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THE IDEA OF AN INTERNATIONAL LANGUAGE.

A THESIS

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T A B L E O F C O N T E N T S .

1. The Need of an International Language.
2. The Fitness of any Living or Dead Language.
3. The Construction of an Artificial Language.
4. The History of the Movement for an International Language.

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I.

We lack what our ancestors had centuries ago, a common means of communication. This purpose has been served in various parts of the world by Arabic, Greek, and Latin. Latin, an Italian dialect, became an international language, because it was the speech of the people who then conquered and organized the world. The great leaps in civilization that countries like Spain and France then made, would have been impossible, had they not stood in communication with Rome by means of an international language. But a greater benefit bestowed on the then civilized world was that, as Greek had facilitated the spread of Greek culture, so Latin facilitated the spread of Christianity. In the middle ages Latin was the language of the clergy and of the educated. In fact, Latin has clung to European universities till within recent times. It has also served as an international language for scientists; but where there before was one scientist there are now a thousand, and this difficult language has fallen into disuse.

The need of an international language is questioned by no one. Our times have witnessed a marvelous development of international relations. The facility of travel and transportation has extended the commerce of the nations over the whole world. Steam has shortened distance and electricity has annihilated it. Civilization which before was almost confined to Europe has expanded to include countries like North and South America, Australia, South Africa, Japan, and numerous other parts of the world. Travelers and tourists feel the need of an international language. They meet men of the same tastes and of the same bent of mind as themselves; but they are as deafmutes, because modern progress has neglected to furnish them with a most essential thing, a common means of communication. Scientists, perhaps, suffer the most from the confusion of tongues. To keep abreast of the times they must know at least three languages, and this requisite delays the spread of science. The intellectual leaders of countries like Japan and China feel most keenly the need of an international lan-

guage. If such a language were adopted, books would need to be translated into only one language instead of a dozen; and the publishing houses could send them directly to all corners of the world.

The purpose of an international language would of course not be to supplant the existing languages. It should merely serve as an auxiliary language, which each nation would use in its intercourse with other nations. There are many things which already are international. The Arabic numerals are international, the Roman alphabet quite so, and naval signals are international. International congresses are hampered by nothing as much as the lack of a language understood by all. The adoption of an international language would so bring the minds together that men would feel the brotherhood of man, and this would be a powerful factor in preventing future wars.

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II.

In the search for an international language the propagandists have naturally first turned to the living languages. Of these the most commendable would be the one that possesses the greatest intrinsic value, the one most centrally located, and the one spoken by the greatest number of people. The choice then would lie between French, German and English.

Of these, French is spoken by the smallest number. A century back it was in great vogue; French splendor at the time of Louis XIV spread French thru Europe. French was fast becoming a universal language; but the resuscitation of national life in the different countries of Europe made French recede to its native land, and today it is used internationally for diplomatic purposes.^{only} This language is highly cultivated, logical and economic.

German is spoken by a greater number,--75 millions to France's 50 millions, and in a century, if statis-

ticians are correct, far outstripping French, will be spoken by 250 millions. Scientific methods have brought Germany to the front in commerce and industries, and the future of Europe will largely lie in her hands. The German language enjoys the enviable distinction of being like Greek thoroughly self-compounding. It seldom resorts to loanwords in expressing new ideas. But the language is burdened by a cumbersome inflexional system, which has long since been discarded by English and also largely by French.

English has progressed farther than both its rivals; it has discarded almost all its old inflexional endings. The vocabulary of the language is rich and versatile. The drawback of English is that its spelling is not reformed as is now being done with French. On the one hand English is a Germanic language and would accordingly be easy for Germans to learn; on the other hand the wealth of French words in its vocabulary would make it easier for French people to learn than German. As it is, English commercial terms are quite international. But

the point that is most in favor of English is that it is spoken by the greatest number of people. 125 million² speak it to-day, and if the forecast of statisticians comes true, in a century it will be spoken by upward of 800 millions.

It certainly would be well to have a living language as a common means of communication, a language which contains a great literature. But there is a factor strong enough to frustrate such a movement. National pride stands in the way. Ridicule national^{pride} as much as we please, it is nevertheless prohibitive. And well may the nations oppose such a movement; the nation favored would have an undue advantage over the rest in commercial influence and political prestige. It would be suicidal for, let us say, Germany and France to permit English to become a universal tongue.

The living languages being thus thrown out of consideration, we must turn to the dead languages. These are pre-eminently Latin and Greek.

Latin is better known to us than Greek, both

as classical Latin and as the Romance languages. Latin was the language of a commercial people; but how we can induce the modern merchant and drummer to learn this difficult language is hard to see. It takes years to learn it,-- a thing which is prohibitive in itself. It is burdened by a cumbersome inflexional system, which is against the grain of modern language spirit. One who knows the language well may not see its difficulties any more than a native German the difficulties of German gender and German case endings.

To point out a few of the numerous difficulties of Latin, we may state that there are five declensions. It is often difficult to place a word in the proper declension, because several declensions overlap in many places. Where does a noun belong which ends in -us, -a, -i, -es, etc? Furthermore there are many inconsistencies of gender. Poeta is masculine, poema, neuter, and methodus feminine. In the verbs there are seventy-five active and fifty-nine passive forms. It is difficult to place a verb in the proper conjugation. is a verb in -io conjugated according to the paradigm of

capio or audio? What mood or what conjugation are suggested by the endings -at, -ant, -em, -am, -et, -ent, -it? In ascertaining the category of the verb or noun one must go thru the tedious work of consulting the dictionary.

Another great drawback of Latin is its inadequacy to express modern ideas. To bring the language up to date, its dictionary must be increased enormously, and that by translation of modern European words! Bicycle, e. g. has been rendered ^{by} birota velocissima! This translation, by the way, illustrates another difficulty; i. e., Latin is almost as helpless in forming new compounds as French and English.

In view of the difficulties of the original Latin there have been offered half a dozen schemes of simplified Latin. These are Courtonne's "Neo Latin" (1885), Henderson's "Latinesce" (1901), D'Rosa's "Nov Latin" (1890), Beermann's "Novilatin" (1895), Puchner's "Nuove Roman" (1897), Isly's "Linguum Islilianum" (1901), and Frölich's "Reform Latein" (1902). The substance of these schemes is to reduce all nouns to one declension and all verbs to one conjugation; furthermore, words are adopted freely

from the modern languages. But this is simply making an artificial language, and why prefer an artificial language based on an ancient to one based on modern languages?

Greek has been proposed, because that language can more easily form new words to express modern ideas. As it is, this elastic, self-compounding language is the source of most of our scientific terms. Examples are trigonometry, logic, astronomy, meteorology, and metaphysics. To form an idea of the capacity of the language zētōō can be cited, which means 'I inquire', zētēna, an object of inquiry, zētēsis, the process of inquiry, zētētēs, an inquirer, and zētētikos, able or disposed to inquire. But Greek also is too difficult a language to become international. It is especially the intricacies of the verbal system that make it hard to learn. Who would suspect that trecho ^{becomes} ~~is~~ edramon in the aorist?

But it may be argued, Greek or Latin could be adopted as an international language for scientists only, without regard to the laymen, who would find either of these languages too difficult. But the uneducated

would resent such a supercilious action on the part of the savants and would in a few years have perfected and adopted an easily learnt artificial language. This language would be used by a far greater number than the scientific language, which it would soon supersede. The only solution of the question is then to adopt an artificial language--one that commends itself because it is easy to learn and because it is no man's language.



III

It may be questioned if it is possible to construct an artificial language. It is argued that man cannot express his thoughts by anything but a natural language. We have heard similar statements in analogous cases. A century ago the steam engine was poohooed as an impossibility. Fresh in our memory is the prophecy that automobiles would never supplant God's horses. Every year the impossible is being performed. Language among other things has yielded most of its mysteries to science, and we understand its mechanism.

The best proof that an artificial language capable of expressing ideas is possible is that several such languages have been constructed and adopted by thousands. Furthermore it must be borne in mind that all languages are to some extent artificial. Language does not exist only by nature (*φδρισ*) but also by convention (*νδρισ*).

The old question as to the nature of language, first proposed by the Greek philosophers and in modern times revived by scholars like Max Müller and Whitney, may safely be answered by saying that language exists *géné*

Kai I'ou. The difference between an artificial language and a natural language is that the latter is constructed by a people in a long period of time, while the former is constructed generally by one man in a few years. One of the most conspicuously artificial traits in the natural languages is the rehashing of old material to form new compounds. Locomotive, telephone and aeroplane are examples. The only real growth in the outer form of language is the simplification of structure and material, and it is on this rock foundation that artificial languages are now being built.

An artificial language cannot of course possess the life and vigor of a living language. But this statement needs qualification; for an artificial language will be just as live to the average reader as a foreign language adopted for international use. An artificial language cannot however express the niceties of a living language; for it is not made primarily to serve for literature,

but for commerce, science, and travel. The material put into the language will be determined by this necessary limitation.

The prime requisite of an artificial language is that it must be easy to learn. Theory has to be sacrificed to gain this end; but theory must be sacrificed to expediency in serving humanity. A far better alphabet could be invented than the Roman. Yet we use that alphabet in order to come into communication with our fellowmen. It is the best system as yet, because it does the greatest number of men good.

In order to be easily learnt there must be no exceptions in the phonology of the artificial language. The spelling of its words must be rigorously phonetic. Each sound should be expressed by one definite letter, and each letter should have one definite phonetic value. None of the European languages are entirely phonetic. Italian is the most phonetic and English the least. English allows the vowel a to represent eight different sounds; a has the same sound as æ in ale, ā as in senate,

â as in care, ă as in am, ä as in arm, ą as in ask, ą as in final, and ą as an all. The last sentence spelled phonetically reads: Inli(sh) alauz Je vauel ē tu represent et difrent saundz.

As regards morphology, the parts of speech of a language which is no man's language must be clearly indicated by the endings of the words. English often does not distinguish in form between noun and verb. House, love, talk, etc. may be noun or verb. But in an artificial language, the reader must be enabled to know whether a word is a noun, verb, or adjective, by its form. In Esperanto the singular of nouns ends in -o, that of adjectives in -a, the present of the verb in -as, the adverb in -e. The accusative of the noun ends in -n, furnishing a ready means to determine the relation between the words of the sentence. None of the natural languages can boast of such simple, clear, distinguishing marks between the different parts of speech.

The vocabulary of the artificial language must be constituted by the words that are most current in the different languages of Europe. There are thousands of

words that are international, and they have only been waiting for a few grammatical rules to make them the basis of an international language. A few examples are atom, crystal, gas, granite, nature, literature, music, poesy, pause, plan, rhyme, style, seem, term, post, theatre, bronze, character, epoch, fabric, form, lamp, park, season, signal, wagon, etc. etc. C. B. Waite has collected over two thousand words that are common to English, French, Italian, Spanish, Portuguese, German, Dutch, Danish, Norwegian, Swedish, and Russian. Many artificial languages have failed, because they have neglected to supply their vocabulary from this store.

Again, an elastic and transparent system of prefixes and suffixes must be employed which will enable the reader to know the meaning of half a dozen compounds or derivatives, if he knows the meaning of the stem. This will enable him to figure out the meaning of a great number of words, and a dictionary may be largely dispensed with.

Finally there must be no homonyms or homographs

#Homophonic Vocabulary. Chicago, 1904.

in the language. As is well known, these are numerous in English. ~~Ex.~~ sound, bat, meet(meat), flower(flour), fair(fare), etc. In an artificial language words ~~may~~^{should} not even be similar in pronunciation. Otherwise, foreigners whose enunciation differs from ours may pronounce them alike.

The constructor of an artificial language learns from the experience of the various languages. He sees the simple structure of English and profits by it. He sees the advantage of the German and Greek compound system and uses it in his language. The artificial language will teach the different countries to understand their own language the better. The French will see how deficient their language is in the matter of compounding new words, the Germans will see that it is possible to express themselves without case endings, and a complicated verbal system, the English will discover among other things the art of spelling. Accordingly if an artificial language should serve no other purpose, it would serve as a plumb line showing the rations where and how

their linguistic structures have sagged out of shape.

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IV

There are three classes of artificial languages. They are the a priori languages, which are philosophical; the a posteriori languages, which are based on the natural languages; and the mixed languages which embody characteristics of both the other classes. Most languages constructed in the later years have been of the a posteriori type.

The first man to suggest the idea of an artificial international language was the French philosopher Descartes, in 1629. The Englishmen, Dalgarno (1661) and Wilkins (1668) did not let the idea pass but worked it out. It was the work of these two pioneers that inspired the famous German polyhistor, Leibniz, to study the idea. A dozen others have worked at the same idea that these beginners worked at - the idea of an a priori language. Each of these men have proposed to construct a philosophical language, one based on logic. These men took it for granted

that we possess complete knowledge, and that language can be reduced to logic. These a priori languages are all difficult to learn. They have neither the form nor the material of living languages; their substance is not even Indo-Germanic.

Simple ideas are expressed by lengthy compounds. Sundre's scheme (1817) makes doredo signify ¹/_{time}, doremi day, and doresol, month. Related ideas are expressed by different vowel shading. Dalgarno's scheme makes nēkē signify horse, nēke, donkey, and nēko, mule. Such classifications disregard the psychological law that words alike in meaning are easily confused if their form is similar.

To give an idea of how vocabularies were subdivided in a philosophical language, Sotos Ochando's scheme (1852) may be cited. Initial a signifies inorganic substances, ab, material objects, ac, characteristic qualities, and so forth down the alphabet. Initial b signifies liberal arts, initial c, mechanical arts, etc. Initial e signifies living bodies, (ef indicates a plant, from which ef-ababe is derived which means crowfoot.)

Such languages are a veritable strait-jacket, and it is a relief to turn to the loose structure of the natural languages.

It was soon seen, that such languages were 'too scientific, and ^{that} elements from the natural languages must be incorporated. This gave rise to the mixed languages like Schleyer's Volapük (1880), Dormoy's Balta (1893), W. von Arnim's Veltpar (1896), and Follack's Langue bleue (1899)

The most famous of these languages is Schleyer's Volapük. It enjoyed a great but shortlived popularity. This language was to be truly universal: "One language for a united humanity."

Volapük contained one declension and one conjugation.

Singular.	Flural.
N. dom (house)	doms
G. doma	domas
D. dome	domes
A. domi	domis

The Verb.

lǒfob, I love
ǎlǒfob, I loved
oǐǒfob, I shall love
eǐǒfob, I have loved
ilǒfob, I had loved
ulǒfob, I shall have loved.

This language is altogether too synthetic. Moreover, the author made several blunders in the construction of his alphabet. He left out the indispensable r but admitted letters like ǎ, ǒ, ũ. The author based his language on English, but for the sake of euphony and ~~ease~~ ease in pronunciation he so disfigured the words that they are unrecognizable. Volapük, e.g., comes from World-speech and Bodügan from Portugal. The author left out r because as he supposed, the Chinese did not possess that consonant, but he introduced ǒ and ũ, vowels which English men are not acquainted with. Another drawback of V olapük is that its compounds are confusing. Bi-nom e.g. means preliminary rule, but bin-om, he is!

The Lord's Prayer in Volapük reads:

C Fat obas, kel binol in sũls,,paisaludomöz nem ola!
Kõmomõd monargän ola! Jenomöz vil olik, äs in sũl,
i su tal! Bodi obsik vädiliki givolös obes adelo!
E pardolös obes debis obsik, äs id obs aipardobs debe-
les obas. E no obis nindukolös in tentadi;sod aidal-
ivolös obis de bad. Jenosõd!

The cause of the downfall of Volapük was not the fact that it was an artificial language but that it was too difficult an artificial language. Philologists saw its shortcomings and hence did not espouse the cause. The language however served the useful purpose of proving that an artificial language was a possibility; thousands spoke and wrote it. For a time it claimed a million adherents.

The third and greatest step in the history of artificial languages was the invention of the a posteriori language, Esperanto, in 1887, by the Russian physician Dr. Zamenhof.

Esperanto introduces into its alphabet the new

symbols ĉ(ch), ĝ(j), ĥ(Ger. ch.), ĵ(s subvocal), and ŝ(sh).
Sixty-six percent of the words of Esperanto are of Latin origin. The rest are from German, English, and Russian. Of the words used in everyday speech there are as many from the German and English as from the French.

Esperanto clearly distinguishes the parts of speech. All singulars of nouns end in -o, and the singulars of the adjective in -a; the plural of these is formed by adding j.

Ex. patro- father
patroj- fathers
patra- paternal
patraj-paternal(before plurals)

The adverb is formed by the suffix -e . Ex.

Ex. patre, fatherly.

Of the verbs the infinitive ends in -i, the present in as, the past in -is, and the future in -os .

Ex. ami- to love
mi amas- I love
mi amis- I loved
mi amos- I shall love

The active participle ends in anta (pres.), inta (past), and onta (fut.). The past participle coupled with the verb esti, to be, makes the perfect.

mi estas aminta - I have loved

mi estis aminta - I had loved

mi estos aminta - I shall have loved.

The passive is formed by the verb esti and the present passive participle in -ata.

Ex. mi estas amata - I am loved etc.

Esperanto possesses two cases, the nominative and the accusative. The nominative and not the accusative case follows the prepositions. The accusative ends in n. This feature gives the language a more elastic word position than is possible in English. Ex. La

no copy KNABON la viro frapis. The man struck the boy.

One of the most commendable features of Esperanto is its prefix and suffix system. There are seven prefixes and twenty-five suffixes in the language. Mal - denotes the opposite of any idea, sen- means without, in denotes the feminine, -estr, a leader, -em, liable to;

-ad denotes the continuation of an action, -aj, something made from, -ig denotes causation, -iĝ, the action of becoming, and -ec denotes an abstract quality.

Ex. bona, good; mal-bona, evil.

knabo, boy, knab-ino, girl.

kombi; to comb; kombilo, comb.

ŝipo, ship; ŝip-estro, captain.

From the root mort (which expressed the idea of death) we obtain the derivations mort-i to die; --- anto, a dying man; -into the deceased; ---o death; -a, mortal; -ema liable to die; --- ado mortality in a given time; -eco liability to death; sen --- a, ne, -ema, immortal; ---iĝi, to die out; --igi to kill; ---iga, deadly; --igo murder; --iganto, murderer; mem --- igo, suicide; mem--iginto a suicide (person); --intaĵo. carrion.

'Esperanto' comes from the verb esperi to hope; 'Esperanto' is the substantive form of the active present participle and the word means the hoping (language).

These illustrations show the possibilities of the language; no natural language can approach it.

This language, excellent tho it be, nevertheless

has evident shortcomings. Dr.Zamenhof should not have incorporated new letters into the alphabet. They are a drag which have hindered the spread of the language even among its most ardent advocates. Dr.Zamenhof violated also the requisite that the vocabulary must be as international as possible; ŝipo and ŝuno are by no means as international as navo and solo would be. A third drawback of Esperanto is its table of correlated words. There are five columns among which is found:

nenia	no such
nenial	for no reason
neniam	never
nenie	nowhere
neniel	no manner
nenies	no one's
nenio	nothing
neniom	none at all
neniu	nobody.

It is an arduous task to learn these by heart.

There are several discrepancies and inconsistencies in the derivation of words in Esperanto.

Ĵaluza means jealous; hence ĵaluzo must mean a jealous person, but it means jealousy!

Another confusing element lies in the vocabulary of Esperanto, where words are admitted sometimes as they are spelled and sometimes as they are pronounced. Boato employs the spelling of 'boat', while rajto is based on the pronunciation of 'right'.

The Lord's Prayer in Esperanto is as follows:

Patro nia, ~~kiu~~ estas en la Ĉielo, sankta estu Via nomo, venu ~~reĝeco~~ Via, estu volo Via, kiel en la Ĉielo, tiel ~~ankau~~ sur la tero. Panon nian ĉiu tagon donu al ni ~~hodiau~~, kaj pardonu al ni ~~sulojn~~ niajn, kiel ni ~~ankau~~ pardonas al niaj Suldantoj; ne konduku nin en tenton; sed liberigu nin de la malbona, ĉar Via estas la reĝado, la forto, kaj la gloro eterne. Amen!

Of the a posteriori languages appearing after Esperanto the most prominent are Bernhard's Lingua Franca Nuova (1888), P. Hoinix's Anglo-Franca (1889), Mill's Antivolapük (1893), Idiom neutral (1902) by an academy and Ido (1907) by an international committee appointed at the World's

fair

in Paris, 1900. M.de Beaufront is the principal champion of the new international language Ido. The language is based on Esperanto, and a number of the improvements introduced have largely been approved of by Dr. Zamenhof himself. Of the 5,379 words found in the Ido dictionary 91% are intelligible to the French, 83% to the Italian, 79% to the Spanish, 79% to the English, 61% to the German, and 52% to the Russian.

What the future has in store for the international language it is difficult to tell. The indications are that there will be no radical changes in future reform schemes; only minor details will be added or changed. Finally one of the schemes will have to be adopted; as yet the time is not ripe for such an action.

An auxiliary international language will usually be read, so a certain latitude in the pronunciation of the words may be quite permissible. But when the language is used by tourists, merchants, and international congresses, fixed rules must be followed. However, considerable variance of pronunciation does not make an artificial language unintelligible; at the recent Esperanto

congresses, Russians, Englishmen, Germans, and Frenchmen had no difficulty in understanding each other. The greatest difficulty with an international language will be to have the same new words uniformly adopted thru the world. This obstacle may be overcome by having an international academy as an arbiter for all new words. Thus uniformity can be maintained in the international language.

The idea of an international language has been severely criticized by several of the leading scholars in Europe. Eg., K. Brugmann, professor in the university of Leipzig, is strongly opposed to the idea.

Prof. Brugmann* believes that a language must spread naturally and he thinks a battle ax is a far more natural way of spreading a language than any commercial agreement. He seems to forget that the avidity with which one million grasped at Volapük and later three million grasped at Esperanto promises well for the spread of an artificial language. Prof. Brugmann sneers at the idea of merchants employing an artificial language in their dealings with their customers. Let us unravel that point. A

New York merchant buys cocoa from Brazilian plantations.

* Zur Kritik der Künstlichen Weltsprachen, Strassburg, 1907.

It is to his advantage to employ for the buying of the cocoa an agent who knows well the language of the natives. Such a man would generally be deficient in English. But an artificial language containing about 80% of Spanish elements in its vocabulary would form a ready connecting link between him and his principal in letters and cablegram messages. Prof. Brugmann fears, moreover, that an auxiliary language would split up into dialects. Still, modern times are not favorable for the formation of dialects, and that especially not in a language spoken chiefly by travelers. This scholar then proceeds to attack such a language as Esperanto on the ground that it is too French. As a matter of fact Esperanto is too German.

Esperanto in particular is attacked by Diels*, Leskien**, and Schuchart***. Leskien in a scholarly way points out the shortcomings of Esperanto, but Diels and Schuchart attack the very substance of that language. Schuchart is favorably disposed towards a language like Volapük; he believes Esperanto sacrifices theory to expediency. Diels mistakes the ending of the nouns in -o for a sign of gen-

*Deutsch Revue Vol. 26. **Zur Kritik. ***Bericht über die aufschaffung einer intern. hilfs-sprache gerichtete bewegung. Wien, 1904.

der, whereas, it is, of course, only a sign of the part of speech. Moreover, forgetting compounds like the German aus-schliessen, he condemns the forming of such compounds as mal-fermi(to close), arguing that such non-meaning combinations violate the spirit of the Indo-Germanic languages. But who would deny the fact that compounding many words from one wellknown stem is an absolute necessity in an artificial language? Matro may probably be better than patrino for 'mother'. But when first the wedge of exception has edged in, it will soon weaken or overthrow the whole structure.

Nietsche has asked why Philology has been working a hundred years on language if not finally to make an international language. The day is fast approaching when this will be realized. We cannot be surprised that there are stagnationists even among the greatest of scholars. It has always been so. But certainly the time seems ripe for the arrival of a universal language, and ^{perhaps} in a few years the much needed common means of communication between the nations may be fully established.

B I B L I O G R A P H Y.

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