

## SAJNOVICS'S *DEMONSTRATIO* AND GYARMATHI'S *AFFINITAS*: TERMINOLOGY AND METHODOLOGY

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**Abstract:** János Sajnovics and Sámuel Gyarmathi are usually appreciated as the first scholars to have proven the relatedness of the Finno-Ugric languages. This paper argues that the significance of *Demonstratio* and *Affinitas* lies not so much in their contribution to the idea of relatedness (since that had been in the air before them) as in the synthesis they give. Sajnovics and Gyarmathi arranged previously known but unsystematic information and arguments into a clear and coherent structure. They applied the principles of linguistic comparison very consciously and pointed out the importance of the evidence of grammar. The most important aspect of their work is the way it anticipated the methods of modern linguistics: deduction, logical inference, philological methods with Sajnovics, and reconstruction and the assumption of hypothetical transitional forms with Gyarmathi. In its purpose, Sajnovics's book is closer to genealogical comparison, Gyarmathi's to typological comparison.

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### 1. Introduction

The history of Hungarian linguistics has two protagonists whose names are recorded in each and every monograph on the general historiography of linguistics: János Sajnovics and Sámuel Gyarmathi,<sup>1</sup> celebrated as the first two scholars to have demonstrated the affinity of Finno-Ugric languages and as forerunners of comparative linguistics. Their

<sup>1</sup> For recent examples, see Koerner–Asher (1995), Hovdhaugen et al. (2000), etc.

respective chef-d'œuvres—Sajnovics's *Demonstratio Idioma Ungarorum et Lapponum Idem esse* (1770; second edition: 1771),<sup>2</sup> and Gyarmathi's *Affinitas linguae Hungaricae cum linguis Fennicae Originis grammaticae demonstrata. Nec non Vocabularia dialectorum Tataricum et Slavicarum cum Hungarica comparata* (1799)—are often referred to as twin achievements.

The two books becoming increasingly less easily available as time went by, they were published in facsimile editions in 1968 in the Uralic and Altaic Series of Bloomington University; first the Nagyszombat (Tyrnau, Trnava) edition of *Demonstratio*, with an introductory study by Thomas Sebeok, then *Affinitas*, with a memorial by Miklós Zsirai. However, the books were difficult to access in another sense, too: whereas originally they had been composed in Latin for the sake of international comprehensibility, later on it was exactly their being written in Latin that constituted a major obstacle. Therefore, in 1970, a German translation of *Demonstratio* by Monika Ehlers, and in 1983 an English version of *Affinitas*, translated and introduced by Victor E. Hanzéli, were published. Both books are now available in Hungarian, too: in the series *Bibliotheca Regulyana* edited by Enikő Szíj, *Demonstratio* was published in 1994, and *Affinitas* in 1999, with ample notes and introductory studies. Hopefully, further large-scale research will soon be based on the original sources, now available in languages other than Latin, too.

The lives, activities, and achievements of Sajnovics and Gyarmathi are discussed in books that would fill a smaller library, and two short monographs have also been devoted to them: in the series *A múlt magyar tudósai* [Hungarian scholars of past centuries], György Lakó wrote a book on Sajnovics in 1973, and János Gulya wrote one on Gyarmathi in 1978. A comprehensive bibliography of the literature on Sajnovics has been compiled by Sándor Hadobás, its second edition appeared in 1996. The 1999 Hungarian translation of Gyarmathi's *Affinitas* was accompanied by a full bibliography compiled by the editor, Enikő Szíj. The special importance of that bibliography lies in the fact that the results of the works listed there have been incorporated in the notes of the Hungarian edition, hence the latter can also be considered the most recent summary of the state of the research on Gyarmathi. Of course, the time that elapsed between those compilations and the present has also brought up

<sup>2</sup> Page numbers of *Demonstratio* cited in this paper refer to the second edition, hence the date 1771. English renderings of all citations whose originals are in Latin are based on the author's Hungarian translations.

new results, especially due to the conferences held in Budapest, Paris, and Göttingen to celebrate the 200th anniversary of the publication of *Affinitas*.

The aim of the present paper is not to rehearse the well-known facts and evaluations (these will be touched upon but briefly); rather, it is to draw the reader's attention to some less often studied general historiographic and methodological aspects. Since Finno-Ugric language comparison, from a grammatical point of view, was based on features of the languages concerned that differ from those of the usual Latin-based grammars, it is worth briefly going over the way grammarians of the period categorized them, the terminology they used for linguistic description, and finding out to what extent commensurability may be assumed at all.

On the other hand, contemporary principles and terminology of language comparison and of the establishment of language affinity are worth our attention since, according to recent studies, it is not at all certain that the two books often characterized as twins are indeed about the same topic: it is imaginable that one of them is on genetic relationship whereas the other is on comparison.

It is interesting to study the structure, genre and scholarly system of evidence of the two books since it appears that their most important virtue lies not so much in being the first or comprehensive or exhaustive demonstrations of the affinity of Finno-Ugric languages as in clearly declaring certain principled criteria and in representing archetypes of later scientific concepts (like 'reconstruction' or 'transitional forms') and procedures of demonstration.

### **1.1. Parallel paths and terminological diversity in descriptions of the languages compared**

The history of Hungarian, Lapp, Finnish, Estonian, etc. grammars written in Latin exemplifies a situation recurring again and again in the history of language description: a system of categories elaborated for a certain language and serving its aim properly there is subsequently used for the description of another language. Latin grammar itself had been fully modelled after that of Greek, whereas other European languages were first described in terms of the categories of Latin. At points where the model of Latin grammar proved unsatisfactory, it was Hebrew grammar, having taken over much of Arabic grammar in its turn, that came in most handy for describing Finno-Ugric languages. Hebrew grammar

itself had made its way to European tradition transposed into the terminology of Latin grammar. Therefore, the virtual map exhibits two lines of progress: that of the Greco–Latin tradition on the one hand, and that of the Arabic–Hebrew tradition on the other. The first grammars of Finno-Ugric languages described parallel facts based on the affinity of those languages in parallel frameworks based on the models followed.

The terminology of these Latinate grammars makes it clear how a word-based model of linguistic description, created with Latin—an inflecting language—in mind, was adapted to suit agglutinating languages. In the beginning, the description of the latter self-evidently involved looking for counterparts of Latin categories in them, and Latin remained a natural basis of comparison later on, too.<sup>3</sup> What constituted a problem was the categorization and labelling of the typological discrepancies between Latin and Hungarian, Finnish, etc. Such phenomena came to light both in the description of these languages and in their comparison, given that in looking for traces of affinity between languages they were the type of evidence, in addition to lexical correspondences, that were used in establishing links among Finno-Ugric languages or, earlier, between one of these and Hebrew, Greek, etc. To mention the most important phenomena of this kind (with the proviso that each individual author referred only to a subset of these, of course):

In phonology, phonemes not found in Latin and their representation in writing; the avoidance of word-initial consonant clusters.

In morphology, the agglutinative character of the given language, including

- for nominals: lack of grammatical gender, a rich system of derivational suffixes, possessive personal suffixes, postpositions, and a large case system;
- for verbs: the origin of definite conjugation, verbalizing suffixes;
- for non-finite verb forms: the personal suffixation of the infinitive.

In syntax, lack of agreement between adjectives and their head nouns.<sup>4</sup>

<sup>3</sup> For instance, *adverbium* was a typical category of this kind: the authors not only discussed adverbs proper under that label but anything that was capable of standing for a Latin *adverbium*, including inflected postpositions, pronouns, person/number suffixes on infinitives, and even whole phrases (cf. Vhael 1733, 104; Pereszlényi 1682 [Supplement], etc.).

<sup>4</sup> Instances of Finnish–Hebrew comparisons include Cajanus (1697) (in its title, too), Vhael (1733); Lapp–Hebrew: Ganander (1743), Hungarian–Hebrew: Pereszlényi (1682), Finnish–Estonian: Wexionius Gyldenstolpe (1650), (cf. Hovd-

These issues were encountered by early grammars of all languages similar in type to Hungarian. At a number of points we see that their emancipation or breaking away from Latin had a definite course that any grammatical tradition faced by such problems had to go through. For instance, this happened with respect to the gradual recognition of the lack of grammatical gender or the creation of the rich case systems of nominals.<sup>5</sup> Some of these features exhibited defectivity as compared to Latin (e.g., the lack of grammatical gender or that of agreement between a head noun and its attribute) or a difference that was easy to detect (such as the use of postpositions), these were relatively smoothly resolved. In order to be able to categorize other characteristics, however, the only non-Latin descriptive practice of the time, that of Hebrew, was appealed to, by several authors independently. Hebrew exhibited certain structural similarities with these languages, hence it could be relied on. On the other hand, since structural similarity and genetic connection were taken at the time to strictly and mutually imply one another, Hebrew offered a solution to the vexed issue of lineage—with the prestige that that “holy” language was able to lend coming as a bonus. This help from Hebrew was especially significant since the description of these languages with the categories of Latin was rather difficult. The dilemma often arose whether these were regular languages at all, amenable to grammatical description (in terms of Latin, that is) or some kind of irregular, barbaric idioms. With respect to Lapp, see the preface of Leem (1748); but Hungarian was also exposed to such views and their refutations.<sup>6</sup>

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haugen et al. 2000; Kulonen 1999). On the grammatical character of Hungarian, see any of the early Hungarian grammars, summarily in Pereszlényi's *Praefatio*, on its correspondences with that of other Finno-Ugric languages, see Porthan (1771/1994), Gyarmathi (1796), Sylvestre de Sacy (1799), etc.

<sup>5</sup> First, the language described was assumed to exhibit gender distinctions on the basis of the Latin equivalents of the words, see e.g., Sylvester (1539). In the second phase, the natural gender of their denotata was carried over to the words or, where this was not possible, they were assigned to common gender (*commune*) or fictive gender (*fictum*), e.g., Szenczi Molnár (1610) on Hungarian, or Ganander (1743) on Lapp. In the third phase, all words were taken to belong to a single gender (*genus omne*), e.g., Göseken (1743) on Estonian, or—in a simpler and more straightforward formulation—to lack gender altogether, e.g., Pereszlényi (1682) on Hungarian, Petraeus (1649) and Vhael (1733) on Finnish, Stahl (1637) on Estonian. As the dates suggest, the succession of phases is not strictly bound to temporal sequence. Similar graduality can be observed in the recognition of rich case systems, cf. Vladár (2005).

<sup>6</sup> Sylvester (1539, 93); Pereszlényi (1682, *Praefatio*), etc.

As a reminder, here are some categories that early descriptions of Hungarian and other Finno-Ugric languages borrowed from Latinized Hebrew grammars: *pronomen affixum*, *status absolutus*, *status constructus*.

In Hebrew, personal pronouns as independent words only exist in the nominative. In the other cases, their role is taken over by certain suffixes attached to nominals or verbs. With nominals, these refer to the person of their possessor, with verbs, to the person and number of their object. Latinized Hebrew grammars used the term *pronomen affixum* (affixed pronoun) to refer to these morphemes. The Hebrew system is not quite identical to the Hungarian, yet it had a liberating effect, in grammars of Finno-Ugric languages, on the description of personal suffixation and definite conjugation. The morphemes involved in these processes, as well as personal suffixes of the infinitive, were taken to be truncated pronouns glued to the noun, verb, or infinitive, respectively (*pronomen affixum*).<sup>7</sup> Indeed, the significance of *pronomen affixum* is even greater, given that a key concept of the description of Finno-Ugric languages, *affix* itself, was based on it. In grammars of agglutinating languages it was a straightforward decision to use that term for all kinds of bound morphemes attached to stems, hence the meaning of *affixum* was soon extended to cover any affix (in the present-day sense). In early grammars of Hungarian, that development took place in an easy-to-observe fashion.

A nominal form bearing a *pronomen affixum* was called *status constructus* in (Latinized) Hebrew grammar, whereas a bare form lacking one was called *status absolutus*. In describing agglutinating languages, it was clear that nouns with a *pronomen affixum* can also (furthermore) be case marked. In early Hungarian, Finnish, Lapp grammars, paradigms with and without possessive suffixes were invariably presented separately. The *status constructus* form (as its name suggests) counted as a compound of a nominal and a pronoun. Similarly, case marked forms were taken to be compounds made up by a noun and a preposition each. That is, suffixation was first recognized in instances where the suffix corresponded to an independent word (pronoun or preposition) in another description, hence morphological concatenation (of a stem and a suffix) could be interpreted in terms of a parallel morphological process, compounding.

Similarly, the notion of *radix* (root) comes from Hebrew but means,

<sup>7</sup> In early Hungarian grammars this concept is found everywhere, along with detailed explanations (Sylvester 1539; Szenczi Molnár 1610; Pereszlényi 1682; etc.), for Finnish, from Vhael (1733) onwards, for Lapp, in Ganander (1743), explanations being identical in all cases.

in European languages, the simplest basic part of the word serving as a base for all derivation and inflection. In the case of agglutinating languages, this again led to the recognition of root morphemes in the present-day sense. The various kinds of derived verbs (causative, reflexive, etc.) were seen as corresponding to Hebrew *binyanim*, with the relevant terms also taken over from Hebrew grammar in most cases.

## 1.2. Terminology

The grammars that Sajnovics and Gyarmathi used for comparison (by Vhael, Ganander, Fiellström, Leem, Helle etc.), exhibited various stages of breaking away from Latin. The situation was further marred by a total lack of a unified terminology.<sup>8</sup> Although the line of development of their reasoning was similar, the terminology used in these books to describe phenomena that differ from Latin was far from being full-fledged. In fact, there were no consistent, unified, and well-defined terms in the present-day sense, and the categories did not coincide with those used today. This had a number of reasons that can be traced back partly to vagueness of categorization, and partly to abundance of terms. Inconsistency could stem from diverse categorization (e.g., whether an ending was taken to be a case marker or an adverb), from stressing different properties of the unit categorized (e.g., *determinatus*, *possessivus*, *personale*, etc. used to refer to person-marked infinitives) or from a stylistic preference for synonyms (*compositus*, *affixus*, *coniunctus*, *constructus*, etc.). Terminology often vacillated within a single work, too.<sup>9</sup>

As far as the Hungarian side is concerned, Sajnovics, being a Jesuit, mainly relied on Pereszlényi's grammar (1682) as was usual in his order. That book followed the model of conservative Latin grammar but incorporated some Hebrew results, too, and was a well-tested pedagogical

<sup>8</sup> For an overview and evaluation of the most important Finnish, Lapp, and Estonian grammars used for comparison, cf. Korhonen (1986); Hovdhaugen et al. (2000); Kulonen (1999).

<sup>9</sup> Here is an example of mixed criteria of categorization and the ensuing terminological chaos. In Ganander's Lapp grammar, a group of adverbial endings is encountered three times (!). On the basis of their forms, they are listed as case markers (*ablativus*, *locativus*, etc.). On the basis of their function, they occur under the respective types of adverbs, subcategorized as *in loco*, *de loco* and *ad locum*. Finally, on the basis of their Latin equivalents, the same suffixes also figure under prepositions (Ganander 1743, 13, 127, 141).

grammar. Sajnovics also drew upon Szenczi Molnár's grammar (1610) although, given that it was among the sources that Pereszlényi himself had consulted, it is difficult to tell at what points its influence was direct and where it was mediated by Pereszlényi.<sup>10</sup> Gyarmathi himself had written a bulky Hungarian grammar that, in accordance with its title (*Okoskodva Tanító Magyar Nyelvmester* [Hungarian language master, teaching by reasoning]) was both scholarly (*raisonnée*) and pedagogical, amalgamating rational grammar of the Cartesian type with observation of the facts of the language described. He deduced the structure of individual languages from an abstract universal grammar that he claimed to be totally regular (hence, ideal); at the same time, he emphasized that a grammar must be descriptive in the sense that wherever one of its claims clashes with usage, it is the description that has to be modified.<sup>11</sup> His analytic solutions sometimes even remind the reader of the early stages of generative grammar; for instance, when he derives syntactic structure from the predicative phrase, by binary branching. On the other hand, in this book he still claimed Hungarian to be an obviously Oriental language.

## 2. The history and terminology of language comparison

The history of Finno-Ugric language comparison, the emergence of the idea of these languages being related, has been written several times (for a summary, cf. Zsirai 1952; Lakó 1973; Gulya 1978).

Search for connections among European languages started in two directions: from overlapping word stocks and from structural correspondences; but both naturally also meant the establishment of historical relationships. The first group includes lexicon-based claims of affinity (from Dante via J. J. Scaliger to Leibniz). Progress in this area meant that Leibniz restricted the range of words compared to what is called core

<sup>10</sup> At any rate, direct influence of Szenczi Molnár is shown by the system of tenses that Sajnovics bases on Hungarian verb forms of diverse shapes, as opposed to Pereszlényi who displayed the Latin tense system for Hungarian, too. By the way, Sajnovics came to know Szenczi Molnár's grammar only after the first edition of the *Demonstratio* was published, with the help of a Dane (cf. Sajnovics 1771, 100), although he naturally used his dictionary right from the start.

<sup>11</sup> His attitude is related to that of the Port Royal grammar (Lancelot – Arnauld 1660), his spiritual forerunners were the grammarians of the French Academy, and his immediate source was Langius' *Verbesserte Grammaire Raisonnée* (cf. Éder 1995).



vocabulary today and pointed out the importance of geographical names. The compilation of the relevant data base began with polyglot glossaries (Pallas 1786–1789). Initially, it was the closest possible agreement of pairs of words that was looked for. Before the discovery of the system of regular sound correspondences, the most popular explanation of sound changes was metaplasm theory.<sup>12</sup> The principle of regular sound correspondences was defined by Turgot in an entry written for *Encyclopédie* (1757); it was there that he pointed out that, for the purposes of comparison, both the sound shapes and the meanings of words have to be taken into consideration in tandem. With respect to Finno-Ugric languages, Fischer (1747) was already more or less aware of regular sound correspondences, see Gulya 1995.

In other cases, morphological features were also taken into consideration (see especially Stiernhielm and Ludolf's principles). As we saw above, the search for origin based exclusively on certain structural similarities directed the earliest accounts back to Hebrew, allegedly the most ancient language. At the same time, the observation of morphological correspondences turned the research into the right direction (see above). Prior to Sajnovics, the Danish scholar Wöldike had proposed a systematic, morphologically-based comparison between Hungarian and Greenlandic.<sup>13</sup> Knowledge concerning the relatedness of Finno-Ugric languages was also accumulating; by the time Gyarmathi started writing, Schlözer had already drawn up the whole family tree.

In the period, scholars were already aware that the branching off of languages was based on the divergent progress of the various dialects of their common ancestor; it is not a mere coincidence that the same term, *dialectus*, was used both for the geographic varieties of the same language and for a set of related languages going back to the same parent language.

Therefore, Gulya (1978, 120) is right when he claims that all data and methods that Sajnovics and Gyarmathi were to summarize and apply had already been known, even if only in a scattered form. On the other hand, the terminology of linguistic comparison was far from being full-fledged: the terms *cognatio*, *convenientia*, *affinitas*, *similitudo*, *consensus*, *harmonia* etc. occurring in the 18th century all seem to have been stylistic variants used in free variation (Hanzéli 1983, xxi).

<sup>12</sup> Cf. Juslenius (1712) for Finnish; for Hungarian, see Szenczi Molnár (1610); Pereszlényi (1682); also the part called *Elenchus* in Sajnovics (1771, 65).

<sup>13</sup> His work was known and referred to by Sajnovics (1771, 118).

### 2.1. Circumstances, time of writing, and reception of the two books

It is well known that the two authors were educated in the natural sciences, not in philology. (In the period, social and natural sciences were not strictly separated; indeed, linguistics kept on borrowing the methods and terminology of the natural sciences even in the late nineteenth century, cf. the family tree and the wave hypothesis, Darwinism, etc.) It is also known that the basic idea of neither work was the author's own. In the case of Sajnovics, the idea came from Maximilian Hell who considered the exploration of the affinity between Lapp and Hungarian to be a side issue of his astronomical expedition and therefore chose a Hungarian astronomer to accompany him. But their journey was primarily about astronomy: even Sajnovics himself considered his linguistic excursion to be a supplementary and at first inconvenient task. Gyarmathi was no philologist, either: he graduated as a medical doctor. He was directed to the Finno-Ugric languages by Schlözer, a historian; recall that in his *Language Master* he still advocated the Oriental connection.

Another common feature is that neither of the two authors spoke the language(s) involved in their comparisons. Although Sajnovics had a collection of Lapp field notes of his own, he refrained, for the sake of verifiability, from using any of them. Both books were written abroad and published outside Hungary (although the second edition of *Demonstratio* was printed in this country).

The first version of *Demonstratio* was read out in three lectures in the Danish Royal Society of Sciences in January and February 1770, and was published in print in April of that year. It was even translated into Danish by R.M. Fleischer before the year ended. The second edition, substantially expanded (by new references and the text of *Halotti Beszéd* [Funeral sermon, the earliest literary text in Hungarian from the end of the 12th century]) replicates the title page of the first, giving only place of publication and printer's name but no date of the second edition. On the basis of a locus within the text and of Sajnovics' correspondence, the time of publication must be the first half of 1771 (Éder 1999, 65).

*Affinitas* is commonly known to have been written in several runs. The first part was reviewed as early as in 1798, the full book was published in 1799, and the third appendix (not included in all extant copies) contains a 1797 letter by Schlözer.

The open-mindedness and short reaction time of the scholarly life

of the period, as well as the international embeddedness of both Sajnovics and Gyarmathi, are shown by the fact that the results of the two works were favourably recognized abroad right after their publication.<sup>14</sup> For quite some time, Sajnovics was assumed to have been diverted from linguistic research by the unfavourable reception of his work in Hungary. Recently, however, it has been pointed out (Éder 1975; Szij 1994) that the familiar attacks only started after his death and that his giving up linguistic research has to be explained by the dissolution of the Order of Jesuits and his ambitions in astronomy. Gyarmathi's *Vocabularium* (1814), written after his return to Hungary, falls short of the standard set by his *Affinitas* due to his isolation in this country, the fading away of his contacts, and the cancellation of his planned field work.

## 2.2. The Latin of Sajnovics and Gyarmathi

Both authors wrote their books in a kind of classicizing Neo-Latin. In Europe, Latin was used as the language of scholarship continuously up to the 18th century, although neither its role nor the language itself remained constant throughout. In the Middle Ages, after Romance languages and medieval Latin had parted, Latin turned from a vernacular into a learned language, the means of international communication, the vehicle of scholarship, and (what was coterminous in the period) the language of the church. It remained a living language though, used both in speech and writing, albeit less and less similar to Classical Latin for just that reason.

In the eyes of the Humanists, Latin was primarily the vehicle of the classical literature that they admired, hence for them its antique form was the benchmark. Latin was considered valuable just because of its stability and constancy, as opposed to the sadly damageable and changeable vulgar languages. Therefore, they set themselves the aim of purging the "corrupted, degenerated" medieval form of Latin, leading it back to the purity of the Classical age. To that end, during the 15th–16th centuries, they standardized the spelling and pronunciation, returned to Classical Latin constructions, and banished all words that had been created in

<sup>14</sup> On Sajnovics, see Porthan (1771), Schlözer (1771), Öhring (1772); on Gyarmathi, see the anonymous reviews published in the *Göttingische Gelehrte Anzeigen* in the years 1798 and 1799 (Szij 1999b), Dobrovský (1799), Sylvestre de Sacy (1799); for further details, see Lakó (1973, 198–205), Szij (1999b).

medieval Latin. However, the closed word stock of Classical Latin was unable to serve the various disciplines that had just started flourishing. Of course, the new concepts had to be expressed somehow but, due to the above considerations, new terms were hardly ever created (in the grammatical terminology or elsewhere), a lot more typical method was making existing words polysemous and using paraphrase.

It was in parallel with the purifying of the Latin language that the process of the emergence of national languages took place. With the appearance of the middle classes and the development of national states, the unification of national languages also started, national languages became valuable. The use of Latin got gradually restricted to scholarship, law, and occasionally to *belles-lettres*. But even in these areas, it had to share its position with the developing and increasingly polished vernaculars. The speed of Latin losing ground differed from nation to nation: it depended on how far the cultivation of the mother tongue had got; in less developed areas, people often wrote in a more regular and cultivated Latin. Hungarians, for instance, preferred Latin for scholarly purposes even at the end of the 18th century. The same situation obtained with the Finns (Finnish, just like Hungarian, became an official state language very late, in the mid-nineteenth century); as a direct consequence, the educated Classical Latin of Finnish or Hungarian scholars was impeccable and perfect in the eyes of their contemporaries.<sup>15</sup>

Sajnovics' and Gyarmathi's time was just the interesting period of transition in which national languages and Latin lived side by side. The same author wrote about the same topic now in Latin, and then in his mother tongue. A typical example is the famous Pallas Collection introducing the world's languages published by Johannes Vater in two languages, Latin and German, as late as in 1815. Gyarmathi's and Sajnovics' books, written in Latin, were reviewed in German, Swedish, French, etc., and *Demonstratio* was translated into Danish in the year of his original publication. The two books can be taken to be the symbolic keystones of the Neo-Latin scholarly literature. However, scientific and scholarly terms mainly occurred in Latin even in works written in one of the vernaculars. National-language terminology blossomed out decades after linguistic description had become autonomous and the principles of language comparison had become consolidated.

<sup>15</sup> Gyarmathi's command of Latin was emphatically praised by Mathias Calonius in a letter cited by Wichmann (1906); Porthan's use of Latin was excellent.

Sajnovics' and Gyarmathi's works follow the grammatical rules of Classical Latin, their choice of words is accurate. There are almost no instances of Hungarianisms in the text of either book. In their use of Latin, two things deserve special attention: the illustrative use of Latin on the one hand, and the Latin terminology on the other.

### 2.3. The use of Latin for illustrative purposes in national-language grammars

Latin, as a language known by everybody, had an important role in explaining the rules of any given language and in language teaching. It was not only grammatical rules themselves that were formulated in Latin; the examples were also glossed in that language. With Hungarian authors, these translations often did not follow the usual rules of Latin grammar, they deviated from regular Latin forms on purpose, following the rule of Hungarian under discussion, throwing light on it exactly by way of deviating from the expected Latin form. Here are a few random examples from early Hungarian grammars: Szenczi Molnár (1610, 177) translated Hungarian possessive constructions into Latin forms that mimicked the Hungarian example:

“For *habeo*, Hungarians use the verb *Vagyon* [‘there is’], *Vadnak* [‘there are’], and for *non habeo*, they use *nincz*, *ninczen* [‘there is no’], *ninczenek* [‘there are no’]. These mostly govern the genitive and take possessive personal suffixes as in *Habent Mosen & prophetas* [‘they have Moses and the prophets’], *Vagyon Mofesec és prophetájoc*, that is, *Est Moses-ipsorum et prophetae-ipsorum* [‘there is Moses-theirs and prophets-theirs’].”

An example from Pereszlényi:

“You shall express active gerunds in *-do* by deverbal nouns with the suffix *-ban/-ben*, as in *Piger in scribendo* [‘Lazy in writing’], *Reft az írásban*, that is, *Piger in scriptione* [‘Lazy in script’].” (1682, 145)

In such cases, the Hungarian examples came with two Latin translations: first, the regular Latin form, and then a second, illustrative/explanatory rendering, the literal translation of the Hungarian form. That is, Latin had a double role here: it served as a model of grammatical description, with the appropriate regular form, and then it was used metalinguistically, illustrating the Hungarian grammatical construction by a literal translation.

Interestingly, Finnish and Lapp grammars did not exploit this possibility in a parallel manner. For them, Latin was simply an intermediary language, that of explanation but not of demonstration. In the case of Lapp grammars this is all the more surprising since we know they were explicitly written for readers who did not speak the language. Even where the Lapp rule exhibited a difference from Latin, the Latin translation of the Lapp example given invariably followed the rules of **Latin** grammar. E.g.,

“The adjective is interpreted as agreeing with the noun in number and case, although it remains unchanged in the construction. For instance, *ḡjappes ḡjalmech* [‘black eyes’, without agreement], *nigri oculi* [with agreement].”  
(Ganander 1743, 147)

#### **2.4. The role of Latin in language comparison: model and metalanguage**

In the age of language comparison, the significance of the illustrative role of Latin suddenly increased. The situation became even more complicated: Latin came in third along with two languages compared, in a role of mediation and illustration. As the authors discussed the issue of the affinity between two (or more) languages that were usually totally unknown to their readers, the use of a metalanguage became crucial.

Items in the glossaries of the period had to be interpreted in a commonly known language; whereas in comparative glossaries, an index had to be supplied. In a contemporary review of Gyarmathi’s book, Dobrovský (1799) suggested, for instance, that a multilingual glossary should be added in which all words (of any language discussed) compared with their Hungarian equivalents in *Affinitas* should be listed and a Latin index should also be appended, in order to make the work more convenient to use and to eliminate inconsistencies.

In grammatical description and comparison, Latin was also appealed to. When a phenomenon under comparison had to be made clear for readers who were unfamiliar with the languages at hand, it was not only the rules themselves that were formulated in Latin: the examples were translated, too. Sajnovics applied this procedure less often; but Gyarmathi often created unattested Latin constructions with gusto in order to illustrate the rules of another language (either Hungarian or Lapp). He found it very important, for instance, that Hungarian has nominal pred-

icates. From the Latin translations of the examples he cited, he omitted the copula, emphasizing its omission by a dash:

“[The copula] [...] is omitted by Hungarians by elision: *A te fiad bolond* [‘Your son [is] a fool’]. *Tuus filius—stolidus.*” (1799, 49)

Writing about a crucial shared feature of Hungarian and Lapp, the lack of agreement between adjectives and head nouns, he used the Latin forms in the same way, unlike Ganander:

“Adjectives and numerals that modify nouns remain unchanged in all cases, e.g.: *Denkewes almats.* Kővér ember [‘Fat man’]. *Obesus homo.* In the genitive: *Denkewes almatfa.* Kővér emberé [‘That of a fat man’]. *Obesus hominis* [without agreement], and not *Obesi hominis* [with agreement].” (1799, 46)

His attention extended beyond the level of sentences, too. For all languages compared, he also provided a sample text with a Latin translation; again, he modified the latter to reflect the peculiarities of the given language, thus using the illustrative power of Latin at the level of the text, too. The texts were suitable for this because they were widely known and invariable in their form, like the Lord’s Prayer or excerpts from the Bible. Thus, in addition to the rules of Latin and its grammatical terminology, he included yet another Latin etalon: texts of a stable form. For instance, he compared the Estonian translation of the Lord’s prayer with its Hungarian translation—but the Hungarian text he used was not the established, accepted version. Rather, he himself created a translation that corresponded to the Estonian text in its words and structures to the largest possible extent, and then he translated it back to Latin with the same accuracy. That Latin version, then, different as it was from the usual text both lexically and structurally, illustrated the Estonian and Hungarian principles of text construction. For instance, the original Latin prayer ends like this: “*Quoniam tuum est regnum et potentia et gloria [...]*” ‘For thine is the kingdom, the power and the glory’. In the version assimilated to Estonian: “*Quia ad te pertinendo existit regnum [...]*” ‘For [it is] pertaining to you [that there] exists a kingdom [...]’ (Gyarmathi 1799, 154).

As was mentioned above, Dobrovský suggested that Latin be used in the glossaries in order to eliminate inconsistencies. However, it is not only there but also in grammatical comparative tables that the use of Latin helps exclude instances of mere formal similarity. In such cases,

Latin “gives away” the distortion or misinterpretation, exactly because its two roles as the model of categorization and as illustrative material have been separated. An example can be found in Gyarmathi’s table comparing Estonian and Hungarian conjugation (1799, 136). In the table, the Estonian participle *Teggew* ‘putting’ is paired with the formally similar but categorially distinct Hungarian imperative *Tégy* ‘put!’. The Latin gloss is *pone* ‘put!’. Here the category label refers to the Estonian example, whereas the Latin translation/illustration to the Hungarian. Thus, Latin *pone* occurs under ‘participle’, even though the Latin participle would be *ponens*.

### 3. Discrepancies of descriptive terminology in early language comparison: Difficulties of methodology

In grammatical comparison, phenomena that exhibited some surplus, defectivity, or difference with respect to Latin grammar were of crucial importance. In addition, it was exactly in the case of these phenomena that the relevant terms were missing from the traditional Latin special vocabulary. We have seen that in these respects the descriptions, although they started off from Latin, and followed basically similar paths, represented various stages of that progress in the various grammars used for purposes of comparison. We have also seen that, even under identical categorizations, various terms based on diverse aspects of the phenomena coexisted, making the overall terminology changeable and vague. In comparative works such difficulties arose cumulatively since it was not only a single language for which a more or less suitable terminology had to be found but diverse, variously conceived, and even in themselves often inconsistent descriptions and terminologies of several languages had to be brought into harmony.

The comparative linguist who was familiar with only one of the languages compared in most cases (his mother tongue, in the ideal case) had no occasion to check his sources and had to content himself with what he got ready-made; this was true of the various word lists of diverse spelling conventions as well as of the grammars written in terms of dissimilar approaches. Even Sajnovics who knew Lapp from personal exposure to spontaneous speech hardly used any of his fieldwork notes in *Demonstratio*—wanting to avoid charges of unverifiability—and mainly used written sources. As a great Finnish scholar of the time, Henrik



Gabriel Porthan wrote in the preface of his edition of Juusten's *Chronicon Episcoporum* (1859, 42),

“from glossaries of this kind only, it is difficult to make suitably solid or well-founded decisions on the affinity of languages that are hardly or not at all known even for the collectors and comparers. [...] The chaos is increased by totally different spellings of the words that can be observed not only across authors but often in the work of one and the same author as well. [...] Others perceive the sounds differently, and wish to represent them differently, each according to his own habit.”

### 3.1. The issue of a unified spelling

Thus, it was clear that the words of the languages to be compared should be represented in a unified and objective system of transcription. Porthan's remark cited above anticipates the realization of the fact that the phonemic system of the collector's mother tongue might have a distorting effect on the transcription of the material collected (with respect to Sajnovics, this was pointed out by Lakó 1973, 101). On the other hand, it did not occur to anyone that some kind of independent, general system of transcription should be selected as the basis of description. The scholars only thought of using the **existing** orthography of one of the languages concerned: the question was which language it should be in terms of which all the others would be described. Those who attempted to give answers, obviously preferred the spelling system of their own mother tongue. In the preface to the Juusten chronicle, Porthan (1859, 43) writes the following, referring to *Demonstratio*, too:

“Should the orthographies of these languages [i.e., Hungarian, Finnish, Lapp, and Vogul] be established and compared more prudentially, and should the description of cases be performed for Hungarian according to the same norms as was so excellently set up for Finnish by Vhael in his *Grammatica*, I do not doubt that this would be mutually fruitful for all the languages.”

The unification of spelling systems had already been suggested by Sajnovics (1770, 30), albeit the other way round: he proposed that Hungarian spelling, “stable, simple, cultivated, and perfectly suited to representing Lapp”, should be used in Leem's encyclopaedia of the Lapp language, and the plan was all but carried into effect. Behind these arguments, the underlying assumption was that the phoneme systems of these languages were similar or even identical. Sajnovics went as far as explicitly stating

this. Having presented some examples—valid even today—of sound correspondences between certain Germanic languages, he went on like this (1771/1994, 50):

“However, between Hungarians and Lapps, there is no room for regular sound changes or omissions (*litterarum constans permutatio aut omissio*) of the kind I have just demonstrated for Danes and Germans. This is because Lapps use exactly the same number and same kind of sounds and expressions as do the Hungarians.”

Gyarmathi, working exclusively from books, complained of the crudeness of Lapp orthography in *Affinitas* (1799, 61), and pointed out that he would transcribe the words in the orthography “accepted by the Hungarian nation”, presenting a tabular summary of the system. In it, he proved the contrastive role of sounds by sets of Lapp words that only differ in a single segment yet their meanings are totally different (*cotzam*, *virrasztok* ‘I keep vigil’; *codzam*, *vizelek* ‘I urinate’; *cadzam*, *hörpentek* ‘I take a swig’, etc.). This minimal pair technique—that was to become a standard tool of structuralist phonology—was being used by grammarians throughout Europe to present sound systems.<sup>16</sup> Gyarmathi had already used this technique systematically in his *Language Master*, and he deserves special credit for having emphasized, as a matter of principle, its significance in establishing the system of sounds (or phonemes, as we would say today) of a language.

### 3.2. The unification of the terminology of declension

#### 3.2.1. Sajnovics’ solution

In addition to the description of sounds, Porthan’s words cited above refer to the description of case systems, too. The methodological difficulties of comparing grammatical systems will be illustrated in what follows on the example of declension, adding that similar examples could be found at almost any level of language description.

At the end of the 18th century, at least three different views were prevalent in the description of the declension systems of Finno-Ugric languages, featuring an abundance of cases. In the first, the paradigm con-

<sup>16</sup> For Lapp, it was used by Porsanger, for Finnish by Martinius (*varas* ‘thief’ – *varras* ‘iron-bar’) and Juslenius, for Hungarian by Sylvester (*hús* ‘meat’ – *hűs* ‘fiancé’, *orom* ‘crest’ – *öröm* ‘joy’) and Szenczi Molnár (*halakat* ‘fish.pl.acc.’ – *hálákat* ‘gratitude.pl.acc.’), etc.

sisted of the cases of the Latin system, with all the other case markers being referred to as prepositions. This solution was followed by Sajnovics, who used Pereszlényi (1682) as his source. In Gyarmathi's *Language Master*, a version of this system was presented: only four of the Latin cases were accepted, the ones that are known as purely syntactic cases today. In the second type of solution, the Latin cases, especially the ablative, were taken to include several different endings—see, from among early Finnish grammars, Martinius (1689) and Petraeus (1649), as well as the Estonian grammars by Helle (1732) and Hupel (1780) and the Lapp grammar by Leem (1743). In the third, most mature version, a rich case system was assumed, as in Vhael (1733) for Finnish and Ganander (1743) for Lapp.<sup>17</sup> These were also the sources used in writing both *Demonstratio* and *Affinitas*.

Sajnovics and Gyarmathi also encountered all these solutions and had to refer to them and try to bring them into some kind of harmony. Sajnovics (1771/1994, 99) merely reviewed them and pointed out that the diverse descriptions covered similar systems of declension:

“In most languages there are prepositions: *a, ab, ex, cum, in, de*, etc. In Hungarian and in Lapp, what correspond to these are certain suffixes attached to nominals. And the cases referred to by most grammarians as ‘ablatives’ also belong here. [...] The same suffixes are considered by Swedish grammarians to be various case endings. That is why, in addition to the usual six cases, they also have *locative, mediative, factive, nuncupative, penetrative, instructive*, etc. [...] And it is clear from a single example that all of these are found with the Hungarians, too.”

(Note the use of the expression “the usual six cases”, clearly showing that the measure of grammatical description, its basis of comparison, was quite naturally the Latin language.)

<sup>17</sup> Ganander's grammar (1743) is especially enlightening with respect to the description of the case system. He thought that it was expedient to base the description of Lapp on that of Finnish, because of their affinity. However, that decision involved the danger of Finnish grammar having a distorting effect on his description. The paradoxical situation arose that, while the description of Finnish had detached itself, on a number of points, from the Latin model that had proved unsuitable, the uncritical adoption of the Finnish model for Lapp reintroduced the earlier situation, this time with respect to Lapp. The number of cases assumed in the various grammars is a case in point. In the earliest extant grammar, Petraeus listed the Latin cases for Finnish. Later on, Vhael (1733) introduced a multi-case system appropriate for Finnish. In his grammar of Lapp, written on the basis of Vhael's Finnish grammar, Ganander likewise described thirteen cases, even though Lapp actually only has eight or nine (cf. Kulonen 1999).

In his review of *Demonstratio*, Porthan (1771) urged a uniform description of cases in order for languages to be comparable, taking sides with the multi-case solution:

“Our older grammars stated that Finnish ablative may have a number of suffixes. Vhael, on the other hand, was right in seeing as many cases as he found separate names for. In all probability, the same solution would be advisable in the case of Hungarian, too.”

### 3.2.2. Gyarmathi’s solution and analyses

Sajnovics only briefly mentioned the issue of declension systems, yet he had to contrast a number of various systems of description. Gyarmathi, discussing the issue in *Affinitas* in a lot more detailed and thorough manner, encountered the problems to an increased degree. In the first part of his book, he contrasted Finnish and Lapp (these two were seen as very closely related at the time) with Hungarian. For the purposes of that comparison, he used Vhael’s *Grammatica Fennica* and Ganander’s *Grammatica Lapponica* (the latter closely following the former). Since these two grammars involved a multi-case system, Gyarmathi had to refer to this fact in his comparison of the declension systems:

“These various word endings were taken by earlier Hungarian grammarians, like [Szenczi] Molnár, to be true case endings, assuming a large number of cases after the model of Finns and Lapps; but more recent grammarians called these endings partly adverbial and partly prepositional, while under the rubric of cases proper they only listed four, viz. nominative, genitive, dative, and accusative.”  
(Gyarmathi 1799/1999, 34)

In the section on Estonian, the paradigm presented attributed two endings to the dative, and as many as six different endings to the ablative. With respect to this, Gyarmathi (1799/1999, 128) added:

“Clearly, the various versions of the ablative ending are none other than prepositions or, if you like, *suffixa praepositionalia* attached to the nominative.”

The cooccurrence of descriptions of diverse kinds, the lack of unification, resulted in terminological chaos in comparative works even where the same phenomena were treated under diverse names. But it also happened that a term or categorization was only appropriate for one of the languages, while the corresponding form of the other language belonged to another category but was called by the same name as the category in

the first language. As a consequence, **Hungarian** adverbial (case) endings are referred to by seven (!) different terms in *Affinitas*:

1. the usual Latin case terms: *accusativus*, *genitivus*, *dativus*, *ablativus* (e.g., 1799, 9)
2. case terms following the Latin model: *penetrativus*, *mutativus*, etc. (*idem.*)
3. *suffixa praepositionalia*, prepositional suffixes (e.g., 1799, 128, 139)
4. *terminationes praepositionales*, prepositional endings (e.g., 1799, 11)
5. *praepositiones*, prepositions (e.g., 1799, 128, 145)
6. *postpositiones*, postpositions (e.g., 1799, *Praefatio*: xii)
7. *terminationes, quae casus formant*, endings that form a case (e.g., 1799, 44)

The second problem for comparison was the vagueness of the interpretation of the term *case*. It was unclear whether the comparison should involve forms themselves or the functions/relations expressed by those forms. We have seen earlier that in multi-case languages a key issue of getting rid of the Latin model was whether categorization should be based on forms or syntactic functions. In comparative studies, it arose again if the comparison of declension systems should be based on the form of nominal endings or else on similarities of the functions expressed by them. Of course, difficulties primarily presented themselves with respect to “semantic cases”.

Gyarmathi did not only have to wrestle with the categorization of nominal cases but also with the problem of “form or relation”. In *Affinitas*, this caused him difficulties at a number of points. In the first part, Gyarmathi compared declension in Hungarian and Lapp/Finnish. He presented case endings in a tabular form, and then illustrative sentences were given for each case. It is conspicuous that the Hungarian case markers involved in the tables and in the sentences were not always the same.

The paradigm of one of the Lapp examples in the table (*Kabmak*) can also be found in Ganander's grammar (1743, 23); that of one of the Finnish examples (*Cala*) occurs in Vhael (1733, 7). In both of these places, all endings figure as separate cases, under separate names that refer to the most important function that the given ending can have in a sentence. Gyarmathi took these tables over, and assigned one, or sometimes two, Hungarian endings to each Lapp/Finnish case ending. The tables are followed by Lapp sentences and their Hungarian translations.

These are in turn followed by individual Hungarian sentences written by Gyarmathi himself.

The fundamental reason for the confusion is that, in the Hungarian sentences, Gyarmathi tried to find examples of the **function giving the name** of the case concerned, that is, he listed further Hungarian endings capable of fulfilling the function that the term referred to. This happened, for instance, in the Hungarian examples of *descriptivus/instructivus*. The Hungarian examples of the table are *Makként* ‘as acorn’, *Makkal* ‘with acorn’. The Hungarian sentences that follow the table, however, contain various Hungarian manner-adverbial constructions: *Az Apostolként mondhatom* ‘I can say it as an apostle’. *Véggel áll felém a pufkád* ‘Your gun is pointing at me’. *Melegenn itta az herbatejet* ‘He drank his herb-tea hot’. Here, the same function is served by various forms. Similarly for *mediativus*. In addition to the suffix *-val/-vel* ‘with’ given in the table, the sentences involve another construction (suffix plus postposition), also in a comitative role: *Atyáftol együtt követem* ‘I follow him together with my father’.

In the cases reviewed so far, Gyarmathi started from function. In other cases, conversely, further possible **functions** of the Hungarian **form** given in the table are exemplified by the sentences. For instance, the example of *penetrativus* in the table is *Kabmaki* in Lapp, and *Makknak* ‘to acorn’ in Hungarian. The Hungarian sentences all show various functions of the suffix *-nak/-nek* ‘to’: *A’ hegynek menni* ‘To go towards the hill’. *A falunak menni* ‘To go to the village’. *Tűznek viznek nekimenni* ‘To rush at fire and water’. *Jánosnak keresztelték* ‘He was christened John’. That is, Gyarmathi set out from form rather than function here. This is evidenced by the fact that the equivalent of one of his examples (*Jánosnak keresztelték. Baptisatus est ad nomen Johannis*) occurs in Ganander’s grammar that he used as a model. However, Ganander emphatically categorized this construction, given both in Lapp and in Latin, as an instance of *factivus* (1743, 173).

It has to be admitted that, for the contemporary reader, such terminological inconsistencies presented much less of a problem than we might think from the foregoing. This is for the simple reason that even in works written in one of the vernaculars the terminology was mainly in Latin. That convenient situation made it possible for contemporary reviewers to simply take over the critical terms in their Latinate forms (occasionally adjusting the endings to the given language) without any translation or interpretation. For instance, Gyarmathi’s *praepositio* used

in the sense 'case marker, adverbial ending' occurs in Sylvestre de Sacy's French review (1799) as *préposition*. Similarly, his term *adiectiva privata* occurs in the German text of the Czech Dobrovský (1799) as *adiectiva privata*. What is more, given that the terminology of linguistics in most Indo-European languages is a direct continuation of the Greco-Latin tradition, this possibility survives in the modern translations, too. For instance, Hanzéli (1983) simply turned the endings into their English form, e.g., *affinitas* is *affinity* in his text. This practice has concealed the exact nature of the concepts behind the terms for a long time.

#### 4. The problem of the titles: The terminology of language comparison

The issue of the terminology of linguistic description, therefore, has been given little attention in the literature so far. On the other hand, the terminology of language **comparison**, that is, the exact nature of the connection that the authors assumed among the languages they compared, has always been a prime concern. Symbolically, the debates have centred around the titles.

##### 4.1. *Idem esse*

In the case of Sajnovics it is clear that he was looking for the relatedness or genetic connection of the languages discussed. In the view of the period it was obvious that such relatedness of languages entails the same relation between the peoples speaking those languages. Hell himself, from whom the idea came in the first place, was looking for evidence on the origin of Hungarians to be gained by linguistic research (Éder 1999, 52; Szij 1994). Most contemporary remarks and criticisms were directed at Sajnovics' claim that the two languages were "the same" (*idem*). In Schlözer (1771)'s view, "the IDEM ESSE on the title page is an overstatement; Herr Sainovits is far from proving by his Hungarian–Lapp comparison that we have good reason to speak of identity", by which he primarily meant that he found the number of correspondences between roots—the type of evidence he thought was crucial—unsatisfactory. Schlözer's opinion was echoed by Porthan (1859, 43):

“Sajnovics slightly overstated his case by using the words *idem esse*, rather than *cognatione coniungi* [conjunctive cognateness, family relationship]; it appears that he wished to demonstrate the latter, nothing else.”

Hager (1773), a work that expressly refers to *Demonstratio* in its title, also uses ‘relatedness’ rather than ‘identity’ (Neue Beweise der Verwandtschaft der Ungarn mit den Lappländer). Nevertheless, Sajnovics himself clearly spoke about the **former** (and not present-day) identity of the two languages (1771, 1), thinking that Lapp and Hungarian were two languages/varieties that had divergently developed from the same (parent) language. Hence, a more accurate title would have said *eiusdem originis* ‘of the same origin’. Similarly, talking about Slavs and Hungarians, he pointed out that it was wrong to assume that Slavs and Hungarians were the same (*eandem*)—a claim (even if wrong) that obviously did **not** refer to present identity. In an inlay (1770, 46) containing Hell’s letter on the Chinese origin of both Hungarian and Lapp (and Hungarians and Lapps), the same word recurs:

“If they had been the same people, the language of the Lapps should have been identical (*eandem*) with that of the Chinese. And since it is an established fact that Hungarian and Lapp are identical (*idem*), Hungarian must be the same as Chinese, too.”

Later, Sylvestre de Sacy’s review (1799) of *Affinitas* (perhaps not independently from Sajnovics) also used the expression *l’identité primitive* for the relationship of the two languages. It is to be noted that Sajnovics and others (e.g., Schlözer in his paper mentioned above as well as in his letter to Gyarmathi [= Appendix 3 of *Affinitas*]) used the word *dialectus* indiscriminately, both for related languages and geographical varieties of the same language. Their relationship was referred to by Sajnovics, as was usual in the period, by the words *convenientia* (this one was used the most frequently), *affinitas*, *similitudo*, *congruentia* etc. as stylistic synonyms.

It is true, however, that Sajnovics, in an exaggerated manner, wished to prove the thesis of the former identity of the two languages by a possibly full agreement between contemporary Lapp and contemporary Hungarian. Thus, he thought that the phoneme inventories were quite identical, and he claimed almost total similarity of the word stock (1771, 42); in comparing words, he invariably picked from among the diverse forms found in the various Lapp dialects just the form that was actually the closest to the corresponding Hungarian word, etc.



#### 4.2. *Affinitas*: structural similarity or genetic relationship?<sup>18</sup>

It is less straightforward to tell what it was that Gyarmathi's work explored. According to the earlier consensus, both works discussed genetic relationships of the languages concerned; from the title of Gyarmathi's book, it was only *grammaticae demonstrata* that has (with good reason) been in the centre of attention. However, recent research suggests that it is not by chance that the word *affinitas* figures in the title. Békés (1997, 198–201) draws our attention to the fact that Gyarmathi's work was written in the intellectual orbit of Göttingen University. The scholarly community at Göttingen treated *affinity* as a key concept and technical term (first in chemistry, then also in other disciplines), aiming at a search for structural similarities. In linguistics, this meant exploring structural features shared by certain languages, some of which could well be due to genetic relatedness—but the latter was not the point of the exercise. Therefore, *Affinitas* can be considered an early treatise in linguistic **typology**. Later on, the so-called “Göttingen paradigm” found itself outside the progress of mainstream science/scholarship, yet works that were written in its frame of reference were evaluated **in retrospect** in terms of the new paradigm: in our case, *Affinitas* was read as a book on the genetic relationship of languages.

Thus, we have two questions to answer. (1) Can it be verified from the text that Gyarmathi was looking for structural similarity, and that *affinitas* is a term used in that sense? (2) Is there any trace that it was taken at the time to be a book on **comparing** languages rather than establishing their **relatedness**? (Put more succinctly: What did Gyarmathi **write** and what did his audience **read**?)

As an everyday term, the word meant ‘neighbourhood’ (*ad + finis*), as well as ‘acquired [“in-law”] family relationship’; the word for ‘consanguinity’ was *cognatio*. With respect to languages and linguistic phenomena, in the literature prior to Gyarmathi, the word *affinis/affinitas* simply meant ‘similar(ity)’, without any technical connotation.

What did Gyarmathi himself write about *affinitas*? In the preface he refused to take sides in the question of the origin of the Hungarian people; rather, he said he wanted to find out if there was anything *affine* between Hungarian and languages of Finnic origin. He also thought it was possible that Hungarian was in the relation of *affinity* with oriental

<sup>18</sup> For the details of the relevant argumentation, see Vladár (2001a).

languages. Beyond statements, exploring the use of words in the text, we find that the word most often used for connections between languages (more than twenty times) is *similitudo*; the same applies with respect to similarities of linguistic phenomena. Gyarmathi's text does not contain a single instance of a word unambiguously referring to connection between languages in terms of origin/kinship. From all that, we can conclude that (as opposed to Sajnovics) what Gyarmathi was after was indeed similarity between languages and not family relationships of either languages or peoples.

However, it does not seem to be probable that he used the word *affinitas* as a technical term. First of all: he never defined *affinitas*, and did not say anything about this word playing a special role in any respect. Secondly: in the book of several hundreds of pages, the word *affinitas/affinis* occurs four times altogether (in addition to the title of the whole book and that of the part on Finnish). Twice in the preface, once in the introduction to the second part (1799, 126), and once in the introduction to the first Appendix (1799, 220). That is, the use of the word is restricted to the titles and the various introductions, in the body of text it **never** occurs at all. This duality is thought-provoking: we know the author did not revise the text after having written it, whereas he was very careful about the titles and introductions (for instance, accepting a suggestion by Schlözer, he changed *Lapponicae* to *Fennicae* in the title). The preface in which the word occurs twice was definitely written last thing.<sup>19</sup> The foregoing may support the assumption, bold as it might seem, that *affinitas* was inserted into the title "on second thoughts", and that the introductions where it occurs were also written *post festa*.

Whether or not what Gyarmathi actually wanted to write about was just the similarity, and not the relatedness, of languages, contemporary readers gathered both from his book. Schlözer, a historian, had no doubts that it was a book on the family relationships of languages, consequently on that of peoples. But even linguists thought so. It is instructive to compare contemporary references to *Affinitas* with those (say) to *Demonstratio* (the latter unambiguously dealing with the lineage of languages). We find that contemporary readers made no distinction: they mentioned both works indiscriminately as either the proof of similarity or that of common origin.

<sup>19</sup> The first part was reviewed in GGA as early as in 1798; the second review (1799) discusses the new portions of the book, including the preface (cf. Szij 1999a), see note 14.

In the linguistic thinking of the day, the similarity and common origin of languages quite naturally went hand in hand and mutually entailed one another. That idea is reflected in the titles of various comparative treatises, as well as in their wording in general: the terms they used meant partly 'similarity' and partly 'kinship', with no distinction whatsoever. Sometimes they even explicated this idea. Here is just one of the many relevant examples: Ganander wrote in the preface of his *Grammatica Lapponica* (1743):

"[...] they agree because they come from the same place. I daresay that Finnish and Estonian agree with Lapp and come from Lapp just as much as the latter comes from Hebrew. Why, they resemble each other not only in their grammatical features but also in many of their words."

Similarities between languages as proofs of their being related had two components in the contemporary view: agreement in essential portions of the word stock (in Gyarmathi's words: *voces characteristicae*) and in grammatical constructions. After the initial, word stock based comparisons, in this period it was grammatical features that were taken to be crucial in supporting or disproving relatedness. The dividing line was not so much drawn between genetic and typological but rather between genetic and areal connections. Agreement of structure and word stock was mainly derived from genetic connections, whereas contacts were thought to lead to borrowing of especially learned vocabulary and sporadic, i.e., non-systematic, grammatical similarities. Examples in Gyarmathi's work include the issue of nominal predicate in relation to Hungarian vs. Romanian (1799, 50), or the disappearance of Estonian possessive suffixes due to a Germanic influence (1799, 140).<sup>20</sup>

In summary: as concerns the meaning of Gyarmathi's *affinitas*, the book itself mainly talks about *similitudo* among languages that is referred to as *affinitas* in a couple of places only, whereas the issue of lineage is not mentioned at all. It is therefore possible that, while Sajnovics is to be considered an expert on the family relations of languages, Gyarmathi was a comparative (in the sense of 'typological') linguist. But even if the Göttingen paradigm had some effect on Gyarmathi in this sense, already his contemporary reception was surely outside that paradigm. In the reading of his contemporaries, Gyarmathi proved *cognatio* along with

<sup>20</sup> Gyarmathi even distinguished direct from indirect borrowing on the basis of the ending of the word, cf. his list of Slavic loanwords (1799, 306).

*similitudo*. And the way *Affinitas* entered the history of linguistics was definitely as a proof of the genetic relationship of Finno-Ugric languages.

## **5. The problem of the titles: The structure, argumentation, and methods of the two books**

The two ‘twin works’, as we have seen, were not necessarily written with the same aim. Their differences are even more pronounced in their structure and manner of argumentation.

### **5.1. *Demonstratio*: The argumentation of the natural scientist**

Sajnovics was a natural scientist: a mathematician and astronomer. His book is, accordingly, a scientific dissertation based on strictly logical derivations and argumentative evidence—as is usual in mathematics (the word *demonstratio* in the title is originally a term referring to mathematical proofs). The deductive approach of the work, its structure (hypothesis–demonstration–results–summary), its style of argumentation (syllogism, examples), the use of experimental evidence (cf. what he says concerning the way Lapp pronunciation is established or the treatment of the words in Leem’s dictionary), the fact that the criteria used are clearly defined, as well as the system of notes and references all suggest that Sajnovics tried to tackle this issue of linguistics in terms of the strict methodology of natural sciences. His hypotheses are always general, and he gets to the concrete case by deduction. He is quite explicit about the fact that a full proof can only be deductive, examples in themselves do not prove anything exhaustively. On the other hand, they are capable of disproving a claim; therefore, he often resorts to the method of refuting the opposite of his own claim by way of an example. Thus, the reasoning of the first chapter is this: Hungarian and Lapp are related, although they are mutually unintelligible for their speakers (claim). Mutual unintelligibility excludes genetic relatedness (opposite claim). The chapter then goes on to refute this opposite claim by numerous examples.

## 5.2. *Praelecta Regiae Scientiarum Societati Danicae:* Traces of spoken language in *Demonstratio*

On the other hand, given that the work was originally written to be read out, Sajnovics had to choose a form in which the text is aurally comprehensible, easy to follow, and convincing at the first hearing. Given that as a Jesuit he was also well-versed in rhetoric, Sajnovics chose a genre of classical oration: a plea at a law court. The traditional structure of a speech of that type involves refutation of the charge and evidence supporting that refutation. In this way, he could link strictly logical deduction with an easy-flowing style. The individual chapters follow the classical structure of public speech:

*Exordium* (title page, motto, letters of recommendation): *captatio benevolentiae*, introduction of the author and the purpose

*Narratio* (letters of recommendation): defining the main thesis: Lapp and Hungarian are of the same origin, this can be demonstrated by both lexical and structural correspondences

*Refutatio* (Chapters I–II): disproof of arguments against the relatedness of Lapp and Hungarian

Two languages can be identical even if their speakers do not understand each other (I)

Are Hungarian and Lapp the same? This is impossible to find out from the books of these peoples (II)

*Confirmatio* (Chapters III–XII): presenting the evidence of genetic relationship

Objective evidence:

Identity of sounding/sounds (III–VI)

Identity of the word stock (VIII)

Identity of the grammar (IX–XI)

Non-objective (authoritarian) evidence:

The identity of Hungarian and Lapp is confirmed by claims made by certain famous authors (XII)

*Conclusio* (end of last chapter): *Quod erat demonstrandum*

However, the work is not only important as a piece of scientific argumentation or as a public speech. Hungarian philology owes it a lot, too: It is in *Demonstratio* that the earliest continuous Hungarian text, *Sermo super sepulchrum* (*Halotti Beszéd* [Funeral sermon] without the follow-

ing Prayer) has been first published in print. The publication of that precious document is a fair example of the joint work of the intellectual workshop of the Jesuits: conscious search for early documents (György Pray, the historian); Modern Hungarian translation of the text found, with careful philological work (Ferenc Faludi, the writer), and its publication embedded in the argumentation of a comparative treatise, with etymological commentaries (Sajnovics). The latter can be considered to be the first Hungarian discussion in historical linguistics and its philological apparatus points forward to modern practice in the publication of linguistic remnants: it includes a letter-by-letter transcript, a Modern Hungarian translation, etymologies of doubtful words, and a cultural historical background.

### 5.3. *Nec non vocabularia: The lack of unity in Affinitas*

Gyarmathi's work is much longer and a lot less well-structured than that of his predecessor. It consists of three short parts (two *affinitates* and one *observatio*) and three *appendices*. We know that the parts were written at different times, and their quality and level of elaboration are also dissimilar. The work was not even revised after it had been written: its contradictions, repetitions, and a plethora of misprints both in the examples and in the Latin text all suggest the lack of editing and proofreading. The first part on the *affinity* of Hungarian and Finnish/Lapp was reviewed already in 1797. This part has no title page since there was not enough time to print it again after the title had been changed (*fennicae* rather than *lapponicae*) following Schlözer's advice. (By *linguae fennicae originis*, the author meant what are called Finno-Ugric languages today.)

According to Hanzéli (1983), the work reveals a gradual development of methods. Gyarmathi discussed his material in an increasingly more mature and self-confident manner, embedded in a more and more organized and resolute structure. A notable exception is the first appendix in which, arguing against the similarity of Tartar (Turkish) and Hungarian, he merely adopted a table of Turkish conjugation with Italian glosses, simply translating the original glosses into Hungarian but giving no analysis, and investigated no further morphological or syntactic issues. The second appendix consists of long word lists copied out of Pallas (1786–1789), a list of Slavic words with sketchy remarks appended to them. This clearly shows that Gyarmathi had been collecting material

for a planned (but never finished) etymological dictionary and wanted to save his half-made material as part of *Affinitas* (cf. Szabó T. 1983).

#### 5.4. ... *grammaticae demonstrata*: Gyarmathi's methodological innovations

Despite its lack of editorial work and uneven quality, Gyarmathi's work is superior to that of Sajnovics in several respects as far as its methodology is concerned. Its new features include not only the fact that he covered more languages but also that he extended his comparisons beyond morphology, to the level of syntax (which Sajnovics had ignored altogether) as well as to the textual level. Although the deductive and universalistic approach of the Language Master is sadly lacking in *Affinitas*, the inclusion of syntax is a definite step forward. And while Sajnovics set a good example in the philological elaboration of early documents, Gyarmathi improved on the theory of language change. The facts that languages change and that regular sound changes exist had been obvious (at least in principle) for both of them. However, Gyarmathi went on to declare at a theoretical level (1799, 39, 138) that, since every language changes, every linguistic form can be assumed to have undergone transitional stages between the common original and its present-day form that would be important to explore. That is, he attempted to reconstruct intermediate forms between two attested ones (*paradigma fictum*) in the course of finding the correspondence between words of two languages going back to the same origin but having evolved into two different forms (cf. Gulya 1994; Hanzéli 1983). In the first part (1799, 39), he reconstructed the emergence of the Hungarian copula. Assuming that universal grammar is necessarily regular, he thought that the original paradigm must have been regular, too, and hence he explained the present irregular form as based on a contamination of four original regular paradigms, pointing out that copulas have suppletive stems in other languages as well. However, of the four stems of the Hungarian copula that he discussed, *örökülök* 'I inherit' was apparently included only because it happens to be similar to the Lapp verb *orrob*. The second part (1799, 138) also discusses the development of the copula, but here the assumed paradigm is quite different because at this point he wished to reconstruct the transition between the Hungarian and the Estonian copula: "As I usually do, I present some fictitious conjugations, and the transition from Estonian to Hungarian will be introduced in its natural process as it were, since I attempt at

the same time to explore that, too”. Sometimes he inserted assumed transitional forms between pairs of individual words compared. Despite his correct theoretical stance, his hypothetical forms are often less than members of regular lines of development—rather than representing systematic correspondences, they often merely serve to fill in gaps between two known words. Just like Sajnovics, Gyarmathi often failed to apply the principle of sound correspondences consistently in practice. His work is full of distortions (see section 2.4. above) and old-fashioned errors of etymology, e.g., Estonian *meel* ‘sense, mind’ vs. Hungarian *mell* ‘breast’, Estonian *mees* ‘man, husband’ vs. Hungarian *műves* ‘artisan’, etc.

It is a methodological point of interest that Gyarmathi was the first to apply an asterisk before a word, though not to indicate a reconstructed form as today but to highlight certain members of a word list: German, French, or Latin words borrowed into Hungarian via Slavic (1799, 306). The notion of reconstructed form and the mark \* were linked in linguistics only later on (in Schleicher 1861–1862).

## 6. Conclusion

Works on the historiography of linguistics, even the most recent ones, refer to the work of the two scholars as a “landmark”.<sup>21</sup> It remains an open question what exactly this means. However, if we survey some more detailed evaluations (Lakó 1973, Gulya 1978, 1994), it appears that it is easier to say what this does **not** mean. The two scholars cannot be considered the founders of historical comparative linguistics because their work remained uncontinued for half a century. They cannot be seen as forerunners of that discipline, either, since one important component of the criteria of later research was lacking in their case: the practical application of the principle of regular sound correspondences. Furthermore, they were not the first to apply grammar-based evidence since Wöldike, Wexionius-Gyldenstolpe and others had done that earlier. In that period, researchers were aware of regular sound changes, the importance of dialectal differences, the process of development of languages, the difference between original vocabulary and loanwords, etc. Looking back from today, they did not even demonstrate the relatedness of Finno-Ugric languages in a satisfactory manner: only a minority of the correspondences they assumed between words have stood the test of

<sup>21</sup> E.g., Hovdhaugen et al. (2000, 54).



time, and the correspondences between grammatical elements were not all correctly discovered, either.

The range of Finno-Ugric languages had been by and large made clear by the time, hence they cannot be considered pioneers of Finno-Ugric linguistics, either. Sajnovics's and Gyarmathi's merit was synthesis: they unified pieces of knowledge and methods that had existed separately before, and Gyarmathi extended the study of Finno-Ugric languages to members of that family of languages living wide apart from one another, too.

On the other hand, they declared their principles of research, the criteria of language comparison (core vocabulary, regular sound change, morphological—and, with Gyarmathi, syntactic—correspondences): they made a theoretical point of emphasizing the importance of grammatical evidence or the discriminative role of sounds. However, their most important contribution was their general approach that really anticipated the methods of later linguistics: deduction, logical inference, philological methods with Sajnovics, and reconstruction and the assumption of hypothetical transitional forms with Gyarmathi.

Therefore, Sajnovics' words (1771, 111) are appropriate with respect to both of them: "I cannot arrogate the glory of discovery, but perhaps I deserve credit for demonstration", and in particular for the methodology of demonstration, we might add.

### References

- Békés, Vera 1997. A hiányzó paradigma [The missing paradigm]. *Latin Betűk*, Debrecen.
- Cajanus, Erik 1697. *Linguarum ebraeae et finnicae convenientia*. Abo.
- Dobrovský, Josef 1799. Rezension zum Werk Sámuel Gyarmathis *Affinitas linguae Hungaricae cum linguis fennicae originis grammaticae demonstrata*. Göttingen, 1798. In: *Allgemeine Literatur-Zeitung*, Jena und Leipzig 3: 49–54, 57–9.
- Éder, Zoltán 1975. Újabb szempontok a *Demonstratio* hazai fogadtatásának kérdéséhez [Further aspects of the reception of Sajnovics's *Demonstratio* in Hungary]. In: *Beiträge zum IV. Internationalen Finnougristen-Kongress 2*. Istituto Universitario Orientale, Napoli.
- Éder Zoltán 1995. Gyarmathi Sámuel Nyelvemesterének egyik fő forrása [One of the main sources of Sámuel Gyarmathi's Language Master]. In: *Magyar Nyelv* 91: 52–63.

- Éder, Zoltán 1996. Sajnovics és *Demonstratio*ja új megvilágításban [Sajnovics and his *Demonstratio* in a new light]. In: Rózsa V. Raisz (ed.): Anyanyelv és iskola az ezredfordulón [Mother tongue and school at the turn of millennium], 77–82. Magyar Nyelvtudományi Társaság, Budapest.
- Éder, Zoltán 1999. Túl a Duna-tájon [Beyond the Danube region]. Mundus Magyar Egyetemi Kiadó, Budapest.
- Fischer, Johann Eberhard 1747. *Vocabularium Sibiricum*. See Gulya (1995).
- Ganander, Henricus 1743. *Grammatica Lapponica*. Typis Laurent Salvii, Holmiae.
- Göseken, Heinrich 1660. *Manuductio ad Linguam Oesthonicam*. Anführung zur Östnischen Sprache. Simon, Reval. Nachdruck 1977. Helmut Buske, Hamburg.
- Gulya, János 1978. *Gyarmathi Sámuel*. Akadémiai Kiadó, Budapest.
- Gulya, János 1994. Zur Führgeschichte der vergleichenden Sprachwissenschaft: J. E. Fischer (1747) und S. Gyarmathi (1799). Bopp-Symposium 1992 der Humboldt-Universität zu Berlin. In: Reinhard Stieremann (ed.): *Akten der Konferenz*, 91–104. Universitätsverlag C. Winter, Heidelberg.
- Gulya, János 1995. Fischer, Johann Eberhard 1747. *Vocabularium Sibiricum*. Der etymologisch-vergleichende Anteil. Johann Eberhard Fischer. Bearb. und hrsg. von János Gulya. Peter Lang GmbH. Europäischer Verlag der Wissenschaften Frankfurt am Main. *Opuscula Fenno-ugrica Gottingensia*, Bd. 7.
- Gyarmathi, Sámuel 1794. *Okoskodva tanito magyar nyelvmester* [Hungarian language master, teaching by reasoning]. Első darab. Kolo'sváratt, Nyomattatott Hochmeister Márton, Tsász. K. Könyvnyomtato és priv. Könyváros Betüivel. Második darab. Kolo'sváratt és Szebenben. Hochmeister, Kolozsvár – Szeben.
- Gyarmathi, Sámuel 1796. Latin nyelvű levél a Stockholmi Tudós Társasághoz [A letter in Latin to the Learned Society of Stockholm]. Közli Leffler Béla. In: *Magyar Nyelv* 9. (1913): 37–41.
- Gyarmathi, Sámuel 1799. *Affinitas linguae Hungaricae cum linguis Fennicae Originis grammaticae demonstrata. Nec non Vocabularia dialectorum Tataricum et Slavicarum cum Hungarica comparata*. Gottingae, Typis Joann. Christian. Dieterich. Facsimile edition (1968) with a memorial by Miklós Zsirai. Indiana University Publications, Uralic and Altaic Series, ed. Thomas A. Sebeok. Vol. 95. Mouton, The Hague.
- Gyarmathi, Sámuel 1799/1983. Grammatical proof of the affinity of the Hungarian language with languages of Fennic origin. Translated, annotated and introduced by Victor E. Hanzéli. John Benjamins, Amsterdam/Philadelphia.
- Gyarmathi, Sámuel 1799/1999 A magyar nyelv grammatikailag bizonyított rokonsága a finn eredetű nyelvekkel, továbbá a tatár és a szláv nyelveknek a magyarral összehasonlított szójegyzékei. [Grammatical proof of the affinity of the Hungarian language with languages of a Finnic origin, as well as vocabularies of Tartar and Slavonic languages compared to Hungarian]. Translated from Latin into Hungarian by Zsuzsa Vladár and István Koszorús. Edited by Enikő Szíj. *Bibliotheca Regulana* 3. Tinta Könyvkiadó, Budapest.
- Gyarmathi, Sámuel 1814. *Vocabularium in quo plurima Hungaricis vocibus consona variarum linguarum vocabula collegit S. Gy. Szotar*, mellyben sok magyar szókhöz hasonló hangú idegen nyelvi szokat rendbe szedett Gyarmathi Sámuel. Orvos doctor és a' Göttingai Tudos Tarsasag tagja. Zweck Bertalan betüivel, Bétsben.

- Hadobás, Sándor 1996. Hell Miksa és Sajnovics János bibliográfiája [A bibliography of Miksa Hell and János Sajnovics]. 2nd edition, Rudabánya.
- Hager, Josef 1793. Neue Beweise der Verwandtschaft der Hungarn mit den Lappländer, wider neue Angriffe der Sainovitsischen Abhandlung. In der Edel von Kurtzbe-kischen Buchhandlung, Wien.
- Hanzéli, Victor E. 1983. Gyarmathi and his Affinitas. In: Gyarmathi (1799/1983: xi–xli).
- Helle, Anton Thor 1732 Kurzgefaszte Anweisung zur Esthnischen Sprache. Halle.
- Hovdhaugen, Even – Fred Karlsson – Carol Henriksen – Bengt Sigurd 2000. The history of linguistics in the Nordic countries. Societas Scientiarum Fennicae, Helsinki.
- Hupel, August Wilhelm 1780. Ehstnische Sprachlehre für beide Hauptdialekte. Riga und Leipzig.
- Juslenius, Daniel 1712. Oratio de Convenientia Linguae Fennicae cum Hebraea et Graeca. Turku. Reprinted in Nettelblatt, Christian von 1728. Schwedische Bibliothec, vol. 1. Stockholm. 157–68.
- Koerner, E. F. Konrad – Asher, Ronald E. (eds) 1995. Concise history of the language sciences. Pergamon, Cambridge.
- Korhonen, Mikko 1986. Finno-Ugrian Language Studies in Finland 1828–1918. Societas Scientiarum Fennica, Helsinki.
- Kulonen, Ulla-Maija 1999. Comparative aspects in 18th century Saami studies in Scandinavia. In: Etudes Finno-Ougriennes 31: 49–59.
- Lakó, György 1973. Sajnovics János. Akadémiai Kiadó, Budapest.
- Lancelot, Claude – Antoine Arnauld 1660. Grammaire générale et raisonnée. Pierre Le Petit, Paris.
- Leem, Knud 1748. En Lappisk Grammatica. Trykt af Gottman Friderich Kisel, Kobenhavn.
- Martinius, Matthias 1689. Hodegus Finnicus. Holmiae.
- Öhring, Emanuel Johan 1772. Dissertatio academia de convenientia linguae hungaricae cum lapponica. Johan Edman, Upsala.
- Pallas, Peter Simon (ed.) 1786–1789. Vocabularia totius orbis comparativa Augustissimae cura collecta. CIIð.
- Pereszlenyi, Pál 1682. Grammatica Lingvae Ungaricae. A P. Paulo Pereszlenyi e Societate Jesu. Iuxta hanc methodum concepta ac elaborata. Typis Academicis, Tyrnaviae.
- Petraeus, Aeschillus 1649 Linguae Fennicae brevis institutio, Exhibens vocum flexiones per casus, Gradus & Tempora, nec non partium indeclinabilium, significationem, dictionnumq; constructionem & Profodiam. Ad ufum accommodata. Petrus Wald, Aboae.
- Porthan, Henrik Gabriel 1771/1994. Ismertetés a *Demonstratio* koppenhágai kiadásáról [Review of the Copenhagen edition of Sajnovics's *Demonstratio*]. Translated from Swedish into Hungarian by Kata Kubínyi. In: Sajnovics (1771/1994: 150–7).
- Porthan, Henrik Gabriel 1859. Prooemium. Preface to P. Iuusten's Chronicon Episcoporum Finlandiensium. In: Opera selecta I. 7–99. Finska Litteratur-Sällskapet, Helsingfors.

- Sajnovics János 1770 [1771]. *Demonstratio. Idioma Ungarorum et Lapponum idem esse. Regiae Scientiarum Societati Danicae Praelecta, et Typis Excusa Hafniae Anno MDCCLXX. Recusa Tyrnaviae, Typis Collegii Academici Societatis Jesu.* Facsimile edition (1968) with an introduction by Thomas A. Sebeok. Indiana University Publications, Uralic and Altaic Series, ed. Thomas A. Sebeok. Vol. 91. Mouton, The Hague.
- Sajnovics, János 1771/1972. Beweis, daß die Sprache der Ungarn und Lappen dieselbe ist. (Aus dem Lateinischen übertragen von Monika Ehlers.) Mit Anmerkungen und Nachwort hrsg. von Gyula Décsy und Wolfgang Veenker. Harrassowitz, Wiesbaden.
- Sajnovics, János 1770 [1771]/1994. *Demonstratio.* The Nagyszombat edition translated from Latin into Hungarian by Zsuzsa Vladár. Edited by Enikő Szíj. Bibliotheca Regulana 2. ELTE, Budapest.
- Schleicher, August 1861/62. *Compendium der vergleichenden Grammatik der indogermanischen Sprachen: Kurzer Abriss einer Laut- und Formenlehre der indogermanischen Ursprache.* Weimar.
- Schlözer, August Ludwig 1771. *Allgemeine Nordische Geschichte.* Johann Justinus Gebauer, Halle: 1771.
- Stahl, Heinrich 1637. *Anführung zu der Esthnischen Sprache.* Reubner, Reval. Nachdruck 1976. Helmut Buske, Hamburg.
- Szabó, T. Attila 1983. Gyarmathi Sámuel nyelvtudományi munkássága a tudománytörténet távlatában. Emlékezés halála másfél százados évfordulóján [The linguistic oeuvre of Sámuel Gyarmathi in a historiographic perspective. On the 150th anniversary of his death]. In: B. Gergely Piroska (ed.): *Nyelvészeti Tanulmányok*, 178–202. Kriterion, Bukarest.
- Sylvester, János 1539. *Grammatica Hvngarolatina.* Neanesi. Facsimile edition (1977): ELTE Fontes ad Historiam Linguarum Populorumque Uraliensium 4. ELTE, Budapest.
- Sylvestre de Sacy, A. I. 1799. [Review of Gyarmathi's *Affinitas*]. In: *Magasine encyclopédique ou journal des sciences des lettres et des arts* par A. L. Millin, IV. année, Tome 6: 85–95.
- Szenczi Molnár, Albert 1610. *Novae grammaticae Ungaricae succinta methodo comprehendens, et perspicuis exemplis illustratae Libri duo.* Typis Thomae Villeriani, Hanoviae.
- Szíj, Enikő 1994. A *Demonstratio* és a két tudós jezsuita tudományos tervei [Sajnovics's *Demonstratio* and scholarly plans of the two learned Jesuits]. In: Sajnovics 1771/1994, 138–57).
- Szíj, Enikő 1999a. Válogatott Gyarmathi-bibliográfia [A selected bibliography of Sámuel Gyarmathi]. In: Gyarmathi (1799/1999, 377–85).
- Szíj, Enikő 1999b. A Gyarmathi-kori tudomány nemzetközisége [The international character of scholarship in Gyarmathi's age]. In: Gyarmathi (1799/1999, 363–75).
- Turgot, Anne Robert Jacques 1757. *Etymologie.* (Article extrait de l'Encyclopédie.) In: Daire, Eugene (ed.) 1844: *Œuvres de Turgot.* Vol. 2, 724–52. Guillaumin, Paris.
- Vhael, Bartholdus 1733. *Grammatica Fennica.* Johan Kiämpe, Aboae.

- Vladár, Zsuzsa 2001a. *Affinitas*: szerkezeti hasonlóság vagy genetikai rokonság? [*Affinitas*: Structural similarity or genetic relationship?] In: Magyar Nyelv 97: 184–92.
- Vladár, Zsuzsa 2001b. Questions of case suffix categorisation in Sámuel Gyarmathi's *Affinitas*. In: János Pusztay (ed.): Specimina Sibirica 18. Zur Frage der Terminologiebildung an der Uralischen Sprachen, 69–79. Berzsenyi Dániel Főiskola, Savaria.
- Vladár, Zsuzsa 2005. A latin nyelvű magyar nyelvészeti irodalom terminusai [Terms in the Latin literature on Hungarian linguistics]. Philosophiae Doctores sorozat. Akadémiai Kiadó, Budapest.
- Wexionius-Gyldenstolpe, Michael 1650. Epitome descriptionis Sueciae, Gothiae, Fennigiae et subjectarum provinciarum. Aboae.
- Wichmann, Yrjö 1906. Ein paar Bemerkungen zu Gyarmathi's *Affinitas*. In: Journal de la Société Finno-Ougrienne 23/15, 1–10.
- Zsirai, Miklós 1952. A modern nyelvtudomány magyar úttörői [Pioneers of modern Hungarian linguistics] I. Akadémiai Kiadó, Budapest.