

On the polysemy of agentive suffixes in English and Croatian: comparing -er and -ač

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On the polysemy of agentive suffixes in English and Croatian:
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Summary and key-words

This paper deals with the semantic roles of nouns that end in *-er* in English and in *-ač* in Croatian. Both suffixes are productive in their respective languages. The goal of the research was to see which semantic roles can be taken by words formed with each of these suffixes. With the help of a theoretical overview and a research conducted in the corpora of English and Croatian, it was discovered that the suffix *-er* is much more polysemous than the suffix *-ač*, since it is productive in the formation of the majority of semantic roles in varying degrees. The suffix *-ač* is only productive in the formation of agent and instrument nouns. The suffix *-er* also attaches to a greater variety of bases than the suffix *-ač*. What can also be seen from the results of the research is that single English words with the suffix *-er* can more commonly take different semantic roles in context than the Croatian ones with the suffix *-ač*.

Key words: *-er*, *-ač*, word formation, semantic role, polysemy, context, corpus research

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1. Introduction

This paper will be dealing with the semantic roles of nouns in English and Croatian, namely those nouns formed with the addition of the suffixes *-er* in English and *-ač* in Croatian. These suffixes are both very productive in the word formation of nouns in their respective languages, and the goal of this research is to see what specific semantic roles the words formed with these suffixes can take in context. The assumption is that the two suffixes correspond in the semantic roles of agent and instrument, but that *-er* is more versatile than *-ač* and that it often takes other semantic roles, as well. In order to prove this hypothesis, research will be conducted using the corpora of English and Croatian in order to observe the words formed with these suffixes in context and to see in what semantic roles they can be found in actual usage.

As for how the paper will be structured, first, a theoretical framework will be given for the concept of semantic roles in general, then for the suffix *-er* as described in grammar books and relevant linguistic research conducted so far, and in the next segment, the same will be given for the suffix *-ač*. Then, an overview of the methodology of the research will be given. In the next chapter, the examples gathered from the corpora of English and Croatian will be given, and the selected words will be analyzed in terms of semantic roles. Also, information will be provided regarding their usage in context. The results will be presented in the form of two tables. The first table will contain the English words formed with the suffix *-er*. The second table, presented in section 4.2., will include the Croatian words formed with the suffix *-ač*. What will follow is a discussion of our findings, and finally, based on the theoretical framework and the results of the conducted research, a conclusion will be given as to the semantic roles that the words formed with the suffixes *-er* and *-ač* can take, and the suffixes themselves will be compared to each other.

2. Theoretical Framework

2.1. Defining semantic roles

Since the concept of semantic roles¹ was first introduced in the 1960s in the works of Gruber and Fillmore, it has become crucial for linguistic analysis (Luraghi and Narrog 2014: 1). There is, however, no general consensus as to the classification of semantic roles. Different linguists that have dealt with them since the 1960s have developed their own categories and divided the roles words take in sentences in different ways.² Given space limitations, these different approaches to the concept are not going to be discussed at length. Instead, the categories used by various linguists will be combined into a single group that will be used here when describing the semantic roles of words in English with the suffix *-er* and those in Croatian with the suffix *-ač*. Special regard will be paid to Cruse's (2000, 2006), as well as Huddleston and Pullum's (2002) approach.

According to Huddleston and Pullum, the first semantic role that appears to be useful for linguistic analysis, and our analysis especially, is the CAUSER. This role can be defined as a role that “involves immediate or direct causation of an action or event” (2002: 230). A subtype of the causer role would be the AGENT, which is prototypically “animate, supplies the energy for the action, and acts deliberately” (Cruse 2000: 283). Some linguists distinguish the FORCE and the EFFECTOR from the agent, and the former is usually defined as “an inanimate doer” (Cruse 2006: 68), whereas the latter is defined as an “agent-like entity [that] supplies the energy, but not the will” (Cruse 2000: 283).

The second major semantic role would be that of the INSTRUMENT. It can be defined as “an entity prototypically used by an agent in performing an action” (Huddleston and Pullum 2002: 231), and is mostly described as “something inanimate” (Cruse 2006: 68).

The next important semantic role is the EXPERIENCER, “an animate participant in an event affected in a characteristically animate way” (ibid.). There is also the BENEFICIARY, which is defined as “an animate participant for whose sake an action is performed” (ibid.). Since these two semantic roles are quite similar, they “are sometimes included under dative” (ibid.).

¹ Semantic roles are also called functional roles, participant roles, case roles, deep cases, and thematic roles (Cruse 2006: 68).

² Cf. Cruse 2000: 281-4, Cruse 2006: 68-9, Huddleston and Pullum 2002: 230-3.

LOCATION is defined as “the place most relevant to an event” (Cruse 2006: 68), and its subtypes include static location, source, path and goal (Huddleston and Pullum 2002: 233).

The final semantic role that is important to mention is the PATIENT, which is an entity “affected by an action performed by some causer, especially an agent” (ibid. 231). Judging from this definition, it is noticeable that the role of the patient is quite similar to the role of the experiencer. In defining the experiencer, Cruse explicitly states that this semantic role is distinguishable by the fact that it denotes a participant “affected in a characteristically animate way” (2006: 68). The difference between the patient and the experiencer thus depends on our interpretation of what “a characteristically animate way” means. Huddleston and Pullum, however, make the distinction between the experiencer and the patient a bit clearer by stating that the role of the experiencer “prototypically appear[s] in situations of emotional feeling or sensory perception” (2002: 231). This definition thus helps us distinguish the experiencer from the patient more easily, since the former is specifically recognized by appearing in such situations as those described.

These semantic roles are the result of the work of several linguists, and are mostly used solely in regard to English. However, although there are many linguistic works that deal with the definition and classification of semantic roles, it should be mentioned that these roles are not universally accepted among linguists. Apart from the fact that different linguists group and define the semantic roles in different ways, there are also some linguists who believe that these categories are not relevant and should not be dealt with at all, and some who believe that they are not universal, i.e. that they are characteristic only of some languages, and not of all of them (cf. Luschützky 2011: 75-97; Luschützky and Rainer 2011a: 3-7; Luschützky and Rainer 2011b: 287-338; Müller 2011: 33-40; Palmer 1976: 142-3; Rosenberg 2011: 53-64; Scherer 2011: 41-52).

Despite this point of view, we will treat semantic roles as language-independent categories, and the set of semantic roles that was provided in this chapter will be used in defining not only the English, but also the Croatian examples. This will provide the necessary basis for the comparison of the words formed with the suffixes *-er* in English and *-ač* in Croatian.

This section gave a brief overview of semantic roles in general. In the next section, we present a brief overview of the treatments of the suffix *-er* in some of the sources cited above and of the treatment of *-ač* in the relevant Croatian word formation literature.

2.2. Semantic roles and bases connected with the suffix *-er*

Judging from the semantic roles that the suffix *-er* has been linked with in theoretical linguistic works, this suffix appears to be quite polysemous. Huddleston and Pullum state that “[n]ouns in *-er* exhibit a wide range of meanings” (2002: 1698). In this segment, a reasonably detailed description will be given of all the roles that have been attributed to *-er* suffixations in Panther and Thornburg (2003), Huddleston and Pullum (2002), Bauer (1983) and Adams (1973).

The first major role that should be mentioned is that of the causer. In Panther and Thornburg (2003), this role has been divided into five further subcategories. The first subcategory would be the one that has the prototypical sense of the agent, which was defined in the previous chapter and is also “the central sense of *-er*” (Panther and Thornburg 2003: 285). It encompasses three different senses; that of “a highly agentive human being who pursues some professional activity or performs some action with a more or less strong impact on a Patient” (ibid. 286), that of a human being that “avocationally or habitually or characteristically engage[s] in activities ... that do not involve a Patient” (ibid.), and that of “human Agents with regard to occupational activities - though their respective bases do not name the action the Agent performs” (ibid. 287). Examples of these three senses of the first category would be *teacher*, *runner*, and *hatter*³, respectively. The other four categories can all be described as agent-like formations, and as far as the meanings are concerned, animals (e.g. *pointer*, *retriever*), plants (e.g. *Venus flycatcher*, *creeper*), inanimate objects (e.g. *skyscraper*, *gas-guzzler* ‘a car with relatively low fuel efficiency’⁴), and agent/causer events (e.g. *thriller*, *groaner* ‘an event which makes the experiencer groan’) can be distinguished. All the agent-like meanings can be understood as words “personified as human agents with characteristic traits” (ibid. 292). When it comes to Huddleston and Pullum, they state that the agentive meaning is the central one when it comes to *-er* suffixations, and also mention the use of *-er* suffixations in “[l]exicalised animal names” (2002: 1698). They also talk about “other kinds of causer in *reminder*, *eye-opener*” (ibid.). In Adams (1973) and Bauer (1983), suffixations of this kind are not discussed at length, but mentioned in passing. However, Adams also names the *-er* suffix as one of agentive suffixes (1973: 30), and Bauer talks about the agentive meaning of *-er* suffixations as a subtype of subject nominalizations (1983: 285-6).

³ The division and terms for the semantic roles, as well as the examples and paraphrases used in this chapter are taken from (Panther and Thornburg 2003), except where otherwise stated.

⁴ The paraphrase is taken from <http://www.thefreedictionary.com/>.

The second semantic role, that of the instrument, has been divided into three subtypes in Panther and Thornburg (2003); the first subtype would involve the prototypical meaning of the instrument⁵, and examples of it would be *can opener* and *dishwasher*. The second subtype can be referred to as the quasi-instrument, which the authors define as “articles of clothing worn by an Agent in carrying out a particular action” (Panther and Thornburg 2003: 293). Some examples of this type of instrument would be *sneakers* and *loafers*. The third subtype of instrument would be instrument-like events, which can be defined as events that “are designed for particular purposes” (ibid. 301), and examples would be *fundraiser* and *mixer* ‘event that has the function to mix males and females’. Huddleston and Pullum also mention the instrument as one of the semantic roles that *-er* suffixations can have (2002: 1698), and Adams names some examples of the instrumental use of *-er* words, e.g. *refresher course* ‘John refreshes (his knowledge) by means of the course’ (1973: 69). As with the agent, Bauer mentions the instrumental meaning of *-er* suffixations as being a subtype of subject nominalizations (1983: 286).

The third semantic role, that of the experiencer, is present in items like *admirer* and *loser* (Huddleston and Pullum 2002: 231) and has no further subdivisions. Interestingly, Panther and Thornburg do not list the experiencer as a separate semantic role, and neither does Adams. Bauer, however, does mention it, again as one of subject nominalizations (1983: 286).

Location, as the fourth semantic role to be discussed, is also not further divided, and includes examples such as *sleeper* and *diner*. This role is found in Panther and Thornburg under the name of purpose-location (2003: 294), whereas Huddleston and Pullum state that the given examples are “complement[s] of a preposition”⁶ (2002: 1698). This role is not mentioned in Adams (1973). Although Bauer mentions it as a semantic role (1983: 144), she does not link it to *-er* suffixations.

The fifth semantic role, the patient, is also quite relevant for the suffix *-er*. According to Panther and Thornburg (2003), it can be further divided into purpose-patient, valued-patient, true-patient, and patient event. Purpose-patients are those patients that “are designed for a special purpose” or that “have inherent properties that make them suitable for certain purposes” (Panther and Thornburg 2003: 295). Some examples would be *scratcher* ‘lottery ticket’ or *stocking-stuffer* ‘small gift suitable for Christmas stocking’. Valued-patients “fulfill

⁵ “[A]n entity prototypically used by an agent in performing an action” (Huddleston and Pullum 2002: 231); the definition was previously used on page 5.

⁶ *Diner* and *sleeper* are defined as “railway carriages to dine/sleep in” (Huddleston and Pullum 2002: 1698).

a purpose in a person's value system” (Panther and Thornburg 2003: 295), and words like *keeper* ‘an entity that is subjectively construed as worthy of being kept’ and *holder* ‘a stock that could pay off in the future and should therefore be held’ would be examples of this subtype. True-patients are “the least productive” (ibid. 296) subtype and are “conceptualised as being in a resultant state after having undergone the action named in the base” (ibid.). Examples of this subtype would be *scrambler* ‘scrambled egg dish’ and *beater* ‘beaten up (old) car’. The fourth subtype, patient events, are parallel in meaning to valued-patients, and the only difference is that valued-patients mainly refer to physical items (people or objects), whereas patient events refer to events (ibid. 302), e.g. *keeper* ‘some thing worthy of being kept’ and *forgetter* ‘an memorable event’. Although this role is listed as a separate semantic role in Huddleston and Pullum (2002), it is not mentioned in connection to *-er* suffixations. Adams does not mention it either, but Bauer does, marking it as a subtype of subject nominalizations (1983: 286).

The remaining meaning in Panther and Thornburg (2003) that is found with the suffixations in *-er* is that of an event with no specified semantic role (Panther and Thornburg 2003: 302), which is exemplified in words like *kegger* ‘a beer drinking party’ and *breather* ‘short rest period during which one catches one’s breath’. This is not one of the established semantic roles, and is therefore not mentioned in Huddleston and Pullum (2002), Adams (1973), or Bauer (1983). This seems to be one of the cases where the standard sets of semantic roles fail to capture the semantic essence of the nouns in question. While this may be seen as argument against using semantic roles in general, such cases seem to be in the minority.

It is also relevant to mention that *-er* is used “to form nouns denoting inhabitants of the place named in the base” (Huddleston and Pullum 2002: 1692), e.g. *Dubliner*, *Icelander*, but this is not one of the meanings that we shall be dealing with in the research of the corpus. Interestingly enough, this usage of the *-er* suffix is not mentioned in Panther and Thornburg (2003), Adams (1973), or Bauer (1983).

When it comes to the bases that the suffix *-er* can be attached to, it is important to note that it is most commonly attached to verbal bases (e.g. *baker*), but it can also be found with nominal bases (e.g. *golfer*), numerals (e.g. *fiver*), adverbs (e.g. *oncer*), adjectives (e.g. *southerner*), and phrases (e.g. *dogooder*)⁷.

⁷ The examples in this paragraph are all taken from (Huddleston and Pullum 2002).

From everything that was stated above, it can be concluded that *-er* has a wide range of meanings and can take many semantic roles, which makes it quite polysemous. Whether that is also the case with the matching Croatian suffix will be seen in the following chapter.

2.3. Semantic roles and bases connected with the suffix *-ač*

When it comes to the Croatian suffix *-ač*, the semantic roles that words formed with this suffix have are not as extensive as those of the English suffix *-er*. In fact, according to Babić, “[i]zvedenice sa sufiksom *-ač* označuju čovjeka ..., životinju ..., oruđe ..., rjeđe neku drugu stvar”⁸ (1986: 73). That means that out of the previously defined semantic roles, the words ending in *-ač* can take only the roles of the agent and the instrument. What is more, by looking at all the other typically agent-forming suffixes in Croatian; viz. *-telj*, etc., it becomes immediately obvious that none of them fares any better with respect to the scope of acceptable semantic roles (cf. Babić 1986: 63-336). Below, we present in more detail the semantic description of *-ač* in Babić (1986), as well as Silić and Pranjković (2007).

The words in *-ač* that take the role of the agent can be divided into two categories; the prototypical, “[p]rofessional human agent” (Panther and Thornburg 2003: 286) and what Panther and Thornburg term the agent-like animal (Silić and Pranjković 2007: 168). There are many examples for the professional human agent, and some of them are *čistač* (cleaner)⁹, *izvođač* (performer), *pjevač* (singer), *zabavljač* (entertainer), etc. The second category, the agent-like animal, is found in only one contemporary example for the name of an animal, *bukač* (bittern), and there is also an example of a word that does not denote a specific animal, but rather a group of animals; *preživač* (ruminant) (ibid.).

As far as the semantic role of the instrument is concerned, it is usually subdivided into various groups according to the type of instrument that the word denotes. For instance, Babić names machine, device, vehicle, gadget, tool, muscle, thing in general, etc. as subtypes of the instrument (1986: 75). Since this distinction is rather subjective and there is a possibility of overlapping, these subtypes will be disregarded in the categorization of the examples that will be given later on. Some examples of words in *-ač* that denote instruments are *odašiljač* (transmitter), *odvijač* (screwdriver), *upaljač* (lighter), *otirač* (doormat), etc.

⁸ “Derivatives with the suffix *-ač* denote a human being ..., an animal ..., a tool ..., more rarely another type of instrument” (Babić 1986, translated by author).

⁹ All examples given in this section are, except where otherwise noted, taken from (Babić 1986).

The same conclusion, viz. that the only two semantic roles connected with *-ač* suffixations are the agent and the instrument, was reached in other Croatian linguistic works, as well (cf. Barić et al. 2005: 307, 317).

As for the type of bases that the suffix *-ač* is most commonly attached to, Babić states that this suffix predominantly attaches to verbal bases (1986: 70), e.g. *pripovjedač* (storyteller/narrator), *prekidač* (switch), etc. Of the other bases, there are only a few denominal nouns formed with this suffix; *rogač* (carob), *trubač* (trumpeter), *tenisač* (tennis player). There are also some compounds that end in this suffix, e.g. *minobacač* (minethrower), *nepušač* (non-smoker); however, they were mostly formed by putting together two words or word parts, the second of which already contained the suffix *-ač*, so it cannot be claimed that the suffix *-ač* attaches to complex bases (Babić 1986: 76).

It can be concluded from this overview of theoretical literature that the Croatian suffix *-ač* has a much narrower set of meanings than the English suffix *-er*, which will also be proved by the analysis conducted on the corpora of English and Croatian.

3. Methodology

The analytical part of this paper was performed with the help of two corpora – the Corpus of Contemporary American English¹⁰ and Hrvatski nacionalni korpus¹¹. The former consists of 450 million words accumulated in the period between 1990 and 2012, and the latter consists of 216,8 million words.

Our English database was collected by using the automatic search option for the schematic string **er.[nn*]* in the Corpus of Contemporary American English. The minimum frequency of the suffixations in the corpus was set to one, and the maximum number of the search results that the Corpus was able to deliver was 7,400. After examining the list of 7,400 most frequently used words in *-er*, we chose the most representative nouns. In other words, the words that end in *-er* but are not a result of suffixation, e.g. *water*, *mother*, and last names, e.g. *Springer*, were eliminated. Similarly, words that end in another suffix, such as *-ster*, or *-eer*, e.g. *youngster*, *engineer*, as well as words that do not belong to the word class of nouns, e.g. *other*, *better*, *alter* were also eliminated. Our final database includes 126 nouns. Afterwards, the appropriate contexts were selected for each noun from those selected, and the relevant semantic roles were identified based on the contextual information. The semantic roles that were used to describe the chosen words are those defined in Panther and Thornburg (2003) and presented in section 2.2. The word list that was thus formed can be seen in the following chapter.

As for the Croatian National Corpus, the data was gathered by accessing the website of the corpus and entering the formula *".*ač"* in the search box, which produced 94,280 results of words in *-ač*. Since the search queries available for the Croatian National Corpus are not as sophisticated as those for the Corpus of Contemporary American English, i.e. multiple entries of the same noun types are given in a random list, it would have been difficult to arrive at the exact number of different noun types in *-ač* without a time-consuming manual analysis. Hence, the multiple entries of the same word were observed if the word was deemed useful, and the most appropriate contextual information was chosen from those that were offered. As with the COCA, all the nouns ending in *-ač* that were not formed by suffixation, e.g. *mač* (sword), *plač* (crying), as well as last names, e.g. *Kovač*, were disregarded. Our final database for the Croatian corpus consists of 130 words and can be found in chapter 4.2.

¹⁰ <http://corpus.byu.edu/coca/>

¹¹ <http://www.hnk.ffzg.hr/>

4. Analysis / findings

4.1. Analysis of the semantic roles of *-er* words in context

The selective list of *-er* suffixations from the Corpus of Contemporary American English is given in the table below. The words are listed according to their frequency of appearance in context, as shown in the Corpus¹². The words that are listed are shown in context, and the semantic role that they take based on the context is given in a separate column.

Table 1: Semantic roles of words formed with the suffix *-er*

| | WORD | CONTEXT | SEMANTIC ROLE |
|----|----------|--|---------------|
| 1. | teacher | The TEACHER may provide ideas such as a day trip to the city or the local beach. | Agent |
| 2. | player | I knew that a PLAYER with his capabilities could come back into the match at any point... | Agent |
| | | Microsoft failed with the Zune, a music PLAYER that was designed to compete with the iPod. | Instrument |
| 3. | writer | In his books, and only in his books, a WRITER can do anything he pleases, provided he has talent. | Agent |
| 4. | driver | On the road, the DRIVER was reluctant to talk about our destination. | Agent |
| | | The operating system in the VM would call a device DRIVER to launch disk read or write requests. | Instrument |
| 5. | owner | The OWNER was in Mexico at the time and no one was hurt. | Experiencer |
| 6. | consumer | Criteria for Determining Treatment Outcomes for a Study Scientific merit only tells the CONSUMER whether or not they should have confidence in the outcomes of a study... | Agent |
| 7. | reporter | An AP REPORTER recently found Lynn's birth certificate online that listed a different birthdate... | Agent |
| 8. | reader | To uncover the textual evidence for such an interpretation, the READER must shift attention from the male characters of the story... | Agent |
| | | ...with a simple hand-held code READER and a diagnostic | Instrument |

¹² The frequency data was not given in the table in order to save space.

| | | | |
|-----|--------------|---|--------------------|
| | | manual, you can often locate a faulty sensor or activator... | |
| | | Alesti ... uses Ajax to create an Outlook-style three-pane online READER that smoothly guides you through folders of feeds. | Purpose-patient |
| 9. | worker | Today, each American WORKER makes 2.5 times more product than he or she did 40 years ago. | Agent |
| 10. | winner | The WINNER will have his or her name appear on the July 29 race's official title. | Agent |
| 11. | speaker | The SPEAKER remains cool to the idea of asking more from Georgia's taxpayers to build a new stadium... | Agent |
| | | A SPEAKER was mounted below the monitor for presentation of auditory stimuli. | Instrument |
| 12. | producer | We can be the largest oil PRODUCER in the world before the end of this decade... | Agent |
| 13. | caller | The first CALLER hadn't identified himself but had simply asked if she were related to George King... | Agent |
| 14. | designer | Interior DESIGNER Ashley Hill wrote her master's thesis at the Savannah College of Art and Design... | Agent |
| 15. | singer | The SINGER wowed the crowd at a 1988 concert performance in Paris. | Agent |
| 16. | commissioner | ...league COMMISSIONER Roger Goodell is concerned enough that he is coming for another visit. | Agent |
| 17. | receiver | Michael Irvin, the Hall of Fame wide RECEIVER, has spoken in favor of same-sex marriage... | Agent |
| | | Jean rang off, leaving me staring at the RECEIVER as the silence closed in again. | Instrument |
| 18. | maker | Swatch, based in Biel, is the world's biggest watch MAKER... | Agent |
| 19. | lover | Being an animal LOVER and an environmentalist, I share that passion. | Experiencer |
| 20. | container | Granola can be stored, in an airtight CONTAINER, for up to 3 weeks. | Instrument |
| 21. | trailer | Indeed, several of the men were seen in the 11-minute TRAILER explaining that ... the position was second only to POTUS... | Agent/causer event |
| | | A dozen people can be found living in a two-bedroom | Location |

| | | | |
|-----|----------|---|--------------------------|
| | | TRAILER. | |
| 22. | fighter | I motion to the second FIGHTER, who's sitting on the ground with her legs splayed in front of her... | Agent |
| | | Roscoe C. Brown Jr. was the first black pilot to shoot down a jet FIGHTER... | Instrument |
| 23. | reminder | Taking a pill becomes a daily REMINDER that one has depression... | Agent/causer event |
| 24. | locker | She and Rosario ditched their stuff in a LOCKER and went out to join Gus for a private training session. | Instrument ¹³ |
| 25. | drawer | She ended up opening the DRAWER and giving him what she did have. | Instrument ¹⁴ |
| 26. | trainer | She works out with a TRAINER three times a week... | Agent |
| 27. | poster | On the POSTER is one of Dylan's drawings of Spar, the zoo's oldest tiger. | Purpose-patient |
| 28. | starter | One of his best friends, STARTER Ryan Dempster, said he would really miss Wood's presence in the clubhouse... | Agent |
| | | As if on cue, the truck's STARTER clicks twice and dies with a moan. | Instrument |
| 29. | merger | The MERGER required the incorporation of even more actors within the previously established CdC network. | Agent/causer event |
| 30. | runner | She was a RUNNER, trim and in great shape... | Agent |
| 31. | explorer | French EXPLORER Jacques Cartier is greeted by Indians on shore waving fur on sticks. | Agent |
| | | An Internet EXPLORER add-on retains open tabs. | Instrument |
| 32. | marker | Charlotte bent to see if the underside had been marked with a red magic MARKER. | Instrument |
| 33. | recorder | Clerk and RECORDER Melinda Myers struggled to hold back tears. | Agent |
| | | They also gave her a tape RECORDER to keep an audio diary of her life. | Instrument |
| 34. | loser | If you don't walk away with a trophy, you're a LOSER. | Experiencer |
| 35. | printer | He took out his phone, sun burning his knuckles, and called | Agent |

¹³ The noun *locker* can also be interpreted as a location, due to the conceptual closeness between the locative and instrumental meaning in the case of words that denote specific types of containers. Here, in keeping with the semantic role assigned to the word *container*, words of this type will be defined as instruments.

¹⁴ Cf. footnote 12.

| | | | |
|-----|------------|---|-----------------------|
| | | the PRINTER for an update. | |
| | | I had a little incident changing the black ink cartridge for the PRINTER I shared with a couple other people. | Instrument |
| 36. | diner | If you're the kind of DINER who likes to explore lots of tastes ..., consider the \$16 vegetarian thali. | Agent ¹⁵ |
| | | I had a conversation with some folks in the DINER the other day. | Location |
| 37. | planner | After his workday as a sports PLANNER, Ryan said he plopped down on the sofa on an August night to chill... | Agent |
| | | ...it provides special tools geared to the academic domain, such as a four-year course PLANNER that helps students structure their courses... | Instrument |
| 38. | opener | Use a chopstick or letter OPENER to lift and loosen the soil beneath a row of seedlings... | Instrument |
| | | Last season, as a sophomore, he played only in the OPENER... | Instrument-like event |
| 39. | controller | ...here was Anne, the oldest sister, the CONTROLLER, always trying to maintain order... | Agent |
| | | Cohon stepped back, having grabbed a small CONTROLLER from the podium. | Instrument |
| 40. | cutter | Three years of this and then a job as a CUTTER in a tailor shop in Boston's North End. | Agent |
| | | It was pried open with a metal tool, not a bolt CUTTER... | Instrument |
| 41. | server | I have no problem telling my SERVER that I want my chicken grilled with no sauce... | Agent |
| | | ...my browser crashes, the SERVER times out, or my Internet connection dies... | Instrument |
| 42. | shooter | The alleged SHOOTER ran out the back door... | Agent |
| | | Compared with punch, the julep, and the fizz, ... the buck ..., the blender drink, and the SHOOTER are barely worth mentioning. | Purpose-patient |
| 43. | ruler | This play is about a RULER who behaves like a fool. | Agent |
| | | Students can use a RULER and protractor to get an estimate. | Instrument |
| 44. | blender | In a BLENDER, puree frozen raspberries and 2 tablespoons sugar. | Instrument |

¹⁵ The agentive use is much rarer than the locative use.

| | | | |
|-----|---------------------------|---|-----------------------|
| 45. | lighter | He plays with the green cigarette LIGHTER while he stares at me... | Instrument |
| 46. | dresser | ...she was the queen's DRESSER... | Agent |
| | | I woke up in the morning, painting leaning up against the DRESSER... | Instrument |
| 47. | mixer | In a medium bowl, using an electric MIXER set on medium-high, beat all ingredients until combined. | Instrument |
| | | At an undergraduate MIXER his first day at Harvard in 1985, Hayes recalls introducing himself to a white student... | Instrument-like event |
| 48. | cleaner | Have you ever worked as a CLEANER? | Agent |
| | | He took from under the sink a bottle of CLEANER and some paper towels. | Instrument |
| 49. | cruiser | He nudged the CRUISER out into traffic. | Instrument |
| 50. | cooler | She'd pack thick sandwiches and iced tea in the COOLER... | Instrument |
| 51. | thriller | ...a moody, atmospheric THRILLER set in a 19th-century Prussian castle... | Agent/causer event |
| 52. | sticker | ...children were rewarded with a STICKER for every game played. | Purpose-patient |
| 53. | keeper | ...he was hired as a full-time animal KEEPER at the Children's Zoo. | Agent |
| | | Is she a KEEPER? | Valued-patient |
| 54. | blockbuster | Ledger died just months before the release of his biggest BLOCKBUSTER, "The Dark Knight." | Agent/causer event |
| 55. | browser | Chrome is a well-rounded BROWSER that should meet most people's needs. | Instrument |
| 56. | fund-raiser ¹⁶ | Bill Clinton spoke last night at a FUND-RAISER for President Obama. | Instrument-like event |
| 57. | typewriter | Burke's receptionist, Martha Trout, looked up from her TYPEWRITER. | Instrument |
| 58. | rocker | Eric Clapton is an old ROCKER that should be singing the national anthem... | Agent |
| | | Grandma would lean forward in her ROCKER... | Instrument |
| | | "Claudine" is one of their most notorious lost tunes, a Chuck Berry-style ROCKER... | Purpose-patient |

¹⁶ Also found as *fundraiser* a bit lower in the list.

| | | | |
|-----|-----------------------|---|-----------------------------|
| 59. | jumper | ...renowned BASE JUMPER Jeb Corliss, was easy to spot... | Agent |
| | | Eric Gordon nails the JUMPER to put New Orleans up by one with less than five on the clock. | Purpose-patient |
| 60. | zipper | I broke the ZIPPER on the other dress I was going to wear today. | Instrument |
| 61. | appetizer | These Greek-style pockets make for a tasty APPETIZER... | Instrument |
| 62. | walker | Andy had never been a fast WALKER. | Agent |
| | | Dominic watched the old woman gather herself up from the chair into her WALKER and make her way into the kitchen. | Instrument |
| 63. | sleeper ¹⁷ | Faye's a deep SLEEPER. | Agent |
| | | I overcautiously dressed my daughter in a T-shirt, a SLEEPER without feet, a SLEEPER with feet, a snowsuit, and a hat. | Quasi-instrument |
| | | His nephew, my father, once rode on the SLEEPER from Edinburgh to London with Laurence Olivier... | Location ¹⁸ |
| 64. | cracker | She still had almost two full jars of water and quite a bit of stale CRACKER. | Agent-like inanimate object |
| | | One soldier carried a safe CRACKER, but most times they didn't use the tool and just blew the safes... | Instrument |
| 65. | transmitter | Stacy is challenged to redefine her role as teacher from that of TRANSMITTER of knowledge to facilitator of group interactions... | Agent |
| | | Blanca is tagged with a radio TRANSMITTER, and scientists onshore are tracking her by telemetry and telescope. | Instrument |
| 66. | boiler | In the kitchen he saw the shiny brass dome of the copper water BOILER next to the stove... | Instrument |
| 67. | dishwasher | Mateo Granados ... found a job as a DISHWASHER in a Richmond District restaurant. | Agent |
| | | His wife, Pat, had loaded the DISHWASHER... | Instrument |
| 68. | stretcher | He had to be taken off the field on a STRETCHER, never a good thing. | Instrument |
| 69. | best-seller | Mark Twain's "new" autobiography is now a BEST-SELLER. | Purpose-patient |
| 70. | shaker | You are a mover and SHAKER in your career, and coworkers | Agent |

¹⁷ A detailed list of all the meanings of the word sleeper can be found in (Panther and Thornburg 2003: 309). Only the meanings given in the table were found in our database.

¹⁸ Out of the three attested meanings, the locative meaning is by far the most frequent.

| | | | |
|-----|--------------------------|--|---------------------------------------|
| | | may feel intimidated... | |
| | | He picked up the salt SHAKER and shook it over the plate. | Instrument |
| 71. | steamer | Place sweet potatoes in STEAMER and bring water to a boil. | Instrument |
| 72. | hanger | He got out of the car and retrieved his suit jacket from the HANGER in the backseat. | Instrument |
| 73. | buzzer | The loud door BUZZER in the other room made them both jump. | Instrument |
| 74. | wrapper | ...at age 16, my hourly wage increase as a Christmas gift WRAPPER at John Halsey Drugstore had been a quarter. | Agent |
| | | One of the passing trucks threw a hamburger WRAPPER at the woman on the corner. | Instrument |
| 75. | airliner | Is there a formal procedure for a first officer to relieve the captain on an AIRLINER? | Agent-like inanimate object |
| 76. | adapter | Obama is an ADAPTER, says Democratic pollster Peter Hart. | Agent |
| | | An ADAPTER plugged into a wall outlet can power the LED. | Instrument |
| 77. | camper | "We were beyond skeptical," says one CAMPER... | Agent |
| | | Julie and John, parents of two, rented a pop-up CAMPER to see national parks in the western part of the United States. | Location |
| 78. | charger | Spurring his white CHARGER up the hill, he bellowed: Fix bayonets! | Agent-like animal |
| | | Joseph picks up the phone, plugs it into the CHARGER. | Instrument |
| 79. | planter | Napoleon Bonaparte's future wife Josephine, the daughter of a wealthy Creole PLANTER... | Agent |
| | | The tomatoes will grow out of the bottom of the hanging PLANTER. | Instrument ¹⁹ |
| 80. | skyscraper | Her father worked for an insurance company and in 1924 oversaw construction of the city's first SKYSCRAPER... | Agent-like inanimate object |
| 81. | twister | But when the storm hit, the warning was no match for the TWISTER for its size and fury and deadly power. | Agent-like inanimate object |
| 82. | no-brainer ²⁰ | Stopping this from happening should be a NO-BRAINER. | Event with no specified semantic role |
| 83. | slipper | She pulled off her leather SLIPPER and wool sock before lifting up her leg. | Purpose-patient |
| 84. | grasshopper | ...in order to survive, the GRASSHOPPER must forage | Agent-like animal |

¹⁹ Cf. footnote 12.

²⁰ Also found as *nobrainier* much further down the list.

| | | | |
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| | | effectively for energy-rich food... | |
| 85. | windbreaker ²¹ | A cool breeze stirred the collar of his favorite blue WINDBREAKER... | Agent-like inanimate object |
| 86. | spoiler | A SPOILER alert is not needed to point out that The Muppets finishes on a high note... | Agent/causer event |
| | | The SPOILER keeps a race car's wheels on the ground. | Instrument |
| 87. | painkiller | For the average person, a PAINKILLER relieves suffering and may cause some side effects... | Instrument |
| 88. | beater | Mix the oil and eggs with a whisk or BEATER until creamy. | Instrument |
| | | It was an old BEATER, a white Camaro with rusty patches and MARTINEZ HOUSE CLEANING printed on the doors... | True-patient |
| 89. | pacifier | For babies under six months, pop a PACIFIER dipped in sugar water in their mouths. | Instrument |
| 90. | commoner | The story twist occurs when the king discovers his daughter loves a COMMONER. | Agent |
| 91. | eye-opener ²² | Learning about the waste generated by bottled water was a real EYE-OPENER. | Agent/causer event |
| 92. | fryer | Take a teaspoon of batter and rake it into the FRYER with another spoon. | Instrument |
| | | You can raise the males to FRYER size and butcher them before they become a nuisance. | Purpose-patient |
| 93. | screamer | She wasn't a SCREAMER, which was the main reason she didn't shriek at him. | Agent |
| | | O'Donnell did just that, and the next day's Post carried this front-page SCREAMER: "ROSIE O'RANT." | Agent-like inanimate object |
| 94. | whistleblower | Kruszewski was a key WHISTLEBLOWER in lawsuits against the drug companies. | Agent |
| 95. | muzzleloader | During the December gun seasons, you can use either a shotgun or a MUZZLELOADER... | Purpose-patient |
| 96. | cliffhanger | End each chapter with a CLIFFHANGER. | Agent/causer event |
| 97. | two-seater | He drove a Mercedes TWO-SEATER. | Location |
| 98. | creeper | ...you're desperate for a quick way out of talking to a CREEPER who's cornered you at a party. | Agent |

²¹ Also found as *wind-breaker* much further down the list.

²² Also found as *eyeopener* much further down the list.

| | | | |
|------|---------------|---|---------------------------------------|
| | | Poison ivy, Virginia CREEPER, and various greenbriers are widespread vines. | Agent-like plant |
| | | With a quick push he slid the CREEPER out from under the coal car and turned off the gas. | Instrument |
| 99. | looker | And despite all that looking, the LOOKER would probably be at a loss to describe the face to anyone later. | Agent |
| | | Even in his drab brown uniform, our local peace officer was a LOOKER. | Valued-patient |
| 100. | do-gooder | Judy was not some outside DO-GOODER but a native West Virginian who had grown up in the hollows... | Agent |
| 101. | 18-wheeler | Finally, the fully assembled car was loaded onto an 18-WHEELER and hauled 350 miles to central Alabama. | Location |
| 102. | crowd-pleaser | You have to be a CROWD-PLEASER these days if you want the coffers to spill over... | Agent |
| | | The big CROWD-PLEASER, a soaring magic carpet that flies above the audience's heads, creates an odd disconnect because the Aladdin and Jasmine on the carpet are quite clearly stunt doubles. | Agent/causer event |
| 103. | scrambler | "No more Ronans," the man in the suit said through his voice SCRAMBLER. | Instrument |
| | | Watch how the inside-the-eggshell egg SCRAMBLER works. | True-patient |
| 104. | roadrunner | ...the ROADRUNNER whipped the snake over its shoulder and smacked it hard on the rocky ground. | Agent-like animal |
| 105. | first-timer | Experience levels range from expert to FIRST-TIMER. | Agent |
| 106. | scorcher | The day was a SCORCHER, never dipping below 115 degrees. | Agent/causer event |
| 107. | all-nighter | She wished she could blame it on an ALL-NIGHTER at the hospital, but she'd simply had a bad dream... | Event with no specified semantic role |
| 108. | page-turner | I myself had read that book a few months ago: a real PAGE-TURNER with a half-dozen major surprises before the end. | Agent/causer event |
| 109. | laugher | Your mother was a great LAUGHER... | Agent |
| | | You'd rather win a LAUGHER, but after you win games like these, it definitely brings the team together... | Event with no specified semantic role |
| 110. | feeler | I'm not a real big thinker - I'm a FEELER. | Experiencer |
| | | The caterpillar lifted a FEELER to tap the flat bag that rode her back. | Instrument |

| | | | |
|------|---------------------------|--|-----------------------|
| | | When she got a FEELER from the two-year-old online auction business, she hadn't expected to be interested. | Instrument-like event |
| 111. | timesaver ²³ | For busy parents with equally busy children, car pooling can be a real TIMESAVER. | Instrument-like event |
| 112. | victimizer | I have been transformed from VICTIMIZER to victim. | Agent |
| 113. | six-footer | a lanky, ginger-haired SIX-FOOTER ... bore an eerie resemblance to Mair's own brother. | Agent |
| 114. | man-eater | Her public romances with rock stars and actors earned her the reputation of a MAN-EATER... | Agent |
| 115. | do-it-yourselfer | He's been a hard-core DO-IT-YOURSELFER, builder and writer for more than 20 years. | Agent |
| 116. | tearjerker ²⁴ | ...the TEARJERKER, the old-fashioned movie sob story is a rarity now. | Agent/causer event |
| 117. | nail-biter | This is me, literally, I'm a NAIL-BITER. | Agent |
| | | ...realize that adolescence is a NAIL-BITER for parents all the way. | Agent/causer event |
| 118. | wife-beater ²⁵ | O.J. Simpson- he's a famous football star, but he was also a WIFE-BEATER. | Agent |
| | | I used to put a red bandanna on my hair and wear ripped jeans and a WIFE-BEATER... | Quasi-instrument |
| 119. | icebreaker ²⁶ | The dog is an ICEBREAKER. People feel more comfortable talking to people when they see a dog. | Agent/causer event |
| | | ...a Soviet ICEBREAKER was sent to provide access... | Instrument |
| 120. | kneeler ²⁷ | At one window sill, an antique KNEELER for praying is now a bookstand. | Instrument |
| 121. | head-turner | ...this two-seater is a HEAD-TURNER and has decent acceleration... | Agent/causer event |
| 122. | head-scratcher | It was a HEAD-SCRATCHER that he wanted to gig with us. | Agent/causer event |
| 123. | sundowner | He sipped a SUNDOWNER with us that evening, as the African sky glowed orange and purple and pink. | Purpose-patient |

²³ Also found as *time-saver* a bit further down the list.

²⁴ Also found as *tear-jerker* further down the list.

²⁵ Also found as *wifebeater* much further down the list; in that spelling, it predominantly denotes a quasi-instrument.

²⁶ Also found as *ice-breaker* much further down the list; in that spelling, it predominantly denotes an agent/causer event.

²⁷ Although <http://dictionary.reference.com/> gives “a person or thing that kneels” as the first definition, there is no noted usage of the agentive meaning in the corpus.

| | | | |
|------|---------------|--|-----------------------|
| 124. | dealbreaker | A man hits a woman, a woman should never go back. ... It's over. It's a DEALBREAKER. | Agent/causer event |
| 125. | money-raiser | Lee was a skilled and effective MONEY-RAISER. | Agent |
| | | Important funding for the center comes from the High Hopes Carousel Ball, a MONEY-RAISER held every two years. | Instrument-like event |
| 126. | heart-stopper | ...that game really proved to be a HEART-STOPPER for one Pittsburgh fan. | Agent/causer event |

4.2. Analysis of the semantic roles of *-ač* words in context

As with the table giving the semantic roles of words in English ending in *-er*, the words in Croatian that end in *-ač* are given in the table below, along with examples of their usage in context, based on which they are assigned semantic roles.

Table 2: Semantic roles of words formed with the suffix *-ač*

| | WORD | CONTEXT | SEMANTIC ROLE |
|----|--------|---|--------------------------|
| 1. | bacač | Prigodu za taj podvig imao je njemački BACAČ diska Lars Riedel... | Agent |
| | | Čedo Romanić ... pokazuje nam raketni BACAČ ruske proizvodnje na nitroglicerinsko punjenje koji je ... izuzetno ubojito oružje. | Instrument ²⁸ |
| 2. | birač | ...svaki bi BIRAČ birao po jednog kandidata iz svake od triju nacionalnih skupina. | Agent |
| 3. | boksač | Lewis je nedvojbeno bolji BOKSAČ... | Agent |
| 4. | brijač | ...glavni je junak udovac Lazar, BRIJAČ od zanata... | Agent |
| 5. | brojač | Zlatne medalje BIS-a dobili su Nikola Petković za držač računala Delta i Zvonimir Viduka za BROJAČ osovina. | Instrument |
| 6. | brusač | Antun Močnik pedesetak je godina radio kao majstor BRUSAČ... | Agent |
| 7. | crtič | U Rimu je bio cijenjen kao CRTAČ zemljopisnih karata... | Agent |
| 8. | čitač | Pristaša sam teze da voditelj mora ujedno biti i autor, a ne | Agent |

²⁸ This is a much more common usage of the word.

| | | | |
|-----|-------------|--|---------------------|
| | | samo ČITAČ tuđeg teksta. | |
| | | U dodatnu opremu spadaju ČITAČ elektronskih knjiga, MP3 player i nekoliko igara... | Instrument |
| 9. | dizač | Splitski "Bugarin", DIZAČ utega Nikolaj Pešalov, u Sydneyu se okitio zlatnom olimpijskom medaljom. | Agent |
| 10. | dobavljač | Od ove godine Radlovac izvozi kamen u Sloveniju, a postao je i jedini DOBAVLJAČ mineralne vune za tvornice Slovenije i Hrvatske. | Agent |
| 11. | dodavač | Slična je bila akcija kod drugog pogotka "bijelo-plavih", samo što je DODAVAČ bio Babić, a Majer precizan strijelac... | Agent |
| 12. | dojavljivač | Anonimni DOJAVLJIVAČ preuzeo je u pozivu ... odgovornost za dva bombaška napada na britanske interese u Istanbulu... | Agent |
| | | Kazao je da iza pulta ima alarmni DOJAVLJIVAČ, ali ga stradala blagajnica u vrijeme razbojstva nije aktivirala. | Instrument |
| 13. | dostavljač | Sada kada mu je sudski DOSTAVLJAČ pozvonio na vrata, Deskar je zaboravio da je nešto ostao dužan građanima... | Agent |
| 14. | držač | Osobito je zanimljiv niz osobnih Jelačićevih predmeta kao što su ... putni pribor za pisanje, DRŽAČ za cigaru izrađen od morske pjene... | Instrument |
| 15. | glasač | U nedjelju će se u Crnoj Gori održati prijevremeni parlamentarni izbori na kojima će 455.791 GLASAČ moći birati... | Agent |
| 16. | gledač | ...tako i nije kad se zna da je Röhmer strastveni GLEDAČ filmova... | Agent ²⁹ |
| 17. | gutač | Turizam je razvojno gledano GUTAČ prostora i zato ga treba držati u okvirima održivog razvoja... | Agent |
| 18. | hodač | Na snazi je nepisano pravilo da će čovjek, građanin, obični domaći HODAČ, kamo god išao, uvijek nastojati pronaći što kraći put. | Agent |
| 19. | hrvač | ...kao sportaš, HRVAČ, radio je i na novinarskim poslovima. | Agent |
| 20. | huškač | Bush je ratni HUŠKAČ i moralna je obveza glasno ga izvrgnuti ruglu... | Agent |
| 21. | igrač | Primorac je ovog trenutka drugi IGRAČ na svjetskoj rang-listi. | Agent |
| 22. | ispitivač | ISPITIVAČ je s njima spojen slušalicama i stručno postavlja | Agent |

²⁹ Although the first definition of the word is given as "sprava za gledanje" (<http://hjp.novi-liber.hr/>), there is no confirmed usage of the instrument sense of the word in our database.

| | | | |
|-----|--------------|--|------------|
| | | pitanja djetetu... | |
| | | ...Bossert i njegova ekipa razvili su tzv. delta-T ISPITIVAČ... | Instrument |
| 23. | istraživač | ...Marko Polo, glasoviti pomorac, ISTRAŽIVAČ i putopisac, inače rođeni Korčulanin. | Agent |
| 24. | izazivač | Iako je već punih sedam mjeseci prvi IZAZIVAČ Britanca Lennox Lewisa... | Agent |
| 25. | izbacivač | Tko ima snagu i zna se tući, zaposlit će se možda kao IZBACIVAČ... | Agent |
| 26. | izdavač | O tom iznimno vrijednom izdavačkom pothvatu govorili su i mr. Božo Biškupić ... te IZDAVAČ Zdravko Cikuša... | Agent |
| 27. | izlagač | Riječ je o najvećoj sajamskoj priredbi u Hrvatskoj ... na kojoj se predstavlja 2651 IZLAGAČ iz 42 države svijeta. | Agent |
| 28. | iznajmljivač | U toj prvoj kategoriji svaki IZNAJMLJIVAČ platit će 300 kuna boravišne pristojbe godišnje po krevetu... | Agent |
| 29. | izrađivač | U okviru škole stječe se zvanje keramičar-pećar, odnosno IZRAĐIVAČ tradicijskih predmeta od keramike... | Agent |
| 30. | izvođač | Ujedno je najavio da će ovih dana biti izabran IZVOĐAČ radova na dionici Split - tunel "Sveti Rok" kroz južni Velebit. | Agent |
| 31. | jahač | JAHAČ, odnosno džokej, na taj način osvaja mnoge nagrade... | Agent |
| 32. | klizač | Nizozemski KLIZAČ Jochem Uytdehaage u velikom je stilu postao osvajač olimpijskog zlata... | Agent |
| 33. | kopač | Radio sam i kao lovac na krokodile, kao KOPAČ u rudniku... | Agent |
| 34. | kovač | U prvoj priči seoski KOVAČ Koren svojom lukavošću i snalažljivošću nadmudruje vragove. | Agent |
| 35. | krojač | Vješti KROJAČ i njegova supruga ističu kako su svi starinski elementi u njihovu odijelu očuvani... | Agent |
| 36. | kupač | Važno je reći ... da se u te četiri sezone u Dravi nije utopio ni jedan KUPAČ. | Agent |
| 37. | kušač | Poznato je da je Uday još 1988. na smrt premlatio oćevog sobara koji je ujedno bio i KUŠAČ hrane. | Agent |
| 38. | letač | "Trećina letova završi u poljima i baštama ili na granama!", kaže ... najpoznatiji našički LETAČ... | Agent |
| 39. | minobacač | Osumnjičeni za tragediju bio je ročnik koji je minu stavio u MINOBACAČ u kojem je eksplodirala. | Instrument |
| 40. | mjenjač | ...Verso vuče iz vrlo niskih okretaja, a MJENJAČ se odlično | Instrument |

| | | | |
|-----|--------------|---|--------------------------|
| | | uklopio uz takav motor. | |
| 41. | mjerač | Nakon nedavnih krađa lažnih patronažnih sestara ... u gradu se pojavio i MJERAČ tlaka iz "Crvenog križa". | Agent |
| | | ...u prostoriji ispod staklenog vrta smješten je i MJERAČ vlage. | Instrument |
| 42. | najavljiivač | Tom Hanks, jedna od najvećih holivudskih zvijezda ... po deseti će put biti NAJAVLJIVAČ! | Agent |
| 43. | napadač | U tom trenutku Cetina više nije samo TURIST koji je doživio nesreću, već napadač na drugu osobu. | Agent |
| 44. | naslonjač | Naravno, nakon tri tjedna drmusanja u Orient Expressu... nije ni čudo da sam zaspao čim sam sjeo u udobni NASLONJAČ. | Instrument |
| 45. | nastavljač | Sigurno je da sam u pogledu promicanja, zaštite i obrane državnih i nacionalnih interesa apsolutno NASTAVLJAČ njegove politike. | Agent |
| 46. | navijač | Gotovo svaki je NAVIJAČ imao hrvatsku trobojnicu na licu... | Agent |
| 47. | nosač | U Nepalju jedan NOSAČ ... nosi do 60 kilograma tereta za iznos od jednog piva. | Agent |
| | | ...usto je dobio i poziv da potkraj mjeseca posjeti američki NOSAČ zrakoplova koji će uskoro uploviti u Jadran... | Instrument ³⁰ |
| 48. | obarač | Moglo bi se naširoko o tome zašto je policijski specijalac prislonio pištolj uz Milanovu glavu i povukao OBARAČ... | Instrument |
| 49. | odašiljač | Od svibnja ove godine instaliran je ODAŠILJAČ od 10 kW... | Instrument |
| 50. | odvijač | Osim USB memorije švicarac naime ima i nožić, rašpicu, ODVIJAČ, škariće, lampicu i kemijsku olovku. | Instrument |
| 51. | oglašivač | Za sadržaj oglasnih poruka odgovoran je isključivo OGLAŠIVAČ. | Agent |
| 52. | ogrtač | Poprsje joj je ogrnuto bogato nabranim plaštom optočenim trakom od filigrana, a OGRTAČ se ispod vrata kopča ružom. | Instrument |
| 53. | okidač | Važno je znati postoji li itko na ovom svijetu tko mu može pomoći prije nego li pritisne OKIDAČ. | Instrument |
| 54. | omekšivač | Takav je primjer OMEKŠIVAČ Cocolino... | Instrument |
| 55. | omotač | Taj položaj ona je zadržala i nakon što je Barić s nje skinuo laneni OMOTAČ i pohranio ga u zasebnu vitrinu. | Instrument |

³⁰ The instrument meaning appears to be much more common than the agentive one.

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|-----|--------------|--|------------|
| 56. | opasač | OPASAC za zimsku odoru bijele je boje sa žutom kopčom... | Instrument |
| 57. | opskrbliivač | Pritom bi Mađarska ... mogla biti OPSKRBLJIVAČ. | Agent |
| 58. | osigurač | ...bit će to kao da ste izvukli OSIGURAC s ručne bombe. | Instrument |
| 59. | osnivač | ...OSNIVAČ joj je sadašnji hrvatski predsjednik... | Agent |
| 60. | osvajač | ...bio je OSVAJAC Kupa europskih prvaka. | Agent |
| 61. | osvježivač | ...imajte pri ruci neki OSVJEŽIVAČ daha ili dobru žvakaću gumu... | Instrument |
| 62. | otimač | Makar je OTIMAČ bio maskiran ... dva zaštitara ipak su na njemu mogli primijetiti neke karakteristike. | Agent |
| 63. | otkupliivač | ...ovih se dana preko lokalnog radija sve češće oglašava i OTKUPLJIVAČ, kutjevačka Rovita d. o. o. | Agent |
| 64. | otvarač | U njoj Levy piše da je uvijek oko vrata nosio OTVARAČ za boce... | Instrument |
| 65. | penjač | Bilo da ste iskusni PENJAC ili početnik, za vas ima smjerova... | Agent |
| 66. | perač | Danju je radio kao PERAČ posuđa, a večeri provodio čitajući djeci priče za laku noć. | Agent |
| | | Ulagači su predvidjeli kupnju dvaju specijaliziranih vozila, ... čistilice za ulice koja uključuje i ... PERAČ ulica... | Instrument |
| 67. | pisač | Tat je obio stražnja vrata, ušao u uredske prostorije i ukrao dva računala, PISAČ, faks i novac... | Instrument |
| 68. | pjevač | Najpoznatiji španjolski PJEVAČ ... Julio Iglesias održat će 20. lipnja koncert u Velikoj dvorani Doma sportova. | Agent |
| 69. | plesač | ... najneumorniji i najvještiji PLESAČ pod maskom bio je švicarski veleposlanik Petar Andrej Troendle. | Agent |
| 70. | plivač | PLIVAČ Miloš Milošević dobio je posebno priznanje... | Agent |
| 71. | pokazivač | ...Kezić je izložio i ... linijski svjetlosni POKAZIVAČ vremena radnih ciklusa semafora... | Instrument |
| 72. | pokretač | Kako nam je kazao POKRETAČ ovog projekta i vlasnik prof. Račić, učenicima je omogućeno vrhunsko glazbeno rock obrazovanje... | Agent |
| 73. | pokrivač | Ispitivanja su pokazala da snježni POKRIVAČ iznad 1000 metara prosječno traje četiri mjeseca u godini. | Instrument |
| 74. | pomagač | Ministar vanjskih poslova dodao je kako se Paktu žele pridružiti i mnoge druge zemlje, a kao POMAGAČ i Sveta | Agent |

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| | | Stolica. | |
| 75. | ponavljač | Među upisanima su i 272 učenika s izravnim upisom te 131 PONAVALJAČ. | Agent |
| 76. | poništavač | ...maturanti su uspjeli u jednom jedinom tramvaju razbiti prozore na vratima, ... iščupati i razbiti PONIŠTAVAČ karata. | Instrument |
| 77. | popisivač | POPISIVAČ angažiran na popisu stanovništva 2001. u Boroviku uistinu nije imao mnogo posla. | Agent |
| 78. | postavljač | ...POSTAVLJAČ izložbe Miljenko Vicul uspio je postavom izložaka gotovo stvoriti prostor autentičnog bidermajerskog ugođaja. | Agent |
| 79. | potrošač | Prosječni POTROŠAČ u "Segrou" provede oko četiri sata... | Agent |
| 80. | predavač | Šljivančanin je PREDAVAČ na tamošnjoj visokoj vojnoj školi... | Agent |
| 81. | pregovarač | Robert Gravell, bivši glavni PREGOVARAČ UNTAES-a, priznaje da su OESS-ovi izvori informacija možda bili loši... | Agent |
| 82. | prekidač | Pobrkali su i funkcije prekidača, pa sam kuhinjski bojler mogao upaliti tek kada sam upalio PREKIDAČ za svjetlo u kuhinji. | Instrument |
| 83. | prepisivač | Potpisana je kao djelo šibenskog notara i skradinskog kanonika Petra Mokrančića, no on je bio samo PREPISIVAČ teksta... | Agent |
| 84. | pretvarač | Među najvažnije se ubrajaju novi mikroprocesor i softver, te novi statički PRETVARAČ za napajanje pomoćnih pogona. | Instrument |
| 85. | prigušivač | Moguće je da je ubojica imao PRIGUŠIVAČ... | Instrument |
| 86. | pripovjedač | U Zagrebu je ... umro akademik Petar Šegedin, romanopisac, PRIPOVJEDAČ, esejist... | Agent |
| 87. | pročistač | "Varteksovo" poduzeće "Denim proizvodi" ipak je u roku sagradilo PROČISTAČ otpadnih voda za tvornicu u Novome Marofu... | Instrument |
| 88. | prodavač | Kao PRODAVAČ ukapljenog naftnog plina, Plena među glavnim kupcima vidi korisnike iz područja Dalmacije i BiH. | Agent |
| 89. | proizvođač | Zadarski PROIZVOĐAČ plastičnih materijala sa 147 zaposlenih ostvaruje oko 12 milijuna DEM prometa na godinu. | Agent |
| 90. | promatrač | Gotovo da je na svakom biračkom mjestu bio po barem jedan PROMATRAČ. | Agent |
| 91. | pronalazač | ..."čudesni mineral", kako ga opisuje njegov PRONALAZAČ | Agent |

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| | | Tihomir Lelas, zasad se ispituje u Institutu "Ruđer Bošković" u Zagrebu... | |
| 92. | pušač | Negdje sam pročitala da vam je navodno jedina mana to što ste okorjeli PUŠAČ? | Agent |
| 93. | razarač | Bule je u tandemu s Krpanom bio pravi RAZARAČ protivničkih obrana... | Agent |
| | | Taj najsuvremeniji RAZARAČ američke Ratne mornarice, zapovjedni je brod sredozemne eskadrile razarača... | Instrument |
| 94. | razbijač | Ujević je majstor zatvorene forme i vehementni RAZBIJAČ kalupa... | Agent |
| 95. | razigravač | Novi igrači su James Sconny Penn, odlični RAZIGRAVAČ koji je lani nosio dres Crvene zvezde ... te Joško Poljak... | Agent |
| 96. | rezač | Od ove jeseni započinje ... osposobljavanje za stjecanje zvanja optičarskog pomoćnika (REZAČ i bruslač naočalnih stakala)... | Agent |
| | | Nadalje je potrebno imati REZAČ pomoću kojeg se prije pušenja odreže milimetar vrha cigare... | Instrument |
| 97. | sakupljač | Isprva je on pasivni SAKUPLJAČ grafičkih listova i korisnik pojedinih likovnih motiva s tih listova... | Agent |
| 98. | sastavljač | Poznati hrvatski jezikoslovac Josip Badalić, SASTAVLJAČ prve sustavne zbirke inkunabula u Hrvatskoj... | Agent |
| 99. | sjekač | Ovdje radi i Matija Tomešić, bio je i on do lani SJEKAČ... | Agent ³¹ |
| | | ...nisu odustali od daljnjeg sukoba već je pijani četrdesetogodišnjak zgrabio SJEKAČ i njime razbio staklo na prozoru kuće. | Instrument |
| 100. | skakač | ...žao mu je što je Bjelanović bio dugo ozlijeđen pa nije konkurirao za mjesto u napadu, jer je izvrstan SKAKAČ... | Agent |
| 101. | slušač | ...on je bio sjajan govornik, a ja, čini se, dobar SLUŠAČ. | Agent |
| 102. | spavač | ...spavao sam samo tri sata, ne mogu po danu biti onako uporan SPAVAČ kao noću... | Agent |
| 103. | svirač | ...primljen sam u stalni radni odnos na HRT-u kao SVIRAČ prvoga brača u tamburaškome orkestru. | Agent |
| 104. | šetač | ...nerijetko se dogodi da ŠETAČ bude pošprican vodom iz | Agent |

³¹ In *Rječnik hrvatskog jezika* (Anić 1998.) and *Hrvatski jezični portal* (<http://hjp.novi-liber.hr/>) the only given definition of the word is that of the instrument; however, the agentive meaning is quite commonly found in the corpus.

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| | | "klime". | |
| 105. | tegljač | No kako bi napunili jedan TEGLJAČ, potrebno je negdje i prikupiti taj otpad. | Instrument |
| 106. | tragač | ...Višnjić je tvrtki "Dinamit" uručio i donaciju u iznosu 10.000 američkih dolara, kojom je nabavljen pas TRAGAČ mina... | Agent |
| 107. | trkač | Najsajjniju trku taj neobični TRKAČ iz Križevaca otrčao je na EP u Helsinkiju 1994... | Agent |
| 108. | trovač | Đakovom hara nepoznati TROVAČ pasa... | Agent |
| 109. | trubač | ...ove godine nastupaju TRUBAČ Lew Sollof i saksofonist Richard Buckley. | Agent |
| 110. | tumač | ...podsjeća da je Tanhofer prvi izvanzagrebački TUMAČ Krležinih dramskih tekstova. | Agent |
| | | Plan je kopiran tako da bi uz njega trebao TUMAČ. | Instrument |
| 111. | udvarač | ...Željko Duvnjak kao Frankić, gazdin posilni i Tonkin UDVARAČ... | Agent |
| 112. | ugovarač | ...glavni UGOVARAČ takvog posla je firma Adria Globe Trade... | Agent |
| 113. | ulagač | ...da sam potencijalni ULAGAČ, možda ne bih te projekte ocijenila tako izvrsnim... | Agent |
| 114. | upaljač | ...u trenutku kada je prinijela UPALJAČ zapalio se i plin koji se nakupio u ljetnoj kuhinjici. | Instrument |
| 115. | upravljaj | ...vozači vozila ne smiju popiti ni kapi ako će za UPRAVLJAČ. | Instrument |
| 116. | uramljivač | Branimir Boras, danas poznati osječki URAMLJIVAČ slika... | Agent |
| 117. | usisivač | ...prvi USISIVAČ izumljen je 1901. u Velikoj Britaniji... | Instrument |
| 118. | usitnjivač | ...Udruzi su donirani ... silk i USITNJIVAČ s diskovima... | Instrument |
| 119. | usmjerivač | Nepoznati počinitelj zastavu je vezao na USMJERIVAČ za letjelice... | Instrument |
| 120. | utikač | Po završetku sušenja izvadite UTIKAČ iz priključnice. | Instrument |
| 121. | utovarivač | Radnici koji su se našli u blizini brzo su priskočili ... i uspjeli pomaknuti UTOVARIVAČ kako bi oslobodili kolegu ispod stroja... | Instrument |
| 122. | uzgajivač | Hrvatska je, ... zajedno sa Slovenijom, danas najveći UZGAJIVAČ lipicanaca. | Agent |
| 123. | veslač | ...takav tretman prošao je istaknuti osječki VESLAČ Ivan | Agent |

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|------|-------------|--|------------|
| | | Jukić... | |
| 124. | vozač | Priveden je VOZAČ INA-e iz Zagreba... | Agent |
| 125. | zabavljač | On je to odbio, ljutito kazavši kako je on visoki funkcionar HNS-a ..., a ne neki ZABAVLJAČ. | Agent |
| 126. | zagađivač | ...na terenu su inspekcijske službe koje će nakon uzimanja uzoraka utvrditi tko je ZAGAĐIVAČ... | Agent |
| 127. | zamrzivač | U kuhinji je plinski štednjak s pećnicom, mikrovalna pećnica, veliki hladnjak, ZAMRZIVAČ, ledomat. | Instrument |
| 128. | zaslađivač | To je prirodni ZASLAĐIVAČ kojega ima u trešnjama i brezi. | Instrument |
| 129. | zatvarač | ...pomno je dizajniran i rukonaslon te patentni ZATVARAČ na presvlaci s mogućnosti skidanja. | Instrument |
| 130. | zlostavljač | Nije točno ni uvriježeno mišljenje da ZLOSTAVLJAČ koristi silu... | Agent |

4.3. Discussion of the findings

Several things can be noticed when observing the word lists provided in the previous two sections. The first and most obvious one would be that the English suffix *-er* is much more polysemous than the Croatian suffix *-ač*. In 126 words that were taken into account, we can distinguish 181 meanings, and the semantic roles that are present in these meanings are the agent, agent-like animal, agent-like plant, agent-like inanimate object, agent/causer event, instrument, quasi-instrument, instrument-like event, experiencer, location, purpose-patient, valued-patient, true-patient, and event with no specified semantic role. Out of the 181 distinguished meanings, 61, or 33.7% belong to the semantic role of the agent. The second most frequent semantic role is that of the instrument, which is recognized in 56 meanings, or 30.94% of all meanings. The third most frequent semantic role is the agent/causer event, which is present in 18 meanings, or 9.94% of the meanings. Next, there is the role of the purpose-patient, which is found in 11 words and constitutes 6.08% of the entire list of meanings. The roles of the agent-like inanimate object, instrument-like event and location are each found six times in the list, which means that every one of them makes up 3.31% of the total. The role of the experiencer is found four times, constituting 2.21% of the total. The agent-like animal and the event with no specified semantic role are both found three times, and make up 1.66% each. Quasi-instruments, valued-patients and true-patients are found

twice each, which means that each of these semantic roles makes up 1.11%. Finally, the semantic role of the agent-like plant appears only once in the word list and makes up 0.55% of the total number of meanings. The only semantic role that is theoretically linked to the suffix *-er*, but was not attested in the corpus is that of a patient event, which is described in theory as quite rare.

As for the Croatian word list, the situation is less complex. In 130 chosen words, there are 141 attested meanings. 95, or 67.38% of these meanings take the semantic role of the agent, whereas the remaining 46, or 32.62% belong to the role of the instrument.

These facts show us that the English suffix *-er* is found in the formation of many different semantic roles with variations in productivity when it comes to each of them. It is most productive in the formation of agent and instrument nouns. This correlates to the use of the suffix *-ač*, which is also found to be productive in the formation of the agentive and the instrumental meanings; however, it is not found in the formation of other semantic roles. That makes it less polysemous than the suffix *-er*.

Another thing that can be noticed is the fact that the words that take the suffix *-er* are themselves more commonly found in more than one semantic role than those formed with the suffix *-ač*. For instance, out of 126 words that make up the English word list, 45 take two different semantic roles (they most commonly take the roles of some type of agent and some type of instrument, but can also be found in different agent-patient, agent-location, and instrument-patient combinations), and five take three different semantic roles (two of the five words take the semantic roles of agent, instrument and purpose-patient). This means that 39.68% of the total word number in the English list can be found in more than one semantic role. In Croatian, out of 130 words, only 11, or 8.46%, can have both semantic roles.

What is also noticeable is the fact that it is more difficult to analyze the semantic roles of the words in *-er*, since there is often conceptual closeness between the semantic roles that the same word can take; e.g. words like *locker* and *drawer* can be analyzed as both instrument and location, as explained in footnote 12. For reasons stated in the aforementioned footnote, the semantic role we opted for in the case of these words is the instrument, and not the location; however, that does not take away from the polysemy of the English suffix *-er*, since, even with this instrument-over-location interpretation, the suffix *-er* is still much more polysemous than the suffix *-ač*.

The difference in the variety of semantic roles that these two suffixes can be used to produce is a result of the difference in the system of suffixes that exists in Croatian and English. For instance, the suffix *-ač* is only used to produce words that can take the semantic

roles of agent and instrument because there are other existing suffixes that are more productive in the formation of words that denote locations or patients; such suffixes would, for example, be *-ačnica*, *-ana*, *-ište*, etc. for location (Silić and Pranjković 2007: 167) and *-anik*, *-enik*, *-nik*, etc. for patient (ibid. 166). As for the suffix *-er*, it is probably used to form a greater variety of semantic roles due to the fact that English has fewer suffixes that are productively used in the formation of locative, patient, etc. nouns. For instance, there are few specifically locative suffixes in English, (Adams and Bauer do not mention any suffixes connected specifically to the locative meaning), and the one suffix that is more or less reserved for the patient role in English is *-ee* (cf. Bauer 1983: 243-53). This ‘competing suffixes’ idea seems to be a major, if not the decisive explanatory factor for the observed differences between English *-er* and Croatian *-ač*. However, a full exploration of the merits of this proposal must be postponed until a much more thorough and extensive contrastive corpus analysis.

Another interesting observation is that some of the less typical semantic roles in the English database, especially agent/causer events and various types of patients, are more commonly found with complex, phrasal bases. At the same time, Croatian nouns in *-ač* do not appear to take phrasal bases, and also do not take agent/causer event and patient roles. Of course, it is hard to find a causal link between these two factors, viz. not taking phrasal bases and not exploiting the mentioned semantic roles, since there simply appears to be no principled reason why agent/causer event or patient meanings would not be expressible with simple bases. However, there does appear to be some correlation between the two factors, and the relevance of this correlation might be explored in more detail in a future study.

5. Conclusion

The goal of this paper was to compare the English suffix *-er* and the Croatian suffix *-ač* in regard to their productivity in the word formation of their respective languages. By giving a brief overview of the theoretical approach to these two suffixes, and by conducting research in the corpora of English and Croatian based on this theoretical overview, it was discovered that these two suffixes correspond in the formation of words that take the semantic roles of agent and instrument. These are the only two semantic roles that the suffix *-ač* is associated with, whereas the suffix *-er* is used in the formation of words with a greater variety of semantic roles, with varying degrees of productivity when it comes to each of these roles. Like the Croatian suffix, it was found to be the most productive in the formation of agent and instrument nouns, and less productive when it comes to the formation of words with other semantic roles. The difference in the usage of the suffixes was attributed to the difference in the systems of suffixes used in the word formation of the two languages, as well as to the difference in the types of bases that each of these suffixes attaches to. From everything that was discovered throughout this research, it can be concluded that the suffix *-er* is much more polysemous and has a much wider usage than the suffix *-ač*.

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