

## Negotiating Techno-Scientific Definitions: A Conversational Analysis of Experts and Linguist-Terminologists in Space Science

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Received: 5/11/2022  
Revised: 30/3/2023  
Accepted: 3/5/2023  
Published: 30/3/2024

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Citation: Alshtaiwi, M. . (2024).  
Negotiating Techno-Scientific  
Definitions: A Conversational  
Analysis of Experts and Linguist-  
Terminologists in Space  
Science. *Dirasat: Human and Social  
Sciences*, 51(2), 312–320.  
<https://doi.org/10.35516/hum.v51i2.3023>

### Abstract

**Objectives:** This study aims to explore the negotiation process used by subject matter experts and linguist-terminologists to agree on the definition of specialized terms. Specifically, the study analyzes a conversation between members of the French General Commission on Terminology and Neology in Space Science and Technology (SST) and linguist-terminologists to understand how they coordinate to reach a common understanding of a chosen term and agree on its definition.

**Methods:** Based on an audio and video corpus, a theoretical framework was used in social linguistics specific to interactional linguistics (LI) and conversational analysis (CA) to clarify the decision-making method and agree on the proposed definition of the term studied through the corpus that was analyzed.

**Results:** Experts and linguists negotiate a perception of the concept through discourse and exchange to agree on the definition of the term presented for the study. Three regularities during the standardization activity were identified: proposing a new definition, modifying an existing definition (with a footnote, a reference...), and deleting an existing definition or an element.

**Conclusions:** Team coordination between subject matter experts, linguists, and terminologists is needed to introduce and modify definitions of specialized terms to promote their use and better support language policymaking development.

**Keywords:** Conversational Analysis, Corpus Linguistics, Techno-Scientific Definition, Decision-Making, Terminology, Language Policy, Popularization of Science.

### تفاوض حول التعريفات التكنولوجية والعلمية: تحليل حوارى لخبراء المجال ومتخصصي اللغة والمصطلحات في علوم الفضاء

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#### ملخص

الأهداف: يهدف هذا البحث إلى دراسة التبادل التخاطبي الذي يستخدمه خبراء المجال واللغويين ومختصي المصطلحات للاتفاق على تعريف للمصطلح المختص. وبالتحديد تحلل الدراسة المحادثة بين أعضاء اللجنة العامة الفرنسية للمصطلحات والمستجدات اللغوية في علوم وتكنولوجيا الفضاء (SST) لفهم كيفية تنسيق الأعضاء بينهم للوصول إلى فهم مشترك للمصطلح المختار والاتفاق على تعريف له.

المنهجية: بالارتكاز على مدونة مسجلة بالصوت والصورة، جرى استخدام إطاراً نظرياً في اللغويات الاجتماعية محدداً في علم اللغة التفاعلي (LI) وتحليل المحادثة (CA) لتوضيح طريقة صنع القرار والاتفاق على التعريف المقترح للمصطلح المدروس من خلال المدونة التي جرى تحليلها.

النتائج: يتفاوض الخبراء وعلماء المصطلحات اللغوية على إدراك المفهوم عبر الخطاب والتبادل بينهما للاتفاق على تعريف المصطلح المقدم للدراسة. لوحظت ثلاث حالات انتظام في ممارسات أعضاء اللجنة في أثناء هذا النشاط: 1- اقتراح تعريف جديد 2- تعديل تعريف موجود (مع حاشية سفلية، ومرجع...) 3- حذف تعريف موجود أو عنصر.

الخلاصة: يُعدُّ تنسيق الفريق بين المتخصصين في المجال العلمي المطروح واللغويين وعلماء المصطلحات ضرورياً لتقديم وتعديل تعريفات المصطلحات المتخصصة ليجري تعميمها وتقديم دعم أفضل لاتخاذ القرارات المتعلقة بسياسة اللغة. الكلمات الدالة: التحليل الحوارى، المدونات اللغوية، التعريف التكنولوجي والعلمي، صنع القرار، المصطلحات، سياسة اللغة، التعميم العملي.



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## **Introduction**

We are examining the verbal interactions that take place during a workshop with the objective of revising specialized terms and their definitions. Our study is motivated by the desire to understand how agreement is reached in this type of activity. By studying teamwork, we can observe the linguistic and interactional patterns as the moderator introduces the term and its suggested definition, taking on the role of the initiator of the debate. Participants either accept the proposed definition without negotiation or they work together to formulate a definition for the term in question. The final version of the definition is adopted after a debate that takes place at two levels: first the conceptual level, then the linguistic level. The drafting phase occurs in a second phase when participants have agreed on both levels. While the conceptual level is often presented as stable content understood by domain experts trained in techno-scientific fields, the linguistic level is often debated, reformulated, and argued by the different participants in the meeting, especially by linguists and terminologists. This argumentation plays an essential role in the decision-making process and the agreement reached by the different participants. Our approach shows that the argumentative sequence is co-constructed by two or more participants through discourse. Thus, the result of the interaction among several participants engaged in the same activity through discourse and the space and objects in that space is constituted by a dialogical and argumentative sequence.

## ***Theoretical framework***

Interactional linguistics emanates from ethnomethodology and focuses on describing how verbal and non-verbal interactions are elaborated in a collective construction. It answers the question: how do members of society carry out the social activities in which they are engaged in an orderly and recognizable way? The founder of ethnomethodology is Harold Garfinkel (1967). Harvey Sacks, while inspired by ethnomethodology, became interested in language practices and their detailed organization in the 1960s. Indeed, he asked how members of a society identify activities of a certain type and context; what methods they use to recognize them and organize them so that they are recognizable as such; how they systematically order the details of speech and interaction while responding to the contingencies of situated action (Sacks, 1992). Sacks (1984: 21) proposes that there is a field of research that is not part of any established science. It is a field that those interested in it have called ethnomethodology/conversation analysis. This field seeks to describe the methods that people use in their social lives.

The essential goal was to show how the details of conversation account for social order are constituted in the local activity of speakers. To this end, Sacks (ibid.) began recording conversations using audio cassettes, as it seemed essential to him to be able to listen to his data indefinitely to develop a specific analysis of phenomena not observable in a single listening or viewing of a scene. In a second step, he showed the importance of transcribing the recorded elements to be able to fix data that are dynamic and temporal and to allow a discussion with others on the theme. Interactional linguistics privileges the point of view of the interactants involved in the conversation. Indeed, it is interested in phenomena that show the organization of interactions by the participants themselves. For example, every interaction is composed of an "opening", which allows a joint and reciprocal "entry" of the participants into the conversation, and of a "closing", which allows them to negotiate the separation. Another element presenting the organization of the interaction by the participants is the notion of "sequences". Indeed, any conversation is structured by themes and activities that the interactants recognize and maintain to build a coherent conversation. We can also mention the theory of organization based on "turn-taking", which allows us to observe the order of the interaction elaborated by the participants without prior agreement.

## ***Research Methodology and Corpus Analysis***

First of all, we need to answer the question: what is a negotiation? The concept of "negotiation" refers to "a series of discussions, exchanges of views, steps to reach an agreement, to conclude a deal" (Petit Robert de la langue française: 2009). Thus, negotiation is an activity that involuntarily brings two or more actors into the interaction to seek a mutually acceptable solution or agreement. Negotiation, therefore, refers to social practice and is presented in the same way as other language activities (job interviews, medical consultations, university classes, etc.). It has its context of appearance

(diplomatic arrangements, workplace, family setting...), its privileged sequential organization, its expected roles, and its alternatives (opposition, coercion, convincing, manipulation... ). Negotiation allows for the success and failure of the interlocutors and presents several modalities of progression (" Workplace negotiation ", " Social negotiation ", " Business negotiation "...). Finally, it mobilizes particular strategies and tactics, resources, and distinct linguistic organizations that the innumerable training techniques to which it has given rise attempt to capture. This conception has imposed itself in two fields.

What is the capacity of individuals to collectively elaborate semiotic units of collective activity in a particular context? Interactionists, whether in the context of interactional linguistics (linguistics of verbal exchanges) or ethnomethodologically oriented conversational analysis (Sacks, Schegloff & Jefferson 1978), conceive of negotiation as a category of activity within a conversation, i.e. as a constitutive component of language use in a particular interaction situation.

In our study, we are interested in the description of a "linguistic component of work" and more precisely of a particular work situation. From this point of view, our approach focuses on the analysis of a particular sequence and aims at explaining what a linguistic approach to negotiation can bring to study the mechanisms of agreement. To do so, we will start with a synthetic presentation of the research methodology and the empirical data on which our study is based. To study the mechanisms that lead to an agreement at the end of a team negotiation, and more precisely in a committee specialized in the issue of terminology standardization, we are particularly interested in a regular activity (the validation of a definition) and a particular sequence (the definition of French terms).

Many of the participants have expertise in language science and language planning. Most of them work in different settings: universities, institutional communication services, or organizations dealing with terminology. In addition, the meetings are conducted under the guidance of a moderator and a chair. The moderator can adapt to different ways of doing things, more or less dirigiste. Either he/she systematically centralizes the speaking and the organization of the activity. Or he/she limits him/herself to intervene in the event of a blockage in the "mechanics of the round table". All of this can produce formats that expand or restrict the participation of certain group members.

In our transcriptions and analyses, we deliberately chose not to identify participants on this basis or to categorize them (e.g., Ling.=linguist). We, therefore, gave them fictitious names and not their titles. This is to avoid categorizing participants in advance, simply by reading them and to avoid creating classes such as "linguists" or "scientists", for example, which would make a grouping of differentiated participants homogeneous. All real names and surnames have been changed.

The corpus constitutes a large corpus that can be processed by other researchers. It has been digitized as a .wav file to be able to transcribe certain passages that will illustrate this analysis more. The session was attended by 16 speakers (15 speakers + ourselves) and was recorded in video and audio. Several documents were provided in this framework (notes, minutes, drafts, articles, documents...). The abbreviation "Termino" refers to the particularity of this corpus, i.e. the field (terminology). From this recording, we have retained a 20-minute excerpt that corresponds to the negotiation and decision-making on several elements of the definition of the term "aeropause". We found this passage interesting because of the way it was conducted and organized, and even because of the profile of the participants. It should be noted that this meeting was held within an institution, so this activity was of primary importance. Thus, not all speakers have the same status and the same legitimacy to speak. This conversation is formally constructed. Thus, the corpus lends itself to the analysis of several moments when the work team manages to agree on the definition of a term after a long discussion. We have marked "Trans.termino" for the studied extract to differentiate it from the main corpus from which it is derived. The abbreviation "trans" refers to the fact that it is a transcription.

### ***Research issue***

The professional activity that serves as the empirical basis for our study is related to a particular sector: the negotiation to propose a definition (Plain language) in the sciences. In this context, which involves many actors from different institutional bodies dealing with terminology and scientists in the field concerned, the work seems to be clearly divided between the participants who comment on the proposed definition. All participants have the same document sent by e-mail

a few days before the workshop. This document was drafted by the Commission secretary and reviewed by the Commission chair. Thus, the working meeting is structured by and for the team members so that everyone can intervene at the right time. Each member can intervene and express his or her point of view at the right time so that the data available to him or her can be disseminated and interpretations compared. The coordination of the team is done in meeting to ensure working conditions that allow the quality and efficiency of the decisions taken. One of the challenges of our work is to show how these meeting organization modalities have an impact on the decisions taken in terms of terminology: how is the negotiation influenced by the interactional dynamics between the participants in the meeting? The structuring of a meeting should be seen as both a problem and a goal of the participants, who actively implement a set of processes to accomplish and ensure the order of the interaction (Brussels, Greco, Mondada, Traverso: 2009). After the theoretical questions that we will raise from the study of the nature of the interactions studied and some of their most remarkable characteristics, we will try to see how knowledge is elaborated in a working context at the national level, what the remarkable actions carried out during the working meeting and, finally, what is the particular use made of it by the speakers.

### *Conversational and interactional analysis*

We therefore first present more precisely the organization of the study session based on a device that regulates the passage from one sequence to the next. We show both its universality and its variability. We then propose to see that the device can be disturbed but that these disturbances do not generate radical transformations of the process. Every team uses linguistic resources to exchange information, solve problems or negotiate solutions. The study of interaction focuses on the coordination between team members because it is particularly interested in the way interaction is organized in various social contexts.

What are the context and salient aspects of interaction in the technical field?

The session we recorded concerns a working session on space science and technology terminology between linguists and domain experts. Thus, the content of the interaction is particular since it is a negotiation between people mastering the content (scientific and technical aspects) and others mastering the formatting (linguistic aspects) to agree on a definition (intended for the general public). The way the interaction is organized shows their ways of working and collaborating, which makes certain dynamics more or less possible. For example, depending on how the interaction is organized at the beginning of the session, certain discussion formats are favored, allowing or preventing certain sequences from one round to the next, certain ways of posing a topic or continuing the previous one, certain opportunities to contradict or support the previous speaker, to control or not control his or her speech. The organization of the interaction in the work meeting in question has configurative effects on several of its dimensions, the formats of participation, the identities and categories, as well as the trajectories of the objects of discourse (elements detailed below).

- **Opening:** The opening sequence is therefore an important moment in the interaction. The contexts are varied and depend on the activity in question. Schegloff (1968, 1986) shows that the opening sequence presents a recurrent organization, composed of different successive activities until the introduction of the first topic. In our corpus, we have identified this opening.

- **Introduce yourself:** Participation formats organize the configuration of interlocutors. For example, the opening is the moment when the form of common availability required of the participants in the interaction is accomplished. During the opening, let us observe how one participant Chr introduces another participant Sop because he has not yet arrived at the meeting. The participant from Toulouse Sop, who arrives late, is introduced by the secretary of the meeting because there is a "hole" in the planned order of introduction. This is a typical example of the preliminary activities that participants can engage in just before the start of a meeting, i.e., before the main activity is introduced.

- **Agenda:** The agenda is thus both a text designed and sent out before the meeting, which is supposed to set the agenda, and a text whose adherence to and realization nevertheless depends on how the meeting will actually take place and be organized locally. In other words, the agenda is presented not as a determination of the group's activities, but as a resource that it invokes to organize it, and that requires the group's agreement to operate.

- **The activity involved:** Successive developments then adjust and complement different types of activities: those that favor a bipartite configuration in which the speaker faces the audience, those whose discussion format favors a configuration in which multiple accesses to the floor are possible, between the facilitator, The audience itself can adopt different postures depending on whether it simply asks questions or allows itself comments, or even autonomous proposals, and collaborative work on a common theme which favors self-selection, allowing alliances and alignments to emerge according to the sequences and the nature of the speaking turns. It should be noted that the passage from one sequence to the other was done here by the marking " bon " used by the moderator of the session " Jea ".

- **Conclusion:** The conclusion sequence is therefore also an important moment in the interaction.

### *Discussion*

In this section, we first present here an overall analysis of the extract, the objects of discourse, and their trajectory, as well as some examples from our corpus related to the hierarchical structure of the negotiation. The extract lets us note that the work meeting, in particular when it concerns specialists, is a privileged place to observe the way in which knowledge is accomplished in the interaction. The video extract transcribed presents several collaborative formulations to build agreement. The transcribed interaction allows to underline the collective and dynamic character of the definition proposed by Jea (L40). The first round of speaking is not an imposition, but rather a "product" progressively elaborated by the participants of different profiles involved in the activity. It is by taking the floor and using argumentation that the participants progressively co-construct the modification made to the definition of the term in question. We have seen how the participants intervene in relation to their profiles, it is the case of the linguists who intervene on the question of language and the scientists who intervene in the field concepts. That is to say, to say a concept linked to a science. Thus, we can see how the expert explains the concept expressed by the French term "aéropause" to build a definition. It segments the term "aéropause" by explaining the two elements "aéro" and "pause". In line 86, Louis rephrases his statement by detailing the concept. Thus, he uses other linguistic resources level. At the level of the progressiveness of the conversation to obtain the agreement of the interlocutors. In our extract, we see how the participants progressively elaborate on the solution to the problem they are facing. Even if Jea - moderator of the session - (L40) has the floor, his interlocutors participate in the organization of his speech: on the one hand when he addresses them "pas de remarques", "no remarks" (L46). On the other hand, the interlocutors actively intervene by helping Jea to reformulate his words. Jea (L40) introduces his subject of discourse, amply prefaced and preceded by the transition marker (bien - well), while Xav wishes to modify one of the aspects of the subject of discourse "Je reviens sur l'aspect techno-spatial", "I come back to the techno-spatial aspect" (L46). This statement is also anchored through the enunciative space of "Je", "I" and signs it as an individual contribution of this enunciator. Thus, he proposes his opinion by inking the statement through the "Je", and "I" to introduce a personal suggestion.

In this collective activity, namely the writing of a technical definition in plain language, we cannot approach the problem of decision-making without analyzing language and considering the language mechanisms that underlie human dialogue in general. Therefore, in what follows, we seek to present the nature of the language resources mobilized by the participants during the work session in question and to describe precisely the conversational and argumentative processes that lead to decision-making. To do this, we will use a model proposed by linguistics Genevan modules that specialize in verbal interactions.

After presenting some aspects of the work meeting related to the definition in terminology. We analyse the object of the discourse, i.e. the theme around which the interaction is built. Different expressions are often used in verbal exchanges to express an agreement led by the speakers: "oui, d'accord, d'accord moi aussi, je suis d'accord", "yes, I agree, I agree too, I agree...". We can also classify these expressions into two categories: expressions expressing total agreement such as "Exactement, effectivement, je suis d'accord", "exactly, indeed, I agree"; others expressing partial agreement such as "peut-être, si tu le dis, oui mais...", "maybe, if you say so, yes but...".

### Discourse objects and their trajectory

In the work meeting, the objects of discourse, i.e. the subjects in question, are manifested by the setting up of the definition (to be popularized). The proposed object is often found in the first turns of, speech and can then be processed, taken up, and modified by the interactants, in the following turns. Thus, a retrospective relationship is built with the first turn and allows us to observe how the first turn of speech is interpreted. For example, let us observe the second turn of speech after the opening of the session. In our case, it is about "the definition of the French term "aéropause". This object is introduced by the sign " bon ".

The relationship between turns can also be prospective with the following turn, projecting a set of constraints that the latter will in turn process retrospectively. This general principle defines the sequentially of interactions (cf. Mondada, Traverso), it highlights how discourse objects are processed, once introduced by the first speaker (the president, Jea), then received, recognized, taken up, or transformed by the second speaker (Xav). The trajectories of the discourse objects can be constructed more or less collaboratively, more or less sensitive to the contributions of the other speakers, and interfere more or less with each other, either to show agreement or disagreement. If we return to the profile of speaker Xav (with a scientific background), the protested contribution to the object of discourse concerns the conceptual level of the object's "technical-spatial aspect [...]". In the first stage of the encounter. This shows that the attention of the domain expert is mainly focused on the technical aspect in the majority of the cases observed through the corpus.

When we observe the interaction between domain experts and linguists, the use of the expert becomes indispensable when it comes to hard science such as space science and technology. When it is a question of language, linguists and terminologists are involved in most cases. The reference, the point of convergence, of stability, is to be sought, in this sense, not only on the side of the language, of the linguistic system, but also on the side of the hard science.

Here, a discussion during the sequence between the field experts to be able to understand the "aéropause" area which is located between two areas "upper space" and "lower space". The "technical science" pole determines the origin and constitutes, at the same time, the reference support; it crystallizes the cultural, scientific, technical, and professional consensus of the speakers.

### The hierarchical structure of negotiation

The Swiss Linguist Eddy Roulet (Roulet et al. 1985) has proposed a definition of the concept of "negotiation" to simply describe the hierarchical architecture of negotiation in everyday life. His starting point (for this conception) is the observations of sociologist Erving Goffman (1973) based on ordinary verbal interactions in life. Thus, Goffman notes, in the sense of the so-called "ritual" exchange, for example:

- How are you?
- Thank you!

This ordinary exchange confirms a social link between the interlocutors, a large majority of the exchanges consist in repairing a real or virtual insult to the interlocutor's image. Let's take the example of asking a question, asserting a proposition, or giving an order, in three cases, the face of the interlocutor can be endangered. Often, there is a reaction from the face that is endangered (smile, topic change, etc.). These exchanges are said to be "ternary" in the interaction, in the sense that there is an "initiation", then a "repair" and finally a "ratification". Let us return to the Genevan linguist who formulates a hypothesis according to which any verbal exchange rests fundamentally on a "systematicity" in which the objects of the discourse are first initiated, then evaluated, and finally ratified to lead to a form of mutual agreement. It is this scheme that we borrow from the Genevan linguist. This scheme of exchange functions as a repetitive and dynamic process in three stages: Proposal: (who wants coffee?) / Reaction: (I do = I want) / Rectification: (okay, with pleasure.)

1. Chr : si quelqu'un n'as pas eu son document je n'ai quelques-uns
2. Fra : moi oui je veux bien (lever la main)
3. Chr : ils sont peut-être mal imprimés s'ils sont mal imprimés vous me le dites parce qu'il y en a d'autres(.) il y en des ratés au niveau de la photocopieuse avec des traits noirs

4. Jea : bon alors le premier de termes que nous avons étudiés était aéro-pause (.) domaine sciences et techniques spatiales géophysiques définition limite supérieure approximative de la région atmosphère terrestre où la densité de l'air permet la sustentation de l'aéronefs qui constitue la limite inférieure de l'espace extra atmosphérique voir aussi espace espace extra atmosphérique qui est évident équivalent étranger aéro- pause (2.2) pas de remarques/

**Translation:**

5. Chr: if someone didn't get his document I don't have some

6. Fra: me yes I want to (raise my hand)

7. Chr: they are perhaps badly printed if they are badly printed you say it to me because there are others (.) there are failures at the level of the photocopier with black lines

8. Ia: well then the first of terms that we studied was aeropause (.) field geophysical space sciences and techniques definition approximate upper limit of the region of the earth's atmosphere where the density of the air allows the sustentation of the aircraft that constitutes the lower limit of the extra-atmospheric space see also space extra-atmospheric space that is evident foreign equivalent aeropause (2.2) no remarks/

In this case, the interlocutor immediately reaches an agreement, which means a proposal. It is then a question of the dialogical completeness of the negotiation. We have presented this example to give an account of the elementary form of verbal exchanges; it could appear more complicated. This model of verbal exchange corresponds to an elementary exchange. As evoked by the different feedback loops marked, two principles can be invoked to explain the possible complexity of the paths in the negotiation model. This exchange may be dialogical or nomological completeness.

As we have already mentioned, the negotiation around a single term lasts about 20 minutes, we can summarize it as follows: the speakers try to build up, as they go along, a consensual position is built up at the end of each construction. The speakers often express positive reactions at the end of their turn. The following borrowed module from Conversational Analysis ( Proposal - Negative reaction - Counter-proposal - Negative reaction - Counter-proposal - Positive reaction) shows how these dialogic exchanges of negotiation are carried out by the speakers in the corpus.

The first possible complication of the negotiation route is that a double agreement marking completeness is not always easy to achieve. We have several examples in our corpus. In this type of conversation (workshop meeting), several interlocutors can agree on a simple proposal. In a simple way to be ratified by several participants. This case is quite frequent in work meetings. Another nomological complication of the verbal exchange appears in the cases where, after having given the floor to the audience, nobody intervenes, which leads the same participant, often after a long pause, to continue his turn to speak. This mechanism of linear extension of the turn to speak is, however, only one possible cause. In other cases, it may be a question of prolonging the reading or of reflecting on the subject... Here is an example concerning monological completeness:

- Dan ] "moi je proposerais une note reprenant la définition ancienne l'aéro-pause constitue par convention la limite inférieure ce qui la définition"

- (...)

- Dan "à ce moment-là on a une note on peut faire un renvoi."

**Translation:**

- Dan " [I would propose a note-taking up the old definition the aeropause constitutes by convention the lower limit what the definition"

- (...)

- Dan: "at this point, we have a note that refers to..."

One can imagine that this discourse orientation towards monological completeness can lead to several types of effects: The speaker "Dan" expects the proposition or agrees. What do you think? Speaker "Dan" proposes another language unit with a more elaborate argumentative character than the first part of his turn.

### Conclusion

This study led us to investigate the notion of agreement from an interactional perspective. It allowed us to identify how scientists and linguists negotiate and reach an agreement when writing a scientific definition. At the empirical level, our microscopic analysis of an excerpt of an interaction regarding the writing of a definition enabled us to identify some of the language mechanisms that arise during the decision-making process in a work situation. It also allowed us to describe in detail the conversational architecture of this type of negotiation, both at the dialogical and monological levels.

In the analysis, categorizing participants as either "specialists" or "non-specialists" allowed us to put the conversation into perspective. When it comes to hard sciences, the presence of an expert becomes indispensable. The linguist and terminologist play an important role in ensuring linguistic coherence according to the standards of the definition, such as reference, notes, choice of lexicon, grammar, and punctuation.

The reference point of stability is not only on the side of the language or linguistic system but also on the side of the hard sciences, by the experts in the field. The expert with the most knowledge in the field intervenes according to their skills and experience in research and study. Negotiation for the understanding of the referent is achieved through discourse, such as argumentation and reformulation.

During the writing activity, we observed four regularities in the participants' practices: creating a definition proposal, adding a definition with notes, quotations, and references, modifying a definition, and deleting a definition. Finally, our study aimed to demonstrate the coordination between two main profiles, experts and linguists/terminologists, in popularizing specialized definitions concerning space science and technology. We believe that team collaboration is essential in this environment to best assist participants in their decision-making process.

### Selected Transcription (French)

- Chr Bon je vous laisse vous présenter
- Dan Eli xx la commission de normalisation et de terminologie
- Chr [pointer le doigt] oui à coté de vous il y a quelqu'un qui est pas là elle va arriver c'est Sophie XX qui est à XXX et qui s'occupe de de communications et des valorisations euh du du bureau du XXX donc voilà
- Ah d'accord !
- Sop [Sophie ouvre la porte et entre]
- Chr et ben voilà [Sophie XX ] elle peut se présenter Sop [bonjour ]
- Ger Vous avez déjà été présenté
- Sop Hop là c'est gentil merci excusez-nous
- Ger Gérard XX du service des XX de l'académie française Cam Camille XX je travaille au même service du maître de dictionnaires
- Geo Georges XX donc chargé de communications et de terminologie à la délégation générale de la langue française et aux langues de France
- Emm Emmanuelle XX je viens de la même cette délégation
- Lou Louis XX directeur de recherche Amérique au CNRS j'étais très impliqué dans les affaires spatiales avec le CNES en particulier et avec la NASA aussi avec le Japon j'suis un investigateur principal de l'expérience sur Stereo sur Wenn donc en tout cas dans pas mal d'expériences spatiales
- Pie Pierre F. M. je travaille au musée de l'espace je m'occupe de la partie jeunesse et les relations entre jeunesse et micro-vulgarisation donc Mr Christian il m'a invité parce que j'ai beaucoup travaillé avec l'association science qui es le plus grand armée du CNES pour l'activité spatiale des jeunes aussi la deuxième parmi les XX j'ai beaucoup travaillé avec l'association de l'activité spatiale de jeunes
- Jea Bien alors vous avez eu soit par courriel soit par: courrier postale la liste des termes que nous avons étudié la dernière fois et notre tradition bien établie depuis nombreuses années donc consiste à relecture des termes que nous



avons étudié la dernière fois pour que euh si on regardant vous avez eu des avec le recul des des XX des choses qui me paraissent pouvoir être améliorée et euh bon X

Chr si quelqu'un n'as pas eu son document je n'ai quelques uns Fra moi oui je veux bien (lever la main)

Chr ils sont peut être mal imprimés s'ils sont mal imprimés vous me le dites parce qu'il y en a d'autres(.) il y en des ratés au niveau de la photocopieuse avec des traits noirs

Jea bon alors le premier de termes que nous avons étudié était aéro-pause (.) domaine sciences et techniques spatiales géophysiques définition limite supérieure approximative de la région atmosphère terrestre où la densité de l'air permet la sustentation de l'aéronefs qui constitue la limite inférieure de l'espace extra atmosphérique voir aussi espace extra atmosphérique qui est évident équivalent étranger aéro- pause (2.2) pas de remarques/

Xav ahh : je reviens sur l'aspect technico-spatial qui X de l'espace extra extra-atmosphérique on a eu un débat la dernière fois mais moi je considère que la limite supérieure de celle de la sustentation des aéronefs ne correspond pas à la limite inférieure de l'espace euh extra-atmosphérique il y a une zone tampon entre grosso modo soixante kilomètre où les avions ne peuvent pas voler et les satellites peuvent plus orbiter et donc d'ajouter la limite inférieure de l'espace extra- atmosphérique me dérange\

Geo est ce qu'il y a une ambigüité\

Sam les satellites ne peuvent pas orbiter\

Xav oui mais les aéronefs les ballons les plus hauts c'est soixante kilomètre ne vont pas dans l'espace extra

Jea oui maintenant ce qu'on appelle xx dans le temps ça fait partie du domaine spatial précisément cette région entre soixante et XX kilomètre consécutif donc il fait bien partie de l'espace extra- atmosphérique d'une autre part je crois que la définition que nous avons donné de l'espace extra atmosphérique était précisément fondé sur le le l'histoire de sustentation donc c'est à coté un peu.

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