
Comparative Studies on Some Distictive Differences
in
the Articulatory Features of English and Japanese

Fumio Shigematsu

Foreword

Before entering upon the main discussion I think it proper as a matter of course to give the outline of the modern linguistic science, which is closely connected with phonetics on which my present subject basically depends.

Man is the only being possessed of speech to express his thoughts and feelings. When he invented written symbols as a means of communication, his civilization set in rapid promotion at an unbelievable stride. The invention of printing machine has still more quickened its pace for these several centuries. In modern times, however, successive appearances of various types of mechanical devices recording speeches and sounds as well as images have greatly added to its velocity in the development of our cultural life. The human brain is indeed Nature's greatest miracle; it would be unbelievable that such a creation could have come into being in the animal kingdom did we not have before our eyes these graded steps which lead up to it. Now we are urged to adjust ourselves to this extraordinary progress of civilization. We live indeed in the age of mass communication daily necessitated to match ourselves with what is called "Lifelong Education". In spite of the importance of speech sound in our civilized life, printing still plays such an important role that we are apt to forget that language is primarily speech, while the written or printed word is merely

a kind of substitute — in many ways a most valuable, but in other respect a poor one — for the spoken and heard word. Many attributes which have vital importance in speech — junctures, pitch, stress, tone of voice, thus especially those elements which give expression to delicate emotions rather than to logical thinking — will not come out in the comparatively rigid medium of writing, or are imperfectly rendered by such means as dashes, italicizing and punctuation. We should, therefore, re-perceive human utterance as a direct medium, for language study has taken a gradual turn to modern linguistic science which chiefly deals with concrete speech material, not documental study as philology does. Especially in the United States, the Yale School led by Bloomfield originated what is called structural linguistics which is primarily interested in discovering and describing as concisely and accurately as possible the inter-relationship and patterns which make up the intricate structures of languages. It has thus developed its own method for these forty years in an attempt to discover structural features in common with a number of Indian languages grown in their own native soil. In a sense, structural linguistics may be called the mathematics of language study because of its seemingly abstract and preoccupied features with methods. It, however, in its widest sense, comprises in it the Prague School in Europe headed by Trubetzky and Jakobson, and the Copenhagen School led by Hjelmslov.

For our present discussion I would like to recognize four branches based on structural linguistics in order to clarify the respective subject matter to be dealt with in each branch. They are:

1. Phonetics, whose subject matter is concerned with speech-sounds or qualities and their organization into speech-sounds, or phones.
2. Phonemics, whose subject matter is concerned with the organization of phones into groups called phonemes, whose members are the significant sounds of speech.

3. Morphemics, whose subject matter is concerned with the organization of phonemics into meaningful groups called morphs. It is also concerned with the organization of these morphs into family group, called morphemes, and the combination of morphemes into words.

4. Grammar, whose subject matter is concerned with the organization of words into various combinations, which often represents many layers of structure, such as phrases, sentences and complete utterances.

On the whole, linguistics does not at present go any further. Finally, however, we should take note of the term phonology. This is used to mean a general term embracing phonetics and phonemics. It is thus convenient, for example, to speak of "the phonology of English," meaning all matters concerning the sound-system of English.

Morphology and syntax are to be taken as subdivisions of grammar; the former deals with the structure of words, the latter with the structure of word group.

Transformational grammar now much talked of was born when the New Bloomfieldian School came to a deadlock.

I have thus far roughly stated the outline of modern linguistic science in its developing process in order to define the placement of phonetics, based on which I intend to point out some distinctive differences in articulatory features in my comparative study of both languages, for I hope the contrastive explanation will help understand the distinctive features commonly lurking unobserved in both languages.

Complete Mastery of Mother Tongue: Generally speaking, as a child we unconsciously learn by five or six years of age the sound system of our mother tongue together with its basic word-order. In other words our speech organ becomes habituated to the natural utterance of our vernacular as a result of pronouncing many thousands of times. The older we grow, therefore, the more difficult it is to learn to pronounce other speech-sounds.

Incomplete Mastery of Foreign Speech-Sounds: Strictly speaking, no two languages are one and the same in individual sounds when closely examined, and it is hardly possible to achieve complete mastery of pronunciation only within limited class hours allotted to the learner. Then, most of us are inclined to be contented with incomplete mastery, giving it up halfway, allowing our pronunciation to remain incorrigible for the rest of our lifetime.

Experimental Phonetics: In the experimental phonetics of today the analysis of speech sounds in general is possible, and shade of difference in pronunciation between sound and sound is to be shown by means of specially devised apparatus such as the kymograph, oscillograph, etc. Speech-sounds are thus recorded and observed aurally and visually by these various types of recording machines, but the mechanical observation alone would not be sufficient unless they are actually mastered by practice through the personal guidance of a native speaker or a well-trained teacher. At Harvard and Cornell Universities, therefore, they use what is called informant in the foreign language pronunciation drill while non-native teachers are only in charge of grammatical classes, co-operating with the former, filling up each other's shortcomings in foreign language teaching. Now we have come to the stage that we should discuss the characteristics in both languages.

General Tongue Position of Japanese Compared with That of English:

1. Generally speaking the tongue position in Japanese may be said to be farther forward than in English, William B. Pettus pointed out in his book, "Comparison of English and Japanese" (1914). He remarks in the same; "The movement of the Japanese back tongue is generally more inactive, especially in vowels. This is partly because of the articulation peculiar to Japanese, where its pitch tone predominates its stress movement." This may be easily identified when in movie pictures we watch the active movement of English actors' and actresses' lips overlapped

by the Japanese version.

2. Again he resumes; "Few of the Japanese back vowels are produced farther backward than the mediate sounds between English [o] and [ɔ].
3. The Japanese [ウ] [ɯ], for example, differs not only in its shape of the mouth from that of the English [u], but it is made much farther forward than in English, without the lips pouting out. The English [u] must be produced with lips pouted, the back tongue raised toward the hard palate as in; book [buk], foot [fut], who [hu:], woman [wʊmən]. Most Japanese beginners are liable to replace [u] in these words by the Japanese [ɯ]. I have once heard an American professor make a remark on this Japanese inactive way of pronunciation as "lip-laziness." Although in fact "Kabuki" and "Yōkyoku" performers speak in deep voice articulated farther backward in the mouth, it is not the usual way of talking in everyday spoken Japanese.

Some Confusing Sounds Compared:

1. English [i] is not the same in quality as Japanese [i] [イ]: It is purely a vowel produced with the tongue-tip slightly raised toward the teeth ridge, while Japanese [i] [イ] mostly with the tongue blade spreading down, the middle and front of the tongue much nearer to the hard palate over its large area. It sounds, therefore, a kind of or rather like a palatal consonant [j]. English [i] is somewhat near [e] in the mouth position. Some Americans pronounce "sit" as [set]. Japanese [i] [イ] has a shade of sound near English [j] as in "yes" or "year". Palmer and Jones subdivide English [i] into three variants; 1) a tense [i] as in the first stressed syllable of "pity" [pítɪ], 2) a lax [i] as in "fit" and "sit", 3) and an unstressed weak [i] as in the second syllable of "city" [sítɪ] and "money" [máni]. On a menu at a London restaurant I was surprised to find Japanese [酒] phonetically spelt "SAKI". The boy actually pronounced it as [sáki], not [sáke] which would be so pronounced by a Japanese.

Here, I must point out a noteworthy fact that English [si], [ti], [di], [ni], [pi], [bi], [ri], [li], [fi], etc. are carelessly pronounced by most Japanese, least aware of himself in the habit of bringing into English his palatalized sounds [ʃj], [tʃj], [dʒj], [nj], [pj], [bj], [rj], [lj], [fj], etc. For example; city [síti], tip [tip], team [ti:m], Edison [édisn], any [éni], capital [kæpitl], country [kÁntri] rid [rid], fill [fil], little [lítl] as [ʃítʃi], [tʃjp], [tʃj:m], [édʒjson], [éni], [Kæpjtal], [KÁntrj], [rjd], [fj:l], [ljtlø].

2. English [ə] is always extremely short and unstressed, so that its exact value is difficult to observe or describe: the vowel is subject to slight variations depending on the individual speaker and on the nature of the adjoining sounds. Jones establishes three variants, but for foreign learners it is sufficient to learn to produce the central one which is pronounced vaguely blended with or rather influenced by the adjoining stressed syllable. It never takes any stress whatever.
3. English [h] is defined as a voiceless glotal fricative consonant rather weakly pronounced with voiceless sound, both the tongue and lips in their natural position: Some English native drops [h] when not initial or in an unstressed syllable as in; hotel [outél], historical [istórikəl], habitual [əhítʃuəl]. In "hour", "honour" and "honest", [h] has been historically elided, but in "humorous" and "humour", [jú:mərəs], [jú:mə] are now regarded as old fashioned. In spoken English, the [h] is usually dropped when not emphasized as in; "he has [z] a hat in his [iz] hand" "he paid her [ə:] what he [i] owed her [ə:].". In Cockney they often drop [h].

Japanese [ヒ] [ç] and [フ] [θ] are so transcribed with narrow signs because of their different qualities from English [h] phonemes. They are pronounced respectively with more breath-force than [hi] and [hu], ending with or rather gliding to vowels [i] and [u]. In modern

Japanese the initial consonant [h] of [ha] is often dropped by some women and children as in; 「アイ」 [ai] and 「アイヨ」 [áijo] instead of [hai] and [háijo] in Tokyo dialect.

4. English [l], [r], and Japanese 「ラ」 [ɾ] series:

[l] is, as it were, a mellifluous sound articulated in a prolonged voice passing through both or one side of the tongue with its tip slightly touching against the teeth-ridge. It is said to have been a favorite sound of Tennyson's, who often used it in his poems when he wished to express some feeling of smoothness, liquidity and lucidity as in, "Low on the sand and loud on the stone The last wheel echoes away. (Maud) It has, as you know, two variants: clear [l] and dark [ɫ]. The former generally appears initially or before vowels, more often before [i:] and [i] as in; "lead," "live", etc.; the latter is used finally and before consonants as in; "tall", "well", "silver". Japanese beginners often put in [ɔ] after the dark [ɫ] as in; full [fulɔ] well [welɔ]. [r] has a few variants, but the standard [r] is generally heard in the Southern English pronounced with the tongue tip slightly retracted or curled up, touching neither the upper teeth-ridge nor the hard palate. Northern England and Scotland types are usually rolled or trilled [r], the tongue tip momentarily touching on and off the palate. Semi-rolled [r] is the Southern type made by some, the tongue tip lightly tapping but once at the hard palate.

The initial sound of the Japanese [ɾ] series is quite different in quality either from [l] or from [r]. It is produced by the front tongue flapping forcefully at the upper teeth-ridge, partly similar in a way to [l] and [r] in its instantaneous on-and-off movements of the tongue. Hence the difficulty for Japanese to distinguish [l] from [r] in recognizing and producing both sounds as in; umbrella [ʌmbrélə], terrible [térəbl], railroad [réilrouɔ], ring the bell [rín ðə bél] or final -ly and -ry as in; family, country, etc.

The Japanese 「レ」 [ʎe] tends to disappear in rapid familiar talking as in; 「ナサレタ」 [nasaʎeta] → [nasatta], 「ソレカラ」 [soʎekaʎa] → [se:kaʎa].

5. English [z], [ʒ], [dʒ] and Japanese 「ジ」 [ʒi], 「ヂ」 [dʒi], 「ズ」 [zu], 「ヅ」 [dzu]:

The Japanese sounds shown above are respectively transcribed as above with phonetic signs for practical purposes in order even for a Japanese to recognize the difference in each sound. For an English native speaker the distinction of [s] and [z], [ʃ] and [ʒ], [tʃ] and [tʂ], [dʒ] and [dʒ] is not important, for it is naturally a self-obvious fact for him. But, strange to say, when it comes to the Japanese, somehow they confuse 「ジ」 [ʒi] and 「ヂ」 [dʒi], 「ズ」 [zu] and 「ヅ」 [dzu] in Japanese phonemes. For example; 富士「フジ」 [fuʒi] and 藤「フヂ」 [fudʒi], 自信「ジシン」 [ʒiʃin] and 地震「ヂシン」 [dʒiʃin]. It seems quite unreasonable that the Japanese who never confuse the sounds of the 「サ」 [sa] series produced with the tip of the tongue not touching at the upper teeth-ridge and those of the 「タ」 [ta] series with the tip touching at the upper teeth-ridge should confuse the voiced fricative 「ジ」 [ʒi] and the plosive-fricative 「ヂ」 [dʒi], 「ズ」 [zu] and 「ヅ」 [dzu], though they can distinguish 「シ」 [ʃi] from 「チ」 [tʃi] and 「ス」 [su] from 「ツ」 [tsu]. This is probably due to the fact that in the case of [ʒi] and [dʒi], [zu] and [dzu], the overpowering resonance of the voiced plosive [d] has naturally caused this difficulty in distinguishing [ʒi] from [dʒi] and [zu] from [dzu]. Such a confusion, however, is now becoming nationwide accepted in the modern spoken Japanese excepting in a few districts, or rather standardized throughout the country. And therefore a matter of no importance at present as far as it concerns Japanese. On the contrary, however, the confusion is never permissible in English. Accordingly, "gin" [dʒin] is naturally easy for Japanese

but not in such as "zinc" [zɪŋk], "leisure" [lɛɪzə], "measure" [mɛɪzə], Elzinga (proper name) [ɛlzɪŋgə], etc. They are apt to be mis-pronounced [dʒɪŋk], [lɛdʒə], [mɛdʒə], [ɛldʒɪŋgə].

6. [m], [n], [ŋ] and Japanese 「ン」 [ŋ] : It should be noted that there exists an important relationship between the English [m], [n], [ŋ] and the Japanese [ŋ] sound. To begin with, I must here reaffirm the accepted fact that [m], [n], and [ŋ] are produced by the forceful resonance while the voiced sounds passing through the nasal cavity with the soft palate lowered, the difference of each sound effected by its resonance area formed by the closed lips or blocked by raising the tongue-tip against the teeth-ridge or by raising the back of the tongue to touch the fore part of the soft palate. [m] and [n] are so denoted with the letters m and n as no explanation required, but [ŋ] is, though spelt -ng, so changeable in quality affected by the adjacent sound that it is necessary to give a general rule for practical purposes;

- 1) -ng is all pronounced [-ŋ] as in; sing [sɪŋ], long [lɒŋ], ring [rɪŋ], strong [strɒŋ], etc. including tongue [tʌŋ] in this category.
- 2) -ng followed by a suffix or a word which begins with a consonant; kings [kɪŋz], kingdom [kɪŋdəm], song-book [sɒŋbuk], strongly [strɒŋli], hanged [hæŋd], willingness [wɪlɪŋnɪs], etc.
- 3) -ng followed by a word which begins with a vowel has two distinctions,
 - i. -ng (verb, noun) followed by a suffix beginning with a vowel as in; singer [sɪŋə], singing [sɪŋɪŋ], slangy [slæŋi], winged [wɪŋd].
 - ii. -ng (adjective) followed by a superlative or a comparative suffix is pronounced [-ŋg-] as in; longest [lɒŋgɪst], longer [lɒŋgə], etc.
- 4) -ng- is pronounced [-ŋg-] except compound nouns as in anger [æŋgə], finger [fɪŋgə], hunger, hungry, linger, jingle, language,

England, etc.

- 5) When the letter 'n' is followed by the letter 'k', it is assimilated into [ŋ] as in; ink [ɪŋk], anker [æŋkə], think, monkey, etc.
- 6) When con- is followed by [k] or [g], there are two distinctions;
 - i. The accented con- is pronounced [ŋ] as in; conquer [kɔŋkə], conquest [kɔŋkwɛst], congress [kɔŋgres], etc.
 - ii. The unaccented con- followed by an accented syllable (including the secondary accent) is pronounced [n] as in; concur [kənkú:], congratulation [kəŋgrætjuléifən], etc.
- 7) in-, en-, un-; 'n' is all pronounced [n], even when followed by [k] or [g]; increase [ɪnkri:s] (n.), [ɪnkri:s] (v.) engage [ɪŋgɛɪdʒ], ungrateful [ʌŋgréɪtfl].

Japanese [ɲ] [ɲ] is so peculiar in quality that it is necessary to state a little about it in details in contrast with English [m], [n], and [ŋ] phonemes. The original Japanese [ɲ] is not to be found in English, but is changeable in Japanese into [n]-, [m]-, [ŋ]- like sounds under the influence of a sound following it. First, we must know the fact that the Japanese [ɲ] is not purely a nasal consonant. It is produced mostly through the nostril but some of the sound escapes through the mouth at the same time, since it is neither purely nasal nor purely vowel enough to claim as such because of the shortage of its resonant quality. It is by nature a kind of continuant like the English lateral and nasals. It is less of a sonorous quality able to stand as a single syllable than the English lateral and nasals. It can not be connected, therefore, with a consonant into one independent syllable though seemingly it should. It is thus classified into the consonant group. The sound shows intricate features in the relationship between the English [m], and [n]:

- 1) [ɲ] sounds like the English [n] when followed by [t(ʃ)], [d(ʒ)], [n], [nj], [r] and [l]. For example; 関東 [kanto:], パン

チ [pantʃi], 寝台 [ʃindai], 感情 [kandʒo:], 困難 [kon-nan], 盛んな [sakan-na], 乱入 [ran-nju:], 転任 [ten-njn], 真に [ʃin-nj], 洗礼 [senrei] 全力 [zenrjoku]. Therefore English words such as bent, bench, kind, danger, unnatural, unusual, opinion, unreal, unreasonable, unless are relatively easy for Japanese to pronounce.

- 2) While on the other hand, the original Japanese [ɲ] [ɲ] retains its peculiarity unchanged when followed by [s], [z], [ʃ], [ʒ], [w], [j] and a vowel in the initial position of the next syllable or phrase. For example; 先生 [seʃsei], 銀座 [giʒza], 電車 [deʃʃə], 近所 [kiʒʒo] 電話 [deʃwa], 南洋 [naʒjo:] 婚姻 [koʒin].

It naturally follows that the [n] sound in English sound clusters such as; tense [tens], can say, [kæn séi], pansy [pæʒzi], insure [inʃúə], onward [ʒnwəd], one year [wánjé:], Bunyan [bánjən] is generally difficult for Japanese. Even a Japanese fairly advanced in the pronunciation is often unaware of his own fault. The careful observation of the speaker's own speech tape-recorded would help him find this fault of his.

- 3) It has been experimentally proved that the Japanese [ɲ] at the end of a word, if not followed by any sound, is generally pronounced [ŋ], but in a familiar talking [ŋ] or [ɲ] is alternatively used as in; 金銭 [kiʒseʃ] or [kiŋseŋ], 婚姻 [koʒiʒ] or [koŋiŋ]. cf. The English, 'king' and 「金」 [kiŋ] are just about the same in quality, while 「金千円」 is pronounced [kiʒseʃeʃ]. In Kansai and especially Kyushu Districts beginner students are liable to a common mistake to pronounce the English [-ŋ] as [-ŋg] as in; king [kiŋg], ring [riŋg], etc. Thus, such words as; finger, single, etc. are not difficult for them to pronounce [fiŋgə], [siŋg], but not for beginners in Kanto districts who pronounce purely nasal [ŋ]. Most Japanese are also liable to replace [ŋ] and [ɲ] for the English [n] sound as in; ten, man, London,

etc., while English native speakers, who speak Japanese, usually bring their own speech-habit of [n]-linking into Japanese and say, 「山田さんおりますか」 [jamadasan^orimasuka] instead of [jamadasa^ɤorimasuka], in which [ɤ] does not link with the vowel [o].

4) The Japanese [ɤ] is usually pronounced [m] when followed by [p], [b] and [m]; Therefore, such words as impart, impolite, imply, compare, combine, immigrate are correctly pronounced, but not in such as, unpromising, impatient, sunbeam, sunburn, inmate, etc.

7. Elision of [w]; In modern English the letter 'w' is conventionally elided before or after 'r', e. g. write, wrong, wring, wrinkle, cartwright, Berwick [bérik], Warwick [wórik].

In modern Japanese it may be said that 「ワ」 [wa] is the only syllable that still retains its initial [w], though in 「私」 [watakufi], [w] is often elided into [atafi] and sometimes [atai] in familiar dialectical talking among younger women. This is chiefly because the Japanese [w] is originally so weaker in quality than that of English that it dies away in informal rapid talking. For example; 「会」 [kwai] — [kai], 「菓子」 [kwafi] — [kafi], まわる [mawaru] — [ma:ru], 「そうでわない」 [so:dewanai] — [so:(d)zanai] 「高くはない」 [takakuwanai] [takakanai], etc.

The English [w], a semi-vowel, is so named with its other pair, [j] because of its sonority larger than that of any other consonant and its on-glide taking on a quality inadmissible as a vowel. For this reason it is often euphonicly assimilated with the sound followed in a stream of sounds, as in; how are you? [hawa:ju], just as its pair, [j] is, as in; I'll miss you. [ailmíʃju:] or this year [ðíʃjé:].

In English just as well as Japanese the speech-sounds are always juxtapositionally or accidentally subject to phonetical changes such as assimilation, contraction, elision, devocalization and shortening or

weakening, etc. in our everyday speech. Here we come to realize a common feature which may be called a sense of aesthetic gratification and motor-economy working through every living language, which is employed to give delicate expression to our desires, thoughts, emotions and to impart information. The senses may be moved by the blended harmony of verbal sounds, by the subtle connotations of ambiguous phraseology and by deliberate deviations from common usage.

In this connection we can derive a common feature of the use of glides, elision, etc. either from Japanese or from English; 「見合い」〔miai〕 — 〔mijai〕, 「試合」〔siai〕 — 〔sijai〕, 「三日月」〔mikkatuki〕 — 〔mikazuki〕, 近所〔kinjo〕 — 〔kin(d)so〕, なんということだ〔nanto-jukotoda〕 — 〔nantfu:kotta〕

In English we find historically established examples such as; house 〔haus〕, houses 〔háuziz〕, picture 〔píktjuə〕 — 〔piktʃə〕, presume 〔prizjú:m〕 〔-zu:m〕, observe 〔əbzó:v〕, vineyard 〔vínjəd〕, cupboard 〔káɫbəd〕, forehead 〔fóred〕 or rarely 〔fóhed〕, infamous 〔ínfəməs〕, castle 〔ká:sl〕, muscle 〔másl〕, etc.

8. Differences of Nature in the Shortening of Both Languages;

- 1) Shortening in English speech is a common feature ranging alike from the upper and educated classes to the lower ones, as in; isn't, don't, didn't, haven't, won't, shan't, shouldn't, mustn't, daren't etc.
- 2) In Japanese, on the other hand, the shortening suggests class, status, age and sex, as in; 「そうではありません」〔so:dewa arimasen〕, 「そうじゃない」〔so:dʒanai〕 (spoken to inferiors), 「そうでねえ」〔so:denei〕 (used in the lower class), 「私」〔watakufi〕 (polite or formal), 〔watafi〕 (les polite or informal), 〔ore〕, 〔boku〕 etc. 「来なさい」〔kinasai〕, 〔koi〕, 〔kitamae〕, 〔irafjai〕, etc.

9. Alliterative Usages; These are also a common feature found in both speeches or in verses, or perhaps in all human speeches, since aesthetic gratification is man's inborn faculty which naturally goes for euphemistic

expression in speech as stated earlier. For example;

English; miles and miles	Japanese; ikurimo ikurimo
round and round	guru guru to
one by one	hitots zuts
little by litte	sukoshi zuts
on and on	don don
etc.	etc.

English verse;

And like a downward smoke, the slender stream
Along the cliff to fall and pause and fall did seem.

(The Lotos-Eaters)

Japanese verse;

「瀧の音はたえてひさしくなりぬれど、なこそながれて、なほ聞えけれ」
「伊勢は津でもつ、津は伊勢でもつ、尾張名古屋は城でもつ」

Miscellany: A friend in need is a friend indeed. A sound mind in a sound body. A stitch in time saves nine. Then and there. Land and Landscape. Go to rack and ruin. With might and maim. Hale and hearty, etc. 「いの一番」, 「きたきた きたまの天神さん」, 「スカットサワヤカ コーカコーラ」 「おどろき とどろき さんしょの木」 etc.

10. Syllabification and Rhythm; Phonetically analyzed, the smallest unit in speech may be defined as an individual syllable, which is combined into a word. A word into a phrase or a sentence. When more than two syllables connected in a word, the definite syllabic sound is most forcefully put forth than all the others by blending them together with it as a whole. If a word, "textbook" taken up for example, it is to be syllabicated into two syllables, [tékst-buk] with stress on the first syllable, but in Japanese way of pronouncing, it will be 6 syllables, [te-ki-su-to-buk-ku]. Here we see an important difference between the two; the former is delivered in its own utterance which moves along

mainly with a syllabic vowel most strongly stressed and other weaker members blended with it, but the latter in its own utterance moves along in a level tone with every consonant and vowel connected simply together to form a syllable, and we feel in its tone a pitch working as in a musical tone rather predominantly than a stress.

The above-stated principle may be applicable to a longer speech. If the following Japanese were to be read by an English native speaker, in his own utterance, it would be as follows:

大阪 [óu-sə-kə], 名古屋 [nə-góu-jə]

この刀は何年位昔のものですか [kə-nóu ketá:nə wə nánnen kurái muká:ji nóu mónou déskə]

This closely examined, English is found to be characterized by its own regular rhythm in each sense group or in each breath-group making up a syllable, the stressed syllable occurring at more or less regular intervals of time, and the unstressed syllables, whether many or few, occupy the time between the stresses. Such regularity is not monotonous, however, because of the pauses made between the groups and the varying intonation of the group.

Bearing in mind the afore-said facts, let's, here again, try to contrast both speeches that express the same thought from the rhythmical point of view; (— shows high pitch)

「私は酔う筈のない弱い酒にでも酔うんです」 [watafi wa jōuhazu no nai jowai sake ni de mo jōuɽ desu]

I get drunk éven on véry weak wíne (which) you wóuldn't expéct to háve any efféct.

Here we notice that Japanese consists mostly of open-syllabled words which end with vowels, while English is mostly of consonant-endings; plosives, fricatives, affricates, and still more remarkable is the feature that some words contain a consonant cluster, as in; street [stri:t], please [pli:z], middle [mídl], etc., and that comparatively many words,

end with consonants such as plosives, fricatives, lateral and affricates as in; stop, seat, sound, knife, teach, judge, church, well, etc., though there are a limited number of words which end with vowels.

Let's observe how English verses consist of consonant-ending syllables and words;

Should auld ac-quaint-ance be for-got and nev-er brought to mind.

(10 syllables ending with vowels contained in the 14 syllables in total)

The Lord is in his ho-ly tem-ple. Let all the earth keep si-lence.

(11 vowel -ending syllables in the 16 syllables)

We now see that the English consonants are well defined; voiced and voiceless consonants stand over against each other in neat symmetry, and they are, as a rule, clearly and precisely pronounced. While Japanese contains relatively more vowel-ending syllables and words, as they are called open-syllabled, moving along with musical note chiefly consisting of pitch tone, high and low.

(To be continued)