



Assisting the Client in Aphasia Speech Therapy: A Sequential and Multimodal Analysis of Cueing Practices

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ABSTRACT: This paper investigates aphasia speech therapy as a particular form of institutional interaction dedicated to the recovery of language and communicative abilities in adult speakers. This specific form of social interaction involves both health and pedagogical issues, by presenting features generally observed in instructional settings. The paper investigates these features by focusing on the interactional and sequential organisation of naming activity – that is, the activity of naming a card. Through detailed analyses of participants’ multimodal conduct, it is shown that this task (e.g. producing a specific linguistic item) is collaboratively accomplished. This defends a conception of the therapy as a socially situated and collaborative process, whose dynamics must be investigated taking into consideration participants’ multimodal resources. By focusing in particular on the cueing practices used by the therapist in order to assist the client’s word retrieval and production of the target item, the paper shows that these practices are strictly dependent on the micro-details of interaction, on the client’s audible and visible conduct, and as such are incrementally and locally occasioned. It therefore highlights the active role played by the client in negotiating the assistance needed by the therapist and, more broadly, in co-constructing the therapeutic process.

Keywords: aphasia, speech therapy, naming activity, cueing practices, multimodality.

1. INTRODUCTION

Aphasia speech and language therapy constitutes a particular form of institutional interaction whose aim is the rehabilitation of adult speakers who, following a brain lesion (most commonly due to a stroke), have lost part or most of their linguistic abilities. With regard to other healthcare and therapeutic settings of interaction that have been largely explored in Conversation Analysis (such as doctor-patient communication, see Maynard & Heritage, 2005; psychoanalytic sessions, see Peräkylä et al., 2008; physiotherapy, see Parry, 2004), and despite the extended research that has been recently realised on both therapeutic and ordinary interactions with aphasic speakers¹, aphasia speech therapy is still an underdeveloped area of investigation (but see Horton, 2006, 2008; Merlino, 2017; Simmons-Mackie & Damico, 1999; Wilkinson, 2004, 2011, 2013). Nevertheless, the analysis of the institutional features of this social event, together with a better understanding of its communicative dynamics, are crucial to highlighting the specificities of a setting of interaction which intersects health/rehabilitation with pedagogical/learning issues. Being oriented to the delivery of a treatment (versus a diagnosis and a prescription) that allows for the recovery and (re)learning of language and communicative abilities, this setting requires a specific type of participation in the activity from the client². The client is indeed involved in the accomplishment of a “performance” that is constantly monitored by the speech therapist. More generally, this latter organises the therapeutic tasks by soliciting/eliciting the client’s linguistic productions, evaluating them and assisting, when needed, the client through cueing practices. Consequently, the communicative processes through which the rehabilitation takes place show some structural features observed in other types of

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¹ During the last decades, CA research has largely contributed to the study of the aphasic pathology, by exploring, in particular, aphasic communication in ordinary settings of interaction (see Klippi, 1990; Laakso, 1992; Laakso & Klippi, 1999; Goodwin, 1995, 2000a, 2004; Wilkinson et al., 2010) and by comparing the practices used by participants in these settings with the ones used in the speech therapy one (Klippi, 2015; Laakso, 2015; Wilkinson, 1999, 2004).

² For a discussion about treatment delivery in practitioner-patient encounters see Pilnick, Hindmarsh, & Gill, 2010.

institutional and asymmetric settings of interaction, such as instructional or pedagogical ones (cf. McHoul, 1978; Mehan, 1979). Our paper investigates these features by focusing on the sequential and multimodal organisation of a specific therapeutic task – the naming activity (that is, the activity of naming a card) – and by showing the collaborative and incremental nature of the cueing practices used to assist the client in the retrieval of a word. By focusing on talk-in-interaction as the medium through which the rehabilitation of language takes places, our analyses contribute to a still marginal conception of therapy as a socially situated and collaborative process. It moreover invites one to consider the crucial role played by multimodal resources – such as gaze orientation, objects’ manipulation, gestures – in the organisation of the therapeutic activities and in the recovery of linguistic items.

1.1. Aphasia speech and language therapy as a form of institutional interaction

Speech and language therapy sessions constitute a specific type of institutional interaction (Drew & Heritage, 1992), characterised by the presence of a precise goal – that is the recovery of language and communicative abilities of the client – and by the accomplishment of specific activities and actions that construct the institution-relevant identities of the speech therapist and of the client. The institutionality of this setting is also due to an *overall structural organisation* of the session that presents a recognisable beginning and an end, as well as different phases that are structured according to the therapist’s agenda (Ferguson & Armstrong, 2004; Horton & Byng, 2000; Silvast, 1991): the opening and closing phase, as well as the central therapeutic phase during which different tasks are performed (see also Horton, 2006, for a description of four different phases). The turn-taking organisation makes relevant an orientation of the participants towards the institutional character of the context and of the form of possible and allowable contributions, as well as their rights and obligations. A recurrent asymmetric distribution of turns and actions can be observed; particularly, the speech therapist initiates and “drives” (cf. Ferguson & Armstrong, 2004; Horton, 2008; Horton & Byng, 2000; Silvast, 1991) most of the activities, asking questions and evaluating the client’s response, giving cues and instructions. Research on aphasia speech therapy has largely insisted on this *asymmetry* (Cortazzi & Jin, 2004; Silvast, 1991; but see Merlino, 2017, and Simmons-Mackie & Damico, 1999, for a discussion about client’s negotiations of this asymmetry) and on the type of participation it implements for the client. Moreover, this therapist-client asymmetry – which is typical of institutional contexts and of healthcare and therapeutic settings (Maynard, 1991; Ten Have, 1991) – is intensified by the client’s reduced linguistic abilities.

As we will highlight in the following section, the realisation of the therapeutic tasks is based on a specific *sequence organisation*: the production of adjacency pairs (such as question-answer sequences) generally followed by the speech therapist’s evaluation as a completion of the sequence (Schegloff, 2007). It is particularly, but not only, the presence of these evaluations/assessments – or an orientation to their absence – that gives the activity a pedagogical flavour and shows some of the specificities of this therapeutic setting (vis-à-vis of other therapeutic settings) in which the client is required to perform tasks for which they are generally evaluated. Different types of tasks are performed (e.g. sentence completion, description of images, repetition of phonemic or lexical items, writing or reading of sentences etc.) and an investigation of their single characteristics is needed. This paper focuses on the naming activity, whose features are detailed in the following section.

1.2. The sequential organisation of naming activities

Naming activities consist of naming objects or actions through the presentation of pictures. They are a commonly used method for assessing language abilities for clinical purposes

and to treat anomia or word-finding difficulties for therapeutic purposes (see Horton & Byng, 2000; Howard et al., 1985; Marshall et al., 1990). Traditionally conceived and explored in neuropsychology (Abel et al., 2005; Morton, 1979), they have more recently been investigated in an interactional and conversation analytic perspective (cfr. Horton, 2008; Merlino, 2017; Wilkinson, 2013). Studying the interactive accomplishment of these activities has allowed for recognizing that they constitute a specific form of social interaction through which the client is both assessed and treated. As such, they require participants to deploy methods for building the intelligibility of their actions and to pursue, turn by turn, their institutional goal(s).

A recurrent sequential organisation of naming activities has been highlighted, with a basic three-parts sequence structure³ constituted of:

1. A known-answer question of the therapist or testing prompt;
2. The answer of the client;
3. A third position turn of the speech therapist that provides on the adequacy or not of the client's answer.

Wilkinson (2013) investigates the methods through which participants display an intersubjective understanding of the adequacy of the answer and highlights a preference organisation for these sequences; acceptance of the answer is generally done in a preferred format (straightforward and with no delay), while declining is generally accomplished in a mitigated and delayed fashion, providing to the client slots for self-repair. The speech therapist's third position turn can take different forms – such as neutral (with acknowledgement such as “okay”, “yes”) or evaluative (such as “very good”). Wilkinson (2013) also identifies possible variations for these three-part sequences that can be realised in a “collapsed” form (when the first turn is not verbally produced) or even “doubly collapsed” form (when also the third turn is not produced as a consequence, for instance, of the client's gaze orientation to the card and a non-rising prosody that signal her/his confidence about the correctness of the answer). More generally, taking into consideration the embodied realisation of these activities (Merlino, 2017) – and thus the manipulation of the objects/cards, participants' gaze orientation, head movements and gestures – allows one to put this three-part verbal sequence into perspective; as a matter of fact, participants also rely on visual resources for structuring the progression of the activity and their understanding of the adequacy of the answer⁴.

These sequences recall the instructional sequences (Mehan, 1979) described for pedagogical settings of interaction as well as sequences observed in testing activity (Marlaire &

³ This structure has been studied especially in speech therapy with children – see Kovarsky & Duchan, 1997.

⁴ In the following excerpt, for instance, the three-part sequence is produced in a very smooth way, through a combination of audible and visible resources that allow participants to understand the meaning of their actions and to structure the activity:

```

1           $(0.6)$
           the      $places card1$
2           $(1.8)$
           the      $grasps & keeps in her hand card2-->
3           CLI    a- (.) -nanas
                pi- -neapple
4           $(0.2)$
5           THE    $très bien/$
                very good
                $places card2$

```

Since the activity is already underway, the first turn of the therapist is realized just by placing the card on the table in front of the client (1). After a long pause, the client produces the target item (3) and this is positively evaluated by the speech therapist at line 5 (“very good”). This third turn is produced by the therapist while she places a new card and thus initiates a new sequence without any verbal request (first position turn). The evaluation of the client's performance is thus deeply intertwined with the “embodied” closing of the sequence.

Maynard, 1990) in which the third position turn generally takes a neutral non-evaluative form. The first turn elicits an element that is known by the speech therapist (a specific target term), and thus is comparable to “known information questions elicitation” (Mehan, 1979) or “known-answer questions” (Schegloff, 2007) produced by teachers in classroom talk. At the same time, the third position turn recalls the evaluation (Mehan, 1979) or feedback (Sinclair & Coulthard, 1975) produced after pupils’ or learners’ answers. Mehan (1979) has described how these sequences can be extended if the student’s reply occasions a rejection (vs accept) or a prompt from the teacher. Prompts consist of reformulating the question and giving some cues (versus just repeating or simplifying the question). In the same way, Wilkinson (2013) observes that, in naming activities, a declining of the aphasic speaker’s answer prompts a further answer to be proffered, and this cycle continues until either an answer is accepted by the therapist or until the participants treat the client as being unable to produce the relevant picture name (by abandoning the test-item or by the tester providing the name). Declining implies then an extension of the sequence (Schegloff, 2007) and it is generally deeply intertwined with cueing; as a matter of fact, when the client produces a wrong answer or shows difficulties in answering, the therapist assists him/her in the production of the target item through different types of cues. Our paper focuses in particular on these *extended sequences* during which the client shows difficulties in producing the final answer and is assisted by the speech therapist in the pursuit of the search. Finally, the production of the item by the client and the evaluation or acknowledgement of the therapist close the sequence and sanction the end of this complex and collaborative “answering process”. We particularly focus on the cueing practices deployed by the therapist and show that that these practices are deeply adjusted to what the client is doing and to the type of assistance the client herself/himself is soliciting or initiating. These adjustments are the result of not only verbal but also visual conduct – to which the therapist is particularly sensitive when (s)he monitors the client’s performance. We thus show the collaborative and multimodal character of cueing practices and the complexity of these “therapeutic” sequences that develop along several turns: although they’re aimed at the production of a single linguistic item, they finally make visible a set of linguistic and interactional competences that participants – both the therapist *and* the client – mobilise turn-by-turn.

1.3. Assisting the client in word retrieval

Research on aphasia speech therapy has largely focused on the role played by the therapist in assisting the client in word retrieval and, more generally, in the client’s rehabilitation process. This role has been mainly associated with his/her eliciting, stimulating and evaluating actions accomplished during the therapeutic activities. These actions have been conceptualised in different research perspectives and through the use of different terminologies – such as feedback, prompting, scaffolding, priming, and cueing – that, despite indicating slightly similar phenomena, are not always clearly put in relation within the literature. In what follows, we focus on two main research perspectives that have approached the issue of “assistance” of the client by focusing respectively on the structuring and interactive value of therapists’ actions – traditionally identified in the discourse analytic notion of “feedback” – and on the type of hints offered to the client – generally defined as “cueing”. We will then (re)specify our conception of cueing in a conversation analytic perspective.

1.3.1. Therapist’s feedbacks

In order to understand which communicative conducts would better facilitate the therapeutic objectives, coding systems have been realised with the aim of categorising, quantifying and comparing the actions of different therapists. The first models were realised in the 70’s by doctors and in a clinical perspective (see Boone & Prescott, 1972; also the CIAS,

Clinical Interaction Analysis System from Brookshire, 1976; Brookshire et al., 1977; Nicholas & Brookshire, 1979). Subsequently, from the 90's onwards, research inspired by discourse analysis, and particularly the Birmingham School (Sinclair & Coulthard, 1975), as well as by conversation analytic studies of classroom interaction (Mehan, 1979), have proposed formal analyses of the therapeutic discourse; the activity of the therapeutic session has been segmented in several hierarchical units and sequences (see, in particular, the ATICS coding system – *Aphasia Therapy Interaction Coding System*, Horton & Byng, 2000). Despite the use of an etic perspective (and its subsequent “external” categories of analysis) and the realisation of decontextualized analyses of participants’ (especially therapists’) contributions, this research has allowed for bringing attention on the communicative dynamics of the therapy and thus to move the reflection from the *conceptualisation* of the *tasks* to the analysis of the way they are actually *accomplished*. It is particularly in this framework that the notion of “feedback” has been used to characterise the therapist’s actions: with the aim of quantifying them, typologies have been established in order to identify the *functions* of these actions – such as evaluating the client’s answer or motivating his/her productions (Brookshire, 1973, 1992; Davis, 1993; Duffy, 1994; Katz, 1994). In a more qualitative perspective, Simmons-Mackie et al. (1999) have highlighted that feedbacks can realise multiple functions and, more generally, that they are *issued of a social process*: “Clearly feedback plays an important role in structuring RRE sequences, correction sequences, continuer latching, and closing sequences. Thus, feedback can establish the boundaries of segments, close activities, and signal the continuation of a task. Feedback helps bracket segments and establish the progress of the exchange, contributing to the client’s expectancies and knowledge of when and how to respond” (p. 224). Following a more situated and interactional analysis of talk, Horton (2008) suggest that: “The more straightforward understanding is of feedback occupying the third turn of the three-part instructional sequences that are core of aphasia language therapy, with the function of providing information about the aphasic person’s response.” (p. 1000). Finally, the presence or absence of feedbacks has been connected with the application of error elimination, error reduction or error-full approaches to therapy (see Horton, 2008). These approaches, clearly based on the notion of “error”, which has inspired different theories of learning for aphasia therapy (see, for a discussion, Ferguson, 1999; Horton, 2008), argue about alternative methods for handling the client’s productions and to set the level of task difficulties. Nevertheless, there are no empirical investigations on how tasks are interactively realised, except for a study by Horton 2008⁵ that explicitly addresses the issue of learning in aphasia therapy as a socially situated phenomenon and investigates the dynamics of naturally occurring therapeutic activities.

1.3.2. Cueing

Focusing less on the actions performed by the speech therapist, and more on the type of hints offered to the client regarding the linguistic dimension involved in the production of the target item, research on neuro- and psycholinguistics (Howard, 2000; Howard et al., 1985; Nickels, 2002) has largely explored the notion and concept of *cueing*. With reference to the naming activities, and through the analysis of experimental settings in which the patient is usually assisted by computer programs and interfaces, researchers have discussed the effectiveness of different types of cueing: semantic cueing – which provides semantic information about the target word (Davis & Pring, 1991; Doesborgh et al. 2004), phonological cueing – which provides the client with one or more phonemes from the start of the word (Hickin et al., 2002; Li & Williams, 1989; Pease & Goodglass, 1978) or a combination of both (Hillis & Caramazza,

⁵ By adopting an interactional approach to speech therapy, Horton (2008) establishes links with traditional research on aphasia therapeutic methods and with its analytical categories and notions; he investigates the processes implicated in learning and lists them under the three themes of “effort and error”, “feedback” and “mutuality and partnership”.

1994). Other types of cueing⁶ (such as syntactic– which is providing a sentence context for the target word) are also considered when the effectiveness of the “hierarchy of cueing” is debated – that is, which type of cueing should be given first and which last (Nickels, 2002; Wambaugh, 2003). Increasing (from weakest to strongest) cueing is generally preferred to decreasing/vanishing cueing, this latest being generally used to assist patients with severe memory disorders⁷ (but see Abel et al., 2005, for a discussion of these alternative hierarchies for treating aphasic naming disorders). The choice of a cueing method or hierarchy is connected with the type of disorder as well as the necessity of avoiding the production of errors, also with reference to the task’s difficulty, and with “implicit assumptions of stability in naming performance” (Horton, 2008, p. 988). In this perspective, cueing is thus conceived in a decontextualized fashion, as a set of resources, and not as a process that is interactively co-built by participants. As highlighted by Horton (2008), “[c]oncepts of ‘easy’ or ‘difficult’ suggest something about the nature of the task, complexity of the stimuli, including a level of ‘acceptability’, which place an increasing load on cognitive and linguistic processing, and which may be best established empirically through collaborative work between therapist and person with aphasia” (p. 988).

By focusing on this collaborative work, and more generally on the interactive realisation of naming activities, we propose to conceive cueing not as a set of single separable resources/hints to be administered to the client in order to find a target word, but as a set of practices that emerge locally and progressively according to both the client’s and the speech therapist’s actions. More than a hierarchy of cueing, we suggest then considering the temporal and sequential organisation of cueing, as well as its collaborative dimension. On the one hand, the therapist must indeed constantly adjust to the interactional contingencies and the locally exhibited competences of the client. On the other hand, the client is not only responding and aligning to the therapist’s cues, by exhibiting her/his local competences, but (s)he is also initiating possible cueing practices. As our paper shows, this results in a constant local (re)definition of the original task. Even a relatively “simple” task such as naming a card and producing a single linguistic item, can thus be reconfigured turn-by-turn by participants.

2. METHOD AND DATA

This study is part of our project on aphasia speech therapy analysed in a conversation analytic perspective. It is based on two fieldworks we have realised in France and in a French-speaking part of Switzerland and on two large corpora of video-recordings (approx. 60 hours) that were collected during the fieldwork. The corpora include several speech therapy sessions as well as ordinary conversations involving several aphasic speakers who present different types of aphasia with the same etiology – a stroke. One of the two corpora offers a longitudinal follow up of the same patients and an overview of different therapeutic settings in which the patient does the speech therapy along with his recovery: the stroke unit of a hospital, a rehabilitation private clinic, the client’s home, a private surgery. In total, 13 patients and 9 speech therapists are included in the data collection. Our study focuses on the organisation of a specific activity – the

⁶ Abel et al., 2005, list the following increasing cues methods: naming, definition, closure sentence, first sound, first syllable, repetition.

⁷ The effectiveness of the cueing method might be related to the nature of the underlying psycholinguistic deficit (but assessments about the type of disorder can be problematic, see Rapp & Caramazza, 1993) and the severity of the disorder. Correlations between the semantic or phonological lesion and with storage or access disorders (or difference between inaccessible or lost linguistic knowledge) are then established in order to define which cueing method should be selected to assist the patient. If the item is presumed to be present in the memory (and thus the problem is to find a “path” to find it) increasing assistance is recommended; while if the item is presumed not to be stored in the memory (and thus it must be re-learned), vanishing cues are recommended (like giving the target word and asking for repetition, then giving its semantic content etc.).

naming of cards – that is recurrently performed in all these different therapeutic settings. The excerpts analysed in this paper are part of a collection established on the base of a series of 10 sessions (of approx. 1 hour each) recorded with the same client during 4 months. The client, a man in his fifties, presents a non-fluent aphasia caused by a stroke he experienced 10 years before the recordings took place. He has been doing therapy on a weekly base for this timespan and for the most part with this same speech therapist. Following the conversation analytic methodology and the principles of multimodal analysis, our study is based on the video-recordings and their multimodal transcripts. The conventions used for the verbal and non-verbal resources are referred to in the appendix.

3. FINDINGS

In what follows, we analyse some sequences that allow us to highlight different aspects related to the collaborative work realised by the speech therapist and the client in order to accomplish the task of producing a specific target item. We first (3.1) show that when the client can't immediately produce the response to the therapist's first turn (that is the presentation of the card), he engages in a word-search process characterised by multiple audible and visible resources that allow him not only to orient the search, but also to handle the practical problem of keeping the turn and showing to be "doing being answering". The temporality and the type of assistance offered by the therapist are strictly dependant on the audible and visible conduct of the client. Secondly (3.2), we show that the client can not only initiate certain types of cueing practices used by the therapist, but also resist them and the type of participation they make relevant for him. Finally (3.3), we show that when the client is shown to be "out of solutions", the therapist can reconfigure the original task according to the competences locally exhibited by the client; this results again in a collaborative (and, in our data, successful) accomplishment of the activity.

3.1. Searching for a word and structuring the temporality of cueing

The naming activity constitutes a specific type of word search (the search being the aim itself of the activity). Word searches have been described in conversation analytic literature (see the pioneering studies of Goodwin, 1983; Goodwin & Goodwin, 1986), where they have been treated not only as mental and cognitive states, but also as visible/accessible and embodied phenomena that, as such, can be collaboratively dealt with in interaction. In this perspective then, when the aphasic speaker manifests difficulties in finding a target word, (s)he's not only handling a mental state and the specific features of its aphasia, (s)he's especially handling the interactional consequences of searching for a word when interacting with someone – more specifically, when interacting with someone in the framework of a naming activity. In our data, when the client can't find an answer straightforwardly, he deploys a series of verbal and visual resources that show that a search is in progress and that, despite her/his difficulties, he's aligning with his "responsive/answering" role; a preference for self-repair is observed in what both the therapist and the client are doing (see also Laakso, 2015). Among these resources there are cueing practices introduced by the client himself. In the following excerpt for instance, the client, who must produce the item "ver⁸ de terre" (earthworm), after some hesitations, pauses and the production of the article "les" (plural form of "the"), refers to the "fishing" activity ("la pêche", end of l. 4) and therefore introduces a semantic link with the target word. The syntagm, though, is not produced as a possible answer and solution/result of the search, but rather as a

⁸ Note that in French the singular ("ver") and plural ("vers") forms of this item (worm) are pronounced in the same way (/ver/). On the card, one single earthworm is represented.

different and parenthetical element, which is subsequently acknowledged by the speech therapist and recycled in a turn that makes explicit the semantic link introduced by the client (6):

Excerpt 1a

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1      the      §(0.5)          §(0.4)
      the      $turns,shows card$positions card->
      the      >>lks down->
2      CLI      .h
3      the      (0.4)$
      the      ---->$
4      CLI      #les §(0.3) °eurh° le::s (0.3)*#.tsk euh:: #*%>la pê:~#che< §H.tsk
      the(pl.)      the (pl.)          the (sing.) fishing
      cli          >>lks down----->*lks h.rig.----*lks THE*lks down->
      cli          %points up%points card-->
      the          -->flks CLI->
      fig          #fig.1          #fig.2          #fig.3          #fig.4
      
5      (.)
6      THE      <oui[:> ((smil.))> c'est pour §la <%pê::[ch:e::((smiling))>&
      yes          it's for (the) fishing
      cli          -->%////////%
7      CLI      [euh xxx          [<he.he.he.((laughing))&
      the          -->flks right->
8      THE      &<he.he.he.he.((laughing))>§H::
9      CLI      &&Hhe.he.> H::
      the          -->flks down->
    
```

The parenthetical character of this production is given by its fast flow and by the fact that the client looks quickly at the therapist and then reorients his gaze to the card. The orientation of the gaze contributes to indicating a return to the searching activity (as the solution has not been found yet) and that the client keeps “doing being answering”. This is also shown by the fact that he breaths-in and smacks his lips and thus projects a continuation of the turn (4). Moreover, when the therapist acknowledges the reference to the fishing activity and smiles, the client first aligns and initiates laughter – laughter to which the therapist aligns too (see Wilkinson, 2007, for laughter in prolonged repair sequences during the therapy) – but then takes the turn again and shows to be still searching for the target item (10):

Excerpt 1b

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10     CLI      les §E°°euh euhr°° %de te- (.) euh *%#non%euhm::*%#.tsk (0.3)
      the (pl.)      (of ear-)      no
      cli          -->*.....*turns h. right->
      cli          %.....%pts card-----%,,,,%.....%pts card->1.15
      the          -->flks CLI-->1.13
      fig          #fig.5          #fig.6
    
```



```

18  THE      $suspends card-->
          ver de$terre/
          worm of earth
          earthworm
          -->$places next card>>

```

At line 12, the therapist gives the first part (“ver”, worm) of the target item (“ver de terre”): by doing so, she does not give the entire solution but calibrates her cueing to the client’s previous productions (since he had produced the beginning of the second part of the syntagm – “de te-rre”). Following this turn, the client looks at the therapist (14, fig.8) and thus “abandons” the posture he had before while handling the search alone (when he was looking at the card and on his right). This mutual gaze is sustained during the production of the solution (15); after a first attempt, the client manages indeed to produce the entire syntagm. The very last syllable is produced while withdrawing the pointing gesture and looking back at the card – so closing down this side sequence and returning to a “naming-cards’ position”. The cue offered by the speech therapist allows for restructuring the “private” search of the client and redefining it as a collaborative accomplishment. The production is then subsequently acknowledged by the speech therapist (“oui”, yes, 16) while she prepares the following card; she keeps it suspended while repeating the target item and then places it on the table while she produces the second part of the syntagm (18). This shows a practical concern of the therapist in organising, at the same time, the evaluation of the client’s production and the structuring and continuation of the activity (avoiding then the production of the item while a new item is represented by the subsequent picture).

The excerpt shows a recurrent pattern in our data, that is a preference for letting the client solve alone the search and self-repairing his own productions and multiple tries. At the same time, the therapist’s assistance is adjusted moment-by-moment to what the client is doing: that is introducing self-cues (like the semantic one) and producing some items but exhibiting them as part of a private search. It is only after several tries and two attempts and repair-initiations of the client (produced with withdrawal of gaze), that the therapist comes in with a phonemic cue. The phonemic cue is offered as a hint (as still part of the search and not as the final solution, thus perfectly in line with what the client is doing – that is, showing to be still searching) and strictly calibrated to the previous productions of the client – who was able to recover the second part of the target syntagm. Following the participant’s body orientation, and particularly gaze, we can see that the activity – which, for the most part, is structured by the client as a “private” one – is redefined by the therapist as a collaborative one; the collaboration not only concerns the phonemic cue but also the type of participation required to the client in order to solve the search (the production of the item is indeed realised through mutual gaze).

The crucial role played by participants’ gaze orientation for structuring the cueing activity can be further observed also in the following excerpt: the excerpt concerns the production of the same item as excerpt 1 (“earthworm”) but it is issued of another session. The assistance of the therapist (who offers again a phonemic cue - “ver de”, 6) is this time solicited by the client, who gazes at the therapist after the production of “la terre” (the earth, 4):

Excerpt 2

```

1  THE      $oui::
          yes
          $turns next card->
          >lks card-->>
2          $(0.4)$
          $places card$
3  CLI      %de(s):: (0.2) euh::: feuh (0.6) te- (0.3) non (.) euh:: (0.9)
          (some;of)                (ear-)          no
cli        %pts card-->

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```

cli      >>lks card-->
the      -->flks CLI-->
4      euh .tsk ɛ(0.4) ɛ(0.2) la (0.2) te:rre/
           the          earth
the      -->flks rightflks down-->
5      *(0.5)
cli      *lks THE-->
6      THE  ɛve:r d[e:
           worm of
           flks CLI-->
7      CLI  [*de terre=
           of earth
           -->*lks down-->
8      THE  =terre
           earth
9      (0.9)

```

On lines 3-4, the client tries to produce the target item and, as observed in excerpt 1, structures the search through the production of a determinant, several hesitations and the self-repair initiation of the item “te-”. During the search the client looks and points at the card. The search culminates in the production of the syntagm “la terre”, which interestingly does not only introduce the final part of the target item (“ver de terre”) but possibly constitutes a paraphasia of the word “ver”, whose pronunciation differs for only one phoneme (ver - /vɛr/ vs terre -/tɛr/). In contrast to what observed in excerpt 1, this production, realised with rising intonation, is followed by an orientation to the therapist; the latter does not immediately take the turn (still showing a preference for the client to solve the search by himself). Nevertheless, after a sustained gaze of the client, she starts to produce the target item (“ver de”, 6); this production is overlapped by client who takes the turn (7) and completes the item (“de terre”) while gazing back at the card. As a consequence, by *completing* (instead of *repeating*) the therapist’s turn and producing a collaborative accomplishment (Lerner, 1996), the client contributes to defining not only the type of assistance he needs but also the type of answer to be proofed (in this case, a collaborative one). The therapist closes the sequence by producing the item “terre”, thus completing the structure initiated at line 6, instead of repeating (and validating) the entire production of the client (“de terre”).

The two excerpts then show that the “same” type of cueing (a phonemic one) used for assisting the production of the same item in the framework of a naming activity can be administered in different ways and with different temporalities by the therapist; cueing is indeed sensitive to the micro – audible and visible – details of interaction and as such is interactively and collaboratively defined according to the competences exhibited locally and moment-by-moment by the client. Moreover, the excerpts clearly show that the client plays a crucial role not only in negotiating the relevance of the therapist’s assistance but also (as shown in excerpt 2) in calibrating the type (or “quantity”) of assistance needed.

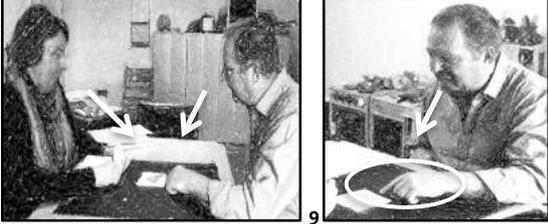
3.2. Negotiating alternative cueing practices

In the following excerpt, we can see that, after the presentation of a new card, the client immediately starts the answering process; the search for the target word (“raisin” – grapes) is characterised by the production of a determinant in the plural form (“des”, the), and the production of a phoneme (“r”) which is then abandoned and subsequently recovered through the production of “des rad-” (some rad-) (2). Interestingly, the client, on line 3, initiates a repair of the projected word, by producing it entirely (“pas de radis”, not radish). The production of the “wrong” item is accompanied once again by a quick orientation towards the right side and exhibited as part of the private search (fig.11). Immediately after, the client produces an in-breath and a click of the tongue that signal a keeping of the turn, he looks again at the card and continues to point at it (fig. 12).

Excerpt 3a

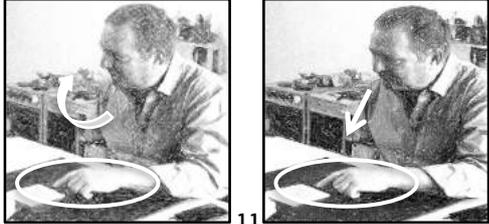
1 the §(0.2)
the \$places card-->
>>lks down-->

2 CLI \$merci\¹§ .h:: des %#(.) r(e) (.) %des:: (0.6) des rad-
thanks\ some r(e) some some rad-
the \$,/////\$
cli >>lks down-->
cli %pts card-->1.4
fig #fig.9,10



9 10

3 ah: pas de *#ra(dis) *£#.h:: .tsk euh:: £(0.2) des
oh not radish some
cli -->*lks right*lks down-->
the -->£lks at CLI----->£lks down-->
fig #fig.11 #fig12



11 12

4 *(0.6) .tsk H:: d- de*:s [.tsk %#(0.3)%#d'ita*#lie/
s- some from italy
cli *lks up----->*lks down-----*.....*lks up-->
fig -->points-->%.....%circ. g.%raises index-->
#fig.13#fig.14 #fig.15



13 14 15

5 THE [°(mh)°
6 *#(0.2)£(0.2)*(0.1)
cli *lks THE---->*lks down-->
the -->£lks CLI-->
fig #fig.16



16

¹ “Thanks” refers to previous turn and sequence.

7 CLI %#euhm: (0.4)
 %suspends index-->
 fig #fig.17



17
 8 THE EUH: en suisse on a [aussi hein/
 in switzerland we also have (it) isn't it
 9 CLI [ouais
 yes

On line 4, after some hesitations and the production of the determinant “des” (some), the client produces the syntagm “d’italie” (of Italy), thus introducing a feature of the target item (its geographical provenance). This turn is accompanied by a thinking face (looking up) and by the raising of the finger that both configure the semantic link as a self-cue (fig. 14-15). In the following pause (6), nevertheless, the client looks quickly at the therapist (and then back at the card) but, following an absence of uptake, again takes a turn on line 7 by producing a stretched hesitation. On line 8, the therapist finally aligns to the semantic cue produced by the client by signalling the presence of this product in the country of the participants (8). This turn is accompanied by a tag positioned question with upward intonation (“hein”, “isn’t it”) that invites a response from the client; nevertheless, the latter has already acknowledged the therapist’s turn in overlap (9). After a pause (10), during which the client continues to look at the card without producing any vocal sound, the therapist formulates a known-answer question (11) and points to the card:

Excerpt 3b

10 (0.6)
 11 THE %qu'est-ce %qu'on %fait avec f##ça/
 what do we do with that
 the \$.....\$points card-->
 the flks card--> -->flks CLI-->
 cli %.....%points card-->1.31
 fig #fig.18,19



12 \$(0.5)\$
 the \$, , , , \$
 13 THE qu'est-ce qu'on peut fai[re/
 what can we do
 14 CLI [boi:re
 drink
 15 (0.6)
 16 CLI \$pour \$le: rouge\ (0.2) >le blanc< .tsk
 for the red the white
 the \$nods/lks down\$lks CLI-->
 17 \$(0.1)*\$(0.3)
 the \$lks down-->
 cli -->*lks THE-->
 fig #fig.20



20

18 THE ouai:s
yes
19 *\$#(.)
cli *lks right-->
the \$lks CLI-->
fig #fig.21



21

20 CLI le:[: euh
the
21 THE [le vin \$#bla[:nc
the white wine
22 CLI [des ra-
some ra-
the \$lks left-->
cli *lks down-->
fig #fig.22



22

The question of the therapist is used to assist the client in the production of the word by introducing other possible semantic links. It thus works again as a semantic cue and allows the therapist to handle a moment in which the client does not initiate any alternative methods to find the word (see the pause on line 10). Since the client does not answer, the therapist reformulates the question (13) – this occasions the client’s answer in the form of a verb (“boire”, drink, 14). Following an absence of uptake by the therapist, the client increments his turn (16) by referring to different types of wine (red and white, 16). This turn is evaluated by the speech therapist, who first nods, then acknowledges (“ouais”, yes, 18) and finally recycles the adjective “blanc” (white) and makes the referent (the wine) explicit (21). Interestingly, while the therapist is evaluating/acknowledging the production of the client concerning the inserted interrogative series, the client goes back to the initial search – thus closing (and configuring as such) this side sequence and manifesting a kind of resistance to further developing the interrogative series and the semantic cueing. His production (22), though, recaps the word produced in the previous turns (“radis”). The video shows that on line 23 the therapist opens her mouth and positions her lips on “r”, thus projecting a phonemic cueing (see transcript below); the client nevertheless is still looking at the card, and initiates some multiple tries on line 25 by producing two self-repairs of the word “radis”. Again, these repair-initiations are accompanied by a specific orientation of the client, who turns his head and averts his gaze (fig. 24-25). This signals that, despite difficulties and effort, he’s still searching for the word and “doing being answering” (see also the clap of the

tongue, 26). It is precisely after this embodied manifestation of the search and effort that the therapist comes in and invites the client through a directive to look at her ("regardez-moi", look at me, 27)¹⁰. The directive of the therapist is accompanied by a pointing gesture towards her mouth; once the client looks at her, she produces the entire target word (29).

Excerpt 3c

23 THE \$#.h.:
the \$opens mouth-->l.27
fig #fig.23



24 (0.3)
25 CLI des ra- \$(.)%non\ (.) ah pas de ra%dis *\$#(.)
some ra- no oh not radish
cli -->lks down->*turns/lks left-->
cli %repositions-----%
the -->\$lks CLI-->
the \$....
fig #fig.24,25



26 CLI [.tsk
27 THE [\$#regardez-*moi
look at me
the \$points to herself
cli -->*...
fig #fig.26



28 cli *#(0.4)
fig *lks the-->
#fig.27,28

¹⁰For the use of these directives in adult-children interactions see Kidwell, 2013, and in interactions with adults with intellectual disabilities see Antaki & Kent, 2012; Antaki et al. 2017.



29 **THE** raisin
 grape
 30 *(.)
 cli *lks down-->
 31 **CLI** des *(.) rai-**-sins%
 some gra- -pes
 cli -->*lks THE-*lks down-->>
 cli -->points card%,,,,%
 32 \$£(.)
 the \$...
 the £lks down-->>
 33 **THE** oui
 yes
 34 \$#(0.4)
 the \$places next card-->>
 fig #fig.29



This visual phonemic cueing (framed through the directive and the pointing gesture) allows then to restructure the activity and the client's participation by reconfiguring the task (from *finding a word* towards *repeating a word*). Interestingly, after the production of "raisin" by the speech therapist (29), the client reorients to the card and produces a "new" version of the therapist's turn (versus just a repetition), by adding the determinant ("des", the). This is positively evaluated by the speech therapist who first acknowledges the production (33) and then (34) turns the following card, thus initiating a new sequence.

3.3. Pursuing a response and reconfiguring the task

The interrogative series of known-answer questions developed by the speech therapist in excerpt 3 allowed not only for developing a semantic cueing but also handling, from an interactional point of view, a difficulty of the client in pursuing the answering activity and the search for the target word. In what follows, we see that when the client explicitly signals to be "out of solutions" (and thus a possible closing of the sequence), the therapist can reconfigure the task for all practical purposes. Again, the task is collaboratively accomplished through the use of different resources and, in this case, even through the use of different modalities (notably, the written one).

At the beginning of the sequence, and unlike previous examples, the client orients to the relevance of an answer (see the click of the tongue, 2, and the very quiet hesitation, 5) but does not produce any verbal items and immediately shows a possible difficulty in finding a solution. The therapist then comes in and offers a cue at line 7, thus handling, from an interactional point of view, the absence of a response. Using a demonstrative pronoun that contextualizes the image

of the card, she refers to a feature of the target item (“ail”, garlic) – the fact of smelling badly – and offers then a semantic cue.

Excerpt 4a

```

1      the      $(0.6)$
        $places card$
2      CLI      .tsk=
3      THE      =ça/
                this
4
5      CLI      (0.4)
                °euh°
6      THE      (0.2)
                ça sent mauvais
                it smells badly
        the      flks CLI-->1.11
8      (0.8)
9      CLI      #le: riz\ euh non euh::mh (0.2) .tsk %pour
                the(m.)rice no for
cli                                     %pts card->
cli                                     >>lks down-->
fig                                     #fig.30 #fig.31

```




```

10     *la:: *(0.3) la*fondue
        the (fem.) the fondue
cli    *,,,, *lks right*lks down-->
fig    #fig.32 #fig.33

```




After a long pause (8), that signals a difficulty and an absence of uptake of this semantic cue, the client produces an item (“riz”, rice) and immediately self-repairs it, thus showing to recognise that this is not the item represented in the picture. This self-repair is followed by a stretched hesitation, a click of the tongue and finally the production of a syntagm (10); the latter recovers the same type of cueing introduced by the therapist (semantic) by focusing instead on another feature of the item, more specifically its function (the fact of being used for cooking the fondue, a typical Swiss melted cheese). This semantic cue is produced while pointing to and looking at the card¹¹ so exhibited as part of the private word search and again not produced as the final response but as a self-cue. The therapist immediately picks the cue up by not only acknowledging it, but also by “recycling” it in a syntactically incomplete structure (with a syntactic cue):

¹¹ The short gaze towards the right side is produced during the search of the word “fondue”, 1.10; when, after some hesitation, the word is finally produced, the client redirects his gaze toward the card (by looking down).

Excerpt 4b

11 **THE** \$#oui: *pour la fon*due on a besoin de:/
 yēs for the fondue we are in need of
 the \$arranges cards-->
 cli -->*lks THE---->*lks down-->
 fig #fig.34



34

12 the E(0.4)
 filks CLI-->
 13 **CLI** \$%de::% \$ *#euhm:: (1.2) *chais plus
 of I don't know anymore
 cli %points card-->
 cli *lowers head--*raises head/lks down-->
 the \$,,,,,\$
 fig #fig.35



35

The turn on line 11 makes explicit the semantic link introduced by the client and invites (again) the production of the target word through a syntactically incomplete utterance produced with rising intonation (see, for the use of this technique in pedagogical settings, Koshik, 2002; Lerner, 1995). The client aligns to this technique by recycling the preposition “de” (of) on line 13, which is stretched out; after a prolonged hesitation and a very long pause during which he further lowers the head (thus signalling a “very private” search), he nevertheless explicitly manifests his incapacity to find the word and the fact of running out of possible solutions (“chais plus”, I don’t know anymore). Although the client pronounces the comment by still looking at the card and thus as a self-comment, in the subsequent pause (14), he gazes at the speech therapist. This latter, at this precise moment, looks to her right (see images 36-37) towards a block of post-its; she then grasps one of them and a pen, thereby projecting, without any comments, a writing activity. The client first looks at her, then looks back at the card (to which he’s still pointing, fig. 38):

Excerpt 4c

14 cli *£#(0.6) £(0.4)*#(0.8) *#(3.4)
 the *raises h/lks THE-----*lks right-*lks card-->
 fig £turns/lks r/post it£takes pen and post it-->
 #fig.36 #fig.37 #fig.38

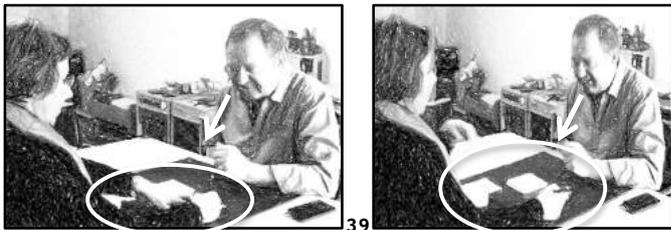


15 CLI *£chais plus .h::*c'est Hm:£
 I don't know anymore it's
 cli *repositions-----*lks post-it-->
 the £places post-it-----£

While the therapist positions the post-it in the middle of the table (close to the card), the client stops pointing at the card, retracts his hand and repositions himself, while also repeating the previous comment (“chais plus”, I don't know anymore) and producing a last attempt (“c'est”, it's) that is subsequently abandoned (15). By the time, the client is looking at the post-it and monitoring what the therapist is doing; during the long pause on line 16, she writes down the target item (fig. 39). These turns show then a progressive contextual reconfiguration of the activity (Goodwin, 2000b) through the use of different semiotic resources (namely the post-it and the pen) and recouring to the writing activity. This reconfiguration is achieved locally and incrementally, as a response to a series of cues that had previously failed (semantic, syntactic).

Excerpt 4d

16 the £#(3.1) £#(0.4)£
 fig. £writes « ail »£retracts hand£
 #fig.39 #fig.40



17 CLI *AH: °euh° (.) ail
 OH garlic
 *lks card-->>
 18 THE £l'ai£:l
 the garlic
 £leaves pen,takes next card£turns it-->
 19 (.)
 20 CLI £l'ai£f
 the garlic
 £places cardf

During the writing activity, the client keeps looking at the post-it, thus aligning to (and showing to recognise) the project initiated by the speech therapist; this projects not only involves a linguistic cue (writing of the target item) but also a specific type of participation from the client. When the therapist starts to manipulate the material resources and positions the post-it in the middle of the table, she initiates a new activity (reading a written source) that requires to the client a different type of participation and reconfigures the original task not only as a collaborative one but also as implying a different (written) modality.

Once the therapist has finished writing the word and has retracted her hand, the client reorients to the card, thus taking again a “naming-cards position” and produces a change of state token, a short hesitation and the target item (17). This production is acknowledged by the speech therapist through a repetition that includes a correction (the use of the article, “1”, the, 18) and that occasions the repetition of the client (20). This extension of the sequence by the client, after the acknowledgment of the therapist, takes place when the therapist initiates a new sequence by placing the new card to be named (20) and it is not followed by a new evaluation/acknowledgment of the therapist. Although it could “simply” constitute a self-repetition of the (corrected) item¹², it also interestingly modifies the (asymmetric) organisation of the sequence and its closure, by being produced *after* the therapist’s “third turn”.

4. DISCUSSION

The analyses showed the complexity and richness of a therapeutic activity such as card naming and pointed to the way it is realised collaboratively by the therapist and the client. When the client can’t find the target item straightforwardly, the three-part sequence – first position turn, answer and third position turn – that usually structures the naming activity is clearly extended by a long “answering process” that precedes the final “third” turn of evaluation/acknowledgment of the therapist. During this answering process, the client uses different audible and visible resources that allow him to structure the search and to configure it as a private one (but see ex. 2 for requests of assistance, also through the use of gaze). The therapist monitors the client’s conduct and, despite a preference for letting him to solve the search alone and for self-repair, calibrates her cueing practices to both what the client is saying and/or doing - a prolonged withdrawal of gaze, for instance, motivates the therapist’s intervention. As shown in the analyses, participants strongly rely on both audible and visual resources for understanding and structuring the activity and their mutual actions.

Although generally we observe a tendency to use increasing assistance¹³ (from semantic to phonemic), the type of cueing practices used by the therapist and their temporality are deeply dependent on the management of the interactional contingencies and on what the client is doing. This shows that cueing can’t be understood “only” as a set of (phonemic, syntactic, semantic) hints offered to the client to support the lexical retrieval, but has to be conceived as a set of actions that are, by definition, dependent on the dynamics of interaction. The interactive organisation of the activity implies then possible local reconfigurations of the original task, that from “naming a card/finding a word” can become “repeating and completing an item” (ex.1), “producing a collaborative completion” (ex. 2), “repeating a word” (ex. 3), “reading a word” (ex. 4). These local reconfigurations are realised in a collaborative and smooth way and imply a negotiation of the task as something to be accomplished “alone” or “together”. They show that, at least in our data, the therapist conceives and realises the task as a joint/collaborative process¹⁴. This collaborative nature of the therapeutic process invites to put into question analytical models that insist on and categorise, through coding systems, exclusively the therapist’s actions and emphasise theirs “functions”, without considering their sequential and incremental nature.

Finally, the analyses have shown the central role that is played by the client in defining the temporality of the therapist’s assistance as well as the type of cueing needed and, more broadly, in co-constructing the dynamics of the therapeutic activity. The client showed his ability not only to monitor his productions and to initiate or suggest possible cueing paths (such

¹² As a specific type of “doing pronunciation” (cf. for second-language interactions, Brouwer, 2004; Merlino, 2014).

¹³ This is in line with what has been observed by Abel et al., 2005, and Horton, 2008.

¹⁴ This seems coherent with principles of “motivation” of the client (Horton, 2008).

as semantic, ex. 1 and 4, or phonemic, ex. 2), but also to negotiate the assistance offered by the therapist. Excerpt 3, for instance, showed some resistance of the client with regard to the semantic assistance (based on the development of interrogative series) and his attempts at closing down the side sequence. Moreover, when the therapist framed the cueing with directives (ex. 3) or manipulation of objects (ex. 4) that constrained the client's conduct, the latter adjusted to the therapist's actions but, at the same time, produced new versions of the suggested item or extended the sequence after the therapist's evaluation. These "small" client's initiatives suggest not only possible variations of the traditional "three-part" sequence but also a negotiation of the asymmetry that they convey. This seems particularly relevant for reflecting about the therapeutic relationship among the client and the therapist, traditionally conceived in terms of asymmetry, with a strong emphasis put on the therapist's actions. A detailed analysis of naturally occurring therapeutic interactions can indeed put this asymmetry into perspective, recognizing the active role played by the client in the therapeutic process and highlighting the specificities of this instructional setting that involves adult "learners".

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6. APPENDIX

Transcription conventions

Verbal resources are transcribed following the ICOR conventions:

http://icar.univ-lyon2.fr/projets/corinte/documents/2013_Conv_ICOR_250313.pdf

Multimodal resources are transcribed using the conventions developed by Lorenza Mondada:

https://franz.unibas.ch/fileadmin/franz/user_upload/redaktion/Mondada_conv_multimodality.pdf