

HOW DID THE SPARROW TWITTER IN ANCIENT JAPANESE?*

By TAKASHI KAMEI**

As regards the *HA* column of the Japanese syllabary (*go-in* 'Five Sonants', or *gojū-onzu* 'Fifty-Sounds Table'), there is no room to doubt that its phonetic value was once labial, that, in terms of the retrospective vista, it 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 hardly betrays itself, and it is impossible to trace back the history of sounds through the history of writing in this case. In the history of sound there must have been many cases of silent change in which some sound established itself through unnoticeable transition (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 impair the established, if not stable, equilibrium of phonological oppositions, and, accordingly, that it has not gone so far as to bring about disturbance which is likely—by causing homonymic collisions (resulting from direct impingement upon the phonemic level)—to necessarily and practically entail trouble for communicative efficiency in terms of semantics of the language involved. When we consider that in the past not a few unnoticed changes of this sort did in fact occur—changes which eluded the inquiring efforts of latter day scholars—then we must conclude that such changes are almost undetectable because of the nature of the changes themselves.

The case of *H* may thus be termed an exceptional example in that there happened to be 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* appeared in positions other than the initial, however, the contrast between the *HA* column and the *WA* column (in terms of the Japanese syllabary) was broken down, and the resulting confusion was reflected in the *kana* system of writing. It is apparent that *H* encroached upon the domain of *W*. Merely from some rudimentary knowledge of phonetics one could immediately infer that even though there must exist no irreversibilities in the direction of any phonetic change (but admitting that such a change would still, to a certain extent, be comparable to water running uphill) it is hardly possible to suppose the transition of *W* to the area of *H*

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(which was in reality a labial at the moment of merger) through the blending of both sounds. Again, it should have been *H* that usurped the position of *W*, which latter did not assume so large a share in the function of distinguishing one unit of linguistic signs from another, and which may by 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 Ancient Japanese in which the opposition between *H* and *W* still obtained, words containing a medial *W* were very few: e.g., *AWA* (foam, bubble), *IWASI* (sardine), *YOWA*-(weak), *KAWAKU* (to dry), *AWI* (a kind of indigo plant, hence a colour name as well), *SUWE* (end), *TUWE* (stick), *KOWE* (voice), *SAWO* (rod), *TOWO* (ten), *KAWORU* (to be fragrant). Practically one can adduce from all these only one example in which homonymic coalescence should be expected: *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 which may in all probability have existed in these phonemically homophonous forms.

It goes without saying that, from the social function of a language, and in view of the role it plays in communication, two 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 ninety-nine per cent certain that, immediately before *H* changed to the sound [w] in medial positions, it was, in any case, a labial, even in the most unlikely event that its value might have been something like [ʍ] (unvoiced w). On the other hand, it could not have been the glottal sound [h] (though there might be room for one per cent uncertainty, since the phonetic reality of the past language naturally cannot be observed). Be that as it may, 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 Ōya Tōru, who regards *W* of the Heian Period as [v], and Murayama Shichirō, 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 prehistoric 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, in light of the fact that such a merger actually did take place, it is ultimately possible to determine that both sounds were labials. Just from this fact alone, in the case of *H*, the way is already opened to reconstruction of its phonetic value. Naturally the voiced counterpart (*nigori* or *dakuon*) of *H* has throughout the history of Japanese remained a labial stop. The disproportion of /h/ (instead of /p/) to /b/ on the morphophonemic level is obvious. A road which eventually leads to Rome is also paved here *ipso facto*.

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 *sensu stricto* without dislocating the system of the *kana* writing. 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-gyō' or *Sa* column (with reference to the Japanese syllabary) has undergone no change since the dawn of history, insofar as concerns the phonological system of Japanese.

More than one scholar has suggested that there might have been a period in which *S* was an affricate (cf. Hashimoto Shinkichi, *The Phonetic History of Japanese* 国語音韻史, 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 H. Arisaka is a very convincing hypothesis based on his usual solid interpretation (cf. "Consonant *S* in Archaic Japanese", in his collected papers, *Studies of the Phonetic History of Japanese* 国語音韻史の研究).

The difficulty, however, begins with the *Mannyō-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 *Mannyō-gana* (which represented the syllables belonging to the *SA* column of the Japanese syllabary) was made by Arisaka at the beginning of the above article. To show the distribution of these characters in the system of Thirty-six Initial Groups 三十六字母 of Chinese phonology:

I affricates: *tsing* (精), *ts'ing* (清), *ts'ung* (從), the 3rd division *chao* (照), the 2nd division of *ch'uan* (穿), the 2nd division of *ch'uang* (牀);

II fricatives: *hsin* (心), *hsie* (邪), the 2nd and 3rd 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* column for some initial group, to judge from the frequency of the characters (*Mannyō-gana*) corresponding to *SA*, *SI*, *SU*, *SE*, *SO*₁ and *SO*₂ (the *SO* corresponds to, i.e., divides itself into, two different phonemes in Nara Japanese). The character 須 of the initial group *hsin* was the commonest for the syllable *SU*, while the character 會 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 會. Of course, it may be easy to offer an *ad hoc* explanation, if one is acquainted with the terms of phonology. It would be possible to explain the apparently arbitrary use of Chinese characters as the reflection of free variants of a phoneme in its phonetic manifestations. But in effect this explanation cannot solve the problem. It is obvious from the first that there ought to be three possible interpretations only: the *S* of Archaic Japanese was either an affricate, a fricative, or an affricate and a fricative at the same time, each, in the third case, being a free variant of a single phonemic unit. No one can tell which alternative is the most probable.

That Arisaka laid emphasis upon the observation of Ennin (圓仁), the author of the *Zaitō-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*, *SA*, *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 simultaneously denoted by this remark the common reading (i.e., *go-on* or *Wu* sound) of the character 佐 and the *SA* sound of Japanese and, by making no clear distinction between them no contradiction arises. According 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 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 syllables beginning with *S*, discussion must take a different direction. We cannot find any evidence that definitely confirms the true nature of the initial sound of *SU* and *SO*₂. For *SE* we have some data worthy of consideration, but they are not convincing enough to build up a theory. Such difficulties make 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 there must have been a certain phonetic integrity in the area of the *SA* column throughout the history of the Japanese language, 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 have been due to a desire to avoid the one-sidedness 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*’, 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 foreign sources scarce as they stand at present but in addition nobody can assure their authenticity. In particular, while the phenomenon of *ombin*’ may appear to be a strong proof, 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 prosodic unit where, in the actual phonetic aspect of the syllable (B), both the consonant and vowel which are integral parts of (B) were reduced to a conglomerate of indistinct pronunciation, while (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 even the realization by such a shape 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*. Incidentally, in the case of *GI*, it must have been once realized in some such form as [rɯ:].

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 *SA* with “the Chinese reading of the character 沙 (s, the 2nd 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 *SA* 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 3rd division. This may imply that it was sufficient to explain the *SA* only by the native reading. Arisaka reconstructed the reading of the character 沙 as [sja], [ʃja], 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 comportment of the initial sound of the *SI*.

After the death of Arisaka the criticism of Mabuchi Kazuo was published. Mabuchi attempted to refute Arisaka’s hypothesis, setting forth his own theory that the *S* was the fricative [s]. (Cf. “The Phonetic Value of the Consonant *S* in Archaic and Ancient Japanese”, in his *The Studies of the History of Japanese Phonology* 日本韻学史の研究, Vol. II). If Arisaka had been 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, concerning the possibility that the ancient *S* might have been an 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 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-onjōkō* 雅語音聲考 (Essay on Onomatopoeia in Classical Japanese) by Suzuki Akira 鈴木 鈴木胤, 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 far-fetched 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. *KAMO-ME* 'sea-gull', *TUBAKURA-ME* 'swallow'. 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 evidence 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 *kyōka*, 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 from time to time in drinking!)

We find *TYOT-TYO* [tʃot-tʃo] describing the twittering of a sparrow and at the same time meaning 'from time to time'. The verse is obviously based on the popular tale of the sparrow whose tongue was cut off. In the *akahon* (red book), the illustrated fable, *Shitakire Suzume* "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 *Haikaisambushō* 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 TIU WO 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 *Seisuishō* 醒睡笑 (Vol. VIII), though the subject does not directly concern the sparrow.

"While we were talking about the kinsmanship that cannot be easily recognized, someone said, 'Really I have recently discovered a relationship between a bunting and a crow.' —'It's sheer nonsense.'—'No, it's a fact. 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.

However, the twittering of a sparrow appearing in commentaries, *shōmono*, in *kana* originating in the Muromachi Period is written *SI-U SI-U*. This form is also registered in the *Umpo-irohashū* 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 *Fuzeishū* 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 *Sambokukikashū* 散木奇歌集 (Vol. IX, Misc. A).

"*HATAKEHU NI KIBI HAMU SISIME SISIMEKITE* (or *ZIZIMEKITE*),
KASIMASIKI MADE YO WO ZO URAMURU."

(Sparrows picking millet on the field twitter so noisily that they seem to be complaining 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 源為憲, an old saying is recorded 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 college. (This means that in the neighbourhood of a college 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 is 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 to mean the cry of sparrows. It is certain, however, that behind the point of the pun there lay a tradition of representing the cry of sparrows as *SIU-SIU*.

One word can 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 from the beginning been an integrate part of the whole, when the unit *SUZUME* was for the first time coined. It may well be possible to examine the problem along this line also. But it is more likely to suppose that the reduplication of the sound *SU* was welded together into the form of *SUZU-*, a change which probably occurred during, and in parallel with, the process in which the onomatopoeic value of *SU-SU-* gradually faded away. Again, in the reduplication of the syllable *SU* the vowel *U* might have been followed by a nasal, as this can well describe the twittering cry (cf. the present *chun-chun*, along with the other occasionally used form, *chut-chut*). If the *SU-SU-* changed to *SU-ZU-* when it was integrated into the form *SUZUME*, (having lost its onomatopoeic function), similar examples of the sonorization of a surd in medial position are, in general, not infrequent in the history of the Japanese language. Further, the form *SISIME* (probably *SIZIME*) found in the *Sambokukikashū* leads us to imagine that the word form had been fluctuating before it was fixed as *SUZUME*. This fact contributes to the validity of the assumption of the onomatopoeic 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 onomatopoeic form, as was also suggested by Suzuki Akira. That there survived into later periods no expressive effect once inherent in the form *SUZUME* does not contradict the assumption of the onomatopoeic origin of the word.

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* [tʃuutʃuu] must be, therefore, a change in the way of describing the cry in graphic form (on the part of human beings using language which by its nature is susceptible of change, while birds, presumably, go on twittering, never changing). 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 *INA-NAKU* 'to cry in', 'to neigh'). The expression *hin-hin* for neighing was established only in the latter half of the Edo Period, replacing the traditional way of depicting neighing simply with /i-/ by a representation with /hi-/ (the transformation of the *H* from a labial to /h/ established itself in the beginning of the Edo Period). How about the sparrow's cry as against the horse's neighing? Since the real twittering cry surely remains the same, people should also have continued to depict the cry with an affricate in this case. 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 form 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 destruction caused by the effect of a sound change 'without *kokoro* (i.e., thoughtless)'. 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 depict the cry of a *hiyoko* (chick) either with *HIYO-HIYO* or *PIYO-PIYO*. Insofar 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 [ʃiuʃiu], faithful to the sounds of the language of the period, or the onomatopoeic [tʃiutʃiu], 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, if a selection should 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 feigning the voice of a sparrow as if it ought to sound [tʃiu tʃiu] (from the Japanese point of view). 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 onomatopoeic 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 onomatopoeic effect as it should be.

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 stepchild), 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 sound [tʃi]. However, admitting that the phenomenon be correlated with 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 to judge how far the hypothesis put forward in the above could faithfully correspond to the reality of the past. Nowhere can we pursue any metacriterion for empirical judgement to be correct. Only the problem *per se* must again be squarely faced. If the Gordian knot remains as it was, no one might cut it here with any single stroke, and the way to untie it has to be sought in many directions, starting afresh by making an attempt to integrate materials such as those summed up separately below.

Postscript

I have developed my interpretation concerning the knotty problem of the phonetic value of *S-* in Ancient Japanese solely on the strength of a very trivial and perhaps insignificant example. Be the problem as it may, there are, in fact, many more materials. I should like, however, to content myself at the moment with merely jotting down several pertinent points.

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 ζ , 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, ζ had formerly been an affricate, how we should interpret the description of Rodriguez is a most attractive and intricate subject. |

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

III. To cite a very detailed example, the form corresponding to *TUTUSINDE* always appears as (tçuxxinde) in the books of the Jesuit Mission in Japan, and this transliteration with Roman script should unveil the real contemporary pronunciation of the form. This phonetic phase of the word may be better explained, if we assume the change: *tututʃinde* > *tuttʃinde* > *tufʃinde*. Further, the form *asa* (morning) is attested to have once been *assa*. If we conjecture the form *asa* coming into existence through the change *atsita* > *atssa* > *assa* >

asa, the relation between the doublets *ASA* and *ASITA* may easily be established, (providing that the two words are cognate).

IV. In the preface of the *Kenshukuryōkoshū* 蜺縮涼鼓集 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 of the history of Japanese (and utilized also by Mabu-chi), there is, in the *Shittan-yōketsu* 悉曇要訣 by Myōkaku 明覺 (published at the end of the Heian Period) an important account of the fact that there was colloquial 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 mellow *t*.)

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

VII. If we suppose the consonant *S* was still an affricate in the Kamakura Period, the view does not contradict the information supplied by the data of the Tō-in 唐音 reading. In Tō-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. From the fact that in some Eastern dialects of the Nara period *TI* was confused with *SI* (as evinced by the *azuma-uta* in the *Mannyōshū*) it may be inferred as well that *SI* was an affricate. (Cf. T. Kamei: *Nihongo Keitōron no Michi* Approaches to the Problem of the Affinity of Japanese, p. 208, note 53.)

IX. In the system of child language there was, (and still is), a practice of replacing *S* with the *ch* sound. This is also relevant to the history of the *S*.

X. The *Z* should also be investigated *in extenso* in its correlation with its surd counterpart, since phonemically they are closely interdependent with, and do not stand in isolation to, one another. (Even at present, the unit *Z* is phonetically rather an affricate; this is true of my own pronunciation of it.)

But, if the consonantal system of Archaic Japanese consisted simply of both the mellow phoneme /*t*/ and the strident phoneme /*ts*/ (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 a full treatment itself must be deferred until later.