How Did the Sparrow Twitter in Ancient Japanese?*

By Takashi KAMEI

There is no room for doubt in regard to the phonetic value of *H*, i.e. the sound of the *HA* column of the Japanese syllabary (*go-in* 'Five Sonants', or *gojû-onzu* 'Fifty-Sounds Table'), which should be traced back to a labial. Whatever problem still remains open to discussion can only be delved into in terms of labials. However, if the effect of a sound change is not projected on the screen of writing, what actually happened in a given society in ancient times so far as regards the way words were pronounced hardly betrays itself. In the history of sound there must have been many cases of silent change in which some sound established itself through unnoticeable transition (accordingly, without a creak, so to speak). It is a gentle shift, to put it in a different way, in the sense that it has not gone so far as to disturb the established, if not stable, equilibrium of phonological contrasts by producing homonyms likely to cause trouble to the whole system of the language involved. When we consider that in the past not a few unnoticed changes of this sort, which eluded the inquiring efforts of scholars, did in fact occur, then because of the very nature of the changes themselves we must regard them as almost impossible to be brought to light.

The case of *H* may thus be termed an exceptional example in that there happened to be most valid proofs which permitted a successful restoration of the whole picture of its history as far back as the preliterate stage. In cases where *H* was in other word positions than the initial, however, the contrast between the *HA* column and the *WA* column (in terms of the Japanese syllabary) was broken down, so that confusion was reflected in the *kana* system of writing. It is apparent that *H* invaded the domain of *W*. Even from a fundamental knowledge of phonology alone, one can easily infer that it is hardly possible to suppose the transition of *W* to the area of *H* (which was in reality a labial at the moment of merger) through the blending of both sounds. It is *H* that usurped the position of *W*, which did not assume as large a share in the function of distinguishing one unit of linguistic signs from another, and which may of its very nature be considered weak. In short, *H* lost its body in the process of invading the area of *W*. At the stage of

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Ancient Japanese, in which the contrast between *H* and *W* still obtained, words containing a media *W* were very few: e.g. *AWA* (foam, bubble), *YOWA-* (weak), *KAWAKU* (to dry), *AWI* (a kind of indigo plant, hence a colour name as well), *SUWE* (end), *TUWE* (stick), *SAWO* (rod), etc. From these one can adduce only one example in which homonymic collision was possible: *AWA* (foam) and *AHA* (millet). (Nevertheless, the difference in meaning may easily have been clear from the actual context, both verbal and non-verbal, in which the homonym appeared—to say nothing of the differentiation of accent or prosody between these phonemically homonymic forms, which may in all probability have existed.)

It goes without saying that, from the social function of a language and in view of the role it plays in communication, two mutually contrasting units are not likely to be so easily blended. But if we trace back the process of the merger of *H* and *W*, we can find in it an evident fact. It is about 99 per cent certain that, immediately before *H* changed to the sound [w] in medial position it was a labial, possibly even something like [ʍ]. On the other hand, it could not have been the glottal sound [h] (though there is room for one per cent uncertainty, since the phonetic reality of the past language naturally cannot be observed.) By the way, it has hitherto been supposed that *H* was absorbed into *W* and disappeared. This view is, as it stands, superficial. It is indisputable, however, that *H*'s transformation into [w] was due to the fact that both of them were phonetically similar at the time of their merger. This is the indispensable background against which the play of the functional change could actually be enacted on the stage of history. Irrespective of the hypotheses put forward by Ôya Tôru, who regards *W* of the Heian Period as [v], and Murayama Shichirô, who supposes its more archaic value to be [b], it is still a fact that the value of *W* was i) a labial, but ii) not a stop, from the Nara Period to the Kamakura Period (not to speak of the pre-historical stage). No matter how cautious an attitude we may assume towards the problem, we can sufficiently determine the range to which its phonetic value should be limited. Therefore, if we think about the implication of the fact that such a merger could take place from the given fact that such a merger actually did take place, it is ultimately the fact that both sounds are labials. Just from this fact alone, in the case of *H*, the way is already opened to reconstruction of its phonetic value.

What the present writer takes up here is such a sphere of sound change in which the phonetic value of a phoneme, i.e. the substance of a sound, was replaced by another value in the form of a one-to-one correspondence. When the sound *S* was affected by a phonetic change, the change must have been of such a kind, for, if we limit ourselves to the problem of phonological functions, the sound expressed by the term *'sa-gyô'* with reference to the Japanese syllabary has undergone no change since the dawn of history, in so far as the phonological system of Japanese is concerned.

Not a single scholar has suggested that there might have been a period in which *S* was an affricate (cf. Hashimoto Shinkichi, "The Phonetic History of Japanese 國語音韻史", p. 221), but no one could attack the problem openly with justifiable proofs. The long blank in the study of this specific theme shows the difficulty of the problem to be solved. Under these circumstances, the theory proposed by the late Dr. Arisaka is a very convincing hypothesis based on his usual solid interpretation (cf. "The Initial of *SA* in Archaic Japanese", in his collected papers, "The Studies of the Phonetic History of Japanese 國語音韻史の研究").

The difficulty, however, begins with the Mannyô-gana, for the kind of Nara Period *kana* corresponding to the later *SA, SI, SU, SE* and *SO* was already multifarious. The enumeration of all the Chinese characters used for the Mannyô-gana which represented the syllables belonging to the *SA* column of the Japanese syllabary was made by Arisaka at the beginning of his above article. To show the distribution of these characters in the system of Thirty-Six Initial Groups 三十六字母 of the Chinese phonology:

I affricates: *tsing* (精), *ts'ing* (清), *ts'ung* (從), the III division *chao* (照), the II division of *ch'uan* (穿), the II division of *ch'uang* (牀);

II fricatives: *hsin* (心), *hsie* (邪), the II and III divisions of *shên* (審), *shan* (禪).

In short, from these data it is entirely ambiguous whether the *S* of Archaic Japanese was an affricate or a fricative. Nor can there be found any preference in the whole *'sa-gyô'* column for some initial group, to judge from the frequency of the characters (Mannyô-gana) corresponding to *SA, SI, SU, SE,* SO_1, and SO_2 (there were two kinds of *SO* in Nara Japanese). The character 須 of the initial group *hsin* was the commonest for the syllable *SU,* while the character 曾 of the initial group *tsing* was usually used for the syllable SO_2. Thus, the convention of choosing the character 須 as the representative of the Nara Japanese syllable-unit corresponding to the later *SU* might somehow be connected with the phonetic value, i.e. the contemporary pronunciation, of the syllable. The same might hold good for other units. Thus the initial *S* might have been a fricative in the syllable *SU,* while it might have been an affricate in the syllable SO_2. Admitting that it might have been so, we must give different explanations for the reason why the character 酒 belonging to the initial group *tsing* was used for *SU* in addition to the character 須, and why the character 所 of the initial group *shên* was employed for SO_2 together with the character 曾. Of course, it may be easy to offer an *ad hoc* explanation, if one is acquainted with the terms of phonology. It will be possible to explain the apparently arbitrary use of Chinese characters as the reflection of free variants of a phoneme in its phonetic realizations. But in effect this explanation cannot solve the problem, for it is obvious from the first that there were only three possibilities; namely, whether *S* of Archaic Japanese was an affricate, a fricative, or an affricate and a fricative at the same time. That Arisaka laid emphasis upon the observation

of Ennin, the author of the *Zaitô-ki* 在唐記, seems to me quite appropriate.

Arisaka inferred the phonetic value of *SA*, described by Ennin as "the reading of the character 佐 in the native language (本郷佐字音)", as something like the reading of the Sanskrit letter *CA*, from the fact that Ennin explained the Sanskrit *CA* as "to be pronounced with a tint of the reading of the character 佐 in the native language (以本郷佐字音勢呼之)" in order to distinguish the phonetic features of the Sanskrit *CA, CHA, ŚA, ṢA* and *SA* from each other. What, then, did Ennin mean by "the reading of the character 佐 in the native language"? According to Arisaka's interpretation, Ennin denoted by this remark simultaneously the common reading (i.e. *go-on* 呉音) of the character 佐 and the *SA* sound of Japanese, without contradiction, by making no clear distinction between them. If one agrees to this interpretation, the phonetic value should have been affricate. But was it [tʃ] or [ts]? Since in the present Japanese dialects, including the Loochuan, or at least in the majority of them, the initial of the syllable *SA* is pronounced as [s], Arisaka preferred the affricate [ts] for the ancient value. The difference between the reading of the Sanskrit letter *CA* [tʃa] and the pronunciation of Japanese *SA* [tsa] can be clearly explained, if Ennin's remark "with a tint of the reading of the character 佐 in the native language" can be understood to show the difference. In short, Arisaka supposed the value of the initial sound of *SA* to be an affricate and, if it was really an affricate, inclined to identify *SA* with [tsa]. If we consider, however, all the syllables beginning with *S*, the discussion must turn differently. We cannot find any evidence that definitely confirms the true nature of the initial sound of *SU* or SO_2. For *SE* we have some data worthy of consideration, but they are not convincing enough to build up a theory.

Such a difficulty makes us abandon the aim of grasping the sound of the *SA* column as a whole. The *SA* column is essentially a term of the Japanese syllabary. Even though a certain phonemic integrity in the area of the *SA* column might be reserved, what we should examine are individual units separated from the Japanese syllabary system. That Arisaka treated the unit *SI* independently of the unit *SA* is supposed to be due to a desire to avoid the onesidedness of exclusively depending on the Japanese syllabary system. According to him, the unit *SI* was pronounced [si] or [ʃi]. One of the reasons is that only the Chinese characters in the fricative series were used for transcribing the Japanese unit *SI* in Korean and Chinese documents prior to the Nara Period, a fact which is difficult to regard as a mere accident. Further, the syllable *SI* lost its initial consonant in the middle of the Heian Period, appearing as *I* through a so-called euphonic change (*'ombin'* 音便, a sort of Sandhi phenomenon in Japanese). Arisaka considered it a phenomenon congenial to the fricative rather than to the affricate. If I am not mistaken in my reading of his article, he seems to have appraised the reconstructions of the phonetic values of *SA* and *SI* with different probabilities. In other words, he seems to put a high degree of certainty on the side of the *SA*. In this

respect I have no objection to his theory. But to me the proofs which are adduced for the reconstruction of the phonetic value of *SI* do not seem convincing enough to be able to admit his view, though they support themselves with, and thus complement each other. Not only are the foreign sources scarce as they stand at present, but also nobody can assure their authenticity. In particular the phenomenon of *'ombin'* may appear to be a strong proof, but a weakening of the whole syllable should be assumed in the process leading to establishment of the *'ombin'* forms. Suppose the formula ⟨A+B+C⟩ indicates a word form of three morae. Then the *'ombin'* form is assumed to have been a prosodical unit where in the actual phonetic aspect of the syllable ⟨B⟩ both a consonant and a vowel, integral parts of it, were reduced to a conglomerate of indistinct pronunciation, while the ⟨B⟩ nevertheless did not lose its mora status in respect to ⟨A⟩ and ⟨C⟩. For example, in the case of the *'ombin'* of *KI,* the consonant *K-* was affected by a strong palatalization, and finally the mora came to be identified with *I.* On the way there may have occurred several variants, among which the realization as [tʃ:] might be included. The syllable so pronounced, which finally came to be identified with the simple vowel phoneme /i/, may have been phonetically quite different from a pure vowel. The *'I ombin'* occurred exclusively in *KI* (*GI*) and *SI* among the syllables belonging to the *I* line of the Japanese syllabary, i.e. the syllables ending in the vowel /i/. If we assume an affricative initial of the syllable *SI,* there is little to stand in the way of the historical explanation of the *'I ombin'* originating in *SI* (in the case of *GI,* it must have been realized as [ɲ·]).

Arisaka has supposed the initial sound of *SI* to be a fricative, either [s] or [ʃ] for the sake of his ingenious interpretation. When Ennin explained the pronunciation of a Sanskrit letter, he had recourse to "the native reading of the character" as much as possible, and if not possible, he appealed to "the Chinese reading of the character". Thus, he explained the *ṢA* with "the Chinese reading of the character 沙 (ṣ, the II division of the initial *shên* 審母)", and the *SA* with "the Chinese reading of the character 娑 (s, the initial *hsin* 心母)", whereas he referred to the *ŚA* with the expression "to be pronounced with the native reading of the character 沙—even if he could have explained it with the reading of a character of the initial *shên* belonging to the III division. This may imply that it was sufficient to explain the *ŚA* only by the native reading. Arisaka reconstructed the reading of the character 沙 as [sia], [ʃia], or [ʃa] in Japanese at that time. This reconstruction seems to be based on his keen insight that the assumption of a fricative would be adequate to explain the behavior of the initial sound of the *SI.*

After the death of Arisaka the criticism of Mabuchi Kazuo 馬淵和夫 was published. Mabuchi refuted Arisaka's hypothesis as he set forth his own theory that the *S* was the fricative [s]. (See "The Phonetic Value of the Initial *S* in Archaic and Ancient Japanese", in his "The Studies of the History

of Japanese Phonology 日本韻學史の研究'', Vol. II). If Arisaka were alive, he would have answered this criticism. I do not intend to neglect Mabuchi's criticism, nor am I inclined to defend Arisaka in his stead. I should only like to offer my own view, independent of other scholars, of the possibility that the ancient *S* might have been affricate—the hypothesis originally proposed by Arisaka.

Arisaka commences his article as follows: "In the present article I should like to study the phonetic value of *S* in Archaic Japanese. Although many reference sources are extant, I shall defer a detailed discussion until another opportunity, and here I shall argue as simply as I can, by offering the conclusion and the main data connected with it." To our great regret, this genius died so prematurely that he did not leave the detailed discussion he had promised. We can never learn from him how many reference sources were at his disposal in addition to the main data. Here I should like to quote one trivial example that might be useful for reference from my own point of view.

The *"Gago-onjôkô"* 雅語音聲考 (Essay on Onomatopoeia in Classical Japanese) by Suzuki Akira 鈴木朖, a scholar from Owari Province, is a monumental work in which a group of Classical Japanese words probably originating in onomatopoeia or sound symbolism are systematically treated. I hope, by the way, I may dedicate a word of eulogy to the author. Being so sober, he never succumbed to the temptation to which experts in this field are often prone: to entertain farfetched etymologies. It is from my hearty admiration for his scholarly attitude that I here turn to his work.

The author analyzed the word form *SUZUME* 'sparrow', into *SUSU-* and *-ME*. The *-ME* he deemed a suffix denoting a flock: cf. *KAMOME* 'sea-gull', *TSUBAKURAME* 'swallow', etc. He considered the remaining part, *SUSU-*, as the onomatopoeia for the twittering of a sparrow. He said, "The people of ancient times heard *TYU-TYU* [tʃu-tʃu] of the present-day language as *SYU-SYU*". It is regrettable that he did not quote any textual evidences to endorse it. But when we trace back as far as the Medieval Period, we learn that the twittering of a sparrow was transcribed with *SI*, not with *TI* as seen in later times.

In a *kyôka*, comic verse in the *tanka* style, by Shokusanjin (蜀山人):

"SUZUME-DONO, OYADO HA DOKOKA SIRANEDOMO,
TYOT-TYO TO GOZARE, SASA NO AHITE NI."
(Dear Sparrow! Where you do make your abode, I know not.
Only join me a little while in drinking!)

We find *TYOT-TYO* [tʃot-tʃo] describing the twittering of a sparrow and at the same time meaning 'a little while'. This verse is evidently based on the famous fable of the sparrow whose tongue was cut off. In the *akahon* (red book), the illustrated fable, "The Sparrow Whose Tongue Was Cut Off",

the twittering cry is written *TI-U TI-U TI-U* in the picture illustrating the fable. The graphic practice of describing the twittering of a sparrow with the *TY-*, as is current at present, certainly began during the Edo Period. The following instance found in a collection of *haikai* poems, the *Haikai-sambushô* 俳諧三部抄 (1677 A.D.) by Ichijiken 一時軒, is the oldest example in my findings.

Suzume no ko by Hanehara Tadayuki (羽原忠之)

"UMARENAGARA 忠 *(TIU)O TSUKUSU YA SUZUME NO KO."*

(The young of the sparrow is by nature loyal.)

Here the word *TIU* [tʃuu] 'loyalty' is used to suggest simultaneously the twittering of a sparrow.

In passing, I should like to add here an anecdote from the *Seisuishô* 醒睡笑 (Vol. VIII), though the subject does not concern the sparrow.

"While we were talking about the kinsmanship that cannot be easily recognized, someone said, 'Really I have recently known the relationship existing between a bunting and a crow.'—'It's sheer nonsense.'—'Yes, it's a reality. It's not hearsay. I myself have heard it personally. Ten days ago, I saw a crow fly down in my garden and play there. A bunting also came and a dove flew down, too. As the three birds met each other, the bunting addressed the crow, saying *TI-TI* (Oh, my father!), and the crow joyfully called *KO-KA? KO-KA?* (You my son? You my son?) to the bunting. Then the dove answered *UU-UU* (Yes, yes) as a witness. Therefore, the crow and the bunting are unmistakably father and son.' "

Evidently *TI-TI* [tʃi-tʃi] is onomatopoeia for the bunting's twittering, between which and the sparrow's voice no linguistic differentiation may have existed.

But the twittering of a sparrow appearing in the Commentaries in *kana* originated in the Muromachi Period is written *SI-U SI-U*. This form is also registered in the *Umpo-irohashû* 運歩色葉集, a glossary compiled in the Muromachi Period, as 啾啾, with its *kana* rendering *SI-U SI-U*, together with the gloss 雀鳴聲 (the twittering of a sparrow). An older instance is attested in the anthology of Fujiwara no Kimishige 藤原公重, the *Fuzeishû*, 風情集 as follows:

"NEYA NO UHE NI SUDAKU SUZUME NO KOWE BAKARI
SI-U SI-U TO KOSO NE HA NAKAREKERE."

(Like the voice of sparrows gathering on the roof of the sleeping room, so lament I *SI-U SI-U* as well.)

Further, in the anthology *Sambokukikashû* 散木奇歌集 (Vol. IX, Misc. A),

"HATAKEHU NI KIBI HAMU SISIME SISIMEKITE,
KASIMASIKI MADE YO WO ZO URAMURU."

(Sparrows picking millet on the field twitter so noisily that they complain about the world.)

We find the verb *SISIMEKU* 'to twitter'. (This *-MEKU* is frequently found in the formation of verbs such as *U-MEKU* 'to groan,' *WA-MEKU* 'to scream', *WO-MEKU* 'to cry', *KISI-MEKU* 'to creak', etc., and is a commonplace suffix used to derive a verb of sound symbolism.) And again in the *Sezoku-gembun* 世俗諺文 by Minamoto no Tamenori 源爲憲, the old saying as follows (cf. Momo Hiroyuki: The System of Education in Ancient Japan, 上代學制の研究 Chap. IV, p. 405, note 11):

"The sparrow around a *Hun'ya* 文屋", i.e. a library (this means that in the neighbourhood of a library even a bird is learned; in other words, 'the sparrows near a school sing the primer').

[Commentary by the compiler]

> There is a passage in the *Senjimon* 千字文: *SIU SIU, TOU ZAU* (秋收冬藏: 'in autumn one harvests, in winter one stores'); the clause is interpreted to denote the twittering of the sparrows in the neighbourhood of Hun'ya, but I am not quite sure whether it guesses right."

That such a scholar as Tamenori said "I am not sure", may be due to his pretending not to know a vulgar pun which would consist in straining the readings *SIU-SIU* of 秋收 as the cry of sparrows. It is certain, however, that behind the point of the pun there lay a tradition of taking the cry of sparrows as *SIU-SIU*.

One word shall be added here on the etymology of the word *SUZUME*. As theorized by Suzuki Akira, it might have originated in the twittering cry of the bird. But the initial sound of the second syllable is not a surd as expected. It will be necessary to explain this point also. Why, then, did the *SU-SU-* change to *SU-ZU*? (In reality the *SU-ZU* might have been the original form. It may well be possible to examine the problem along this line also. But it is more likely to suppose that the reduplicated form *SU-SU-* became *SU-ZU-*, a change which probably occurred during the process in which the onomatopoetic value of *SU-SU-* was forgotten—though the reverse case may also be possible.) In the reduplication of the syllable *SU* the vowel *U* might have been nasalized, as this can well describe the twittering cry (cf. the present *chun-chun,* along with the other occasionally used form, *chut-chut*). The *SU-SU-* changed to *SU-ZU-* when it was integrated into the form *SUZUME,* having lost its onomatopoetic function. Besides such a case, the sonorization of a surd in medial position is, in general, not strange in the history of the Japanese language. The form *SISIME* (probably *SIZIME*) found in the *Sambokukikashû* leads us to imagine that the word form had been fluctuating before it was fixed as *SUZUME*. This fact will contribute to the assumption of the onomatopoetic origin of the word.

The French *pigeon* is explained as having originated from the Latin *pipionem*. This is a well-known example of a change when the motivated relation between a word form and its meaning was lost by a phonetic change in the form. An example of the same kind can be found at hand. Originally

the Latin *pipio* meant a chicken. In like manner the Japanese *HINA* is probably derived from an onomatopoetic form, as also suggested by Suzuki Akira.

The real twittering of sparrows must have undergone no change since ancient times. The change from *SI-U SI-U* to *TI-U TI-U* [tʃuu tʃuu] must be, therefore, a change in the way of describing the cry in graphic form on the part of the people using the language. Such graphic changes did certainly occur. For example, the neighing of a horse was not *HIN-HIN,* but *IN-IN* in Ancient Japanese (as also suggested in the verb *INANA-KU* 'to neigh'). The expression [hiɴ hiɴ] for neighing was established only in the latter half of the Edo Period. How about the sparrow's cry as against the horse's neighing? Since the real twittering cry remains the same, the people should also have continued to depict the cry with an affricate. If this assumption be allowed, the change of the word form from *SI-U SI-U* to *TI-U TI-U* is a change that does not belong to the normal phonetic changes in the world of arbitrary linguistic signs. Suzuki Akira has already said: "There are the 'sounds with *kokoro* (intrinsic value)' and the 'sounds without *kokoro*' for making up a word out of sounds." In the case of the twittering of a sparrow, the people must have, in Suzuki's terms, saved the tradition of the 'sounds with *kokoro*' from the destruction caused by the effect 'without *kokoro* (i.e. thoughtless)' of a sound change. From *SI-U* to *TI-U* the phonetic reality itself is supposed to have undergone no change. To prove this assumption another hypothesis must be admitted. At a time not far from the stage where something discordant was felt about the practice of transcribing the twittering of a sparrow with *SI,* the unit of the *SA* column, i.e. the phoneme /s/, had not yet entirely lost its occlusive element and still maintained such an element in some form, or at least the memory of its pronunciation as an affricate was still transmitted in some form (for instance, even if only as a norm to be exercised in speech training, though never used in practice). The transmission of the memory of pronouncing an affricate may have been more or less parallel with the following. Nowadays we describe the cry of a chicken either with *HIYO-HIYO* or *PIYO-PIYO*. In so far as the choice of either form does not affect *ceteris paribus* the understanding of the meaning objectively referred to by the context in which the form was used, the choice is entirely left to one's disposal. In the case of the twittering of a sparrow, too, there must have once been a stage where *mutatis mutandis* such a choice was freely allowed. If so, at that stage the expression for the twittering may have been either [ʃiu ʃiu], faithful to the sounds of the language of that period, or the onomatopoetic [tʃiu tʃiu], faithful to the impression of the natural sound as heard by people. The subjective interpretation that regards the pronunciation [tʃ-] as more faithful to the impression of the natural sound is nothing but a social fact in the form of the transmission of memory. If I here may be allowed to make a prediction,

I dare say that, when a selection will be made between *HIYO-HIYO* and *PIYO-PIYO* for describing the peep of a chicken, I am inclined to think the latter will survive. In the case of the sparrow, at least, there has been no relevant change in taking the sounds [tʃuu tʃuu] as the cry of a sparrow. If there occurred any change at all, it was in the domain of meaning (in its wider sense). The [tʃiu tʃiu](>[tʃu: tʃu:]) has enhanced the value of onomatopoetic effect just by the fact that it was exempted from normal phonetic change. Naturally this is the result of the subtle effort the linguistic community has made to maintain the onomatopoetic form as it is.

The transition from *SI-U SI-U* to *TI-U TI-U* on the graphic level, however, came as late as the time when the relation of stylistic variation between the sound [tʃ] and [ʃ] was lost, the former being interpreted as forced out of the phonological system, (thus it may figuratively be described as content with being treated like a step-child), while the latter sound [ʃ] was, so to speak, an honourable member of the phonological system of the time. That very transition must be posterior to the stage in which the letter *TI* came to represent the sounds [tʃi]. However, admitted that the phenomenon reflected in the transmission of memory of the affricate—that is, it can be interpreted that way—survived even in the Muromachi Period, it is beyond the range of this article for the present writer himself to judge whether and how far the hypothesis put forward in the above corresponds to the reality of the past. The problem must again be faced squarely; the Gordian knot remains as it was, and the ways to cut it have to be sought in many directions, starting afresh from the first.

Postscript

I have developed my interpretation concerning the phonetic value of *SA* in Ancient Japanese solely on the strength of a very trivial and perhaps insignificant example, by referring to the knotty problem involved. Be the problem as it may, there are, in fact, many more materials. I should like at the moment to jot down several points concerned.

I. J. Rodriguez remarked not only in his *Arte* but also in the *Arte Breve* that the initial sound of *SA, SU,* and *SO* was in reality pronounced *ç,* though he preferred the letter *s* for practical use. Since in Portuguese as well as Castilian, both of which were consulted in explaining the Japanese sounds, *ç* had formerly been an affricate, how we should interprete the description of Rodriguez is a most attractive subject.

II. Is the sound [ts] in [ototsan] or in [mattsugu], known as one of the 'traditional pronunciations of the true-born Edo people', really the later "corruption"?

III. To cite a very detailed example, the form *TSUTSUSINDE* always appears as ⟨tçuxxinde⟩ in the books of the Jesuit Mission in Japan. This form of the word may be better explained, if we suppose the change:

tututʃinde>tuttʃinde>tuʃʃinde. Further, the present pronunciation of 吉祥天 [kiʃʃo:teN] may be somewhat of a proof for the earlier form [kittʃo:teN].

IV. In the preface of the *Kenshukuryôkoshû* 蜆縮涼皷集 the author incidentally referred to the existence of such pronunciations among country people as "*TIWE* [tʃe] for *SE* 'shoal' ".

V. Already well known as a source and utilized by Mabuchi, too, there is in the *Shittan-yôketsu* 悉曇要訣 by Myôkaku 明覺 (published at the end of the Heian Period) an important account of the fact that there was confusion between *T* and *S* because the latter was given the sound of the former. (To use the terms of R. Jakobson and his adherents, this may be a change in which strident *t* was reduced to its original mellow *t*.)

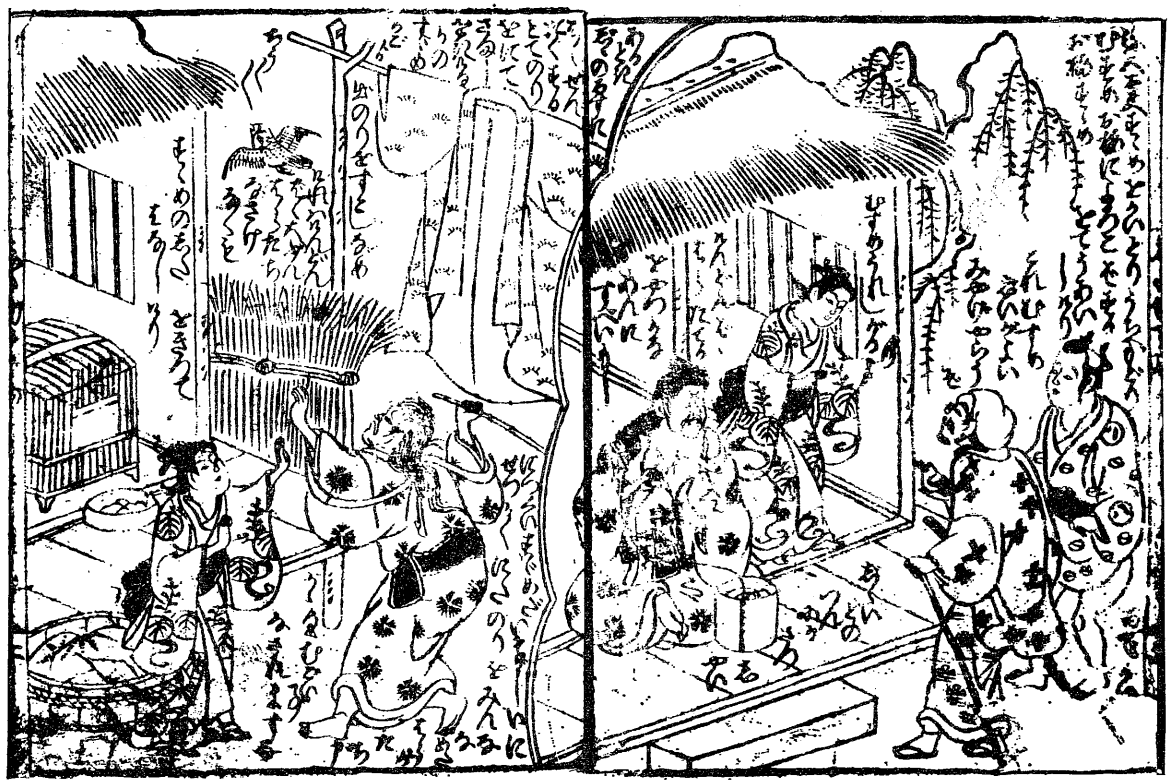
VI. Instances of the distinction between *S* and *T* being disregarded are found in the Japanese readings of the *Shin'yaku-hachijikkan-kegon-kyô-ongi* 新譯八十卷華嚴經音義 which was compiled in the Nara Period.

VII. Even if we suppose the consonant *S* was an affricate still in the Kamakura Period, the view does not contradict the information supplied by the data of the Tô-in 唐音 reading. In Tô-in the Chinese characters of the cerebral initials (i.e.知, 徹, 澄) are read with *S*. There is nothing strange in this if we consider the value of *S* an affricate.

VIII. In the system of child language there was, (and still is), a practice of replacing *S* by the *ch* sound. It will be relevant as well to the history of the *S*.

IX. The *Z* also should be investigated in relation with its surd counterpart. (Even at present the unit *Z* is phonetically an affricate; this is true of my own pronunciation of it.)

But, if the consonantal system of Archaic Japanese consisted of both the phoneme /t/ and the so-called strident /t/ only (the latter being [tʃ] in the syllables *SI* and *SE*), and lacked the phoneme /s/ (or [ʃ]), the system may be strange from the phonological point of view. If there is a language which has no *s*-phoneme, but only the opposition between /t/ and /ts/, the [t] of the latter, the preceding part, or 'Vorschlag' as Trubetskoy puts it, has virtually no value in terms of phonology; in other words, it is irrelevant. I imagine that originally Japanese had three phonemes, /t/, /ts/ and /s/ which contrasted with one another, and the phoneme /s/ disappeared without any trace left in writing. If we follow the line of this assumption, some phenomena might be explained easier than otherwise, although the explanation itself must come much later on.



Shitakire Suzume (The Sparrow Whose Tongue Was Cut Off) from Iwasaki Collection in the Toyo Bunko