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HOW DOES TECHNOLOGY CHANGE OUR CONCEPTION OF TASK-BASED INSTRUCTION? LEARNING TO COOK IN A FOREIGN LANGUAGE: A CASE STUDY

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Abstract

In the field of foreign language learning, practitioners and researchers today agree upon the many advantages of both task-based instruction and technology enhance learning. The number of studies considering the relationship between these two language learning approaches is also increasing. Yet, in spite of the fact that technology is a broad concept, most of the literature focuses on the use in the classroom of Web 2.0 technologies and practical applications of mobile learning. Little is said on how computer-mediated interaction reshapes tasks as pedagogical constructs and restyles task-based interaction, especially in those learning environments in which learners are asked to carry out non-linguistic tasks in a foreign language.

In task-based instruction, a task is an activity which requires learners to use language, with emphasis on meaning to attain an objective [1]. In our research, pairs of adult learners of Catalan and Spanish as a foreign language are set with the objective to elaborate a typical Catalan or Spanish dish in a digital kitchen. That is, learners are faced with the challenge of understanding and performing cooking instructions displayed orally -or in the form of still images or a video with subtitles if they ask for helpon a digital tablet which controls the motion sensors attached to the ingredients and utensils used.

In the present paper we want to explore (a) how learners' interaction with their partner and with the tablet shapes the task learners are constructing and (b) how the actions they perform to fulfil the task objective (cooking a dish) trigger their linguistic resources and helps them build new knowledge in the target language. We use Conversational Analysis (CA) procedures to analyse learners' discourse and to characterise task-based interaction in this particular milieu. We first focus on the task as workplan to understand how the software expects learners to conduct the task and then we examine how learners actually use it (task as process). We will see that in many cases students treat the interactive kitchen as another participant in the cooking task, especially when they ask for help. Learners negotiate whether they want to press the help button and when, but it is important to notice that the activation of the help button in the table serves as a means to determine not only which steps need to be demonstrated through a still image or a video but also which language forms are to be learnt. In this particular context, the task is not judged to be successful depending on linguistic criteria but on whether the learners manage to cook an edible dish or not. This is particular important because technology provides a context in which language learning takes place while learners are engaged in a meaningful and real non-linguistic social task. Thus, it is our objective to contribute to expand the concepts of task-based instruction and technology enhanced learning in the field of second/foreign language acquisition.

Keywords: Task-based interaction, technology-enhance learning, human-computer interaction, foreign language learning, adult education.

1 INTRODUCTION

Traditionally, the relationship between the fields of second language acquisition research and educational research was a complex one [2], as they were perceived of not being mutually dependent. This situation changes with the emergence of the so-called task-based approach to language learning. For the first time researchers from both fields share the common objective [3] of investigating which (and how) pedagogical tasks lead to the acquisition of knowledge. Tasks turn into both an instrument of data collection and the object of inquiry [4] and, consequently, studies from either field contribute, over time, to finely-tune the concept of task, surprisingly enough, without creating much controversy. For example, [5], who provided one of the first widely accepted definitions of tasks, argued that by "task' is meant the hundred and one things people do in everyday life, at work, at play, and in

between. Tasks are the things people will tell you they do if you ask them and they are not applied linguists" [5:389]. Almost fifteen years later, the nature of what a task is remained the same, when, for example, [1:11] suggested that "a task is an activity which requires learners to use language, with emphasis on meaning to attain an objective".

Computer-assisted language learning (CALL) is another important field of inquiry common to second language acquisition research and educational research [6]. The study of how computers have been used and are being used for language teaching evolves parallel to the kind of pedagogical practices students can do. Language learning computer programmes designed in the 1950s and implemented in the 1960s and '70s supported the then-dominant behaviourist theories of learning and presented learners with series of repetitive language drills. During the 1970s and 1990s several types of CALL programmes were developed with the aim of providing learners with opportunities for practicing language skills through games and through reading and writing activities controlled by the students and not by the computer. CALL programmes also offered learners opportunities for interacting in real contexts or through simulations. Yet, what became revolutionary in the field of language teaching, especially from the late 1990s was computer-mediated communication (CMC), as for the first time, language learners could communicate, synchronously and asynchronously, with other learners or speakers of the target language 24 hours a day; first through tools such as electronic mail and instant messages and then through social platforms and virtual worlds. The emergence of CMC as field of study may explain why the studies which combine the principles of CALL and task-based language teaching (TBLT) are scarce [7], [8]. This paper aims to be a contribution to this area.

2 TASKS, TASK-BASED INTERACTION AND LANGUAGE LEARNING

Interactionist researchers have claimed that social context has an impact on task performance [9] and that learner factors need to be taken into account [10], yet, as [11:197] suggests the "learner(s') perception of tasks has not been fully taken into account". Similarly, there is no agreement with regards to the role social interaction plays in the process of learning a language. On the one hand, mainstream researchers position themselves in the cognitive-oriented perspective (also referred to by [12] as the "weak interactionist perspective") and claim that although social interaction contextualises acquisition as learners are exposed to modified, negotiated or comprehensible input it plays a secondary role in such processes. On the contrary, researchers who adopt a strong socio-interactionist perspective, also referred to as CA-for-SLA (Conversation Analysis for Second Language Acquisition) sustain that acquisition emerges from interaction, as learning is a situated social practice.

To some researchers, the existence of radically opposed views on the nature of language acquisition or on how to conduct research in SLA is a chaotic situation [13], others, though, feel that controversy awakens researchers' creativity [14], [15]. In either case, the truth is that although today mainstream research within the interactional paradigm still follows a cognitive direction, the number of sociocultural-oriented research studies is growing. Our study is founded on the premises of the latter approach, whose main postulates can be described as follows:

- a) Learning is a process of knowledge construction rather than of knowledge transmission [16].
- b) Learning is situated [12] and rooted in the social activities carried out by members of a given community of practice [17].
- c) Teaching is a process of scaffolding the construction of knowledge [16].

From this perspective, learners are in the centre of the learning process, in a context in which language practice and knowledge acquisition are not dealt with separately. Learning - transforming information into knowledge through social actions- consists in triggering a set of procedures linked to knowledge building (searching for information, gathering information, processing information, transmitting information, transforming information and using information). The activation of such procedures is possible thanks to the use of diverse techniques and procedures, of various channels (visual or audio), of a range of supports (printed, magnetic, analogical, digital...) and of different languages (linguistic, audio-visual, gestural, numeric, iconic, graphic, etc.).

Socio-constructivists also argue that the relationship between action and (sociocultural) context is bidirectional. Action cannot be described and understood out of the cultural, institutional and historical context in which it develops, but contexts are created and reproduced through actions [18]. Learning

then takes places through action; through the participation in meaningful social activities. This principle implies that, by carrying out specific tasks, individuals take an active part in the processes of acquiring knowledge and of developing abilities, as knowledge can only be constructed if it is contextualized and can only be transformed and acquired through social interaction [19]. The conceptualization of learning as a social process of transforming information and developing critical thinking is at the core of the various pedagogical proposals in favour of CALL in language integrated learning, and task-based learning [20], [21], [22].

In the context of our study, in which pairs of adult students are learning a language while learning to cook in a digital kitchen, learning is described as situated because it only takes places through action, cooking in this case, and meaning is constructed in the social context in which such action takes place. From this viewpoint, cognition is also situated as cognitive actions are responses to the demands of a given social activity [23]. This also means that tasks are not fixed constructs and cannot be categorised and analysed from an etic perspective, as mainstream researchers do:

...those who have recently introduced the notion of task-based foreign language learning need to consider that tasks cannot be externally defined or classified on the basis of specific external task features (e.g. [24], [25], [26]) despite our best efforts to do so. Rather, tasks are in fact internally constructed through the moment-to-moment verbal interactions of learners during actual task performance. [27:272]

In order to understand how tasks are perceived in CA-for-SLA, we need to refer to Breen's idea [28] that pedagogical tasks go through three temporary phases: before they are actually implemented in class they are just a blueprint (task-as-workplan); during their execution learners work in joint collaboration to construct the meaning of the actions they undertake to carry it out (task-in-process); and upon their completion participants have (or not) achieved a result (task-as-outcomes). In cognitive-oriented studies tasks are analysed as workplans only, whereas sociocultural researchers defend that as data is taken during the course of action, the analysis should not rely on pre-established categories. Again, much of the tension between the two perspectives is methodological in nature and revolves around the emic-etic dichotomy:

A task-as-workplan can be specified only etically, as at that stage there are no participants in communicative behaviour to study. A task-in-process can be studied etically and overwhelmingly has been in the TBL/SLA literature. However, a task-in-process is a communicative event that can also be analysed emically using a CA methodology (e.g. [29], [30], [31], [32]). At this point we can see tendencies to a paradigm division, with an etic perspective more appropriate to an objectivist ontological orientation in a quantitative paradigm and an emic perspective more appropriate to a constructionist or phenomenological ontological orientation in a qualitative paradigm. [33: 536].

3 RESEARCH CONTEXT

3.1 Cooking in a digital kitchen

Our data was collected in the framework of an EU-funded project, namely LanCook (Learning languages, cultures and cuisines in digital interactive kitchens). To learn to cook in a foreign language students used a 'digital kitchen', that is, a tablet PC with touch screen and an embedded movement detector system that communicates with the wireless digital sensors inserted in or attached to all ingredients or kitchen utensils used, as shown in figure 1.



Fig. 1 LanCook digital kitchen and sensors

In LanCook digital kitchen, learners are faced with the challenge of understanding and performing cooking instructions displayed orally on a digital tablet. Recipes were created in seven languages - Catalan, English, Finnish, French, German, Italian and Spanish- through the use of an 'authoring tool', that is, a computer based system that allows technical and non-technical specialists to programme content for the use in software applications. The authoring tool was developed at the University of Newcastle, the leading institution in the project. Our team created the materials for the Catalan and Spanish kitchens and we present some of the results of their implementation here.

3.2 Task-as-workplan

The pedagogical materials stored as a software programme in the tablet follow the same structure. There is a pre-task which asks learners to recognise the ingredients and the kitchen utensils they are going to use. To do so, the computer names the utensils and ingredients and learners need to grab them. As all utensils and ingredients have either inserted or attached sensors and the tablet has a movement sensor detector, the tablet can recognise the action performed by the learners and can provide them with immediate positive or negative feedback, depending on whether they take the right ingredient or utensil. The task follows the same procedure. The tablet gives oral instructions on how to prepare a given dish and the students must perform those actions. Again, the computer judges the learners actions as correct if learners move the ingredients and utensils mentioned in the instructions. The students can ask the computer for help if they do not understand the instructions. In order to do so, they can listen to the instruction again or press the help button on the tablet screen. There are four types of buttons: rewind, forward, pause and help. If students activate the help button during the pretask, they can see a still image of a utensil or an ingredient; if they do so during the task, they can see an image illustrating a cooking step. During the development of the task, students can ask for help twice per each instruction. If they press the help button a second time the still images turns into a video with subtitles in the target language.

If we follow [34] categorisation of listening tasks to describe LanCook tasks-as-workplans, we can clearly determine that they fall into the category of "short responses" and the subcategory of "Obeying instructions" because "learners perform actions [...] in response to instructions". Those actions, cooking, could be done individually in, for example, a self-access centre or at home. In order to trigger the development of interactive skills, in our study learners were asked to perform the task in pairs. This will explain why tasks-in-process cannot merely be analysed as a type of listening task.

3.3 Research objectives and corpus

In this paper we will use CA procedures to analyse the interaction generated by pairs of adult learners of Spanish or Catalan. We want to explore how learners' interaction with their partner and with the tablet shapes the task learners are constructing and how the actions they perform to fulfil the task objective (cooking a dish) trigger their linguistic resources and help them build new knowledge in the target language. In order to do so, we will examine the task at stake as an outcome and as a process.

Our corpus is made up of 24 video recorded cooking sessions, of pairs of foreign university students preparing one or two dishes in the Catalan kitchen (*crema catalana* and *bunyols*) or one or two dishes in the Spanish kitchen (*tortilla de patatas* and *salmorejo*). Participation was voluntary. Most of the learners who cooked the Catalan dishes were enrolled in a Catalan course for beginners at a University in Barcelona. None of the learners who cooked the Spanish dishes were studying Spanish at that time. A couple of learners decided to cook all four dishes whereas most of them opted for trying one or two in the same language.

For the sake of brevity we will only provide examples of two of those pairs; one of the learners is a member of both pairs. It is our objective to trace the discourse procedures used by this learner. At this point, we should also bring to light that although the sample we provide here is limited, the scope of our analysis stem from a close examination of the whole corpus. First we watched all the videos to select the relevant excerpts, then they were then transcribed and analysed. We opted to transcribe our data in what [35] refers to as tone groups, that is, into message blocks. As a consequence, we do not number the turns of each speaker, instead we number the message blocks that structure learners' discourse. It is also important to notice that our transcription is not fine-tuned (e.g. we do not include pauses or we do not transcribe pronunciation) as our purpose here is to reflect on how the task unfolds rather than to provide a microanalysis of students' talk. The transcription symbols we used are

adapted from [36] and [37]. We provide a legend to interpret them at the end of this paper (see appendix 1).

3.4 Describing classroom interaction

Authors like [38] suggest that during the resolution of pair-work communicative tasks, learners engage in, at least, three actions:

- They select or reproduce interactive schemes that allow them to fulfil the task requirements.
- They manage the development of each task.
- They attempt to overcome any kind of communicative problem they encounter.

Based on their work, [39] expanded this idea by describing what each of the actions entails from a discursive point of view. Although she studied task-based interaction in face-to-face technology-free environments, in this paper will follow her model, illustrated in figure 2, to analyse talk-in-interaction in the interactive kitchen.

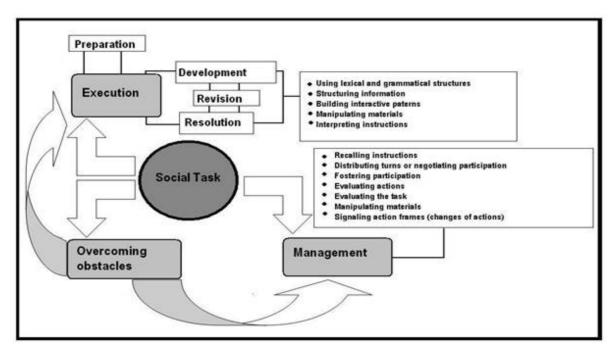


Fig. 2. Characterisation of pedagogical tasks as social processes

4 TASK-AS-OUTCOME

As we said in the previous section, LanCook tasks fall into the category of "obeying instructions". Consequently, the cooking task is judged to be successful or not depending on whether the learners manage to follow the steps to prepare the target dish. In the case of our study, computer instructions and feedback play a role in learners' attainment of task goals but the achievement of task-outcomes does not entirely depend on the learners' competence in the target language but on how they socially interpret those instructions and on their previous cooking experiences.

Similarly, the quality of the outcome, in this particular study, does not rely either solely on linguistic criteria but on whether the dish is edible or attractive. This evaluation, as we can observe in excerpt 1 below, is not always done in the classroom. In excerpt 1 we can see that while setting up the tablet for a new cooking session in the Catalan kitchen, the researcher (MAR) asks learners (ANN & CLA) about the dish (*bunyols*) they had prepared on a previous session. ANN and CLA are both French adult learners enrolled in a Catalan course at the university.

```
315 ANN: bueno\
                                                    ANN: well\
           los míos era:n_
                                                          mine we:re_
316
           planos\
317
                                                          flat\
318 CLA:
           sί\
                                                    CLA:
                                                          yes\
319 MAR:
           @@
                                                    MAR:
                                                          @@
320 ANN:
           tenían buen gusto\
                                                    ANN:
                                                          they were tasty\
321 CLA:
           els meus_
                                                          mine_
                                                    CLA:
           també\
                                                          too\
323 MAR:
           també eren plans\
                                                    MAR:
                                                          they were also flat\
324 ANN:
           yo pensaba que eran_
                                                    ANN:
                                                          I thought that they were_
325
           bastante llenos
                                                          full enough
326
                                                          but when I showed them_
           pero cuando lo enseñé
           a mi compañera de piso_
327
                                                          to my flatmate
                                                          flatmate who is Catalan
328
           de piso que es catalán
           v se burló muchísimo\
                                                          and she made fun of them\
329
330 MAR: tampoc és questió de burlar-se'n\
                                                    MAR:
                                                          they were not that bad to make fun of\
331
           no/
                                                          is it/
332 ANN:
                                                    ANN:
333
           pero le hizo mucha gracia y:_
                                                          but it made her laugh and_
334
335
           y me preguntó
                                                          and she asked me_
           esto es bunyols/
                                                          this is bunyols/
           seguro/
```

ANN states, in Spanish, that although the desert she had prepared was tasty (line 320) and acceptable for her (lines 324,325), it did not look right to the eyes of her flatmate (lines 326,327, 328,329), who, unlike her, was familiar with the dish. The fact that the evaluation of the task outcome trespasses the classroom doors demonstrates the authenticity of the task learners performed.

5 TASK-AS-PROCESS

As we said in section 3.4., when learners engage in a meaningful task they carry out three types of social actions: they execute the task, they manage the task and they overcome communicative obstacles. In this particular case, and given the nature of the task (obeying instructions), interaction while learners execute the task is scarce (cooking is quite a solitary activity). So learning at that phase is related to the acts of cooking and to the cognitive and linguistic challenge of understanding instructions rather than to the development of interaction skills.

On the contrary, interaction plays a key role in the action of overcoming communication problems as we can see in excerpt 2, in which ANN & CLA are now engaged in the task of cooking *crema catalana*, their second dish in the Catalan kitchen. As we can see, ANN and CLA are negotiating the meaning of one instruction given by the tablet (TAB). The researcher (MAR) is present but does not participate:

```
53
    TAB:
           pelem una llimona amb el ganivet\
                                                        TAB: peel a lemon with the knife\
54
     CLA:
            uf/
                                                        CLA:
                                                               uf/
55
            Je ne peux pas le faire
                                                               Je ne peux pas le faire
     ANN: no/
                                                        ANN: no/
56
57
            (i CLA dóna el ganivet i el plat amb
                                                               (and CLA gives ANN the knife and the
            llimona a ANN)
                                                               plate with a lemon in it)
58
            hay sólo que tallar-lo\
                                                               we just need to cut it\
            no
60
            e:n
                                                               i:n
            las dos/
                                                               both/
     CLA:
            no\
                                                        CLA: no\
            pelar
                                                               to peel\
64
     ANN:
            pelar/
                                                        ANN: to peel/
65
66
            (l'ANN prem el botó d'ajuda)
                                                               (ANN presses the help button)
67
     TAB:
            pelem una llimona amb el ganivet\
                                                        TAB:
                                                               peel a lemon with the knife\
68
                                                        CLA:
     CLA:
69
     ANN:
            ah/
                                                        ANN:
                                                               ah/
            pelem/
                                                               peel/
70
            había entendido tallem\
71
                                                               I understood cut\
            pero:_
72
                                                               bu:t_
73
            aquí
                                                               here
                                                        CLA: eh cut it_
           eh tallar-se
74
            (i fa un gest amb mans com si fes
75
                                                               (and she moves her hands as if she were
            servir el ganivet; no li surt la paraula
                                                               using the knife; she doesn't know the
            treure)
                                                               word remove)
76
77
     ANN: ah/
                                                        ANN: ah/
            quitar la piel\
                                                               remove the peel\
78
            no/
                                                               no/
            (CLA mira MAR i riu)
                                                               (CLA looks at MAR and laughs)
79
```

Excerpt 2 above illustrates two types of learning. On the one hand, learners gain culturally-bound knowledge related to the action of cooking. Students are asked to peel a lemon. They do not have a peeler but a knife because peelers are not widely used in typical Catalan kitchens. The tablet gives clear instructions about using the knife for peeling (line 53), but this command presents a problem for CLA, who switches to French to tell her partner she cannot figure out how this action can be performed with such an utensil (line 55). ANN has not yet understood this cultural difference, because she did not understand the verb used in the instruction. Consequently ANN is first surprised to CLA's reaction (line 56) but then, when CLA gives her the knife, she activates the help button to check she understood the instruction correctly (line 66). The subsequent turns indicate she had not and illustrate how she learns the meaning of the verb peel (*pelem*) as opposed to cut (*tallem*), what she had understood they had to do with the knife (lines 69, 70, 71).

In the context of our study, actions related to the management of tasks are sometimes linked to learners' decisions to when and why they want to activate the help button instead of relying on how the partner has understood the instruction. Like what happens in computer-free classroom interactions, in line 66 help is requested to double check comprehension and such action is closely linked to the action of overcoming communicative obstacles.

On the other hand, excerpt 2 also illustrates learners' procedures to overcome communication problems. When CLA encounters a problem, she switches into French (line 55) - the language she typically uses to address ANN in non-academic contexts. ANN, on the contrary, relies on Spanish, the other language both are learning in Barcelona. In excerpt 1, we could observe that Spanish, and not Catalan, was the language she preferred to use to address CLA and the researcher before starting the task. In excerpt 2, Spanish for ANN is a resource to keep the task going, and she uses it to make use of either code-mixing (her utterances mix Catalan and Spanish in lines 58, 60, 61, 71, 72, 73) or paraphrasing procedures (in Spanish, in line 77, she describes the meaning of the verb "peel" as "remove the skin").

Paraphrasing seems to be a preferred procedure for ANN to negotiate meaning, as she also relies to it in the Spanish kitchen, where Spanish is the target language. In excerpt 3 we can observe this phenomenon while ANN helps ALI, a Chinese student, to understand the instructions given by the tablet (TAB) about how to cook a *tortilla de patatas* (Spanish omelette).

```
411 TAB: bajamos el fuego\
                                                    TAB: turn down the heat\
412 ALI:
           bajamos/
                                                     ALI:
                                                           turn down/
413 ANN: mhm_
                                                     ANN: mhm_
414 ALI:
                                                    ALI:
           pero::
                                                           bu::t
415 ANN:
                                                     ANN:
           un poco
                                                           a little
416 ALI:
           así o::/
                                                     ALI:
                                                           like this o::r/
417
           (ALI baja el fuego)
                                                           (ALI turns down the heat)
                                                     ANN: yes\
418 ANN: si\
419
           bajar\
                                                           turn down\
420
           menos fuerte\
                                                           less strong\
421 TAB:
                                                     TAB: the potatoes_
           las patatas
422
           deben cocerse a fuego lento\
                                                           should be cooked at low temperature\
423
           no tienen que quedar_quemadas_
                                                           they should not be
424
           ni crujientes\
                                                           burnt
425 ANN: no\
                                                           or crunchy\
                                                     ANN: no\
426 TAB:
           tienen que quedar blandas\
427 ALI:
           cómo/
                                                     TAB:
                                                           they should be soft\
428
           blandas/
                                                     ALI:
                                                           how/
429 ANN:
           blandas m::
                                                           soft/
           menos duro/
430
                                                           soft m::
431 ALI:
                                                           less hard/
                                                     ALI:
```

In the communicative exchange occurring between lines 411 and 418 ALI is manipulating the utensils (in this case the thermostat controller of the hotplates) and trying to understand the meaning of the verb "bajar" (in line 416 she asks ANN whether she is moving the thermostat controller in the right direction). ANN, on the contrary, evaluates ALI's action (ANN asks ALI to turn the controller down just a little; line 415) but also helps ALI understand the meaning of the verb "bajar" (turn down) by paraphrasing it with the phrase "menos fuerte" (less strong, lines 419 and 420). ANN uses this procedure again in line 430 to help ALI understand that "blandas" (soft) means "menos duro" (less hard). So, paraphrasing is used by ANN both to learn (excerpt 2) and teach (excerpt 3) culinary actions and jargon.

6 DISCUSSION

Our study provides evidence which supports the claims of sociocultural interactionists regarding the fact that tasks are "internally constructed through the moment-to-moment verbal interactions of learners during task performance" [27:272]. This means that a task designed with certain presupposed given features does not necessarily unfold as such during the course of action. As workplans, LanCook are listening tasks which trigger short silent responses (obeying instructions) on the part of the learners, but while in process they may turn into opportunities for language production.

LanCook technology provides a context in which language learning takes place while learners are engaged in a meaningful and real non-linguistic social task: cooking. Yet, planning cooking as a social task by asking students to interact with the tablet in pairs does not guarantee that learners will engage in discursive activities if they do not judge it necessary. As a process, the cooking task does not generate language learning when learners focus on the task execution. That is, performing the instructions correctly does not trigger language output. It is a sign that indicates students understood the instructions, which, in turn, reveals language was not a problem and therefore learning can only be traced through the actual cooking skills learners develop or practice. This is particularly clear when a cooking action (peeling potatoes) is culturally-bound and in conflict between what students know (how to use a peeler to peel lemons) and what the tablet asks them to do (to use a knife to peel lemons).

Linguistic and non-linguistic learning can clearly be traced discursively when students interact to undertake the actions of managing the tasks and of overcoming communication problems. Thus, unlike what happens in most computer-free environments language learning is mostly associated to actions other than executing the task. This is not problematic but sheds light on how computer mediated communication may change our conception of task-based instruction.

Interaction, especially when learners are engaged in the discursive action of overcoming communicative obstacles, is a cooperative social activity which implies that participants alternate the adoption of complementary discursive roles. For example, in our sample, ANN relies on paraphrasing as a procedure to negotiate meaning both when she adopts the role of expert (in the Spanish kitchen) and non-expert (in the Catalan kitchen). [39] suggests, that in order to scaffold their process of language development, they adopt a series of subsequent procedures to overcome communication obstacles that range from code-switching in to another language the use of lexical substitution in the target language. In such a continuum, the use of code-mixing procedures and of paraphrasing in the target language constitutes two intermediate steps. ANN's discursive behaviour reveals that her competence in Spanish and Catalan is not even. In the Catalan kitchen, in order to keep the flow of the conversation, she code-switches into Spanish or uses Spanish to construct (mixed) utterances in Catalan. She also negotiates meaning by paraphrasing, in Spanish, some challenging words. In the Spanish kitchen, on the contrary, all communicative obstacles are solved in the target language.

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Appendix 1: Key to the Transcription Symbols

1.	Questions Yes/No	/
2.	Other intonation types Affirmative Suspension	\ -
3.	Interruptions (unfinished sentence/word)	text_
4.	Lengthening of a sound	text:
5.	Language shift	text
6.	Incomprehensible data	XXX
7.	Laughter	@
8.	Comments from the transcriber	(text)
9.	Omitted excerpt	[]