



Constructed Languages: A Chronological Description

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Abstract. This paper is devoted to the problem of the diversity of “artificial” or constructed languages. The aim of the work is to reveal in-depth the diversity of communication systems developed to varying degrees, as well as to find an answer to the question: what prompted people to create new languages? The author analyzes various types of invented languages, from international universal language projects to secret languages of closed communities, as well as fictional languages used in literature and common languages for use among kindred peoples. The material for the study is numerous examples from research linguistics articles and monographs. Instead of a detailed classification, the work uses the chronological order of the appearance of language projects, regardless of the place of their creation or the identity of the inventor. The chronological presentation of the material allows one to see the big picture. Special attention is paid to little-known projects that are not mentioned or poorly described in the literature on interlinguistics. Using the encyclopedic work of Alexander Dulichenko, *International Auxiliary Languages* (1990), as a starting point, the author significantly expanded the scope of constructed languages, not limited only to international projects, and supplemented the proposed list. In addition, this paper analyzes some phenomena that were mistakenly included in the list of constructed languages. The main result of this study is a list consisting of several hundred different communication systems described in the author’s unpublished book and partly presented here. The abundance of examples helps to understand the problem initially posed. The author has identified several motivating factors for the creation of new languages: the desire for communication; facilitating communication between native speakers of different languages; use in literary works; linguistic and philosophical research; communication in closed communities, etc. This work is complemented by examples of numerals from various pasigraphies (universal writing systems).

Keywords: constructed languages, fictional languages, universal writing, universal alphabet, pasigraphy, ideography

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Сконструированные языки: опыт хронологического описания

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Аннотация. Настоящая статья посвящена проблеме разнообразия «искусственных», или сконструированных языков. Целью работы является углубленное раскрытие многообразия разработанных в той или иной степени систем коммуникации, а также поиск ответа на вопрос: что подталкивало людей к созданию новых языков? Автор анализирует различные типы изобретённых языков, от международных универсальных языковых проектов до тайных языков закрытых сообществ, а также вымышленные языки, использованные в художественной литературе, и общие языки для употребления в среде родственных народов. Материалом для исследования служат многочисленные примеры из научных лингвистических статей и монографий. Вместо детальной классификации в работе использован хронологический порядок появления языковых проектов, независимо от места их создания или личности изобретателя. Хронологическая подача материала позволяет увидеть общую картину. Особое внимание уделено малоизвестным проектам, не упомянутым или плохо описанным в интерлингвистической литературе. Используя в качестве отправной точки энциклопедическую работу А. Д. Дуличенко «Международные вспомогательные языки» (1990), автор существенно расширил перечень рассматриваемых искусственных языков, не ограничиваясь только международными проектами, и дополнил предложенный А. Д. Дуличенко список. Кроме того, в настоящей работе анализируются некоторые феномены, ошибочно попавшие в список сконструированных языков. Основным результатом исследования является список, состоящий из нескольких сотен различных систем коммуникации, которые были описаны автором в его неопубликованной книге и частично представлены здесь. Обилие примеров способствует пониманию изначально поставленной проблемы. Автор выделил целый ряд факторов, побуждающих к созданию новых языков: стремление к общению; облегчение коммуникации между носителями разных языков; использование в литературных произведениях; лингвистические и философские исследования; коммуникация в закрытых сообществах и др. Настоящая работа дополняется примерами числительных из различных пазиграфий (систем универсального письма).

Ключевые слова: конструированные языки, вымышленные языки, всеобщее письмо, универсальный алфавит, пазиграфия, идеография

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Introduction

The creation (design) of languages has always been of interest to the scientific world and to ordinary people who have always sought to communicate while looking for new means to improve communication. Philosophically minded individuals offered the humanity a universal language; pragmatists developed intermediary languages (similar to modern assemblers used in computers); romantics invented languages for their “Cities of the Sun” and other utopias; adventurers included exotic languages in stories about imaginary overseas countries; and science fiction writers composed languages for the characters of their literary works.

In the twentieth century, there appeared authors for whom language design became an end in itself: they were more interested in the process of creating a language than in its practical application. Thousands of language projects emerged, created for the sake of pleasure. Designing languages became a common hobby. One of the first creators of such projects was John Ronald Reuel Tolkien (1892–1973). As he wrote, creating languages was his “secret vice”¹. He created two dozen languages. This passion led Tolkien to create an entire world, which he called Middle Earth. Since then, the number of similar projects has been constantly growing, and there are already tens of thousands of them.

In general and comparative linguistics, a significant amount of research has been concentrated on reconstructing ancestor languages, the so-called protolanguages. Recreating, for example, Proto-Indo-European, Proto-Uralic, Proto-Austronesian, and dozens of other protolanguages, in a certain sense, can also be regarded as linguistic design. Other examples of language construction are machine and telegraphic codes. Some of these projects have long been included in the catalogues of international auxiliary languages. The author does not see his task in excluding such projects, or in looking for new works. For example, the inclusion of just one shorthand project in the list would open the doors to the field of shorthand writing with hundreds of stenographic schools with their own methods (i.e. projects). The same would be true of cryptographic projects. Languages from fairy tales and fantasy require special analysis and, with rare exceptions, are not considered in this work.

The book by Alexander Dulichenko, *International Auxiliary Languages* (in Russian) [17], prompted the author to continue his research in the field of interlinguistics. The form of presentation of the material and the chronological sequence in which linguistic projects appear below is modelled on Dulichenko’s work. The purpose of this paper is to supplement Dulichenko’s book with “new” constructed languages, as well as to include other languages that are neither international nor universal.

Material and methodology

The unification of all categories of constructed languages into a single list, made in chronological order, with the inclusion of little-studied and unknown projects, became the topic of a large, as of yet unpublished book by the author. This book with the working title *Pasigraphy over the Centuries: Conceptually Constructed Languages and Word Symbols Supposedly Valid for Everyone* is devoted to the diversity of “artificial” or constructed languages. The purpose of this work is an in-depth review of the variety of communication systems developed to varying degrees.

In present article, the author will briefly present its concept and the main results of his work, including the motivating reasons for language creation. The following section provides examples selected by the author to illustrate each of these reasons.

The idea of constructing an international language that would perform a unifying function has been justified more than once, and many studies have already been done. The novelty of this work lies in the fact that in a single review it attempts to present various created languages, regardless of the purpose of their authors.

¹ Tolkien’s Not-So-Secret Vice, folk.uib.no/hnohf/vice.htm (accessed 24 August 2024).

In this regard, of particular note are the previous studies by Kuznetsov [29] and Rossella [50]. They analyze and classify universal languages in detail, and trace the history of the main interlinguistic concepts. Of interest is also Piperski's book [47], in which he examines international, fantasy and other types of constructed languages, both from a linguistic and from a historical point of view. Piperski, too, wonders about the purposes for which people invent languages.

There have been several attempts in interlinguistics to describe and classify language projects. The author took as a basis one of the most complete encyclopedic works by Alexander Dulichenko: *International Auxiliary Languages* (hereinafter abbreviated as DIAL) [17]. This encyclopedia covers the period from the first mentioned invented language (in this case, the second century AD) to the 1970s. More than 900 projects are presented in DIAL. As the name suggests, mainly international, auxiliary, universal, and common languages have been inventoried, while utopian, fantastic, fake, adventurous, and fictional projects remain uncovered. The author has significantly expanded and supplemented this catalogue, without going far beyond the same time frame.

The author's manuscript book *Pasigraphy over the Centuries: Conceptually Constructed Languages and Word Symbols Supposedly Valid for Everyone* lists attempts to create languages in all their diversity. The unified catalogue of constructed languages includes various types of linguistic projects, from international universal languages to secret languages of closed communities. It also includes fictional languages from literature and mythology.

More than 460 different communication systems described in the encyclopedic style cover the period from the first mention (in our case, between 1200 and 800 BC) to the 1980s. The work is complemented by examples of numerals from one to ten from various pasigraphies and a summary table of constructed languages indicating the authors of the projects.

In the course of the research, the author studied the primary sources of the projects presented in the references. This led to unexpected results. There are many errors, typos, and other blunders in interlinguistics works. The author of this study believes that dozens of projects mentioned in Dulichenko's book got there by mistake, and gives reasons for his opinion about each of such cases.

The monograph pays special attention to little-known projects that are not mentioned or insufficiently described in the literature on interlinguistics. The abundance of examples helps to understand the problem initially posed and substantiates the idea that the desire for communication has been pushing different people to create new languages for centuries.

Scrupulous work has been done to find unexplored constructed languages. Checking primary source books one by one, as well as numerous reviews, journals and articles, the author found a large number of well-known, little-known, and completely unknown languages.

The main part of the book includes only those projects mentioned in DIAL where the author does not agree with Dulichenko's conclusions or where the data (the name of the creator, or the time and place of creation) need clarification. The information collected is a selection of linguistic design material to help future researchers. Therefore, Esperanto, Idiom Neutral, Nepo, Interlingua, Occidental and dozens of other well-known languages are not included. At the end of the work, a summary chronological table of linguistic projects is presented (not included in this paper due to restrictions of space), including the names of the constructed languages, the years of creation, the full names of the authors, and examples of numerals. The table contains all the projects from DIAL, including the numbering adopted there. Dubious projects that mistakenly got into the interlinguistics literature are also listed in the table. Names of dubious languages are given in curly brackets. Substantial work has been done to establish the full names of the authors of the linguistic projects, as well as their dates of life and type of activity.

Attempts to construct languages have brought together well-known scientists, philosophers, and writers. The book contains, among others, the names of Dante, Thomas More, Francis Bacon, Newton, Jonathan Swift, Jean-Jacques Rousseau, Fourier, Proudhon, and Voltaire. The idea of creating a language occupied the minds of Rabelais, Campanella, Cyrano de Bergerac, Blaise Pascal, Herbert Wells, and Gerolamo Cardano. Hundreds of people offered their language projects.

In the list of constructed languages, one can find languages that have long been regarded in linguistic works as natural ones. Among them are Sanskrit and Old Slavonic, modern languages such as Nynorsk, Modern Cornish, the official language of Israel – Hebrew – and the Efate language in the New Hebrides.

The list of language projects includes seemingly incompatible phenomena. On the one hand, there are detailed projects with a developed vocabulary and structure, such as Esperanto, spoken by up to 2 million people (naturally, some of such languages are limited to only a few speakers, and sometimes to just one native speaker). On the other hand, it includes works that deal only with general reflections on what a language would look like if it were created. There is no contradiction in this. Well-known encyclopedic works also include both types of language projects on equal terms.

The authors of some international language projects did not design any vocabulary or language rules at all and did not even propose anything new but simply justified the idea of using existing natural languages as universal ones (such as English, French, or Italian).

There is also a third side to this issue. Unfortunately, works on interlinguistics sometimes mention projects that were mistakenly included in the published lists of constructed languages, and these errors travel from one article to another. The author tried to trace the history of how this happened, using many such examples.

The structure of each entry includes:

1. The year of creation of the linguistic project.
2. The name of the linguistic project {curly braces enclose the names of projects that, in the author's opinion, raise doubts about their attribution to language construction}.
3. The creator of the linguistic project.
4. The country and city (locality).
5. Classification (*a priori*, *a posteriori* or mixed type)².
6. The corresponding number of the linguistic project in DIAL, if any.
7. A tentative description of the linguistic project.
8. A sample text (numbers from one to ten, if available).
9. Bibliographic references.

Examples

To illustrate his ideas, the author has included below several examples from his manuscript book that illustrate the main goals, principles and motivating reasons of language creators. The following selection also includes examples of the author's research on how erroneous (from his point of view) projects found their way into interlinguistics literature.

315 BCE. Διαλέκτους ιδίας. Alexarchus (Ἀλέξαρχος, 350–290 BCE), ancient Macedonian scientist, philologist, philosopher, commander, and ruler; son of Antipater (397–319 BCE) and younger brother of the king of Macedonia, Cassander (Cassander; c. 355–297 BCE). Ancient Greece.

An *a priori* – *a posteriori* language. Not in DIAL.

Ouranoupolis (Greek Οὐρανόπολις 'city of heaven') is an ancient city founded in 315 BCE by philosopher Alexarchus first on the Halkidiki peninsula on the isthmus behind Mount Athos and then transferred to Pamphylia. Heraclides Lembus (second century BCE) writes about him in the thirty-seventh book of the History as follows: "Having founded Ouranopolis, Alexarchus began to instill in it a special speech (διαλέκτους ιδίας)". Alexarchus tried to put into practice the ideals of human brotherhood and universal love, and to eliminate the differences of faith and languages. So, for the inhabitants of the City of Heaven, who called themselves Uranids, he invented a special language, the ideological basis of which was the philosophy of ancient cosmopolitanism and the equality of all people preached by the Stoics.

² *A posteriori* language projects are based on existing languages, while *a priori* ones do not have such a basis, their vocabulary and alphabet being uniquely designed.

The only thing that is known about the structure of this language is that words were built by combining two already known stems taken from oriental languages; the grammatical endings in it were similar to the Greek ones. It is worth noting that, in the formation of new words, Alexarchus acted as the predecessor of the Stoics with their theory of the natural connection between a thing and its name. The text of a letter that Alexarchus sent to the rulers appointed by Cassander has survived, as well as a few words in the Uranic language: 'rooster' ὀρθροβόας *orthroboas* (early-caller or crier, for *alektōr*, *alektryōn* 'rooster, cock'), 'barber' βροτοκέτης *brotokertēs* (man-cutter, for *koureus* 'barber'), drachma ἀργυρίς, ἀργυρίδα *argyris*, *argyrida* (silver-ish: a silver vessel), 'daily ration of a person' ἡμεροτροφίς, ἡμεροτροφίδα *hēmerotrophis*, *hēmerotrophida* (day-feeder, breadwinner, for a dry measure, the choinix, more than a pint and a slave's daily allowance), 'herald' ἀπύτης, ἀπύτην *apytēs*, *apytēn* (caller, roaring-out [of wind], for *kēryx* 'herald' (Attic ἡπύω *ēpuō*, Doric and Arcadian *apuō*, 'I call').

References: [3], [19].

Seventh century. Goídelc. Irish mythology. Ireland. The dating is tentative, connected with the work of Longarad, an Irish grammarian of the seventh century, *Auraicept na n-Éces* (*The Scholars' Primer*).

Old Irish, the ancestor of all modern Goidelic languages: modern Irish, Scottish Gaelic, and Manx. Not in DIAL.

According to tradition, the ancestor of the Irish was the legendary king of Scythia, Fénius Farsaid (Phoeniusa, Phenius, Féinius; Farsa, Farsaidh), one of the leaders who built the Tower of Babel. After the confusion of languages happened, Fénius gathered 72 outstanding scholars to study them. Ten years later, they created a perfect language that took the best features from existing ones. Fénius named the language *Goídelc*, after Goídel mac Ethéoir. He also created several extensions (perhaps registers) of Irish (*bérla* (Old Irish *bélrae*) 'language'):

bérla tóbaide (*téibide*) 'the selected (lit. 'cut out') language, i.e. Irish';

bérla Féne 'the language of Irish law', after himself;

bérla na filed 'the language of the poets';

bérla etarscarta 'the language of separation' (i.e. Isidorean etymological analysis);

bérla fortchide na filed 'obscure language of the poets';

íarmbérla 'cryptic language', after Íar mac Nema.

Irish mythology claims that Fénius discovered four alphabets: Hebrew, Greek, Latin, and Ogham. He used *Beith-Luis-Nin* (Ogham) as a perfected writing system for his language (the word *ogham* refers only to the form of letters or script, *og-úaim* 'dot seam', denoting a seam made with a sharp instrument, while *beith-luis-nin* is named after the first letters of the alphabet).

The numbers one to ten are: *oen*, *da*, *tri*, *ceithri*, *coic*, *se*, *secht*, *ocht*, *nai*, *deich*.

Reference: [10].

1516. Utopian language. Thomas More (1478–1535), a humanist, professor, writer, lawyer, diplomat, and politician. London, England. Peter Giles (1486–1533), a humanist, printer, and secretary of the city of Antwerp. Antwerp, Duchy of Brabant.

A fictional language of either *a posteriori* or *a posteriori* – *a priori* type. Not in DIAL.

Thomas More (1478–1535) is considered the founder of modern utopian socialism. More invented a prosperity country and called it Utopia, which means both 'best place' and 'absent place'. The handwritten original of Utopia has not survived. In the new ideal society, Thomas More envisioned a new language, unlike any other. The Utopian language had an original 22-letter alphabet in which the letters are in the form of a circle, a square, and a triangle. The appendix to the book, written by More's friend Peter Giles, contains a short sample of the text, a quatrain in the Utopian language with a Latin translation. The book was written with a claim to authenticity; therefore, the author of the language is not indicated. So, both Thomas More and Peter Giles can equally be considered its creators. Most sources indicate that the language was created under the influence of Latin, Greek, and Hebrew, but Persian also played an equally important role. For example, "Narzan", a proper name meaning 'high', occurs twice and can be explained

only as a word of Iranian origin. The vocabulary of the Utopian language includes no more than a couple dozen words. As for the numerals, only “one” is represented, *bargol* (which is quite comparable, for example, with *bāragī*, which means ‘once’ in the Pashto language, or *bargat*, ‘good luck’ in Garhwali, used instead of “one” when counting).

References: [37], [59].

1623. Sensualische Sprache. Jakob Böhme (1575–1624), Christian mystic, theosophist, and founder of Western sophiology (the doctrine of the “wisdom of God”). Gorlitz, Saxony, Germany.

A linguistic project of a philosophical type. Not in DIAL.

Boehme experienced visions twice, in 1600 and 1610. This became for him a supernatural Divine revelation, which, he believed, brought him the ability to communicate directly with the Holy Spirit. There was no expressive language for the visions that were revealed to Jacob, and he had to invent it himself. Balthasar Walther (1558 – c. 1631), a Rosicrucian and practicing alchemist, gave Boehme the foundations of alchemy and Kabbalah, and helped him create his own language, skillfully using alchemical terms and symbols. Boehme’s sensual speech was both “natural” and “substantial”.

References: [6], [7].

1644. Chirolugia. John Bulwer (1606–1656), physician and early Baconian naturalist. London, England.

A sign language system. Not in DIAL.

Bulwer wrote five works exploring the body and human communication through gestures. Chirolugia, or the natural language of the hand, consists of “speaking” movements and gestures and focuses on body language. The section titled “Chironomy” discusses the use of gestures in rhetoric. Bulwer also explores lip reading for the deaf and dumb. The work clearly shows interest in developing an academy for the education of the deaf. In addition, the treatise *Philocophus* (1648) mentions a system called by Bulwer “Arthrologie”, in which the letters of the alphabet corresponded to the joints of the fingers (for communication, the right joints were indicated in the right order).

References: [8]³.

1657. Lingua Atlantica (Lengua Atlántica). Juan Caramuel y Lobkowitz (1606–1682), theologian, mathematician, and music theorist. Milan, Duchy of Milan.

A project of a universal language of the mixed type, based on Latin. Not in DIAL.

Caramuel admitted that he used this language to exchange secrets with some friends even before he turned twenty.

In lexical terms, the Lengua Atlántica does not differ from Latin. The change of grammatical categories is achieved by numerical morphemes, which makes Latin words unpronounceable or difficult to pronounce. The fact is that Caramuel applies to the Lengua Atlántica a system of graphical representation of numbers by analogy with Greek and Hebrew numbering. Thus, the first nine letters denote units, the next nine, tens, and the rest, numbers that are multiples of 10, starting with 100. Their possible combinations allow one to express all numbers to infinity.

The numbers one to ten are: *a, b, c, d, e, f, g, h, i, j*.

Reference: [34].

1704. Formosan. George Psalmanazar, or Psalmanaazaar (c. 1679–1763), is the pseudonym of an adventurer posing as a native of Formosa. The real name and origin are unknown. France.

A fictional language of the *a priori* type. Not in DIAL.

The Formosan language was invented by Psalmanazar and is described in chapters 18 and 28 of his book. The language has its own alphabet of 20 letters.

3 Ulfvíðardóttir, Á. Some 16- and 17th-century manual alphabets, compared with the modern BANZSL and ASL alphabets, medieval-baltic.us/fingerspelling.pdf (accessed 24 August 2024).

Surprisingly, until the end of the eighteenth century, the vocabulary of this fictional language was repeatedly cited in literature as an example of the living language of the islanders of Taiwan.

The numbers one to ten are: *tauf, bogio, charhe, kiorh, nokin, dekie, meni, thenio, sonio, kon*.

References: [12], [28], [49].

1711. Little language & A Proposal for Correcting, Improving and Ascertaining the English Tongue.

Jonathan Swift (1667–1745), an Anglo-Irish satirist, publicist, philosopher, poet, public figure, and clergyman. Dublin, Ireland.

In DIAL, number 43 is Dr. Swift's "project of a revised, improved and refined language" called the "Little language".

In fact, these are two different projects.

The "Little language" (although Jonathan Swift used the term "Our language"), i.e. "baby talk", is found in *The Journal to Stella*, AD 1710–1713, a collection of letters, first published in 1766, after the death of the writer. This project is represented by separate phrases scattered throughout the text of Swift's correspondence with Esther Johnson (Stella, 1681–1728). Some of these phrases are a comic distortion of the English language. For example: *Dood mollow* = Good morrow ('Good morning'). In other cases, it is a simple encryption of the English language: *al bsadnuk lboinlpl dfaonr ufainfbtoy dpionufnad* ('a bank bill for fifty pound').

The second project, *A Proposal for Correcting, Improving and Ascertaining the English Tongue*, is a reform of the English language. In 1711, Jonathan Swift outlined his proposals in a public letter to Robert Harley (1661–1724), a government leader appointed as an expert on the use of the English language.

References: [17], [51], [54].

1760. Lengua General. Fray Martín Sarmiento (born Pedro José García Balboa, 1695–1772), a Benedictine monk. Monastery of San Martín, Madrid, Spain.

An *a priori* logical project, pasigraphy based on the classification of things according to the decimal system, similar to the Polygraphia (1663, number 26 in DIAL) by Athanasius Kircher (1602–1680). Not in DIAL.

Martín Sarmiento's goal was to create a common, rather than a universal, language, limited to the field of terminology of natural sciences.

It is interesting to note how Sarmiento solved the problem of translating a written language into a spoken one. For this purpose, he used the idea of Francis Masclef, canon of Amiens, who invented a new method of reading biblical texts written in Hebrew, consisting exclusively of consonant characters. Thus, Sarmiento introduced additional five vowel sounds in the following order: *a, e, i, o, u*. In the same order, these vowels were inserted after the consonants of which the words of pasigraphy consisted. For example, "dolphin" corresponds to the number 2347, which is converted into four consonants: *G.D.P.L*. To pronounce the word, we insert four corresponding vowels and get *Ga-De-Pi-Lo*.

The numbers one to ten are: *B, G, D, P, K, T, L, M, N, S*.

References: [11], [33], [52].

Nineteenth century. Pantang Kapur (camphor language). Aborigines of the Malacca Peninsula. Johor (Johore), Malaysia. The dating is tentative, associated with the earliest mention of the "camphor" language made by James Richardson Logan, 1847.

An *a posteriori* project of a ritual language. Not in DIAL.

The phenomenon of the camphor language is the superstition associated with the collection of camphor by the Jakun natives. The vocabulary is built on that of Malay and Jakun (Djakun). The name "Pantang Kapoor" means 'taboo' (*pantang*) on the use of common Malay when searching for 'camphor' (*ka-poor*). During the season, this secret language was to be spoken not only by the collectors of camphor, but also by the natives who remained at home.

The numbers one to ten are: 1 *s'mambong*, 2 *dua mambong*, 3 –, 4 –, 5 –, 6 –, 7 –, 8 *lepen*, 9 *s'mêl*, 10 *s'pol*.

According to the Italian naturalist and traveler Beccari (Odoardo Beccari, 1843–1920), “many superstitions also prevail among the Kayans in Borneo when collecting camphor”, which implies the presence of a secret language. Details remain to be seen.

References: [30], [32], [35].

Nineteenth century. Une idée. F.D. France.

A project of a universal musical language. Not in DIAL.

An anonymous reader of *Pasilogie* of Anne-Pierre-Jacques de Vismes du Valgay, 1745–1819, number 92 in DIAL, with the initials F.D., presented a description of his pasigraphy project on the flyleaf (i.e., the flyleaf at the end of the book).

The author of the pasigraphy assumed that a string was stretched between two points located at a distance of one meter from each other. If one divides this space into 10 parts, like the neck of a guitar, and makes the string vibrate, one can get 10 sounds corresponding to 10 musical notes. They can be assigned immutable values corresponding to 10 vowels and diphthongs. Sixteen consonants will be used to change the above sounds. At the same time, each sound expresses a separate idea, and each articulation changes the expressed idea.

The numbers one to ten are: *un, in, i, eu, u, on, o, an, a, ou*.

Reference: [18].

1817. *.** Mary Baker Willcocks (1791–1864), an adventurer posing as a princess from exotic lands. Bristol, Avon, South West England.

An *a posteriori* project. Not in DIAL.

On April 3, 1817, Mary Baker Willcox appeared in Almonsbury (Gloucestershire, England). The adventurer pretended to be the princess of Caraboo, an island located not far from Japan, spoke in an incomprehensible language, and wrote in unknown characters from left to right. It was the language of her own composition, a mixture of Gypsy and invented words. For 10 weeks she managed to lead the whole aristocratic society of England up the garden path. Later she visited America, France, and Spain, where she again tried to continue playing her role but without any success. Mary Baker, thanks to her first biographer Matthew Gutch (John Mathew Gutch, 1776–1861), received the nickname “Psalmanaazaar in a Skirt” (see Formosan, by George Psalmanazar).

The numbers one to ten are: *eze, duce, trua, tan, zennee, sendee, tam, nunta, berteen, tashman*.

Reference: [58].

1859. Gavlensographie / Gavlensofonie. Maximilian Heinrich von Gablenz (1801/1804–1876). Dresden, Germany.

A universal alphabet. Not in DIAL, but this system is mentioned in the description of Mundografie in 1864 under number 157. It seems that this alphabet was removed from the list of linguistic projects or, more precisely, replaced by the Mundografie project.

Gablenz describes in detail the use of the new alphabet in the German language. It would be more correct to return Gavlensographie to the list that contains similar reforms, such as: Ilyin's project of a universal alphabet (Nikolai Sazontovich Ilyin, 1809–1890, number 122); Schmitt's pasigraphy (Anton Schmitt, number 161), which turned out to be a discussion of the form of letters in the Latin alphabet; the Common Language by Bernard Shaw (Bernard Shaw, 1856–1950, number 649), which is nothing more than a phonetic reform of the English spelling; a rational alphabet of an anonymous author (number 807.27); and an unnamed project by François Drojat (1795–18xx, number 830.53).

In DIAL, for the year 1875, an unnamed project of a certain Glaberg with reference to Petro Evstaf'evič Stojan (1884–1961) is listed under the number 837.57. Glaberg is repeatedly mentioned in the works of the late nineteenth century. Tellingly, this name always occurs in the same context, namely:

“...A. Renzi, Sunderwall, Anonymous (= Charles Stewart), Agnus, Système du Baron de Glaberg... Sini-baldo de Mas...”. If we trace where and when the list of pasigraphies appeared in the same order, we find a lecture *Zur Geschichte der weltsprachlichen Versuche von Leibnitz bis auf die Gegenwart* (“On the history of attempts at a world language from Leibniz to the present day”), given at the Nuremberg Teachers’ Club on November 11, 1874. The list of pasigraphies presented there seems to be the very source from which the confusion began. The fact is that instead of Baron Glaberg, Baron von Gablenz is listed there. With high probability, Glaberg is an error that occurred when reprinting an article written in the Gothic font in German when translating it into French. Most likely, we are talking about Gablenz’s project number 157.

References: [17], [20], [61].

1864. {Clave Harmónica}. Miguel Angel Mossi (1819–1895), an Italian priest.

The *Universal* project dated 1926 is included in DIAL under the number 892.112 among the linguistic projects with missing information. Below, an attempt is made to clear up the confusion.

First, the date. In 1916, the drama *Ollantay* was published, written in the Quechua language. It was accompanied by a Hebrew-Quechua-Castilian dictionary compiled by Mossi in 1860. Later, this dictionary was published separately in 1926 under the title *Diccionario analítico-sintético-universal* [*Universal synthetic-Analytical Dictionary*]. This is how this strange dating and glottonym *Universal* appeared.

Second, was there actually a language project? There is no mention of a “universal language” in the said “dictionary.” Mossi tried to prove the Hebrew origin of Quechua. To this end, he compiled a Hebrew-Quechua dictionary of 525 Hebrew roots corresponding to Quechua roots in order to arrive at the “true Quechua alphabet”.

However, Mossi did work on the topic of a “universal language”. This work is the *Clave Harmónica* (*Harmonic Key*), 1864. In it, Mossi considered the history of the creation of international auxiliary languages and came to the conclusion that a universal language cannot be created by man. At the same time, he promoted the project *Lengua Universal y Filosófica* (number 136 in DIAL) by Bonifacio Sotos Ochando (1785–1869).

Comparing two dozen natural languages such as Indo-European, Semitic, and South American ones, as well as Chinese, Mossi concluded that Hebrew is the true universal mother language (*verdadera lengua madre universal*).

Thus, the project considered here is not related to linguistic design, but rather refers to the field of language origins.

References: [13], [17], [39], [40], [41], [42], [43], [44].

1869. Pasigraphie (*Langue Universelle*). Willhelm-Léo Taillian. Marseille, France.

An *a priori* project, pasigraphy. Not in DIAL.

Taillian combined shorthand, mnemonics, and pasigraphy in one work, assuring that these three sciences can be comprehended in 24 hours. “Shorthand and mnemonics combined can be seen as a prelude to pasigraphy, or a universal language expressing not only sounds, but also ideas... that will be understandable to all people, regardless of what language they speak or write”.

The numbers zero to nine are: *se, te, ne, me, re, le, je, ke, fe, pe*. Ten consonants, from zero to nine, correspond to a mnemonic phrase: *si tu n'ai mes rien loue gens qui font bien* (“if you have nothing, praise people who do well”).

Reference: [55].

1879. Modern Hebrew. Eliezer Ben-Yehuda (born Eliezer Yitzhak Perlman, 1858–1922), the “father” of modern Hebrew and founder of the Hebrew language movement. Jerusalem, Palestine.

An *a posteriori* project. Not in DIAL.

Hebrew separated from the related Semitic dialects more than three thousand years ago, but modern Hebrew, which is spoken in Israel today, is only one and a half hundred years old. Hebrew ceased to be a spoken language at the end of the second century CE. It was supplanted by Greek and Aramaic, the latter

being close to Hebrew. However, for the Jews, it remained the sacred language: *leshon ha-kodesh*. The “new ancient language” was revived thanks to the enthusiasm and efforts of Eliezer Ben-Yehuda. In 1879, his article entitled *Sh’elāh Lohātāh* (הַטְהוּל-הַלְאִי ‘The burning question’) appeared in the Hebrew magazine *Ha-Shaḥar* (*The Dawn*) in Vienna. First of all, Ben-Yehuda and his associates had to make a choice between two varieties of Hebrew – Ashkenazi and Sephardic – which differ significantly in pronunciation. Although Ashkenazi Hebrew was familiar to the reformers themselves, they opted for the Sephardic version, as it was closer to the language of biblical times. The next and most important step was to determine by what principle new words would be created. Initially, Ben-Yehuda intended simply to construct new roots from the still unused combinations of sounds and also to replenish the Hebrew vocabulary at the expense of the Arabic loan words. However, both proposals were rejected, and Ben-Yehuda found the only methodologically correct solution: the ancient language itself should become the source of word creation. The replenishment of Hebrew with new words now goes in several ways. First, new meaning is given to existing words. Secondly, from existing words, according to the laws of Hebrew grammar, new ones are formed. A characteristic feature of Hebrew – the expression of concepts using a close combination of two words – was also widely used. In medieval Hebrew, there appeared words that were constructed from the initial letters of several words at once. This principle also helped create new words. Some of the vocabulary was borrowed from the Aramaic language.

References: [4], [21]⁴.

Twentieth century. Lisepsep (Lisefsef). The aborigines of the New Hebrides, now renamed Vanuatu. The dating is tentative, based on Crowley’s research (Terence Michael Crowley, 1953–2005).

An *a posteriori* project of the language of invisible entities living in the bush of the islands of Ambrym, Espiritu Santo, and Paama according to the beliefs of the islanders. Not in DIAL.

Lisepsep is one of the few characters in the mythology of Melanesia endowed with their own language with documented vocabulary. The best known Lisepsep phrases in the Daakaka region are magic spells to control the forces of nature. One of the features of the Lisepsep speech is that the markers of time, aspect and modality are not used.

Compare the numbers one to ten:

Lisepsep: *tāga* (*taagaa*), *luāga* (*luaagaa*), *teluga* (*telugaa*), *hatuga* (*hatugaa*), *limaga* (*limagaa*), *kuana* (*kuanaa*), *tīti* (*tiitii*), *vālo* (*vaaloo*), *tēga* (*teegaa*), *luri* (*lurii*);

the archaic language of the Ambrym Spirit (Tamar): *sɔŋae*, *naloe*, *natolu*, *tɔlunɛmba*, *nImbanɛɛɛ*, *naorɛɛɛ*, *naorbIsi*, *bIsInɛɛɛ*, *tanɛɛɛ*, *tanɔɔlo*.

References: [9], [14], [46], [48].

1908. Eskayan. Mariano Datahan (1875–1949), a Messianic rebel soldier and veteran of the Republican army. Bohol, Philippines.

An *a posteriori* or *a posteriori* – *a priori* language. Not in DIAL.

An artificial auxiliary language of the Eskay people in Bohol, an island province of the Philippines. According to a legend, the Eskay language and syllabic writing were the creations of Pinay (the heroic ancestor of the Eskay people). It was “discovered” by Mariano Datahan at the beginning of the twentieth century. It was not until 1980 that the Eskaya were “found” by agricultural advisers in the isolated village of Taitai.

Currently, there are approximately 3,000 known people using the Eskay language and writing system. They live in the villages of Kadapapan, Biabas, Taitai, Lundag, and Kanta-ub in the southeast of Bohol. Lexicostatistical analysis indicates that the time of the origin of the language is not earlier than the nineteenth century. Grammatically, it is Boholano, the Bohol language with substituted vocabulary. The basic “alphabet” of 46 characters makes up most of the common sounds and syllables used in Eskayan. More than 1,000 symbols are used to represent the rest of the syllables.

⁴ Felman, D. Eliezer Ben-Yehuda: vozrozhdenie ivrita [Eliezer Ben-Yehuda: The revival of Hebrew], alefbeys.mybb.ru/viewtopic.php?id=15 (accessed 24 August 2024).

The numbers one to ten are: *oy, tre, coy, pan, sing, nom, pen, wal, sim, pon*.

References: [26], [27]⁵.

1914. Rolfs Sprache. Paula Moekel (born von Moers, c. 1870–1915), an animal protector and hoax writer. Mannheim, Germany.

A fictional language attributed to a dog (Rolf Airedale) with a “human mind”. Not in DIAL.

A curious incident took place at the beginning of 1914, when the entire German press was clamoring about the dog’s amazing abilities. Rolf, no more, no less, communicated with his mistress using the original sound-shock alphabet (similar to Morse code). In studying this phenomenon, doctors Wilhelm Neumann and Ferdinand Lothar concluded that Rolf was simply responding to the hostess’s unconscious signals.

References: [36], [60]⁶.

1931. Medefaidrin (Medefidrin). Oḃeri Ȭkaimḡ script. Michael Ukpong and Akpan Akpan Udofia, two leaders of a sect of believers in the spirits of good and evil, founded around 1928. Ikpa village near Iere, Itu District, Calabar Province, Nigeria.

An *a priori* project, served as the language of the cult for the members of the sect. Not in DIAL.

In its structure, the language largely resembles English, although the semantics are closer to the Ibibio-Efik language. Sectarians believed that the name of the language was given by the Seminant, or “holy spirit” of the sect. In 1936, the followers of the sect founded a school where they taught a new language and a new script. The language had an original 32-letter alphabet and even special sounds that were not peculiar to Ibibio. The vigesimal number system is used.

The numbers one to ten are: *airi, greid, se:ta:, aidu, dzito, tarisi, fuda, eitia, pikn, pa:ri:d*.

References: [1], [15], [56].

1937. Falso Persiano. Tommaso Landolfi (1908–1979), a writer and translator. Rome, Italy.

An imaginary language of the *a priori* type in the story *Dialogo dei Massimi Sistemi*. Not in DIAL.

One of the characters, a poet named Y, wrote three songs in “Persian”, taught to him by a certain captain. Later, the poet learned that it was a nonexistent language, completely invented by the captain.

Perhaps this idea served as a prototype for the story by Wolfgang Kohlhaase (born in 1931) and the script of the movie *Persian Lessons* of 2020 directed by Vadim Perelman (born in 1963).

References: [16], [31]⁷.

1942. Navajo Code Talkers. Philip Johnston (1892–1978), a World War I veteran and engineer. Los Angeles, California, USA.

A cryptography project. Not in DIAL.

Johnston believed that the Navajo language could be used to convey military messages, since it contains sounds that have no analogues in European languages and is difficult to learn. Johnston presented this idea to the United States Marine Corps (USMC). Navajo ciphers (*Diné bizaad yee nidaazbaa’ígíí*) transmitted reports by radio and telephone in their own language from 1942 to 1945. Despite the fact that the Japanese were well versed in cryptography, they failed to unravel the Navajo cipher.

The idea of using Indian languages to send encrypted military messages was first tried out during the World War I. There are 18 known tribes that supplied signalmen-encryptors for the US Army, for example, Cherokee (September 1918), Choctaw (September – November 1918), Hopi (1943), Mesquaki (or Fox, Meskwaki, January 1941), and Comanche (June 1944). Among others are Cree, Creek (or Muscogee,

⁵ Galambao, M. Eskaya language, web.archive.org/web/20090918002819/http://www.ling.hawaii.edu/~uhdoc/eskaya/Eskaya.html (accessed 24 August 2023).

⁶ Ráth-Végh, I. Komediia Knigi: 11. Memuary sobaki [Comedy of the Book: 11. Memoirs of a dog], lingua.russianplanet.ru/library/rat-veg/11.htm (accessed 24 August 2024).

⁷ Albani, P., & Buonarroti, B. Aga magéra difúra. Dizionario delle lingue immaginarie, paoloalbani.it/Aga.html (accessed 24 August 2024).

Muskogee), Crow, Kiowa, Menominee, Mississauga, Navajo, Ojibwe (Chippewa, Ojibwa, Ojibway), Oneida, Pawnee, Sac, Seminole, and Sioux (Lakota). Basques were used in a similar manner by the US Army (Basque, May – August 1942). Additional research is required for each of these codes.

The numbers one to ten used by Navajo Code Talkers are: *ak'ah tsah ajaa'* ('oil-needle-ear'), *dééh dlq'ii ak'ah* ('tea-weasel-oil'), *dééh tsii' gah ajaa' dzééh* ('tea-hair-rabbit-ear-elk'), *ch'ö ak'ah shidá gah* ('fir-oil-uncle-rabbit'), *ch'ö tin ak'ehdidliní ajaa'* ('fir-ice-victory-ear'), *dibé tin alna'asdzoh* ('sheep-ice-cross'), *dibé ajaa' ak'ehdidliní dzééh tsah* ('sheep-ear-victory-elk-needle'), *ajaa' tin at'ééd tsii' dééh* ('ear-ice-girl-hair-tea'), *tsah tin ách'ííh ajaa'* ('needle-ice-nose-ear'), *dééh ajaa' tsah* ('tea-ear-needle').

References: [24]⁸.

1952. Astraglossa. Lancelot Thomas Hogben (1895–1975), a scientist, biologist, and creator of the artificial language of Interglossa (number 600 in DIAL). Birmingham, England.

A scheme of radioglyphs for interstellar communication. Not in DIAL.

Hogben spoke about the project in a 1952 lecture to the British Interplanetary Society entitled "Astraglossa, or first step in celestial syntax".

He proposed to represent numbers in the form of ordinary impulses and mathematical concepts with the help of distinctive signals: radio glyphs.

This is what a two-dimensional triangular number series looks like: 1, 1.1, 1.1.1, 1.1.1.1, 1.1.1.1.1, etc.

Hogben's radioglyph scheme was improved by MIT professor Philip Morrison (1915–2005) in 1962. In Morrison's version, numbers are represented by rectangular pulses, and mathematical operations are represented by other pulses.

References: [23], [38].

1954. 999 (i.e. Novecento novantanove) Cod. Carlo Allioni & Ernesto Boella (Dulichenko's Boellu is a misspelling). Turin, Italy.

A code for friendly international correspondence. Digital pasigraphy is indicated in DIAL under the number 901.121. In the same edition, Dulichenko mentions the linguistic project Arioni-Boera, number 854.74, referring to Fuishiki Okamoto (Rikichi, or Fuishiki, Okamoto, 1885–1963).

Perhaps we are dealing with the same project. Indeed, in the introduction to his book, Okamoto lists several works that influenced the Babm⁹ language, including Arioni-Boera. Taking into account that Okamoto's native language is Japanese, it can be assumed that the Japanese spelling was the source of the confusion. The thing is that there is no "l" sound in the Japanese language. Instead, they pronounce "r" (voiced alveolar flap [ɾ]). The surnames Allioni and Boella could easily have been transformed into Arioni-Boera in some Japanese source.

In order to distinguish cardinal numerals from other numbers corresponding to code words, they are written in parentheses: (1), (2), (3), etc.

References: [2], [17], [45], [53].

1965. Ptydepe & Chorukor. Václav Havel (1936–2011), a writer, playwright, human rights activist and statesman, the last president of Czechoslovakia (1989–1992), and the first president of the Czech Republic (1993–2003). Prague, Czechoslovakia.

Two projects of the *a priori* type. Not in DIAL.

Attempts to demonstrate internal linguistic patterns by bringing them to the point of absurdity have been met more than once before. Václav Havel for his satirical play *Memorandum* (*Vyrozumění*, 1965) ridiculing bureaucracy created the languages Chorukor and Ptydepe. They demonstrate opposite principles of construction: in Chorukor all words are as similar to each other as possible, whereas in Ptydepe

⁸ MacDonald, P. Real code talker interview, navajocodetalkers.org/peter-macdonald-real-code-talker-interview/ (accessed 24 August 2024).

⁹ Babm is pronounced [bo' a: bəm].

no words are alike. As a result, it is impossible to use either of the languages. Thus, this experiment of the Czech writer demonstrates the need for a harmonious balance between insufficiency and redundancy of means to achieve an end (which are automatically achieved in natural languages).

The names of the seven days of the week from Sunday to Saturday in Chorukor are: *ilopagor, ilopagar, ilopager, ilopagur, ilopagir, ilopageur, ilopagoor*.

References: [22], [25].

1971. Yerkish. Ernst von Glasersfeld (1917–2010), a philosopher and professor emeritus of psychology. Yerkes Regional Primate Research Center. Atlanta, Georgia, USA.

An artificial language developed for chimpanzees and gorillas. Not in DIAL.

Glasersfeld named the language after Robert Mearns Yerkes (1876–1956), the founder of the laboratory. Glasersfeld used symbols, which he called “lexigrams”, and developed a grammar regulating their combination. The first monkey trained to communicate in Yerkish was the chimpanzee Lana.

Reference: [5].

1972. Makaton. Margaret Walker (born in 1938), a speech therapist. London, Great Britain.

A language program that combines spoken speech, gestures, and symbols to help people with learning disabilities or developmental disorders to communicate. Not in DIAL.

The name “Makaton” comes from the first letters of the names of three therapists who helped develop the program in the 1970s: **M**argaret Walker, **K**atherine Johnston, and **T**ony Cornforth. Walker created the Makaton Core Vocabulary, which contains 350 concepts needed to express daily needs. The signs were taken from the British Sign Language. The program has been adapted for use in more than 40 countries around the world.

References: [57].

Conclusions

In conclusion, it should be noted that the author did his best to cope with the maximum coverage and detail of the material. An overview of various types of constructed languages, including complex and carefully designed ones, has been undertaken. As a result, the list of constructed languages has been significantly expanded. In addition, dozens of instances of erroneous and unverified data were found, analyzed and corrected in the course of the work, which, hopefully, will contribute to the restoration of historical justice and accuracy. However, a number of projects mentioned in linguistics literature have not been considered due to the unavailability of information sources. The classification of individual projects, too, needs further clarification. For subsequent researchers, it can be recommended that more attention be paid to the detailed classification of the languages identified.

One of the novel contributions of this study is identifying the main motivating reasons for the creation of new language projects. Based on the examples, the following motivations were revealed:

1. The desire for communication.
2. Facilitating communication between native speakers of different languages.
3. Use in literary works.
4. Linguistic and philosophical research.
5. Communication in closed communities.
6. An ideal language for an ideal society of the future.
7. Communication with God and other higher powers.
8. Communication with an alien mind.
9. Communication with animals.
10. Education for the deaf and dumb, and people with other disabilities.
11. Adventurism or profit-taking.

12. Secret communication and secret writing.
13. The revival of dead languages.
14. Reforming natural languages.

Thus, the collected material may allow further researchers to see more fully the picture of language creation in a historical context and to study more deeply the goals and objectives of constructing languages. This seems particularly relevant in the light of the modern computerization of international communication and the development of artificial intelligence, which require new formalized coding systems. In this regard, the mankind's accumulated experience of language construction must be of high value, and the present paper may be able to add some food for thought.

Although the list compiled by the author is not complete or final, it allows us to see that the problem of language construction is not limited only to international auxiliary languages. There are still a huge number of languages outside the current focus of research that are not "natural". These include cryptography, machine and telegraphic codes, reconstructed protolanguages, and thousands of programming languages. Perhaps, this work will encourage researchers to further catalogue and analyze the remaining uncovered language projects.

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Appendix

Numbers one to ten in various pasigraphies

Mudrā, Hāsta. India, Between 1200-800 BCE	Chinese knotting China, II c.	Dactylogia Beda(Venerabilis) VII-VIII c.	Notes Tironiennes IX c.	Ignota Lingua Hildegarde 1150	Nūshu. Jiāngyǒng XIII-XIV c.	Figures et Fictiys G. Fontana, 1420	
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
Polygraphie J. Trithemius, 1496	Steganographia J. Trithemius, 1499	Celestial Alphabet Cornelius Agrippa. 1510	Utopian Thomas More, Peter Giles. 1516	Plains Indian Sign Language. N. American Aborigines, 1527	Quipu. 1533 Incas, Andes mountains	Bālai Balan Muhyi-i Gülşenî, 1550	De Artibus G. Cardano, 1550
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
Hieroglyphica P.V. Bolzanii, 1556	Enochian John Dee, 1583	*** H. Hugo, 1617	Noui Carattiri e Zifre. T.C. Castelli, 1632-1654	Harmonie Universelle. Marin Mersenne 1636	Chirologia J. Bulwer 1644		
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

One-Line Cipher Charles I, 1646	New Perfect Language Francis Lodwick, 1652	Short Writing Goubarts 1653	Ortographia Arctica Juan Caramuel y Lobkowitz, 1656	Universal Character Cave Beck, 1657	Clavis Conveniente Linguarum J.J. Becher, 1661	Mirabilia graphica Gaspar Schott, 1664
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
Ars Notaria J. Caramuel y Lobkowitz, 1665	Philosophical Language J. Wilkins 1668	Pasigraphia J.Ch. Sturm 1676	La Première Langue du Monde. R.P. Alphonse Costadau. 1717	Allgemeine Schrift David Solbrig 1726	СЛАВЕНСКИЙ ПИСМЕНЫ Matej Karaman 1738	
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
Chinesische Pasigrafie, Ch.G. von Murr, 1777	Allgemeinen Rede und Schriftsprache. 1779 Ch G Berger	Le Parfait Alphabet Ch.-A. de Moy, 1786	Palais des 64 fenêtres J.-P. de Baulmes De-Ria, 1788	Système de Claude Chappe, 1792	Pasigraphie J. de Maimieux, 1796	Théorie des Signes R.-A.C. Sicard 1799
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

	Pasigraphie und Antipasigraphie Vater, 1799	Okygraphie H. Blanc, 1801	Symbolic Character J. Anderson 1802	Pangraphie H. Bürmann, 1805-1807	Une idée F.D. 18..	Pasigraphia J.M. Schmid 1807	Sinnensprache Andreas Riem, 1809	Lingua Slavica Josef Dobrovský, 1810-1822
1	1				un	21	a	ā
2	2				in	21	b	ē
3	3				i	21	c	ī
4	4				u	21	d	ā
5	5				u	21	e	ē
6	6				on	21	f	ē
7	7				o	21	g	ū
8	8				an	21	h	ū
9	9				a	21	i	ū
10	10				ou	21	k	ī

	Lacographie, Zalkind Hourwitz, 1811	Pasitélégaphie Armand C. de Firmas-Périers, 1811	La Langue Hébraïque Restituée, A.F. d'Olivet 1815	Caraboo Mary Willcocks, 1817	Solresol J.-F. Sudre 1817-1866	Notography E.T. Vidal 1819	Night alphabet Ch. Barbier, 1821	Braille Alphabet Louis Braille, 1824
1	—	—	אחד:				—	—
2	l	—	שני: שנים:				—	—
3	c	—	שלוש:				—	—
4	o	—	ארבע:				—	—
5	v	—	חמש:				—	—
6	e	—	שש:				—	—
7	i	—	שבע:				—	—
8	j	—	שמונה:				—	—
9	/	—	תשע:				—	—
10	z	—	עשר:				—	—

	Phonarhythm William-Henry Henslowe 1827	Reformed Egyptian Joseph Smith 1827	Aérogaphie. M.U.P. Delatour, 1831.	Homographie Sophie Scott 1831	The philosophic alphabet, 1832 G. Edmonds	Langue Universelle Augustin Grosselin 1836	Langue Universelle Anonymous, 1837
1	1	1		1	crz	9	at
2	2	2		2	gr	1	et
3	3	3		3	3/m	σ	il
4	4	4		4		1	ot
5	5	5		5		—	ut
6	6	6		6		c	as
7	7	7		7		1	es
8	8	8		8		1	is
9	9	9		9		6	os
10	10	10		10		9/	us

Polyglotte Improvisé A. Renzi, 1840	Algebra der Griechen. G.H.F. Nesselmann, 1842	Universal Lingual Reform A. Thibaudin, 1842	Hieroglyphes Français. 1843 Camille Chesnier-Duchesne	Pantography Benajah Jay Antrim, 1843	Moon writing W. Moon, 1843	Idéographie S. de Mas 1844
1 L —	Г	28N'	1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	03n	^	
2 L =	Г	T2	9 9 9 9 9 9 9 9 9 9	[to]	U	
3 L .	Г	THR6	9 9 9 9 9 9 9 9 9 9	hre	C	
4 L ..	Г	F5R	9 9 9 9 9 9 9 9 9 9	[fær]	U	
5 (—	Г	F96V'	9 9 9 9 9 9 9 9 9 9	[fiv]	U	
6 (=	Г	S6KS'	9 9 9 9 9 9 9 9 9 9	[syks]	Г	
7 (.	Г	S8V'N'	9 9 9 9 9 9 9 9 9 9	[sevn]	Г	
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	Ecriture Universelle D.-A. Perier, 1860.	Visible Speech A.M. Bell, 1864	Mundografie M.H. von Gablenz, 1864	Scriptura Universalis, J. Hunkeler, 1866	Idéographie Lunaire, R.-A. de Vertus, 1868	Pasigraphie W.-L. Taillien, 1869	Tachygraphie, 1872, E.G.A. Baumgarten	Duodenal Arithmetic, J.W. Nystrom, 1875
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	Modern Hebrew E. Ben-Yehuda, 1879	Idéographie S.I. Baranovskij 1884	Pasigraphia J.N. Bobula, 1886	Nal Bino S. Verheggen, 1886	Universal Phonography W. Benson, 1887	Octonary Numeration, A.B. Taylor, 1887	Pasistenographie Abraham D. Lutimirski, 1887	American Language E. Molee, 1888
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6	אָן	אָן	אָן	kê		E	אָן	on
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	Lengua Universal L. Selbor, 1888	Chinook Stenografie Jean Marie Raphael LeJeune, 1891	Martien Hélène Smith 1894-1899	Veltlang F.J. Braendle 1910	Pitmanic Phonography I. Pitman, 1910	Scientific Dial A. Hallner, 1912		
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4	אָן	אָן	אָן	אָן	אָן	אָן		
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Signala E. Molee, 1915	Rennellese Sign Language Kagobai 1915	Философский Язык J. Linzbach, 1916	Sign Talk E.Th. Seton, 1918	Isotype O. Neurath, 1920	Eskayan 'Pope Pinay', 1920-1937	Boyscout Language R.S.S. Baden-Powell, 1st Baron Baden-Powell, 1921
1		0001				
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Fonoline D.W. La Rue 1922	Ideografia Analityczna E. Erdman, 1925	Key-Way W.E. Irish, 1925 - 1927	Labanotation Rudolf von Laban 1928	Oberi skaime 1931	Bulilağ. G.E. Tolentino, 1937	Global Alphabet R.L. Owen, 1943
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Mānavabhāṣā S. Satyabhakta 1943	Tsolyáni. late 1940s. Muhammad Abd-al- Rahman Barker	Antibabele Gaj Magli, 1950	Unifon J.R. Malone, mid-1950s	Lincos H. Freudenthal 1960	Ashoke Oklahoma, USA 1950s-1980s	Shavian G.B. Shaw, 1962	74-07 WUM, 1967	Klingon Marc Okrand, 1984
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3 चिन		4 III	BRI	3 :				
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5 दून		5 IIII	F&V	5 :				
6 हून		6 IIII	SIKS	6 :				
7 तेन		8 IIII	SEVEN	7 :				
8 देन		8 IIII	ΔT	8 .				
9 पोन		9 IIII	N&N	9 .				
10 बीन		9 IIII	TEN	10 .				

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