrase is given the status of S or O according to how it is related to V. When we speak of S, it is always S of V. In this sense S is dependent on V. Therefore, V is the head.

V, on the other hand, does not presuppose the existence of any other element. It is true that when we think of a verb, we usually think of something which represents the agent or patient or some other case in relation to the event expressed by the verb. However, there are impersonal verbs such as rain, snow, seem, etc., which did not need to take any subjects in older English, and which even today take the mere formal subject it. Verbs, therefore, do not necessarily require the existence of S. A verb is a verb without the existence of O or S. It is not accidental that V is uniquely realized by the word class verb, and that the same term "verb" is used for both the functional and formal categories. The verb is the core element and head of the sentence.

3.7. Head-Dependent Relationships and their Correlations

We have discussed in the above the head-dependent relationship in various syntactic structures, and established the position of the head in each. The above arguments, particularly those for the status of V as head of the basic sentence and those for the status of v as head of the verb phrase as well as those for the position of the head in the derived sentences, should offer some data for the evaluation of the operator-operand theory by Vennemann (1974a and b) and the X-bar theory by Jackendoff (1977), both of which are involved in formulation of the head-dependent relationship in syntactic structures. (Cf. Hawkins, 1983: 31-40 & 183-189; 1984: 109-115.)

As to the head-dependent relationship in Japanese, we find very beautiful correlations between the positions of the heads in all the syntactic structures examined. In the basic sentence in Figure 1, the head comes at the end exactly as in the other structures in Figures 2-9. Here is a complete uniformity among the positions of the heads.

In English syntactic structures, too, we find a similar tendency. The head V is placed before O rather than after, near the front rather than at the end, though not quite at the very front as in VSO languages. It also comes almost at the front in the structures in Figures 2 & 4. And it always comes at the very front in all the other structures.

4. Summary

In Section 1. the word order in the basic sentence, the noun phrase, the verb phrase, the adverbial modification, and the adpositional phrase in English and Japanese is examined. In Section 2, the same in the derived sentences in the form of the interrogative, the imperative, and the exclamatory sentences is examined. In Section 3, the head-dependent relationships in these structures are discussed, and the positions of the heads determined.

It is then demonstrated that in Japanese the head comes at the very end in all the structures examined, that the Japanese language is a perfectly head-postposing language.

As for English, on the other hand, it has been shown that the head comes at the front in most of the structures. In the verb phrase, in the adpositional phrase, and in all the derived sentences, the head comes at the very front. In the noun phrase and the adverbial modification, it can be preceded by the single or simple type of dependent, but it regularly precedes the other types of dependents, which are the majority. (Cf. Quirk et al., 1985: 63, who say, "...one-word elements tend to precede the head, whereas multi-word elements tend to follow it.") To this extent can we say that English is a predominantly head-preposing language.

The results obtained so far can be shown as in Table 4, where the element underlined is the head in each structure. It is to be noted that in Figures 1', 2', and 4' for English, where exceptional orderings are found, that the elements which come before the head are all the simplest of the dependents in the structure. They are shown enclosed by dotted lines in the table.

	ENGLISH	JAPANESE
	HEAD	HEAD
Figure 1' (Basic Sentence)	S <u>V</u> O	S O <u>V</u>
Figure 2' (Noun Phrase)	D/A <u>N</u> AP/AC	D/A/AP/AC <u>N</u>
Figure 3' (Verb Phrase)	<u>v</u> v v v v V	V v v v v <u>v</u>
Figure 4' (Adverbials)	<u>ADV</u> H ADV/ADVP/ADVC	ADV/ADVP/ADVC <u>H</u>
Figure 5' (Adpositional)	<u>PREP</u> N	N <u>PREP</u>
Figure 6' (Yes-or-No Q)	<u>Q</u> SVO	SOV <u>Q</u>
Figure 7' (Wh-Q)	<u>WH*Q</u> SVO	SOV <u>Q</u>
Figure 8' (Imperative)	<u>IMP</u> SVO	SOV <u>IMP</u>
Figure 9' (Exclamatory)	<u>EXCL</u> SVO	SOV <u>EXCL</u>

Table 4. The Position of the Head in Syntactic Structures

The question still remains why in Figures 2' and 4' the head is preceded by the simple dependents against the dominant tendency of head-preposing in English. These exceptions do not undermine the fact that English is a predominantly head-preposing language. Rather, this enclosed part in the table seems to point to the whereabouts of the answer for the question. What is to be noted here is that the preposing of the simple dependents in Figure 2' and 4' is in parallel with the preposing of S in Figure 1'. The placing of S before V is the characteristic feature of English as an SVO language in contrast with VSO and SOV languages. The presence of S in front of the head should have a great deal to do with the placing of simple dependents in front of the head in Figures 2' and 4'. Arguments for this

assumption will be given in the next section.

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