Title	A Supplementary Description of the Use of Demonstratives in Central Alaskan Yup'ik
Author(s)	Tamura, Yukishige
Citation	言語文化共同研究プロジェクト. 2017, 2016, p. 31-40
Version Type	VoR
URL	https://doi.org/10.18910/62015
rights	
Note	

A Supplementary Description of the Use of Demonstratives
in Central Alaskan Yup'ik

Yuki-Shige Tamura

(tamura@lang.osaka-u.ac.jp)

1. Introduction

In this paper, we illustrate the essential uses of Central Alaskan Yup'ik (hereafter, CAY) demonstratives. As described in Jacobson (1984; 1995), CAY has some thirty demonstrative root morphemes, and the system seems extremely complicated for speakers of native languages that employ a binary or ternary distinction, such as the English *this*/*that* or the Japanese *kore*/*sore*/*are*, in their demonstrative system. While Jacobson's description of the system (Jacobson 1995:Ch.6) gives us a general picture on the way the CAY demonstrative system works, one problem with it is that without guidance from some CAY instructor, learners or researchers who are not familiar with the language would struggle with the employment of individual morphemes in real world situations. This problem prevents the learners from confidently using demonstratives, despite the basic understanding of spatial expressions being crucial for the advanced learning of the language; moreover it prevents researchers from making cross-linguistic analyses although the CAY offers interesting facts regarding the linguistic universality of spatial expressions. With this problem in mind, this paper attempts to provide a supplementary description for Jacobson's well-organized generalization on CAY demonstratives. After reviewing the crux of Jacobson's classification (Jacobson 1995:Ch.6) on CAY demonstratives in section 2, we elaborate and illustrate the points that help readers to identify the essence of the classification in section 3. This work results from long discussions with John W. Toopetlook (a native speaker of CAY/Language Assistance Program Coordinator, Office of the Lieutenant Governor of the State of Alaska), and the numerous insights shown here that complement Jacobson's original descriptions are derived from his deep understanding of the CAY as a native speaker.

2. An Overview of CAY Demonstrative System

As shown in Table 1 below, Jacobson (1995:Ch.6) utilizes three parameters to clarify the way in which thirty CAY demonstrative root morphemes are employed: (A) current state of a referent, (B)

directionality, and (C) accessibility. The table is simplified for an expository purpose; the original one employs a three-dimensional diagram, but here we use a two-dimensional table by placing the third parameter of accessibility next to the second parameter of directionality in the vertical axis. In addition, though CAY indicates the grammatical number and case for every noun, we employ the cited forms (i.e. absolute and singular forms) throughout this paper as our aim is to show which demonstrative "root morpheme" is chosen from the thirty demonstratives in various spatial contexts. The readers should keep in mind that the demonstrative morphemes that we consider would be realized in non-singular forms, non-absolute case forms, or verbal roots.

(B) *Directionality* / (C) *Accessibility* / (A) *Current State*		(i) *extended*	(ii)*restricted*	(iii) *obscured*
(I)	(α) *up above* less accessible	pagna	pikna	pakemna
	(β) *up slope* more accessible	pau͡gna	pingna	pamna
(II)	(α) *across* less accessible	agna	ikna	akemna
	(β) *over* more accessible	au͡gna	ingna	amna
(III)	(α) *outside* less accessible	qagna	keggna	qakemna
	(β) *inside ,inland* more accessible	qau͡gna	kiugna	qamna
(IV)	(α) *downriver, toward exit* less accessible	uegna	ugna	cakemna
	(β) *down below, down the slope* more accessible	un'a	kan'a	camna
(V)	(α) *there,* near listener less accessible	tamana	tauna	---
	(β) *here,* near speaker more accessible	man'a	una	imna

Table 1 (Jacobson 1995:76, with modifications)

The first parameter current state (A) concerns how a referent is perceived: when a referent is in motion, a demonstrative is chosen from column (i) *extended*; when a referent remains at rest, a demonstrative from column (ii) *restricted* is selected; and when a referent is not visible, the selected demonstrative is from column (iii) *obscured*. One interesting fact of this parameter is that even when a referent remains still, if it is very long or big, a demonstrative should be chosen from column (i) *extended* like a moving object. In other words, the difference between (i) and (ii) substantially results from that of whether or not the speaker needs to move his/her eyes to identify the referent. Note that no gender or animacy affects the use and choice of CAY demonstratives.

The second parameter directionality (B) with five distinctions (I) to (V) concerns what direction the

speaker faces.   For instance, assume that there is a fly staying on the ceiling and the speaker is pointing toward it.   In this situation, *pikna* (I-ii-α) is chosen because the speaker looks upward (I), the referent stays still (ii), and the speaker cannot reach the referent; thus, the target is judged as a thing categorized as being (α) *less accessible*, which is one of the two values of the third parameter accessibility (C).   In another instance, talking with someone at the table, the speaker wants the listener to attend a dog lying under the table.   In this case, *kan'a* (ii-IV-β) is employed essentially because the speaker has to lower his/her gaze (IV) to see the dog lying (ii), and it is in his/her vicinity, i.e., *more accessible* (β).   As shown in these examples, with Table 1, one can rather precisely tell which demonstrative among the thirty should be used to refer to a referent in various locations.

When we observe the ways in which CAY speakers use demonstratives in conversations, however, we would also come across examples that seemingly do not fit the distinctions shown in Table 1, particularly for those who have no previous knowledge on the CAY spatial cognition.   For instance, imagine that you are in a room, and a native speaker wants to focus your attention on a thing in the middle of the room.   In this case, he/she may use *kan'a* (ii-IV-β), even though it is neither located in your vicinity nor the speaker's, and you do not have to look down to identify it, either.   Again, imagine that the native speaker wants you to pick up something just a couple of meters away from you and the speaker.   In this context, he/she may use *ikna*, which, according to Table1, indicates that the referent is *less accessible* (ii-II-α), even if it seems totally accessible to non-CAY speakers.   On the other hand, a dog on top of the hill may be pointed to by *pingna* (ii-I-β) or *pauɠna* (i-I-β) as a referent *more accessible*, even if the dog is 40 or 50 meters away from the speaker and listener.   In addition, the same *pingna* (ii-I-β) or *pauɠna* (i-I-β) may be employed to refer to something when a CAY speaker glances out the window.   Thus, without knowing the basic mindset on spatial cognition of CAY speakers, we would face difficulty in reading Table 1 and understanding why the characterization with the three parameters is applicable.   In section 3, we illustrate crucial cases to illuminate the minimum required to understand the referential strategies by which CAY speakers utilize the thirty demonstratives.

3. The River Mouth and the Use of CAY Demonstratives

Illustrating several crucial uses of the CAY demonstratives, this section explores CAY speakers' fundamental ideas on categorizing spatial relations.   In 3.1, we first observe that, when CAY speakers use demonstratives, they see their local space as if they are in a village.   In other words, by "superimposing" the village terrain on local spaces, they use demonstratives to focus the listener's attention to someone/something in various locations.   In section 3.2 and 3.3, we suggest that the four areas that are created by the terrain properties are further utilized as implicit but crucial landmarks for other uses of the demonstratives.

3.1 An Idealized Village Terrain and its Topological Mapping onto Local Spaces

To figure out the way the system of CAY demonstratives works, let us first consider an idealized village terrain shown in Figure 1 below.
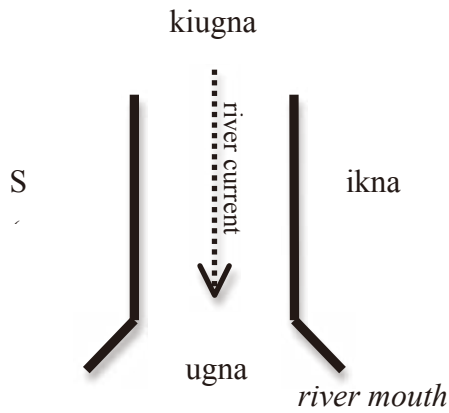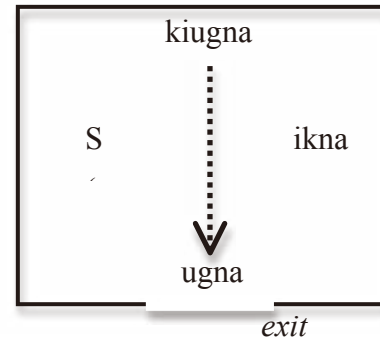

Figure 1　　　　　　　　　　　　　　Figure 2

In Figure 1, a small river is depicted; the arrow indicates the direction of the river current.   *S* represents the speaker.   In this situation, referents beyond the center of the river are all referred to by the demonstratives that belong to row II-α in Table 1 (i.e., level, less accessible, (i) *agna*; (ii) *ikna*; (iii) *akemna*).   In all the figures in this paper, the demonstratives in the second column (i.e., (ii) *restricted*) are represented.   To the referents around the river mouth, the demonstratives that belong to row IV-α (i.e. downriver, less accessible, (i) *uegna*; (ii) *ugna*; (iii) c*akemna*) are employed.   Finally, the demonstratives belonging to row III-β (i.e., more accessible, (i) *qau͡gna*; (ii) *kiugna*; (iii) *qamna*) are used for the referents in the opposite direction from the river mouth, i.e., the upriver area.   Let us summarize the important point here for further accounts: with respect to the village terrain, CAY speakers identify the four landmark areas of (i) the river-mouth, (ii) the upriver, (iii) the riverbank where they are, and (iv) the opposite riverbank.   Associated with this hallmark, one interesting fact is that while Figure 1 depicts an idealized village terrain, if CAY speakers are unable to see the river mouth in the actual village contexts because, for example, it is far from the village, they regard the lower part of the stream they can see as the area for row IV-β (e.g. *ugna*), judging from the direction of river current.

One most important characteristic of the mindset on spatial relations observed in CAY speakers is that, wherever possible, they "superimpose" the village terrain on local spaces where they currently are, and with this virtually created village terrain, they use the demonstratives.   With the four-area partition observed in Figure 1 in mind, let us examine Figure 2 that depicts a simple-structured room with one exit. In Figure 2, the demonstratives employed are the same as those in Figure 1: *ikna, ugna,* and *kiugna*.   In this topological mapping process, the river mouth functions as the key landmark.   Thus, by making the exit of a room correspond to the river mouth, a "virtual" river current can be obtained in the room, which has its upper reach at the opposite side of the exit.   Therefore, if the speaker is located at *S* in Figure 2, the referents around the exit are indicated by the demonstratives of row IV-β ((i) *uegna*; (ii) *ugna*; (iii)

cakemna), and those around the opposite side of the room from the exit are referred to by the demonstratives of row III-β (i.e. (i) *qaug͡na*; (ii) *kiugna*; (iii) *qamna*).   Moreover, for the things across the virtually created center line, a less-accessible demonstrative from row II-α ((i) *agna*; (ii) *ikna*; (iii) *akemna*) should be utilized; when the speaker focuses the listener's attention to something across this virtual line, even though it seems highly accessible from a perspective of non-native speakers of CAY, a *less accessible* demonstrative must be employed for its reference.   Therefore, in row IV-α in Table 1, Jacobson (1995:Ch6) places seemingly unrelated two notions of *downriver* and *toward exit* together in the same cell.   However, as illustrated here, we could not understand what Table intends unless the readers are given the CAY mindset in which the entire system working with the village terrain, including the demonstratives of row II-α, is transferred to local spaces when CAY speakers employ demonstratives.

Another most important characteristic is that these four areas created by the village terrain further serve as implicit landmarks for the uses of other CAY demonstratives, which is discussed in the next section.

3.2. Implicit Landmarks and Choice of Demonstratives

This section elucidates that the four areas created by the three terrain properties of the river-mouth area, the upriver area and the river current are further utilized as implicit landmarks for other uses of the demonstratives.   Let us first have a look at Figure 3 below.
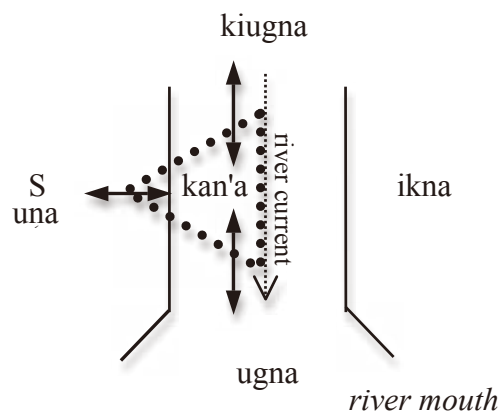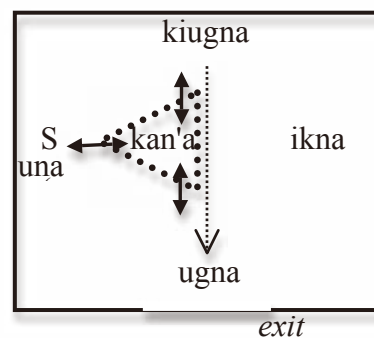

| Figure 3 | Figure 4 |

The demonstratives of row V-β (i.e., near the speaker, more accessible, (i) *mana*; (ii) *una*; (iii) *imna*) are employed to refer to things around the speaker, the property of which is represented with *una* under *S*. In this case, the use of V-β demonstratives is considered to be nearly similar to that of English *this* (or its variants), although further accounts of the space around the speaker are provided below.

With this use of V-β demonstratives, let us consider what demonstratives are utilized to fill the referential gaps between the vicinity of *S* and the other three specified areas stated in Figures 1 and 2. Assume here at first that the speaker faces the river orthogonally to the river current.   As shown in

Figure 3, a demonstrative from row IV-β (i.e., more accessible, (i) *un'a*; (ii) *kan'a*; (iii) *camna*) is chosen to refer to the referents between the vicinity of *S* and the center of the river. The double-headed arrows from *kan'a* in Figure 3 indicate the elastic property of the potential area referred to by the demonstratives from row IV-β. Thus, regardless of whether (a) the speaker *S* is on the top of the hill far away from the center of the river, (b) he/she is at the edge of the riverbank, or (c) he/she is in the river, a demonstrative from row IV-β ((i) *un'a*; (ii) *kan'a*; (iii) *camna*) would be employed to refer to things between the vicinity of *S* and the center of the river. The same schematic structure is applied to the cases in which the speaker is in a room as shown in Figure 4. The things that are located between the vicinity of speaker and the centerline of the room virtually created are pointed by a demonstrative from row IV-β ((i) *un'a*; (ii) *kan'a*; (iii) *camna*).

This characteristic of the demonstratives in row IV-β ((i) *un'a*; (ii) *kan'a*; (iii) *camna*) is retained for the other prominent landmarks. When the speaker sees objects in parallel to the river current, (i.e., when he/she looks downriver or upriver,) as shown in following Figure 5, a demonstrative is chosen from row IV-β ((i) *un'a*; (ii) *kan'a*; (iii) *camna*) to point to things between the vicinity of the speaker and the river mouth area or the upriver area.
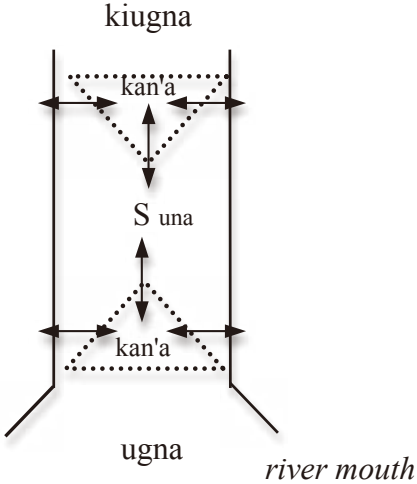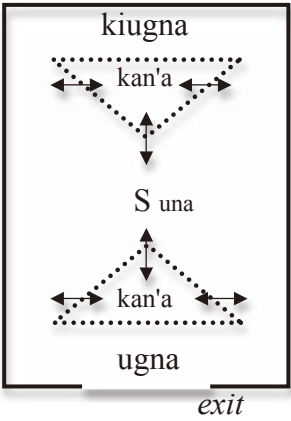

Figure 5

Figure 6

Figure 6 suggests that the same schematic structure is employed when the speaker is in a room. With regard to Figures 5 and 6, the following should be noted. Even if the speaker is located on one side of the riverbank as in Figure 3, or one side of a room, as in Figure 4, when he/she faces the direction of the river mouth/the exit or the upriver/the opposite side of the exit, the perspective shown in Figures 5 and 6 is exercised. In other words, for these two directions, the speaker uses the demonstratives, identifying himself/herself as if he/she is on the river current. In sum, the demonstratives of row IV-β ((i) *un'a*; (ii) *kan'a*; (iii) *camna*) are utilized to fill the referential gaps between the vicinity of the speaker and the areas specified by the three major landmarks of the river mouth, the upriver and the river current, and their conceptual equivalents created by the topological mapping between the village terrain and local spaces.

Now let us examine the way in which the speaker uses demonstratives around his/her vicinity,

which also improves our understanding on how important the three major landmarks (or their equivalents) are when CAY speakers employ the demonstratives.   Imagine that the speaker is in a room sitting at a regular-sized table.   The things on the table are referred to by a demonstrative from row V-β (i.e., near the speaker, more accessible, (i) *mana*; (ii) *una*; (iii) *imna*) as mentioned above; note that *imna* ((iii) obscured) is used when a referent is, for example, in a box on the table.   The things on the adjacent table may be referred to by a demonstrative from row II-β ((i) *au͡gna*, (ii) *ingna*, (iii) *amna*); in Table 1, the row is classified as *more accessible*, indicating the sense of *over*.   From this example and the description from Table 1, we might conclude that the use of the demonstratives of row II-β ((i) *au͡gna*, (ii) *ingna*, (iii) *amna*) may be similar to that of *over* (*there*) in English.   However, the demonstratives of row II-β are used only if the major landmarks are not evoked; otherwise, a demonstrative should be chosen with the referential strategies explored in Figures 3, 4, 5, and 6.   Thus, for example, when the speaker focuses the listener's attention to a thing on the next table, having a sense of looking toward the exit, he/she would use a demonstrative from row IV-β (((i) *uegna*; (ii) *ugna*; (iii) c*akemna*) or from row IV-β ((i) *un'a*; (ii) *kan'a*; (iii) *camna*).   Note that the potential area referred to using the demonstratives from row IV-β ((i) *un'a*; (ii) *kan'a*; (iii) *camna*) could be very elastic between around the vicinity of speaker and the major landmarks.   If the local space in Figure 6 is a large room or gymnasium, the referential range of the demonstratives can occupy a good proportion with respect to the speaker and the landmarks, but if it is a small room, they might have little referential range.

    With this property of the space around the speaker, let us further assume that there is a lamp above the speaker's table.   The lamp is referred to by *pikna* from row I-α ((i) *pagna*; (ii) *pikna*; (iii) *pakemna*) defined in Table 1 as *up above, less accessible*.   On the other hand, if the lamp that the speaker wants the listener to attend to is located on the other side of the room beyond the centerline virtually created, he/she has to use *ikna* from row II-α ((i) *agna*; (ii) *ikna*; (iii) *akemna*) even if it is located upward from him/her.   Similarly, if a bird rests on a tree and it is right above the speaker, he/she would use *pikna* from row I-α, but if it is seen on the other side of the riverbank or the hill, the speaker needs to use *ikna* from row II-α ((i) *agna*; (ii) *ikna*; (iii) *akemna*) even if the bird sits in a tall tree.   Thus, once the speaker has a sense of being oriented toward a major landmark, he/she needs to employ the demonstratives that follow the referential strategies shown in Figures 3, 4, 5, and 6.   However, when the speaker looks up and points to a bird flying very high in the sky, the speaker should use *pagna* from row I-α ((i) *pagna*; (ii) *pikna*; (iii) *pakemna*), the use of which is allowed, although the referent may be beyond the center of the river is because the speaker's visual field in this case contains no major landmarks or he/she has no sense of facing any major landmark.

    Based on these observations, in sum, we can say that one of the difficulties in understanding the system of CAY demonstratives from a perspective of non-CAY speakers is: without knowing where the speaker is located with regard to the three major landmarks of the river mouth, the upriver, and the river current (and its equivalents in local spaces), we cannot properly use even the demonstratives that seem to correspond to the English *over (there)* or *up (there)*, because the areas specified by them restrict the use

of those demonstratives.   Thus, even if we learn individual meanings, as shown in the single cells in Table 1, we can hardly use it in an appropriate way.

3.3.   Other Uses

In this section, we observe the way in which the other demonstratives that we have not yet dealt with but are presented in Table 1 are used, illustrating prominent cases to understand their usages: the demonstratives of row I-β, III-α, and V-α.   Starting with the demonstratives of V-α (near the listener, less accessible, (i) *tamana*; (ii) *tauna*), imagine that the speaker is at the table with the listener.   In this context, things on the table that are closer to the speaker are referred to by a demonstrative from row V-β (i.e. near the speaker, more accessible, *mana* (i); *una* (ii); *imna* (iii)), and for things that are closer to the listener, a demonstrative from row V-α ((i) *tamana*; (ii) *tauna*) is employed, the use of which is predicted from the description of Table 1.   Related to this use of V-α ((i) *tamana*; (ii) *tauna*), one interesting usage is that when the speaker is neither together with the listener nor shares the location, the listener can serve as a "mobile" landmark.   In other words, wherever the listener is, the things around the vicinity of the listener can be referred to by a demonstrative from V-α ((i) *tamana*; (ii) *tauna*).   If a bird rests on a tree near the listener and the speaker wants the listener to attend to it, he/she can point at that bird using *pikna* from row I-α ((i) *pauǧna*; (ii) *pikna*; (iii) *pakemna*), even though the tree is located beyond the river.   This seems to be the reason why the demonstratives of row V-α ((i) *tamana*; (ii) *tauna*) are described as *less accessible* in Table 1.   However, the landmark function of the listener is limited to the case in which he/she is in the speaker's visual field and the referents are located in the vicinity of the listener; in other cases, the speaker's perspective rather than that of the listener is generally employed while CAY speakers use demonstratives.

Now let us move onto the use of row I-β ((i) *pauǧna*; (ii) *pingna*; (iii) *pamna*): in Table 1, the demonstratives are characterized as *up slope*, *more accessible*.   Consider the following Figure 7, in which the speaker faces the opposite direction of the river current, as shown by the arrow from *S* and he/she has no major landmarks in his/her visual field:

Figure 7

Figure 8

Figure 9
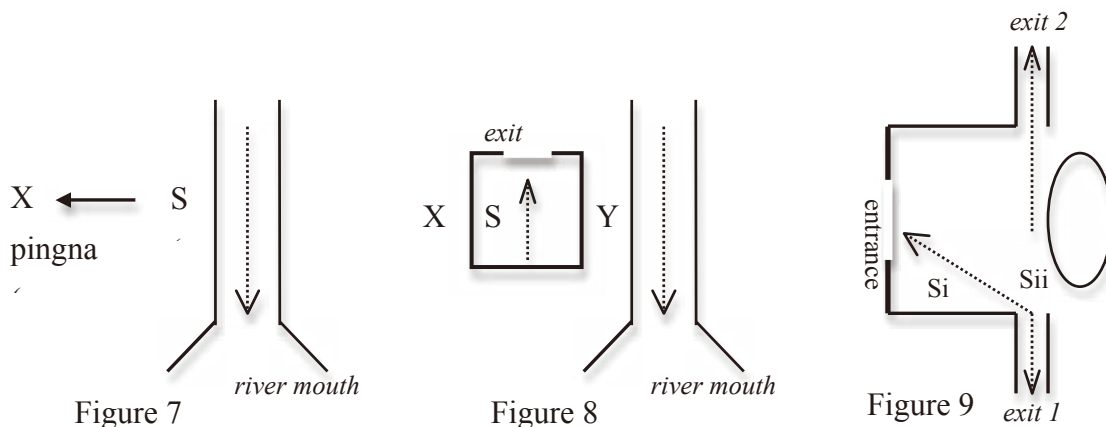
In this situation, the speaker would choose a demonstrative from row I-β ((i) *pauǵna*; (ii) *pingna*; (iii) *pamna*) to point at things. The two factors mentioned in the definition of Table 1: *up slope* and *more accessible* suggest that the things referred to by row I-β ((i) *pauǵna*; (ii) *pingna*; (iii) *pamna*) would be located (a) somewhere up hill leading from the river and (b) within the same area as where the speaker currently is, because the speaker has no major landmarks in his/her visual field. This is the reason why demonstratives from row IV-β ((i) *un'a*; (ii) *kan'a*; (iii) *camna*) are not used in this direction. Note that one typical use of *pamna* ((iii) *obscured*) is observed when the referent is located beyond the top of the hill on the same side. For instance, when a moose goes over the hill and beyond the speaker's vision, but he/she is sure that it is beyond the hill, *pamna* ((iii) *obscured*) is employed.

Figure 8 depicts a single-space house as well as a village terrain, and the speaker is supposed to be inside the house. Our issue here lies in the question of how *X* and *Y* in Figure 8 would be indicated by demonstratives. First, for the things inside the room, the speaker utilizes the demonstratives following the strategies that have been shown in Figures 2, 4, and 6. When the speaker just wants to attend the listener to a thing outside the room such as *X* or *Y* in Figure 8, a demonstrative from row III-α ((i) *qagna*; (ii) *keggna*; (iii) *qakemna*) is chosen; in Table 1, these demonstratives are characterized as *outside*, *less accessible*. If a dog is chained outside the house, it may be referred to by *qakemna* ((iii) obscured), but if it is visible through the window, either *keggna* or *qagna* would be employed; the difference of use depends on whether the dog stays still or moves around.

While the demonstratives from row III-α ((i) *qagna*; (ii) *keggna*; (iii) *qakemna*) can be employed to refer to X or Y in Figure 8, following III of the second parameter, however, the speaker can also use demonstratives, utilizing the knowledge of the entire village terrain. When this style of spatial recognition is exercised, *X* in Figure 8 would be referred to by a demonstrative from row I-β ((i) *pauǵna*; (ii) *pingna*; (iii) *pamna*); on the other hand, *Y* would be indicated using a demonstrative from IV-β ((i) *un'a*; (ii) *kan'a*; (iii) *camna*), following the principles shown in Figures 7 and 3, respectively. This referential strategy of spatial identification depending on village terrain would be effective when the speaker wants the listener to attend to the referent more precisely when it is located outside of the house.

Examining Figure 9, as a final example, let us consider the case in which there are multiple exits in a western-style building. We focus our attention on how the centerline is virtually created. Figure 9 schematically depicts a hotel lobby, and the oval indicates the reception. Assume that the speaker and the listener are located in the area of *Si*. In this situation, the virtual river current is drawn between the entrance and *Sii* rather than between the entrance and the reception. This is because CAY speakers think of the *Sii* area as that leading to another place (i.e. the exit 1 in Figure 9), which motivates them to regard the corner of *Sii* as the upriver. With this alignment, the reception area is regarded as that of *ikna* (i.e. the opposite riverbank) as shown in Figure 4. Now, imagine that the speaker and the listener move to the corner of *Sii* and face the direction of exit 1. In this case, CAY speakers draw the virtual river current between *Sii* and exit 1, and refer to the things between them by following the spatial strategy shown in Figure 6. The area of the hotel reception may be regarded as that of *kiunga* (i.e. the

upriver area).　However, interestingly enough, if the speaker and listener turn around and face the direction of exit 2, the virtual river current is now drawn between *Sii* and exit 2, and the reception area is regarded as the area of *kan'a* as shown in Figure 6, which let us recall the property in which, as suggested in 3.1,the river mouth functions as the key landmark to create a virtual village terrain in a topological mapping process between the idealized village terrain and the local spaces where the speaker currently is.

4. Conclusion

　　This paper attempted to provide a supplementary description for Jacobson's generalization of CAY demonstratives.　Illustrating prominent uses of CAY demonstratives classified by Jacobson (1995:Ch.6), we elucidated the points that non-native speakers of CAY must consider in order to understand the application and content of Table 1.　In particular, we highlighted that when CAY speakers use demonstratives, they perceive their local spaces as a village, superimposing the village terrain and its major landmarks on their local spaces; without the knowledge of this function, which this paper referred to as the topological mapping process, we would not even be able to appropriately use the demonstratives that seem to simply correspond to the English *this*, *that*, *over there,* or *up there*; because the areas specified by the three major landmarks abstracted from the village terrain restrict the uses of those demonstratives.　I hope that our illustrations are helpful for CAY learners who want to learn more about the characteristics of CAY demonstratives, and for linguists who want to perform cross-linguistic research on spatial expressions: the first cipher to crack the codes is to know the location of the river mouth.

References

Jacobson, Steven A. 1984. *Yup'ik Eskimo Dictionary*, Fairbanks: Alaska Native Language Center.
Jacobson, Steven A. 1995. *A Practical Grammar of the Central Alaskan Yup'ik Eskimo Language*,
　　　Fairbanks: Alaska Native Language Center.