Resultative Verb Compounds Versus Auxiliary Verbs: An Analysis of Student Acquisition of Chinese Native Forms of Expression

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Introduction

A distinct indicator that the Chinese student is beginning to grasp idiomatic forms of expression is his/her ability to use resultative verb compounds (RYCs) appropriately. In simple terms an RYC is two verbs juxtaposed to form a compound, the second verb indicating some result of the first. For example, da po 'hit break,' communicates the idea of breaking something by hitting or striking it.

In this study I monitored how non-native students used RYCs as opposed to auxiliaries in situations where native Chinese speakers would clearly prefer to use an RYe. Of particular interest to me were the types of errors students would make in relation to the implementation of RYCs. I was further interested in the amount of time required by the student before he/she would be able to mimic native RYC usage. Thus, I focused on discerning at what point in the acquisition process students were able to internalize this subtlety of locution and produce it in their expressive language.

The first section of this paper will give background for the study and will explain the expectations and hypotheses that preceded the research. The second section of the paper will focus specifically on the methodology used to acquire the supporting data. The third section will be a presentation and discussion of the data including an evaluation of the dominant errors committed by non-natives concerning RVC usage.

1. Hypotheses and Background

Li and Thompson (1981:54-55) define an RVC as a compound in which "the second element of the compound signals some result of the action or process initiated in the first element." A more specific definition can be found in Thompson's "Resultative Verb Compounds and the Student of Chinese" (1971:1). She states: "Given a transitive action verb, such as la 'pull,' and an intransitive verb, such as kai 'open,' they can be combined into a resultative verb." Furthermore, "A resultative verb will be defined as a verb compound which can occur in the 'potential mode.'" What occurring in the "potential mode" means is that the infixes de 'obtain' or bu 'not' can be inserted into the middle transitive and intransitive verbs. It is these potential mode RVCs that are pertinent to my study. Students will only be considered competent in the usage of RVCs if they know how to use them in this mode. Examples are la de kai 'pull' potential result 'obtain open,' and la bu kai 'pull' potential result 'not open.' In contrast, the use of neng 'can' and bu neng 'cannot,' or hui 'will' and bu hui 'will not' to express the de and the bu infix respectively, would be considered use of an auxiliary.

Because hui, neng, and keyi 'may/can,' all structurally resemble the English auxiliaries, and also because we use auxiliaries with great frequency in English, I hypothesized that beginning students of Mandarin would display a strong tendency to use these auxiliaries under circumstances in which natives would prefer to use RVCs. Additionally, due to the nature of auxiliaries in Chinese, I expected that beginning students would use them to express meanings either unintentionally or inaccurately. For example, a customer desires to tell a shop owner that he cannot afford his goods. Most natives agree that the best way to convey this meaning is through the RVC mai bu qi 'buy' potential result 'not afford.' The alternative use of an auxiliary form of expression, such as bu neng mai 'cannot buy,' does not specify for what reason the person cannot make the purchase, and is thus not restricted to the exclusive interpretation that the goods are "unaffordable." Instead, the reason for not being able to buy the goods could be because his/her mother has forbidden it, or because he/she has a poor credit rating, etc. Of course, there does also ex-
ist the possibility that the speaker intended to communicate the same meaning as expressed in mai bu qi. Unfortunately, due to the generality of the auxiliary expression, one is only left to speculate. Furthermore, according to my native informants, use of bu neng mai, although grammatically acceptable, seems awkward.

Light (1977:35) puts forth another notable distinction between RVCs and auxiliaries. He asserts: "To use an RVC, the agent must have initiated the primary action referred to by the compound, while the use of neng 'can' only suggests the possibility of initiating the action."

This study's purpose is to test the validity of the foregoing hypotheses, as well as to discern at what point in the Chinese language acquisition process students were able to start using RVCs appropriately.

2. Methodology

Since I wanted to compare results from students at different acquisition levels, I collected data "vertically" from a range of different classes. Accordingly, data was taken from subjects in Chinese classes ranging from Chinese 101 to Chinese 321. Data was also collected from a group of native Chinese speakers most of whom were BYU Chinese department instructors.

I obtained the data by means of a questionnaire. In order to avoid confusion and misunderstandings, I chose to make the entire questionnaire in English. All subjects were given identical questionnaires. For subjects whose native language was not English, I made sure that the instructions for the survey, and the content of the questions were clearly understood before they made any attempt to respond. The questionnaire was composed of fourteen questions, ten of which were pertinent to the study, and four of which were added to decrease the obviousness of what was being tested. The questionnaires also requested germane background and demographic information from the participants in order to facilitate proper analysis of the results (see Appendix C).

All questions were preceded by a deliberate description. These descriptions set up the desired context under which Chinese responses could be solicited. Responses could be written in either pin yin (a phonetic alphabet system used to represent Chinese characters) or Chinese characters so as not to penalize the students for inability to write the characters. None of the questions required direct translation; most called for a reaction to, or comment on a situation. Many of the contexts set up situations where the response could have actually been a verbal utterance if the test had been performed orally. The relevant questions were designed with the intention that the subjects would respond using an RVC. In other words, I anticipated that under the circumstances of the context provided, the usage of an RVC would create the most "native-like" response.

As mentioned earlier, due to English interference, I predicted that lower level students would rely more heavily on the use of auxiliaries to express their meaning, while more advanced students, especially those who had spent some time in China, would be more inclined to use RVCs. Moreover, I expected that the native group would use virtually all RVCs and no auxiliaries.

The data from the questionnaire was classified according to question and by class level, or according to whether the subject was a native or not. Responses were categorized into groups according to usage of an RVC, an auxiliary, or something else (see Appendix A: Data Table). The reason for such categorization was to produce data in which the results for class levels could be compared with each other as well as with those results produced by the native group.

3. Data and Results

The data revealed three major errors committed by students. Error for this study will be defined as unnative-like response. For example, if natives clearly preferred the use of an RVC, then use of an auxiliary would be considered an error. This is not to say that the responses containing auxiliaries are grammatically incorrect; on the contrary, they may be entirely grammatically sound. Nevertheless, what is being tested for is the most native-like and semantically appropriate response.

Question number five is the only question from the ten that produced a one hundred percent RVC response among natives (questions number eight and number ten followed with eighty-seven point five percent). For this reason, and also due to the fact that the errors found in question five were indicative of the errors found in the other questions in the study, I have chosen to use responses from this question to introduce the three major error types.

Accordingly, these errors (preceded by an asterisk below) as well as the correct response for question number five are identified in the following four examples.

1) *ge ge, wo bu neng, or wo bu neng zuo, etc.
   big brother, I not can, I not can do
   
2) *wo bu neng pa shang qu
   I not can climb ascend go
   
3) *wo shang bu qi lai
   I ascend not rise come
   
4) wo pa bu shang qu
   I climb not ascend go
   
The errors listed above are not necessarily complete responses from the questionnaire, but instead represent the critical portion of numerous responses. I inserted the correct form underneath error examples for contrast purposes.

In general, all three of these errors can be characterized by interference from the subjects' native language. Manifestation of such interference is particularly obvious in error number one. Students
formed grammatically incorrect RYCs. For their commission of the error can be attributed to
ries, they have never been taught the proper way
ample, for response to question number two (see
to form a potential mode RYe.

The second error, while it contains an RVC
(and is thus a step in the right direction) still ad­
heres to the non-native form of negation using the
auxiliary. From this type of error it is apparent that
the subjects had integrated usage of RVCs into such
contexts; nevertheless, they still lacked proficiency
in their usage of the negative form of the potential
mode RVC.

The third error was most interesting to me.
These subjects produced responses in which they
clearly intended to use a potential mode RVC to
express their meaning, but did not know how to do
so correctly. These garbled, self-invented RVCs say
much about these students' struggle to speak like a
native.

As far as the prevalence of these three errors
among the various class group levels, error number
one was definitely most common among surveys
taken from Chinese 101 and 102. The reason for
this error is that they probably could think of noth­
ing better to write. At the 101-102 level, first year
of acquisition, grammatical training and voca­
bulary is so limited that they were perhaps struggling
just to get anything down at all.

Error number two occurred in data taken from
all class levels, but was most concentrated in the
subject responses obtained from Chinese 201 and
202. These students have expanded vocabulary and
grammatical training and would thus be unlikely
to commit error number one.

Surprisingly, error number three also ran the
gamut of all class levels. For lower level students,
this type of error only occurred with those stu­
dents who had spent time abroad studying Chinese.
Their commission of the error can be attributed to
the fact that, while they know not to use auxil­
aries, they have never been taught the proper way
to form a potential mode RVC. Some such students
formed grammatically incorrect RVCs. For ex­
ample, for response to question number two (see
Appendix B: Questionnaire), a Chinese 102 stu­
dent who had lived in China for a year responded:
+kai bu guan ‘open’ potential result ‘not shut.’ The
reason for this type of error is clearly a result of
basic familiarity with native forms of expression.
The understanding of RVCs is undoubtedly already
incorporated in this student’s receptive language; still
the concepts remain insufficiently crystallized to
facilitate proper implementation in the student’s
expressive language. As for upper level students,
commission of error number three could be for the
same reason as for lower level students, or it could
be because they have been taught the compound
structure in class but cannot remember the rules
for construction.

Another notable idiosyncrasy involving error
number three was that students used an RVC that
was grammatically correct but idiomatically inap­
propriate for the given context. For example, again
for question number two, I obtained the following
response: men, wo da bu chu lai ‘door, I hit’ poten­
tial result ‘not exit come.’ According to my native
informants, this RVC could not be used in this con­
text. A context that it might be used in is to ex­
plain that you were unable to “type up a report” for
various reasons. Using this example we can see why
it is so hard for the student to assimilate proper RVC
usage, because the verb da ‘hit’ can be used in so
many different contexts to mean many different
things; in this instance it means to strike the key­
board or type. This error can also be explained as
an attempt to mimic native forms of expression.
This student perhaps is unaware that he is in error;
after all, he is using a native-like form of expres­
sion. However, it is clear that he has not mastered
using RVCs appropriately in different contexts.

It is interesting to note that among all eight
natives surveyed, for all ten questions asked, error
number two (as we have defined error for the study)
was recorded only once, and error number one and
three not at all.

4. Statistical Analysis

I chose to perform a Chi Square test on my
number data to ascertain if my conclusions formed
by inspecting the raw data were reasonable. At the
bottom right hand corner of the data sheet there is
a count of total responses obtained numbering 579.
The right hand column identifies the total number
of responses for each class. These numbers vary due
to the varying number of subjects available from
each class. The three central columns contain the
essential data. For each language level, the top
number in each of the three columns RYC, Aux, and
other is the actual number of responses obtained
from the data for that language level. For example,
consider the first row for 101 language level. Eleven
students were tested on ten different questions pro­
ducing 110 total responses. Of these 110 responses,
eight contained RVCs, thirty-five used auxiliaries,
and sixty-seven had something else. The bottom
three figures for the 101 language level identify the
number of responses we would have expected had
there been no relationship between language level
and RVC usage. Accordingly, responses should have
been 47.69 RVC, 19 Aux, and 43.32 other.

In order to discern just what this test indicates
it is best to analyze just one column at a time. Con­
sider the Aux column first. In this column, as we
proceed from lowest language level to native level,
it is apparent that the number of Aux responses
actually recorded diminishes from one extreme case
of 35 for the 101 level, to the other end of the spec­
trum of only one Aux response for the native group.
Since the questions were designed to elicit an RVC response, it was expected that the higher up in the level the subject the more likely he would avoid using an auxiliary. The data strongly suggests that this is a proper assertion. Furthermore, the discrepancy of the paired values (especially noticeable for the 101, 102, 321 and native levels) indicates a pattern. According to our hypothesis lower level students should use more aux than expected, and natives should not use any. From the data sheet, looking at the 101 level, it is observed that the top value for the numbered pair exceeds the bottom value by 16 responses. This discrepancy of top and bottom value slowly diminishes as we rise to the 201 and 202 language levels, and then increases (except this time with the bottom value greater than the top) as we rise into the native level. This spectrum of findings strongly suggests that the hypothesis that lower level students would use more auxiliaries than the higher levels is valid.

Looking at the RVC column we observe a similar phenomenon in reverse. Lower language level subjects use fewer RVCs than would have been expected had there been no relationship between being a lower level student and using an RVC. Accordingly, as the language level rises, the use of RVCs also rises. Notice for the 321 group the number of RVC responses exceeds expectations by 35.31 responses. This discrepancy may appear exaggerated due to a possible hyper-correction discussed in the section: Pedagogical Suggestions.

Another point of interest is that the natives did not produce an RVC response up to the mid to high seventies range. This indicated that there was some kind of breakdown in the questions that were intended to produce a 100% RVC response among natives. This point is also discussed later.

5. Pedagogical Suggestions

All three of these errors need to be isolated and overcome in different ways. Error number one can probably be best overcome by presenting more opportunities for students to talk with natives and hear them speak, accompanied by more Chinese instruction in general. Specifically, RVCs might be introduced on a basic level (perhaps in Chinese 102), so students could at least know what they are and that they exist, and could thus listen for them when the opportunity presents itself. Overcoming error number two is simply a matter of forcing non-native students not to rely so heavily on auxiliaries and teaching them how to form a potential mode RVC. As for overcoming error number three, instructors should refer students to the DeFrancis standard beginning Chinese textbook which states: "The student should not attempt to make up his own RVCs, but should learn and memorize them as he encounters them." (Thompson, 1971:1) This advice, however, is considered too restrictive by many teachers who instead encourage students to make up their own RVCs, hoping that through such activity they will become more aware of RVCs and be able to form them correctly with time and practice.

5. Conclusions

On the whole, the data demonstrated that generally at the 300 level, students begin to use RVCs competently and in the correct form; but this is not to say, even at this level, that students have completely mastered this skill. In fact, it is possible to say that there was a fourth error committed by this level of students. It is apparent from the data that Chinese 321 students, for example, use RVCs with even greater frequency than the natives. It is difficult to ascertain the reason for such an outcome. Perhaps this type of error is due to hyper-correction, or perhaps it simply represents students' inability to discern when an RVC is appropriate and when something else would be better. Such an ability constitutes a profound awareness of the language that can only be achieved through much practice and interaction with native Chinese speakers.

The data does support the hypothesis that beginning students rely on auxiliaries while more advanced students implement greater usage of RVCs. However, the data indicates two interesting facts concerning advanced students, specifically the Chinese 321 group. First, even among the students of this most advanced group, there still exists significant use of auxiliaries (albeit most in conjunction with an RVC). This demonstrates the difficulty that students have in breaking away from patterns of English expression. Furthermore, a pattern of reversion to reliance on auxiliaries when the proper RVCs are not known can be detected in the data.

The data also revealed much about the questionnaire itself. The fact that natives did not choose to use RVCs when responding to certain questions may be attributable to problems with the questions themselves. Frustrated with the results concerning the native group, I consulted with several native Chinese faculty members. Upon scrutiny of the questions in my questionnaire, they were able to tell me why in many instances an RVC was not only not preferable but also inappropriate. For example, question number nine (see Appendix B) was intended to solicit a kan bu dong 'read' potential result 'not understand' response. Many of the natives chose not to implement this RVC, however. In fact, of the eight tested only one did. It was explained to me that the question was not worded properly in order to obtain the desired response. Because I had the words "cursive script" in the question, and because most native Chinese equate the ability to understand cursive script with an ability to "recognize" the characters, and not necessarily with an ability to "understand" the meaning, a good number of the responses focused on recognition of script: ni ren bu ren shi cao ti zi? 'Do you recognize cursive script?,' and not on understanding of the cheng yu 'idiom': ni kan de dong ma?

If I were to repeat the test, I would do so in a slightly different manner. First, it would be necessary to work with a native who has good English in
order to compose question contexts in which the
native speaker would clearly choose an RVC to
communicate his/her meaning. Having composed
the questions on my own, only half of them proved
to satisfy this requirement. However, upon discuss-
ing the possibilities of this kind of question con-
struction with a native instructor, it was his opinion
that the creation of a context that would always
exact an RVC response on the part of the native
would be extremely difficult due to the diversity of
the language.

Another problem with the study is that data
from Chinese 301 was unattainable. Data from that
class would have really completed the spectrum of
subjects. Additionally, I was faced with the problem
of drawing an unequal number of responses for each
class. In order for the test to have been statistically
significant, roughly thirty subjects would have to
have been surveyed from each group. This task
proved to be technically unfeasible as Chinese 102
had only one section of five students, and none of
the sections numbered thirty students. Yet another
revision might have been to make the test oral
instead of written, since virtually all of the questions
solicited answers that could have been uttered
verbally. Using such a method, subjects might have
performed more naturally. However, employing this
method would have required many hours of
interviewing, thus presenting time demands that I
could not meet.

Despite the weaknesses listed above, this study
did yield some useful results. Of course my study
results are only applicable to students at Brigham
Young University. It would be interesting to con-
duct a continuation of this study, i.e. rework it so
that it could be replicated at several universities
with a sufficient number of subjects so that data
results could be rigorously statistically analyzed. As
it stands, the study suggests strongly that proper
implementation of RVC is a process that non-na-
tive students have to acquire slowly. The main types
of errors committed in the acquisition have been
outlined and discussed in the study. As a general
rule, the more advanced the student, the greater
the level of competency in manipulating RVCs.
Nevertheless, even at the most advanced class lev-
els there still exists a significant use of auxiliaries.

6. References
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Appendix A

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Appendix B

QUESTIONNAIRE

Dear Participants:

Thank you for taking the time to help with this project.

Below are some questions that solicit a Chinese response. Please respond to the questions as naturally and spontaneously as possible. Answers can be given in Chinese characters or in Romanization with proper tone designations. Both forms (or a mixture when a particular character is not known) are equally acceptable.

The sections in regular print set up the overall context when one is needed. Please respond to the questions or complete the statements that are in bold face print.

1. Jill works hard in the backyard racking up the leaves. After a while she explains to her mother that there are too many leaves and that she cannot finish the job. How would she say this?

2. Sylvia pulls on the door, but it will not open. She mutters:

3. Jack invites his friend James to go to the baseball game with him. How would James explain that he would really like to go, but that he does not have time?

4. Bob has bags under his eyes and is obviously very tired. During lecture he yawns and starts to nod off. The professor, insulted by such behavior, reprimands Bob by telling him that if he plans to sleep in lecture he should not bother coming. Bob was embarrassed. How would Bob explain to the professor that he was unable to get to sleep last night?

5. John, Mary's older brother, has built a tree-house in their backyard. In order to climb into the tree-house one must grab a low-lying branch and pull oneself up and into the doorway. Mary is able to reach the branch but is having some trouble climbing up. After several failed attempts she becomes frustrated. How might Mary tell her brother that she cannot make it up?

6. Mr. Chen starts speaking in Taiwanese and then asks the bewildered looking Jeff if he is able to understand. How would he ask?

7. Glen points to a tall tree and asks his father how tall he thinks the tree is. How would he ask?

8. Robin points to the sign some distance down the road which reads: WU3 JIN DIAN4. Squinting, how would Frank explain to Robin that he cannot see the sign?

9. Mr. Li writes some very famous Chinese idiom in cursive script. He then asks William if he understands? How would he ask?

10. After school, Jennifer and Vickie decide to take a walk in the woods near their homes. During their stroll they encounter a stream. Jennifer who is long legged and quite athletic, jumps the stream just making it to the other side dry. She then beckons Vickie to jump and follow her. Vickie, who is short and awkward, is hesitant. She knows that she cannot make the jump and states:

11. Linda, who hates to watch football, asks Rick to turn the T.V. off. How would she ask?

12. Ralph wants to purchase a new mountain bike. After inspecting several bicycles on hand, he finally finds one to his liking. Accordingly, he asks the sales clerk for the bicycle's price. The clerk responds by telling him that the price is $650.00. Ralph disappointedly informs the clerk that he cannot afford such an amount by stating:

13. The water in the swimming pool was extremely cold. The minute Ron dove in his whole body became numb. he warned the others to be careful before jumping in by stating:

14. As the oral comprehension test commences, Fred puts on his earphones and listens to the recordings. After the exam, a disgruntled Fred explains to the instructor that he thought the exam was unfair because some of the recordings were indistinct. How would he explain that there would many parts that he might gotten right had he been able to hear them?
Appendix C

**CHI SQUARE TABLE**

Expected counts are printed below observed counts

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0.687 + 0.670 + 0.108 +
0.005 + 0.173 + 0.120 +
20.542 + 12.206 + 5.962 +
3.071 + 11.889 + 0.198 = 162.241

df = 10