# Pointing left in Ghana

## How a taboo on the use of the left hand influences gestural practice[*]

Sotaro Kita and James Essegbey
Max Planck Institute for Psycholinguistics, Nijmegen/Leiden University

In Ghana, many peolple consider pointing by the left hand to be a taboo. We investigated consequences of this taboo on the Ghanaian gestural practice by observing gestures produced during naturalistic situations of giving route directions. First, there is a politeness convention to place the left hand on the lower back, as if to hide it from the interlocutor. Second, as a consequence of left-hand suppression, right-handed pointing may involve an anatomically staining position when indicating a leftward direction across the body. Third, pointing is sometimes performed with both hands together, which does not violate the taboo. Despite the taboo, left-handed pointing is not suppressed fully. Left-handed pointing gestures occur in association with the verbalization of the concept LEFT, suggesting the embodied nature of the concept. In addition, it is noteworthy that there is a class of left-handed gestures, which are so reduced in form that Ghanaians do not consider them as pointing for the purpose of the taboo.

**Keywords:** gesture taboo, left hand, pointing, Ghana

## 1. Introduction

In Ghana, there is a general taboo on left-hand use. Giving, receiving, eating, and drinking with the left hand are considered to be rude by virtually all members of the community. A significant portion of the people also considers pointing by the left hand to be rude. Pointing, here, includes both gesture that indicates a directed path and gesture that indicates a direction toward a particular location. Consequently, they avoid pointing by the left hand in face-to-face interaction, especially with superiors and strangers.

The following excerpt from a Ghanaian newspaper illustrates this taboo. The excerpt appeared in a series of articles, in which a question from a reader is answered by a columnist. In the following article titled "Why Not the Left hand", a foreigner who recently moved to Ghana raises a question about the left hand.

"Why Not the Left Hand" (*Weekly Spectator*, 5th-11th Feb. 2000 issue)
Dear Nana Abrewa, …I have however noticed that Ghanaians are very much displeased with the use of the left hand. … — Monica XXX

Dear Monica, It is a fundamental part of our culture not to either shake hands, give an item or point by the left hand…

This article portrays the issue of the left-hand taboo to be a typical question by a foreigner. As the phrase, "a fundamental part of our culture", in the answer indicates the left-hand taboo is a part of Ghanaian cultural identity.

Another article in the Ghanaian mass media also underlines the significance of the pointing taboo in Ghanaian cultural identity. A Ghanaian weekly publication, *The Sun* (18th-24th November, 1996), published a letter from a well-known Ghanaian actress in the section, "A letter to Maame". She describes a cross-cultural clash between a Ghanaian film director and an English director of photography during the shooting of a movie in London. The story in the film was set in Ghana with Ghanaian characters. The film was shown in Ghana when it was completed. Among the crews, the director was the only Ghanaian. The problem arose in the shooting of a scene in which "the little girl Ama sees Sister Mabel on a horse back in the bush, Sister Mabel points at an object further off with her right hand" (Sister Mabel was played by the actress). The director of the photography, an English man, was not happy because the action did not conform to the established film language. He claimed that, considering the positioning of the actors, Sister Mabel should point with the left hand. The Ghanaian director and the actress had to give a lesson on Ghanaian culture to the crew to resolve this conflict. After the description of this experience, the letter continues, "in Ghana, making gestures or pointing at objects with the left hand is considered highly provocative and culturally disrespectful. Foreign oriented Ghanaians use the left hand with no ill intentions. But then, care must be taken when one is in the midst of culturally oriented Ghanaians or Africans. Such a person sooner finds his/her actions unacceptable, especially when seen on our screens". The letter indicates that there may be some individual variations as to the gesture taboo. Such variations may be the cause for the tragedy in the following incident, which is also reported in a local newspaper.

The following incident, which was reported in a Ghanaian newspaper, The *Ghanaian Chronicle* (October 12th, 1998), illustrates how serious the consequence of violating the taboo can be. An airforce officer was driving behind a cab, and started to overtake the cab. The cab driver gestured with the left hand to the officer. According to what the cab driver told the newspaper, which the officer denied, he and his friend were physically abused because of the offensive left-hand gesture. According to him, the officer questioned him as to why he used his left hand to give him a signal. Then the officer called in his junior officers, who took the driver and his friends to the airforce base, shaved them with broken bottles, beat them up, and locked them up in a room till the following day without food or water. The newspaper article does not make it clear exactly what kinds of gestures were performed with the left hand except to say that the gesture was performed "to signal to the officer of the impending danger his over-taking could pose to other vehicles and himself." One could imagine some pointing gestures were involved in doing so.

This alleged violent reaction by the officer is obviously extreme (extreme enough to be newsworthy). However, it illustrates very well how strongly some of the people feel about the gesture taboo. This situation in Ghana raises a couple of questions. How does a taboo on a particular type of gesture shape the gestural practice of the community? In what context do people nevertheless produce taboo defying gestures? We will address these questions on the basis of a corpus of gestures that are produced during route directions. Thus, the goal of this paper is two-fold. First, we aim to document the effect of the left-hand taboo on the Ghanaian gestural practice in the context of route direction. It will be shown that the gesture taboo has consequences beyond the general suppression of left hand pointing. This discussion leads to, among other things, the question of how body movements are defined as a gesture for the purpose of the taboo. It was found that direction indication by the left hand does not violate the taboo if it is carried out in a particular manner. Second, we will discuss a certain linguistic context in which people tend to produce a taboo-defying left-hand gesture. This examination will lead us to the discussion of the embodied nature of the concept, LEFT, and possible speaker-internal functions of gestures.

## 2.  Naturalistic route direction corpus

We collected naturalistic examples of people giving route directions in the town center of Keta, an Ewe speaking town in south-eastern Ghana. People were

stopped on the street by a research assistant, and asked to participate in a survey. First, they were asked for directions to two different locations near the town center (both a few hundred meters away). After they had given these directions, the survey proper began, in which the research assistant interviewed people about their belief and knowledge about the left-hand taboo. The interaction was video-taped from a distance, and the audio was radio-transmitted to the video camera. Then, the consultants were debriefed about the purpose of the study, and permission to use the recording for research was obtained. Following this procedure, we have obtained route directions from 28 people. 26 of these gave clear and rich enough responses to our questions to allow us to learn their views on the left-hand taboo.

## 3.   The perception of the left-hand taboo among the people we interviewed

Let us turn to the results from the interviews with the 26 people who offered comments with sufficient details about the taboo to permit some analysis. All of the 26 people acknowledged a general left-hand taboo for giving, receiving, eating, etc. 16 of them, furthermore, acknowledged that left-hand pointing would be inappropriate. The other 10 people did not consider pointing with the left hand to be part of the taboo.

The people we talked with explained the reason for the inappropriateness of left-hand pointing (and other activities) in various ways. Among the explanations given were "it is part of the custom", "it is a taboo", "you're in the wrong", and "you've insulted the person". The underlying theme of these various reasons is that the use of the left hand is a violation either of the lore of the community or of the interlocutor. One expression that was recurrent in almost everybody's explanation, in one form or the other, was *bu* (respect, regard, consider, think about (someone)). Among the uses of the expression were *mèbu amea o* 'you've not respected the person', *mède bubu amea ŋu o* 'you've not accorded the person respect' or *mefia bubu o* 'it does not show respect'.

These ways of characterizing the inappropriateness of the left-hand use can be seen in the context of Sarpong's (1974) discussion of the place of respect in the Ghanaian society: "respect for authority, old age, the mysterious, and the spiritual, all of which can be classified under the sacred, as opposed to the profane". He continues that there is the "expectation that something evil will result from its negation. People in authority, old men, etc., are expected to

measure out adequate punishment to disrespectful subjects either physically or mystically… ."(1974, p. 65). Thus while some of the people we talked with were prepared to overlook the inadvertent use of the left hand for peers and people who were younger, none of them accepted that it could be used for an older person. In short, if one uses the left hand especially when interacting with an older person, it is thought that the person did not consider or give due regard to the social status of this person and it is seen as a sign of disrespect. It is also customary to pay respect to strangers, whose social status is unknown, such as the research assistant who asked for directions in this study.

## 4.   The influence of the left-hand pointing taboo on the Ghanaian gestural practice

### 4.1   The likelihood of left hand use for pointing

The left-hand taboo has various effects on the gestural practice among the people who gave us route directions. First, we examine the likelihood of left-handed pointing gestures during route direction in two groups of these people: the group that acknowledges the taboo on pointing by the left hand, and the group that does not acknowledge this gesture taboo. We counted the number of gestures in which extended fingers (often just the index finger) and the arm movement together signify a vector or a directed path in the discourse context. They typically accompany a statement about a relative location (e.g., "it is on your left", "it's next to the mission") or a path (e.g., "you turn left", "you go straight").

Among the 16 people who acknowledged the pointing taboo, 5 people did not use any left-handed pointing gestures, but 11 people used such a gesture at least once during route direction. Among the 10 people who did not acknowledge the pointing taboo, only 1 person did not use any left-handed pointing gestures, and the other 9 used such a gesture at least once. In other words, the group who acknowledges the gesture taboo was less likely to produce left-handed pointing gestures. Note, however, that the majority of the people who acknowledged the gesture taboo still produced left-hand pointing.

This is partly because not all left-handed pointing gestures defy the taboo. There are inconspicuous gestures that do not count as a gesture as far as the taboo is concerned (this judgment is given by the second author, who is from Keta). Let us call these gestures "semi-pointing". Semi-pointing gestures are reduced in size and performed in the lower periphery (lower than the hip), as

we will discuss in details in the next section. It is interesting to note that of the 11 people who acknowledged the left hand taboo and yet used a left hand pointing gesture, 3 people used only semi-pointing gestures with the left hand. Thus, these 3 people did not in fact violate the left-hand taboo. Nevertheless, it is striking that of the 16 people who acknowledged the taboo, 8 of them made use of taboo-defying left-handed pointing. We will return to this observation below.

## 4.2 Semi-pointing

In this section, we examine semi-pointing in more detail. Semi-pointing is performed only with the left hand, and has the following formal characteristics. Semi-pointing is performed below the waist, usually with a fully-stretched arm. In some cases all fingers are extended, and in other cases only the index finger is extended. It makes a small movement to the left or to the left-front to indicate a direction away from the body. The right hand is also simultaneously but separately pointing to the left, and it is either in its preparation phase or in its hold phase. The gestures in Figures 1, 2, and 3 illustrate semi-pointing.
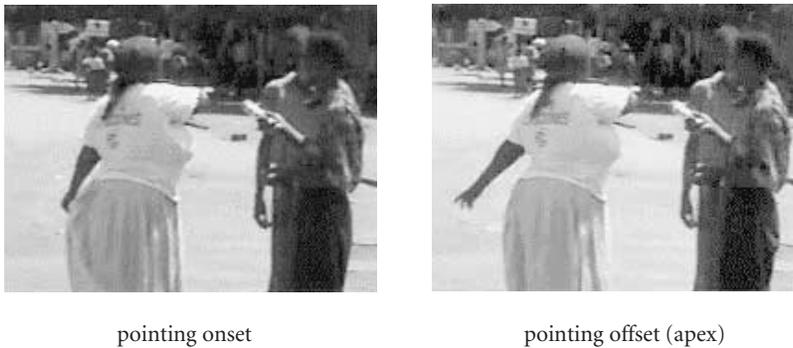


|   pointing onset   |   pointing offset (apex)   |

**Figure 1.** Semi-pointing by the left hand (also gesture 1 in Example 1).

In Figure 1, the woman had pointed to the left with her right hand to indicate the street that goes to her left. As she held the right-hand gesture at her chest, she flicked her extended left arm to the left below the hip, indicating the left side on the street. This left-handed gesture was far more inconspicuous than other right-handed gestures by her. She produced five right-handed pointing gestures during route direction (three of them point across the body to the left,
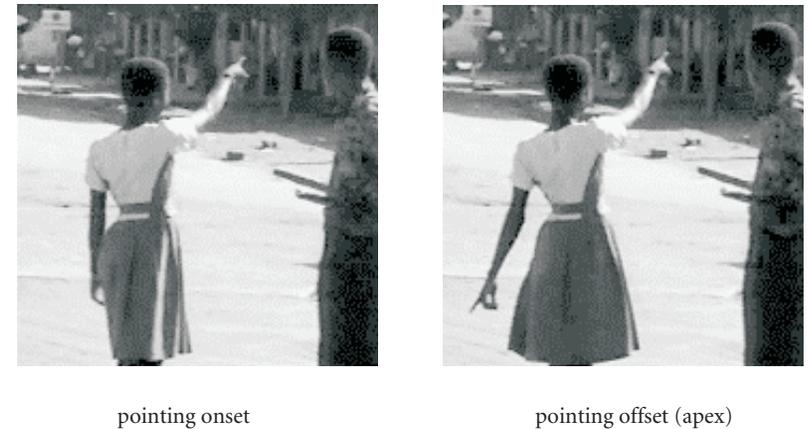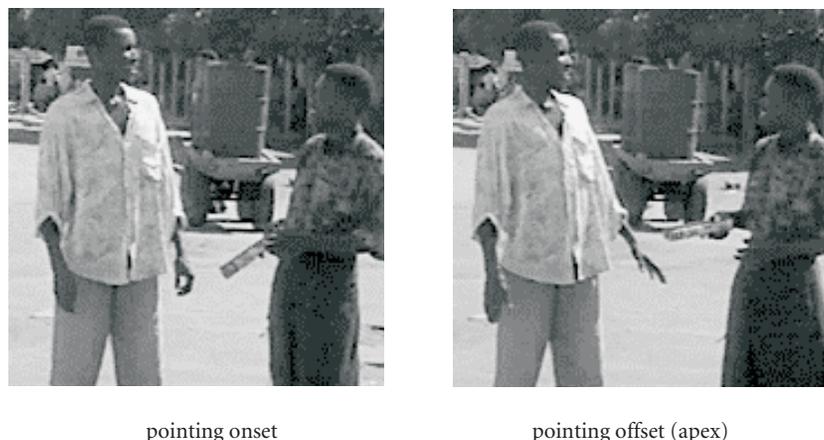
|   pointing onset   |   pointing offset (apex)   |

**Figure 2.** Semi-pointing by the left hand.

and two of them point to the right or to the front). All of them were performed at her chest height or higher.

It is possible that the semi-pointing was not visible to the interviewer (the man pointing with a rolled paper) as the speaker's body could have blocked his view of it. At any rate, the research assistant did not mention it during the interview. Furthermore, the speaker stated that she had not used the left hand. The research assistant started out the interview with the question, "why didn't you use the left hand to point it out to me?" She answered first with a rhetorical question, "Was I expected to use the left hand?", then continued, "it is the right hand that is used to point out things, that is why I couldn't use the left hand."

The semi-pointing illustrated in Figure 2 was very similar in shape to the one in Figure 1. The woman had been asked where Rose Pavilion is, one of the two places the research assistant asked the route for. She had replied, *ele afii* "it's here", as she pointed to her left-frontal direction with her right hand across her body. The research assistant asked, "where", again to get further information. She replied again, *afii* "here" (this lexical item is necessarily accompanied by a pointing gesture), and she pointed again with the right hand, as shown in the left panel of Figure 2, as she rotated her body slightly to the target direction. After the word "here" had been uttered and her right hand had reached the apex of pointing, the left hand with the extended index finger swung out at the lower periphery without any accompanying speech. This is shown in the right panel of Figure 2. This gesture is much less conspicuous than her 17 right-handed pointing gestures, each of which reached above her shoulder at its

pointing onset                    pointing offset (apex)

**Figure 3.** Semi-pointing by the left hand (also gesture 1 in Example 3).



preparation onset        mid preparation        preparation offset

**Figure 4.** Preparation for a right-handed pointing following the semi-pointing in Figure 3 (also gesture 2 in Example 3).

highest point. Once again, because of the way the speaker's body was positioned, it is possible that the gesture was not visible to the interlocutor. The interviewer again did not mention this semi-pointing in the interview, and the woman stated, "the left hand is not used to show a place to people."

Figure 3 illustrates a different type of semi-pointing. In this case, the semi-pointing by the left hand preceded right-handed pointing to the left-frontal direction. Being asked to explain how to get to Rose Pavilion, the man replied, "Well, that [Rose Pavilion] too, you go on the left, when you get to the lagoon side like this". As he uttered, "Well, that too", the left hand moved to the left in the lower periphery, as shown in Figure 3. Two or three video frames (1 frame = 40msec) after the onset of the semi-pointing by the left hand, the right hand left the resting position to the right, which would not be the final direction of the right-hand pointing. After the left hand had reached its apex, the right hand started to move towards left-front direction, as in Figure 4, and the left hand retracted back to the resting position. It is as if the left-ward vector is transferred from the left hand to the right hand. This right-handed gesture was performed as the man said, "you (will) go again", and it was interrupted in middle of the preparation phase. As we will discuss in more detail later, the man produced another semi-pointing with the left hand immediately after the interruption of the right hand gesture. This semi-pointing was, in turn, followed by a full right-handed pointing gesture to the left-frontal direction and the phrase "to the left".

The semi-pointing in Figure 3 is again much more reduced in form than the man's 15 right-handed pointing during route direction, each of which reached as high as the shoulder level. The semi-pointing was not discussed in the interview, and he stated, "they say that in order to talk to someone, you have to use the right hand to talk".

It has been pointed out in the literature that people sometimes obscure gesture. For example, subtle eye movement (de Jorio 1832/2000, pp. 70–71) or lip pointing (Wilkins, to appear) can be used to indicate an object or a person so that the indicating act can be seen only by the intended recipient but not by others. Other types of conventionalized gesture can also be performed in disguise (de Jorio 1832/2000, pp. 197–198) so that only the intended recipient can decode the movement. Ekman (1985) points out that some obscured gestures may not even have any intended recipient: some potentially offensive gestures can be performed in the periphery so as to look like non-gestural acts. In such a case, the gesture has no intended recipient, although it is targeted toward a particular person whom one wishes to secretly curse. Semi-pointing is a new species in this class of obscured gestures. It has no intended recipient.[1] Furthermore, unlike deceptive offensive gestures, it is not targeted to anybody.

A question arises as to how semi-gesture arises without an intended recipient nor a targeted person. It may arise from the affordance (in the sense of Gibson, 1986) of surrounding space in the interactional context. There may

be a natural tendency for people to reach out with the closest arm toward the direction which they wish to communicate about. In other words, a communicatively intended direction invites unwitting reaching. The gesture taboo does not completely override this invitation. The people who acknowledge and observe the gesture taboo have internalized a routine to reduce the form of reaching when it is performed by the left hand.

It is not clear whether the speaker and the interlocutor were aware of the semi-gesture. However, it is clear that semi-pointing is treated as "non-gesture" as far as the gesture taboo is concerned. According to the gesture taboo, "using the left hand to show things to somebody" is not acceptable. Semi-pointing does not fall into this category because Ghanaians do not consider that the person performing semi-pointing intends to "show". In other words, semi-pointing does not officially "give" a direction, but merely "gives off" a direction, in the sense of Goffman (1963). Observers, who are not engaged in culturally grounded participation, can still read the direction "given-off" in semi-pointing. This is because the body movement is recognized as arising from the intention to communicate something, and its direction can be given a consistent interpretation in both the discursive and the physical contexts. The above analysis of semi-pointing can be seen as a first step in the research program Kendon (1981) proposes, namely, a systematic investigation of observable features that make participants in interaction in a given culture classify a certain behavior as the one that "gives" rather than "gives off" information.

## 4.3 Other consequences of the taboo on direction-indicating gesture by the left hand

The taboo on left-handed pointing shapes Ghanaian gestural practice in other ways as well. In addition to semi-gesture and the relative low frequency of taboo-defying left-handed pointing, the people who acknowledged the gesture taboo exhibited the following four features in their gesture practice.

First, taboo-defying gestures by the left hand tend to be less conspicuous (though not reduced enough to become a semi-gesture) than the right hand counterparts. The ones by the left hand tend to be smaller and lower. We will later illustrate this phenomenon in Example 2 in section 5.

Second, there is a conventional "respect position" for the left hand. It is considered to be very polite to hide the left hand behind one's back (with the back of the hand on the buttock) (see Figure 5).

Third, right-handed pointing can be "hyper-contra-lateral" when the target direction is to the left, in the sense that the arm crosses in front of the face or around the neck (see Figures 6, 7, 8). These strained postures for gesture are caused by the avoidance of the left-hand use and the interactional demand to face the interlocutor.



**Figure 5.** Conventional "respect position" for the left hand.



**Figure 6.** Hyper-contra-lateral pointing by the right hand.



**Figure 7.** Hyper-contra-lateral pointing by the right hand.

Fourth, pointing gestures are sometimes performed bi-manually. When accompanied by the right hand, a conspicuous left-hand movement for pointing is no longer rude. This is an instance of a more general principle of taboo neutralization, in which the left hand's movement is not rude if the right hand is in contact with the left hand. For example, when one has to use the left

**Figure 8.** Hyper-contra-lateral pointing by the right hand, around the neck.



**Figure 9.** Bi-manual pointing.

hand to receive or give (e.g., when the right hand is covered with food during a meal), one can still observe the taboo by accompanying the right hand at the left hand's wrist. Figure 9 illustrates a pointing gesture with two hands, in which the palms touch each other.[2]

## 5.   The word "left" and direction indication by the left hand

As we have already noted, of the 16 people who acknowledged the gesture taboo, 11 indicated direction with the left hand either by a taboo-defying

gesture or by a semi-pointing gesture. 7 of these people used the Ewe word, *mia* 'left', in their route directions. These people provide us the opportunity to examine the embodied nature of the concept underlying the word "left".

In 6 of these cases, there was some indication that a direction-indicating gesture by the left hand might have activated the concept LEFT, which led to the choice of the word "left". Namely, four of them gestured predominantly with the right hand, and their only left hand gestures were the direction-indicating gestures that immediately preceded the word "left" and, in some cases, one or two subsequent gestures (see Examples 1 and 2). The other two people gestured equally frequently with the right hand and the left hand, but the sequence of the right hand gestures was broken by a direction-indicating gesture by the left hand that immediately preceded the word "left".

The following examples provide evidence for the embodied nature of the underlying conceptual representation for the word "left". In Example 1, the first left-hand pointing in her route direction (gesture 2) by the speaker is a semi-pointing, and it accompanied the phrase "to my left", which includes her first mention of the word "left". In Example 2, the first left-hand pointing in her route direction (gesture 3) is a taboo-defying gesture (the speaker acknowledged the gesture taboo in the interview). This gesture accompanied the phrase "on your left side", which again includes her first mention of the word "left".

*Notational conventions*

In the examples, the following conventions are used. In the speech transcript, the words in square brackets are uttered by the interlocutor. The abbreviations in the gloss stand for the following grammatical notions:

| | | | |
|---|---|---|---|
| ALL | allative | 1SG | 1st person singular |
| HAB | habitual | 2SG | 2nd person singular |
| LOC | locative | 3SG | 3rd person singular |
| PROSP | prospective | TOP | topic |
| REP | repetitive | TP | textual particle |

The lines immediately above the speech transcript indicate the timing of gestures with respect to speech. (The synchronization between speech and gesture was determined by a frame by frame analysis on the basis of digitized video, using an annotation software MediaTagger (Brugman & Kita, 1995).) The line headed by "RH" shows right hand gestures, and the line headed by "LH" shows left hand gesture. A gestural movement can be segmented into

qualitatively different phases, such as preparation, stroke, hold, and retraction
(see Kendon, 1972; McNeill, 1992; Kita et al., 1998 for the definition of these
phases). The stroke phase is indicated by a sequence of "*", and the hold phase
is indicated by a sequence of "_". Gestures are numbered as G1, G2, G3, and so
on. Thus, "*G1******___" indicates the stroke phase and then the hold phase
of gesture 1. The stretch of these symbols is aligned to the synchronous portion
of speech (note that the length of the stretch does not metrically represent the
duration of the phase). When the gesture phase continues to the next transcript
line, ">" is added at the end, as in "*G1******___>".

(Example 1)
    RH    _____G1_____
          Ne   è-zɔ     [ee]  ne   è-to     street  ya  dzi  tee      ko-a
          When 2SG-move [yes] when 2SG-pass street  this top straight just-TP
          'When you walk straight ahead on this street,'

          Gesture 1: Right hand, pointing to the left, is held at the shoulder height
          (see the right hand in Figure 1).

    RH    _____
    LH                      *G2*************
          [ee]  e-le              nye mia gome
          [yes] 3SG-be_located 1SG left  direction
          'it is on my left side.'

          Gesture 2: Left hand, semi-gesture (see Figure 1). The gesture stroke
          starts before the beginning of the phrase, and continues through the
          word "left". Right hand keeps holding in the position of the previous
          gesture.

(Example 2)
    RH    *G1*************___
          è-to     ge     teeee   [ee]
          2SG-pass PROSP straight [yes]
          'You will go straight.'

          Gesture 1: Right hand with the extended index finger moves forward
          from the vicinity of the left shoulder, indicating a path.

    RH        *G2******
          ale  be  ne   è-ga-yi
          thus that when 2SG-REP-go
          'and as you go,'

          Gesture 2: Right hand pointing (see Figure 10).

    LH                              *G3************
          curve aɖe    ga-le            afima le   wò mia kpadzi [ee]
          curve certain REP-be_located there LOC 2SG left side    [yes]
          'there is another curve over there on your left side.'

          Gesture 3: Left hand, an upward arc movement indicating a turn direc-
          tion to the left (see Figure 11).

    LH  *G4**********
          na-ga-tu-i          [ee]
          2SG-REP-pass-3SG [yes]
          'you take that [route] too.'

          Gesture 4: Left hand, a straight movement, indicating a path to the left
          (see Figure 12).

    LH                  *G6**___
    RH      *G5***
          ko  ne   è-yi-na       teee      ko-a [ee]
          then when 2SG-go-HAB straight just-TP [yes]
          'then as you go straight,'

          Gesture 5: Left hand, a very short movement to the left, which seems to
          be interrupted prematurely.

          Gesture 6: Right hand, indicating a path (see Figure 13). Note that it
          seems as if the right hand takes over the left-handed gesture 5 to indicate
          the left-ward direction.

    RH  *G7********************
          Rose Pavilion a    e-le            ale  gome
          Rose Pavilion TOP 3SG-be_located thus direction
          'Rose Pavilion is in this direction.'
          Gesture 7: Right hand, indicating direction away from the body

Note that taboo-defying gestures 3 and 4 in Example 2 are performed at a lower
position than any of the right-handed pointing gestures in her route direction,
which all reached higher than the shoulder level. In addition, she interrupts left-
handed gesture 5 and switched hands to the right in gesture 6, which further
supports the idea that she was indeed aware of the gesture taboo.

    It is worth stressing again that the left hand became gesturally active at a very
interesting place in the discourse in the above two examples. In Example 1, the
woman had used five right-handed pointing gestures during the route direction
(three of them point across the body to the left, and two of them point to the
right or to the front) before her first left-handed semi-gesture. Interestingly, the

**Figure 10.** Gesture 2 in Example 2.
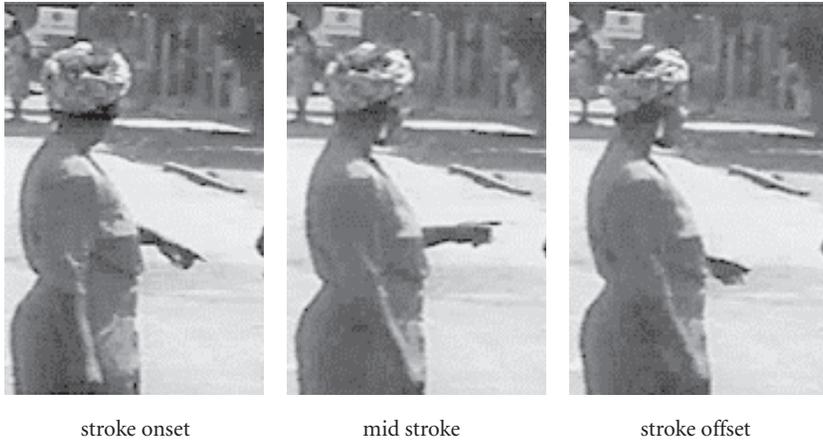


stroke onset      mid stroke      stroke offset

**Figure 11.** Gesture 3 in Example 2.

semi-gesture, which indicated left, accompanied the phrase that contained her first (and only) mention of the word "left" in her route direction. Example 2 is even more striking. In this example, the woman had used 15 right-handed pointing gestures in a row (9 of them pointing to the right, 6 of them pointing to the left) before her first left-handed gesture, gesture 3, which indicated left in a movement that violated the taboo. Again, the stroke of this taboo defying left-handed gesture was synchronized with her first (and only) mention of the word "left". These observations support the idea the concept LEFT, which underlies the word "left", is an embodied concept. Furthermore, the taboo defying gesture 3 in Example 2 raises an interesting question. We have to remember
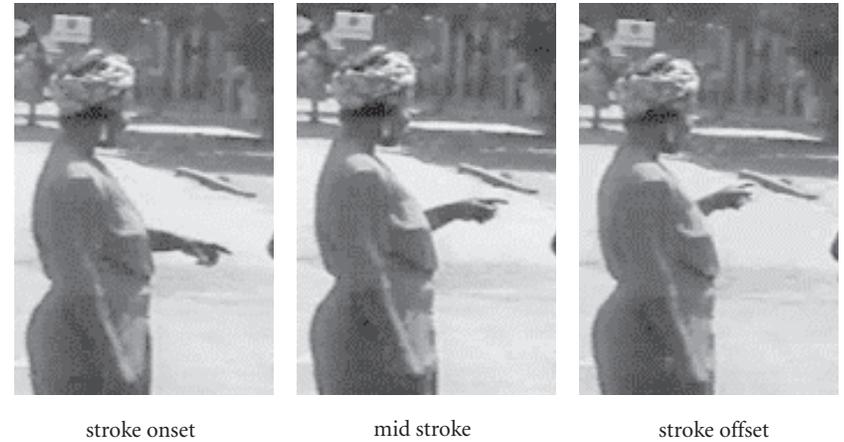
stroke onset      mid stroke      stroke offset

**Figure 12.** Gesture 4 in Example 2.



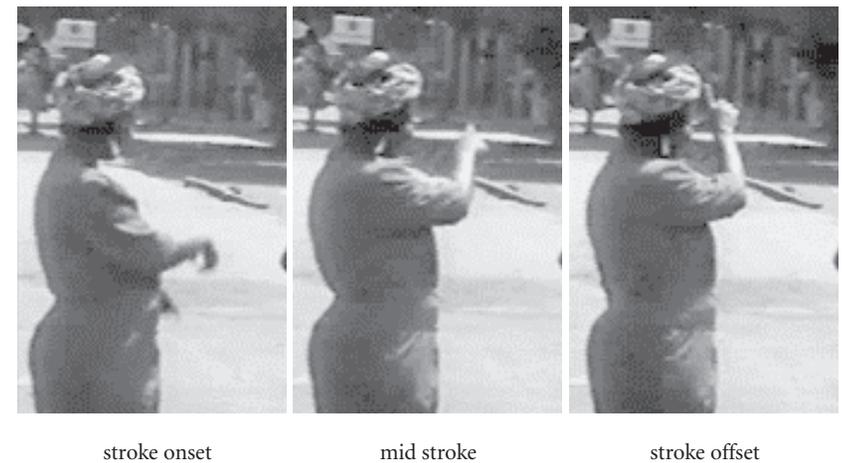stroke onset      mid stroke      stroke offset

**Figure 13.** Gesture 6 in Example 2.

that a taboo-defying gesture could cause major social damage (cf. newspaper article on the alleged violence of the air force officer, mentioned earlier). Were there other motivations that outweighed the potential danger and urged her to use the left-hand in gesture 3?

This leads to the possibility that the speaker may sometimes take advantage of the embodied nature of the underlying conceptual representation. In other words, is it possible that, when faced with a choice between LEFT and RIGHT,

where there could be some confusion, the speaker evokes a left-handed direction indication to facilitate the planning of an utterance? (See Kita, to appear, for another line of evidence for this idea). In Example 2, there was no overt indication that the speaker was having difficulty with choosing the concept LEFT. However, one could argue that the choice between LEFT and RIGHT is always a challenge for the speaker to a certain degree.

The following Example is a case with a clear speech dysfluencies before the word "left". At the end of the first line, the speech dysfluencies occurred. A right-hand had been moving up forward and slightly to the left, which apparently was about to become a pointing gesture to the left, but it was interrupted prematurely during its preparation phase. As the speaker resumed speaking after a short pause, the left hand performed a semi-pointing (gesture 3). This semi-gesture was immediately followed by a right-handed pointing gesture to the left (gesture 4) as well as the phrase "to the left". This sequence of events is consistent with the idea that the speaker sometimes *uses* left-handed gesture to zero in on the embodied concept LEFT when the word "left" is desirable in the discourse.

(Example 3)

```
LH      *G1*********
RH                      *G2*******************>
     Aha,  ke  è-ga     ye-ha [short silence] (80–120 msec)
     Well, then 2SG-REP 3SG-too
     'Well, then you will that [Rose Pavilion] too,'

LH      *G3**
RH   *___**G4***************____>
     è-ga-to        ge   ɖe  mia me
     2SG-REP-pass PROSP ALL left in
     'you will go again to the left,'
```

(This utterance has a clear intonational break from the previous utterance)

Gesture 1: Left hand, semi-pointing (see Figure 3), and retracts towards the resting position.

Gesture 2: Right hand, a pointing gesture to the left-front, interrupted and held (see Figure 4).

Gesture 3: Left hand, semi-pointing. The left hand moves forward on the left side (see Figure 14).

Gesture 4: Right hand, rises up to the face-height and points to the front-left direction (see Figure 15).

pointing onset                    pointing offset (apex)

**Figure 14.** Gesture 3 (left hand, semi-pointing) in Example 3.



stroke onset          mid stroke          stroke offset (apex)

**Figure 15.** Gesture 4 (right hand) in Example 3.

```
RH   _____*G5*************_____
     [emia me] ee  ne   è-yi ɖe tɔkɔ    gome    aleka ko-a,   ne
     [left  in] yes when 2SG-go ALL lagoon direction thus  just-TP when
     'when you go in the lagoon direction like this,'
```

Gesture 5: Right hand, rises even higher and points to the same direction, and holds

## 6.    Summary and discussions

The taboo on using the left hand to point with when giving directions (acknowledged by the majority of the people interviewed in this study) leads to some characteristic features of the Ghanaian pointing practice. (1) Pointing with the left hand is less likely. (2) When the left hand indicates a direction, the gesture is often reduced in size and performed in the periphery. Some gestures are made in such an inconspicuous way (i.e., "semi-pointing") that they no longer count as gestures for the purpose of taboo. (3) There is a conventional respect position for the left hand in face-to-face interaction. (4) Pointing by the right hand can be "hyper-contra-lateral" when the target is to the left or left-back. (5) There are conventionalized bi-manual pointing gestures.

Semi-pointing highlights the existence of folk definition of gesture for the purpose of the left-hand taboo, and the folk definition is not necessarily the same as the definition by researchers or by members of other cultures. Clear meta-awareness of what counts as gesture has also been reported elsewhere. For example, Wilkins (to appear) reports that people in the Arrernte speaking community, an Australian Aboriginal community, have a clear sense of the distinction between two types of pointing gestures: the ones that belong to gesture, and others that belong to the local sign language, which is routinely used by hearing members of the community (see Kendon, 1988, for detailed description of such sign languages in other Aboriginal communities). Folk definitions of gestures in different cultures would be an interesting area for further investigation, as Kendon (1981) has pointed out.

Despite all the above mentioned influences on Ghanaian gestures, the taboo does not lead to the total inhibition of direction indication by the left hand. This situation allows us to investigate the embodied nature of the underlying concept for the word, "left". For the taboo-acknowledging consultants who used the word "left" in their route directions, left-handed direction indication is strongly associated with uttering of the word, "left". More specifically, slightly before the word "left", the left hand becomes gesturally active. This supports the idea that the underlying concept for the word, "left", has an embodied representation, and a body movement can activate this concept. We have also discussed an example in which a long sequence of right-handed pointing gestures was broken by a taboo-defying left-handed pointing gesture, which happened to synchronize with the first and only mention of the word "left" in the route direction. Furthermore, we discussed an example, in which a speech dysfluency seems to have triggered a semi-pointing gesture by the left hand,

which in turn is followed by an utterance containing the word "left". Though these observations cannot be conclusive in any way, they open up the possibility that the speaker can use body movement to facilitate the planning for speech production (see Kita, to appear, for another line of evidence from similar route direction data, and see Kita, 2000a, 2000b, for a survey of related views concerning self-oriented functions of gestures). If this idea holds, then we are seeing a subtle equilibrium achieved by the Ghanaian gesture practice, in which the cognitive urge to move the left hand penetrates through the cultural norm, but only to the extent that the reduced gestural morphology minimizes the potentially damaging social effect.

### Notes

1.  It is possible that in some cases the intended recipient is the gesturer him/herself. Later in Section 5, we discuss the possibility that people may sometimes use gesture to facilitate the access to an embodied concept, as part of their conceptual planning for speaking.

2.  Bi-manual direction-indicating gestures are commonly used among fisherman in order to direct the boat from the shore. In our corpus, only two consultans performed bi-manual direction-indicating gestures. A further study is necessary to document how wide spread they are in non-fishing situations.

### References

Brugman, Hennie & Sotaro Kita (1995). Impact of digital video technology on transcription: a case of spontaneous gesture transcription. *KODIKAS/CODE: Ars Semiotica, An International Journal of Semiotics,* 18, 95–112.

Ekman, Paul (1985). *Telling lies: clues to deceit in the marketplace, politics, and marriage.* New York, London: W. W. Norton & Company.

Gibson, James J. (1986). *The ecological approach to visual perception.* Hillsdale, New Jersey and London, Lawrence Erlbaum Associates.

Goffman, Ervin (1963). *Behavior in public places.* New York: The Free Press of Glencoe.

de Jorio, Andrea (1982/2000). *Gesture in Naples and gesture in Classical Antiquity*. Translated by Adam Kendon. Bloomington and Indianapolis: Indiana University Press.

Kendon, Adam (1972). Some relationships between body motion and speech: An analysis of an example. In Siegman, Aaron W. & Benjamin Pope (Eds.), *Studies in dyadic communication*, (pp. 177–210). Elmsford, New York: Pergamon.

Kendon, Adam (1981). Introduction: Current issues in the study of "nonverbal communication". In Adam Kendon (Ed.), *Nonverbal communication, interaction, and gesture* (pp.1–53). The Hague, Paris, New York: Mouton.

Kendon, Adam (1988). *Sign languages of Aboriginal Australia*. Cambridge: Cambridge University Press.

Kita, Sotaro (2000a). How representational gesture helps speaking. In David McNeill (Ed.), *Gesture and language* (pp. 162–185). Cambridge: Cambridge University Press

Kita, Sotaro (2000b) Hito wa naze jesuchaa o suru noka [Why people gesture?]. *Ninchi-kagaku [Cognitive Studies]* 7, 9–21.

Kita, Sotaro (to appear). Interplay of gaze, hand, torso orientation and language in pointing. In Sotaro Kita (Ed.), *Pointing: where language, culture, and cognition meet*. Mahwah, NJ: Lawrence Erlbaum Associates.

Kita, Sotaro, Ingeborg van Gijn & Harry van der Hulst (1998). Movement phases in signs and co-speech gestures, and their transcription by human coders. In Ipke Wachsmuth & Martin Fröhlich (Eds.), *Gesture and Sign Language in Human-Computer Interaction, International Gesture Workshop Bielefeld, Germany, September 17–19, 1997, Proceedings* (pp. 23–35). Lecture Notes in Artificial Intelligence, Volume 1371. Berlin: Springer-Verlag.

McNeill, David (1992). *Hand and mind*. Chicago: University of Chicago Press.

Sarpong, Peter (1974). *Ghana in retrospect: some aspect of Ghanaian culture*. Tema: Ghana Publishing Corporation.

Wilkins, David (to appear). Why pointing with the index finger is not a universal (in socio-cultural and semiotic terms). In Sotaro Kita (Ed.), *Pointing: where language, culture, and cognition meet*. Hillsdale, NJ: Lawrence Erlbaum Associates.

## Authors' addresses

Sotaro Kita
Max Planck Institute for Psycholinguistics
P.O. Box 310
6500 AH Nijmegen
The Netherlands
http://www.mpi.nl/world.persons/
profession/kita.html
E-mail: kita@mpi.nl

James Essegbey
Center for Linguistics 2e gs
Faculteit Letteren
Univ. of Leiden
The Netherlands
E-mail: essegbey@let.mail.leidenuniv.nl

## About the authors

**Sotaro Kita** received his Ph.D. in linguistics and psychology from the University of Chicago in 1993 for the dissertation titled "Language and thought interface: a study of spontaneous gestures and Japanese mimetics". Since then he has been working at Max Planck Institute for

Psycholinguistics, in the Netherlands, where he is currently a Senior Researcher. His main research interests are cognitive psychological, interactional, and ethnographic studies of the relationship between speech and spontaneous gestures. His research interests also include conversational analysis, semantics and pragmatics of spatial expressions, and cross-linguistic studies of spatial conceptualization.

**James Essegbey** held a Ph.D. fellowship at the Max Planck Institute for Psycholinguistics in Nijmegen from 1995–1998 where he investigated the semantics and syntactic behaviour of verbs in Ewe. This formed the basis of his dissertation entitled "Inherent complement verbs revisited: towards an understanding of argument structure constructions in Ewe" (Ph.D., 1999, Leiden University). He is currently working on verb semantics in the Gbe languages of West Africa and their relation to the languages of Suriname, within the research project entitled, Transatlantic Sprachbund. The project is funded by NWO (the Dutch National Science Foundation) and Professor Pieter Muysken's Spinoza fund. Essegbey's research interests lie in syntax, semantics, cognition and culture, and their interrelationship.