

Precision in gestures and words

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Abstract

This paper investigates the notion of precision in cognition and communication, it overviews the gestures conveying precision analysed in the literature on multimodality and provides an analysis of the precision gesture of the *beak* in a corpus of oral university examinations. Based on a corpus of transcribed Italian real speech, a linguistic analysis is also proposed of the *beak*’s lexical affiliates (the adverbs *esclusivamente*, *proprio*, *appunto*) and of their possible meanings.

Keywords: multimodal communication, precision gesture, vagueness.

Introduction

When we talk to other people, as well as informing them about the topic we are dealing with, we also inform them about the level of certainty or uncertainty, specificity or precision of what we are saying, and the logical relations we establish between pieces of information we are conveying. The need to inform others about our level of precision stems from Grice’s (1975) norms of quality and quantity, which impose us not to tell more or less than what is relevant, determining therefore the threshold of precision we should stick to. According to Vincze & Poggi (2011), when we keep below the required level of information – either because our knowledge is in itself vague or because, although we could go into detail, we do

not want to – we may choose to meta-communicate that we are being vague, i.e. to signal our vagueness to the interlocutor, through verbal and/or bodily signals of vagueness. In a corpus of Swiss political debates, of oral university examinations and of narratives of dreams two qualitative observational studies (Vincze & Poggi 2011; Vincze et al. 2012) analysed the gestures through which a Sender meta-communicates that s/he is being vague and the reasons why s/he is so (e.g., for the sake of euphemism or because information is redundant or not novel for the interlocutor), while also finding out their recurrent features (easy handshape, curve and fluctuating movement trajectory, low tension), all bearing a morpho-semantic value of looseness.

But if when we are vague we remark our vagueness, in the same vein, as we consider that details are particularly important to our discourse, we may keep ourselves above the required precision and we may meta-communicate our goal of being more precise.

In this work we present a study on some precision gestures and their lexical affiliates: the gestures and the concomitant lexical items conveying that the Speaker is being or wants to be precise. After defining the notion of precision from a cognitive and communicative point of view (Sect. 2) we overview those gestures conveying precision which have been distinguished in previous research in gesture literature (Sect. 3), then we provide a semantic analysis of a specific precision gesture, the *beak* (Sects. 4-7) and of its corresponding Italian lexical affiliates *esclusivamente*, *proprio*, *appunto*) (Sect.8).

What is precision? Precise knowledge, precise communication

We define *precision* as a property of knowledge thanks to which, while thinking of a given topic, one has beliefs about each single aspect of it. Therefore, when speaking of precision we may refer both to how some topic, concept or notion is represented in our own mind (for instance, with clear-cut boundaries and vivid details) and to how this topic, concept or notion is phrased in our discourse (for instance, by setting apart sub-topics and clarifying discourse structure): we may be either precise or imprecise in communication.

Precision differs from *specificity* because specificity dwells in the field of definition, of recognizing entities and assigning them to classes, while precision belongs in the field of description, that is, it pertains to the goal of having (and consequently, possibly providing) a more thorough knowledge of a single entity. In terms of cognitive structures, definition is more an aspect of semantic memory, while description is one of episodic memory.

But how do we communicate that we are being precise, that we are going into more detail in what we are saying? We may do so by verbal expressions like English “*precisely*” or Italian “*per la precisione*”, but also by bodily signals: for example I may *squint eyes* to convey that I am picking up a very specific detail of the topic dealt with, or I may perform various types of gestures.

Precision gestures

Previous works have already dealt with the issue of gestures conveying precision. Morris (1977:58) noticed that the *precision grip* gesture is typically used when “the Speaker wants to express himself with delicacy and with great exactness, while his hand emphasizes the fineness of the points he is stressing”.

Kendon (2004), in his analysis of pragmatic gestures, investigates two gesture families which in certain contexts of occurrence convey the concept of precision. The first one is the family of the *grappolo* hand-shape or *purse hand* (the same hand-shape of *purse hand* in Morris et al. 1977, *finger bunch* in Kendon 1995; *tulip hand* in Poggi 2007), where the *palm is upwards with all the fingers brought together so that their tips are in contact*. In the second gesture family only the *thumb and index fingers are put into contact at their tips* and are held in such a way that a *roughly circular space* is maintained between them. This is the so-called *ring* gesture. Both families, from then on called by Kendon the G-Family and the R-family, respectively, are investigated in terms of their parameters, meaning and contexts of use.

As far as the G-family is concerned, Kendon (2004) singled out four different but closely related gestural expressions that use this hand shape:

- A. The hand closes to *grappolo* from a partially open pose to seize a topic which is to become the focus of attention as a clarification for another’s puzzlement or as a specification of something; the hand is drawn in towards the Speaker.
- B. The hand, in the *grappolo* pose, oscillating upward and inwards towards the Speaker several times, conveys an undermining of Sender’s expectations and a request for further explanations from Speaker. This is the famous *mano a borsa* or *tulip hand* analysed in depth by Poggi (1983, 2007).
- C. *grappolo* opens to a hand shape in which the fingers are extended, to mark the topic-comment distinction. The *closure-to-grappolo* is associated with mentioning the topic, while the *grappolo-to-open* is associated with the comment.

D. the *grappolo* hand is sustained in a vertical position and moved downwards vertically to convey the idea of essence, core or heart of something (Kendon 2004: 229-238).

As Kendon himself notices, the first three expressions are closely related to one another (they are a family in fact) and the “action motif they all share is that of holding on to something and making it prominent for the attention of the other” (Kendon 2004: 236).

The gestures of the second gesture family, the R-family, are used in a context where the Speaker is indicating that he means to be very precise about something, that what he is saying is ‘exact’ in some way, and that it demands special attention for this reason. (Kendon 2004: 228).

The two gesture families are in fact related but different at the same time: while both of them seize or grasp something, the ring gesture also picks up, it extracts a specific object from a different group of different objects (Kendon 2004: 240).

As far as the gestures from the R-family are concerned, Kendon singled out three patterns of use, all sharing the semantic theme of “making precise”. These gestures occur in conjunction with spoken expressions that quote proverbs or describe exact facts or figures or clarify an idea or opinion that the Sender believes has not been completely grasped by the listener. Ring is also associated with insistence from the Sender’s side: he insists on expressing his own opinion, possibly in disagreement with that of his interlocutor.

In her analysis of the French politician Lionel Jospin’s multimodal communication, Calbris (2003) also focuses, among other gestures, on precision gestures. Precision is, according to her, a symptom of implication : «a person who is implicated in what s/he is doing can’t afford a superficial and nonchalant approach. S/he studies the issue in depth and in all its details» (Calbris 2003: 116 our translation).

Calbris agrees with Kendon on the meaning and context of use of the fourth expression of the *finger bunch* (in Calbris called *la pyramide*) and of the *ring gesture* (that she calls *le rond*).

To Calbris as well, the *finger bunch* or *pyramid* conveys the condensed, the quintessence of something that the opening of fingers is going to set free so that the listener can discover it. But in addition to Kendon's view, according to Calbris, the *pyramid* can also emphasize the particular character of the mentioned thing and it is evocative of precision thanks to the very position of the palm: closed and hiding a secret content about to be revealed.

As far as the *ring* is concerned, for Calbris (2003) too, the ring is a symbol of precision and even rigour (possibly, moral rigour too).

Besides the *pyramid* and the *ring*, Calbris (2003) analyses a series of other gestures that convey the meaning of precision. One of them is the *frame* (*le cadre*): *open hands with palms facing each other and fingertips forward* as if holding and touching the sides of a box, to represent delimiting, bordering the concepts one is talking about. The *frame* is a polysemic gesture, it can have various meanings, such as: an open space limited by lateral borders (pathway); a bordered field of action (boundary marking); a defined object held between the palms of the hand; or an objective we aim at (Calbris 2003: 86-89). Moreover, according to the context, besides setting boundaries and limitations, the gesture of the frame can also metaphorically signal the path or an objective, a goal of the Speaker. A very precise and constrained one, we should add.

Another precision gesture is *les pincers* (the *pincers*): *thumb and index touching*, with the rest of fingers closed in the palm, as if holding something very subtle.

According to Calbris (2003), the *index*, if *raised*, is also a gesture that can contribute to generating precision. Although the *index* itself cannot seize an object, as the other precision gestures can, it nonetheless has a role in precision by announcing it.

As Calbris notices, all these gestures in their parameters (hand orientation, movement, finger position, direction of movement) have something that reminds us, listeners-viewers, of concepts related to precision (either precise borders: as the gesture of frame (fr. *cadre*) does; or pinpointing precise details: as the gesture of pincers does). In fact, very often these gestures occur in correspondence to matters which require high precision, such as when numbers or other quantities are announced (the *frame* gesture for instance).

The relationship of precision gestures to precision can be physically explained by the fact of pointing or holding a little element: such as pointing a small element by the tip of the five fingers united in a *reversed pyramid* or by the index finger; or holding a very little element between the five reunited fingers (*pyramid* or *finger bunch*) or between the two fingers of the pincers (in a *pincer* gesture) or even between the tip of the nails (the *ring* gesture) (Calbris 2003: 126). As Calbris adds, the figurative process consists in recalling the size of different objects by mimicking their holding.

Finally, another pertinent study is Lempert's (2011). This study investigates Barack Obama's precision gestures. He calls Obama's ring gestures *precision grips*, therefore mixing up Kendon's two different categories of "ring" and "precision grip". According to Lempert, ring-precision grips indicate the focus of discourse, but they have also undergone a degree of conventionalization and acquired the performative meaning of "making a 'sharp', effective point", thus finally reflecting

this image to the Speaker who uses them and who starts to be perceived by the audience as “*being argumentatively sharp*” (Lempert 2011: 3).

From the *finger bunch* to the *pyramid* and the *beak*

From the above overview it seems that Kendon’s *finger bunch* conveys, according to its type: focus of attention or clarification (type A); request for further explanations from Speaker (type B); the essence, core or heart of something (type D); it makes the distinction between topic and comment (type C). Although Kendon (2004) mentions the *finger bunch* in the category of precision gestures (together with the *ring*), the *finger bunches* he mentions convey concepts similar to clarifying (such as focusing on some element to clarify it, or to comment on it) and not to precision *per se*.

It is the *ring* gesture which bears the meaning of precision proper according to Kendon (2004).

At a first sight, from Calbris’ description of the “*pyramid*”, this gesture might look equivalent to Kendon’s “*finger bunch*”; however, there are several differences in the two gestures in both shape and meaning.

Although it has the same configuration (joint fingertips) as Kendon’s *finger bunch*, Calbris’ *pyramid* is nonetheless different as far as the *direction of movement* is concerned. Calbris’ *pyramid* moves downwards while Kendon’s first three types of *finger bunch* move upwards (sometimes oscillating up and down, like in Poggi’s 2007 *tulip hand*) or towards the Speaker. Only the direction of movement of the fourth type of *finger bunch* (D) is vertical downwards.

In Kendon’s *finger bunch*, the direction is therefore generally from the point (fingertips) to the base (palm), while in Calbris’ *pyramid* it is generally in the direction of the point: the joint fingertips may repeatedly touch a surface (e.g., a desk or table), or the palm of the non dominant hand, or anyway beat somewhere like the “beak” of a bird pecking food.

Second, *palm orientation* is different in the two gestures: upward in the *finger bunch*, while in the *pyramid* it is downward or toward the beaten hand or other surface. Calbris’ *pyramid* is reversed, with fingertips pointing downwards.

This difference in the physical parameters of gestures recalls a difference in the underlying ideas. In the *pyramid*, the direction of movement goes from the whole to a single part, from the base of the pyramid (an extended surface) to a focal point, while Kendon’s *finger bunch*, even in its fourth type (Type D) is a “pyramid” standing in its prototypical position, tip of fingers upwards and foundation downwards, and moreover going towards the base, towards the foundation of the pyr-

amid, the essence of things. By contrast, in Calbris' *pyramid*, its tip which is formed by joint fingertips metaphorically represents the holding of a single very subtle thing, hence one's going into details. The tip of the pyramid allows us to point precisely at one single, possibly fine or small thing or part, by singling it out of the others, separating it and looking at it in separation to everything else.

Going towards the tip as opposed towards the base is a metaphor of two opposite cognitive operations: to go to the fundamentals of something you have to abstract from specific aspects, while if you focus on specific aspects, you single out some points within a surface, without going in depth.

As witnessed by expressions like *basically, in essence, in substance*, when you want to go to the core of a concept, phenomenon or entity you have to be synthetic and prune it from its specific aspects; on the contrary, when you want to be specific you have to see its specific aspects and distinguish them from each other, see the differences more than similarities, while necessarily losing something of the global view.

In this work we focus on a specific gesture of precision, Calbris' *pyramid*, but seen only in its uses with direction of movement downward or toward the other hand or a surface: the *reversed pyramid*. As Calbris mentions, if the pyramid is reversed, and the tip of the fingers points downwards, the meaning of the gesture is that of a restricted element, a particular object, a prototypical example (Calbris 2003: 118). To distinguish it from other possible *pyramids*, here we call it the *beak* since it is a gesture similar to a pecking beak that (metaphorically) picks up and points at a small element – a detail – within the topic dealt with. To better understand the meanings of this gesture, below we first analyse some examples of it in a corpus of oral university examinations; then we propose a semantic analysis of its lexical affiliates: the words that accompany it and provide a synonym of it.

Corpus and motivation

We employed two types of corpora in our study: the first one is a corpus of oral university exams in Psychology within the Faculty of Education of an Italian university, while the second is an on line freely accessible corpus of transcribed oral interactions in Italian (Badip corpus).

The former was collected by asking the students' permission to be videotaped while answering the examiner's questions. It consists of 14 videos of 20 minutes each (on average). Analyses were conducted on 6 of these 14 videos. During the

experiment, a total of 38 students were recorded. Students are invited to answer the examiner's questions in groups of two or three.

The latter corpus represents one of the most important collections of transcribed Italian oral interactions. It was collected in four cities: Milan, Florence, Rome and Naples and it contains 496 texts containing a total of approximately 490,000 words.

Oral examinations are a communicative setting where giving an image of clarity and precision in one's enunciation is highly important. The very fact that one is capable of explaining complex matters in a precise and even in a simple, straightforward way, convinces the examiner that the subject has been well assimilated and understood by the student. Being able to explain what one has studied in a clear, precise and concise manner is extremely important especially in a Faculty of Education, a faculty which prepares future primary school teachers.

We assumed therefore that, in this context, students will pay great attention to report what they have studied in a clear and precise way, and also to multimodally highlight the focal points of their enunciation in order to convey the image of a well-prepared student.

Two expert coders conducted an observational analysis on the video recorded corpus of oral Psychology exams and singled out the cases in which the Speaker has the goal of being particularly precise. Those cases were analysed from a multimodal perspective, where both the body behaviour and concomitant speech of the students were taken into account. It is interesting to note that often gestures of precision are accompanied by a verbal expression (word or phrase) that conveys a similar meaning. The verbal expressions accompanying precision gestures in the corpus of oral university examinations (the gestures' lexical affiliates) were extracted. Then a research on the occurrences of these verbal expressions was conducted on the BADIP corpus of transcribed speech interactions. This research was aimed at verifying, in a far larger corpus of transcriptions of oral interactions, our insights concerning the meaning of the gestures through the supposed meaning of the lexical affiliates (see Sect. 8).

Method

We used two methods, "verbal-to-body" and "body-to-verbal". In the former, after finding cases of precision in the verbal transcription we looked for and analysed the co-occurring body signals. But this method highlights only cases where body signals repeat the meaning of words; so in the latter method, without listening to the verbal content, we looked for body signals characterized by morpho-

semantic features of precision, and that only after checking the plausibility of their interpretation in the verbal transcription. For each case, we analysed the body signals of precision in terms of their physical production, their meaning, and the reason for their use.

The meanings of the “beak”

As mentioned by Calbris concerning her *reversed pyramid*, when the tip of the fingers points downwards, the meaning of the gesture is one of a restricted element, a particular object, a prototypical example (Calbris 2003: 118).

In our corpus of oral exams we found around fifty occurrences of the reversed pyramid or *beak*. As our data also indicates, the most typical meaning of the *beak* is one of quantitative restriction: you narrow the referent to a restricted class of objects or concepts, until such restriction finally ends up, in some cases, by singularizing or focusing on a unique example of that class. Let us consider an example.

(1) n. 0051

7.43 *perché nel nostro centro insomma ci sono persone* [right hand in beak shape points onto the table, first it only touches it, then it draws a circle on the table] *con livelli di dislessia*, [beak points onto the table] *discalculia* [beak moves to right pointing onto the table in a slightly different point]

(because in our center [for speech pathologies] to sum up there are persons [right hand in beak shape points onto the table, first it only touches it, then it draws a circle on the table] with levels of dyslexia [beak points onto the table], dyscalculia [beak moves to right pointing onto the table in a slightly different point]).

Here the student first *points onto the table* with *right hand in beak shape* while uttering *persone* (persons). The *beak* then *draws a circle onto the table* iconically representing the whole center for speech pathologies, with a (restricted) number of people there. Then she starts giving specific examples of the pathologies held by these persons: while saying *dyslexia* she points with the *beak downward*, as if pointing to that (and only that) kind of speech pathology; then she *moves her right hand still in beak configuration slightly to the right*, thus showing that there is another (group of people with another) speech pathology: dyscalculia.

One more case in which the Speaker uses the *beak* to refer to single entities is the following:

(2) n.0051

9.35 *Diciamo a livello mhm* [beak on the table draws a circle] *strutturale esistono diversi* [beak hitting the table three times as if to pinpoint] *tipi diiii... di memoria a secondo delle situazioni* [beak points at 3 points on the table]
(Let's say at a structural mhm level [beak on the table draws a circle] different types oooof... of memory exist [beak hitting the table three times as if to pinpoint] according to situations [beak indicates three different points on the table].

Here the student, while talking of the different types of memory, *draws a circle on the table*: an iconic gesture recalling the concept of “structure”, that is some entity seen as unique, but including/containing several entities in its turn; yet this movement is performed already in the handshape of the *beak*; then immediately the student uses this handshape to *hit the table three times*: a way to indicate (and “locate”, the same way it is done in Sign Languages, see Klima & Bellugi 1979) the different types of memory she is referring to. Then again with the *beak* she *indicates three different points on the table*, now referring to the different situations. What is interesting in this fragment is that she is not locating the various types of memory in the same place as the various situations; but in any case her using the same hand-shape of the *beak* results in a parallelism of three single entities on one side (memories) with three on the other (situations); and each of these entities is singularly indicated by the *beak* shape, which then works as a tool to indicate something precisely.

One more use of the *beak* in locating and later pointing at a specific referent is the following (see Figure 1).

(3) n.0051

09.55 *Però* [right hand in beak shape indicates various points on the table] *tutte queste tipologie praticamente avvengono seguendo un processo che si può che potrebbe essere tripartito è divisibile appunto* [beak] *in codifica* [beak] *immagazzimento* [beak] *immagazzinamento* [beak was ready to move onto another point but goes back to the point pointed at previously on the table] *e recupero* [beak].

(Yet [right hand in beak shape indicates various points on the table] all of these typologies actually occur following a process that can that could be split into three, it is divisible in fact [beak] into coding [beak] storing [beak] storing [beak was ready to move onto another point but goes back to the point pointed at previously on the table] and retrieval [beak])

The student first indicates various points on the table to refer to the various stages of memory: she is in fact distinguishing three types of memory process, so she uses the *beak* to point to three points on the table. However, when mentioning the stage of “immagazzinamento” (storing), she does not correctly utter the

word, but skips a syllable (*immagazzimento* instead of *immagazzinamento*). She therefore utters the word for a second time, this time correctly. While uttering the seven syllable word in the wrong manner, she realizes she committed an error and although her right hand in the position of the *beak* had already started the movement to point at a third point on the table (i.e. the third memory process: retrieval), coherently enough, with the *beak* she goes back to the point representing the second process, already previously pointed to, and points to it again while correctly pronouncing it. This gesture, as well as again demonstrating the device of locating the referent, shows that the *beak* is a way to select a single entity while precisely distinguishing it from others.

That the *beak* means restriction to a smaller and determined quantity of entities is also confirmed by concomitant words conveying the same meaning. Like in the following examples (For an illustration of example 4 and 5, see Figure 2):

(4) n. 0046

01.38 *Questa imbecillità non è diciamo destinata [beak] esclusivamente [beak] a una cerchia ristretta di persone, ma anzi è diffusa in tutta la società.*

(This stupidity is not, let's say, exclusively devoted [beak] to a restricted entourage of people, but on the contrary it is spread all over the collectivity.

In denying that stupidity is confined, devoted, only to some people within society, the student uses the *beak* while saying “exclusively to a restricted bunch of people”. Both the adverb *esclusivamente* (exclusively) and the expression *cerchia ristretta* (restricted entourage) refer, in fact, to something that is (here denied to be) owned only by a very small number of persons.

It is interesting to notice that just a minute later, the student repeats the same concept – though paraphrasing it – and performs the gesture of the *beak* again.

(5) n.0046

2.30 *L'imbecillità quindi l'imbecille tipico non è esclusivamente appartenente [downward beak] ad una specific [beak closing and opening again] classe sociale*

(Stupidity therefore the typical stupid does not exclusively belong [downward beak] to a specific [downward beak] social class)

Here the *beak* accompanies (and is congruent with) the concepts of “exclusively” and “specific”.

Sometimes precision gestures can occur immediately after gestures indicating vagueness, as if they are intended to compensate for them. Precision gestures have

the role of lowering the level of vagueness by going into detail and better describing the vague concept. An interesting example is the following:

(6) n.0051

8.53 *c'è una ragazza ambidestra, di questo non se ne parla nel libro. Pare che abbia problemi [vagueness gesture] con la temporalità [vagueness gesture] e quindi con le successioni [beak] e con la memoria [beak]*

(There is an ambidextrous girl, this is not mentioned in the book. It seems that she has problems [*vagueness gesture*] with temporality [*vagueness gesture*], and therefore with successions [*beak*] and with memory [*beak*]).

While talking about this girl's problems, the student performs oscillating, fluctuating vagueness gestures (see Poggi & Vincze 2011; Vincze et al. 2012), since at that time the Speaker still has not decided to get into the details, to mention the girl's specific problems. While stating one of the girl's problems, temporality, her hand in *finger bunch* configuration, with *tip of fingers laterally positioned*, iconically picks up a problem from the possible series of problems and releases it. The precision gesture occurs when she goes into even more details and explains what she means by "temporality problems". The hand in *beak shape* with *tip of fingers downwards points on the table* while uttering *successioni* (successions). Another *beak touching the table* occurs while uttering the word *memoria* (memory). We see therefore how the girl's specific problem is her not being able to situate events in time.

The lexical affiliates of the "beak"

As mentioned above, the gesture of precision often accompanies and highlights a verbal expression (word or phrase) that conveys a similar meaning: its lexical affiliate (Hadar & Butterworth 1997). Since studying the lexical affiliates of the "beak" may help understand its meaning more in depth, here we propose a semantic analysis of the lexical affiliates of the beak in our corpus of oral university examinations. In order to undertake this analysis, we rely on a corpus of transcribed Italian speech, namely, Badip (Banca Dati dell'Italiano Parlato).

1. Esclusivamente. A first lexical affiliate of the *beak* is *esclusivamente* (exclusively), which again restricts to only one entity, or only one class of entities, as in

(7)

"Ci sarà un avvenimento sportivo intervallato da brani **esclusivamente** jazzistici!"

(There will be a sport event spaced out by exclusively jazz pieces).

2. Proprio Another Italian lexical affiliate of the “beak” is the adverb *proprio* (just, right). This word has at least four meanings:

Firm assertion. The first meaning is one of high certainty, cognitive commitment and categorical claim, such as

(8)
"Non riesce **proprio** a tirar fuori quello che è il concetto"
(She is *definitely* not able to extract the concept).

Here *proprio* (somehow equivalent to Eng. *definitely*) means that the Speaker is claiming something with high certainty and force.

Intensification. Another meaning is to intensify some quantity or intensity, like

(9)
"Fa **proprio** freddo"
(It is really cold, it is particularly cold).

Specificity. Sometimes *proprio* corresponds to “precisely”, “exactly” that one, like in this example.

(10)
"Ma questo sarebbe in fase di di di legislazione **proprio** quando s'è fatta la legge"
(But this should be in the phase of legislation, *right when* the law has been drafted).

Here the Speaker wants to restrict to a particular time (*proprio quando* = exactly when) within a range of possible times: he is in fact being more specific and precise. In this case too,

(11)
"Non so se riuscirò a rispondere **proprio** a questa domanda"
(I don't know if I'll be able to answer this *very* question),

within the various possible questions asked (questions A, B, C, D) the Speaker is restricting to one in particular: just A, the very question A.

Matching. In the fourth meaning, *proprio* conveys a matching between a presupposed and an asserted entity: the mentioned entity exactly coincides with one that was expected or looked for.

(12)

"*Eh lo so ma io mia figlia non l'ho potuta mandare **proprio** per questo*".

(Oh I know my daughter I could not send her *precisely* for this reason).

Speaker and Interlocutor are talking about an event A, and since the Speaker is questioned about the reason for the event B (that the Speaker could not send her daughter), she says that the reason for B is “right” (i.e. is precisely) A.

One more example:

(13)

"*Radio Incontri serve **proprio** alla alla bisogno delle delle del conforto nel nel fare compagnia a persone che in questo momento possono essere sole*"

(Meeting Radio is of of use *just* for for consolation of those people that in this moment may be alone).

People are talking of the need for people not to feel alone (A), and the Speaker says that the very function B of Meeting Radio is exactly A.

Out of these four meanings of *proprio*, the beak corresponds to the last two. These cases both imply a presupposition: in case 3, “specificity”, it is presupposed a small number of things (various times, various questions), and *proprio* is used in asserting which of them is chosen; in case 4, “matching”, there is not a choice among various entities, but a single entity is found to exactly match with a presupposed other.

The “*beak*” can typically accompany these two uses of *proprio*, and not others.

3. Appunto. *Appunto* (Engl. in fact, precisely) shares the meaning of “precisely” with *proprio* and in the following example the two adverbs are interchangeable.

(14)

"***Appunto** per questo ti ho fatto venire*" or "***Proprio** per questo ti ho fatto venire*".

(I made you come precisely for this reason).

Unlike *proprio*, *appunto* can stand as an energetic confirmation of the interlocutor's contribution. It reiterates the concepts just mentioned by insisting on them. Here it has the meaning of the English expression *in fact*.

(15)

"Sì, **appunto** se ne parlava anche con l'altra ragazza"

(Yes, *in fact*, we were talking about it with the other girl too).

Appunto can be accompanied by the *beak*. Let's look again at example (3) where the student performs a beak while uttering the adverb *appunto*.

(3) n.0051

09.55 *Però* [right hand in pyramid indicates various points on the table] *tutte queste tipologie praticamente avvengono seguendo un processo che si può che potrebbe essere tripartito è divisibile appunto* [pyramid] *in codifica* [pyramid] *immagazzinamento* [pyramid] *immagazzinamento* [pyramid was ready to move onto another point but goes back to the point pointed at previously on the table] *e recupero* [pyramid].

(Yet [right hand in pyramid indicates various points on the table] all of these typologies actually occur following a process that can that could be split into three, it is divisible in fact [pyramid] into coding [pyramid] storing [pyramid] storing [pyramid] was ready to move onto another point but goes back to the point pointed at previously on the table] and retrieval [pyramid])

The student's uttering the adverb *appunto* is a way of insisting on her affirmations, a way of emphasizing the correctness of her previous assertions, conveying at the same time certainty in what she is stating. *Appunto* here can be seen as carrying the meaning of "as I was saying...".

Appunto therefore can both specify something and insist on the reliability of the Speaker's affirmations.

Conclusions

This work has focused on the precision gesture of the *beak* (a type of reversed pyramid) in a set of recordings of oral university examinations. This gesture conveys a meaning of quantitative restriction, narrowing the referent of concomitant speech to a restricted class of objects or concepts and finally ending up, in some cases, in singling out and focusing on a unique example of that class. In its deictic function too, of locating and later pointing at a specific referent, it restricts the fo-

cus to a small and determined quantity of entities and finally picks up a single entity while precisely distinguishing it from others.

By analyzing the lexical affiliates of the *beak*, we found that it is often concomitant to words conveying meanings like “exclusively”, “specific”; its meanings correspond to the Italian words *esclusivamente*, that also restricts to a single entity or class of entities; to *proprio* in its meanings of specificity and of matching between a single presupposed entity and an asserted entity to which it exactly corresponds (somewhat synonymous of “precisely” or “exactly”); and to *appunto*, an energetic confirmation of the interlocutor’s contribution that emphasizes the correctness of a previous assertion by enhancing its certainty and insisting on it.

All precision gestures have the role of lowering the level of vagueness by going into detail and better describing a concept. In addition to this, all uses of the *beak* convey a semantic core of something singular, in some cases possibly belonging to a class of other similar things, but such that the Speaker can perfectly distinguish them and consider each worth being pointed at singularly.

In general the *beak*, like other precision gestures, is characterized by physical features – and their consequent morpho-semantic nuances – that systematically contrast with those of vagueness gestures: 1) high muscular tension, as opposed to the typically loose hands of vagueness gestures conveys a meaning of concentration and focused attention of the gesturer, that is transmitted to the Interlocutor as a request for attention; 2) straight and precisely targeted direction of movement, as opposed to the wavy movements conveying vagueness, bears a morpho-semantic feature of punctuation, of aiming at single points – and small points, details – within the object of discourse; 3) within the hand shape, contact between fingers, as opposed to the open hand in gestures of vagueness, conveys a morpho-semantic feature of grasping, of picking up a single object, worth catching because it is relevant; 4) the very pointed shape of the *beak* by itself performs an act of focusing and concentrating on a single object, on the one side asking for the Interlocutor’s attention, but at the same time implying that the Sender is him/herself in first place capable of such concentration and careful conceptual distinction. In this, in the same way as Lempert’s (2011) observations about Obama’s *precision grip*, the *beak* too attributes a general nuance to its Sender as someone who is “precise” himself, thus becoming a self-presentation device (Goffman 1959) to show the image of a person who is up to the point, lucid, systematic.

According to a model of persuasion (Poggi & Vincze 2008) that views the persuasive effect of a Speaker’s multimodal communication as due to all three Aristotelian categories of *logos* (rational argumentation), *pathos* (the appeal to the Audience’s emotions), *ethos* (the Speaker’s character of the Orator), a gesture of this kind, when used in an argumentative context, will not only provide metadiscursive

information concerning the level of precision one is sticking to, but also project a particular *ethos* of the Speaker as a competent and reliable person, enhancing his credibility and respectability: if the precision of the content conveyed reverberates on the precision of the Speaker as a whole, what s/he says should be taken more seriously.

Of course, if this holds for a persuasive context, it may also hold for a situation – like an oral examination – that at the same time aims at informative and persuasive goals: to expose some contents in such a way as to induce a certain (positive) evaluation in the teacher. Thus the student by using the *beak* can give an image of him/herself as a systematic and precise person. This again shows us the multifunctionality of gestures in multimodal communicative interaction.

Our future investigation will be widened and deepened by quantitative analysis on other gestures of precision and vagueness in different kinds of interaction, trying to give a better insight of the cognitive and social processes underlying gesture use in different social situations.

Figure 1. *Sequence of 'beak' gestures with co-occurring speech.*



From left to right: *codifica, immagazzinamento, immagazzinamento, recupero*

Figure 2. 'Beak' gestures with co-occurring speech



(*imbecillità destinata*),

(*non è esclusivamente appartenente*)

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Notes

¹ All the examples in this section are taken from the corpus Badip (Banca Dati dell'Italiano Parlato). <http://badip.uni-graz.at/>

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