Multimodality in native/nonnative interaction: A case of negotiation of/for meaning

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Introduction

The purpose of the present paper is to approach a multimodality in the interaction between adult second language (L2) learner and native speaker, in particular, interaction so-called "negotiation of/for meaning". Although there are several studies both analysing this kind of interaction and thoses investigating in nonnative's gesture, but few analysed negotiated conversation including nonnative speaker in the multimodal perspective (Sotaro Kita, personal communication). Indeed, existing studies on nonnative gesture are theoretical (e.g. Kellerman & Bialystok, 1997), empiric (McCerfferty, 1998; McCafferty & Ahmed, 2000) and contrastive (e.g. Stam, 2000; van Hoof & Kellerman, 2001), but these are in productionist and intra-individual perspective. However, we need also an approach to multimodality in social interaction to work out a comprehensible picture of linguistic approriation phenomenon of second language acquisition (SLA), as some works begin to entreprise it (Kida & Faraco, Forthcoming; Faraco, 2001). At this aim, this paper adotes a Vygotskian conception of linguistic appropriation, that is, social and cognitive development of an individual is realized by an internalization of discourse that (s)he maintains with another in the interaction socioculturally defined by a given situation. It is thereby supposed that intramental activity is mediatized throughby semiotic system at the intermental plane. In addition, approaching a social interaction, gesture somtimes needs to be into consideration. In fact, gesture is, like a language, a semiotic mediation system as well. Now, it seems that contemporary studies on gesture tend to mainly focus on its cognitive aspect. However, in the field of SLA and language learning, social relationship between teacher and learner (or native and nonnative in a contact situation) and its affective consequence are so crucial that it affects approriation activity and process. So, this paper analyses both cognitive and social implication of gesture in learner/native interaction.

Vygotsykian interpretation of negotiation of/for meaning

Vygotsky left influencial works on social and cultural origin of thought through his theory of semiotic mediation of mind. Application of Vygotskian thesis on SLA and bilinguailism is nemerous and various. Retained idea by comtemporary reserchers are :

1) SLA depends on a developmental state of learner's language (zone of proximal development);
2) There is a link between interpersonal use of language and cognitive developement of inner speech (therefore, learner's active participation in interaction is crucial to linguistic appropriation)
3) If SLA develop cognitive aspect of language, this development influence the first language (L1) (e.g. note-taking technique in L1 and L2, see John-Steiner 1985)[1].

However, it seems that Vygotsky is not very clear about an interrelation between concrete settings and discourse forms. His claim on language overwhilingly stresses on word, but other aspects of language ramained not to be analysed enough[2]. To understand such interrelation, several neo-Vygotskian researchers refers to Bakhtin, Russian scholar as well, and his concepts like dialogicality, multivoicedness, heterogeneity, speech genres (cf. Wertsch, 1991, ch. 3, 4, 5). With these concepts, there are studies on reported discourse, inner speech, humour-parody, and socializational interaction between child-caretaker and pedagogical interaction in educational settings like pupil-teacher. The last item would be the most relevant to the analysis of learner/native interaction.

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[1] It seems to me that zone of proximal development was a particularly influential notion in the SLA literature, at least in France (e.g. Vasseur 1993), because of pedagogical interests that involve and this influence was strengthen by Bruner's concept, interactional format. And the point on the linkage between interaction and internalization of language became the requirement of learner's active participation in interaction.
[2] Some authors assigne this fact to his early death.

To illustrate vygotsian and bakhtien interpretation of learner/native interaction, I start off with a typical negotiation of (or for) meaning analysed by SLA scholars (see for review, Gass, 1997; Long, 1996; Pica, 1994, 1996)[3]. A main reason for focusing on the learning sequence or negotiated interaction as a sociocultural setting is that such sequences are centrally concerned with language socialization. Here is an example:

Ex.1 (Faraco & Kida, 1999: 221)

    L :   maintenant j'aime être ici ... j'aime être en France .
            mon qualité de vie est moins vite . et:: j'ai=
    N :   =moins rapide
    L :   moins rapide et j'ai le temps aller à l'école avec mes enfants

        (L: nonnative learner; N: native teacher)

At the first glance, this conversation is an ordinary exchange in L2 classroom: first, the learner does a grammatical error, and the native teacher reacts by a corrective feedback and the learner rectifies his/her own error. A typical account by SLA scholars is that a negotiation by input like this allows the leaner to consciousness-rise about local grammatical problem of his interlanguage, so it is recommended. Then, SLA reseachers discussed on several models of input and interaction. However, although the negotiation of/for meaning is viewed as a co-construction of language socialization process that participants jointly work out, it seems that social dimension is evacuated from discussion on this model.

From the Bakhtinian viewpoint, such interaction involves an important theoretical matter, particularly in the native's feedback. Indeed, it is a specific type of dialogic utterance.

Before analysing this utterance, let me briefly recall dialogicality or multivoicedness or polyphony. For Bakhtin, any utterance contains several voices (namely, enunciators in a contemporary terminology), different from speaking subject. For example, in a reported discourse, there are two enunciators as follows:

    A)   I will be here!

    B)   He said, "I will be here!" (Direct discourse)
    C)   He said enthusiastically that he would be there. (Indirect discourse)
    (From Wertsch 1991: 80)

The meaning is *grosso modo* similar in between direct and indirect discourses, but a little bit different. The most important consideration is a contrast between two discourses by which the former is univocality, because of reporting process by which the speaker's voice is maximally identified to reported voice, but the later is analytic interpretation of the reported voice by the speaker.

This analytic process can, of course, have multiple versions, and be realised in a variety of ways according to a speaker's involvement in utterance, several enunciators, and his interlocutor. Following speaker's involvement in a voice, two voices are made of a degree of dialogicality (heterogeneity). Then, we could conceive a wider range of verbal and non-verbal devices that make heterogeneous two voices.

Moreover, univocality principle is closely tied to authority of discourse (Wertsch 1991: 78). This is so in a media discourse, a scientific discourse, a pedagogical discourse, which is of my interest.

Now, let's return back to the last native/learner interaction. As a main reference of speech genre is pedagogical grammar and/or dictionary in language learning settings, we could assume that the teacher's feedback is a reported discourse like this:

    N :   French grammar says "moins rapide"

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[3] Francophon scholors prefer to use the term "sequence" (De Pietro et al., 1989; Kraft & Dausendschön, 1993; Faraco & Kida, 1999).

Wherein, authoritative enunciator's voice is elliptical. Some features of authoritative univocal discourse are:

- No analytical interpretation by the speaking subject (or dictionary-type and decontextualized definition of lexis or normative grammar-type of rules)
- Unilateral transmission of message to interlocutor (like mathematical model of communication, Shannon & Weaver 1949)
- Direct and non-analytical acceptation of message by the interlocutor.

But a more realistic interpretation may be that 1) the native's utterance is produced instead of learner; 2) by an authoritative discourse, the native's attempt is to create or make more present a French grammar's voice in the inner speech of learner. We see that native teacher attempts that internalization of linguistic monitor is realized on the interpersonal plane.

> L :   moins vite (oh, French grammar says "moins rapide", so) . moins rapide

In this way, it is hoped that an other-regulation of linguistic rules becomes self-regulation.

Multimodality in negotiation

Now, a question arisen here is what gestures or others devices do in this sort of interaction. This is an example of what is called "inter-codic" or "cross-modal reformulation" (e.g. De Pitro 1988 ; Kida & Faraco, forthcoming; Taranger & Coupier 1984), very frequently observed in N/L interaction:

Ex. 2

GSV	1. L:	et:: +++ /euh:: /auber	
→	2. N:	aubergine↑ ++	
VSV	3. L:	aubergine↑ + /aubergine↓	
	4. N:	hum	

GSV = geste sans verbal (Gesture without Verbal)
VSG = verbal sans geste (Verbal without Gesture)

When a learner has a communicative trouble (e.g. lack of word, lexical incertitude), he leaves some gestural hints of word concerned. Then, the native could very often "translate" or "reformulate" them in verbal modality, thanks to symbolic virtue of gestures. Learner typically repeats this verbal reformulation and the conversation continues if both participants find a certain accord each other[4].

In this sequence, it is noticed first that such a learner's behaviour is served to trigger an univocal reporting process in the native's utterance, as we have seen in example 1. As the native see that learner makes do dialogue his gesture with his/her inner speech, the native calls on dictionary-type voice in order to adjust his dialogicality to learner's plane. This gives rise to attempts to modify and externalize learner's form/meaning relationship at the interpersonal plane.

Second, if word-seeking is successful like this example, it is often observed that learner repeats native's preceding utterance, particularly without gesture. The absence of gesture might be evidence that the verbal modality is a principal concern, and that internalization process is externalized on verbal modality with a meaning or image that gesture has represented in learner's mind.

Third, the learner simultaneously produces some devices (e.g. gaze to native, rising contour) as if (s)he called on native's participation in this process. By this behaviour, learner's voice is conditionally subordinate to

L: et:: ...... /euh::

QuickTime™ et un décompresseur sont requis pour visualiser cette image.

L: auber-

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N:aubergine ↑ ....

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Stop

L: auber-gine↓

QuickTime™ et un décompresseur sont requis pour visualiser cette image.

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[4] This type de behavior is discussed by J. Bruner (1985) for language acquisition of child (as interaction format), but the difference that adult L2 leaner is a conitively develped subject.

authoritative voice in the native utterance through externalized verbal means of learner. This is so-called conditional dependence. This is conforming to the fact that the native is a spokesman of the authoritative voice.

Multimodal variability in negotiation: Cognitive mirror?

Thus, internalization of linguistic norm in L2 learner's mind goes through a complex process of externalization and mediatization of several voices. However, albeit its relevance, the arguments advanced here concern only the most simple model, and examination of other variations would be necessary. For clarity of discussion, I distinguish variations on learner's side form those on native side.

First variation is learner's reaction to native's proposition. It was claimed that there was no gesture because the learner faces to the inner dialogicality, but in some cases, learner's utterance is produced with gesture.

Ex. 3

GSV	1. L:	il va monter + [s::] euh:{:::::::} ouais: +	
→	2. N:	{à la sur°face}	
G+V	3. L:	surface ? ((foncement des sourciles))	
→	4. N:	surFACE ++	
	5. L:	n + ou::i::	
→	6. N:	surface↓ ++	
G+V	7. L:	surface↓	
→	8. N:	dessus	
	9. L:	++ ng ((geste de monter))	
	10. N:	/oui /ça monte↓ +	
	11. L:	monte ou{i}	

L:surface?

↔

In this example, gesture is accompanied with verbal production (line 3-photo). It seems that instead of opting for internalization process, learner renews appeal to authoritative voice (the reason is unknown). As seen in the face (photo), learner expresses incomprehension but we do not know whether it is from incomprehension of linguistic form or of meaning of native's contribution. In following turns, native persists remaining on authoritative mode in staying to provide extracted input (lines 4 and 6) and its reformulation (line 8), to that learner's reaction is heteroclite. After a few exchanges relative to an initial message (lines 9-11) to return back to the initial trouble source, the native renegotiate on the object to focalize. Accordingly, gesture in learner's repetition seemingly shows that learner does not enter in the internalizational activity. Futhermore, as learner's interiorizing struggle is seen in a following sequence, verbal-without-gesture behaviour occurs about a problematic segment (line 13-photo, lines 16 and 18).

Ex. 3 (suite)

→	12. N:	{/tu} comprends↑ surface +
	13.	/c'est dessus↓ +
VSG	14. L:	((faible)) ah::: {surface}
→	15. N:	{la surfa}ce +
VSG	16. L:	surface ++
	17. N:	oui ? +
VSG	18.L:	n n + oui↓ {sur}face /et:: on:::

L: ah:::
surface
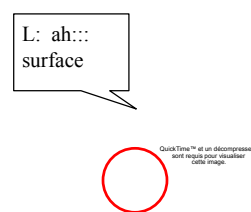
Also does this differential behaviour seem to come from the fact that the learner knows or not a word in question.

Ex. 4

GSV	1. L:	/mh:: non + /chacun + mh:: +
	2. N:	d'accord↓ +
	3. L:	et{::}
→	4. N:	/{un} par un↑
	5. L:	++++
	6. N:	/un + par + un↑ +++
VSG	7. L:	un + par + un ? mh::{::}

L:un .. par
.. un?mh::::
(one by
one? mh:::)

← Frown

Stop

<div style="text-align:right">

→   8. N: /{un} légume + /après {un autre↓++}
G+V   9. L: {ah + ah + ouais} + après un autre

</div>

In this example, the contrast is one between verbal without gesture (VSG) and verbal with gesture (G+V): contrary to the former (line 7), the verbal segment (line 9) seems to be known to the learner. This finding is interesting insofar as, one could assess the state of word(s) in the learner's lexial repertoire through a gesture that follows: if a problematic segment is known to the learner (i.e. in the case of a lexical retrieval), (s)he will use a gesture with verbal production in a next excahnge (G+V); otherwith, (s)he does not do so and enter in the internalisational activity (GSV).

Moreover, gesture-with-verbal behaviour (G+V) reactive to cross-modal reformation is often the case in which a native or an advanced leaner is speaker. Absence of interiorizational activity could be, therefore, evidence that the seeking word is known to the speaker and is found only in passive vocabulary (namely, lexical retrieval).

Ex. 5

	1. L:	et:: .... /le °sau:ce↓ ....
	2.	/s . /s . /s /ça devient:: /un peu::
GSV	3.	.... euh::: [(xx)]
→	4. N:	[con]sistant
G+V	5. L:	consis[tant]
→	6. N:	[é-] .. /épais
G+V	7. L:	épais
	8. N:	oui

N: consistant

L:consistant
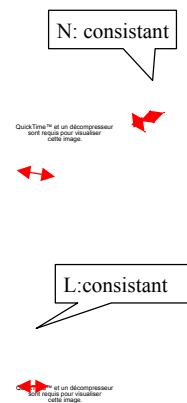
In this example, the advanced learner accompanies a gesture with his utterances (line 5-photo, line 7) in reaction to teacher's propositions (line 4-photo, line 6).

Social role of multimodality in negotiation

Second variation concerns native's scaffolding feedback. In fact, a verbal reformulation is produced with as well as without gesture. In the case of reformulation without gesture (example 2), it was advanced that authoritative voice is put forward in the native's utterance and that this process tends to be univocal and without analytical interpretation of speaking subject. In comparison with example 1, however, intonation could be an analytical cue, but this does not appear in gesture.

N: à la surface

In the case of reformulation with gesture (examples 3, 4, 5), it could be assumed that gesture functions so that authoritative voice is withdrawn for some reasons. In other words, reference to authoritative voice is no more neither univocal nor direct nor homogeneous, but dialogical and indirect and heterogeneous through an analytical interpretation by the native.

N: un par un↑

Now, what is analytical interpretation in this case? If one narrowly takes into account native's feedback, it is noticed that repetition of gesture of his interlocutor is the most salient behaviour. Indeed, we have impression that the native is seeking word instead of the learner: by gestural repetition, the naive tries to become word-researcher in taking place of learner's role. This is to say that in this interaction, collaborative process is more privileged than other dialogicalities (like dialogicality with a pedagogical grammar). Furthermore, role-identification of participants re-inforces their cohesion as partner of social interaction, or co-participation (e.g. Fornel, 1992; Heath, 1992). Thus, gesture could mitigate severity inherent to authority, other-reparation, normativeness,

N: consistant

like so, that pedagogical discourse could involve. In this way, gesture plays a social role.

Nevertheless, word-assistant must not go further than it is waited by word-seeker: if a native's assistance might be long enough, then learner could feel that his activity territory is transgressed. It may be the case of the example 3: the word "surface" could not be problematic for the learner since she is passing to the next story. As the learner does not adopt seeking-word activity, next exchanges are needlessly elongated. As Corder (1975: 102) said, "Efficient interpretative behaviour is […] behaviour which holds hypotheses *lightly* and is even prepared to entertain for as long as possible potentially conflicting hypotheses about meaning, that is, to accept ambiguity, contradiction and paradox, i.e. to keep our interpretaitve options open". Attention payed to gesture in discourse could be one of possible steps to interprete efficiently meaning of learner's discourse.

Finally, the following variation of negotiation concerns locus of trouble source.

Ex. 6
		1. N:	/c'est /c'est pour utiliser le riz::: + qu'on a mangé:: +
	→		LAVEILLE + par exemple + non
VSG		2. L:	/la veille {/c'est}
	→	3. N:	{HIER}

In this instance, a trouble source is found in native's utterance (1). Reacting to learner's other-reparation, the native repeats his gesture to focus on the fact that the meaning is maintained in verbal reformulation than in trouble source. Gesture holds, thereby, discursive coherence, which is threatened at the moment of lexical insecurity in native/learner interaction.

Conclusion

1. Negotiation of/for meaning is often studied as transmission model of communication in terms of input-output. It is always neither univocal nor static, but its dialogicality is variable.

2. In the light of other modalities like gesture, its complexity can be revealed out. In particular, gesture could shed light on a state of cognitive activity. Exclusively verbal studies could hardly analyse this inner activity.

3. Nonverbal modalities provide a framework to approach not only cognitive but also social dimensions of interaction, if analysis does not exclusively rest on form/meaning one-to-one relationship.

However, although the present paper struggled to enlarge a classic view of negotiation of/for meaning, this analysis is limited to lexical aspects of language. I wonder if this study contributes to an acquisition of cognitive universals, linguistic grammar, pragmatic, and discursive competence (see McNeill & Levy 1993; McNeill 2000; Talmy 1985). Moreover, gesture's implication in discourse in learner/native settings is still unclear. These concerns need to be tackled in a future research.

References

Bruner, J.S., 1985. The role of interaction formats in language acquisition. In J.P. Forgas (Ed.), *Language and social situations*. (p.31-46) New York: Springer.

De Pietro, J.-F., Matthey, M. & Py, B., 1989. Acquisition et contrat didactique : les séquences potentiellement acquisitionnelles dans la communication exolingue. In D. Weil, H. Fugier (Eds.), *Actes du 3e colloque régional de linguistique*. (p. 99-124) Strasbourg (France): Université des Sciences Humaines et Université de Louis Pasteur.

De Pietro, J.-F., 1988. Conversations exolingues une approche linguistique des interactions interculturelles. In J. Cosnier, N. Gelas, C. Kerbrat-Orecchioni (Eds.), *Échanges sur la conversation*. (p. 251-267) Paris: Éditions du CNRS.

Faraco, M., 2001. Exploratory study of gesture in negotiation of meaning between native and nonnative speakers. Paper Presented at the 11th conference of European Second Language Association (Eurosla), 26th-29th September 2001, University of Paderborn (Germany).

Faraco, M. & Kida, T., 1999. Acquisition de L2 et séquences d'apprentissage : degré de stabilité interactive. *International Review of Applied Linguistics in Language Teaching* (IRAL). 38 (3) : 215-230.

Fornel, de M., 1992. The return gesture: Some remaks on context, inference, and iconic gesture. In P. Auer, A. di Luzio (Ed.), *The contextualization of language*. (p. 159-176) Amsterdam-Philadelphia: John Benjammins.

Gass, S. M., 1997. *Input, interaction, and the second language learner*. Mahwah (NJ): Laurence Erlbaum Associates.

Heath, C., 1992. Gesture's discreet tasks: Multiple relevancies in visual conduct and in the contextualisation of language. In P. Auer, A. di Luzio (Eds.), *The contextualization of language*.(p. 101-128) Amsterdam-Philadelphia: Benjamins.

John-Steiner, V., 1985. The road to competence in an alien land: A Vygotskyan perspective on bilinguisme. In J. V. Wertsch (Ed.), *Vygotsky and the social function of mind*. (p. 348-372) Cambridge (MA): Harvard University Press.

Kellerman, E. & Bialystok, E., 1997. On psychological plausibility in the study of communication strategies. In G. Kapser, E. Kellerman (Eds.), *Communication strategies. Psycholinguistic and sociolinguistique perspectives*. (p. 31-48) London-New York: Longman.

Kida, T. & Faraco, M., forthcoming. Gesto e iniciación de la interacción didáctica en L2. *DeSignis*.

Krafft, U. & Dausendschön-Gay, U., 1993. Séquence analytique. *Bulletin CILA*, 57 : 137-157.

Long, M. H., 1996. The role of the linguistic environment in second language acquisition. In W. C. Ritchie, T. K. Bhatia (Eds.), *Handbook of second language acquisition*. (p. 413-468). San Diego-New York-Boston-London-Sydney-Tokyo-Toronto, Academic Press.

McCafferty, S. G. & Ahmed, M. K., 2000. The appropriation of gestures of the abstract by L2 learner. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning*. (p. 199-218) Oxford (UK)-New York, Oxford University Press.

McCafferty, S. G., 1998. Nonverbal expression and L2 private speech. *Applied Linguistics,* 19 (1), 73-96.

McNeill, D., 2000. Catchments and contexts: non-modular factors in speech and gesture production. In D. McNeil (Ed.), *Language and gesture*. (p. 312-328) Cambridge (UK), Cambridge University Press.

McNeill, D., & Levy, E. T., 1993. Cohesion and gesture. *Discourse Processes*, 16(4), 363-386.

Pica, T., 1994. Research on negotiation: What does it reveal about second-language learning, condition, processes, and outcomes? *Language Learning*, 44 (3), 493-527.

Pica, T., 1996. Do second language nearners need negotiation? *International Review of Applied Linguistics for language teaching* (IRAL), 34 (1), 1-21.

Shannon, C.E. & Weaver, W., 1949. *The mathematical theory of communication*. Urbana, University of Illinois Press.

Stam, G., 1999. Speech and gesture: Which changes first in L2 acquisition. Paper presented at Second Language Research Forum, Minneapolis (Minnesota), 25th September 1999.

Talmy, L., 1985. Lexicalization patterns: Semantic structure in lexical forms. In T. Shopen, (Ed*.), Language typology and syntactic description: Vol. 3. Grammatical categories and the lexicon*. (p. 57-149) Cambridge, Cambridge University Press.

Taranger, M.-C. & Coupier, C., 1984. Recherche sur l'acquisition des langues secondes : approche du gestuel. In A. Giacomi, D. Véronique (Eds.), *Acquisition d'une langue étrangère. Perspectives et recherches* (tom. 1). (p. 167-183) Aix-en-Provence (FR), Publications de l'Université de Provence.

van Hoof, A.-M. & Kellerman, E., 2001. Gesture placement in motion events: A crosslinguistic study of L1 and L2 'thiking for speaking' patterns. Paper Presented at the 11th conference of European Second Language Association (Eurosla), 26th-29th September 2001, University of Paderborn (Germany).

Vasseur, M.-T., 1993. Gestion de l'interaction, activités métalangagières et apprentissage en langue étrangère. *Acquisition et interaction en langue étrangère* (AILE), 2, 25-59.

Wertsch, J. V., 1991. *Voices of the mind: A sociocultural approach to mediated action*. Cambridge (MA), Harvard University Press.