This study takes a diachronic approach to verbal reduplications in Japanese, and illustrates that the functions of Japanese verbal reduplications can be analyzed in terms of clause integration. Japanese verbal reduplications have reduced the structural scope from both independent and dependent clauses to dependent clauses over history. Along this cline of clause integration, verbal reduplications have undergone semantic changes from original lexical meanings to adverbial to aspectual. This study also presents the proportional frequency of verbal reduplications over history in comparison of reduplications of other types.

The arguments are induced from more than 1200 reduplications of five types: verb, adjective, noun, adverb, and ideophone. These data cover all stages of Japanese from the 8th through the 20th centuries. Texts are selected that best reflect colloquial usage of those days. The history of Japanese is provisionally divided as follows: 1) Early Old Japanese (8-Early 9C); 2) Late Old Japanese (Late 9-12C); 3) Middle Japanese (13-16C). Although this study centers on Old through Middle Japanese, verbal reduplications in later stages (17-20C) are also presented to illustrate their diachronic transition.

In Early Old Japanese (8-Early 9C), verbal reduplications occurred as finite verbs in both independent and dependent clauses, and several verbal reduplications had been adverbialized as early as this stage. In other words, verbal reduplications have three types of syntactic behaviors in Early Old Japanese. Example (1) illustrates a verbal reduplication occurring as a finite verb in an independent clause. (Verbal reduplications are underlined and square brackets indicate a clause.)

(1)  Man'yo (8C: 2)

\[
\text{[Amenokaguyama} \ nobori-tati \ kuni-mi \ wo \ sure]-ba \\
\text{name.of.mountain mount-stand country-view ACC do-when} \\
\text{[kunifara wa keburi tati-tatu]} \\
\text{spacious.plain TOP smoke stand-stand} \\
\]

‘(lit.) Whenever (we) mount Mt. Amenokaguyama and view (our country from there), smoke is (always) going up from the spacious plains.’ [lit. smoke stands and stands.]

The first clause is a dependent clause because the linking particle BA (when/if) is always added to dependent clauses. The first form of the verb \textit{tatu} ‘stand’ takes the ‘linking form’ (\textit{tati}: non-finite form); however, the second form is the sentence-final form (\textit{tatu}: finite form) which normally indicates the present tense. Notice that the reduplicated verb still retains the original lexical meaning, not semantically bleached into an adverb.

In Late Old Japanese (Late 9-12C), verbal reduplications have gradually ceased to occur in the independent clause; namely, scope reduction. However, verbal reduplications still function in the dependent clause. Example (2) illustrates the concessive relation between two clauses. Notice that the reduplicated form \textit{siru-siru} ‘know-know’ (finite/sentence-final form) is carrying its argument as a lexical verb. I will call this phenomenon the ‘clause-linkage by reduplication’, which is taken over from Early Old Japanese. Example (2) is a paratactic linkage, but at the same time, a kind of hypotactic linkage with linking particles coexists as in (3). (HON= honorific)
(2) *Heichu* (10C: 465)

\[ \text{[fito no yo no fakanaki wo siru-siru] [farukani i-namu]} \]

people GEN life GEN be.in.vain ACC know-know far go-will

‘(The man) knows the emptiness of life, but (he) will go far away.’

(3) *Yamato* (10C: 295)

\[ \text{[seken no koto afarenaru [ifi-ifi]-te]} \]

world GEN thing sad.things say-say-and

\[ \text{[kano otodo no yomi-tamaft-keru]} \]

that.DISTAL esquire NOM intone-HON-PERF

‘(Esquire and ladies) had talked about sad things in the world, and he intoned (a song).’

Verbal reduplications have also retained adverbial functions; however, they started to accelerate the semantic change from original lexical verbs to adverbs. In (4), the verbal reduplication is followed by the adverbial particle TO, which indicates that the semantics of this verbal reduplication is not lexical, but become adverbialized (it is impossible to ‘brandish the umbrella while creeping’). Adverbialized reduplications cannot take any linking particles unlike (3). (AP= adverbial particle; PERF=perfective)

(4) *Otikubo* (10C: 124)

\[ \text{[kasa wo [hou-hou] ute-ba] kuso no ito]} \]

umbrella ACC creep-creep-AP hit-because dung NOM very

\[ \text{ookaru ufe ni kagamari wi-nu]} \]

be.many on in stoop sit-PERF

‘Because (the messenger) energetically brandished the umbrella, (the two men involuntarily) turned over on the dirty place.’

<table>
<thead>
<tr>
<th>Table 1: Diachronic Syntax-Semantics Change in Verbal Reduplications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Syntactic Level</strong></td>
</tr>
<tr>
<td>Independent Clause Verbs</td>
</tr>
<tr>
<td>Dependent Clause Verbs</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

In this case, the reduplicated form creates the new meaning ‘energetically’ through the phonological change and reduction (*fou < fafu ‘creep’ [v.t.]* to modify the verb *ute ‘hit’ (< utu)). Notice that the verbal reduplication cannot take any arguments and are integrated into the independent clause: valency-decreasing. I will call this ‘clause-integration’. From Middle Japanese (13-16C) through the 20th century, verbal reduplications have decreased in number
and have totally been adverbialized or aspectualized in meaning as in Table 1. Chart 1 shows the diachronic proportional frequencies of Japanese verbal reduplications. (At the conference, types and tokens of verbal reduplications are to be illustrated.)

**Chart 1: Diachronic Proportional Frequencies of Verbal Reduplications**

![Chart showing diachronic proportional frequencies of verbal reduplications]

Verbal reduplications have paradigmatically changed over history. In Early Old Japanese (8-Early 9C), they could function as finite verbs in independent clauses as in (1). From Late Old Japanese (Late 9-12C) on, they have gradually reduced its structural scope into dependent clauses in order to modify the independent clause: clause-linkage by reduplication, as in (2). Clause integration has further proceeded. Because of the decline of clause-linking properties in verbs, the clause-linking function of verbal reduplication has been taken over to other linking particles from Middle Japanese (13-16C) on. At the same time, verbal reduplications have undergone semantic changes: original lexical > adverbial > aspectual, and adverbialized reduplications have been dominant from Late Old Japanese to the present. This indicates that verbal reduplications have been adverbialized to modify the finite verb in the independent clause: clause-integration, as in (4). Through this clause integration, Japanese verbal reduplications have a growing tendency to appear pre-verbally in the basic SOV construction (74% on average) as in (4).

Although recent historical-typological studies on grammaticalization reveal that structural scope expands rather than reduces, Japanese verbal reduplications support well-attested patterns of the grammaticalization of clause-linkage along a “unidirectional cline from relatively free juxtaposition to syntactic and morphological bondedness” (Hopper and Traugott 1993: 168). The diachronic process of lexical items (verbs, in this case) into adverbs also follows a general principle of weakening or decategorization. Furthermore, the gradual but steady decline of Japanese verbal reduplications as observed in Chart 1 reminds us of the classical view of grammaticalization (Givón 1979: 209): discourse > syntax > morphology > morphophonemics > zero. Of course, it is conceivable that there may be variations according to dialects and idiolects. But the findings as illustrated in Table 1 and Figure 1 cannot be an accident. Therefore, it can be concluded that Japanese verbal reduplications have reduced their structural scopes over history: 1) independent > dependent clauses; 2) finite verbs > non-finite verbs > adverb > aspectual; 3) more > less frequency.