

## USER-PROFILE DEFINITION AND INTERFACE DESIGN: THE CASE OF THE *PARALYMPIC DICTIONARY*

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### Abstract

Compiling a dictionary is more than developing contents; it requires, first and foremost, planning. Among the decisions that must be made during the dictionary-planning or pre-lexicographical stage (Atkins & Rundell 2008: 18-44), one of the most important is the user-profile definition, which is the key for creating a lexicographical resource that achieves the users' expectations and is thus functional. Given the relevance of this matter, the present work aims to design a user profile for the *Paralympic Dictionary* (under development), and to investigate its implications for the dictionary-making stage. This dictionary is part of a broader set of lexical resources whose goal is to describe sports' lexicon based on Frame Semantics (Fillmore 1982, 1985). Although the two previous dictionary outputs from the SemanTec research group — viz. *Field*, a football expressions dictionary (Chishman 2014) and *Dicionário Olímpico*, a dictionary of Summer Olympic sports (Chishman 2016) — had a target user group in mind (cf. Chishman *et al.* (2014), dos Santos & Chishman (2015), Chishman *et al.* (2018), Chishman *et al.* (2019)), one might say it was a rather basic one whose implications were not widely discussed nor well incorporated into the design of the dictionaries. Focusing on *Paralympic Dictionary's* envisaged users, the current work deepens and expands on the earlier discussion about target-audience definitions in the context of the SemanTec research group. In contrast with the other two resources, the user-profile definition for the *Paralympic Dictionary* intends to go beyond a broad notion of 'lay audience', determining the specific user groups and their specific needs. Regarding the compilation of the *Paralympic Dictionary*, the user-profile definition will help determine the functions, content and structure of the dictionary and enable the evaluation of which aspects of the previous dictionaries one should maintain or redesign, and to reflect on the type of inclusion of elements as well as on the adoption of digital access policies.

**Keywords:** user profile, target audience, pre-lexicographical stage, frame-based dictionary, Paralympic sports.

### 1 Introduction

The definition of the intended target audience serves as a basis for the planning and compilation activities of any type of dictionary as it guides and directs the lexicographer in establishing the functions, defines the contents, and designs the dictionary structure (cf. Gouws 2011, 2018, 2020). In the development of dictionaries based on frames, the definition of the user profile is as important as the theoretical notions from Frame Semantics, and both exert a shared influence on the planning of the dictionary, a phenomenon that can be observed in the dictionaries developed by the SemanTec (i.e., Semantics and Technology) research group.

In general, the research developed by SemanTec seeks to investigate and explore the interaction between Frame Semantics (Fillmore 1977, 1982, 1985) and Internet Lexicography (or Online Lexicography (Gouws, 2018)) through the description of the lexicon of special fields (cf. Gouws, 2020). To date, this research has culminated in the publication of the dictionaries *Field – Dictionary of football expressions*<sup>1</sup> (Chishman, 2014) and *Olympic Dictionary*<sup>2</sup> (Chishman, 2016). Although there are differences between them, both tools adopt the notion of frames to describe the lexicon of special fields (soccer and Summer Olympic sports, respectively).

In addition to the organization format, the dictionaries also share similarities regarding target audience definitions: during the resources' planning process, the SemanTec team adopted a relatively broad and wide user profile (cf. Chishman *et al.* (2014), dos Santos & Chishman (2015), Chishman *et al.* (2018), Chishman *et al.* (2019)) from which lexicographic decisions were made.

Considering the centrality of the user-profile definition for the planning and development processes of dictionaries, the present work aims to problematize the implications that the adopted user concept brought to the design of the interfaces for the *Field* and *Olympic* dictionaries. Additionally, this work also seeks to complement the documentation of the steps followed by SemanTec during the compilation of these tools. This discussion arises from the revision of the *Olympic Dictionary* and constitutes, above all, an exercise in theoretical and methodological reflection (and why not self-criticism?) intended to identify and correct flaws that, to some extent, originated from the established user profile. In addition to the contribution to the reformulation of the dictionaries already published, the consequences of such reflection extend to future works and will be valuable for discussions related to the *Paralympic Dictionary*, the current project at SemanTec.

In order to situate the reader in relation to the various projects, Section 2 presents the existing *Field* and *Olympic* dictionaries and their respective user profiles based on publications by the SemanTec group. Section 3 problematizes the user profiles of the *Field* and *Olympic* dictionaries in order to serve as a basis for the description of the *Paralympic Dictionary*'s user profile. Section 4, finally, presents a brief conclusion.

## 2 The *Field* and *Olympic* dictionaries: Target user groups and their broader implications

The *Field* and *Olympic* dictionaries are endeavours in the interface between specialised lexicography and Frame Semantics: *Field* is a tridirectional trilingual dictionary (Portuguese, English and Spanish) that describes the football lexicon; the *Olympic Dictionary* is a unidirectional bilingual resource (Portuguese with translation equivalents and examples in English for the lexical units) that describes the 40 Summer Olympic sports. Such dictionaries were inspired by the lexicographic models applied in *FrameNet* (cf. Fontenelle 2003, Ruppenhofer *et al.* 2016) and *Kicktionary* (Schmidt 2007, 2008, 2009), projects which were developed for NLP purposes and also to meet the needs of specialised users – such as language researchers, teachers, and students. The dictionaries by SemanTec, in contrast, were compiled for lay people. Also, in the SemanTec dictionaries novel lexicographic designs were proposed, adapted to the potential users of these tools. As a result, one of the main concerns during the development of the *Field* and *Olympic* dictionaries was the reflection on how the lexicographic model based on frames would serve the target audiences of these tools.

At this point, it is important to note that in a lexicographic project that adopts a frame-based approach, the dictionary functions and the content and structure definitions result not only from the definition of the user's profile, but also from parameters derived from the adopted theoretical model. This approach determines, for example, (i) the users purpose of using the dictionary (encoding and decoding); (ii) the format of the definitions (two-parts definitions: the frame-setting part and the word-specific defining part (Fillmore

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1 Available at: <http://dicionariofield.com.br/>.

2 Available at: <http://www.dicionarioolimpico.com.br/>.

2003: 267)); and (iii) the presentation format (structure) of the dictionary content (relation between a frame and its LUs, relations between frames, and relations between LUs): “a single background frame, entered only once, can serve many word senses, its description could be made accessible from all of the relevant entries” (Fillmore 2003: 263). Alongside these decisions, the definition of the target audience, in turn, complements this process to the extent that it refines the decisions made. When stipulating, for example, a linguists’ audience, the choices about function, content and structure take into account the activities in which these professionals engage (reading, writing, listening, speaking, translating); the linguistic skills necessary for the performance of such activities (lexical, morphological, syntactic, semantic, phonological, etymological, metalinguistic knowledge); the degree of familiarity with the medium in which the dictionary will be made available (book, computer, smartphone, internet); and so on.

Thus, it can be said that a dictionary’s planning process can be subdivided into three phases: in the first, the characteristics that come from the theoretical model are determined – in this case, the model based on frames; then, the user profile is defined; and, finally, the dictionary’s function, content and structure definitions (in that order), which are based on the user profile, are established. Atkins & Rundell (2008), when approaching the pre-lexicographic stage from a more practical perspective, list eight categories according to which the properties of any dictionary should be defined: a dictionary’s language(s); a dictionary’s coverage; a dictionary’s size<sup>3</sup>; a dictionary’s medium; a dictionary’s organization; the users’ language(s); the users’ skills; and what users use the dictionary for (cf. Atkins & Rundell 2008: 24-25). The *Field* and *Olympic* dictionaries will now be described using the categories proposed by Atkins & Rundell, but classifying them according to the three phases of a dictionary’s planning process. Section 2.1 presents the definitions in terms of the theoretical approach – the dictionary’s organization (theoretical perspective); Section 2.2 presents the user-profile definition – the users’ language(s) and the users’ skills; and Section 2.3 covers the dictionary function, content, and structure definitions – the dictionary’s language(s), the dictionary’s coverage, the dictionary’s medium, the dictionary’s organization (practical perspective), and what users use the dictionary for. It should be observed that this section will only present the *Field* and *Olympic* dictionaries; the dictionaries’ properties will be problematized in Section 3.1.

**2.1 The frame-based lexicographic approach**

The theoretical approach adopted to compile a dictionary has implications for decisions regarding the organization of any dictionary. In dictionaries based on the notion of frame, this implies that the description of the lexicon is based on two types of definition, which are complementary and interdependent – the definition of frames and the definition of lexical units; such an organization reflects a conception of meaning based on the continuities between language and experience (i.e., awareness of the physical and social world) (Fillmore 1982, 1985). By adopting this approach for the development of *Field* and *Olympic* dictionaries, the SemanTec group showed interest in representing the meanings of the domains described in a more contextualised and complete way – full knowledge of word meanings (cf. Fillmore (1985), Chishman *et al.* (2014), Chishman *et al.* (2018), Chishman *et al.* (2019)). Thus, from a theoretical perspective of the development of SemanTec’s dictionaries, the assumed model implies the adoption of the notions of frame and lexical unit, as evidenced by the excerpts presented in Table 1.

**Table 1** - Metalexigraphic excerpts related to the organization of the *Field* and *Olympic* dictionaries

|   |   |
|---|---|
| Dictionary’s organization (theoretical perspective) |   |
| Field   | “The lexical units are organised around the notion of semantic frames.” (Chishman <i>et al.</i> 2014: 26)   |
| Olympic Dictionary                                  | “an electronic lexicographic resource that presents the Olympic sports lexicon, using the notion of frame (or scenario) as an organizing principle.” (Chishman <i>et al.</i> 2018: 266) |

3 This item does not immediately apply to online dictionaries; pace Gouws & Tarp (2017).

## 2.2 The target user group definition

The bibliography of lexicography assigns a central and determining role to the pre-lexicographic step of defining a user profile and defends the importance of such an activity even in cases with the potential to serve such a wide audience that reaching even a basic level of detail becomes difficult (Atkins & Rundell 2008; Gouws 2011; Nesi 2013; Lew & de Schryver 2014; Gouws 2018; Tarp & Gouws 2019; Gouws 2020; amongst others). This is because it is from the user-profile definition – and, consequently, from the needs of these users – that many of the lexicographic decisions are made. According to this basic premise, SemanTec’s earlier scientific output reveals an intense concern with the user of *Field* and *Olympic* dictionaries, as this output discusses the adaptations and adjustments aimed to serve the target audience better through relevant content and a user-friendly interface. It is worth mentioning, however, that the profile definitions are broad and wide and can be seen as the result of the exercise of placing the intended audience (lay, non-specialised) in an opposite field to that of *FrameNet* and *Kicktionary* users (specialised and NLP). In addition, the themes of these dictionaries (football and Olympic sports) were considered to be of general interest, i.e., of interest to users who do not necessarily have a direct relationship with sports, such as translators, students from many fields, or any person interested in these topics (cf. dos Santos & Chishman 2015; da Silva 2018; Chishman *et al.* 2019). Tables 2 and 3 show excerpts from SemanTec’s publications that characterise the user profiles based on the language and skills definitions.

**Table 2** - Metalexigraphic excerpts related to the users’ language(s) of the *Field* and *Olympic* dictionaries

| Users’ language(s) |   |
|--------------------|---|
| Field              | <p>“Portuguese, English, or Spanish first or second language speakers.” (dos Santos &amp; Chishman 2015: 449)</p> <p>“It could be accessed by Portuguese, English, or Spanish speakers, either as a first language or additional language.” (dos Santos &amp; Chishman 2015: 449)</p> |
| Olympic Dictionary | Portuguese speakers, either as first language or additional language.   |

**Table 3** - Metalexigraphic excerpts related to the user skills of the *Field* and *Olympic* dictionaries

| Users’ skills      |  |
|--------------------|--|
| Field              | <p>“A football dictionary aimed at the non-specialised audience.” (Chishman <i>et al.</i> 2014: 26)</p> <p>“A dictionary for a lay audience.” (Chishman <i>et al.</i> 2014: 34)</p> <p>“Familiarity with printed and electronic dictionaries, mastery of online tools in different supports (computer, tablet, cell phone).” (dos Santos &amp; Chishman 2015: 449)</p> <p>“The reader is likely to be familiar with other online resources, including other electronic dictionaries, in addition to being sufficiently familiar with the traditional structure of a lexicographic resource.” (dos Santos &amp; Chishman 2015: 449)</p> |
| Olympic Dictionary | <p>“is part of a proposal aimed at a non-specialised and quite heterogeneous audience.” (Chishman <i>et al.</i> 2018: 273)</p> <p>“user who is not familiar with linguistic theories.” (Chishman <i>et al.</i> 2018: 272)</p>  |

With regard to Table 2, it is important to note that the characterization of the users’ language(s) in the *Olympic Dictionary* is not described in the texts of the SemanTec group; it was proposed within the scope

of the present work based on the characteristics of the language of the *Olympic Dictionary*. From Table 3, it is possible to state that the user profiles are quite broad and wide; both dictionaries specifically (i) refer to lay/non-expert users; while for the *Field* dictionary a user must (ii) be familiar with print and online dictionaries and (iii) have mastered the use of various online tools.

### 2.3 The dictionary function, content, and structure definitions

Considering that LSP dictionaries are born to meet some demand of a certain public in relation to any description gap of one or more specialised languages, the planning and compilation activities of such dictionaries have to take into account the needs of those who will be the users of these tools (cf. Gouws 2011, 2018). For that matter, user profiles are the starting point for definitions related to (i) the functions of the dictionary – the ways in which the dictionary foresees the linguistic activities with which the target audience engages; (ii) the dictionary’s content – the elements that the dictionary offers so that users are able to find answers to their questions; and (iii) the dictionary structure – the path that the dictionary offers so that users can easily and objectively access the answers they are looking for.

At this point, it is worth reminding that the category ‘dictionary’s organization’ was doubled, in order to be able to analyse it from a practical perspective as well. In the case of dictionaries from the SemanTec group, this means analysing the consequences of adopting the notions of frame and lexical unit for structuring the dictionary interface. Moreover, considering that a recurrent theme in SemanTec’s work is the adaptation (of content and structure) of the models followed by *FrameNet* and *Kicktionary*, it is relevant to add some extra descriptive information from the dictionaries regarding these adaptations in order to complement the information which was presented based on the categories of Atkins & Rundell (2008). Table 4 presents publication excerpts from SemanTec that characterise the intended uses by the target audiences.

**Table 4** - Metalexigraphic excerpts related to the use the target user groups make of the *Field* and *Olympic* dictionaries

|   |  |
|---|--|
| What users use the dictionary for [Dictionary function] |  |
| Field   | <p>“Quick consultation during the 2014 World Cup games – decoding. Use for additional language production – encoding.” (dos Santos &amp; Chishman 2015: 449)</p> <p>“We consider that the first type of the dictionary’s use would be linked to decoding, when the consultants had to make a quick query to understand a certain term. However, we do not rule out the use of the resource for encoding, in contexts linked, for example, to translation processes.” (dos Santos &amp; Chishman 2015: 449)</p> |
| Olympic Dictionary                                      | Partial encoding and decoding.   |

In relation to Table 4, it is again worth mentioning that the characterization of the possible uses of the *Olympic Dictionary* by its users is not included in SemanTec publications; therefore, the proposition of the partial encoding and decoding functions is restricted to this work and considers the influence that the methodology adopted for the planning of *Field* had on the planning of the *Olympic Dictionary* and reflects how the dictionary content actually meets these functions. With regard to *Field*, the decoding function seems to be related to quick queries aimed at understanding terms, while encoding is related to translation activities.



Table 5 presents publication excerpts from SemanTec that characterise the languages of the dictionaries.

**Table 5** - Metalexigraphic excerpts related to the *Field* and *Olympic* dictionaries' languages

| Dictionary's language(s) [Dictionary content] |  |
|---|--|
| Field   | <p>“Trilingual (Portuguese, English, or Spanish).” (dos Santos &amp; Chishman 2015: 448)</p> <p>Tridirectional</p> <p>“a [...] football dictionary called <i>Field Dictionary</i> [...], a trilingual resource (in English, Spanish, and Portuguese)” (Chishman <i>et al.</i> 2019: 623)</p>   |
| Olympic Dictionary                            | <p>Bilingual (Portuguese, English) Unidirectional (Atkins &amp; Rundell 2008) or monodirectional (Welker 2008): the dictionary only presents translation equivalents and examples (both in EN) for the lexical units.</p> <p>“the <i>Olympic Dictionary</i> is considered a bilingual resource and unidirectional or [...] monodirectional [...] that is, it is a resource that only allows access to the information that constitutes it in the sense of the source language (Portuguese language) for the target language (English) and not the other way around.” (da Silva 2018: 78)</p> |

Considering that the definition of the languages in a dictionary is an unfolding of the target user groups' language definition in the dictionary, it is worth highlighting the differences (presented in Table 5) between *Field* and the *Olympic Dictionary* with regard to these properties: although the two dictionaries were designed for very similar purposes, *Field* is a trilingual tridirectional dictionary while the *Olympic Dictionary* is a bilingual unidirectional one.

Table 6 presents the excerpts from SemanTec's publications related to the dictionaries' coverages.

**Table 6** - Metalexigraphic excerpts related to *Field* and *Olympic* dictionaries' coverages

| Dictionary's coverage [Dictionary content] |  |
|--|--|
| Field                                      | <p>“Football specific domain.” (dos Santos &amp; Chishman 2015: 448)</p> <p>“a [...] football dictionary called <i>Field Dictionary</i> [...], a trilingual resource (in English, Spanish, and Portuguese)” (Chishman <i>et al.</i> 2019: 623)</p> |
| Olympic Dictionary                         | <p>“describes the lexicon of [the] 40 Olympic sports.” (Chishman <i>et al.</i> 2018: 623)</p>  |

In the year that the *Field* dictionary was launched, Brazil hosted the 2014 FIFA World Cup, and in the year of the launch of the *Olympic Dictionary* Brazil hosted the 2016 Summer Olympics. In this sense, it can be said that the definitions of coverage for both dictionaries were established as an attempt to meet a demand in relation to these events.

Table 7 presents the excerpts from SemanTec's publications related to the dictionaries' mediums.

**Table 7** - Metalexigraphic excerpts related to the *Field* and *Olympic* dictionaries' mediums

|  |   |
|--|---|
| Dictionary's medium [Dictionary structure] |   |
| Field                                      | Digital: online/internet<br>"electronic medium; website with mobile version." (dos Santos & Chishman 2015: 448) |
| Olympic Dictionary                         | Digital: online/internet<br>"it is a digital lexicographic product" (da Silva 2018: 52)                         |

With regard to the dictionaries' mediums, the main difference between the *Field* and *Olympic* dictionaries concerns the fact that the *Olympic Dictionary* does not have a smartphone version whose configuration has been designed to adapt the content according to the specifics for devices of this nature.

Table 8 presents the excerpts from SemanTec's publications related to the dictionaries' organizations from a practical perspective.

**Table 8** - Metalexigraphic excerpts related to the *Field* and *Olympic* dictionaries' organisations (practical perspective)

|  |   |
|--|---|
| Dictionary's organization (practical perspective) [Dictionary structure] |   |
| Field  | "we propose a macrostructure along the lines of <i>Kicktionary</i> . However, we defend the display of two concurrent lists - that of words and that of scenarios" (dos Santos & Chishman 2015: 462)                        |
| Olympic Dictionary   | "When selecting one of the forms of access, users are directed to one of the three levels of the <i>Olympic Dictionary</i> : the modality level, the scenario level, or the word level." (Chishman <i>et al.</i> 2019: 626) |

Given that this paper started from the premise that in addition to the implications for the organization of the dictionary at a theoretical level, the definitions derived from the frame-based approach must also have consequences for the organization of data in the dictionary application (i.e., website). Thus, in the case of *Field*, for example, the notions of frame and lexical unit guided an organization of the application based on two forms of access (frames and LU lists) and two types of microstructure (the frame and the LU microstructure). In relation to the *Olympic Dictionary*, these characteristics change due to the increase in the number of described sports: to the two forms of access presented by *Field*, *Olympic Dictionary* incorporates a third access format (the sports grid) and, consequently, a third type of microstructure (the sports microstructure).

Table 9 presents the excerpts from SemanTec's publications related to general adaptations applied to *Field* and *Olympic* dictionaries' content and structure.

**Table 9** - Metalexigraphic excerpts related to the *Field* and *Olympic* dictionaries' adaptations (content and structure)

|  |  |
|--|--|
| Adaptations [Dictionary content and structure] |  |
| Field  | <p>“The lexical units are organised around the notion of semantic frame, which, in the context of this feature, is called scenario.” (Chishman <i>et al.</i> 2014: 26) [CONTENT]</p> <p>“Adaptation of the methodological procedures applied in the <i>FrameNet</i> platform, since the organization of the information should consist of a friendly interface [STRUCTURE], showing only what is relevant to the reader.” (Chishman <i>et al.</i> 2014: 34) [CONTENT]</p>  |
| Olympic Dictionary                             | <p>“(i) adapt information that appears in <i>FrameNet</i>, in order to be more easily understood by the layperson, and (ii) suppress information that would not be relevant for this type of user.” (Chishman <i>et al.</i> 2018: 273) [CONTENT]</p> <p>“the <i>Olympic Dictionary</i> maintains the decision taken in the <i>Field</i> development process to replace the concepts [frame and lexical unit] with the notions of scenario and word respectively.” (Chishman <i>et al.</i> 2018: 273) [METALANGUAGE, cf. de Schryver &amp; Joffe (2005)]</p> <p>“Considering that the way in which <i>FrameNet</i> displays the relations between frames presupposes a certain familiarity with the theoretical framework of Frame Semantics, the <i>Olympic Dictionary</i> presents this information in order to highlight other dimensions of the relationships between scenarios, such as the organization and classification of events, for example.” (Chishman <i>et al.</i> 2018: 274) [STRUCTURE]</p> <p>“The <i>Olympic Dictionary</i> [...] did not intend to provide its target audience with information about verbal valence or syntactic aspects that would not be useful to them.” (Chishman <i>et al.</i> 2018: 275) [CONTENT]</p> |

A last step in describing the *Field* and *Olympic* dictionaries has to do with approaching the adaptations implemented by SemanTec with regard to the development of these tools. Even though SemanTec took inspiration from the *FrameNet* and *Kicktionary* projects for the development of its dictionaries, considering the differences regarding the user-profile characterization, many aspects of the *Field* and *Olympic* dictionaries are described as alternative ways to present information. In addition, the suppression of some information is justified to the extent that they were seen as not being adequate for the target users of the tools.

### 3 Towards the *Paralympic Dictionary*

Considering the three categories presented in the previous section, the goal in the present section is to problematize the user profiles of the *Field* and *Olympic* dictionaries in order to be able to define the user of the *Paralympic Dictionary*. First the user definitions of the dictionaries already published as well as their implications are analysed (Section 3.1), then the user profile for the *Paralympic Dictionary* is established (Section 3.2).

#### 3.1 What was learned?

With regard to the *Field* and *Olympic* dictionaries, in addition to the definition of the users' languages, the characterization of the user profiles revolves around three features: (i) lay/non- expert users; (ii) familiarity with print and online dictionaries; and (iii) mastering of the use of various online tools. *Field* mentions the three features; the *Olympic* user profile only mentions the first feature.

If, on the one hand, this characterisation can be considered somewhat imprecise (especially as the extent is questionable to which it is able to provide answers about dictionary function, content and



structure), on the other hand, it is necessary to keep in mind that the SemanTec projects used not only this broad user-profile definition as a point of departure, but also took into account the lexicographical structures of *FrameNet* and *Kicktionary*. In other words, what this information reveals is that, although the target user characterization has not directly guided the decisions on the dictionaries' function, content and structure, it has always been, to some extent, present (as indicated in the academic writings of the group) in the reflections on the adaptations of elements from *FrameNet* and *Kicktionary*. Therefore, in order to determine if (and if so, which) features of the *Field* and *Olympic* user profiles can or should be mapped onto the *Paralympic* user profile, it is necessary to reflect on two issues:

- 1) How did the research group integrate the user profile into the analysis of the lexicographical structures of *FrameNet* and *Kicktionary*?
- 2) Considering this methodology, to what extent was the user profile sufficient to guide the planning of these dictionaries?

Regarding the first question, it can be said that the user profile was integrated in two ways. First, it guided decisions regarding *which* elements (content and structure) should be imported into the group's dictionaries; second, the user profile guided the decisions regarding *how* these elements from the specialised tools should be adapted/reformulated for the interface of the group's dictionaries.

Regarding the second question, the answer is a little more complex. This is because, while the user profile, although broad, relatively efficiently guided decision making on adaptations, it did not serve as a basis for surveying the needs of users (which guide the definition of functions of the dictionary, which in turn guide the definitions of content and structure). Thus, the problem was to think about adaptations without a deeper reflection on functions. By adopting the elements from *FrameNet* and *Kicktionary*, SemanTec got a 'two-for-one deal': the functions of these elements also came with the package, even though they were not compatible with the tools' audiences. Therefore, it would have been very useful to have reflected on the following questions:

- 1) What functions do these elements serve in *FrameNet/Kicktionary*?
- 2) Which of these functions/elements apply to *Field/Olympic* user needs?
- 3) What adaptations are needed so that these elements best serve the *Field/Olympic* audience?
- 4) What other elements can be useful to meet the needs of the *Field/Olympic* audience?

Obviously, when dealing with the need to "(i) adapt information that appears in *FrameNet* [...] and (ii) suppress information that would not be relevant for this type of user" (Chishman *et al.* 2018: 273), there is, at the very least, a notion about the activities with which the target audience will *not* engage, revealing that the functions were not completely ignored. However, the use of dictionaries occurs in connection with the types of activities in which users *are* engaged (reception and/or production) (cf. Lew 2012; Nesi 2013). Bearing this in mind and knowing that the user-profile definition usually does not reach a maximum level of specificity – "A user profile seeks to characterise the *typical* user of the dictionary, and the uses to which the dictionary is *likely* to be put" (Atkins & Rundell 2008: 28, emphasis added) – a sufficient profiling for these tools should be able to list the most common needs and uses of prototypical users. There is an attempt in this direction in the description of *Field*'s function and user skills: "when the consultants had to make a quick query to understand a certain term" (dos Santos & Chishman 2015: 449) and "Familiarity with printed and electronic dictionaries, mastery of online tools in different supports (computer, tablet, cell phone)" (dos Santos & Chishman 2015: 449). However, these are questionable points since (i) the dictionaries do not have word definitions and, therefore, the user cannot quickly resolve doubts about terms; (ii) the dictionaries do not follow a traditional orientation, so being familiar with the structure of traditional dictionaries does not necessarily improve the experience; and, finally, (iii) it is not clear to what extent the structures of the dictionaries are based on the structures of other online tools (such as social networks, for example) to the point where it is possible to say that the experience that users bring from other sites can contribute to a better experience in using SemanTec's dictionaries.

### 3.2 What is next?

Regarding the *Paralympic Dictionary* user-profile definition, the discussion resonates in ways to encourage a more detailed user profiling but also to reinforce the relevance of considering such a profile when establishing the functions, content and structure of a dictionary. Following the same approach employed for the analysis of the *Field* and *Olympic* user profiles, in this section the categories proposed by Atkins & Rundell (2008: 24-25) are again the guiding principle.

**Table 10** - Paralympic user-profile definition

|                    |   |
|--------------------|---|
| Users' language(s) | <ul style="list-style-type: none"> <li>➤ Portuguese and English native speakers, either as first language or as additional language.</li> </ul>   |
| Target users       | <ul style="list-style-type: none"> <li>➤ Linguists and other language professionals;</li> <li>➤ Mass media professionals;</li> <li>➤ Literate adults;</li> <li>➤ School students;</li> <li>➤ Middle childhood;</li> <li>➤ Language learners;</li> <li>➤ Athletes with disabilities and other sports' professionals;</li> <li>➤ People with disabilities (such as vision impairment, deafness, dyslexia, etc.);</li> <li>➤ People familiar with a variety of online resources (smartphone, tablet, computer).</li> </ul> |

Once one has outlined the user profile, the needs of each of these groups may be listed and, based on these, the functions, content and structure of the dictionary may be defined. Regarding the needs of language learners, for example, it is possible to list needs related to reading and writing, but also listening and speaking. Such demands guide the definition of functions aimed at serving this specific group (encoding and decoding), the proposition of content elements (definition of words, definition of frames, examples in the target language, translation equivalents, etc.) and, finally, the definition of the dictionary structure (dictionary portal structure (cf. Gouws 2018); with three levels of information: superframe, frame, and word), etc. From the people with disabilities' perspective, definitions of structure also influence decisions with deeper implications that promote inclusion through digital accessibility (cf. Chishman *et al.* 2021). Finally, it is worth mentioning that the survey of the needs of the different user groups who are part of this profile will demand a more detailed investigation of the activities with which these people are involved and in what sense the dictionary can contribute to the performance of such activities.

## 4 Conclusion

The development of the *Paralympic Dictionary* is an extension to the dictionaries already published by the SemanTec research group. In addition to new issues (such as discussions involving inclusion, both from the perspective of access to the dictionary and the sports' presentation and representativeness), the work with Paralympic sports has motivated reflections aimed at ensuring a better experience of using dictionaries by means of the improvement of theoretical and methodological aspects that characterised the previous projects. Among the theoretical-practical issues, the definition of the user profile was emphasised, given its centrality in the processes of dictionaries' planning and production. In this sense, it was considered relevant to reassess the user-profile definitions of the *Field* and *Olympic* dictionaries in order to determine the starting point for a reflection of this nature in the *Paralympic* context, listing the positive and negative aspects to be taken into account and pointing out perspectives for the next steps.

The analysis revealed that the concepts adopted by the SemanTec team members in relation to the target audience of the dictionaries already compiled resulted in tools that were relatively distant/disconnected from the specific situations in which they are (or could be) used. This is because the elements that constitute the dictionaries do not necessarily represent ways to meet the specific needs of users, but adaptations based on a conception of abstract users with abstract needs ('massification' – cf. Tarp & Gouws (2019)). This finding does not suggest that the tools are not used by real users with real needs, but from the point of view of the properties that characterise the dictionaries, it is difficult to specify who these users actually are. Therefore, this discussion is extremely relevant for the definition of the *Paralympic* user to avoid these generalizations and to meet the needs of its target audience.

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