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Remnants of the Old Dual in *a*- and *i*-Type Nouns in Modern (Sub)standard Croatian: A Synchronic and Diachronic Analysis

Abstract

This paper provides a detailed diachronic and synchronic description of the remnants of the old dual paradigms in the nominative, accusative, and vocative of the *a*-type nouns (most masculine and most neuter nouns) and the *i*-type nouns (some feminine nouns) in Modern (sub)standard Croatian. The focus is on their use within the full declensional paradigm (e.g., in the *a*-type NOM./ACC./VOC., originally dual, *dvâ pȑsta* 'two fingers' versus the genitive, originally plural of the noun, *dvàjū pȓstā* 'of two fingers'), and there is also a brief comparison with the use of the petrified accusative (e.g., in the *a*-type *čòvjek s dvâ prèzimena* 'a man with two surnames'). Where relevant, comparisons are made with modern Croatian dialects.

Keywords: dual, a- and i-type nouns, nominative/accusative/vocative, (sub)standard Croatian, historical and contemporary language.

1. Introduction

The term *dual* refers to a grammatical feature used to mark exactly two entities, distinct from both singular and plural. In languages that preserve it, nouns, pronouns, adjectives, and verbs may all inflect to specifically refer to pairs. Among the Slavic languages, the dual has largely disappeared over time, having merged with the plural in most branches. Slovenian, along with Upper and Lower Sorbian and Kashubian, is a notable exception: it is the only widely spoken Slavic language in which the dual remains fully productive and systematically used in everyday communication. As a result, speakers of Slovenian consistently distinguish between one, two, and more than two, making the dual a defining and distinctive feature of the language.

Looking beyond the geopolitical border that separates Slovenia from

neighbouring Croatia, we find that in areas in far-northern Croatia, adjoining the Slovenian border, the grammatical feature of dual is preserved in some dialects of Kajkavian. *Kajkavian* is a hypernym for a group of dialects spoken widely across northern Croatia, extending as far south as Zagreb, and even beyond. Although Kajkavian dialects differ in various respects from contemporary Standard Croatian, Kajkavian functioned as a literary, administrative, and liturgical language in north-west Croatia from the sixteenth to the mid-nineteenth century. Kajkavian is still widely used in these areas and the varieties of Kajkavian spoken on the Croatian side of the Croatian–Slovenian border share many features with the varieties of Slovenian spoken on the Slovenian side.

In all varieties of modern Croatian, the grammatical feature of dual has disappeared completely, with the exception of some north-western Kajkavian dialects along the Croatian–Slovenian border (Lončarić, 1996: 97; Celinić, 2020: 13).[1] Its traces are mostly fossilised forms (such as the Modern Standard Croatian preposition *među* 'between,' originally the genitive/locative dual of the *e*-type noun[2] *mèđa* 'border,' morphologically plural forms (such as the Modern Standard Croatian endings -*ima* (*a*- and *i*-type), -*ama* (*e*-type) in the dative, locative, and instrumental plural, which originally, and with some modification, stem from the DAT./INSTR. dual -*oma*/-*ema* (*a*-type), -*ama* (*e*-type) and -*ma* (*i*-type)), or syntactic traces (this is the case in the use of the ending -*a* in nominative, accusative and vocative of the *a*-type nouns and corresponding adjectives and pronouns following the numerals *dvâ* 'two', *trî* 'three' and *čètiri* 'four', for example in Modern Standard Croatian *dvâ čòvjeka* 'two people', which comes from the nominative/accusative/vocative dual -*a* in the *a*-type). However, in some instances, the dual is preserved as a special ending after *dvâ* in the

[1] Anita Celinić informed the author that, in her data, the dual was best preserved in Štrigova (her examples come from the settlement of Banfi), where it has been preserved in pronouns and verbs. She also noted that there may be additional cases of dual—at least in certain examples or categories—in Kajkavian, but that the questionnaire for *Hrvatski jezični atlas*, which has been a standardised tool for dialectological studies of spoken idioms since the mid-twentieth century, includes only a limited number of sections in which the dual could be found. As a result, the dual is mostly absent from it, which hinders a full investigation of possible instances of the dual in Kajkavian and other dialects.

[2] We use the division of nouns into the *a*-type, *e*-type and *i*-type, which is based on the ending of the GEN. SG. in the respective declensions, e.g., *čòvjek-a* (*a*-type) 'of a man', *žèn-ē* (*e*-type) 'of a woman' and *stvâr-i* (*i*-type) 'of a thing'. For this division, see Težak and Babić (2000: 99). This classification is not based on gender: the *a*-type includes solely masculine nouns like *mûž* 'husband' and neuter nouns like *sèlo* 'village'; *e*-type nouns are predominantly feminine nouns like *žèna* 'woman' (with a few masculine exceptions, like *täta* 'dad'); and *i*-type nouns are all feminine and include examples such as *nôć* 'night'

NOM./ACC./VOC., or might be preserved semantically in other forms as well. It is the remnants of the NOM/ACC./VOC. of the *a*-type after the numerals *dvâ*, *trî* and *čètiri*, and potential survivals in the NOM./ACC./VOC. of the *i*-type in these cases within the full, historically mixed declension of Modern Standard Croatian, that we are dealing with in this paper. By *mixed paradigm* we imply that some plural endings derive from the original plural forms, while others derive from the originally dual ones, although they have now all become plural in meaning, with the possibility that the dual has been preserved semantically in some *i*-type forms in the nominative, accusative and vocative. By *full paradigm* we mean that every case form is regularly used where historically expected, contrasting with the petrified accusative, which is an optional use where it is the original accusative that has displaced other case forms following a preposition and numerals *dvâ*, *trî* and *čètiri*. For example, in the full declension we find NOM./ACC./VOC. (= originally dual) *dvâ sîna* 'two sons' but GEN. (= originally plural of the noun) *dvàjū sïnōvā* 'of two sons', or NOM./ACC./VOC. (= originally dual, and potentially still preserved as dual in absolute use) *nïti* 'two threads' (through homonymy with NOM./ACC./VOC. PL., which also ends in *-i*) or (originally dual, and still potentially preserved as dual after *dvïje* NOM./ACC. FEM.) *dvïje nïti* 'two threads' (through homonymy with NOM./ACC./VOC. PL., which also ends in *-i*). For the petrified accusative, see e.g., *öd dvā čòvjeka* 'from two people', *öd trī žène* 'from three women' and *od čètiri nïti* 'from four threads. We analyse these remnants in full detail both synchronically and diachronically. After providing a detailed description of all contexts in which the former dual is (or, for the *i*-type, maybe) preserved in the full declension, we offer a brief comparison with the use of the petrified accusative. This comparison serves to show that the use of the petrified accusative represents a purely syntactic remnant of the dual in these contexts, since by syntactic analogy it includes the forms of *e*-type nouns, whose accusative plural endings following the numerals *dvâ*, *trî* and *čètiri* are always plural and not dual.

Historically, the remnants of the former dual in NOM., ACC. and VOC. in the *a*-type after the numerals *dvâ*, *trî* and *čètiri* and, with a possible preservation of the dual semantically, in the *i*-type after these numerals (and potentially also in absolute use) within the full declension originated as the dual endings were gradually disappearing (eventually vanishing completely in the *e*-type). In this process, most of the dual oblique cases were supplanted by originally plural ones, leaving only the NOM./ACC./VOC. *-a* in the *a*- and, possibly, *-i* in the *i*-type as remnants of the old dual in certain contexts. We provide examples from the *a*-type,

since we must still present arguments and data for the potential semantic preservation of the dual in NOM., ACC. and VOC. after *dvïje* NOM./ACC. FEM., *trî* and *čètiri*, and in absolute use in the *i*-type. In the *a*-type, the ending following the numerals *dvâ*, *trî* and *čètiri* comes from the NOM., ACC. and VOC. DU. *-a* (when the dual still existed, it was predictably used only after *dvâ*), e.g., *dvâ*, *trî*, *čètiri čòvjeka* 'two, three, four people'. In other cases, the original dual endings were replaced by the original plural ones in all uses, including after following these numerals. For example, in Modern Standard Croatian in GEN. PL. we find *zúbī* 'of (two) teeth' and *dvàjū zúbī* 'of two teeth', where the genitive plural form *zúbī* has displaced the ancient genitive/locative dual form ***zùbū*/***zúbū*. The same development occurred in all other oblique forms, although some dual endings have survived with plural meaning, e.g., the ending *-íjū* (< GEN./LOC. DU. of the *i*-type) in some nouns, such as *zùbíjū*, alongside the originally plural forms *zúbī* and *zúbā* in GEN. PL. Likewise, the DAT./LOC./INSTR. PL. *-ima* (*a*-type), *-ama* (*e*-type) and *-íma* (*i*-type), the only endings in these cases in Modern Standard Croatian for all nouns, derive from the DAT./INSTR. DU. *-oma*/*-ema* (*a*-type), *-ama* (*e*-type) and *-ma* (*i*-type).[3] The outcome of this development varies across dialects, but the dual has disappeared in all of them, too. The petrified accusative also originates from the accusative dual of the *a*-type and possibly the *i*-type, and was at some point analogically extended to the accusative of the *e*-type, which is historically and synchronically always plural in origin (due to limitations of space see the last chapter for details).

Therefore, the main aim of this paper is to analyse in detail the origin and use of the dual remnants in the NOM./ACC./VOC. after *dvâ*, *trî* and *čètiri* in the *a*-type, and the possible retention of the dual in the NOM./ACC./VOC. in certain contexts in the *i*-type.[4]

[3] In fact, the Modern Standard Croatian plural endings in DAT./LOC./INSTR. (*-íma* in the *a*-type, *-ama* in the *e*-type, and *-íma* in the *i*-type) are dual in origin across all three nominal types, as are the GEN. PL. endings of a small set of nouns in the *e*- (*-ū*) and the *i*-type and, by analogy, those of the *a*-type (*-íjū*). Historical evidence shows, however, that the oblique dual cases of GEN., DAT., LOC. and INSTR. shifted semantically into plural function earlier than the NOM./ACC./VOC. *-a* after *dvâ*, *trî* and *čètiri* in the *a*-type, which is originally dual, but still functions as a special plural ending with these numerals, or the so-called "plural after 2–4", cf. Marković (2012: 496).

[4] In the text that follows, we use the following abbreviations: anal. = analogically; ARj. = *Rječnik hrvatskoga ili srpskoga jezika*, 1884–1886 (dictionary) and the same *Rječnik*… (all volumes); c. – circa; cf. = compare; Cro. = Croatian; Kajk. = Kajkavian; e.g. = for example; i.e. = that is; IMP. = imperative mood; INDEF. = indefinite (of adjectives); Lat. = Latin; lit. = literally; MASC., FEM., NEUT. = masculine, feminine, neuter; NOM., GEN., DAT., ACC., VOC., LOC., INSTR., ABL. = nominative, genitive, dative,

2. Methodology

For a clearer and more complete description of the matter, we consult a range of contemporary and historical sources. These include studies on the dual in Čakavian, Štokavian, and Kajkavian texts (e.g., Hercigonja, 1999; Kapović, 2007; Matasović, 2008; Kuzmić, 2007; 2008; Kuzmić and Kuzmić, 2015; Kuzmić and Šimudvarac, 2015; Kapetanović, 2011; Lisac, 2012; Lukežić, 2015; Blažević Krezić, 2020); reissues of old Čakavian texts, mostly from the sixteenth century (e.g., Štefanić et al., 1969; Armolušić, 1993 [= *Slava ženska*]; Marulić, 1995 [= *Judita*], Marulić, eLektire[5] consulted for consistent availability of certain forms; Vrančić, (1995)[6] [= *Život nikoliko izabranih divic*]; Lucić, 1997 [= *Robinja* and selected poems]; Hektorović (KHK)[7] [= *Ribanje i ribarsko prigovaranje*]. Of these, only Štefanić's medieval collection and Armolušić's seventeenth-century edition fall outside the sixteenth century.[8] We also use grammars of past and present Standard Croatian[9] (including nearly all contemporary grammars,[10] the most recent in our corpus being Mihaljević,

accusative, locative, instrumental, ablative; OEng. = Old English; PERF. = perfect; PRES. = present; SG., DU., PL. = singular, dual, plural.

[5] URL: https://www.gssjd.hr/wp-content/uploads/2010/11/marulic_judita.pdf.

[6] We did not consult Vrančić's *Dictionarium quinque nobilissimarum Europae linguarum: Latinae, Italicae, Germanicae, Dalmaticae et Ungaricae*, since it contains no morphologically and semantically dual forms (our data).

[7] URL: https://sfb12a5664712b57e.jimcontent.com.

[8] Our corpus does not include works by several other well-studied Čakavian writers of the sixteenth century—for example, Šime Budinić, Brne Krnarutić, or Petar Zoranić—although their texts also contain dual forms, as can be seen through casual reading. Their omission is due to the fact that our research on dual forms in Čakavian, which focused on the texts of the sixteenth and seventeenth centuries, did not by chance include them initially. Moreover, the Čakavian texts from that period that *are* included provide: (1) a sufficient number of examples of the dual; (2) clear evidence that the dual still existed in sixteenth-century Čakavian (a fact noted by other scholars as well, e.g., Kuzmić, 2008: 287–302; Lukežić, 2015: 69), with some dual forms persisting in Čakavian into the eighteenth century (Kuzmić and Kuzmić, 2015: 23), and (3) confirmation that the dual was still present across all parts of speech, i.e., that is was fully preserved at that time, although it was becoming rarer than the plural and some forms were already disappearing (as is evident in Vrančić's *Život nikoliko izabranih divic* from the late sixteenth century). Therefore, the omission of other sixteenth-century Čakavian authors was in part subconscious (our research initially centred on other writers and remained focused on them) and in part conscious (as the research progressed and the extent of the preservation of the dual in the sixteenth-century Čakavian became increasingly clear).

[9] We used only the grammars that address the language in its entirety, i.e., that describe all linguistic levels (traditionally: phonology, morphology, syntax, and lexicon; with emphasis on morphology, since it is the focus on this study).

[10] Ham's (2002) grammar was inaccessible to us; therefore, it was the only grammar

2014; most twentieth-century grammars; and several historical ones, primarily from the nineteenth century, with only Bartul Kašić's 1604 grammar predating that period and belonging to the early, pre-standardisation stage). In addition, we consult dictionaries of past and present Standard Croatian (ARj.; Broz and Iveković, 1901; Anić, 1996; 2004; Šonje, 2000; Jojić, 2015), dialectological descriptions and studies (e.g., Hraste et al., 1956; Jedvaj, 1956; Lončarić, 1996; Geić, 1998; Lukežić and Turk, 1998; Lisac, 2003; 2008; 2010; Velić, 2023), and other relevant sources (e.g., Matasović, 1997, 2001; Fulk, 2018). For the Proto-Slavic dual and other declensional forms see Damjanović (2005: 76–148) and Kapović (2015: 765–773).

Remarks on the corpus and on language use. Our decision to focus on old Čakavian texts for historical dual forms is based on two considerations: 1) we have worked with these texts most extensively, and 2) according to both our own observations and those of other scholars, Čakavian preserved the dual longer than the other two Croatian supradialects (although it ultimately lost it as well), the only exception being certain contemporary north-western Kajkavian dialects on the Croatian–Slovenian border, as noted above. We have thoroughly read the works of all sixteenth-century Čakavian authors included in our analysis, with particular attention to Vrančić's *Život nikoliko izabranih divic*, from which most of our examples are drawn and in which dual forms are still attested across all parts of speech. Regarding the distinction between "standard" and "dialect," we treat all older Čakavian, Štokavian and Kajkavian texts, as well as contemporary Standard Croatian, as standard in the sense that they that they functioned (or function) as literary languages. Only the contemporary Čakavian, Štokavian and Kajkavian varieties are considered dialects. In the analysis of dual forms the label "DU." is used only if the form in question is a historical dual (i.e., attested in texts in which dual was still productive), when citing data from other authors who mark certain forms as dual in modern dialects, and when discussing possible semantic or morphological retention in the *i*-type. Otherwise, forms are labelled "PL." (if they have developed into plural forms) or left unmarked (in the case of the Modern (sub)standard Croatian NOM./ACC./VOC. after *dvâ*, *trî* and *čètiri* in the *a*-type, and in cases where a similar pattern may be preserved in the *i*-type; in such cases we simply write "NOM./ACC./VOC"). If these NOM./ACC./VOC. forms occur dialectally only after *dvâ*, we treat them as a "true" dual; the same applies to fossilised

omitted from our analysis.

forms. When referring to the extension of former dual endings in NOM./ACC./VOC. from syntagms with *dvâ* to those with *trî* and *čètiri*, we describe this process simply as spreading "from *dvâ* to *trî* and *čètiri*." We also consistently differentiate between *oral language*, *idiom* (an idiom of folk literature) and *spoken language*, *idiom* (a spoken dialect, as opposed to the written language, which is typically a standard language).

To analyse the relevant uses in depth, we address the following issues:

1) the preservation of the former NOM./ACC./VOC. DU. in the *a*- and *i*-types in different contexts,
2) whether these NOM./ACC./VOC. forms represent separate endings or cases, and
3) the causes of the spread of the *a*-type NOM./ACC./VOC. dual ending *-a* from after *dvâ* to after *trî* and *čètiri*.

A full synchronic and diachronic description of points (1) to (3) will provide a complete picture of the extent and nature of the preservation of the former NOM./ACC./VOC. DU. in the *a*- and *i*-types.

The analysis is organised into chapters. The first chapter offers full insight into research on the dual—its development and disappearance in Croatian—and a survey of how Croatian grammars treat the former dual. The second chapter provides a short history of the dual from Proto-Indo-European to Modern Croatian and outlines what remains of it, focusing on the NOM./ACC./VOC. of the *a*-type after *dvâ*, *trî* and *čètiri*, as well as on possible preservation of NOM./ACC./VOC. in certain contexts in the *i*-type. The third chapter examines the historical origins of the restriction of former dual remnants to the NOM./ACC./VOC. of the *a*-type and, possibly, the *i*-type, drawing on historical thirteenth–eighteenth-century Čakavian legal texts (Kuzmić and Šimudvarac, 2015: 38–47; that paper does not include data for *i*-type nouns, so we supplement it with our own material) and on Modern Standard Croatian. The second chapter is therefore primarily synchronic in orientation, whereas the third is centred on diachrony.

3. A survey of research on the dual in the historical stages of Croatian

There are numerous studies and data on the development and disappearance of the dual number in Croatian. For clarity, we divide the relevant data and conclusions into three sections:
(1) when the dual was lost; (2) in which categories and types of texts it

disappeared earliest and where it was preserved the longest; and (3) when it began to spread to the numerals *trî* and *čètiri*.

1) *Dating the loss of the dual*. In the corpus of Modern Croatian, no dialect has preserved the dual as a productive paradigm anywhere in the system, with the exception of certain north-western Kajkavian dialects on the Croatian–Slovenian border (Lončarić, 1996: 97; Celinić, 2020: 13). According to Matasović (2008: 187), the dual disappeared in Štokavian in the fifteenth century, while in Kajkavian it disappeared at the beginning of the seventeenth century,[11] while Kuzmić and Kuzmić (2015: 100) note that some dual forms remained current in Kajkavian as late as the first half of the seventeenth century. No single work gives the exact date of the loss of the dual in Čakavian. Kuzmić and Kuzmić (2015: 23) report that the forms in DAT./INSTR. DU. -*ema*, -*ima* in the *a*-type were still present in Čakavian as late as in the eighteenth century, and that certain forms of GEN. DU. -*u* in the *a*-type were present in this dialect and survived into the seventeenth century (ibid.). Kapović (2007: 58) also notes that GEN./LOC. DU. of the 1st- and 2nd-person pronouns, *naju* and *vaju* (both sometimes used with plural meaning as well, ibid.), persisted in Croatian—and therefore hence also in Čakavian (*our note*)—into the seventeenth century, before eventually disappearing.

Our own analysis of Marulić's *Judita*, Hektorović's *Ribanje i ribarsko prigovaranje*, Lucić's *Robinja* and selected poems, and especially Vrančić's *Život nikoliko izabranih divic* (all sixteenth-century texts), as well as Armolušić's *Slava ženska* (mid-seventeenth century), shows that the dual is still present in these works, most clearly in Vrančić's and, to a somewhat lesser degree, in Armolušić's. It still occurs across all parts of speech in Vrančić's *Život nikoliko izabranih divic*, although it is already very rare there, and some forms are present also in the seventeenth century in Armolušić's *Slava ženska*.[12] Therefore, Čakavian preserved the dual the

[11] Lončarić (1997: 97) says that sixteenth-century Kajkavian had the dual, "but only optionally" ("ali samo kao fakultativan izbor"). Lukežić (2015: 77–78) specifies that among the sixteenth-century Kajkavian writers, Ivan Pergošić used the dual consistently, whereas Antun Vramec sometimes used plural forms alongside dual ones. Regarding the idiom of Antun Vramec, Matasović (2008: 187) states that some believe his dual forms reflect his mother tongue, that was Slovene.

[12] A statistical method for determining the precise percentage of dual forms in the works of Vrančić and Armolušić would indeed be appropriate, but we leave this for another occasion. It is worth noting that we have carried out a statistical analysis of the dual in Marulić's *Judita* from the very beginning of the sixteenth century, and that the dual is attested there in approximately one third of all forms in the declensional system, but it has been lost entirely from the verbal conjugation. The author's article presenting the

longest, precisely until the eighteenth century.[13] Matasović (2008: 194) further states that in older Štokavian texts the dual was retained longer when preceded by the numeral *dvâ*. Kuzmić and Šimudvarac (2015: 49) show that in thirteenth–eighteenth-century Čakavian legal texts the word *oba(dva)* 'both' required exclusively dual forms until the end of the fifteenth century. Our data from sixteenth-century Čakavian literary texts confirm these conclusions: cf. Marulić's (1995: 102) *obi ruci* 'both hands' (with *obi* ACC. DU. FEM. 'both'), while with *dvi* ACC. DU. FEM. 'two' he only has the younger plural *-e*: *dvi ni tri zime* 'for two or three winters', *ove dvi* 'these two' (Marulić, eLektire: 25, 67, 70)), Hektorović's (KHK: 19) *dva…siromaha* 'two poor men;' and Vrančić's (1995: 18) *dva venca* 'two wreaths'. Lukežić's (2015: 69, 74, 74, 77–78) examples of the dual from older texts in all three dialects (i.e., literary languages at that time) align with the conclusions of Matasović, Kuzmić and Kuzmić, Kuzmić and Šimudvarac, Kapović, as well as our own findings. The author considers it possible that the dual forms of DAT./INSTR. DU. *-ima*, *- ama*, *-ima* in all declensions, described as dual in most grammars of the nineteenth-century Standard Croatian (Babukić, 1854: 170, 173; Pacel, 1865: 4; Mažuranić, 1869: 36, 37; Veber Tkalčević, 1873: 27, 28; Parčić, 1878: 23), were not artificial but reflected actual usage. This is plausible given that more spoken idioms than today had likely preserved the dual at that time, and because of a possible continuity with the Čakavian literary language of the eighteenth century, where the DAT./LOC. DU. forms of the *a*-type were still present (data from Kuzmić and Kuzmić, 2015: 23), i.e., a century prior

analysis has already been reviewed and is due to be published soon.

[13] A few dual forms are not lexically attested in some sixteenth-century Čakavian writers, although they appear in the idioms of other Čakavian writers of the same period. Such is the case e.g., with the GEN./LOC. DU. *ruku* 'of hands', which occurs in Lucić's idiom (1997: 77, 79, 85), whereas it is absent from Vrančić's *Život nikoliko izabranih divic*, where it is replaced by GEN. PL. *ruk* and LOC. PL. *rukah* (1995: 12, 43, 53, 68, 89, 91, 110). It is evident that the form *ruku* must have survived into later language stages, since it is present (alongside *nògū*) in Modern Standard Croatian, which is predominantly Štokavian-based, and these two forms prevail there over *rúkā*, *nógā* << **ruk*, **nog*. However, some Čakavian dialects also exhibit the GEN. PL. *ruk* (e.g., in the traditional Čakavian idiom of modern Split, in the television show *Velo misto*, which is in that dialect, as said by one of the characters: *bez rûk i bez nôg* 'without hands and legs'), a form already attested in Vrančić's idiom. Also, as previously stated, Modern Standard Croatian also preserves modern reflexes of both historical forms (GEN./LOC. DU. **ruku* and GEN. PL. **ruk*) in GEN. PL., namely the much more frequent *rùkū* (: *nögū*) and the much rarer *rúkā* (: *nógā*), in the latter case with the historically younger (but predictable) ending *-ā*. Cf. e.g., Babić et al., 1991: 586; Barić et al., 1997: 155; Težak and Babić, 2000: 111, 112 – the two authors deem the *-ū* forms more common; Marković, 2012: 281 – Marković treats forms *rúkā* and *nógā* as regional (southern Croatian).

to these grammars. Moreover, among the most notable nineteenth-century grammarians Antun Mažuranić's maternal idiom was Čakavian, which strengthens the case for the authenticity of the dual forms in his grammar (1869 edition consulted).[14] Babukić (1854: 170–200) lists dual forms only for NOM./ACC./VOC. DU. in the *a*-type and for DAT./INSTR. DU. in all types, and does not explicitly state whether the DAT./INSTR. dual forms were indeed used in everyday language, only citing Ignjat Alojzije Brlić, who expresses doubts about whether, specifically, the DAT./INSTR. dual forms, as found in the standard of that time, would be "accepted" by speakers. This suggests that even then the DAT./INSTR. DU. forms were rarer than NOM./ACC./VOC. DU., or non-existent at least in some dialects of that time. This is highly plausible, since only the NOM./ACC./VOC. *a*-type endings of the old dual have left traces today. But Brlić's remarks (as cited by Babukić) do not tell us anything on whether the DAT./INSTR. DU. forms had been lost in all Croatian dialects of that time, and it is reasonable to assume that some dialects may still have preserved them. Today's north-western Kajkavian dialects on the Croatian–Slovenian border have lost these forms, retaining the dual only in pronoun–verb constructions, according to Anita Celinić (personal communication with the author). Mažuranić (1869: 38) likewise does not comment on the use of DAT./INSTR. DU. in everyday language; instead, he notes (ibid.) that in some (i.e., not all) dialects the original plural endings in dative, locative, and instrumental had been lost and supplanted by the original dual endings. For the then-Standard Croatian Mažuranić (ibid.: 42, 45) states that the dual *has* also DAT./INSTR. DU., which supports the view that such forms were indeed real and recognisable, even to modern readers. A definitive conclusion about the authenticity of the nineteenth-century DAT./INSTR. DU. forms cannot be reached, since the spoken idioms of that period have not been preserved in writing. However, according to Anita Celinić (personal communication), the view that the dual in these grammars reflects actual usage is even more likely given that the dual in these grammars was not influenced by the dual from the Old Church Slavonic

[14] Therefore, based on the link between Mažuranić's maternal Čakavian idiom and the dual forms of DAT./INSTR. DU. within the *a*-type in the eighteenth-century Čakavian literary language, the dual in nineteenth-century grammars could be interpreted as a čakavism. However, if we consider the possibility that the dual in the nineteenth-century grammars was linked to certain organic idioms that preserved the dual—idioms that may have been more numerous at the time than today and may not have been exclusively Čakavian, but also Kajkavian or Štokavian—then it could equally be viewed as a kajkavism or even a štokavism. Prosodically and phonologically in general, all these dual forms are neo-štokavisms.

grammar, nor by Latin grammars (Latin having lost the dual in its prehistory). Even if these dual forms were still real in the nineteenth-century grammars, the dual still preserved only part of its original endings and only after *dvâ*, *trî* and *čètiri*, i.e., it had already lost the GEN./LOC. DU. endings, as in Modern Standard Slovene, where the original dual endings survive only in NOM./ACC./VOC. DU. and DAT./INSTR. DU. (and are used normally in everyday language, as is the dual overall in Slovene). Nevertheless, if the DAT./INSTR. DU. forms in these grammars were real rather than merely formal, this would mean that Standard Croatian still preserved the dual as late as the nineteenth century (although it no longer followed only *dvâ* and *öba* 'both', but already also *trî* and *čètiri*), but it had been irreversibly lost from grammars by the end of the nineteenth century. Since this dual already came with *dvâ*, *trî* and *čètiri*, it was *de facto* paucal.

2) *Historical preservation and loss by category and by type of text.*

2a. *Categories*. The dual was first lost in verbs, and then in the rest of the system (Matasović, 2008: 303). This is confirmed by our data from sixteenth-century Čakavian: Hektorović in *Ribanje i ribarsko prigovaranje* in his *bugaršćicas* (which are a form of old oral songs; KHK: 19–24) has *sta* 3rd DU. PRES. 'they two are' ten times, while Vrančić in his *Život nikoliko izabranih divic* has *podasta* 2nd DU. AOR. 'you two gave' only once (1995: 27). Nominal NOM./ACC./VOC. DU. forms (including adjectives and all pronouns except 1st- and 2nd-person pronouns)[15]

[15] The entire present and historical corpus of Croatian (both standard and dialectal) has lost the original NOM. and ACC. DU. of the 1st-person pronoun and ACC. DU. of 2nd-person pronoun, while the NOM. DU. of the 2nd-person pronoun has been preserved as *vî*, homonymously with the NOM. PL. *vî* of the same pronoun, according to Kapović's (2007: 58) data. Although this form was historically preserved until some point in Croatian, in our opinion the preservation of NOM. DU. *vî* in Modern Croatian is inconclusive but likely, and always through homonymy with NOM. PL. *vî*, as well. A relic of either NOM. DU. **vę̂* of the 1st-person pronoun or of ACC. DU. **vâ* of the 2nd-person pronoun (the exact origin remaining inconclusive according to Kapović, ibid.) is preserved only in the Kajkavian dialect of Bednja, in the idiom of the oldest generation of speakers in the mid-twentieth century as a particle *-vo*, which is added to the nominative plural forms of personal pronouns when referring to two persons, e.g., *mïvo dvâo* 'we two', *vïvo dvâo* 'you two' (Jedvaj, 1956: 306). Younger dual forms of personal pronouns consisting of the base form and the word 'two' have been found in those north-western Kajkavian dialects on the Croatian–Slovenian border that have preserved the dual, e.g., in Banfi NOM. DU. *midva* 'we two' (MASC.) and *midvę* 'we two' (FEM.) (Celinić, 2020: 13). Noteworthy here is the gender distinction (MASC.: FEM.) in these forms, which is of secondary origin. Similar forms of personal pronouns are also encountered in Modern Standard Slovene (cf. also in Germanic languages a

survived the longest after *dvâ*—a situation still preserved in some modern Čakavian and Kajkavian dialects (cf. Lončarić, 1996: 97, 98; Lisac, 2010: 28), representing a "true" dual remnant or, exending by analogy, to *trî* and *čètiri*, as is the case in Modern Standard Croatian, in all Štokavian dialects and in some Čakavian and Kajkavian ones (cf. Lončarić, 1996: 97, 98; Lisac, 2003: 27; 2010: 28).

2b. *Types of texts*. Based on both previously published data and our own findings for older Čakavian texts, in the sixteenth century the dual was preserved in Čakavian literary texts (both secular and religious), legal texts, and oral/traditional usage. As noted above, some dual forms remained current in Čakavian as late as the eighteenth century. Blažević Krezić (2020: 63) observes that only in the Croatian Glagolitic fragments of the twelfth and thirteenth centuries was dual preserved across all parts of speech and in both meanings—pairness and twoness. By contrast, in the printed Croatian breviaries towards the end of the fifteenth century, the meaning of pairness was largely lost, while twoness was retained. Our analysis of old Čakavian texts from the sixteenth–seventeenth centuries in our corpus confirms Blažević Krezić's conclusions. Hercigonja's (1999: 128–138) analysis of dual forms in *Petris' codex* from the mid-fifteenth

corresponding formation, e.g., in OEng. *wit* 'we two', originally from elements 'we' and 'two').* On the other hand, the original GEN./LOC. DU. of the 1st-person pronoun, *naju*, and of the 2nd-person pronoun, *vaju*, were preserved in Croatian into the seventeenth century, beside the original meaning of GEN./LOC. DU., also in DAT. and INSTR., and optionally also in the meaning of plural alongside the inherited dual one (Kapović, 2007: 58; Kapetanović, 2011: 100). The accusatival use is found in our corpus in Hektorović's (KHK: 24) idiom of *Ribanje i ribarsko prigovaranje*, in the *bugaršćica* titled *I kliče devojka, pokliče devojka*, in the verses *Pušćaj naju, bašo, pušćaj naju, bašo,* | *Puščaj naju, bašo, do naju* (here it is GEN. DU.) *mile majke*, (…). "Release us, pasha, release us, pasha, | Release us, pasha, to go to our dear mother, (…)". The use of *naju* in all the instances except the last one may also represent the partial genitive instead of the accusative, while the final instance is undoubtedly a possessive genitive. In our corpus, *naju* and *vaju* in genitival use are found also in Marulić's idiom of *Judita* (e.g., eLektire: 40) and in Lucić's (1997: 99) idiom, and for dativ al use Kapetanović (2011: 100) adduces an example from Marulić's *Pisni razlike*: *platit će Bog vaju ki tako činite* 'God will punish you (lit. 'pay you') for your acts'. Neither **naju* nor **vaju* are attested lexically in Vrančić's *Život nikoliko izabranih divic*.

*The fact that both the north-western Kajkavian dialects in question and Gothic—of all the Germanic languages—preserved the dual in both pronouns and verbs reflects the same type of development in both cases: the dual could not have been preserved only in the verbs, since there would have been nothing in the declensional system to mark it. Likewise, the "necessity" of preserving the dual in pronouns asked for a new formation of dual pronouns, formed identically in both cases (base pronouns + 'two'). Predictably, all later Germanic languages after Gothic lost the dual in the verbs, while retaining it only in the pronouns.

century (1468) and the dual forms in *Acta Croatica* (precisely, fourteenth–fifteenth centuries) shows that the dual remained dominant where expected until the end of the fifteenth century, both in written and in spoken language, though plural forms occasionally competed with it. Blažević Krezić (2020: 62) states that the dual had already been lost in spoken Croatian dialects by the sixteenth century. A counterargument to this claim is the presence of dual forms in two of Hektorović's three *bugaršćicas* in *Ribanje i ribarsko prigovaranje* (see below), suggesting that the dual may still have been alive in spoken Čakavian in the sixteenth century, although this cannot be proven due to the lack of direct evidence. Kuzmić (2008: 287–302) notes that in Čakavian the dual was preserved in expected contexts until the fifteenth century, whereas in the sixteenth century plural forms began to prevail. This aligns with Hercigonja's conclusions for the corpus up to (and including) the fifteenth century and with our data from sixteenth- and seventeenth-century Čakavian texts. It is particularly noteworthy that Hektorović (in the sixteenth century) preserves more dual forms in his *bugaršćicas* (KHK: 19–24) than in the rest of *Ribanje i ribarsko prigovaranje*. Only in the *bugaršćicas* does he preserve verbal dual forms (10 instances of *sta* 3rd DU. PRES. 'they two are'), alongside dual forms in other parts of speech. Since *bugaršćica* is a type of old traditional oral song, this suggests that the dual may still have been present in spoken Čakavian in the sixteenth century.[16] Kapetanović (2011: 93, 110) notes that the dual is preserved in the sixteenth-century Čakavian texts in some endings that function as alternatives to plural endings, in constructions with *dva* and *oba(dva)* 'both' and as a stylistic archaism; verbal dual forms occur when a text represents a younger version of an older text from previous centuries.

By our analysis of Vrančić's *Život nikoliko izabranih divic*, this holds for the dual endings that function as alternative plural ones, for constructions with *dva* and *oba(dva)* 'both', and for the stylistic archaism function.

[16] An anonymous reviewer of one of the author's still-unpublished articles on the dual in Croatian suggests that the preservation of verbal (and other) dual forms in Hektorović's *bugaršćicas* can be attributed to better preservation in oral literature (Cro. *usmena književnost*), as opposed to spoken language (Cro. *govorni jezik*, *govor*). The author of this paper, however, considers it equally possible that the preservation of the dual in Hektorović's *bugaršćicas*—which are themselves examples of oral literature—reflects the continued existence of certain dual forms in the spoken Čakavian of the sixteenth century, which is not improbable, since some dual forms continue into the written Čakavian as late as the eighteenth century. This would imply that at least some dual forms were still present in the spoken Čakavian idioms of the sixteenth–eighteenth centuries as well. Further discussion follows below.

However, we have also observed that the dual was still current in this text and attested across all parts of speech, although only rarely. It is rarest in verbs, which agrees with Matasović's (2008: 303) observation that the dual in Croatian disappeared from verbs first. Some forms are especially infrequent, such as the DAT./INSTR. DU. of nouns, of which most forms already have plural meaning, though a minority still preserve dual meaning—e.g., *rukama* 'to hands' and possibly *popoma* 'to (two?) priests', both morphologically and syntactically DAT. DU. (Vrančić, 1995: 37). Lukežić (2015: 69) also adduces the form *popoma* and assumes a dual meaning. These data reflect the situation at the end of the sixteenth century. Therefore, the dual in Vrančić's idiom of the late sixteenth century was still alive, though very rare, and present in all parts of speech. This aligns with Kuzmić's (2008: 287–302) conclusion that the dual becomes rarer than the plural in the sixteenth century. Lisac (2012: 42) likewise notices that dual examples in Vrančić's works are numerous, citing *oči moji* 'eyes of mine'. We confirm that such syntagms with *oči* 'eyes' or *uši* 'ears' and the corresponding pronominal or adjectival forms occur nine times in *Život*…, and these are the only NOM./ACC./VOC. dual forms with those nouns in the text. Kuzmić (2008: 287–302) identifies dual forms in *Senjski korizmenjak* (the beginning of the sixteenth century, 1508; Catholic literature), and Blažević Krezić (2020: 62–63) states that dual forms were also current in the written language of sixteenth-century Croatian protestant literature. To summarise for the dual in Čakavian: the dual was still dominant in the fifteenth century in literary, legal and oral (and possibly spoken) language, and in the sixteenth century, although already rarer than the plural in the contexts where the dual was expected, it was still present in literary texts (both secular and religious), legal texts and oral (and possibly spoken) idioms of the sixteenth century, while some forms persisted into the eighteenth century.

3) *The spreading from* dva *(and* oba(dva) *'both') to* tri *and* četiri. Evidence from fourteenth-century Čakavian legal texts already shows a partial spread of the dual from *dva* to *tri* and *četiri* in NOM./ACC./VOC., but not in oblique cases (Kuzmić and Šimudvarac, 2015: 40). Also in Čakavian, beginning in the fifteenth-century Čakavian legal texts, conversely when appearing with *dva*, alongside the dominant inherited dual ending -*a* in NOM./GEN./VOC., masculine *a*-type nouns occasionally show younger plural endings (ibid.: 41). Nouns with the quantifier *oba(dva)* 'both' MASC. preserve their NOM./ACC./VOC. DU. -*a* most consistently in the thirteenth–eighteenth Čakavian legal texts; younger plural endings in NOM./ACC./VOC. do not occur with this quantifier anywhere in the entire corpus (ibid.: 38–46). Kuzmić and Šimudvarac (ibid.: 49) offer an

explanation for this better preservation of the dual after "both" – wherewith nouns had exclusively dual forms in the entire paradigm until the end of the fifteenth century, whereas in the oblique forms with 2 some younger plural forms were current already in the thirteenth century (ibid.) – by the fact that "both" semantically involves two components at the same time, leading to a better retention of dual. Overall in their corpus, in the NOM./ACC./VOC. of masculine *a*-type nouns the originally dual *-a* is dominant after *dva* and exclusive after *oba(dva)*, whereas after *tri* and *četiri* it is generally rarer than the inherited plural endings. Only in the eighteenth century does *-a* become more frequent than plural endings after *tri*, while plural endings after *četiri* remain dominant throughout the entire period (ibid.: 38–47). Kašić (1604: 58) in his largely Štokavian-based grammar with many Čakavian elements, states only for the forms of *dva* that nouns following them in the NOM./ACC./VOC. take *-a*, which he labels GEN. PL., giving examples such as *dvá clovìcka* 'two men', *dvá*[,] *Vlaſtelìna* 'two noblemen', and *dvá goſpodìna* 'two gentlemen', while he provides no examples of noun agreement with *tri* or *četiri*.[17] As noted earlier, some modern Čakavian dialects continue to preserve the original NOM./ACC./VOC. DU. *-a* only after *dva*, using plural endings after *tri* and *četiri* (Lisac, 2010: 28). The same is true of some Kajkavian dialects (Lončarić, 1996: 97, 98), which also preserve the neuter NOM./ACC./VOC. DU. *-ẹ* (ibid.: 97). Other Čakavian and Kajkavian dialects, as well as all Štokavian dialects and Modern Standard Croatian, have extended this *-a* (and in in Kajkavian neuter, *-ẹ*) to *tri* and *četiri* (ibid.: 97, 98; Lisac, 2003: 27; 2010: 28). The opposite development—spreading of plural endings from after *tri* and *četiri* to after *dva*—has also been documented in some Kajkavian dialects (Lončarić, 1996: 97). This mirrors the situation in the fifteenth–eighteenth-century Čakavian legal texts, where nouns after *dva* occasionally show younger plural endings alongside the prevailing dual ending *-a*. To summarise: the mixing of dual and plural in the NOM./ACC./VOC. after quantifiers *dva* and *tri*/*četiri* begins very early (fourteenth century) in Čakavian legal texts, tipically at the expense of *tri* and *četiri*. As a result, some modern Čakavian and Kajkavian

[17] The example (Kašić, 1604: 188) *Sctíoſam trí dobba* 'I spent three hours reading' (lit. 'I read three hours') does not provide evidence for the spread of NOM./ACC./VOC. DU. *-a* from *dva* to *tri*, since for the non-singular form <*dobba*> the NOM. SG. **<dobbo> did not exist at that time nor has it ever existed, to the author's knowledge. Instead, what we appear to have in the example <trí dobba> is a form that may be considered indeclinable (which would imply SG. *<dobba> in Kašić's idiom), in the same way as in Modern Standard Croatian *döba* can be either declinable (e.g., LOC. SG. *ù tom döbu* 'in that age') or indeclinable (e.g., LOC. SG. *ù tom döba*).

dialects, and all modern Štokavian dialects, have NOM./ACC./VOC. -*a* in MASC. and NEUT. after *dva*, *tri* and *četiri*. Other Čakavian and Kajkavian dialects preserve the original dual endings in the *a*-type only after *dva*, thus retaining a 'true' dual, albeit only in this form. We propose that the spread of the dual ending -*a* from *dva* to *tri* and *četiri* in the *a*-type has a clear morphological-syntactic basis. The numerals *dvâ*, *trî*, and *čètiri* are syntactically adjectives, and as such nouns agree with them as with adjectives. Since in noun-adjective syntagms in the NOM./ACC./VOC. the nouns and adjective always share the same endings (e.g., *vèlik-i ljûd-i* 'some big/great people', *dvâ vèlik-a čòvjek-a* 'two big/great men'),[18] this "regularity" influenced the syntagms with *dvâ* and *trî*/*čètiri*, in such a way that a similar „regularity" occurred at some point, when the dual ending -*a* NOM./ACC./VOC. DU. spread analogically from *dvâ* to *trî* and *čètiri* (e.g., *dva velik-a čovjek-a but *tri, četiri velik-i ljud-i >> *dvâ*, *trî*, *čètiri vèlika čòvjeka*). However, this resulting "regularity" after numerals 2–4 is incomplete when compared to the inherited uniformity in adjectival, pronominal, and nominal endings in the NOM./ACC./VOC. of adjective-noun syntagms. Since it is younger and analogical, it shows different outcomes across dialects: retention of a "true" dual only after *dva* (albeit only in this form; some Čakavian and Kajkavian dialects) or full spreading to *tri* and *četiri* (some Čakavian and Kajkavian dialects, all Štokavian dialects, and Modern Standard Croatian). Therefore, the original NOM./ACC./VOC. DU. -*a* of masculine *a*-type nouns spread from *dva* to *tri* and *četiri* because numerals 2–4 behave syntactically like adjectives, but it did not spread to numerals beyond *četiri*, since numerals from *pêt* 'five' onwards behave like adverbs and require genitive plural (e.g., *pêt ljúdī* 'five people', literally 'five of people', as in *mälo ljúdī* 'few people' or, with GEN. SG., *mälo krüha* 'some bread').

To summarise the development and disappearance of the dual in Croatian: in Štokavian it vanished in the fifteenth century; in Kajkavian it disappeared by the beginning or in the first half of the seventeenth century (with survival in some present-day north-western Kajkavian dialects on the Croatian–Slovenian border); while in Čakavian some forms were still current into the eighteenth century. Within Čakavian, some dual forms are still attested in the sixteenth century in oral language (and possibly, though inconclusively, in spoken usage), in literary texts (both secular and

[18] More precisely, it is the indefinite adjectives that originally had the same endings as nouns, although in Modern Standard Croatian they have adopted certain endings from the definite adjectives, such as the DAT./LOC. SG. FEM.-*ōj*, which historically belongs to the definite adjective declension, e.g., *lijépōj cüri* 'to a pretty girl'.

religious, Catholic and Protestant), and in legal texts. It is possible that the dual was still preserved as a real, not merely artificial, feature in those nineteenth-century grammars of Standard Croatian that include it, which would imply that the dual persisted in Standard Croatian until the last quarter of the nineteenth century.

Regarding the treatment of the term *dual* in Croatian grammars, we have emphasised that there is a strong possibility that the nineteenth-century grammars (Babukić, 1854: 170, 173; Pacel, 1865: 4; Mažuranić, 1869: 36, 37; Veber Tkalčević, 1873: 27, 28; Parčić, 1878: 23), which list not only the NOM./ACC./VOC. *-a* after *dvâ*, *trî* and *čètiri* in the *a*-type but also the oblique forms of DAT. and INSTR. in (*a*-type) *-ima*, (*e*-type) *-ama*, (*i*-type) *-ima*, indeed reflect real dual usage (albeit only with numerals 2–4). In contrast, grammars from the end of the nineteenth century onward abandon this interpretation, classifying these DAT., LOC., and INSTR. endings as plural (e.g., Maretić, 1899: 133, 155, 161; Babić et al., 1991: 519, 593, 607–608; Matasović, 2008: 186–187, 194, 199). However, one historical or artificial element remains in the present-day grammars: the practice of calling the NOM./ACC./VOC. *-a* of *a*-type nouns and agreeing declinable words (adjectives and pronouns) after numerals *dvâ*, *trî* and *čètiri* a dual. All grammars that mention this phenomenon describe it as a dual or a remnant of the dual (Maretić, 1899: 405; Florschütz, 1921: 27; Jurišić, 1944: 129; Brabec et al., 1954: 37; Pavešić and Vince, 1971: 368; Babić et al., 1991: 486; 2007: 303–304; Barić et al., 1997: 101; Raguž, 1997: 6; Težak and Babić, 2000: 93–94; Marković, 2012: 275, 493). A few authors call it a paucal, Cro. *malìna* (Babić et al., 1991: 486; 2007: 303–304; Matasović, 2008: 303; Marković, 2012: 275, 493), which is also incorrect. Only Grubišić (1995: 99) and Silić and Pranjković (2005: 141) classify this *-a* as genitive singular, though this too is inaccurate (see below). In contemporary usage, agreement of *a*-type nouns in the NOM./ACC./VOC. with *dvâ*, *trî* and *čètiri* is morphologically a "plural with 2–4" (Marković, 2012: 496), or a set of special plural endings (Mihaljević, 2014: 25). More precisely, the ending *-a* in the *a*-type is nowadays morphological in agreement with nouns, but syntactic in agreement with verbs: with nouns it is obligatory, whereas with predicates it alternates with plural forms or cannot appear at all if the sentence is interrupted by a personal pronoun (which functions as the topic). Mihaljević (ibid.: 24–25) illustrates this with examples such as *dva lijepa mladića* 'two good-looking boys' (with only the former dual *lijepa* 'good-looking' NOM. of MASC. INDEF.), but *Ova su dva mladića lijepa*/*lijepi* 'These two boys are good-looking' (with both former dual *lijepa* and plural *lijepi* possible, both 'good-looking' NOM. of MASC. INDEF.), and *Ta dva mladića, oni su lijepi* 'Those two

boys, they are good-looking' (with the plural form *lijepi* 'good-looking' NOM. PL. MASC. INDEF. as the only option after the NOM. PL. MASC. of the 3rd-person pronoun *oni*). Matasović (2008: 186–187, 194, 199) correctly speaks only of traces of the dual. Prescriptive grammars still wrongly, or anachronistically, treat the aforementioned agreement with 2–4 as dual or paucal, although more recent descriptive grammars show that it has become plural in meaning, remaining morphological in some contexts but functioning syntactically in others. Marković's (2012: 275, 493–496) important contribution is noticing that the NOM./ACC./VOC. -*a* after *dvâ*, *trî* and *čètiri* is not identical to the *a*-type GEN. SG. ending -*a*. The decisive evidence comes from adjectives (and historical considerations): GEN. SG. of definite masculine and neuter adjectival forms can (and must) end in -*ōga* or -*ēga* (e.g., *mȍgūćēga* 'of possible'), while the corresponding forms in the -*a* NOM./ACC./VOC. after 2–4 always end in -*a* (e.g., *dvâ mȍgūćā ȍdgovora* 'two possible answers' – this here form *mȍgūćā* is also definite, but ends in -*a*, which is historically NOM./ACC./VOC. DU.!). He also shows that neuter forms after *dvâ*, *trî* and *čètiri* are prosodically distinct from neuter noun NOM./ACC./VOC. PL., confirming that these neuter forms in the NOM./ACC./VOC. -*a* after *dvâ*, *trî* and *čètiri* are also historical duals – with -*a* from MASC. NOM./ACC./VOC. DU. historically (*our note*) – putting thus an end to an ongoing discussion about the nature of NOM./ACC./VOC. NEUT. with 2–4 (for this see Kuzmić and Šimudvarac, 2015: 41). We will discuss this matter of the NOM./ACC./VOC. -*a* after 2–4 in more detail in the final chapter. For now, it is sufficient to note that in grammars, and in many dialects of all three supradialects—Štokavian, Kajkavian, and Čakavian (Lončarić, 1996: 97, 98; Lisac, 2003: 27; 2010: 28)—the former dual persists as a partly morphological, partly syntactic trace in the NOM./ACC./VOC. of *a*-type nouns after 2–4, while in some Čakavian and Kajkavian dialects it survives only after *dvâ* (Lončarić, 1996: 97, 98; Lisac, 2010: 28), where the historical dual is thus better preserved as a "true" dual, albeit only in this form. Kajkavian also preserves the former neuter NOM./ACC./VOC. DU. as -*ẹ*, in some dialects only with *dva* NOM./ACC. DU. NEUT. „two", and in some with 2–4 (Lončarić, 1996: 97, 98).

4. A short introduction to the development of the dual from Proto-Indo-European to Croatian and its remnants

The dual number was fully developed in the Proto-Indo-European language across all parts of speech, making it an inherited feature in the Indo-European daughter languages, all of which had it at some point in

their development, with the exception of the Anatolian branch.[19/20] It was best preserved in several ancient Indo-European languages, such as Vedic/Sanskrit and Greek,[21] and to some extent in Proto-Germanic (Gothic still had dual forms in verbs and personal pronouns, while the other early Germanic languages retained it only in personal pronouns).[22] In contrast, Latin had already lost the dual before the earliest inscriptions [23] (Matasović, 1997: 132). More broadly, the dual disappeared early in the great majority of Indo-European languages (ibid.). The Balto-Slavic languages historically possessed the dual (as did the Balto-Slavic proto-language). In Baltic and Slavic languages, the dual declension of nouns and adjectives, and all pronouns except the personal pronouns, as Indo-European heritage, exhibited three distinct case forms: one for nominative/accusative/vocative, one for genitive/locative, and one for dative/instrumental. In other words, the original dual system had the syncretisms NOM.=ACC.=VOC., GEN.=LOC., DAT.=INSTR. We refer to this structure as dual syncretism. Some Baltic and Slavic languages have preserved the dual to this day, e.g., Lithuanian, a Baltic language (where it is archaic in everyday usage and appears mainly in traditional genres such as fairytales)[24] and Slovene, a Slavic language (where it remains fully

[19] The dual is completely absent from the Anatolian branch of the Indo-European languages, and Matasović (1997: 133) argues that this absence is due to the Anatolian languages having split from Proto-Indo-European earlier than the other Indo-European branches, so that the Anatolian languages most likely never developed the dual as a category.

[20] While Proto-Indo-European and its Indo-European daughter languages had—or still have—only the dual alongside singular or plural, and never had any additional grammatical numbers, some languages exhibit a trial or even a quadral. For example, languages of Papua New Guinea have singular, dual, trial, and plural in their pronominal systems (Matasović, 2001: 189).

[21] Only until the fifth century B.C., at which point it was lost (Matasović, 1997: 132).

[22] The pronominal dual forms in Germanic languages are an innovation in form, but semantically archaic, since they preserve the dual category, only with new forms instead of the old ones. Thus, e.g., Old English *wit* 'we two' ultimately developed from a syntagm meaning 'we two', with the *-t* element of *wit* corresponding to the initial *t-* of Old English *twa* 'two' (feminine). Of course, the fact that OEng. *wit* and *git* are rendered in Modern English translation as 'we, you two' is merely coincidental and a reflection of translation practice.

[23] Latin preserves relic dual forms only in NOM./ACC./VOC. *duo* 'two' MASC. and NEUT. and *ambo* 'both' MASC. and NEUT., and potentially (but inconclusively) in NOM./VOC. *duae* 'two' FEM. and *ambae* 'both' fem. All other oblique forms of these words exhibit exclusively plural endings, e.g., GEN. PL. MASC. and NEUT. *duorum*, and DAT./ABL. PL. FEM. *duabus*.

[24] Mihaljević (2014: 24) also notes that the dual in Modern Lithuanian has been preserved as an archaism. Matasović (2008: 177) says that the dual is used rarely in Modern

productive in everyday language). The dual was also present in earlier stages of Croatian, but all three modern supradialects—Čakavian, Kajkavian, and Štokavian—have lost it (Lončarić, 1996: 97), with the exception of certain north-western Kajkavian dialects on the Croatian–Slovenian border (ibid.; Lisac, 2003: 26; 2010: 26; Celinić, 2020: 13). In Croatian, the dual has been lost both morphologically (the inherited dual endings developed into plural ones) and semantically (dual meaning disappeared across all parts of speech). What remains today of the old dual in the standard language consists either of fossilised remains or of living forms that now function with plural meaning (e.g., the GEN. PL. endings *-ū* and *-íjū* with some nouns), or of special plural endings (such is the case of NOM./ACC./VOC. *-a* of the *a*-type after *dva*, *tri*, and *četiri*), although a semantic retention of the dual in some contexts in NOM./ACC./VOC. of the *i*-type remains a possibility. The fact that the dual disappeared first in verbs and only later in declinable parts of speech (Matasović, 2008: 303) is visible as much as in sixteenth-century Čakavian texts discussed in the previous chapter and in Modern Standard Croatian and all of its dialects, except for the north-western Kajkavian dialects on the Croatian–Slovenian border, which have preserved the dual. Today's Standard Croatian language and Croatian dialects exhibit almost no trace whatsoever of the dual category in verbs,[25] whereas among declinable parts of speech there

Standard Lithuanian, and that some dual forms are likewise preserved in Latvian and in the extinct Old Prussian.

[25] Besides the north-western Kajkavian dialects that have preserved the dual in verbs and personal pronouns (Celinić, 2020), an additional exception is found in the Čakavian dialects of Stinatz, Hackerberg, Stegersbach, and Heugraben in Burgenland (Cro. *Gradišće*) in the Republic of Austria. These dialects have preserved the 3rd DU. *-ta*, fossilised, as the plural ending in the 3rd PL. of the present tense of the verb 'to be' as *sta* 'they are', while the dialects of Weingraben, Stegersbach, and Rehgraben have preserved it also for the verb 'to want/will' as *ta* 'they want' (in Weingraben alongside the originally plural *šte* with the same meaning) (Neweklowsky, 1978: 215–216). These two verbs are the only auxiliary verbs in Croatian. A further possible exception with a dual form preserved in the original dual meaning is the Neo-Štokavian Ikavian dialect of Kninsko Polje within the City of Knin, where the author has spontaneously recorded (via mobile phone, so the form is documented) the 1st DU. present *nêćeva* (with the original dual ending *-va*) 'we two will not' in a sentence spoken by the author's maternal grandmother (73 years old): *Ëvo Ànīta ì jā šêtāmo* (1st PL. PRES., used with dual meaning) *i dòšlȉ smo* (1st PL. PERF., used with dual meaning) *do slädolēda, i jâ vèlīm, nêćeva* (1st DU. PRES. used with dual meaning) *däljē* 'Anita and I are having a routine walk and have come to the ice-cream shop, and I said, we will go no further.' After this, two additional sentences followed (not remembered), with 1st PL. PRES. once and the 1st PL. IMP. *àjmo* 'come on, let us go', both contrasting with the 1st DU. PRES. *nêćeva*. The fact that the form *nêćeva* is the only dual form in the corpus, while all other verbal forms in the

are numerous traces thereof, varying by category and dialect.

We adduce some examples here, all mere traces of the former dual:

a) GEN. PL. endings -*ū* and -*íjū* for some nouns in both the modern standard and the modern dialects; for example, Modern Standard Croatian *rùkū* GEN. PL. 'of hands', *kòstijū* GEN. PL. 'of bones'; in additional examples -*ŭ* is found e.g., in the Old-Štokavian Slavonian dialect, e.g., *s jājũ* 'from eggs', *na vrátŭ* 'at the door', *s léđŭ* 'from the back' (Ivšić, 1913: 243, 254), while -*íju* occurs in some examples in many dialects, often facultatively, e.g., in Eastern Herzegovinian dialects of Slivno Ravno and its surroundings (especially in the dialect of Podgradina, e.g., *bolèstijū* 'of illnesses', *ćèrijū* 'of daughters', *kokòšijū* 'of chickens' from this dialect, i.e., of Podgradina (Vukša Nahod, 2015: 177), in the Neo-Štokavian Ikavian dialects of Vrpolje, Kninsko Polje, and the settlement of Knin within the City of Knin in Kninska Krajina, e.g., *crȉvijū* 'of worms', *gòstijū* 'of guests', *kòstijū* 'of bones', *vlástijū* 'of the city government' (Velić, 2023: 94, 105), and in some forms in the dialects of the northern Croatia, e.g., *gumbíju* 'of buttons', *autíju* 'of cars' (Marković, 2012: 278)

b) DAT./LOC./INSTR. PL. -*ima*, -*ama* in Modern Standard Croatian[26]

example are plural, clearly shows that this dual form is a relic. Moreover, although this is the only form in the corpus (and the only dual verbal form in the entire corpus of Modern Croatian, if we exclude the aforementioned north-western Kajkavian dialects that systematically preserve dual in verbs), the fact that it is in the present tense aligns with the observation of Kuzmić and Kuzmić (2015: 44) that in historical Čakavian texts the verbal dual survived longest in the present tense (until the seventeenth century).

[26] The older, originally plural endings, e.g., in nouns (*a*-type) DAT. -*om*, LOC. -*ih*, INSTR. -*i*; (*e*-type) DAT. -*am*, LOC. -*ah*, INSTR. -*ami*; (*i*-type) DAT. -*im*, LOC. -*ih*, INSTR. -*mi*, are found in nineteenth-century grammars (Babukić, 1854: 173; Pacel, 1865: 6 – Pacel also (ibid.) has younger -*mi* as optional alongside the inherited -*i*, all in the *a*-type; Mažuranić, 1869: 37; Veber Tkalčević, 1873: 28; Parčić, 1878: 28), and are referenced in modern grammars when discussing that historical period (Babić et al., 1991: 519, 593, 607; 2007: 333, 334, 335, 398, 399–400, 415, 416–417). Today, such endings are poetic and, in our experience, very rare, appearing sporadically in twentieth-century poetry as recent as Ivan Slamnig's (b. 1930, d. 2001; he used in a verse the LOC. PL. *gaćah* 'pants' and the agreeing words in LOC. PL. -*ih* with that noun, although the exact verse cannot be recalled, as it was encountered only incidentally). More frequent, although also only poetic, are the 'middle', levelled-down but still originally plural endings (*a*- and *i*-type) -*im* and (*e*-type) -*am* (all with -*m* originally from the old endings of DAT. PL. (*a*-type) -*om*, (*e*-type) -*am*, (*i*-type) -*im*), e.g., INSTR. PL. *krilim* 'with wings', DAT. PL. *jaslícam* 'to manger'. The originally dual endings of DAT./INSTR. DU. (*a*-type) -*oma*, (*e*-type) -*ama* and (*i*-type) -*ima* << *-ьма (with younger -*i*- by analogy of other cases, e.g., NOM. PL.) were first slightly levelled-down (*a*-type in the modern standard having only -*ima*, with -*i*- from NOM. PL. and, possibly, LOC. PL. and INSTR. PL., while the other two endings unchanged), and then spread in some Croatian dialects in

and in many dialects; Štokavian—e.g., in south-eastern Eastern Herzegovinian dialects (Lisac, 2003: 102), Čakavian—e.g., in the Northern Čakavian dialect of Tinjan near Pazin (Lisac, 2010: 81), and Kajkavian—in some dialects (Lončarić, 1996: 99)

c) the forms *öčí* 'eyes' and *üší* 'ears'—originally dual forms of the now-lost class of root nouns (Matasović, 2008: 208); in some Čakavian dialects with retention of dual also in words that agree with nouns, e.g., (Susak) *õči mojï* 'eyes of mine' (Hraste et al., 1956: 97) and (Sali) *slabi oči* 2x 'weak eyes', *svaki oči* 'every pair of eyes' (= everyone) (Grandov, 1959: 235, 236) ~ Vrančić in the sixteenth century in *Život nikoliko izabranih divic* had e.g., *oči moji* 'eyes of mine' (Lisac, 2012: 42),[27],[28] and their oblique forms in

DAT./INSTR. PL. or DAT./LOC./INSTR. PL. (in some Čakavian and Štokavian dialects they appear as *-iman*, *-aman*, with additional parasitic *-n*, according to our data), whence they were adopted as the only possible endings into DAT./LOC./INSTR. PL. in Standard Croatian by the end of the nineteenth century (cf. Strohal, 1893: 28–44; Maretić, 1899: 133, 155, 161). Historically speaking, these former DAT./INSTR. DU. endings are the best preserved (now plural) remnants of the old dual declension, and they are almost the only former dual survivors in the oblique cases (alongside the survival of GEN./LOC. DU. >> GEN. PL. *-u* (*e*-type) and *-iju* (*i*-type) in a few nouns) in the entire Croatian corpus. Note: we use the term "old endings" here in connection with the fact that those were all old(er) endings of DAT., LOC. and INSTR. PL. in Standard Croatian before the adoption of the originally dual, now plural *-ima*, *-ama* in these cases, while the original, Proto-Slavic old endings were largely the same as those that Croatian had before adopting *-ima*, *-ama*, and the only difference was in DAT. PL. and LOC. PL. of the *i*-type, which were *-ьмъ and *-ьхъ (these would have yielded **-am, **-ah / **-em, **-eh in Croatian, depending on the reflex of the reduced vowels), respectively.

[27] In old Čakavian texts, adjectives and pronouns agreeing with the nominative dual *oči* and *uši* likewise appear in NOM./ACC./VOC. DU. *-i*, in accordance with the *a*-type declension (since adjectives and pronouns lack *i*-type and all other declension types except the *e*-type). Numerous examples occur in Vrančić's *Život nikoliko izabranih divic*, like *oči moji* 'eyes of mine', *oči tvoji* 'eyes of yours' (1995: 27, 48, 58; their abundance was also noticed by Lisac, 2012: 42), and in Armolušić's *Slava ženska* in *uši… slišali* 'ears… listened' (1993: 26). This type of concord is also found in some modern Čakavian dialects, such as the Central Čakavian dialects of Susak and Sali, whose examples are cited above. However, even in the sixteenth century some Čakavian poets already show innovative plural markers on adjectives and pronouns agreeing with these nouns, e.g., in *Judita* Marulić (eLektire: 5) has accusatival *prid oči vaše* 'before your eyes'. The latter situation parallels that of Modern Standard Croatian.

[28] Also, the archaic form *dnî* 'days' in *dvâ*, *trî*, *čètiri dnî* 'two, three, four days' may be dual in origin, since the noun *dân* 'day' was originally an *n-stem, and as such had *-i* in NOM./ACC./VOC. DU. (NOM. PL. had *-e*). This *-i* could easily have been preserved in *dvâ*, *trî*, *čètiri dnî*, since it stands after *dvâ*, where dual is expected, and had spread after *trî* and *čètiri* at some later time. For the accusative of these forms cf. Šenoa's (1878: 43) temporal (= syntactically accusatival) expression in *Seljačka buna*, *tri dni i tri noći* 'three days and three nights', where *dni* is very likely an inherited ACC. DU. (but for a possibility of a retention of the old *n-stem ACC. PL. see below). When not used without

the standard language and in several dialects (some dialects go back even further and preserve the dual syncretism in those nouns, as is the case in the Čakavian dialects of Trogir (Geić, 1998: 44) and, with some adjustments to the LOC., in the archaic-conservative model of the autochthonous old Čakavian dialects of the island of Krk (Lukežić and Turk, 1998: 151, 154),[29]

numerals *dvâ*, *trî* and *čètiri*, the NOM. PL. form is likewise the archaic *dni*, which represents the younger NOM. PL., with newer *-i* having substituted the old *-*e*, which is now lost. Some argue that *dnî* in *dvâ dnî* can also be in NOM. PL. (with younger *-i*) or remain in NOM./ACC./VOC. DU., cf. e.g., Glavan, 1927–1928: 131; Belić, 1932: 135. The form *dnî* with numerals *trî* and *čètiri* may also represent the original ACC. PL. in *-i*, which is then homonymous with the ACC. DU. *dnî*, that appears after *dvâ*. Older texts also show this dual after numerals 2–4, e.g., the Čakavian *Život nikoliko izabranih divic* by Vrančić (Vrančić, 1995: 14, 16, 22, 31, 52, 53, 82, 84, 85, 86, 95, 99) and the sixteenth–eighteenth-century Kajkavian legal texts (Kuzmić, 2007: 264, 265, 269, 274, 275, 276). The older language also preserved other remnants of the former *n-declension of the noun *dan*, cf. e.g., in Marulić's *Judita* GEN. SG. *dne*, LOC. SG. *u dne* 'during day' (lit. 'in day'), INSTR. SG. *dnem*, ACC. DU. *dvadeset i dva dni* 'twenty-two days', *tri dni* (in the case of *tri dni* in Marulić's idiom, *dni* may be an inherited ACC. PL. since it follows *tri* 'three', where plural is originally expected), ACC. PL. *po sve dni* 'on all days' (Marulić, 1995: 5, 6, 18, 29, 61, 68, 71, 80, 88, 89), and in Vrančić's *Život nikoliko izabranih divic* GEN. SG. *dne* (already alongside the younger and still rarer *dneva* (Vrančić, 1995: 25, 99), a form absent from Marulić's almost a century older idiom), ACC. DU. *dni* and ACC. PL. *dni* (ibid.: 10, 13, 14, 16, 22, 25, 29, 31, 32, 39, 44, 46, 52, 53, 55, 57, 61, 82, 84, 85, 86, 90, 94, 95, 99). Even modern Standard Croatian preserves some forms from the former full *n-declension of this noun, some only fossilised: GEN. SG. *dnê*, fossilised LOC. SG. [dne:] in *onòmadnē* (with more innovative variant *onòmad*, that underwent the apocopation of *-ne*) < **onomъdьne* (with the first semivowel (*ъ*) having shifted to full *a* since it was in the so-called "strong" position, while the other (*ь*) disappeared for being in the so-called "weak" position), literally 'in this day', originally NOM./ACC./VOC. DU. *dnî* with *dvâ*, *trî* and *čètiri*, or possibly also ACC. PL. *dni* in Šenoa's (nineteenth-century) *tri dni i tri noći*. Also, the stem of the modern GEN. PL. *dánā* (*dān-*, cf. in the older language GEN. PL. *dan*, found today in many Štokavian, Čakavian, and Kajkavian dialects as a GEN. PL. ending in -0) also derives from the *n-declension (although it is homonymous with the *o-declension, cf. the *o-stem GEN. PL. *pásā* 'of dogs'). ARj (:247–248) also adduces some forms of the *n-declension for this noun. The enlarged stem of the oblique cases, *dnev-*, that springs from the *n-stem *dn-* by addition of *-ev-*, is also used, but its forms follow the regular *a*-type declension, e.g., *tî dnêvi* NOM. PL. 'those days'. However, all these forms are now archaic or poetic, while the regular modern declension is (NOM. SG. – GEN. SG.) *dân – dâna*, with the stem *dān-* (from NOM. SG.) used throughout the paradigm.

[29] The full paradigm of *öči* is in Trogir: NOM./ACC./VOC. *jöci*, GEN./LOC. *jòcïju*, DAT./INSTR. *jocímân* (the same endings occur with *jüši* there) – the [c] in these forms is due to the Trogir cakavism. In the archaic-conservative model of the autochthonous old Čakavian dialects on Krk, the distribution of the old endings (i.e., their present reflexes there) has been maintained, the innovation being that the GEN. DU. ('DU.' per Lukežić and Turk's terminology, with the authors' remark that it is preserved only in these two

d) the sole personal-pronoun survivor preserved as a particle in the Kajkavian dialect of Bednja, -*vo* 'two'—according to Kapović, it is unclear whether it derives from NOM. DU. of the 1st-person pronoun **vę̂* or the ACC. DU. of the 2nd-person pronoun **vâ* (2007: 58)—which was used by speakers of very advanced age in the mid-twentieth century, and was added to 1st and 2nd-person PL. of personal pronouns when referring to two persons (Jedvaj, 1956: 306), nowadays only dialectal numeral forms such as *dvádesti* 'twenty', *trídesti* 'thirty'[30] in Eastern Herzegovinian dialects of the Dubrovnik area (Lisac, 2003: 109),

e) the reflex of the old dual syntagm **dъvě sъtě* 'two hundred' in both Modern Standard Croatian and its dialects; Modern Standard Croatian *dvjësti* (archaic, attested in the more recent corpus only in ARj. (: 924) as *dv̈ijesti*, in Broz and Iveković (1901: 280) as *dvjë sti*, and adduced by Gluhak (1993: 585) as *dvjësti*; next to the normally used *dvjësto* and the now rarer *dvjësta*,[31] and e.g., Central Čakavian dialectal on Susak (Hraste

paradigms) has preserved the old form intact (*očuj*, *ušuj*, with unetymological -*j* added to -*u* < *-*ju*), while LOC. DU. has added -*ih* under the influence of LOC. PL. (*očujih*, *ušujih*, with -*ih* added to the inherited -*u-j-*, the -*j-* again being unetymological).

[30] In this dialectal *dvádesti*, the NOM./ACC./VOC. DU. of the word for 10 (Standard Croatian *dëset*) has been preserved, fossilised as -*desti* < NOM./ACC./VOC. DU. **deseti*. In contrast, in the dialectal *trídesti* the NOM. PL. of the word for 10 may have been preserved with younger -*i*, having lost the inherited NOM. PL. *-*e*. Cf. the Old Church Slavonic forms for these numerals (20 and 30): *dъva deseti* (with NOM./ACC./VOC. DU. *deseti*, *our note*) and *trije desete* (and for 40: *četyre desete* – with NOM. PL. *desete*, *our note*), from Damjanović (2005: 116) and Matasović (2008: 245). The word for 10, Proto-Slavic **desętь*, behaves like a consonantal stem in the Old Church Slavonic NOM. PL. *desete* in the words for 30 and 40, although in Old Church Slavonic it generally belonged to a mixed *i- /consonantal declension (cf. the forms in its absolute use in Damjanović, 2005: 115). Thus, Old Church Slavonic shows both NOM. PL. *desete* and *deseti* (ibid.), a situation comparable to the Croatian dialectal -*desti* in *tridesti*, which has undergone a similar development (with -*i* fully prevailing). The forms *dvádesti*, *trídesti*, and *čètrêsti* (showing the NOM. PL. -*i* as does the modern dialectal *trídesti, our note*) and *dvádest*, *dvàest*, *trídest*, *trìest*, *četr̀-est* are listed as other possible forms for 20, 30 and 40, alongside the main forms *dvádesêt*, *trídesêt* and *četrdèsêt*, in Budmani's grammar (1867: 59–60). Note: <̂> in Budmani's orthography marks post-tonal length, thus e.g., *četrdèsêt* = the present *četrdèsēt*.

[31] A number of grammars and dictionaries list *dvjësta* alongside the historically younger form *dvjësto* (which was formed analogically after *stô* 'a hundred'), where in some *dvjësta* is the predominant form, while others prefer *dvjësto*. Several nineteenth-century grammars also record the form *dvjesti*. Cf. Budmani (1867: 60); Mažuranić (1869: 59); Veber Tkalčević (1873: 53); Parčić (1878: 53, 55); Babić et al. (1991: 664); Anić (1996: 223; although the 2004 edition lists only *dvjësto* : 269); Barić et al. (1997: 218); Raguž (1997: 106); Šonje (2000: 223); Marković (2012: 486); Jojić (2015: 242). Some grammarians include only *dvjësta*, cf. Babukić (1854: 218); Strohal (1893: 62); Maretić (1899: 217); Florschütz (1921: 63); Brabec et al. (1954: 102); Težak and Babić (1969:

100; although the 2000 edition gives *dvjësto* as the main form : 135, 136); Pavešić and Vince (1971: 368). The form *dvjësta* also appeared on the 200-HRK banknote (the HRK ceased to exist in 2022, replaced by the euro). In our corpus only Grubišić (1995: 100) and Silić and Pranjković (2005: 143) list the word *dvjësto* as the only possible form, as does Anić (2004: 269). No twentieth–twenty-first-century grammar or dictionary in our corpus includes *dvjësti*, although it survives as an archaism in the lexicon due to its mention in Gluhak (1993: 585), and through attestations in (1) nineteenth-century grammars by Pacel (as *dvie sti* or *dvie stje*, alongside *dvie sta* and *dvje sta*, the latter two being the main forms; 1865: 25; also an analogical dual *tri sti* alongside the expected and more frequent, originally plural *tri sta*, ibid.), Budmani (1867: 60; he lists *dvïjesti*, *dviesti* alongside the main *dvjësta*), and Mažuranić (1869: 59; alongside *dvěsto* and *dvjësta*, both quoted before *dvjësti*), although the form *[*dvjesti*] is absent from Veber Tkalčević's grammar (1873); and (2) in nineteenth- and early twentieth-century dictionaries, such as ARj. (: 924); Broz and Iveković (1901: 280); in the latter written as *dvjë sti*, and in both of them alongside *dvjësta* (Broz and Iveković: *dvjë sta*), which is adduced there as the primary form. The form *dvjësti* (Budmani, ARj.: *dvïjesti* (Budmani also: *dviesti*), Mažuranić, Broz and Iveković: *dvjë(][)sti*, Pacel: *dvie sti* or *dvie stje*) is the most historically accurate and represents the earliest Croatian reflex of Proto Slavic form **dъvě sъtě*, where **sъtě* is the NOM./ACC./VOC. DU. of the numeral 100, **sъto*. The form survives in some dialects, e.g., in the Eastern Herzegovinian dialect of Dubrovnik as *dvïjesti* (Matasović, 2008: 245), and in the Central Čakavian dialect of Susak as *dvîsti* (Hraste et al., 1956: 117). As expected, the older literature also contains **dvisti*: Vrančić has 2x INSTR. DU. *dvistima* in his *Život nikoliko izabranih divic* (1995: 12), although the NOM./ACC./VOC. DU. is not attested there, nor is the NOM. of the numeral 200 lexically (we therefore infer **dvisti* from the corresponding INSTR. DU. *dvistima*). Kašić (1604: 62) lists only the inherited *dviſti* and the youngest *dvifto*, and similarly for 300 and 400 he has older : younger forms *triſta* and *trifto*, *cetiriſta* and *cetiriſto*. Mažuranić (1869: 59) shows a comparable but morphologically younger stage: *dvěsto*/*dvjësta*/*dvjësti*, *tristo*/*trïsta*, *četiri sto*/*četirista*. Modern Czech, for example, has preserved this form as *dvě stě* 'two hundred' from Proto-Slavic. The younger Croatian form in -*sta*, *dvjësta*, was formed analogically after *trïsta* and *čètirista*, where -*sta* is the old, now fossilised NOM./ACC./VOC. PL. of the numeral 100 (Proto-Slavic NOM./ACC./VOC. PL. **sъta*), not a dual ending, contrary to long standing traditional interpretations. Cf. for the etymology as an analogical dual e.g., Mažuranić (1869: 59); Gluhak (1993: 585); Barić et al. (1997: 218); Matasović (2008: 245); in all these grammars the treatment of -*sta* in *dvjesta*, *trista*, *četirista* as originally dual is completely wrong; only Broz and Iveković (1901: 280) correctly state that *dvjë sti* is the inherited dual form ("prava dvojina riječi *sto*" "the true dual of the word *sto* 'hundred'"), although they also label -*sta* as dual (ibid.). For 300 and 400 preserving the fossilised plural of *sto*, grammars usually list *trïsta* (some of them alongside the younger *trïsto*, e.g., Mažuranić (1869: 59); Maretić (1899: 217); Brabec et al. (1954: 102); Babić et al. (1991: 664); Težak and Babić (2000: 135, 136), but only a few still mention *čètirista* (Pacel, 1865: 25; *četir sta*; Mažuranić, 1869: 59; Marković, 2012: 486), although it is mentioned by Marković, whose grammar is the most recent one in our corpus, so that the form *čètirista*, next to the overwhelmingly dominant and younger *čètiristo*, is a part of the current Standard Croatian language. It is noteworthy that the word for 400 was also attested as *četira sta* in *četira sta carstvija* 'four hundred empires', with the younger NEUT. NOM./ACC./VOC. PL. *četira* (the word for 4 originally did not have separate neuter forms) in the medieval Croatian text of

et al., 1956: 117) *dvîsti*, as well as in some other forms.[32]

All these forms are now either fossilised (the dialectal Bednja -*vo*, the dialectal *dvádesti*, *trídesti*, the Modern Standard Croatian and modern dialectal reflexes of **dъvě sъtě*) or plural in meaning (the GEN. PL. endings -*ū*, -*ijū* and DAT./LOC./INSTR. PL. -*ima*, -*ama*, -*ima*; and the forms *öči* and *üši* and their oblique cases). Since we have said that the former dual has also left some other traces in Modern Standard Croatian—and in all modern Štokavian and some Čakavian and Kajkavian dialects—in the NOM./ACC./VOC. of the *a*-type after *dva*, *tri*, and *četiri* (and in some Čakavian and Kajkavian dialects only after *dva*) as well as a possible semantic dual in the NOM./ACC./VOC. -*i* in the *i*-type in certain contexts, this is what we will now examine in detail, focusing solely on Modern Standard Croatian and, for the petrified accusative, on both Modern Standard and modern substandard Croatian.

5. A synchronic analysis of remnants of the old dual in the NOM./ACC./VOC. of the a- and i-types

The most prominent retention of the old dual in Modern Standard Croatian is the NOM./ACC./VOC. -*a* in *a*-type nouns and other declinable words

Aleksandrida (on the deeds of Alexander the Great), cf. Štefanić et al. (1969: 331). The older language also kept some other forms of the once declinable numeral *sto*, namely the GEN. PL. *sat* is found in Hektorović's *Ribanje i ribarsko prigovaranje* in *pet sat* 'five hundred' (KHK: 64; the numerals from *pet* onwards have always governed genitive in Croatian, as is the case nowadays as well, e.g., *pêt stänōvā* 'five apartments' ~ older Cro. *pet sat* 'five hundred'; but Vrančić (1995: 23) had one instance of DAT. PL. regardless of *petsto* 'five hundred' used before it in *petsto učenikom* 'to five hundred students'), and the form *pet sat* for older Croatian texts is also noted by Gluhak (1993: 585), and appears in Kašić's grammar for 500–900 (1604: 62). Modern Czech preserves this genitive: *pět set* 'five hundred'. Also, Vrančić (1995: 12) still has INSTR. DU. *dvistima*. Today, this GEN. PL. *sat-* survives only fossilised in *sätnīk* 'captain' (in the army), *sätnica* 'female captain' (in the army) and *sàtnija* 'company' (a type of military unit) (Gluhak, 1993: 585), while the numeral 100, *stô*, has long since become indeclinable.

[32] Notably, the forms *dvâ* 'two' MASC. and NEUT., *dvïje* 'two' FEM., *öba* 'both' MASC. and NEUT., *öbje* 'both' FEM., and the younger *öbadvā* 'both' MASC. and NEUT., *öbadvije* 'both' FEM., and their corresponding oblique forms, are also dual in origin. Semantically they remain dual, since they denote 'two', but apart from this semantic feature—and apart from the endings they preserve, as well as the agreement with *a*-type nouns in the NOM./ACC./VOC. (where some dialects still retain a relic of a "true" dual when these forms appear exclusively after *dva*)—they exhibit no syntactic dual properties, as the nouns they govern occur in the plural. The forms *dvïje* 'two' and *öbje* 'both' FEM. stand out as the sole survivals of the NOM./ACC./VOC. DU. *-*ě* in the *e*-type declension in Modern Standard Croatian.

(adjectives and pronouns) after the numerals *dvâ*, *trî* and *čètiri*, as in *dvâ*, *trî*, *čètiri sîna* 'two, three, four sons'. This feature of Modern Croatian has most recently been described in detail by Mihaljević (2014: 24–25). Such forms occur after *dva*, *tri*, and *četiri* not only in the standard language but also in many Croatian dialects—most notably in all Štokavian dialects, but also in several Čakavian and Kajkavian ones (Lončarić, 1996: 97, 98; Lisac, 2003: 27; 2010: 28). [33] In these forms, the NOM./ACC./VOC. -*a*

[33] An exception within Štokavian is the Neo-Štokavian Ikavian dialect of Kninsko Polje within the City of Knin. This dialect is presently Neo-Štokavian Ikavian, but was historically Čakavian—like the whole of Kninska Krajina—and it has preserved numerous former Čakavian features, as shown in my dissertation (Velić 2023) and in my ongoing research (2023–present). This dialect has also preserved, to some extent, the situation in which the original NOM./ACC./VOC. DU. -*a* in the *a*-type still occurs only after *dvâ*, but not after *trî* and *čètri* 'four'. This situation is preserved in these examples (all spontaneous, and not formally documented): *tríkvārti* (alongside the younger *tríkvārta*) lit. 'three quarters' (-*kvārti* being ACC. PL. in -*i* of the masculine noun *kvärat* 'quarter'), meaning 'trousers of length below the knee but above the ankle', *trî mètri* 'three meters (long)' (*mètar* MASC. 'meter'), and *trî pȑsti* / *trí prsti* 'three fingers (long)' (*pȑst* MASC. 'finger'), also in *Pòijo sam trî špagéte!* 'I ate three pieces of spaghetti' (= three curly strands constituting the dish of spaghetti, not three portions of spaghetti), where *špagéte* is ACC. PL. in -*e*, in contrast to the three previous examples, all of which have ACC. PL. in -*i*; *špagéti* NOM. PL. (*plurale tantum*) 'spaghetti, noodles', which is a contact word in the analysed dialect, used by a 50-year old speaker (the author's maternal uncle) who has lived in Germany since 1994, whereas the native terms for 'spaghetti' are the Italian borrowings *màn^{i}stra* and *päšta* (both *e*-type). All the examples except *trî špagéte* are accusatives of measure and preserve as an archaism the old ACC. PL. in -*i* (originally used with masculine nouns whose stem did not end in a palatal). This ACC. PL. in -*i* is not limited to these three examples, as it also lives on in the spontaneously recorded (but also not documented) example (by the author's maternal grandmother, 73) *na slädolēdi* ACC. PL. of *slädolēd* 'ice-cream', in a figurative sense 'to go buy an ice-cream' (not literally 'on ice-creams'), where normally the singular would be used (*îć^{i} na slädolēd* 'to go buy an ice-cream to eat in company'), rendering the example *na slädolēdi* a *hapax legomenon* in the system (but a very likely archaism due to the existence of ACC. PL. -*i* more regularly in accusatives of measure after *trî* with masculine nouns). Most of the examples quoted (all except *trî špagéte*) are used by older speakers, who generally remember them passively, as forms used by the older generation before them. However, middle-aged speakers also recall them, rendering them not fully extinct or fully restricted to the old generation of speakers. This is clearly visible from the living example *trî špagéte*, used by the author's 50-year-old maternal uncle, and from the fact that the author's mother regularly uses *tríkvārti* (the only example still commonly used across all generations, including the author, although always alongside the younger *tríkvārta*, with analogical -*a* from the dual, here after *trî*). The author's maternal uncle is a particularly conservative speaker, having lived in Germany for more than thirty years: thus, newer dialectal changes have affected him less than speakers in the homeland. He also preserves some prosodic relics of former uses, such as: 2nd SG. PRES. *izâjdēš* 'you come out, exit'; a threefold archaism: the neoacute – which is sometimes used in the dialect (Velić, 2023: 80–86), the

ending continues the *a*-type masculine NOM./ACC./VOC. DU. ending -*a*, which subsequently spread to neuter nouns as well, even though neuters originally had NOM./ACC./VOC. DU. *-*ě* (cf. Kajk. *selę* '(two) villages' if still used only after *dva*; see below). As already noted, grammars still traditionally refer to this phenomenon as a "dual," and occasionally as a "paucal." Both labels are incorrect (cf. Mihaljević, 2014: 24); what we are dealing with are partly morphological and partly syntactic plural forms that represent semantic and morphological traces of the former dual. The spread

old place of stress; very rarely used in the dialect (*ibid.*: 71–73, 140, 161 – footnote 92), but my ongoing research shows fixed patterns where it survives, and as a relic/very rare in the present/infinitive/participle (where by listening to recordings and by targeted listening, in the dialect of middle-aged speakers it occurs in up to 5% of examples a day, whereas the so-called double accent occurs in about 25% of examples a day, whilst among older speakers the percentage is a bit higher for the double accent – around 30%) and the present with the preserved sequence -*jd*-, had still not been found at the time of my dissertation, but has subsequently been shown to have virtually vanished in the modern dialect on the native territory, although it was used in the past, same as - *jt*- in the infinitives such as *dôjti* 'to come'), and the facultative and rare present prosodic type *gledâ* 3rd SG. PRES. 'he/she/it sees', which may have existed in some rhymes in the idiom of the Knin-born Petar Knežević in the eighteenth century, notably (by targeted reading) in *preda* : *gleda* both 3rd SG. PRES. 'gives over : sees', since in verbs in -*ati* with short stem only two prosodic types are normally expected in the present: *glëdām* and *kòpām*, but for stylistic purposes (especially in poetry, as in this rhyme), they may alternate, yielding analogical forms such as **glèdā* or **gledâ* with the expected **prèdā*/**predâ* in the analysed rhyme; this assumes that Knežević may also have preserved the old stress position at least in some contexts, since his idiom is more than three hundred years older than the modern Neo-Štokavian Ikavian dialect of Kninsko Polje). These facts suggest that this feature was somewhat more common thirty years ago and is undoubtedly an archaism, preserving the older stage in which masculine nouns took plural after *trî* and *čètiri*, and dual only after *dvâ*. The behaviour of neuter nouns remains unclear due to lack of data. To summarise the situation with accusative endings: all examples occur with the numeral *trî* and in the accusative plural, mostly in the accusative of measure. The ACC. PL. -*i* is preserved only when the meaning is that of measure, and in the isolated figurative *na slädolēdi*. Targeted elicitation suggests that speakers perceive the old plural after *trî* and *čètiri* as still preserved in the sense of measure, which is still to be confirmed; however, based on the examples we have analysed, this appears to be the majority pattern, though not the only one, as shown by the example *trî špagéte*, which is literal in sense and not measural. A comparable preservation of plural after *trî* and *čètiri* has not been found in neighbouring Neo-Štokavian Ikavian dialects in Drniška Krajina, nor anywhere else in Štokavian to the author's knowledge, and since the analysed dialect of Kninsko Polje was historically Čakavian, the existence of these examples raises the question of them being preserved as čakavisms, since this situation is still preserved in Čakavian. All forms discussed here are recent findings and were not included in my dissertation (Velić, 2023), and apart from the forms analysed here, the only synchronically recorded pattern in the dialect is that masculine nouns take -*a* after *dvâ*, *trî* and *čètiri* (the same holds for neuter nouns).

of the former NOM./ACC./VOC. DU. -*a* from *dvâ* to *trî* and *čètiri* is due to morphological pressure from adjective-noun agreement, as noted in the previous chapter. In contrast, some Čakavian and Kajkavian dialects preserve the original situation, in which these *a*-type NOM./ACC./VOC. forms occur only after *dva*;[34] the same applies to neuter nouns in those Kajkavian dialects that retain the older pattern. As we have pointed out, following Marković (2012: 275–276, 493–496), these forms of masculine are both synchronically and diachronically distinct from both the GEN. SG. of MASC. and the NOM./ACC. PL. of NEUT. *a*-type nouns. Therefore, we have a clear—now partly syntactic—retention of the former dual, preserved today as a plural form in the masculine NOM./ACC./VOC., that has extended from *dvâ* to *trî* and *čètiri*, and to NOM./ACC./VOC. of neuter forms after these numerals, where it has replaced the old neuter NOM./ACC./VOC. DU. *-*ě*.[35] As shown by Mihaljević's (2014: 24–25) examples, the retained morphological nature is visible in all instances of agreement with nouns, where it always appears, while the younger syntactic nature of this ending in predicate agreement is visible in the fact that it cannot appear in all contexts: the plural is

[34] The MASC. NOM./ACC./VOC. -*a* after *dva*, *tri* and *četiri* has also been preserved in some other Slavic languages that have lost the dual as a grammatical category as well (Mihaljević, 2014: 24–25).

[35] This neuter NOM./ACC./VOC. DU. *-*ě* was still preserved in Čakavian legal texts up until the seventeenth century, co-occuring in competition with the newer and the more frequent -*a* from the masculine (cf. Kuzmić and Šimudvarac, 2015: 44 – the explanation that -*a* is from the masculine is ours), and was lost in the eighteenth-century Čakavian legal texts (ibid.: 46). In literature, it is present in Marulić's *Judita* in four instances (1995: 34, 35, 49; eLektire: 18), whereas it does not occur at all in almost a century younger idiom of Vrančić. According to Kuzmić and Šimudvarac (2015: 43, 44, 46), this -*i* was already less frequent than the newer -*a* in NOM./ACC./VOC. of neuter nouns in the sixteenth-century Čakavian legal texts; they incorrectly treat -*a* as a formally neuter plural ending (ibid.: 41), whereas we regard it correctly as an analogical masculine dual ending by origin (*our note*). This situation continued into the seventeenth-century Čakavian legal texts, and afterwards in the eighteenth-century Čakavian legal texts this neuter NOM./ACC./VOC. DU. -*i* had completely vanished. The ending of neuter NOM./ACC./VOC. DU., *-*ě*, is identical to the ending of *e*-type nouns in NOM./ACC./VOC. DU., which was also *-*ě*. The neuter NOM./ACC./VOC. DU. *-*ě* has been preserved, fossilised, only as -*i* in the archaic (Gluhak, 1993: 585) *dvjësti* 'two hundred' < **dъvě sъtě*, with **sъtě* as the NOM./ACC./VOC. DU. of **sъto* 'hundred'. The latter has a neuter ending -*o* in NOM. SG., comparable to Latin neuter -*um* in *centum* 'hundred', within the same original declension class (Proto-Indo-European *o-stems or Latin 2nd declension, Slavic *a*-type nouns), and neuter *-*om* also in the source Proto-Indo-European **ḱm̥tom* 'hundred'), hence the corresponding NEUT. NOM./ACC./VOC. DU. **sъtě*. For further discussion of the now lost NOM./ACC./VOC. DU. *-*ě* of neuter nouns and other declensional forms, see also the final chapter (the main discussion) of the text.

sometimes optional and sometimes the only possible form. Therefore, here the dual has been preserved only as plural in meaning.

In contrast to this clear morphological dual > plural retention of the former NOM./ACC./VOC. DU. (now PL.) *-a* in the *a*-type after *dvâ*, *trî* and *čètiri*, which remains distinct from the original and current NOM./ACC./VOC. PL. *-i* in that type, a possible morphological and semantic retention of the old NOM./ACC./VOC. DU. *-i* in *i*-type nouns in Modern Standard Croatian remains conceivable, though inconclusive in all contexts. Its likely survival through homonymy with the NOM./ACC./VOC. PL. *-i* (historically also *-i*, and preserved everywhere) is highly plausible for morphological reasons—both phonological and prosodic. This possible, though very likely, retention of the old dual has not been directly mentioned in any source to the author's knowledge; it is only indirectly suggested in Jurišić's (1944) grammar. There, Jurišić (ibid.: 141) states that the NOM./ACC./VOC. DU. of the *i*-type ends in *-i*, adducing the example *kosti* 'two bones' used absolutely, thus allowing the possibility that the NOM./ACC./VOC. DU. *-i* in the *i*-type has indeed been preserved.[36] Ivana Kurtović Budja and Mate Kapović have likewise pointed out to the author, in separate conversations, that the NOM./ACC./VOC. DU. *-i* may have survived in this noun type. Here we shall describe the two uses where this *i*-type NOM./ACC./VOC. DU. *-i* may have been preserved in Modern Standard Croatian: (1) in absolute use, and (2) after numerals *dvïje* NOM./ACC. FEM., possibly also *trî* and/or *čètiri*.[37] The first possibility—absolute use—is indirectly supported by Jurišić, and we consider it very likely. Cf. the form *stvâri* in *Môrām pòkupiti stvâri* 'I must pick up (two) things', where *stvâri* may mean 'two things' (= ACC. DU.) as well as

[36] He says the following of the NOM./ACC./VOC. DU. of the *i*-type: "*Nom. ak. vok. du.* – Za ove padeže služi čista osnova s produženim vokalom: *kosti*." "In these cases, the bare form with long vowel [by „long vowel he means the historical Proto-Slavic *-ī, that regularly yielded *-i* in all Slavic tongues (*our note*)] is used: *kosti* 'bones'". (Jurišić, 1944: 141). In contrast, regarding the former Croatian GEN./LOC. DU. *-iju* and DAT./INSTR. DU. *-ima* he explicitly states (ibid.) that they have either left reflexes in certain words in Standard Croatian (GEN./LOC. DU. *-iju* > GEN. PL. *-ijū*) or that they are now used as plural endings in Standard Croatian (DAT./INSTR. DU. *-ima* > DAT./LOC./INSTR. PL. *-ima*). By comparison, the other two historical grammars of Croatian (Matasović, 2008; Mihaljević, 2014) make no mention of a possible relic survival of the *i*-type NOM./ACC./VOC. DU. *-i*.

[37] The hypothesis that follows could also be applied to Croatian dialects; however, since this paper focuses on Standard Croatian, and since the hypothesis in question remains only formal (though very likely, as the subsequent discussion shows), we have limited our analysis to Standard Croatian.

'things' (= ACC. PL.), which suggests that NOM./ACC./VOC. DU. *-i* may indeed be semantically preserved here. As for use with numerals, the situation is entirely inconclusive—just as in absolute use—both regarding whether the dual occurs at all and, if it does, whether it occurs only after *dvïje* or also after *trî* and/or *čètiri*. However, since historically dual forms survived longest after *dva* and *oba(dva)* 'both', it is possible that the forms analysed are preserved at least after *dvïje*, e.g., *dvïje stvâri*, *dvïje nïti* 'two things, two threads'. If this is the case, both uses—absolute use, and use after *dvïje*—would share a potential semantic dual meaning (= two of something), which is also morphological but completely merged with the plural through homonymy with the NOM./ACC./VOC. PL. *-i*. That said, although the potential retention of NOM./ACC./VOC. DU. *-i* in the *i*-type in one or both uses remains very likely, it can in no way be concluded if it has indeed been preserved. Syntactically, there are no arguments for or against in agreement patterns, since (1) adjectives and pronouns historically lost the *i*-type declension in Slavic, and (2) the NOM./ACC./VOC. DU. *-ě* of the *e*-type—required for adjectives and pronouns when they agree in *i*-type nouns has been completely lost in all declinable parts of speech. Therefore, adjectives and pronouns, if used with potentially dual *i*-type nouns, always appear in plural, although the *i*-type still may preserve its dual, e.g., *Môrām pòkupiti svòje* ACC. PL. FEM. *stvâri* ACC. DU. 'I must pick up two of my things'. The more economical explanation is that *i*-type nouns used with adjectives and pronouns in the NOM./ACC./VOC. are always plural, meaning that the dual of the *i*-type is not preserved when adjectives or pronouns are present—an interpretation that is certainly correct in some cases. This is probably why no scholar has explicitly mentioned the potential survival of NOM./ACC./VOC. DU. *-i* in the *i*-type, and why only Jurišić alludes to it indirectly, and only for absolute use. The preservation of the dual in this type remains most plausible in absolute use, since in use with numerals it is unknown whether it spread to *trî* and/or *čètiri*, having become a potential paucal in the process. This may have also been Jurišić's reasoning when mentioning its potential survival only for absolute use, which is more likely. This possible retention of the dual remains semantic, since it is morphologically homonymous with the NOM./ACC./VOC. PL.*-i*, although the dual is also retained morphologically. To conclude: a survival of the NOM./ACC./VOC. DU. *-i* of the *i*-type—partially suggested by Jurišić—remains entirely potential, yet very likely for morphological reasons, whether in absolute use and/or after numerals *dvïje* and/or *trî* and/or *čètiri*, or in both these uses. This case of a potential survival is still a semantic (and morphological) dual, at least in absolute use. However, even if this possible retention exists, although

formally having been preserved morphologically, it remains purely semantic due to the homonymy with the NOM./ACC./VOC. PL. *-i* in the same type. Thus, unlike the clear survival of the NOM./ACC./VOC. DU. > PL. *-a* after *dvâ*, *trî* and *čètiri* in the *a*-type, which has become plural in meaning, the potential survival of NOM./ACC./VOC. DU. *-i* in the *i*-type remains semantically dual, at least in absolute use. This potential survival would therefore be the only instance in Modern Standard Croatian where the dual is still preserved semantically (and morphologically), although it survives solely through homonymy with the NOM./ACC./VOC. PL.

To summarise for the Modern Standard Croatian corpus: alongside the retention of the old NOM./ACC./VOC. DU. *-a* in *a*-type nouns (and other agreeing parts of speech) as a plural ending after *dvâ*, *trî* and *čètiri*, it is very likely that the old NOM./ACC./VOC. DU. *-i* of *i*-type nouns has also been preserved as dual semantically (and morphologically through homonymy with the NOM./ACC./VOC. PL. *-i* in the *i*-type) in absolute use and/or after *dvïje* NOM./ACC. FEM. and/or *trî* and/or *čètiri.* In the latter case, the form would be dual if still used only with *dvïje*, and paucal if used also with *trî* and *čètiri*. Its retention remains inconclusive and purely formal, but is morphologically (both phonologically and prosodically) entirely logical and expected. We can therefore state, with more clarity than any Croatian grammar published to date, that the old dual in declension in Modern Standard Croatian has been largely preserved in the NOM./ACC./VOC. forms. This is evident both from the grammars and studies dealing with the former NOM./ACC./VOC. DU. *-a* in *a*-type nouns, and from Jurišić's remark concerning the NOM./ACC./VOC. DU. of *i*-type nouns. Concretely the dual survives as *-a* after *dvâ*, *trî* and *čètiri* in the *a*-type in all declinable parts of speech (now plural in meaning, partly morphological and partly syntactic), and, potentially but inconclusively, as NOM./ACC./VOC. *-i* in the *i*-type in absolute use and/or after *dvïje* and/or *trî* and/or *čètiri* (dual if still only restricted to *dvïje*). The *a*-type NOM./ACC./VOC. *-a* after *dvâ*, *trî* and *čètiri* is no longer dual but plural, representing a partly morphological and partly syntactic trace, while the potentially preserved NOM./ACC./VOC. DU. *-i* in the *i*-type remains semantically dual in absolute use, and possibly also remaining dual if used only after *dvïje* (and not *trî* and/or *čètiri*, where it would be paucal), but its existence as dual is hypothetical and survives only through homonymy with the NOM./ACC./VOC. PL. *-i* within the *i*-type.

In the petrified accusative, which is a purely syntactic use, *e*-type nouns also appear after numerals *dvïje* NOM./ACC. FEM., *trî* and *čètiri* by syntactic analogy, even though their forms are not originally dual.

Examples include: *čȍvjek s dvâ prèzimena* 'a man with two surnames', *hódati pö dvije vrëće* 'to walk over two bags', *s dvïje nïti* 'with two threads'. Thus, the petrified accusative encompasses both the forms of *a*- and *i*-type nouns (the former originally dual and the latter only potentially dual in the contexts analysed), as well as *e*-type nouns, which are always originally plural. Since it is purely syntactic and not morphological, the petrified accusative cannot be used to determine in which contexts the former dual has been preserved, even though it contains some originally dual forms (of *a*-type and, potentially, *i*-type nouns).

In the next chapter, we outline the development of the dual in *a*-type and *i*-type nouns—specifically, its gradual reduction to the NOM./ACC./VOC. dual—drawing on examples from Čakavian legal texts from the thirteenth–eighteenth centuries (Kuzmić and Šimudvarac, 2015: 38–47). Afterwards, we briefly analyse the origin of the petrified accusative on the basis of the same corpus.

6. A diachronic survey of the development of the dual in nouns in Croatian

We will not go into extensive detail regarding the development of the dual in the Čakavian legal texts from the thirteenth–eighteenth centuries, as collected by Kuzmić and Šimudvarac (2015: 38–47). Instead, we will briefly outline the main tendencies relevant to our analysis:

a) when the reflex of the *e*-type NOM./ACC./VOC. *-*ě* began to disappear,

b) when plural endings began to replace the original dual endings in the oblique cases,

c) when the *a*-type ending NOM./ACC./VOC. -*a* began to extend from *dva* and *oba(dva)* 'both' to *tri* and *četiri*, and

d) when the use of the petrified accusative after *dva*, *tri*, and *četiri* first appeared.

From both synchronic–diachronic and methodological perspectives, we consider the historical and present neuter (= *a*-type) NOM./ACC./VOC. -*a* after *dvâ*, *trî* and *čȅtiri* to be an analogical dual taken from the masculine (which has always had the NOM./ACC./VOC. -*a* in dual) by origin, as does Marković (2012: 493, 494–495), which contrasts with Kuzmić and Šimudvarac (2015: 41), who regard it as neuter plural by origin. Our view, shared with Marković, is correct on both morphological and prosodic

grounds, and ends the discussion on whether the ending was originally taken from the NOM./ACC./VOC. DU. of masculine nouns by analogy, or it was taken from the neuter NOM./ACC./VOC. PL. Namely, *both* the prosodic and morphological (i.e., inflexional) criteria clearly demonstrate that it stems from the masculine NOM./ACC./VOC. DU., for the following reasons:

aa) Prosodic evidence. As Marković (2012: 493, 494–495) has shown, there is a prosodic difference in the accent paradigm C[38] between NEUT. NOM./ACC./VOC. after *dvâ*, *trî* and *čètiri* and the NEUT. NOM./ACC./VOC. PL., cf. NOM./ACC./VOC. after 2–4: *dvâ ïmena* 'two names' ≠ NOM./ACC./VOC. PL. *tâ imèna* 'those names'. The form *ïmena* in *dvâ ïmena* is *prosodically* (and therefore *morphologically*, since accent paradigms reflect morphological structure) unmistakably dual, with the ending *-a* taken from the masculine. The accent in NOM./ACC./VOC. after 2–4 *ïmena* is the same as in NOM./ACC./VOC. after 2–4 *grâda*, i.e., the initial short (*ïmena*) or long circumflex (*grâda*) typical of the accent paradigm C;[39] and

ab) Morphological evidence. As Marković (2012: 494) has also shown—and as we have already noted for masculine *a*-type nouns—there is a morphological difference endingwise between the NEUT. GEN. SG. of

[38] The term *accent paradigm*, as well as the system of accent paradigms, is taken from Kapović (2015: 765–773; 2018: 160–161). Marković does not employ this analytical apparatus, and neither the term *naglasna paradigma* 'accent paradigm' nor *naglasni tip* 'accent type' occurs in his grammar; the conclusion based on accent paradigms is therefore ours.

[39] It could tentatively be proposed that in neuter NOM./ACC./VOC. forms after *dvâ*, *trî* and *čètiri* the ending *-a* was taken from NEUT. NOM./ACC./VOC. PL. (which is also *-a*), but that the accent was retained from the former neuter NOM./ACC./VOC. dual forms in **-ě*. However, we do not consider this likely, since morphologically it is more plausible that both the ending and the accent point to the dual, where both the former MASC. and NEUT. dual forms of NOM./ACC./VOC. in the *a*-type of the accent paradigm C had circumflex, and it was the neuter ending *-a* that was indeed borrowed, but not from NOM./ACC./VOC. PL. NEUT., but from NOM./ACC./VOC. DU. MASC., since it did not alter the accent in neuter in the way it would have if the ending had come from NOM./ACC./VOC. PL. NEUT. Thus, both prosodically and morphologically, the dual was retained as a special plural ending in the neuter, albeit with the younger *-a* from MASC., which is the most probable development, since it is purely morphological; in fact, due to both prosody and 'true' morphology (i.e., paradigms) together constituting the morphological level, a point long recognised (of older works cf. e.g., (Hraste et al. (1956), and of the most recent ones cf. e.g., Kapović (2015; 2018). Put simply, the ending and the prosody are inseparable—both belong to the same morphological domain—so it is not possible for an ending to be borrowed from one grammatical number (here, the plural), while the accent type remains from another (here, the dual), as the data clearly show.

definite adjectives and the NEUT. NOM./ACC./VOC. after *dvâ*, *trî* and *čètiri*, just as in the masculine. Cf. MASC.: GEN. SG. *òd toga mögūćēga ödgovora* 'of that possible answer' – NOM./ACC./VOC. after 2–4 *dvâ mögūćā ödgovora* 'two possible answers'; NEUT.: GEN. SG. *do mögūćēga rjèšénja* 'to a possible solution' – NOM./ACC./VOC. after 2–4 *dvâ mögūćā rjèšénja* 'two possible solutions'. This directly *morphologically* established that this younger *-a* in NEUT. NOM./ACC./VOC. after *dvâ*, *trî*, *čètiri* is originally dual and taken from masculine, and that it replaced the older, inherited neuter NOM./ACC./VOC. DU. **-ě*, which would have yielded *-i* in Modern Standard Croatian (cf. *-i* in *dvjësti* < **dъvě sъtě*, with **sъtě* also originally NEUT. NOM./ACC./VOC. DU. of **sъto* 'hundred'). A further important morphological argument is that, if the masculine and neuter forms in NOM./ACC./VOC. after *dvâ*, *trî* and *čètiri* were interpreted as GEN. SG. of *a*-type nouns—as proposed by Grubišić (1995: 99) and by Silić and Pranjković (2005: 141), who say explicitly that it is in "GEN. SG."—this would again be incorrect and synchronically implausible. The genitive is a nominal attribute, and, once used after another noun, becomes indeclinable (e.g., NOM. SG. *cëntar grâda* 'city centre', LOC. SG. *u cëntru grâda* 'in city centre', INSTR. SG. *cëntrom grâda* 'through city centre'). By contrast, the NOM./ACC./VOC. forms of *a*-type nouns after *dvâ*, *trî* and *čètiri* are fully declinable–-and they alternate with originally plural endings in the rest of the paradigm (e.g., NOM. – GEN. after *dvâ*, *trî* and *čètiri*: *dvâ grâda* (< DU.) – *dvàjū grädōvā* (noun < PL.), both 'two cities'), since the old dual endings outside the NOM./ACC./VOC. were lost in the *a*-type (and in other types), making it a mixed paradigm both synchronically and diachronically.[40]

Likewise, the formally possible survivor of the old NOM./ACC./VOC. DU. *-i* in the *i*-type (at least in part semantically dual, i.e., in absolute use) is also prosodically and morphologically a different (inherited) form than all other forms ending in *-i* in the *i*-type, for the same reasons just presented for the NOM./ACC./VOC. DU. > PL. *-a* in the *a*-type.

The now established fact that NEUT. NOM./ACC./VOC. *-a* after *dvâ*, *trî* and *čètiri* is originally dual but taken from the masculine further refines

[40] This mixedness is synchronically visible in the declension of the noun *čòvjek* 'man', the only Croatian noun that exhibits suppletion in its paradigm. It has the stem *čovjek-* throughout the singular and in NOM./ACC./VOC. after *dvâ*, *trî* and *čètiri* (e.g., GEN. SG. *òd toga čòvjeka* 'from that man', NOM./ACC./VOC. after 2–4 *dvâ čòvjeka* 'two people'), but the stem is *ljud-* in the rest of the paradigm, except in NOM./ACC./VOC. after *dvâ*, *trî* and *čètiri* (e.g., GEN. PL. after 2 *dvàjū ljúdī* and GEN. PL. without 2–4 *ljúdī*).

our analysis of the data collected by Kuzmić and Šimudvarac (2015: 38–47), in that our findings for neuter nouns replace the conclusions those authors reached concerning the evolution of the dual in the neuter.

6.1 A brief overview of the development of dual declension in all three noun types

Kuzmić and Šimudvarac only provide examples for *a*- and *e*-type nouns, and since in Modern Standard Croatian (and, as far as the author is aware, in nearly all modern dialects) all traces of the *e*-type NOM./ACC./VOC. DU. have disappeared,[41] we shall focus in detail solely on *a*-type nouns in the material collected by the two authors. We supplement their analysis with present-day data for *i*-type nouns in Modern Standard Croatian, adding our conclusion regarding the potential retention of the old NOM./ACC./VOC. DU. -*i* in the *i*-type.

Our analysis of the behaviour of masculine *a*-type nouns and of *e*-type nouns is primarily based on the concluding section of Kuzmić and Šimudvarac's study (ibid.: 47–50), while the analysis of neuter *a*-type nouns will be based on the analytical portion of their paper (ibid.: 38–47).

a) *The loss of the* e*-type NOM./ACC./VOC. *-ě.*

The gradual replacement of **-ě* by the NOM. PL. -*e* was documented in

[41] It has disappeared from the entire Croatian corpus, with a possible exception in the spontaneously recorded (by the author, the form being documented) form *rûci* NOM. DU. in absolute use from a very old speaker (86 years old) of the Neo-Štokavian Ikavian dialect of Kninsko Polje within the City of Knin, that was uttered alongside *nöge* NOM. PL., while both forms (*rûci*, *nöge*) were semantically dual. The form *rûci* could not subsequently be confirmed among speakers younger than the one that I got the form from upon targeted query. Lisac (2003; 2010) does not mention the retention of *e*-type NOM./ACC./VOC. DU. anywhere in Čakavian and Štokavian dialects, and the author of this paper has likewise not encountered any traces of it in the extensive corpus of sources examined. For Kajkavian as a whole, Lončarić (1996: 97) states that Kajkavian dialects have, in general, preserved MASC. NOM./ACC./VOC. DU. -*a* and NEUT. NOM./ACC./VOC. DU. -*ẹ*, but lost the *e*-type NOM./ACC./VOC. DU., replacing it with NOM./ACC./VOC. PL. -*ẹ* in this type (as typical of entire Kajkavian, the openness (i.e., open pronunciation) of this NOM./ACC./VOC. PL. -*ẹ* tells us that it evolved from the NOM. PL. of palatal *e*-type stems, from Proto-Slavic NOM. PL. *-*ę*, i.e., from the front nasal **ę*). Regarding the loss of the *e*-type NOM./ACC./VOC. DU. *-*ě*, Lončarić (ibid.) explicitly states: "Sigurno je tu [in NOM./ACC./VOC. DU. of the *e*-type (*our note*)] bio isti nastavak kao i u s. r. (-*ẹ*), ali zasad o tome nema potvrde iz živih govora." "It is certain that the ending here was the same as in neuter (-*ẹ*), but at present there are no confirmed examples of this from the living dialects."

the fifteenth century in the petrified accusative in the example *od dvi libre* 'of two scales'. At that time, masculine *a*-type still retained -*a*, while in neuter the inherited -*i* was still a dominant ending over the younger -*a* (< MASC.).

b) *The replacement of dual oblique endings by plural endings*.

Plural endings begin to appear with *dva* 'two' in the fourteenth century, and with *oba(dva)* 'both' in the sixteenth century. The *e*-type lost all dual endings by the seventeenth century, although some genitival dual forms were still retained in the *a*-type MASC., while in the *a*-type in general the DAT./INSTR. DU. -*ima*, -*ema* was still kept into the eighteenth century.

c) *The spread of dual from 2 to 3 and 4*.

The extension of dual morphology to *tri* and *četiri* is attested from the fourteenth century, and was dominant with *tri* in the eighteenth century, though not with *četiri*. The reverse process—the influx of plural endings after *dva*—begins in the fourteenth century, but dual endings in the *a*-type remain dominant throughout the entire thirteenth–eighteenth-century corpus. With *oba(dva)* 'both', this influx of plural endings occurred in the sixteenth century, but only in the *e*-type, whereas the *a*-type retained its dual markings with *oba(dva)* 'both' exclusively even in the eighteenth century (by which time the old NOM./ACC./VOC. DU. -*i* of neuter nouns had disappeared, having been fully replaced by the corresponding NOM./ACC./VOC. DU. -*a* from the MASC.). As noted earlier, some Čakavian and Kajkavian dialects still preserve -*a* in the *a*-type only after *dva* (a "true" dual; in Kajkavian, the old neuter NOM./ACC./VOC. DU. -*ẹ* is also preserved), while other Čakavian and Kajkavian dialects, all Štokavian dialects, and Modern Standard Croatian exhibit this ending after *trî* and *čètiri* as well (same for the neuter -*ẹ* in those Kajkavian dialects).

d) *The emergence of the petrified accusative after numerals (2–4)*.

With *dva*, the petrified accusative first appears in the fifteenth century, it does not occur with *oba(dva)* 'both', and with *tri* it appears in the seventeenth century, alongside the petrified ACC. PL. -*i* with *tri* (e.g., *do tri gradi* 'three towns'). A tendency toward indeclinability (i.e., petrification) in the genitive is attested from the fifteenth century, which is interesting because most prepositions take the genitive, and some examples occur with prepositions; indeed, several grammars of Modern Standard Croatian allow the petrified accusative to be used in prepositional phrases (Babukić, 1854: 219–220; Veber Tkalčević, 1873: 53; Florschütz, 1921: 64; Silić and Pranjković, 2005: 143). With *dvije*, *e*-type nouns show

petrified ACC. PL. -*e* already in the fifteenth century. Morphologically, the case that came to be used in these contexts—where all other oblique dual cases were gradually disappearing—is the accusative (dual in the *a*-type and, potentially, formally dual through homonymy with the NOM./ACC./VOC. plural in the *i*-type; plural in the *e*-type). This was the only oblique dual case that remained in the *a*-type and, possibly, the *i*-type (the *e*-type having lost the dual entirely), owing to inherited dual syncretism with the NOM./VOC. DU.[42] Examples show that the use of petrified accusative was very prominent by the eighteenth century in Čakavian legal texts (Kuzmić and Šimudvarac, 2015: 46, 47). In substandard/dialectal Modern Standard Croatian of the nineteenth century Mažuranić (1869: 59) notes in his grammar that, although forms after *dvâ*, *trî* and *čètiri* should be in the corresponding case, speakers in some regions ("u někojih okolicah") use the indeclinable forms in NOM./ACC./VOC., with declension sometimes preserved only in feminine nouns. As noted earlier, this (sub)standard use continued into the twentieth century and to the present day. A note: Although there is no direct continuity between the analysed thirteenth–eighteenth-century Čakavian legal texts and Modern Standard Croatian (= nineteenth–twenty-first-century), since Modern Standard Croatian is primarily Štokavian-based, the increasing frequency of the petrified accusative over time suggests a kind of developmental continuum. For example, in the contemporary urban dialect of the Croatian capital city of Zagreb (Kajkavian-based with strong Štokavian influence), the author encounters exclusively petrified accusative forms, such as *pókraj*

[42] Typologically, the same situation—namely, the accusative taking over the functions of other oblique cases—is found in the history of English, which in its oldest stage had four (or, with the instrumental, five) cases. Only four were common in Old English: nominative, genitive, dative, and accusative. However, with dative gradually becoming rarer during the Middle English period and finally disappearing with the loss of final -*e* throughout the system around the year 1500—sometime between years c. 1485 and 1515 according to Cottle (1985: 26–31)—it was the accusative (as in the Croatian use of petrified accusative, discussed in the text) that eventually assumed the functions of the dative. And since the accusative is unmarked in contrast to the nominative, and since the former genitive—although retaining its formal marking—lost its broader genitival functions and became restricted mainly to possession and to pre-nominal use, effectively ceasing to function as a case, Modern English no longer has a case system in nouns (nor in adjectives and numerals). On a broader typological level, it is not surprising that it is the accusative that took place of other oblique cases in both English and, specifically in the petrified accusative with *dvâ* 'two', *trî* 'three' and *čètiri* 'four', in Croatian, since in Indo-European languages this two-part case distinction of nominative and accusative forms the basic semantic distinction of subject : object, where NOM. = subject and ACC. = object (in Indo-European languages that have preserved the dative, it is ACC. = direct object, and DAT. = indirect object).

dvá čóvjeka 'next to two men', *s trȉ kúne* 'with three kunas' (the *kúna* (HRK) being the former Croatian currency, replaced by the euro in 2023), *po své čétrī tráke* 'on all four lanes'.[43]

To summarise points a.–d. for the Čakavian legal texts of the thirteenth–eighteenth centuries: the *a*-type lost its oblique dual endings after the eighteenth century, leaving NOM./ACC./VOC. -*a* as the sole surviving dual form, whereas the *e*-type lost all its endings in the seventeenth century, thus earlier than the *a*-type. The situation in the *a*-type after the eighteenth century therefore corresponds to that of Modern Standard Croatian (with only NOM./ACC./VOC. -*a* remaining), and we assume a comparable situation for Modern Standard Croatian in the *i*-type NOM./ACC./VOC. -*i* in some contexts, although it is only the latter that is, if preserved, still semantically dual at least in absolute use. The petrified accusative in genitival use first appears in the fifteenth century, at which time *e*-type nouns already have the NOM. PL. -*e* after *dvije* NOM./ACC. FEM. in *od dvi libre* 'of two scales', this construction gaining in frequency towards the eighteenth century, when it becomes very common in both the *a*- and the *e*-type, and in Modern (sub)standard Croatian it continues to be used to the present day. This petrified use of the former NOM./ACC./VOC. DU. of the *a*- and (potentially, and synchronically still partly as DU. semantically) of the *i*-type spread to the *e*-type by syntactic analogy already in the fifteenth century, at which time the NOM. PL. -*e* had already replaced the NOM./ACC./VOC. DU. **-ě* (which is not attested at all in the corpus analysed by the two authors) after *dvije*.

7. Conclusion

Of the remnants of the old dual in the NOM./ACC./VOC. of nouns, all

[43] Compare also the two ways of expressing the phrase 'with both hands' in the Neo-Štokavian Ikavian dialects of Vrpolje and Kninsko Polje within the City of Knin in Kninska Krajina: *s dvî rûke* (or with the variant *sa*: *sȁ dvī rûke*; both our data) petr. ACC. and *(s) dvìma rùkama* (our data) INSTR. PL. To this compare the only option in the urban Kajkavian-based dialect of Zagreb: *s dv(j)é rúke* (our data) petr. ACC. In the examples from these two different dialect types, the use of the petrified accusative is linked to the increasing use of the preposition *s* 'with' when denoting tools, where it is not originally expected. In other words, the wider the use of *s* in a phrase, the commoner the petrified accusative is. And since the urban Kajkavian-based dialect of Zagreb exhibits only the use of *s*, it has only the petrified accusative in the expression analysed, whilst the rural Neo-Štokavian Ikavian dialects of Vrpolje and Kninsko Polje also preserve the older instrumental phrase as an option (though *s* may be used with it facultatively as well).

dual forms have been lost only in the *e*-type, where the disappearance of the dual occurred earliest. Alongside the most prominent surviving trace of the dual in this category – the ending *-a* in the NOM./ACC./VOC. in the *a*-type after *dvâ*, *trî* and *čètiri* – the dual may also survive, formally and semantically, in the *i*-type. This potential survival concerns the ending *-i* in the *i*-type in certain contexts (in absolute use, after *dvïje* NOM./ACC. FEM. and/or *trî* and/or *čètiri* – representing a dual if restricted to *dvïje*, and a paucal if extended to *trî* and/or *čètiri*) and through homonymy with the NOM./ACC./VOC. *-i* in this noun type. In both the *a*-type and, if preserved, in the *i*-type the forms with these endings (*-a*, *-i*) represent separate inherited case endings rather than other case forms. The *a*-type forms now have a plural meaning, whereas the potential survivors within the *i*-type retain a dual meaning at least in absolute use (and in use after numerals, if still restricted to 2). This study has demonstrated conclusively that the neuter NOM./ACC./VOC. *-a* after *dvâ*, *trî* and *čètiri* originally derives from the NOM./ACC./VOC. DU. *-a* of MASC. It has also been shown that the spreading of the *a*-type NOM./ACC./VOC. DU. > PL. *-a* from *dvâ* to *trî* and *čètiri* was influenced by noun-adjective agreement. The syntactic use of the petrified accusative, first encountered in the fifteenth-century Čakavian legal texts, gradually increased in frequency and became dominant in this type of texts by the eighteenth century. It continues to coexist with the full declension in Modern, Štokavian-based (sub)standard Croatian, where the corresponding case forms remain in use in every case category.

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Sažetak

Članak je dao podroban sinkronijski i dijakronijski opis ostataka dvojine u NAV iza brojeva *dvâ*, *trî* i *čètiri* u *a*-vrsti (što je danas množinom) i mogućega (ali nedokaziva) čuvanja u *i*-vrsti kroz homonimiju s NAV mn. u tom podsustavu u apsolutnu položaju i možda uza *dvïje* n./a. ž. r. (a možda širenjem i uza *trî* i(li) *čètiri*), pri čem u potonjem slučaju ostala je semantički očuvana dvojina (ali samo ako se uistinu očuvala; barem u apsolutnu položaju, a s brojevima jedino ako se čuva samo uza *dvïje*). Također, pokazalo se da je u *a*-vrsti širenje NAV -*a* od iza *dvâ* na *trî* i *čètiri* djelom utjecaja imenično-pridjevske sročnosti. K tomu, pokazano je da su i NAV -*a* uza *dvâ*, *trî* i *čètiri* u *a*-vrsti i mogući preživitak NAV dv. -*i* u *i*-vrsti (pričem potonje još znači dvojinu barem u apsolutnu položaju) povijesno i danas zasebni padežni nastavci, i nisu jednaki nijednomu drugomu padežu. U svezi s tim konačno je objašnjeno da je nastavak srednjega roda NAV -*a* uza *dvâ*, *trî* i *čètiri* podrijetlom iz NAV dv. -*a* muškoga roda. Na kraju, okamenjeni akuzativ, koji se povijesno širio i dobivao na čestoti te ga ima i danas u (sup)standardnom hrvatskom, analogijom je opsegnuo i NAV mn. *e*-vrste, te se kao čisto sintaktičko obilježje ne može koristiti za proučavanje ostataka dvojine.

Ključne riječi: *dvojina*, *imenice* a- *i* i-*vrste*, *NAV*, *(sup)standardni hrvatski jezik*, *povijesna i sadašnja razdoblja jezika*.