THE PROBLEM OF AN INTERNATIONAL AUXILIARY LANGUAGE
AND
ITS SOLUTION IN IDO

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Note: Throughout this paper, the initials: I. L. stand for international language. A more exact use would be I. A. L.: international auxiliary language, but I have preferred to follow the more usual initials. The following language initials are used: D(eutsche); E(nglish); F(renc); I(talian); R(ussian); S(panish); P(ortuguese); L(atin). Because of the frequency with which the words are used, Esperanto has been reduced to Esp. and Esperantist to Espist.
PREFACE

No exhaustive discussion is here attempted of the various problems involved in the selection or construction of an international auxiliary language. The aim is to present all the main facts and arguments with only sufficient fullness to enable the inquirer to judge fairly the merits of the various solutions of the problem.

It is doubtless true that no one can study this subject with quite the scientific impartiality he could give to inanimate inventions. The few foreign languages which we have studied, or and perhaps specialized in, tend to predispose our judgments. Above all, our native tongue is so bound up with our thought processes and our sentiments as to predominate in our judgments. That which is natural to us must of necessity have more weight than that which is foreign to us.

The writer does not pretend to have transcended these very human limitations, but my sole desire was and is to see established that type of auxiliary language which offers the best all around solution of the problem. I could have given a specious appearance of scientific impartiality to the subject by simply describing the different attempts and theories and merely hinting at my own preferences. The writer is a convinced adherent of that type of International language known as Ido and sees no reason to conceal his convictions. They are the result of a consideration of the various theories covering a period of fifteen years and above all, of prolonged lexicographical and practical translation work. This has but matured an early conviction of the superiority of Ido over Esperanto and over the the Latinist schemes. I have herein set forth as impartially as I was able the facts of the matter and the reasons for my convictions, without intentionally given undue weight to arguments in support of my thesis or intentionally omitting argument or fact of importance which oppose my views. It would have been a pleasure to me to have been able to omit such constant reference to Esperanto, but the facts do not permit. To-day, Ido and Esperanto are the only systems which have been worked out in detail and are serious competitors, in my judgment, for official recognition.
In short, I advocate Ido simply because I regard that language, taken as a whole, as the most efficient form of International language that has yet been constructed and, in view of the limited field of fact out of which a practical a posteriori form of auxiliary tongue must be constructed, the most efficient form likely to be constructed. Built on sound foundations, with no sacred Fundamento to hinder the removal of any defects or the insertion of betterments which experience may show to be necessary, Ido is perfectible.

The field for study of this problem has now been so thoroughly considered from different points of view that, to the experienced investigator, little can be presented which is entirely new. I venture to hope, however, that some of the matter here presented will be of value to those already familiar with the subject. For the general public (which includes the vast majority of the so-called "learned classes") no apology is necessary for presenting all phases of the problem, as the greater part of previous investigations have been published in scattered journals inaccessible to the general reader.

The author makes no pretensions of being a learned philologist or even a polyglot. My approach to the subject is that of the average intelligent man unburdened with a weight of traditional learning. It is my hope that this lack of dead facts and presuppositions on the subjects has lead me to impartial judgments.

Luther H. Dyer.

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TENDENCY OF CIVILIZATION TOWARD UNITY.

The striking characteristic of the last century has been the extraordinary growth of the material means of communication—steamships, railways, telegraphs, telephones. This has resulted in the drawing together of the peoples and multiplied enormously the bonds which unite them. This has brought about a unity, a uniformity both in the material life and, in an ever increasing degree, in the minds of the peoples. Factories, wherever situated manufacture the same general type of instruments, fabrics, and other objects of general use under similar technical and industrial processes. We wear the same kind of clothes and live in about the same way wherever we may dwell. Our schools have much the same courses of study. Our newspapers, our books reflect comment and conditions much the same everywhere. A Parisian of to-day is more like the Londoner of to-day, than the Parisian of a hundred years ago like the Frenchman of his time from the provinces. In fact, to-day the cleavage tends to run more and more, not by international boundaries, but by social and economic classes.

THE I. L. AN INSTRUMENT OF EFFICIENCY.

The aim of civilization is to reduce the wastefulness which characterizes its development by organizing our labors, utilizing our natural resources and inventions. Our motto, conscious or unconscious, is that of Ostwald: "Dissipate no energy." Scientists, inventors, traders, in fact all men of fair intelligence are willing to adopt any new invention or process, wherever it may originate, providing it makes for efficiency. During the late war, the
fact that the inventor of the Diesel engine was a German did not prevent the Allies from using that type of motor. Ideas own no allegiance.

In spite of the growth of the material means of communication, the fact remains that we have done nothing to remove the linguistic barriers. We provide the modern man with a telephone, but he stands like a deaf-mute before it when he desires to speak to a person of a different linguistic group.

The need for an I. L. lies in the necessity of uniting minds, ideas now separated by these barriers of language. As said Prof. Donnan: "Internationalism of thought is the motto of the 20th century." Or as Prof. Jespersen puts it: "Thoughts pay heavy custom taxes on the mental goods imported from one country to another in the shape of translation costs, and chiefly in the enormous amount of time that men of all countries have to devote to the study of foreign languages. Yet in spite of all this, much mental work remains unknown outside the land of its origin."

THE I. L. AND THE SCHOLARLY WORLD.

The situation is particularly bad and becoming daily more difficult in the scholarly world and among scientific researchers. We find small bodies of men throughout the world engaged in the same scholarly pursuits, identical scientific investigations. These men need the latest information obtainable to put them in touch with one another, prevent useless duplication and allow them to efficiently organize and develop their specialties to the best advantage. Their learned publications, even though published in one of the great cultural languages, are not immediately accessible to the small bodies of savants of like interest in other language groups. They are, as has been so aptly said, isolated on separate islands between which communication is extremely difficult. A decade or so ago, a reading knowledge of English, French and German enabled these isolated scholars to keep fairly abreast the latest developments. To-day he needs Italian, Spanish, Dutch, the Scandanavian and Slavonic languages; one may even add the Japanese. The chemists of Italy
and Sweden are doing important work just as the chemists of England and Germany. It is an era of specialization. At the best, man can conquer, make his own but a small field of human knowledge. Intelligence is the monopoly of no one nation, or group of nations. Therefore we need every possible means of conserving our energies by facilitating the communication of thought, by making immediately accessible the ideas contained in the flood of monographs and publications of all kinds which now reach at the most only a few nationalities.

Again, each culture group, no matter how small, is obliged to create or duplicate for itself the instruments of culture: scientific and technical manuals, dictionaries, books of reference, etc. We impose an unnecessary burden for such publications, especially on the members of the smaller language groups: The Dutch, the Norwegians, the Hungarians. The publication of many of these books in an I. L. would do away with much of this burden at a small cost.

Any instrument which will reduce the labor of our overcrowded intellectual life ought to be welcomed, and it is certain to be adopted in the future as the result of intellectual and economic pressure. One should consider not only the present actual losses from lack of easy communication, but also the potential increases in communication which would result from the official adoption and consequent wide use of such a medium of expression.

**GROWTH OF LANGUAGES.**

The linguistic situation is constantly becoming more complicated and difficult. Increasing floods of publications are appearing not only in the great culture languages but also in the small nations, as: Portuguese, Swedish, Danish, Norwegian, Greek, Roumanian, Bulgarian, Hungarian. Linguistic groups that were formerly content with mainly a spoken language are now awakening to an intense nationalism which finds expression in new national literatures, as among the Fins, Catalonians, Lithuanians, Serbians, Albanians, Irish. Take the Magyar language as an example. Here is a language unique in type and virtually
unknown outside the bounds of Hungary. Yet there exists in Hungary a rich and increasingly important intellectual life, but any scientific publication printed in that language alone is destined to remain unknown and consequently uninfluential however important it may be.

INTERNATIONAL CONGRESSES.

Consider the matter of oral discourse in the great and increasing number of our international congresses. The endeavor is usually made to restrict the papers to the three languages: E., F., G., but such restriction ordinarily gives rise to protest by other nationalities and, because as a matter of fact there are but comparatively few members of these congresses who are able to understand and communicate in even the three languages named, a good part of the papers and discussions are a sealed book to many and the congresses tend to break up into national groups that nullify, the proper scope of such meetings.

As a practical example of the linguistic difficulties which attend such congresses, I take the following from a report by Dr. Nitobe, who is one of the secretaries of the League of Nations:

"I have had occasion to mention that no less than 28 languages are in use in the countries represented in the League. (There exist 49 languages in actual use in Europe alone.) A number of them (Gaelic, Basque, etc.) will scarcely claim to be heard in the Assembly. Suppose, therefore, there are 22 languages officially employed by the 48 State Members. Apply the formula $\frac{22 \times 21}{2}$ and we have 231 as the number of translations to be made if each Delegation were to speak but once in the Assembly! The absurdity of such a figure is an argument for the necessity of considering the question of an International Language."

The linguistic disabilities of our diplomats at the Versailles Peace Conference are still fresh in the public mind. Each of the 70 delegates spoke in his national tongue and as a result an army of translators had constantly to be present. Owing to the former prestige of the French as
a diplomatic language, an attempt was made by the French to make their language the sole official one, but without success. The fact that President Wilson, an ex-college president was unable to speak in French and would not trust his pronunciation sufficiently to read from a French manuscript, must have been a shock to those Frenchmen who urge their language as best fitted to supply the place of an I. L.

I. L. AND WAR.

Though there grows an ever increasing amount of similarity among the nations, there yet exist, due largely to ignorance and misconceptions of the ideas, aims and aspirations of other peoples, a tremendous amount of chauvinistic sentiments which keep the peoples apart and form a fertile field for war propaganda. In these days of great armaments we are too apt to concentrate our attention on the existence of the armaments themselves as the causes of war. Yet munitions are not stored and warships built without the will, desire, purpose in the minds of the people. Guns do not fire themselves. The ultimate factor is psychical, rather than physical. We have spent billions of dollars for the material means of offense. We have spent comparatively nothing in an attempt to make the foreigner understand us better, to influence the minds of possible antagonists.

Now the I. L. merely as a language is as well fitted for ill uses as good uses; it should not be identified merely as a pacifist instrument. But the very fact that it is an international language make it peculiarly well fitted as a means to help overcome the international antagonisms which arise from ignorance and misconception. It ought to have the support of all men of humanitarian purpose.

CONCLUSION.

We have seen that in spite of our magnificent material means of communication, we yet lack an instrument which directly unites minds. We need an I. L. not only as a medium of ordinary intercourse but especially as a sort of clearing house for new ideas, a central office where
scholars and scientists of all nationalities can grab an idea fresh from the mint of thought.

**GENERAL OBJECTIONS TO THE SELECTION OF A NATIONAL LANGUAGE AS AN I. L.**

Admitting that we need an I. L., why cannot this lack be supplied by the adoption of one the "natural" languages: English, French, etc. as a common auxiliary tongue?

There are two main objections:

(1) That such selection "would violate the principle of neutrality which should dominate in all international relations" by giving undue advantage and preference to one linguistic group.

(2) That the swarm of difficulties in spelling, pronunciation, grammar, vocabulary and diction would make even the learning of one language a prolonged and laborious task, practically an impossible task if a complete mastery is attempted.

**GENERAL UTILITIES OF AN I. L.**

To attain stable and enduring success, an I. L. must be of practical use, do that part of the world's intellectual labor more efficiently than is now being done by the laborious learning of foreign tongues or by multiple translations. It is not enough that the the I. L. be possible, or have at most a sentimental value; it must be of practical utility.

About fifteen years ago, the monorail method of railroad transportation was demonstrated to be practical and it was freely prophesied that such method would shortly supplant the existing double rail system. Such has not proven the case. The scheme may be practicable in theory, but for some reason does not yet seem to fill a real economic need. Even upon the official adoption of an I. L. that there would be an immediate scramble for books in that language is not to be expected. Yet it would fill a limited but very real need from the very start. The utility of an I. L. lies largely, at present, in the scientific, scholarly, economic and social (or sociological) fields. It
is also of great value as an intellectual stimulent and moral awakener. But it is to be expected that it will always remain very secondary and ineffectual in works of chiefly literary value, where the importance lies rather in the sentiment and diction rather than the new thought to be expressed.

A recent writer has suggested that the future official I. L. might well begin by translating some of the books of Victor Hugo. If he means that as a pleasant and useful text by which the student can learn the language, perhaps yes. But if he expects that the general public would turn eagerly to any merely literary translations, especially when translations already exist of such works in its own tongue, decidedly no. This was and is the mistake of the Espists in putting emphasis upon the translation of purely literary matter. The public does not want and will not read such material. It already has a superfluity of such works in its own language. The intellectual curiosity which will lead the student to wade though a work in a strange tongue, however easy it may be, is not widespread though it does exist in a very limited degree. The scholarly man, the technician in search for some new facts to add to his particular field of research even now utilizes his linguistic knowledge, though this knowledge of foreign tongues is hardly ever more than sufficient to cover more than a bare reading knowledge or one or two languages. The ordinary man rests satisfied with his national tongue, because of the difficulties of thoroughly learning any foreign tongue. It is not to be expected that the translation of literary works into the I. L. can be depended upon to attract any great interest to the language.

The field to be tilled by the I. L. lies in the quick dissemination of current thought, which may or may not have literary value. The books or pamphlets translated need not be those alone which interest only the specialists. There are constantly appearing books and serious articles on matters of general international import which should have the attention of intelligent men and are therefore well worth translating into one key language. As a practical example, I may state that during the past few weeks I have read books by Lothrop Stoddard and Hilaire Belloc
which would be well worth while translating into a sole auxiliary tongue, not only because of the interesting international questions discussed, but also because the limpidity of the style lends itself readily to translation into the logical language of the I. L. Take, for example, the book by Professor Keynes on "The Economic Consequences of Peace," which appeared during the momentous days of the Versailles peace conference. Would it not have been highly beneficial if this work could have been available for the consideration of all peoples though one immediate translation? I speak of these authors, not because I agree in all respects with their conclusions, for I do not, but in order to illustrate the nature of the service the I. L. can render to mankind. There is also, I believe, an excellent market for an international magazine, or magazines, which could act as a medium for the translation of articles of general social and scientific importance selected from the multitude of nationalistic journals. The number of such worthy articles may not be large, but their immediate translation would be a real service. Such journals might also serve for the publication of important public statements and documents.

I shall not here attempt to more than mention the value of an I. L. in ways of ordinary communication, such as in commercial affairs. A great amount of such communication is at present carried on by means of hired translators who cost a lot and are not always immediately available; this work could be done more efficiently and directly did a widely recognized I. L. exist.

As an example of the need for a language which all can master as an aid to travellers, we are all familiar with the plain man's exasperation at the diversity of tongues which causes, especially the English speaker, to raise his voice (sometimes in profane ejaculations) when he attempts to communicate with the foreigner, in the vain hope that by so doing he will somehow or other be understood if only he shouts loud enough.

There should always be borne in mind the indubitable increase of intercommunication which would result especially from official recognition of such a language. Practically all new devices to improve intercommunication
seem at first to have only a limited field of usefulness—necessity grows with use.

**I. L. AND SCHOOLS.**

Some of the most valuable utilities of an I. L. would come from its introduction into the schools. Aside from its general use as a means of communication, such a language as Ido, founded as it is on international words, the very quintessence of modern languages, offers a solid basis on which to easily and quickly acquire other languages, especially those of the Romance group. To the experienced Idist, a French or Spanish text is almost intelligible at sight. It would be of no mean help in the acquirement of the Latin. To the Germanic, Slavic and Scandinavian races, it would afford a pleasant and easy introductory step, a point of departure for the study of any Romance language and the Latin.

The grammar of Ido, founded upon logical principles, without the exceptions and anomalies which swarm in all natural languages, would forcibly impress upon the minds of the students the necessity for and principles of grammar. An apparently small but valuable service is the drill which the student receives in distinguishing the parts of speech though the constant repetition of uniform word terminations.

Some scientific educators have objected to language study as a means of mental discipline because it leads the student to guess, instead of arriving at conclusions by exact analysis, by induction. In our mother tongues, we are ordinarily inclined to express our thought through accustomed sentences, not by building up our thought word by word. The weird sentence formation of the Latin, the constant succession of purely idiomatic expressions, the ambiguous use of words, the large amount of useless verbiage introduced chiefly for dictional purposes especially in literary matter tend, so it is asserted, to soften the mental tone of the student because, in translation work, he often merely wildly guesses at meanings, at constructions. The regular grammatical forms, the use of words in one definite sense, the lack of idiomatic expressions, found in a properly constructed I. L. does away
with this objection because it compels the student to express his thought in logically constructed sentences. Such exercises are very valuable not only to the student but to the adult. It is a true intellectual gymnastic.

Such study is valuable not as an intellectual tonic but from the moral side. The direct personal interchange of letters, even picture cards, with foreign students not only quickens and awakens the interest of student in the customs, life and thought of other peoples, but it broadens his feelings of kinship with the rest of mankind. The natural tendency to picture foreign peoples as different, strange and inferior to one's own particular nation would tend to be corrected. The direct contact, so to speak, with all humanity would broaden the mind and soften the misunderstandings and asperities so often brought about by politicians and selfish economic parties, especially in these days when foreign news is so often used as means of propaganda. A better understanding of the real thought of the ordinary foreigner would enable him to discount at its real value some of this propaganda stuff served up under the guise of news.

Two lessons a week, of an hour each, for a single year would enable the student to obtain sufficient command of an efficient I. L. for all practical purposes such as he could not gain over a living tongue with years of study.

Apart from the above, it may also be urged that there exists no organized movement to adopt any one language as an official auxiliary language and that until such demand gain enough momentum to promise even a slight probability of success, such considerations are futile. The active advocacy is confined to a few scattered persons, chiefly literary people enamoured with their own language. There exists in all of us a powerful, unthinking sentiment which leads us to prize and appreciate our own particular language. One does not find the Germans advocating the adoption of the French, nor the French the English, nor the English the French. Yet if such a movement is to succeed, it must necessarily get its main strength outside of the particular linguistic group whose language is to be adopted.
When it is proposed that some one national language be adopted, there should be taken into consideration other questions than the particular linguistic qualifications of a language. We cannot lightly run counter to the fact that such selection is bound to wound patriotic sensibilities which with or without justification play a determining part in the world. Every such project is bound to be still-born because it arouses jealousies and antagonisms in the political, social, religious, and other nationalistic sentiments of peoples. The advantages which are sure to result to one group by the adoption of their particular language and the consequent disadvantages which are certain to other linguistic groups are by no means fanciful or unimportant. Consider for a moment what it would mean to have English chosen as the official I. L. and every scholar throughout the world set to learning English as their secondary language. English manufacturers and traders would thereby gain a tremendous advantage in pushing their trade in foreign countries because they could make themselves readily understood. Take the South American trade: Would the Germans, the French readily accept the intense propaganda of the English tongue? Furthermore, English civilization and ideas in all departments of life would gain a distinctive power which, however acceptable that would be to Great Britain and the United States, would not win the approval of the Latin countries. Think how the United States bears the impress in her whole national life, political, social, religious, material, of that of England, not merely because a large number of Englishmen first settled here but because English is the common tongue of the two countries. Had Spanish or French gained the mastery, our whole national life would have run to the Latin type of civilization.

We must adopt a language which is as neutral as the metric system, a language which will conciliate or be indifferent to all parties, all opinions, all creeds.

The history of the natural languages presents not a reasoned growth but a practically uncontrolled development wherein strange methods of expression have been grafted on the original languages by the influence of a
higher or contiguous civilization, the conquest of arms or trade relations. Recent decades have seen the deliberate coining of a large scientific and technical vocabulary much the same throughout Europe. But the main body of the words in common use are largely the result of fortuitous incorporation into the language. A word or phrase of local usage spreads to general use. Oftentimes the slang expression of to-day becomes the cultured speech of tomorrow. Or, if you will, the "slang" of the upper classes becomes imposed upon the people as the only correct speech.

It is true that development has generally been in the direction of a grammatical simplification in comparison to the Greek and Latin conjugations and declensions yet, because of the invention of printing and the consequent solidifying of present forms, it is improbable that the immediate future holds likelihood of any great degree of further simplification, however that might result in betterments. Because some 16th century writer confused the Anglo-Saxon word igland with isle, we have since all conscientiously spelled island with an s and are likely so to do for the indefinite future—such is the conservatism of the human race.

Aside from irregularities and exceptions to the grammatical rules*, another even greater obstacle is the use of proper diction. We construct our sentence according to fixed modes of expression which can only be learned by a lifetime of careful use. Take, for example, the illogical, idiomatic use of prepositions found in every natural language and almost in every sentence, a constant source of error and misunderstanding.** The ways of expression in our great cultural languages are absolutely fixed and any great deviation from common usage is regarded as improper—"babu" English, French, etc.

Any language which aspires to the role of an I. L. must be free from this rigidity in order that it may bend

* Note: "It is characteristic of the imperfections of language that the word 'rule' in grammar always suggests the idea of 'exceptions' and 'irregularities'." Sweet, 'History of Language.'

** Note: For instance, why do we say "look up" a word in the dictionary? Is the dictionary in the sky? Why does a house "burn down" and the man inside "burn up"?
itself to suit the linguistic needs of different peoples in their varying methods of expression.

We see the students in the higher schools now giving more than half of their study period to the acquirement of a smattering of other languages, time needed for other subjects of high value, such as natural science, history, political and economic questions. It would seem the part of wisdom to conserve as far as possible our limited time for study and devote it to subjects of more urgent need, especially in the colleges and universities. Doubtless we have considerably improved over the time when only the grammar of the languages was chiefly taught, yet the results to-day are qualitatively insufficient to give the student much more than than a more or less accurate reading knowledge of a foreign language. Said Professor L. Pfaundler: "If one is possessed of a little natural talent, one can by dint of industry and much loss of time easily get so far as to read or understand a paper or a letter in a foreign language, but when it comes to writing (replying) the task is incomparably more difficult." To write and speak a language fluently and correctly is a most prolonged and difficult task. One would imagine in listening to the ordinary person advocating a natural language (other than their own) as an I. L. that these people were natural linguists. Pin them down to their actual knowledge of a foreign tongue and we find how truly pitiful is their equipment. I appeal to the readers personal experience, not to his theoretical ideas. How many educated people of your acquaintance, even those who have continued their linguistic studies in college, have a competent reading, writing and speaking command of a foreign tongue? Apart from those who have learned such a language naturally and those who have specialized in a language by years of study, there exist very, very few. They may be able to read more or less well, but of writing and speaking, the less said the better.*

* Note: In Europe a speaking and reading knowledge of two or three languages is quite a common thing and evokes no notice; but the ability to do literary or scholarly work in a language other than one's own is more or less of a phenomenon. A Pole in Paris, writing in French; a Hungarian contributing articles to a Danish newspaper is regarded as a prodigy and is lionized on that account
to keep in mind the reply of Schuchardt, the famous linguist, to the question of how many languages he knew: "Scarcely my own."

On the other hand, if the claims of the advocates of an artificial I. L. are valid, we have in such language an instrument by which we can communicate both by writing and by speaking with foreigners of whatever nationality after only a few weeks or at most months of study.*

THE FITNESS OF INDIVIDUAL LANGUAGES AS AN I. L.

In addition to the general statements made above, it may be worth while to examine briefly the fitness of individual languages to assume the function of an I. L.:

RUSSIAN.

It has sometimes been suggested that the principle by which an I. L. should be selected should be that of "equal difficulty to all."** Because of the interrelations of many European languages, particularly because of the incorporation of Latin root words, any Latin type of language must be easier to learn and use by peoples from the Romance group than by peoples whose languages are not so directly related. Now as a great cultural language which preeminately offers "equal difficulty to all" and therefore great neutrality, the Russian might be considered.

If we may trust the testimony of those who have conquered its difficulties, the Russian is a language of

Note: It has been further objected to an artificial form of I. L. that it would lack a great literature, a tradition. The greatest utility of any form of I. L. lies in its readiness to express current thought, a language that will do the work more quickly than separate translations. "Literature" will come into being with time. As an instrument of expression, it needs no more "tradition" than does a Diesel engine.

** Note: A further discussion of the "equal difficulty" principle will be found on p. 50, 51.
extraordinary flexibility, has a phonetic orthography and high verbal capabilities. Its highly developed systems of prefixes and suffixes, its power of word-combination (like the German), makes it an instrument of expression superior to many other languages. Said Prof. William Lyon Phelps: "Here is a language before which the English, the French and the German seem only dialects." (We are apt to be so enamoured with our own language, that we do not stop to consider that other languages may have points of superiority.)

Yet, in spite of all that can be said of the beauties of the Russian tongue, we cannot seriously consider Russian as a proper selection as an I. L., because it is a well recognized fact that the learning of Russian is a practically unsurmountable task for the majority of Europeans.

This is an example, however, of where the principle of "equal difficulty" leads. The principle we must go by is that of "efficiency" rather than "difficulty." If one people, or group of peoples, have a higher natural facility in the acquirement of a certain type of language than others, so much the better, provided the less fortunately situated peoples are not thereby intentionally discriminated against in the application of all around efficiency. We do not expect that all workmen be equally gifted or their tools of equal dullness.

**GERMAN.**

The German is recognized as a strong, powerful language. Its power of word-combination for the succinct expression of ideas is unsurpassed in any language. The contributions of German to philosophy and science cannot be neglected by any one who aspires to a broad culture. The spelling, and the pronunciation of the German, aside from the gutturals, are not as difficult to learn by the English speaker as that of the French. It has many less verbal irregularities than the French. Yet it is commonly recognized as a language illfitted to serve as an I. L. because of its difficulties to non-Germanic races. It has found little extension outside the fatherland. The grammar has many archaisms: a multitude of case forms for nouns,
complicated adjective formation, and the like. It possesses a neuter gender, but it is not used consistently, as in the English. "Why" asks the English student impatiently "should the moon be masculine, the sun be feminine, and the word for woman or wife be neuter?" There are no logical explanations to such questions. We simply cite the fact that grammatical gender is arbitrary in European languages. It is just these vagrant, purposeless linguistic forms that bewilder the youth, that make thorny the path of knowledge and lead our learned linguistic professors to regard a language as some highly mysterious thing with which it is dangerous to interfere. The German vocabulary is unique in type and difficult to learn for the Slavic races, for the Romance group, and even for the English and Scandinavians.* Its heavy involved method of sentence construction, together with the abstractness and imprecision of many German words, makes the language almost an anachorism amongst the great cultural tongues. There is an old saying to the effect that "one can learn Spanish in 20 weeks, French in 20 months and German in 20 years." Although there is here an exaggerated shortness of time for the learning of Spanish and French, it does show fairly well the relative difficulties. No language which is exceedingly difficult for a majority of Europeans stands any chance of selection as an I. L. Admitting the many strong points of the German and the value of its literature, it is impossible of selection not alone by reason of its lack of facility for the majority of Europeans but at the present time because of the political situation. It is well to bear in mind the lesson that this "political situation" has for the advocates of any other linguistic or nationalistic group, however impossible enmity may seem at the present time. In this country, the proportion of students studying German is now very small indeed in comparison with the number before the war. In the years to come, it may be some other language.

SPANISH.

Although rarely mentioned as a candidate for the I. L., the Spanish is certainly worthy of standing in the front

* Note: Cf Meillet 'Les Langues dans L'Europe Nouvelle', p. 292.
rank, if languages are judged on their merits. The phonetic spelling and regularity of pronunciation are great and undeniable advantages over the French and the English, and no language can hope for success which does not have these characteristics. It is, taken as a whole, easier of acquirement, at least among the English, than is the French. It is, unlike the French, a language constantly increasing in use with the great development before it. To-day, it is the language of all the nations of the South American continent, except Brazil, and of Central America. Many of these nations have a promising future both by reason of natural increase in population and increase in cultural values.

However, like other European languages, Spanish has a multitude of grammatical irregularies, grammatical gender, and fixed forms of sentence construction which will always present great difficulties to non-Spanish speaking groups. It is very easy to exaggerate the facility of acquisition, especially for speaking and writing. I give the following bit of practical testimony:

"Some weeks ago," he said, "we advertized for a salesman to work in Spanish countries. Of forty-three applicants, thirty-eight were simply useless because they couldn't speak Spanish decently. Everyone of them thought he could, having been 'educated' in our college 'language courses!' Of the other five, four were not competent salesman. The fifth man got the job—he had learned to speak Spanish in Germany." (G. P. Purnam, "The Southland of North America.") Yet American schools and colleges are specializing in teaching Spanish!

FRENCH.

But you urge: "When the best language for an I. L. is spoken of, it is the English or the French that is usually referred to." Practically speaking, it is the English when referred to by English speakers, and French, by Frenchmen. If English speakers are found urging the value of French as a universal medium, or vice versa, it will ordi-
narily be found that the speaker has little or no knowledge of the language he suggests (or has become so thoroughly nurtured in it as to be unconscious of its difficulties for the ordinary scholar).

Let us examine the merits of French for the role: It makes high claims for that honor and has some strong advocates. The English speakers prefer it to the German, the German and Slavic races would prefer it to the English. History shows us that French has twice held the position of a universal language (in the higher social and official circles) in Europe; once during the 12th and 13th centuries and again during the 17th and 18th centuries. It is especially noted as the language best suited for polite literature, conservation and diplomacy. French prose is a model of precision and clarity of expression. The French grammar, except for its complicated verbal system, is of a modern type, much like the English. Its sentence arrangement is generally logical and clear: subject, verb, complement, and is therefore easy of comprehension by all peoples. Its vocabulary is especially easy of acquirement by all Latin races and the English. It is noted that there exist some 15,000 words which the English and the French spell in a similar manner. The significations of words are ordinarily less ambiguous than is the case of like words in English. It is not nearly so arduous a task for the English speaker to attain a fair reading knowledge of the French as of the German.

Now it is a necessary postulate of the modern I. L. that it should be not only easy to read but easy to write and speak, and these latter are not characteristics of the French.

"The orthography, fixed in the 16th and 17th centuries, is both historical and pedantic and does not correspond to the pronunciation . . . Relatively easy for the Slavs, the Scandanavians, the Hollanders, the

* Note: My yesterday’s paper stated that urgent representations had been made to the American government that French be adopted as the official language for the Limitation of Armament Congress in Washington.
French pronunciation is difficult for the Germans and especially for persons whose paternal language is the English." (Meillet ibid. p. 288-9).

In fact, it is utterly impossible to learn to speak French out of a book, a demand which is easily met by a properly constructed I. L. The French, like the other European languages, has grammatical gender, which simply means that the ordinary English student wishing to write a phrase in French has to consult the dictionary every time he wishes to use a French noun. The verbal system is extremely complicated and bristles with difficulties. Says L. de Beaufront: "Even agreeing to disregard all verbs of the second conjugation (infinitive in-ir) in which the interposition of -iss- in certain tenses and its omission in other constitutes a true irregularity, there remains in the French 110 verbs indubitably irregular. The French verb être presents in itself 34 diverse finals united to 22 different roots, a total of 56 forms as variant as possible. The French conjugation, as a whole, presents 2,265 diverse forms. This is why one can easily appreciate the declaration of General Faidherbe that, "The verb is the great obstacle to our (French) colonization." There lies before the writer a book prepared for beginners in French. It contains 18 closely printed pages of conjugations. Consider for a moment the labor necessary to an easy mastery of these tables! Yet, as seen in Ido, all verbal forms found to be necessary for the logical expression of thought can easily be printed on one page. Is it a common sense proposal to burden the youth of all lands with this veritable mountain of verbal forms for which no reason can be given except the bare fact of their existence and the plea that they are "natural"?

The proper use the syntax of the French language, even if one is a master of its grammatical irregularities and exceptions, is an affair of long training and laborious study. The French which we endeavor to teach in our schools in essentially the language of the French elite of Paris in which even the cultured Parisian sometimes errs from the correct usage and instances are not unknown of faults committed by members of the French Academy. Says Meillet (p. 214.)
"It is necessary that one should be oblivious of its
difficulties in order that one may resign oneself without
tremor th write even a few lines in French."

"The French is a language traditional, literary,
aristocratic, which can be used with facility only by
persons possessing a very high degree of culture. It
was created by the intellectual and social elite. It is
a kind of ideal toward which the French more or less
successfully strive without actually attaining." (ibid.
p. 224).

It is evident from the foregoing that a reading,
speaking, writing mastery of French can only be attained
by those specially trained and that it decidedly is not a
language for the masses.

ENGLISH.

Far outnumbering those who have French or German
for the mother tongue is the English now spoken by pro-
bably about 175 millions of people. Because of the in-
creasing populations of the United States and the British
colonies, English is likely to occupy a position of con-
stantly increasing importance, though one must not forget
the probable rate of increase of the Russian and the
Spanish. The English have been a colonizing and trading
race consequently a knowledge of English is widespread
throughout the world and hardly a city of any importance
can be found where English is not spoken. It contains
one of the finest literatures of any language, ancient or
modern. Its grammar is free from the embarrassing
declensions, agreements and conjugations of the German
and French. Its vocabulary of Romance and Germanic
origin contains such a large proportion of international
roots that "neither the Frenchman, the Hollander, the
Norwegian, the Dane, the Swede, nor even the German
feels himself entirely a stranger" (Meillet, ibid. p. 296).
The relations between the French and English vocabu-
laries are particularly close and intimate.

* Note: "Qui ne s'est pas assoupli l'esprit par une longue gym-
nastique est hor d'état d'écrire le français avec quelque propriété
d'expression." (ibid p. 213.)
Acknowledging all that can be said in favor of the English, we must recognize that there does not yet exist any considerable amount of organized or unorganized sentiment in non-English speaking countries to lead us to suppose that these countries would be willing to adopt English as the official secondary language. The French particularly with their well known love and appreciation of their own language would be particularly opposed. The very fact of the commercial and political predominance of the English speaking races militates against the adoption of the language by arousing the nationalistic jealousies and prejudices against any further extension of this powerful position.

Spelling and Pronunciation: The chaotic English spelling and pronunciation, to say nothing of the complicated accentuation, entirely unfits it to occupy the position of an I. L. Compare, for instance, the five constant vowel sounds of a, e, i, o, u as found in the Spanish (or Italian) with the thirty or more vowel sounds that these letters may stand for in English and in addition to this the multitude of ways of spelling the same sound.* How is the self-taught foreigner to remember what particular sound to give to a particular vowel or combination of vowels? Take the th sound as found in the and therefore present in almost every sentence, which many foreigners find almost impossible to pronounce correctly. My current weekly paper is advertising a book entitled "How to Spell and Pronounce 25,000 words frequently misspelled and mispronounced." If we need such a book, what chance has the foreigner of correctly spelling and pronouncing our language? Educators tell us that because of the time necessary for our children to devote to the barron and unprofitable study of the spelling books, our children are retarded a year or more in their progress in comparison with children of other nationalities who do not have to confront this difficulty. That I may not be

*Note: The following words have the same vowel sound: urn, earn, work, bird, were, scurge and tierce. The same is true of mine, pie, eye, buy, height.

In Clark's work on the I. L., page 19, will be found 21 ways of writing the same sound of the letters.
considered to have exaggerate the difficulties, I quote the following authorities:

"When the vocabularies of the two languages (Anglo-Saxon and Norman-French), widely different both in their orthographical structure and their phonological character, were combined, the result is a language in which the orthography has almost reached the extreme of irregularity. To such an extent, in fact, have the signs representing sounds been multiplied, that many of the letters are pronounced in several different ways, while the letters, or combinations of letters, for a single sound amount, in some cases, to scores. Indeed it may be computed that many words of no more than two syllables may be spelled in several thousand different modes, by the use of combinations actually employed in other words in the language. The word scissors, for instance, may be thus written as is computed by Ellis, in nearly six thousand different ways."

Article 'Orthography', Webster's Dictionary.

"We have half a dozen symbols for every sound and we have half a dozen sounds to the same symbol. Our spelling is illogical, incoherent and chaotic, and no other language, ancient or modern, has ever had a group of orthographic inconsistencies as absurd as "Through" (thru), "cough" (kof), "hough" (hok), "bough" (baw or bou), "rough" (ruf)."

Brander Matthews, newspaper article.

"The spelling of the English continues to be probably the most vicious to be found in any cultivated tongue that ever existed. With a number of sounds for the same sign, and again with a number of signs for the same sound, it is in no sense a guide to pronunciation, which is its only proper office."

Lounsbury, 'English Language', p. 82.

Said Prof. Francis A. March, former President of the American Philological Society, "It is no use to try to characterize with fitting epithets and adequate terms of objuration the monstrous spelling of the English language."

Quoted from R. G. White's 'Words and their Uses.'
Said Prof. Max Müller: "If we compare English as spoken with English as written, they seem like two different languages.... as different as Latin is from Italian."

Any thoroughgoing phonetic reform which would remove some of the difficulties of English for the foreigner is extremely unlikely in the immediate future. Professor Brander Matthews, of the Simplified Spelling Board, asserts: "Any scientific phonetic reform is absolutely impossible." We should have to introduce a large number of diacritical marks or new letters which would play havoc with the language and practically result in a new language for the eye.* The most that we can expect is that in the course of four or five decades, we shall arise to that degree of intellectual impartiality which will enable us to willingly adopt at least many of the amended spellings recommended by the English and American Philological Association. Such adoption would doubtless mark a great advance, but it would not be fundamental enough to enable the foreign student to spell or pronounce easily the English language.

As a matter of fact, the great difficulty of English for the foreigner lies not so much in the spelling as in the pronunciation. The orthography is largely international and consequently thousands of our words are recognizable by sight to the foreigner. He knows the meanings without reference to the dictionary. If we change the spellings to accord with the pronunciations, he would lose the facility of reading the English. That which is irregular and fantastic to the foreigner is the pronunciation. To help the foreigner, therefore, we should not attempt to make the spelling agree with the pronunciation, but the pronunciation with the spelling. We should not pronounce nature as nechur, or nation as neshon, o ocean** as oshan or oshn

* Note: It is likely to be some centuries before we shall feel free to write excess as xs, or edge as ej, or give one common spelling to the different ideas contained in wright, write, right, and rite. Nor are we soon likely to write the words of Hamlet's soliloquy on mortality, "must give us pause" in the form of "must give us paws."

** Note: Ocean is pronounced in German "ocean," in French "oséan", in Italian "oceano", in Russian "okean".
but as they are now spelled. The same is true of the French. It would be easier to learn French if it were pronounced as written than it would be if it were written according to the pronunciation. The spelling of all languages is much more international than the pronunciation. It is just this similarity in spelling which facilitates the learning of international roots.

**GRAMMAR:** The grammar, though fairly easy and regular in comparison with other languages, has many irregularities and exceptions to rules. We have for instance, over 170 words in common use of which the past and past participle are formed irregularly. There exists no regular rule by which one can determine the plural forms of the nouns. Some plurals end in -s, others in -es; some change the spelling of the root, as: beef to beeves, leaf to leaves, body to bodies, child to children, foot to feet. Some words are without distinguishable singular and plural, as: you, deer, sheep. We have many forms of prefixes and suffixes which modify the meaning of a word in the same way. Take these, for example, which are intended to give an opposite meaning to the root: inequality, irregular, impolite, illogical, ignoble, disagreeable, malapropos, non-essential, uneven. Any logically-formed I. L. (or the German for that matter) can express this idea in one or two invariable forms. A well-known 'English Grammar Simplified' contains 236 pages of text.

* Note: 'Now, the fact is that these principal parts of speech are so interchangeable in our mother tongue that they can hardly be said to be distinguished from each other. In English almost any simple noun may be used as a verb without change in its form; and in like manner almost any verb may be used as a noun. Nouns are used as adjectives, and adjectives as nouns. Pronouns may be used, and are used, as nouns, as adjectives, and even as verbs. We wire a message, we table a resolution, we foot our way home, a hunter trees a bear, a broker bears stock or bulls it, the merchant ships his goods, the hypocrit cloaks his sins with acted falsehood, the invalid suns himself, the east wind clouds the sky. We thus constantly use, and for centuries have used, as verbs words which originally were nouns. On the other hand, we speak of the run of a ship, of a great haul of fish, of a horse coming in on the jump, of a man being on the go, of a great rush of people, of a push of business, of the thrust of the rafters of a house, of the spring and fall, and so on using verbs as nouns. We cannot speak of the right and the wrong, the good and the bad, the strong and the weak,
IDIOM: As has been said all cultural languages have become fixed in certain forms of expression, any departure from which stigmatizes the speaker or writer as uncultured and ignorant. The foreigner must painfully acquire modes of expression, not merely definitions of words. In French, the use of an improper word to express a definite meaning is almost a crime. The English words are more ambiguous because they may be combined in sentences, the ordinary dictionary significations of the separate words affording but little clew to the real sense. This leads to looseness, ambiguity, inexactness of expression which is a constant source of misunderstandings. It is a difficult matter to draft a law which does not need court decisions to determine its meaning or draw up a treaty which is not open to different interpretations. It is impossible to expect the foreign student to acquire English modes of expression without instruction of high class extending over years. As a practical example of what we might expect to find were English taught in all foreign schools, I give the following:

"English is compulsory in all the schools of the Island (Porto Rico), but few pupils learn it thoroughly enough to retain it through life. Most of them read it in a parrot-like manner; if they speak it all, it is to

without using adjectives as nouns.... And as to using nouns as adjectives, we cannot speak of a gold watch, an iron bar, a bar-room, a carpet-bag, a carpet knight, a brick house, a stone bridge, or a windmill, without doing that. It is the commonest conversion of the parts of speech. We can hardly communicate in English without it.... When we use brew-house, a wash-house, a turn-stile, we use verbs as adjectives. As to pronouns, "he" and "she" are constantly used as adjectives. as, a he goat, a she animal.... Love in English corresponds to both amor and amo in Latin, and to amour and aime in French. Man is a noun, meaning a human male (homo, homme); and it is a verb, as, to man a ship, for which in Latin and French there must be a periphrasis; and it is an adjective, as man child, man rope, a use of the word impossible in Latin or in French.... You cannot tell whether love or man is noun, verb, or adjective until you see it in a sentence. The illustrations of this fact in English are countless." (R. G. White, 'Every-Day English,' p. 296-8.)

* Note: We do not "sow" but "plant" corn. "Why" asks the foreigner, "cannot I say meself and yesternight as well as myself and yesterday?" We have to reply: "What you say is logical enough, but it is not good English to use these expressions."
shout some half-intelligible phrase after a passing American. The ear shudders at the English spoken even by teachers who are supposed to be specialists in it; the rest are little short of incomprehensible.

Passing on from one instructor to another, the English that finally comes down to the pupils resembles the original about as much as an oft-repeated bit of gossip resembles the original facts. It might almost be said that there has been no progress made in teaching English in the twenty years of American rule, or at least in the last fifteen of them." (my underscoring).

H. A. Franck, 'Roaming through the West Indies', (page 281).

We must conclude, therefore, that the practical use of English as an auxiliary tongue is impossible. Any brief study on the part of the foreigner can only equip him with a sort of jargon, "babu", "pidgin"-English, such as we sometimes find used by guides on the continent or which would be merely sufficient to make the speaker understood in a barber-shop, a restaurant, a shop. It would be entirely insufficient qualitatively and quantitatively to enable the user to write a lengthy letter in idiomatic, correct English or to translate a popular or scientific article from his own language into the English, in the way it can be done in a properly constructed artificial I. L.

Consider the plight of some learned, foreign savant who attempted to put into standard English some paper of his for an international congress. As one writer puts it: "One can picture the scene in which representatives of all nations would meet in solemn discussion of questions in an expatriated English, to which no Briton could listen without a ripple of laughter or an impatient shrug of indignation." Even if a more thorough study were attempted than is at present practically possible, the English would lose more than it could gain by such adoption. Said the linguist, Michel Bréal: "A language would become a mixture of all idioms and would lose all its distinctive spirit and all its originality." In other words, the wide use of any language by peoples of different linguistic traditions and training could only result in a degradation of the language.
I will conclude with the words of Prof. Lounsbury (English Language, p. 187-8):

"Of all the languages of Christendom, English is the one now spoken by far the largest number of persons; and from present appearances there would seem to be but little limit to its possible extension. Yet that it or any other tongue will ever become a universal language is so much more than doubtful, that it may be called impossible; and even if it were possible, it is a question if it would be desirable. . . . It has become extended because it has been and still is the speech of two great nations which have been among the foremost in civilization and power, the most greedy in the grasping of territory and the most successful in the planting of colonies. But as political reasons have lifted the tongue into its present prominence, so in the future to political reasons will be owing its progress or decay."

BOTH ENGLISH AND FRENCH AS I. Ls.

It has sometimes been suggested that both English and French be adopted as universal tongues. As either of these languages is tremendously difficult to master, the proposal to double the task for non-English and non-French peoples may be accurately described as stupid, though "thoughtless" is a more polite word.

DEMANDS ON AN I. L.

An efficient I. L. should have the following general characteristics:

(1) Neutrality in all international relations.
(2) Easy comprehensibility founded on the use of international European root words.
(3) Simplicity and regularity of grammar, though sufficient for the exact expression of all necessary thought relations.
(4) Phonetic spelling.
(5) Ease and euphony of pronunciation, by the avoidance of gutturals, nasals, varied pronunciation of consonants and vowels, difficult diphthongs, harsh or unusual sounds arising from combinations of letters.
(6) Regular accentuation.
(7) Precision of expression: Unambiguity in the signification of words. Absence of difficult idiomatic expressions where the meaning can only be understood from the sentence as a whole, as: "How do you do? A logical method of sentence formation, preferably that of the English and French: subject, verb, complement and the qualifying words in general placed next to the words they qualify.
(8) A richness of vocabulary sufficient for the exact and clear and euphonious expression of all thought.
(9) A regular and rigorously logical system of word formation and derivation by means of affixes.
(10) Easily printable, using only such characters and letters as are most generally in use or easily obtainable: the Roman alphabet.
(11) Such a general facility of use that the ordinary person can easily master it sufficiently to read, write and speak.

No national language fulfills even a small number of the above requirements; English, for example, fulfills none expect no. 10.

GENERAL OBJECTIONS AGAINST THE POSSIBILITY OF AN I. L.

There exists a more or less consciously held presupposition that language is not an acoustical and optical sign system arbitrarily coordinated with our thought, but that our ideas are inseparably with the manner of their expression, i. e. the words; that the ideas and method of correlating these ideas into logical categories differ so much among the nations that no common basis exists upon which to found a common tongue. In short, that "language cannot be created in a retort" but is a "living organism" which cannot be artificially reproduced.

Though few scholars hold to this objection in its logical purity, there yet exists a widespread prejudice against any artificial form of language based on the belief in its inadequacy to take the place of a so-called natural language. They feel that an I. L. can only be a rough code of mutually intelligible signs, not a true language.
If one carries this objection to its logical extreme, one would have to admit that no language can be adequately translated into another. That the English and French versions of the Peace Treaty are not faithful reproductions of a common thought. This extreme form hardly needs, I think, a refutation. It may be admitted that because of our fixed diction in constructing sentences, often some small shade, nuance of thought in the original cannot be well expressed in translation, unless by way of parenthesis, but this applies only to unimportant details and does not affect the substance.

The overwhelming refutation of the above objection is the demonstrated fact that such an artificially elaborated form of I. L. as Ido can and does translate all thought accurately and precisely. In fact, Ido, by its logical system of prefixes and suffixes, by its use of words in an unambiguous way is, as said Couturat, "an instrument of precision, for the analysis and exact expression of thought, which is superior, from the point of view of logic, to our traditional languages, encumbered as they are by confused and ambiguous expressions." It is to be noted that we are here speaking of thoughts that admit of precise expression. The I. L. is essentially an instrument for the expression of the intellect, though it is by no means lacking in the expressiveness necessary in literary creation providing that such sentiments are capable of being clearly put into words. Doubtless the native tongue will always remain supreme in the misty realms of poetry and imaginative literature wherein the soul obscurely strives after expression by beauty of diction.

The possibility of translation into a different tongue lies in the fact that in spite of using different noises and signs to represent the same thought, we all live in the same sort of world and apprehend this world through the same senses and one common logic, however much this common logic may be obscured by different idioms, metaphors and grammatical difficulties with which an uncontrolled growth has encumbered the languages. In other words, we have common senses to grasp facts and common facts to grasp. We get our interpretations of words from our environment. The difficulties of understanding arise not from differences of mental process but from lack
of information. For example, it would be difficult to convey to the ill-informed dweller of the tropics a clear idea of the actual appearance and properties of snow. The idea of "home" will be pictured in the minds of different peoples in a different way, yet there yet exists a common basis of understanding in the idea of a dwelling place, an abode for one's family. Now if the mental processes were different, if our senses were different, this mutual intelligibility would not be possible. Recent news items speak of the possibility of communication with the inhabitants of Mars. Presumably the mentality and environment of the "Man from Mars" are so different from our own as to make any mutual comprehension absolutely impossible.

In conclusion, I quote the apt remark of Prof. Ostwald:

"The scientific investigator regards language only as a means of making himself understood. Language is not for him something "which thinks and poetizes", but rather an instrument for conveying his knowledge and wishes to other people, much after the fashion whereby a musician is enabled to convey his feelings by means of musical notation and the instruments of the orchestra."

It is true that we cannot create a "living organism", like a horse to drag our goods, but we can create a motor which will do the work far better. The natural languages may be said to have the beauty of the natural forest and thickets untouched by the hand of man. A properly constructed I. L. is like the beauty that goes with the studied placing of the trees and the clearing away of the underbrush. Our arts are artificial as distinguished from the wild beauty of nature, but they gain thereby more than they lose.* An a posteriori form of I. L. is in reality but a reasoned use of existing linguistic material, not a purely

* Note: "C'est justement le privilege de l'homme de diriger et de corriger la nature, de la perfectionner au besoin et de la discipliner. Dans toutes les institutions et dans toutes les productions humaines, le progrés consiste a remplacer l'action spontanée par l'action reflexie, l'instanct par la raison." Couturat, 'Pour la L. I.', p. 25-6.
artificial creation. It is but the "quintessence" of modern languages. All theoretical beliefs to the contrary must yield in the face of practical demonstration of its possibility.

AN I. L. NOT SOMETHING NEW.

It is well to remember that, however absurd the creation of a common secondary language may seem to some Europeans, such languages have existed for centuries in the orient. India has in Hindustanee, or Urdu, which has existed since the 16th century, a key language which will carry a man throughout hundreds of different tribes. The Sanskrit was an artificial creation of scholars dating from 350 B. C. In order to end the linguistic confusion which arose owing to the break up of the ancient Vedic peoples into various tribes and state organizations, a number of Indian scholars, headed by the famous Panini, created out of the Vedic languages an artificial language, now known as Sanskrit which remains in use in that fixed form even to-day.* The Chinese, who have a large number of widely divergent languages, possess in Mandarin-Chinese a master language which serves as a common written language throughout the empire.

Owing to the growth of science, there has been artificially coined for the European languages, a vast scientific vocabulary which is a practical lingua franca for scientists. Furthermore, we have elaborated systems of international signs, such as: the numbers, algebraic signs, chemical signs, musical notation, maritime signals.**

PRACTICAL OPPOSITION AND PUBLIC INERTIA.

The real hinderances which prevent a wide acceptance of an I. L. arise (1) from objections founded upon the inadequacy of some forms of I. L.; (2) from prejudices

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* Note: My attention was drawn to the facts about Sanskrit by a booklet in Ido by P. Ahlberg, "Exkurseto en la Historio di la Mondo-Linguo."

** Note: By the latter system a ship of one nation can in case of accident summons a surgeon from the ship of another nation, but, unless the surgeon happens to know the particular language, he is unable to communicate with the patient after he arrives on board.
caused by the inaccurate and improper ways of translating thought by poorly instructed usess of artificial languages; (3) from the natural conservatism inherent in human nature, scholarly and otherwise. The last is by far the most important obstacle.

It is admitted that a string of undefined words, plus a few grammatical rules (such as is outlined in some of the Latinist projects) do not constitute a true language, any more than a lot of unshaped stones constitute a building. Such a "language" is at best but a more code somewhat more full than maritime signals. Any proper I. L. must be a consistent whole which covers fully and accurately the necessary expression of complex and varied thought. Practical experience shows that the elaborated I. L., known as Ido, answers the purpose of a real language.

An elaborated language, such as Ido, is a powerful instrument for the expression of thought, but like many powerful instruments it needs study to understand and care in use if it is to produce the best results. It should not be held against Ido or Esperanto that non-adepts in the language, either because of natural inability to think clearly or because of a tendency to be mislead by national idiom find it difficult to translate their thoughts clearly. No form of I. L. can furnish brains to its students or give them facile use of the language without study. One can practically from the start construct simple matter which will be understood perfectly by all foreigners, but the accurate translation of difficult matter requires study and practice.

The greatest obstacle which the I. L. has to overcome is the conservatism especially of the learned classes and persons in authority. To-day there exists no problem of the I. L. in the sense of its possibility or practicability, any more than there is of the possibility of air-flight by human beings. The real problem, or rather series of small problems, is simply to determine the most efficient form such a language should take. Governments are, as a rule, far more conservative than the bulk of the people, and it usually take from ten to fifteen years after public sentiment has been worked up to obtain the necessary legislation. Probably the favorable verdict of the scholarly
and scientific world would do more to hasten the advent of an official I. L. than any widespread use among the more ordinary people. That verdict no form of I. L. has yet succeeded in obtaining, although there is visible an increased willingness to accord such recognition.

Why is this dilatoriness on the part of the learned public? First of all, I should say, the advent of an I. L. has been vastly retarded by the fact that there exists no pecuniary recompense for its construction. Such efforts as have been made have been largely at the expense of idealists poor in this world's goods. Could any one have made money out of it, the I. L. would have been in a much more advanced stage than it is now. Secondly, the training of the ordinary professor leads him to pursue the "safe and sane" paths of accepted truth such as the use of the dative in Virgil, early English poetry or archeology, rather than to make incursions into what he is inclined to regard as a cheap, commercial language lacking in history and tradition. As a matter of fact, the construction or even use of a perfected I. L. presents a particularly instructive field of study. It demands an analysis of thought and language which would delight the true scholar providing one could interest him in it. The I. L. is a particularly human problem related to the mass of the people which needs not merely linguistic knowledge but common sense, that is, the ability to judge impartially and sympathetically all facts in their relations to human beings, which is a native endowment as likely to be found outside as inside of colleges. The outlook for the support of the I. L. by the learned classes is not particularly bright when one stops to consider that long line of savants who have opposed the rotation of the earth, the circulation of the blood, steam power, propellers, railroads, gas-lighting, aviation and all the rest either by "demonstrating the impossibility" or declaring that "even if it could be done it would not be of any use." However, the sentiment in regard to an official I. L. is slowly gaining respectability. The eminence of many of the originators and propagators of Ido has been a great help toward bringing the problem within the range of vision of scholars. Possibly I have exaggerated the antagonism of the learned and official classes, probably a better term would be "inertia."
have advanced to the point where it is fairly easy to find prominent people who are willing to sign a petition in favor of such a language, though almost none of them are willing to devote real study to the subject or go to the trouble of even learning by practical experience the capabilities of either Ido or Esperanto. With respectability will come funds for development and propaganda and an eventual official recognition.

However, the lack of support on the part of those who one might suppose would be the most active protagonists, the professors of languages, has possibly had one good effect. It has allowed the language to develop from simple forms and prevented the intrusion of intricate and difficult rules of grammar and expression which would likely have taken place had the task been turned over to a purely linguistic body. No complicated forms which can only be mastered by years of study should be intruded into a language to be easily acquired by ordinarily educated men of all nationalities. Such support as has been given has come mainly from scientists rather than linguists. The scientists because of their training in other fields of endeavor have felt a greater need of such a language and have no vested interests in the "natural" languages. Ostwald, Pfaunder, Donnan were scientists. Couturat, outside of the fact of his prolonged study of the I. L., was a philosopher and mathematician. Jespersen (aside from the help afforded by Baudouin de Courtenay in the Delegation Committee) has been the only philologist of eminence to give constant help and support in the development of Ido. Of course, the language has received much aid and assistance from the labors of many who have had a wide knowledge of languages but they have not been men of prominence. (see Appendix A.)

The development of an I. L. has been a matter of trial and error. No one man or group of men can sit down in a study and evolve a perfect form of language. It needs practical use to demonstrate its excellencies, its defects, its limits. The learning of the scholars must be checked by the common sense of the ordinary man. No rule or word should exist in an artificial I. L. for which there does not exist a good reason and the I. L. therefore needs and welcomes scientific study. The I. L. is essentially a popular
movement and in the course of time will undoubtedly gain the support of the learned and governmental classes.

**A PRIORI SOLUTIONS.**

Certain philosophic minds from the time of Descartes on, while perhaps recognizing the possibility of a language constructed on *a posterori* principles, have attempted to build up an I. L. by a philosophical coordination of ideas and symbols, in an endeavor to give high precision to ideas and avoid the ambiguities and illogical expressions of natural languages. As Descartes said, such a language depends upon the creation of a "vraye Philosophie" and is not intended for "esprits vulgaires".

It affirms that the fundamental ideas possible to the human mind are few in number: mind and matter; mind: the intellect, the sensibilities, the will; matter: organic and inorganic; organic matter: vegetable or animal, etc. To such fundamental ideas are assigned arbitrarily selected letters or numbers (or in such a language as Solresol: a musical notation). In the Ro project, for example, the letter b stands for one of the 25 grand divisions of ideas and denotes "existence, substance, thing;" the letter o: "a concrete noun"; the letter d: "space, place, dimension." Ro translates the idea of world by "bod"; comet: "bodak"; moon: "bodam"; star: "bodar"; sun: "bodas", etc. I judge from the foregoing that the only letters which afford a clew to the meaning are to be found in the first three letters of each word, the others being arbitrary endings to enable the reader to distinguish the different objects from one another. This is a fair illustration, I think, of the method followed in building up all philosophical "languages". They are primarily mathematical in conception. One could use bod-1 for world, bod-2 for comet, bod-3 moon, or even 1-1 for world, 1-2 for comet, because such numbers are quite as distinctive (and probably as easily remembered) as the letters. About the only good word that I can say for these systems is that they are neutral. It is, of course, mathematically possible to build up with a few letters or numbers sufficient combinations to run into the millions, but this unfortunately does not furnish the means to remember easily or under-
stand the meanings of this prodigious number of combinations. It may be noted that there is some relation between such systems and the ideographic writing of the Chinese with its 40,000 signs.

The following reasons are given to show that such projects are practically impossible:

(1) That the fundamental conception that the primary ideas are but few in number is illusory and contrary to fact. As Prof. Couturat remarked, the different and irreducible symbols of mathematics alone amount to more than one hundred, not to speak of the large number of symbols and combinations of symbols necessary to express the chemical formulas. While possibly suitable for the classification of such simple ideas as world, moon, comet, star, it must utterly break down when it comes to the multitudinous abstract ideas of wide and varied application as expressed by verbs in common use and qualifying words. One has but to look at such books as Roget's 'Thesaurus' to realize the complexity of the problem and how inadequate is any existing project.

(2) That aside from the fact that it would be extremely difficult to institute a world philosophic congress which would work out a logical classification of ideas which would be acceptable to all, we have to take cognizance of the fact that in scientific conceptions at least there is nothing absolutely final. New discoveries, new conceptions are constantly arising which make it necessary to revise our ideas, some of them very fundamental as regards the universe and its workings. Such a priori systems as have been heretofore worked upon rest upon the individual conceptions of their originators with all the limitations and errors that must arise from imperfect knowledge and apprehension.

(3) That as a matter of fact the exigencies of thought have in each language worked out a classification, or at least distinction of ideas by means of separate words for objects, acts, feelings, which although not logically perfect is probably quite as good as some a priori classification that a group of philosophers can give. A comparison of languages shows that, though we use different sounds to represent the one same idea, the peoples have
found it necessary to make the same habitual distinctions of objects and thoughts in all languages.

(4) That in trying to escape the ambiguities which arise from the different idiomatic uses of the same word by assigning arbitrary letters to a particular idea, readers must of necessity translate the ideas expressed back into the familiar words of their own language and therefore misconceptions would be likely to arise. Of course, this could be avoided if careful and minute definitions were given for each sign. But such aid would be only partial, for we do not think alone in abstract formulas where the relations are few but in complex conceptions of life where the intellect, the will and the sensibilities each have their part. Man is not only a logical being but a psychological being.

(5) That the great advantage of an a posteriori language is the facility with which it can be learned in comparison with any existing natural language. The best language is that which uses the least machinery and takes the least time to do the work efficiently. There is no sense in adopting an intricate machine where a simple one will suffice. Any a priori language would not only burden the mind by attempting to think along new and unaccustomed formulas but would simply overwhelm the memory with combinations of arbitrary letters or other symbols which would make memorizing of our entire chemical formularies pale in comparison.* A priori systems are in fact but glorified Dewey systems of classification such as we find in our libraries, plus a multiplicity of combinations to represent the ideas of motions, of sensibilities, of connective words. This loss of facility would make the thorough learning of the most difficult of any of our existing natural languages seem like child's play.

(6) That it is not believed that such a language could be spoken, and if it could be spoken, it would be practi-

* Note: What a burden to the memory to remember the Ro word for 100: "zubi", in comparison with the facility which one can remember the Ido word for the same idea: "cent-" which is directly represented in FIRS and found indirectly in derivative forms in E and D. Or, consider the international roots: "mond", "lun", "stel" in comparison with "bod", "bodam", "bodar" of Ro!
cally impossible to understand, as one would lose all the associations of words with their customary sounds that now aid us in remembering the significations. Therefore, such a language, in comparison with a natural language or an a posteriori artificial one, would be but half a language.

(7) That no workable a priori system has yet been evolved, or is in prospect of being evolved. Until some system is created that stands some likelihood of adoption there seems to be little use of discussion.

I will conclude with a quotation from Prof. Couturat who, as a philosopher and logician, was particularly well qualified to render judgment:

"Elles (a priori languages) reposent sur un principe tout subjectif, essentiellement précaire ed caduc;... Elles n'ont donc ni valeur scientifique, ni utilité pratique."

Histoire de la Language Universelle, p. 119.

"En résumé, une langue philosophique est irréalisable dans l'état actuel des sciences, et fut-elle réalisée, elle serait impraticable même pour les savants, parce qu'elle irait au rebours de la fin de tout language et de tout symbolisme, et paralyserait la pensée au lieu de l'aider."

Pour la Langue Internationale, p. 15.

**WHY NOT THE LATIN?**

To the man educated along classical lines, the first solution of the I. L. that offers itself is apt to be the Latin. It was the common language of the intellectual élite of the Holy Roman Empire. The Reformation, the increase of culture of the common man, the growth of independent states, all contributed to the abandonment of the wide use of Latin, and in the 18th century it had ceased to be the common language of the learned. The 19th century marked its decadence in university circles. Latin has in its favor that it is neutral, dead and therefore respectable. It is the direct parent of the Italian, Spanish, Portuguese, French and Roumanian. It has been used with Greek to build up a modern vocabulary of scientific terms. Latin roots may be found for about half of our common English vocabulary and for about three-quarters of the whole vocabulary. They are quite abundant in the
German and many are found even in the Russian. The sameness of these root forms should not, however, be stressed too much. The original Latin words have undergone many phonetical changes in all languages, especially in the English where they came into the language largely from the early French and underwent still further changes in the course of history. Admitting these changes in orthography, there yet remains a fairly recognizable common form of spelling the root which facilitates the learning of the different tongues. These Latin root words constitute the largest basis for unity among European languages. We cannot escape from it. When some teacher of English gives the advice: "Avoid Latin derivatives; use terse, pure, simple Saxon", he is using but one single Saxon word—"Saxon;" the other seven words of the sentence being of Latin derivation. What places the English in the Germanic group is the fact that our grammatical, connective words, nearly all prepositions and conjunctions, together with articles, pronouns, adverbs from pronominal roots, which occur in almost every English sentence, come to us from the Saxon. Also we have a large number of words of common, every-day use which come to us from the same source, as: man, horse, bird; good, evil; long, short; lie, sit, stand. In a number of cases we have two words expressing the same idea: one from the Saxon, one from the Latin, as: will and testament; yearly and annual; begin and commence. What gives to the English vocabulary the Latin predominance is the fact that not only thousands of words expressing primitive conceptions have been derived from the Latin through the French, as: sign, color, power, but the fact that there exists beside the Anglo-Saxon primitive words, derivative words expressing the same idea which have come to us from the Latin-French. Along with Anglo-Saxon word leaf, we have the English words foliaceous, foliage, foliate, which come from the Latin words: foliaceus, folium, foliatus; along with the Anglo-Saxon word iron, we have ferro-, ferrous from the Latin ferrum; with the word die, which is of Scandinavian origin, we have many words in the English derived from the Latin mori, as: mortal, mortuary, immortal. Any international language, therefore, which is based on inter-
nationality must contain a predominance of root words which were primitively Latin. Early proponents of the I. L. did not clearly recognize the extent and significance of this vast body of common root material and their systems therefore differed much from one another in vocabulary. "To-day", as says Prof. Jesperson, "great converging lines are seen", so that most systems are but dialects of one another. A further discussion of the nature of the vocabulary will be found under that heading.

A committee on the I. L. from the British Association (Educ. Section) recently attempted a census of opinion on the claims and practicability of classical and medieval Latin to serve as an auxiliary language. Scholars furnished Latin translations of certain test papers (also translated in Ido and Esperanto). Copies of the Committee's Report and test translations may be obtained from the 'Committee on International Auxiliary Language, International Research Council, 1701 Massachusetts Avenue, Washington, D. C., U.S.A.'

I must refuse as a practical man of considerable experience with the problem of the I. L. to discuss at length any solution which has classical or medieval Latin as its aim. Such remarks as I shall insert are put in simply for the purpose of showing the relations between Latin and modern practical forms of the I. L. The advantages of the ancient Latin are so plainly outweighed by its disadvantages as to be simply out of the question, except for a few college professors. The learning of any modern language, to say nothing of an artificial language like Ido or Esperanto is so much more easy and more suitable to modern conditions that even if the governments were unwise enough to adopt Latin as an auxiliary tongue, the project would not meet with any wide acceptance, nor would it likely slow down the demand for a logically constructed artificial language. An I. L. is not intended for use by savants of the type of the old classical culture or to be a plaything of a leisured class with scholastic leanings. It must be of a type suitable for easy and instant use by the ordinary man, the business man, the scientific man, who is utterly incapable of putting his thought into Ciceronian phrases, even though he studied Latin in his college days.
To have a chance of success, what must be put forward is some type of simplified Latin, some artificial form of I. L. with Latin roots in modern form as the basis of its vocabulary. The Delegation that finally decided upon Ido considered and rejected a large number of neo-Latin schemes among which was 'Latino sine flexiono', lately revived by the Academia pro Interlingua under the name of 'Interlingua'.* Prof. Peano, the author of the above-mentioned project was a member of the Delegation. A small number of scholars: Peano, Meysmans, Rosenberger, Monseur, Roningue, Bernhaupt, etc. ignored the decision of the Delegation and continued a desultory discussion of various types of artificial Latin schemes, which appealed to them individually, in the pages of a small journal called 'Discussiones' from 1907, the date of the decision of the Delegation, to the outbreak of the war in 1914. Since January of this year, certain bulletins have been issued in an attempt to revive interest.

'Interlingua' in its present form marks no advance over what was presented to the Delegation by Dr. Peano and other proposers of neo-Latin projects. These gentlemen, in spite of the learning of some of the collaborators, have not yet elaborated any large amount of the details of their proposals. They largely confine themselves to theoretical discussions, to general considerations or principles which do not seem likely to promote the solution of the problem. The words written by Prof. Couturat in 1909, are as true to-day as when they were written: (Since the rejection of the Latinist projects by the Delegation, the discussions and projects put forth for a neo-Latin I. L.) "have not advanced the problem one step; they have been consecrated to purely theoretical discussion without practical result."

The advocates of these neo-Latin projects have no body of followers. Their languages simply suffice for communication between themselves. The proposers do not put their projects to the practical test of translating difficult matter, but confine themselves to the construc-

* Note: A copy of an English draft of the 'Handbook of Interlingua' may be obtained from the International Research Council, Wash. D. C. See also an excellent letter of criticism by Louis Orsatti from the same source.
tion of simple sentences or to the discussion of linguistic problems for which a small vocabulary suffices. Judging from past discussions no two of these neo-Latinists agree, or are willing to agree an any large amount of detail, each being wedded to his own particular ways of forming words, sentences, orthography and grammar. Even at the present time the 'Manual of Interlingua' (p. 23) reflects this chaotic state: "He who wishes to write in Interlingua, has only to select his words (from Latin roots) according to his taste or necessities, adopt a (any) system of spelling (which suits him), string the words together with a minimum of grammar; and if his readers (those who know Latin) understand what he has written, his solution of the I. L. is good."

These attempts impress me as diversions of Latin scholars who, without time or inclination for prolonged study, or willingness to consult the linguistic usages of non-Romance groups, sketch out some form of I. L. that best suits them individually. A more sympathetic understanding of differing linguistic needs is essentially if an efficient form of I. L. is to be adopted. Theoretical considerations must yield in the face of contrary facts. A prolonged intensive study of details and practical test by difficult translation is essential. Stringing together words that have some degree of inter-nationality does not constitute a language. Because the spelling and significations of Latin words are easy to the proposers this does not necessarily suppose a like facility to the world in general. So unpractical all these schemes seem to me, that I would not attempt comment except that there exists such general ignorance of the general problem and the fact that most of our linguists are so steeped in the classical traditions as to be unmindful of the practical relations of the problem.

According to the Manual of Interlingua the following are the general rules for the adoption of words: (1) The Academy adopts all words common to the DEFIRSP. (2) The Academy adopts all words Latin-English. (3) Every international word which exists in the Latin is to have the Latin stem (i.e. is to be spelled according to the classical Latin).
Concerning the first rule, it may be said that it has been practically carried out in Ido. Every international root found in these languages has been adopted in Ido wherever it has been found necessary for the expression of thought. Ido has not merely promulgated a rule but done the work. It should be understood the Ido is founded upon the principle of adopting as root words that form which has a maximum of internationality in modern languages, irrespective of whether the root came from the Latin or some other language. As a matter of fact, the result is a type of language which contains a vast majority of words which have Latin roots, but this result has come not from the deliberate adoption of only the words in the modern languages which have a Latin origin, but simply as a result of a search for that form of root which is easiest of understanding and use by the greatest number of Europeans. In Ido, the "Latinity" of the language is a result of a search after internationality of separate words to express certain ideas, and does not result from any theoretical rule of selecting only words which have Latin roots. Moreover, in Ido the form of the root adopted is in accordance with the modern spelling, or spellings, taking into consideration the phonetics of the language. The form of root adopted in Interlingua is the etymological Latin stem and therefore often differs from the modern spelling in any language. To go back to the archaic spelling of the Romans is regressive because it makes the recognition of the meaning of the words and the spelling of the words more difficult for everybody, except the Latinists, and thus lessen the efficiency of the Language. This means the retention of such combinations as: oe, ae, th, ph (in place of f), the pious retention of double letters, and the difficulties in spelling presented in the numberless words where the spelling of the original Latin has undergone orthographical changes in all languages. This is against the whole historical tendency toward simplification of ancient abnormalities. About the only thing that can be said for the adoption of the Latin stems for the words is that it simplifies the root selection. Instead of attempting to find some easily recognizable form in the modern words, one has simply to find some Latin word which has survived in modern
speech and transcribe the original Latin spelling. Ido is composed on a practical, international basis, not on a pedantic, etymological basis. Naturally enough, the words common to DEFIRSP are from Latin roots and such words as used in the common vocabulary are not great in number.

Consider the second rule, that of adopting all English words which have a Latin base. It should always be remembered that a majority of these words have come into English not directly from the Latin (as is often the case in Italian and Spanish) but via the French and have consequently suffered many changes not only in the French but in the English so that to-day the spelling and pronunciation and especially the significations differ much from the classical words. To adopt the original form of root must therefore in very many cases tend to make more difficult the recognition and use of the words. The rule seems to me but a round about way of insisting upon a purely Latin vocabulary in deference to the scholastic leanings of Latinists. Such rigid selection does not make for either facility or efficiency. Why not set up an inflexible rule that words common to the English and French be adopted, or the English and German? An I. L. built up on these rules, if we must have iron rules to go by, would result in a language far easier of comprehension than one based on a dead and bygone language. Ido bases itself not on any inflexible rule of root selection but on the broad basis of modern internationality. This permits the selection of roots common to the English and German. The English and German populations together outnumber the whole Romance group. Are not points of agreement in these two great linguistic groups worthy of being taken into consideration? For instance, Ido has selected the common English and German roots: dank* and send as most international for the idea. The Latinists insist on gratia and mitte. They claim even a greater numerical international for these words than is obvious in dank and send. It may be admitted that the Latin roots can be extracted from words

* Note: The th sound in the English form of the word is impossible phonetically. Note the double "t" in mitte.
in many modern languages. We have in English the *mitte* in words like transmit; *gratia* bears some resemblance to gratitude, gratify, etc. but the form of the words have so changed and the sense has become so obscure that only a feeble connection can be claimed. If we literally follow the rule of using Latin stems, we ought to adopt a separate and distinct root wherever an English word has been derived from a separate Latin root. For example, along with the verbal root: *admirari*, we should have a different form of root for the noun: *admiratio*, and still another for the adjective idea: *admirabilis.* In Ido, these are all regularly derived from one form root: *admir-ar, -o, -inda, -iv-eso, -anto*, etc. Once the root is known all derivative forms of the idea follow as a matter of unvarying rule.

This brings us to the question of a regular and logical system of derivation which is sadly lacking in the Latinist projects. Interlingua does give a list of affixes which can be applied according to the whim of the writer, but no Latinist project that I am acquainted with attempts a logical and fixed form of word derivation, such as we find in Ido and Esperanto. The Latinists claim that the fixed forms of word derivation found in Ido and Esperanto deform the words so that they seem unnatural and therefore less recognizable. The Idists and Espists consider their system of word derivation the most characteristic and valuable trait of their languages. They consider that their system of affixes which carries the fundamental sense of the stem throughout all forms: verb, noun, adjective, etc. as not only of inestimable benefit in fixing the meanings of a particular form beyond question but

*Note: The Vocabulario Commune of Peano has: *admir-a*, -bile, -tione, -tor*, all derived from one root. However, this regularly formed derivation is immediately followed by: *admissible, ammissione, admisso, admitte*, four separate words to be learned as grammatical forms for one fundamental idea and which can in Ido be regularly derived from the one root; *admis-*. Peano boasts that his vocabulary covers more than ten thousand words. By stringing the vocabulary out by listing as separate words many arbitrary grammatical forms for one fundamental idea, it is very easy to collect a vocabulary seemingly fairly complete. If the Idists should list as separate words the various grammatical forms of their root words, it would be easy to run the vocabulary up to 60 or 80 thousand. (see Appendix B.)
in relieving the memory of the burden of remembering
the differing grammatical root forms for one fundamental
sense. We cannot have it both ways. We must either
choose the seeming distortion which results from regula-

tity of word derivation: admir-ar, admir-o, or we must
seek (vainly) after "naturalness": transmit, transmission;
permit, permission, admit, admission, etc. Let us take
some examples: Some Latinists have objected to the Idist
(and Esp.) Use of -o, -ado as the substantive forms for
verbal roots; -ation(e), or-acion(e) being more consonant
with the Latin. Ido, therefore, "mutilates" such words
as admiro, destino, kontesto, aklamo, kombino, solvo, in-
vento. We say (1) that the senses of these roots are per-
fectly recognizable through the verbal forms: admirar,
destinar, kontestar (E.: admire, destine, contest, etc.);
(2) that the use of -o as an affix relates these substantive
nouns directly with concrete nouns, such as: puer-o,
hund-o, and that we must have consistency for the ending
denoting nominal ideas; (3) that if the Latinists are con-
sistent in their derivation they must have alongside of
admir-ation(e), destin-ation(e), etc., which seem natural
to the Romance group and the English, such artificial
forms as solv-ation (for English "solution"), invent-
acion(e) (for the English "invention"), etc.*

Ido "deforms" such roots as dominac-ar (Latin:
domin-ari), operac-ar (Latin: oper-ari), violac-ar (Latin:
viol-are), formac-ar, rotac-ar. We answer: (1) that these
words are perfectly recognizable, especially in the sub-
stantive form; (2) that to use the shortened form would
lead to possible confusion of meaning with domino (game,
mantle); opero (E.: opera); violo (musical instrument);
formacar with formo, rotacar with roto.

* Note: We have ordinarily two bases for derivation in selecting
stems for verbal roots derived from the Latin: the root of the infini-
tive, the verbal root; the supine form (which is the Latin supine
minus the final -um). The Latinists usually have both root forms
and thus sacrifice regularity and facility. We even find these double
forms in Reform-Neutral: apprender alongside of apprehensible;
comprender and comprehensible; acquirer and acquisible. Ido roots
are usually taken from the supine form. Those interested in an
intensive study of this question should consult an article by Prof.
Couturat: 'Pri la selekto di la verbal radiki' in PROGRESO, vol. II,
p. 321.
It has been objected that Ido does not always use the most international form of root. For instance, Ido has sun-o instead of the more international form sol-. It is answered that the root sun-o is E and D, therefore of great internationality; that the root: sol- is a needed international form for the idea found in the adjective: sol-a: alone, sole. Many such accommodations have to be made in order to avoid sameness of root for different ideas, and often in order to obtain an easily pronounceable form of root. In Ido the selection of each root is a problem in itself, not to be decided by inflexible rule, but in light of all the facts. We do not fit facts to theory, but theory to facts.

Latinists object to the fixed form of the Idist and Espist noun finals: -o, -i which they deem mechanical and unnatural. Interlingua, like some other Latin projects, derives its terminal letters from the genitive form of the Latin root and therefore ends variously in -a, -o, -u, -e*, instead of having the one -o of Ido. Almost any system of vowel endings may be said to be an improvement on the lack of any final vowels which characterizes so many words in Universal and Idiom-Neutral: nostr, patr, votr, etc., in that it softens the accumulation of consonants and makes the words pronounceable. But they do not afford any clue as to the grammatical character of the word and impose an intolerable burden upon all except Latinists and the southern Romance races. I cannot but wonder at their retention in a 1921 type of I. L. Contrary argument is hardly needed except for confirmed Latinists. However, I quote the following from Prof. J. Meysmans, who is a prominent advocate of a Latin based I. L.: He said in 'Discussiones', June 1910: "The final vowels of the Latin stem are not acceptable in an I. L. They are too difficult to retain. Persons who have not studied Latin are continually forced to consult the

* Note: It is noted in Interlingua that the letter "e" is a final for not only nouns but also adverbs (-mente), and even verbs. It has thus no value in determining the grammatical character of a word. The meaning of a particular word ending in -e must therefore be determined by an inspection of the whole sentence, just as is the case with so many of our English words which so much puzzle the foreigner.
dictionary in order to ascertain whether they should write *poeta* or *poeto*, *templo* or *temple*, *rosa* or *rose*, *aspectu* or *aspecto*, etc. The Italian interlinguists who are the principal partisans of the Latin finals do not understand how difficult they are; for them they are indeed very easy, too easy . . . These finals exist solely in the southern languages (I.H.P.) which are spoken by about 90 milliones of people; but the Latin finals are totally unknown in all other languages."

He said again in 1912: "I have for a long time defended the Latin finals (-a, -o, -e, -u), but I have arrived at the conclusion that we ought to abandon them as useless and difficult . . . The long, patient and impartial investigation I have made of this question has convinced me that in all countries there exists an ineradicable hostility to the Latin finals."

If a Latin based I. L. is only to include common words from the classical Latin, it must lose many well known roots which have wide internationality because they have no classic equivalents. The proof is obvious enough to those who will glance at a dictionary. For example: abandon(-ar) which is DEFIS but not in classic Latin; abas(-ar) EFI; abat(-ar) EFIS; kaval DEFIRS; garden DEF (in place of Latin hortus); danjer-a EF*, etc. Let us take the idea of "responsible": Latin: reus, rea; D: verantwortlich; E.: responsible; F.: responsable; I.: responsabile; S.: responsable; P.: responsaval; (note the difference in spelling, which form is "natural?"). In Ido, we derive such words directly from the root: respons-anta, -iva. Esp. has respond-a deriving it from respond-i.**

Another serious problem which the Latinists do not make clear is the significations to be given the words.

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*Note: Interlingua has periculose for this idea which is only Latin and Italian. Spanish has peligroso, arriesgado; Italian: periglioso, pericoloso; Port.: perigoso, arriscado. Ido has obviously the best solution.

**Note: In this connection it is noted that Esp. has two widely different significations for the one root respond-i: (1) to reply, respond (to a letter, etc.); (2) to be responsible or accountable. This is a sample of ambiguity in Esp. which is rightly criticized. Ido has two different roots to express the significations: respond-ar, respons-ar. There are a few words with ambiguous double meanings yet remaining in Ido, but it is expected that decisions of the Idist Academy will soon do away with such cases.
Are we to follow the ancient, classical meanings, or are we to take the roots in the form found in the classical Latin and apply to them modern meanings? The Latin was a highly developed cultural language reflecting the bygone civilization of its time. To-day our science and our whole social structure have changed and are reflected in our languages. In ancient times any departure from fixed forms of diction was regarded as improper, just as to-day when we censure the use of unusual expressions. To fix the form (spelling) of the roots does not alone suffice. It is also absolutely essential that each word should have a determinate meaning. The recent British report on the claims of Latin put forth two essential requirements for the I. L.: (1) that it should be easily understood; (2) that it should not be easily misunderstood. The report points out the fact that while there is little chance of ambiguity in the words representing concrete things, such as chair, railway, wine, king, soldier, mother, there is in modern languages no certain guide to the exact meanings of words denoting more abstract ideas which have a wide and varied field of application in the different modern languages; this is especially true of verbal roots of common, idiomatic use. Ergo, say the Latinists, we should go back to the classic writers, to the meanings of the Latin words as found in Latin dictionaries. The point is important, very important. But it is not to be solved by going back to the Latin words which are as idiomatic in use, as ambiguous in signification as like words in any modern language, and furthermore these various senses of the words very often differ much from the modern use of the same roots as found in modern languages. A glance at the Latin dictionaries is enough to demonstrate this. For example, I turn to the first pages of my Latin dictionary (Harper's). I find: abdic-o, -are (from which comes our 'abdicate') for which the following meanings are given: (1) to deny, disown; refuse, reject; (2) to renounce, to disenherit; (3) to abdicate. Take the Latin abhorre (from which comes our word 'abhor') which may signify according to good classic use: (1) to shrink back; (2) to shudder; (3) to be averse or disinclined to, not to wish; (4) to be remore from an object, i.e. to vary or differ from; (5) to be free from;
(6) to alter, to change. Now if we are to go back to the Latin, we are confronted with the task of not only learning a lot of strange spellings but an enormous number of new, idiomatic meanings for thousands of words which would demand years of study. The contention that with Latin as a base, new dictionaries would not have to be worked out as the existing Latin ones would suffice is seen in its true light. Either we must attempt to write classical Latin which demands a lifetime of study or we must be content with constructing "dog-Latin" sentences which would offend the true Latinist even more than an I. L. founded on modern roots.

The Latinists, as I see it, have made two errors: (1) They have allowed their scholastic training to prejudice them against an I. L. founded on modern internationality. The modern, practical world does not care whether the vocabulary of an I. L. comes from Latin or the Chinese; what it desires is efficiency. (2) They have failed to understand the difficulties of the problem and failed to work out the details and put their systems to the test of difficult translation. Elaboration of their systems and practical tests would show up defects of their theories and demonstrate to them the need for a complete, coherent and logically worked out language, as we find in Ido.

HISTORY OF THE I. L.

The philosopher Leibnitz (1646—1716) is ordinarily regarded as the father of the idea of an I. L., although Descartes, in a private letter written in 1629, outlined with remarkable lucidity the principles upon which such a language might be founded. Although the problem of an I. L. attracted the attention of Leibnitz throughout his whole life, his service chiefly consisted in enunciating the value and necessity of such a language, rather than in any fruitful attempts at its solution.

Attempts at international languages are usually considered as falling into the groups: (1) a priori systems, such as that of Dalgano, Wilkins, Ro; (2) a posteriori systems, such as Ido, Esp., Idiom-Neutral; (3) systems based on a mixture of the a priori and a posteriori prin-
ciples, such as Volapuk. The 150 or more projects that appeared prior to the appearance of Volapuk may be characterized as belonging to the a priori (or perhaps better termed "pasigraphic") period. The reasons for rejecting a priori systems have already been sufficiently considered.

It may be said that only three systems have been worked out in details and attracted any considerable following: Volapuk, Esperanto, Ido. The other a posteriori attempts, inclusive of the later Latin projects are lacking in detailed work especially as regards the vocabulary, practical application and followers.

VOLAPUK.

Volapuk, though it ended in failure in 1889, cannot be said to have "perished" any more than it would be proper so to speak of Watt's steam engine—it was altered and bettered. Volapuk was not a continued success chiefly because of its arbitrary choice of roots, arbitrary formation of words, arbitrary grammar. Another obstacle was the popish attitude of its founder, Bishop Schleyer, who regarded all attempts at improvement as a grave personal offense. It fought a good fight against Esperanto but had to fail as Esp. was more efficient. One of the cleverists bits of propaganda put out by the Idists is a translation of an article written by Dr. Zamenhof against Volapuk wherein by the simple substitution of the words Esp. for Volapuk and Ido for Esp., it is shown that the Volapukists were urging the same reasons against Esp. that to-day the Espists are urging against Ido. The antagonism of Espists to Ido is simply a case of "human nature" repeating itself.

The great merit of Volapuk was that it practically demonstrated the fact that it was possible to construct an I. L. through which the peoples of the different language groups could make themselves understood, especially by writing. Its greatest failure was in its unfitness for oral communication, which defect Esp. remedied. Although Volapuk was but the child of its time and is now but a phase in the development of an efficient type of I. L., it is undoubtedly of great value as an instructive
linguistic experiment. Among its merits may be men-
tioned: (1) An alphabet which contained letters easily
pronounceable; no mute letters; all letters having the
same sounds. (2) One sole and regular declension and
conjugation (though the declension was much too com-
plicated). (3) Adjectives, adverbs, verbs, etc. derived
from one root. (4) Natural gender. (5) Simple syntax.
(6) No exceptions in grammar. Volapük adopted a major-
ity of its roots from the English but so mutilated them
as to make them practicable unrecognizable. This was
in part due to an effort to adopt an alphabet which would
be easily pronounceable by all peoples, Europeans and
otherwise. This lead to the omission of so many common
letters and to their substitution by others as to greatly
change the spelling of the English words. Schleyer had
in mind an easy language for the whole world, not merely
one founded on the basis of the principal European lan-
guages and, as a consequence of attempting the im-
possible, he constructed a language harder than it need
have been for Europeans.

**ESPERANTO.**

Thanks to the active propaganda of its adherents,
Esperanto needs no detailed history or exposition of its
nature. The ordinary man is quite unaware of previous
or later attempts at the solution of the problem of the
I. L. (except possibly in the case of Volapük) and to him
the word Esperanto stands for the equivalent to the I. L.
Zamenhof's first book appeared in Russian in the
year 1887. The first society was founded in St. Peters-
burg in 1892. Its progress was at first very slow, espe-
cially in western Europe, and it was only after 1898, when
the distinguished scholar Marquis Louis de Beaufront, him-
self an originator of an a priori project, took hold of the
language and gave it his powerful support that it attained
a wide extension. It is not too much to say that the
early extension and magnitude of the Esp. movement
originated with de Beaufront. He was the St. Paul. To
quote the words of an Esperantist author (Clark, Inter-
national Language, p. 109, 110) de Beaufront was "the
greatest and most fervent of all the apostiles of Espe-
In a series of grammars, commentaries, and dictionaries he expounded the language and made it accessible to numbers who, without his energy and zeal, would have never been interested in it."

Zamenhof was inspired to create his language largely by reason of his observation of the bitter animosity which existed between the different language groups of his native city. He was a man of idealistic, humanitarian temperament who felt that one of the great causes of nationalistic hatreds was the diversity of languages and consequent lack of mutual understanding. His study of the English grammar and syntax was a revelation to him and influenced him very considerably in the formation of his language. He was unacquainted with the southern Romance languages (Italian, Spanish, Portuguese) which lead him to undervalue the great body of international Romance roots.* His adoption of many French roots, however, gave a considerable basis of Romance internationality which would otherwise have been lacking. His knowledge of Russian, Polish, German largely influenced him in the construction of his alphabet and the selection of many words in his vocabulary. Esperanto has conquered a honored place for itself in the hearts of a multitude of its adherents. The fierce loyalty of its followers is remarkable as well as heartening to all who look forward to the governmental adoption of some form of I. L. Its support and propaganda have come largely from the ranks of the common men, though it has attracted the attention of some scholars and the favorable endorsement of a number of prominent personages. It should be said right here, however, that this endorsement of Esperanto by prominent people and the majority of scholars is primarily an endorsement of the idea, as almost none of them have bothered to make any exhaustive study of the language or attempt to use it in foreign intercourse. When we read therefore of His Excellency . . ., His Highness . . ., Professor . . . as recomending the introduction of Esperanto as a second world language, we should understand that these distinguished gentlemen are favorable toward the adoption of an I. L. rather than that they have studied Esperanto and the general problem.
As to the number of its adherents, it is impossible to state anything definite. Esperanto, like Ido, suffered greatly from the breakage of communications during the war. Many tens of thousands of people have purchased its textbooks or at least its leaflets which serve as "keys" to the different languages. Its claim to "millions of adherents" must be very largely discounted. In fact, Esperanto "statistics" are so often exaggerated or misleading as to lead the cautious man to ignore them all together. The leading Esperantists constitute an enthusiastic group with a fondness for large numbers and an astonishing forgetfulness of the fact that a majority of those who purchase their textbooks and leaflets fail to make any particular study or use of the language after the first interest has worn away. However, this comparative smallness in numbers and practical effectiveness must be expected. Lack of official support and the fact that the pecuniary means must come out of the people in humble or modest circumstances makes very difficult the support of adequate journals, especially since the war.

Contrary to the opinion of many Espists, the Idists do not look upon the growth of Esp. with entire disfavor. The Idist group recognizes the obvious fact that their own language has been for many years in a formative stage and because of the lack of proper dictionaries and textbooks was, is even now in most countries not in a position to carry on an effective propaganda. Every Espist is looked upon as a possible adherent to Ido, if he can be reached later through an exposition of the relative merits of the two rival languages. The defects of Esperanto will be treated later on in this paper.

* Note: The Italian and the Spanish represent more directly and faithfully than the French the Latin stems.

* Note: The May (1922) number of the Amerika Esperantisto gives the following information: 250 as the number of members in the Espist Asso. of North America (which includes not only the U. S. but Canada, etc.). Subscriptions to the official journal at a dollar a head, plus all cash sales and sales of foreign exchange journals, amounted to a total of $500.00. Esperanto has been before the American public for years and thousands of its books or leaflets have been sold. Yet this is the result. However, in the United States, distant as we are from the linguistic complications of Europe, the need for an I. L. is not so apparent as on the Continent. Self-complacent Uncle Sam is hardly a fair example.
IDO AND THE WORK OF THE DELEGATION.

The artificial language known as Ido had its origin in the work of the Délégation pour l'Adoption d'une Langue Auxiliaire Internationale. The Delegation devoted seven years to an examination of more than sixty schemes for an artificial language and in 1907 appointed a working committee of eminent representatives of all important language groups with the object of summing up the previous work of the Delegation and adopting an international auxiliary language capable of serving the needs of science, commerce and general intercourse. In October of that year, eighteen long and fatiguing sessions were held in Paris. The Secretaries of the Committee were Professors Couturat and Leau, two eminent philologists and mathematicians, who were the authors of "L'Histoire de la Langue Universelle" and "Les Nouvelles Langues Internationales", the two standard works on the subject of the I. L.

The members who took part in the proceedings were as follows:

Prof. Dr. Louis Couturat;
Prof. Dr. L. Leau (Univ. of Paris);
Prof. Otto Jespersen (Univ. of Copenhagen); Philologist;
Prof. Dr. Baudouin de Courtenay (Univ. of St. Petersburg); Philologist;
Mr. P. D. Hugon (London); Linguist, (representing Mr. W. T. Stead);
Dr. E. Boirac (Rector of the Univ. of Dijon), Linguist and President of the Espist 'Lingva Komitato';
M. Gaston Moch (Paris); Linguist (acted as deputy and voting representative for Rector Boirac in the sessions at which he was unable to be present. M. Moch was Secretary of the Espist 'Centra Officejo' and a member of the 'Lingva Komitato';
Prof. Dr. Förster (Ex-Director of the Observatory in Berlin), Prof. Förster was elected an Honorary President, but was able to take part in only a few sessions;
Prof. Dr. W. Ostwald (Emeritus Prof. of Leipzig Univ.); Philologist and Nobel Prize-Winner for Chemistry;

Prof. Dr. G. Peano (Univ. of Turin); Mathematician and author of 'Latina sen flexiono', later known as 'Interlingua';

Abbey Dimmet (Professor of living languages in Paris); representative of Mr. G. Harvey, Editor N. A. Review, New York;

Dr. Paul Rodet (Paris); representative of Professor (of medicine) Ch. Bauchard, a member of the Academy of Sciences in Paris;

Mr. G. Rados, member of the Hungarian Academy of Sciences.

Those who voted at the final session were: Messers Ostwald, de Courtenay, Jespersen, Dimmet, Hugon, Moch, Rodet, Couturat, Leau. Professor Ostwald was elected President of the Committee. General Sebert attended to the counting of the votes.

The eminence and ability of this committee that finally decided upon the selection of Ido cannot be questioned. Any future committee must respect its findings and have as data for consideration the facts already studied. As will be shown later, the field of practical discussion is a narrow one, consisting in the problem of using in the most efficient way the elements which are international in the natural languages. Said Professor Ostwald: "Although these labors were very fatiguing, they proved all the more effective for the progressive elucidation of the problem in hand. From the very multiplicity of the attempts at a solution and their discussion there arose in the minds of the workers, in a manner never to be forgotten, a clear conception of the main conditions required for a successful solution of the problem, and a recognition of the errors which a disregard of one or other of these conditions had produced in the existing systems."

A number of inventors of the different language systems availed themselves of the opportunity to appear in person and defend their projects before the Committee:
Dr. Nicholas (Spokil), Mr. Spitzer (Parla), Mr. Bollack (La Langue bleue). Prof. Monseur explained Idiom-Neutral, "yet his plea had a character less of positive defense of Neutral than a zealous and expert insistence on the weakness of Esperanto." All the members of the Committee were familiar with Esperanto and Messers Boirac and Moch were important officials in the Esp. movement. Moreover, Dr. Zamenhof, not being present, was directly represented by de Beaufront. The Committee considered all projects in the objective, scientific spirit and, says Prof. Jespersen, "our final result absolutely could not have been different, even if Dr. Zamenhof himself had been present in person before us." The discussions finally narrowed themselves down to a consideration of Esperanto, Idiom-Neutral, Novlatin.

Universal was considered defective largely because of the irregular character of its root construction (in comparison with Esperanto) which came about from a desire to give a "natural" form to the words. Its roots, lacking as they were in final vowels, had a abrupt, uneuphonious sounds (Pisk nat in mar: fishes swim in the sea).

Neutral was, aside of Esperanto, the most serious and complete system. Especially in its favor was the greater internationality of of its vocabulary, in comparison with Esperanto, and the fact that it had no supersigned letters which demanded special print. Against it were certain criticisms: two different sounds for c and g; the admittance of c and qu (not the q of Ido) as equivalents to k (writing, for example, "copequi" for kopeki); the admission of double letters; accumulations of unpronounceable consonants in many words; lack of a logical system of derivation which resulted in several root words for one idea; lack of characteristic grammatical finals: -o, -a, etc. which made it often necessary to consider a sentence as a whole before it could be determined to what part of speech a certain word belonged.

In spite of such defects as have been mentioned above, it might be said, in view of the rejection by the

* Note: admitt, admission; applaud, applaus, etc. From avie (bird) was derived aviar (to aviate, to fly), also other words as aviator, aviation.
Committee of the supersigned letters of Esp. and the adoption of a more international vocabulary along the lines of Neutral, that if there had existed in Neutral* a system of final vowels serving to indicate the grammatical specie of the word: noun, adjective, etc., as is the case in Esp., that which in substance the Committee adopted was nearer to Neutral than to Esp., and the new language might well have been termed 'Reformed Neutral' instead of "Simplified" or "Scientific Esperanto."

Prof. Jespersen states:

"If we preferred definitely to adopt Esp. as the basis which was adopted in altered form, that was done out of regard for the Espists in thanks for their important work in making the idea of a world language known and popular, and not for any other cause whatever."

After exhaustive consideration, the Committee adopted the following (unanimous) declaration:

"None of the existing languages can be adopted in its entirety and without changes. But the Committee decides in principle to adopt Esperanto because of its relative perfection and the many and varied uses to which it has been put, but with the reservation of several changes to be carried out by a "Permanent Commission" in the direction indicated by the conclusion of the Secretaries' Report and the Ido project; this to be done, if possible, in agreement with the Esperantist Language Committee."

The chief alterations demanded in Esp. were as follows:

(1) The replacement of certain letters requiring special type by Latin letters, thus allowing the language to be printed anywhere.

(2) The suppression of certain useless grammatical rules in regard to the invariable use of the accusative form and concord of adjectives.

(3) The regularization of the system of word derivation, in order to make the language a more precise instrument for the expression of thought.

* Note: Idiom-Neutral used final vowels to indicate gender.
The enrichment of the vocabulary by all words necessary to translate exact ideas, in accordance with Jespersen's principle of maximum internationality.

It is important to remember that the decision was unanimous, therefore concurred in even by the Esperantist members of the Committee.*

It is also important to keep in mind in any consideration of the relative merits of Ido and Esp., that the changes made were along the lines of the fundamental recommendations above outlined.

The necessity for the reforms demanded seems to me to be obvious almost at sight to any impartial and scientific mind uninfluenced by notions as to the desirability of holding to the primitive form of Esp. for practical reasons of propaganda.

The initiation of most of these reforms was chiefly due to Marquis L. de Beaufront, the "St. Paul of the Esperantist movement," who submitted them in a printed pamphlet to the Committee under the pseudonym of "Ido" (i.e., a derivative). None of the Committee (excepting possibly one of the Secretaries, prof. Couturat) knew or cared to know the identity of the author. What was adopted was not Ido but Esperanto "subject to changes by the project called Ido." Therefore, Ido as finally elaborated differs in a considerable number of points from the project as submitted by de Beaufront.

It is to be remembered that these meetings were simply the culminating point of years of study and were called for the purpose of final decision. The question of a scientific reform of Esp. was not first thought of in October 1907. As will be shown later from the published correspondence between Zamenhof and Couturat, it was known prior to the time of the meetings that Esp. could probably be accepted only in a modified form. De Beaufront recognizing this fact, submitted his project which embodied changes that his great knowledge of the subject and past experience made seem necessary to him.

* Note: Rector Boirac, who afterwards broke with the Delegation, justified his vote and subsequent action as follows: "As a member of the Delegation, I voted (through my substitute: M. Moch) to reform Esp.; but as an Esperantist, I have had to nullify that decision."
Had the Committee adopted Esp. in its primitive form or had they adopted some modified form of Neutral, probably nothing would have been said of the "disloyalty" of De Beaufront. As a result of the successful adoption of the changes suggested by de Beaufront (and the subsequent break with the Espists) he has since been constantly the object of continued malicious personal attacks—"Judas" being one of the usual epithets applied to him.

Without attempting any close judgment as to the ethics of the acts of de Beaufront in his position as the personal representative of Zamenhof, these attacks do seem to those who look upon the subject from an objective, scientific standpoint to be unjustified and calumnious. The Committee was a scientific, not a propaganda body. De Beaufront knew (and Zamenhof knew) before the meetings that it was hardly probable that Esperanto would be accepted without changes. He thus felt justified in urging modifications, not only from a scientific standpoint, but in order to make Esp. acceptable to the Committee and thus avoid a break in the movement.

The Committee, in recognition of the long and self-sacrificing efforts of the large and important body of Espists, desired no break with that body and consequently withheld their findings from the public until the Espist 'Lingva Komitato' could be communicated with. Esp. had a numerous so-called 'Lingva Komitato' scattered throughout the world. Practically none of them were people of prominence or competence in the linguistic field. Their chief object was to preserve the purity of the language rather than to make betterments. Probably a vast majority knew nothing of the scientific aspects of the problem. They had done nothing in the past to perfect Esp. and, it may be said, nothing since, except the adoption of some hundreds of new roots and the two suffixes: -ach, and -ism. These two suffixes are, so far as I know, the sole fruit of Esp. evolution.* Out of the 61 members of the Lingva Komitato which expressed an opinion, 8 declared themselves insufficiently informed to pronounce

* Note: -ach, a pejorative, expressing contempt; -ism, denoting a distinctive doctrine.
a judgment on such an important matter; 8 accepted without question the changes recommended, 11 expressed themselves as favorable to some changes to be decided upon after further consultation with the Delegation Committee, and 34 refused to treat with the Delegation although they declared that "they did not disapprove in principle of changes in Esperanto." Rector Boirac recognizing the fact that the proposals as submitted had not been sufficiently explained to the Lingva Komitato proposed to Dr. Zamenhof on the 7th of January, 1908: (1) to continue the correspondence with the Delegation Committee; (2) to prepare a report on the proposed emendations. However, seven days later, Dr. Zamenhof, in a letter to Prof. Ostwald, the President of the Committee, formally broke off all relations. The rocks which really wrecked the accord between the two bodies were:

(1) The demand of the Espists that the Delegation take no independent action but submit its findings for acceptance or rejection of Esperanto to the Espists themselves who regarded Esp. as "a living language of a living people," concerning which no outside parties had any rights except of suggestion, unless they be commissioned by the various governments. To this the Committee replied that, in their judgment, the Esp. Lingva Komitato was quite as private an affair as the Delegation Committee, which at least had the moral authority that goes with a competent body of scientists in an examination of a scientific subject. That to refuse any fundamental changes until they were demanded by officials from the various governments was to adjourn the solution to the "Greek kalends". In short, the Delegation Committee being composed of scholars of whom many had never been Espists did not feel themselves obligated to submit to the rejection of their proposals by a less competent body.

(2) The Esp. Lingva Komitato being an amorphous body with little knowledge of the questions at issue were naturally inclined to believe their language to be good enough as it stood and to trust to the leadership of a few influential men who really decided the question. Said M. Moch, general secretary to the Esp. Centra oficeyo,
and a member of the Delegation Committee who formally adhered to the Ido movement in 1912: "I did all I could to affect a union of the Espist and Idists, but I failed because of the resistance of three very influential Espists, who were irreconcileably opposed to all reforms of Esperanto." It has been asserted, I do not know with how much truth, that a certain publishing company that possessed a complete stock of the Esperanto supersigned type and that had the sole right to publish the official Esperantist publications, used its influence against the proposed reforms both at this time and once before when changes had been proposed. It felt that it had supported Esp. when it was weak and was naturally not inclined to give up the privilege of making money now that the sale of the publications was a profitable venture. The argument that radical changes would mean the scrapping of the existing stock of textbooks, etc. was at least practical.

(3) The difference in aim and mentality between the Esp. propaganda organization and the body of learned men who composed the Delegation Committee. In 1907, the Espists were at the height of their success. After years of obscurity they had, thanks largely to the efforts of de Beaufront, succeeded in attracting the attention of the public and in recruiting a considerable body of adherents. They were much in the position of a commercial company that after long effort had succeeded in getting a market for its goods but now found its progress threatened by a lot of technicians whose aim was to tinker with their product and thus produce serious disorganization in their selling program. Most of the Espists were practical men, loyal to their "kara lingvo", little interested in the scientific aspects of the problem and fearful that continued changes would break up their propaganda organization.

The Espists pointed to the break up of the Volapukist movement when dissentients were allowed to creep in. From the narrow but practical view of propaganda the Esp. attitude toward reform certainly had justification. The followers of any large organized movement must often give up their own predilections for the sake of discipline and the effectiveness of the whole organization.
But a fundamental defect must be corrected within an organization or it will sooner or later be corrected by pressure from without. The Espists forgot the fact, or would not recognize the fact that the Volapukist break up, which they themselves had brought about, was due, not to ambitious leaders who wished to head a separate organization, but to the inherent defects of the Volapukist language itself. Esp. was a more efficient type of I. L. than Volapuk, therefore Esp. won out just as Ido is bound to win out over Esp. unless some more efficient form of I. L. is developed than Ido.

However much it may hurt individuals, or individual organizations, the world in the course of time will adopt that type of machinery or form of artificial I. L. which will best do the work. Should Ido fail to develop all the requirements of a proper I. L. and some other type of I. L. be invented which did fulfil all the conditions, that new language would finally conquer. It is our hope and judgment, that Ido has, or will develop, all the necessary qualifications.

As a matter of fact, the split between the Esperantist propagandists and the Idist linguists was probably the best thing that could have happened. When the Permanent Commission (which was formed out of the Delegation Committee) started to apply to the details of the language the radical and far reaching recommendations outlined by the Delegation Committee, they found themselves confronted by a multiplicity of small problems which took years of study to work out in satisfactory form. Had the Idists stuck fast to the tentative changes in Esperanto shown in the Idist textbooks of 1908, and started an intensive propaganda, it is quite probable that the Idist movement would have completely disorganized and won out over the old Esp. movement. But the continued changes made it difficult to hold together a large body of adherents who were mainly interested in a diffusion of the language. As a result, Esp., by shutting out all changes in the language, has been able to go ahead and win adherents to the idea of an I. L., and the Idists have been able to go ahead and perfect their language, awaiting the time when the world will recognize the necessity for adopting the most efficient type of I. L. The
lesson is that constant changes, even though they be betterments, make propaganda difficult, but that if the betterments are not made within an organization, some outside movement will spring up and force the acceptance of the changes.

FOUNDING OF THE IDO UNION.

The expected and hoped for accord with the Espists having failed, the Delegation Committee considered its special task as fulfilled and, in accordance with article VI of the Declaration of the Delegation, which read as follows:

"Il appartiendra au Comité de créer une Société de propagande destinée à répandre l'usage de la Langue auxiliaire qui aura été choisie", there was instituted a Permanent Committee which some months later formed the Unioño di la Amiki de la Linguo Internaciona with an Academy and Directing Committee.* Textbooks and dictionaries for the tentative form of the language were prepared in accordance with the decisions of the Delegation Committee. A sixty page monthly journal was established under the editorship of Professor Couturat, especially intended for the further discussion of linguistic problems, which continued in publication until the death of Professor Couturat at the outbreak of the war in 1914.

The findings of the Committee having been laid down on broad lines, the further intensive study of the details was participated in not only by the members of the Idist Academy but by more than a hundred other persons interested in the subject. The consequent continued changes and additions especially to the vocabulary made extensive propaganda difficult to sustain, because the textbooks could not be kept up to date. However, the Unioño received the adherence of several thousands and brought about, prior to the war the printing of a dozen small journals in the language, in addition to the official linguistic journal, PROGRESO. Just prior to the

* Note: The distinctive name "Ido" was adopted only after the refusal of Dr. Zamenhof to permit the use of the word Esperanto in connection with the new form of language.
outbreak of the war, the Idisi Academy considered the formative period of the language at an end and declared a period of stability to last at least ten years in order to summarize the work done and issue textbooks and vocabularies which would reflect the developed state of the language and serve for propaganda. Being essentially an international undertaking, the war seriously impeded the expected propaganda.

The death of Professor Couturat by a motor accident on the 3d of August, 1914, was a tremendous loss to the Ido movement. Had he lived, his great influence in scholarly circles and his tireless industry and enthusiasm would doubtless have greatly expedited the growth of Ido in spite of the impediments presented by the war. Couturat was a man of the highest scholarship and of an almost machine-like precision of mind. Prior to 1901, he had made his mark in the scholarly world by his philosophical and mathematical works. His knowledge of the general problem of the I. L. was unrivaled. By his death, which fortunately only came at the close of the period of formative labor, Ido and the I. L. movement in general sustained a loss which is difficult to estimate in its magnitude.

The more than 4,000 pages of PROGRESO constitute an invaluable store of linguistic discussion which cannot be ignored in any future investigations. In 1915, there was published the French-Ido dictionary (584 pages). In 1919, there appeared the German-Ido dictionary (823 pages). An Ido-English dictionary has been completed which embodies the vast amount of work done on the language by the discussions and decisions of the Academy. It is now in course of publication. A large Ido-French dictionary is slowly being published. A considerable amount of other dictionary work has been done which is yet mostly in manuscript form owing to lack of funds.

Since the end of the war, the Ido movement has been slowly but surely gaining momentum. As soon as proper dictionaries can be published, an extensive propaganda and use may be regarded as certain.

The great difficulty of the present time is the lack of funds due largely to the depreciation of European monies. Ido is not a sort of code language like Esp., for
which small "keys" suffice but a rounded out, coherent language which demands large and accurate dictionaries, which cost a considerable amount to print. It is hoped that Ido will soon attract the attention of some man of wealth who will be wise enough and generous enough to endow the movement with sufficient funds to publish the necessary dictionaries and textbooks. If this is done, Ido can be trusted to succeed by its own merits.

Ido bases its claim to be a practically final form of a world language, not on the number of its present adherents, but on its efficiency. It is not the work of one man, or of a dozen, but the reasoned product of many scholars. No future committee can ignore the judgment of the competent scholars who originated and guided it. It has no sacred, inviolable *fundamento* and does not claim to be absolutely final in all its details, but it seems unlikely that any future committee, that may study the subject, can find a better solution, taken as a whole.

Its basic principle is best expressed in the happy formula enunciated by Prof. Jespersen: "That international language is best which is easiest for the greatest number of men," (an adaptation of Bentham's famous ethical formula). This formula of 'facility' must, however, be understood as including the postulate of 'perfection', i. e. the capability of expressing clearly, exactly and logically all human thought. Esperanto is "easy" but it is, compared to Ido, a relatively imperfect instrument for the expression of thought. Said Couturat:

"Not only does it (Ido) offer to them (philosophers), as it does to all men, a medium of communication between all countries, but it furnishes them also with an instrument of precision for the analysis and exact expression of the forms of thought, which is very superior, from the point of view of logic, to our traditional languages, encumbered as they are by confused and ambiguous expressions."

**ATTITUDE OF ZAMENHOF TOWARD REFORMS.**

In 1894, Dr. Zamenhof recommended many reforms subsequently carried out in Ido. He wrote:
"We should do away with the supersigned letters. In theory they seem to be all right but practice shows them to be a grave barrier in the diffusion of our language. Due to the fact that the printers do not possess these special letters, the general printing of our books is almost impossible... The language can exist very well without the accusative... I propose to form the plural by -i (vice -oj).... The agreement of the adjective with the noun is superfluous ballast." These proposals were put to vote and rejected (157 to 107) by a conservative majority composed in large part of Russians and Germans, supported by the publishers.

In August 1905, the Esp. Congress assembled in Boulogne-sur-Mer adopted as the basic law of Esp., the famous Fundamento de Esperanto, which consists of the first textbook of 1887, which contained the 16 rules of grammar and the 925 original roots. The declaration stated, in brief, that until some authoritative body chosen by the chief nations should decided to make changes "no person and no society should have the right arbitrarily to make in our Fundamento even the smallest changes. The Fundamento must remain severely inviolable even in its errors."* The Dresden Congress of 1908 and the Barcelona Congress** of 1910 repeated the adherence to the Fundamento and, except for some still-born proposals of Zamenhof in 1906 which will be described later, the Espists have consistently opposed any betterments or changes.

Any reforms therefore must be in the way of augment (neologisms), never of change. Individual Esp. writers have in the course of years added several thousand words to their vocabularies in the way of neologisms, some of which have been officialized by the Esp. Lingva Komitato. Says Clark (I. L. p. 121): "The Lingva Komitato is in no sense an academy or legislative body, having for

* Note: "Neniu persono kaj neniu societo devas havi la rajton arbitre fari en nia Fundamento ian ech plej malgrandan shanghon... La Fundamento devas resti severe netushebla ech kune kun siaj eraroj."

** Note: "Ni restos fidelaj." "Ni iras trankvile nia vojon." "Ni neniam plu parolas pri la reformoj." "Fiksita unu fojon por chiam."
its object to change or improve the language (as is the case with the Ido Academy); it is the duly constituted and widely representative authority, which watches the spread and development of the language, maintaining its purity, and helping with judicious guidance." The method of Esperanto is to leave the introduction of new words to the taste or necessity of the individual authors. If the arbitrary choice of the author meets with favor (is copied by other authors), the Lingva Komitato may sooner or later officialize it. In Ido, the members of the Akademio study each proposed new word in the light of the different forms of the word found in the various languages, together with the definitions, and then introduce the word into the vocabulary. In other words, the method of Esp. is to construct the vocabulary by individual use: that of Ido is scientifically controlled evolution. A further discussion of this subject will be found under "Vocabulary".

The method of neologism cannot reform the alphabet, the phonetics, the grammar, nor incorporate new words which would change the spelling or sense of the original roots. Because Zamenhof originally reserved the root ment-(o) to signify the botanical word mint, this root is forever interdicted to signify mind (Esp.: mensol), however international it may be for that signification. Because afekt- was selected to signify: show affection, the more international form: afektac- cannot be used for that meaning, and afekt- used for the sense of: to affect. Because strato is used for "street", we cannot change the spelling to strado and use strato in the geological sense, etc. It has been found necessary in Ido to change in some form or another hundreds of the original Esp. roots in order to obtain a more international form or to avoid collision in meaning with other roots.

As is evident from the correspondence between Dr. Zamenhof and Prof. Couturat, published in supplement form in PROGRESO, Zamenhof played a double role toward the work of the Delegation. As a linguist he felt that Esp. was imperfect and therefore, in theory at least, approved projects of reform. As a tactician, he was obsessed with a desire to preserve unity in the ranks; the prospect of any considerable changes, or indefinite
series of changes made him fear that they would break up the organization so painfully gotten together. He was above all else a man of high ideals interested in the "internal idea", i.e. the potency of Esp. in reducing international misunderstandings.

In a letter dated August 27th, 1903, Zamenhof stated: "If the (International) Academies would be willing to accept Esp., I would not protest against betterments, but would even beg for that which an authoritative committee might find to be useful." On December 4, 1906, he writes: I will favor anything that the Delegation Committee may decide upon, if your Committee is sufficiently powerful to forward the movement better than Esp., which I doubt." On January 13th, 1907 (nine months before the meetings in Paris) he repeatedly urges "caution" (sengardeco) in the findings of the Committee. If Esp. is not chosen, he says, "it will cause a great scandal which will kill the whole idea (movement), because Esp. will become discredited and perish. In that case it would be the duty of the Espists to conceal from the public the findings of the Delegation" (kaj la esperantistoj devos ech per chiuj fortaj kashi vian agon). If Esp. be chosen, he begs with almost pathetic insistence that the wording of the findings should not read that the Delegation "made election between the different languages and chose Esp.", but that it should simply state that it chose Esp. without mention of the fact that there existed other forms of I. L. worthy of consideration.* Prof. Couturat said in a note on this point: "This is but the tactics of the ostrich. Here is why the Espists now endeavor to conceal Ido from the public by all possible means." But does Dr. Zamenhof, who always appeals to the governments (for an official decision) imagine that no inquiry will be made in regard to the other I. L. languages and "projects?" Will they blindly believe the Esp. bluster and accept without

* Note: "Viaj vortoj pri la "elekto" havos terure pereigan efikon, ili donos armilojn en la manojn de niaj malamikoj, ili detruos chiujn niajn ghisnunajn akirojn, ili denove ekdubigos kaj fortimigos de nia ideo chiujn, kiuj jam estis pretaj labori por ghi, — char la mondo diros: "nun ni eksciis, ke ekzistas multaj egalvaloraj artaj lingvoj, sekve ni povas alighi al neniu el ili, char se unu komitato hodiau elektis unu lingvon, kie ni havas la garantion, ke morgau alia komitato ne elektos alian lingvon."
question the "inviolable language" without examining into it?" This naive fear that the public would learn of the existence of competing forms of I. L. was, of course, from the scientific point of view simply puerile and justified the caustic comments of Prof. Couturat, but it perhaps had some justification from the viewpoint of practical propaganda, as the rank and file of the Espists were not linguists, but idealists.

On January 18, 1907, Prof. Couturat wrote to Zamenhof stating that he was finding great opposition to the idea of any changes, among certain influential Espists, and that, in his opinion, the question was reduced to this: Whether Esp. would be adopted with or without betterments. Zamenhof replied that if the Committee would take Esp. without conditions and leave all question of betterment to the Esp. Lingva Komitato, all would be well. In January, 1908, Zamenhof stated, in view of the fact that the Delegation Committee refused to submit itself to the control of the Lingva Komitato, that in the future no changes would be permitted in Esperanto except they be recommended by some authoritative congress arranged by the governments.

RIVALRY BETWEEN ESPERANTO AND IDO.

The relations between the two rival languages have been far from amiable. History repeats itself—first an attempted conspiracy of silence, then ridicule, distortion of facts and calumny. Prior to the findings of the Delegation, the Esp. press boasted of the importance of the Delegation Committee. When its findings were made public, there was either entire silence on the part of the Esp. press or the misleading statement was given out that the Committee had decided in favor of Esp. The Delegation Committee desiring no break, made efforts to retain the good will of the Espists and, at the same time, introduce betterments. Even as late as January 26, 1908, the Delegation addressed a letter to the members of the Lingva Komitato, which said: 'We therefore address to you, as friends of the idea of an I. L. for which we have fought for seven years and constantly are fighting, a request that you consider tranquilly and impartially the
present situation (i.e. of (1) the conservative party which would tie the language down to a "sacred book", and (2) those who wished improvements by the counsels of scientific experts)". With the headstrong leaders of the Espists it was "Esp. or nothing" and no conciliation was possible. No Esp. journal, so far as I know, permitted fair discussion of the suggested reforms. Every reference which might be considered favorable to reform has been systematically minimized. On the other hand, Professor Couturat, stung by the systematic suppression or distortion of the findings of the scientific body of which he had been secretary and the calumnious references to himself and de Beaufront, continued a stream of sarcastic ridicule of Esp. and its followers in the pages of PROGRESO. This, though intellectually justified and very natural under the circumstances, did not tend to allay the antagonism. The method of attack by ridiculing the views of opponents is a common one in French intellectual life and is often very effective. Many reforms have been won by it, some lost. However, it seemed to me and to many others, that a somewhat more reticent manner of opposing the distortions and slanders of the Esp. press would have been better for the promotion of the movement. Since the war, however, there has appeared in the Esp. world a dawning recognition of the fact that Esp. cannot be stuffed down the throats of the authorities without an examination of the whole problem which would likely result in the adoption of the changes in Esp. made in Ido. As stated before, I am quite willing to admit, that at the time of the general recommendations made by the Komitato there was a justified fear that continued changes extending over several years might do harm to the practical progress of the Esp. movement. Now, however, that the period of change in Ido has practically come to an end, there no longer seems practical reasons for refusing to adopt the reforms. The inert, uninterested public cares little for either project and it would seem the part of wisdom to adopt the most efficient form of I. L. and concentrate the attack on the mass of the people. As said Couturat: "Those who believe the ruin of Esp. means the ruin of the idea, have a too favorable opinion of Esp. and too little respect for the idea."

ZAMENHOF AN REFORM PROPOSALS OF 1906.

In January, 1906, in order to head off, if possible, more radical proposals by the Delegation, Dr. Zamenhof communicated to a number of Espists a number of changes to be introduced into the language as neologisms. Among these were:

(1) Replacement in some words of the diphthong au by e.

(2) Suppression of the plural termination -j and indicating the plural simply by accepting the last syllable instead of the next to the last which remains (plus the terminal letter) to denote the singular: boná, patró: bonaj patroj. (Doubtless this reform would tend to do away with some of the forest of -js, but as a practical sign of the plural has little or nothing to commend it.)

(3) Modification of a number of roots, such as: alumo (vice alumeto), amusi (amuzi), lo (anstatau), ad (apud), arhhitekto (arhhitekturisto), avra (avara), abenturo (aven-turo), fensi (defendi), dajmono (demono), djamanto (diamento), komtí (kalkuli), kamarado (kolego), pisi (urini). (So many of these changes are lacking in internationality, that they do not commend themselves to any but Espists accustomed to the use of mutilated roots.)

(4) Replacement of a number of roots by others, as: stete (vice anstatau), stati (farti), breva (mallonga), fidrompi (perfidi), mem (malpli).

(5) A number of changes in the alphabet, or rather use of the alphabet, as: the hh letter, i. e. the letter h with supersign, being replaced by kh except in the transcription of proper names and in the words hholero and hhoro which would become holero, koruso. The letters c, g, j, s, with supersigns to be written as ch, gh, jh, sh, even in the printing establishments were there was a supply of supersigned letters.

(6) In order to reduce the number of finals, as -j, the adjective need not be made to agree with the noun unless it stands alone.

(7) The verb esti to be reduced to the form of its monosyllabic endings: as, is, os, us.

It is to be noted that these changes were to come about simply in the way of additional or optional forms
to the original forms which might still be used. It is difficult to understand how Zamenhof expected to reconcile some of these changes, such as the suppression of the agreement of the adjective with the noun, with his claim to a strict adherence to the Fundamento. These proposals were made to the Lingva Komitato to be accepted or rejected as a whole. Though many of the Espists were not averse to reforms in general, some of the proposed changes were repugnant to them (such as the monosyllabic forms of the verb esti), furthermore others were in favor of still other changes not proposed. The leading conservatives opposed any changes. As a result of the cold reception given to these proposals, Zamenhof did not put them to vote.

Even after the close of the Delegation's sittings, Dr. Zamenhof wrote out a modified form of the above proposals and, although not recommending their adoption, offered to submit them to the Lingva Komitato. They never came to vote, however, as certain powerful leaders were firm against any change.

The above outline of reform within the ranks of Esperanto is chiefly useful as an example of endeavor to avoid any fundamental reforms and an attempt to placate a large number who desired some sort of reform. In a letter to Couturat, dated January 21, 1907, in reply to the assertion that he was listening only to the voices of the conservatives, Zamenhof said: "It is exactly because I have listened too much to the critics that I have been convinced (particularly in the last three or four months) how difficult it is to content the reformists and what a great danger it would be (to the movement) to start to concede anything."

THE EXCELLENCIES OF ESPERANTO AND THEIR RETENTION IN IDO.

The Delegation Committee was not only fully cognizant of the important work that the Espists had done in popularizing the idea of the I. L. and the desirability of keeping intact, if possible, the large body of adherents but, at the same time they recognized the real substantial excellencies of the language. In a very real sense, Ido
incorporates certain fundamental features of Esp. and may therefore be regarded as an evolved, scientific form of Esp. What are these excellencies and how far have they been retained in Ido? The most important are: (1) Simple grammatical forms, -o, -a, etc. indicating the grammatical role of the word. (2) Simple conjugation, without exceptions. (3) The practical system of word derivation which enables all related ideas to be regularly formed from the root. (Ido has simply carried out the earlier system of word derivation to a greater degree of logical precision). (4) Power of word combination, similar to the German. (5) A large proportion of its vocabulary which, in spite of its empirical selection, conforms to internationality. (6) Coordination of orthography and pronunciation, and the suppression of double letters.

Dr. Zamenhof was not the only one, or the first author to recognize the necessity of simple, regular grammatical forms or to use international roots. His system is far from perfect but it marks a decided step in advance over its predecessor, Volapuk.

THE FUNDAMENTAL DEFECTS OF ESPERANTO.

It is not necessary to be a learned philologist or accomplished linguist to understand the common sense necessity for the general reforms of Esperanto proposed by the Delegation Committee and carried out in Ido. In judging the relative excellence of Ido and Esp., it is essential to keep the mind upon the main points of the differences hereafter discussed. Esp. writers are apt to endeavor to confuse the mind of the inquirer by the discussion of subsidiary questions.

SUPERSIGNED LETTERS.

Esp. has six supersigned letters: c', s', g', j', h', u'. Owing to the lack of special type for these characters, I have endeavored to distinguish these special letters by placing an accent point thereafter, as here shown.

It is argued that the use of the special letters permit the carrying out with scientific exactitude of the phonetic principle of "one letter, one sound." The digraphs:
sh, ch, as found in the words: ship(o), chambr(o), being reduced to s'ip(o), c'ambr(o). No member of the Delegation Committee attempted to defend the retention of the supersigned letters. Out of all the projects considered, Esperanto alone had the temerity to offer an alphabet which demanded special type. However, the celebrated philologist, Prof. Baudouin de Courtenary, with Prof. Ostwald concurring, did put in a plea for the absolute phonetism of "one letter, one sound." His argument was that one should be guided by a strict logic rather than by traditional use, however international. He proposed that the sound of the Esp. letter c be represented by ts: tsent (for cent), tserta (for certa), etc.; that the Esp. sound of c' be represented by tc: tcambro (instead of as Ido: chambro); and that the Esp. letter s' (Ido: sh) be represented by c: cipo (for ship). Jespersen, Couturat and Moch opposed these proposals, basing their arguments on the practical ground of international usage; showing that whatever theoretical benefits might arise by their adoption would be more than offset by the loss of facility of recognition because of the distortion of the spelling. The outcome of the discussion was that, "the Committee accepted in the I. L. the digraphs ch and sh with the sounds found in the ordinary English words." The voting was four against two—the only decision reached in the whole conference which was not unanimous. Prof. Jespersen states on this point: (In Ido) the strict phonetic canon "one symbol, one sound" is followed in so far as the same sound is never arbitrarily written one way in one word and another way in another word, and the same letter is never pronounced differently in some words compared with the majority... The canon must be subordinated to the fundamental principle of greatest facility."

It is argued that the retention of these supersigned letters, especially the g' (pronounced like the E. j) tends to preserve the international aspect of certain words, as: g'entila, g'ermo, g'ardeno, g'irafo, sofag'a, voyag'o. This must be granted as respects such words as the above. However, it may be said that the Esp. g' likewise distorts some words from the English standpoint: g'oj (E. joy), g'ardeno (pronounced in E. with "g" hard as distinguished
from the French sound). In Ido, it has been the rule to follow the spelling where that has the greatest internationality, and the pronunciation where that kind of internationality predominates over the orthography.

The above words are written in Ido: jentila, jerma, jirafo, sovaja, voyajo; gardeno (with the hard g as in E.); other such words are: anjelo, vejetanto, mariajar. The French word 'boudoir' is transcribed phonetically in Ido as buduaro. However, as has been stated before, because the orthography of the common roots is so much more often international than the pronunciation, there must often result in any form of I. L., formed on an a posteriori basis, a certain amount of "distortion" of the pronunciation, though, in most cases, the "distortion" is not sufficiently great to prevent easy recognition of the original words as found in the natural languages.

It is argued that the retention of these special letters enable an easy phonetical transcription of certain difficult Russian and German proper names. It is enough to answer to this that the transcription of proper names is of comparatively little importance in any I. L. All existing alphabets are imperfect symbols from the viewpoint of the philologist. Permit the philologist 80 characters, instead of 30, and, from a phonetic standpoint, his alphabet would be far superior to any existing, but it would result in the loss of facility for immediate recognition of words now afforded by the common international orthography, imperfect as it admittedly is. Schleyer, in his Volapuk, for instance, replaced the r in words by 1, because r was difficult to pronounce by the Chinese and in consequence of this and similar changes, his vocabulary, though largely based on English words, was so disfigured as to become almost unrecognizable even by Englishmen.

Another argument offered by the Espists in support of the supersigned letters is the somewhat curious one that the lack of availability of these letters prevents half-taught Espists from rushing into print at the nearest printers. Because there exists but few centers where Esp. copy can be set up, there exists in these centers competent Espists who will see to it that only copy composed in good style is put into print. I shall only say that this affords a somewhat startling commentary on the boasted
facility of Esp. One would presume that it was the essential aim of any form of I. L. to be printed in numberless centers, rather than a few.

The last argument offered in support recognizes the difficulties in the way of obtaining a stock of official letters and states that where the special letters cannot be obtained, the supersigns be done away with and the digraphs ch, gh, jh, sh, hh be used instead and the supersign over the u simply suppressed. Thus those printers who possess only the Roman letters can print any Esp. article. Of course, this is no fundamental reform of the alphabet and is put forward only as a makeshift, a temporary expedient to be used by those who for the time do not possess the proper letters. So far as I know, no Esp. journal employs this palliative remedy. The Esp. editors recognize the fact that if the language is to be printed, the proper alphabet should be used and not digraphs which deform the original and make unsightly the appearance of the words.

The practice of the Espists themselves is a sufficient argument against this makeshift. No one uses it and no one will use it because it alters the whole aspect of the language. There exists no sufficient reason for retaining a special alphabet if it is not fit for use. The digraphs ch, sh (as found in chambro, shipo) are acceptable enough and were adopted by the Delegation Committee because of their wide internationality, but the digraphs: gh, jh, hh so distort the international spelling as to cause a great loss of facility of recognition. Such forms as: agho (age), ghentila, ghermo, voyagho, ghoyo, ghardeno; jhaluza, jhargono, jhuro; hhaoso, hhameleono, hhemio, hhino, hhirurgo, hholerio, hhoro, monahho (monk), monarhho (monarch), have not only lost their international aspect as to the spelling but are displeasing to the eye and a shock to our common sense. There is no real alternative to either retaining the special letters and always using them, or to making a thoroughgoing reform of the alphabet, as was done in Ido. The criticism of Dr. Zamenhof himself in 1894 (quoted on p. 71) as to the practical detriment of these letters to the diffusion of the languages stands as good to-day as when it was written. Of course, the Esp. propagandists claim that Esp. has now
obtained such wide use and recognition that it is unwise and impolitic to make changes. This argument is but a sample of what would be adduced to hinder any change in the language, should any official congress consider the adoption of Esperanto. All the forces of conservatism, of vested interests, of prejudice would put in the plea of long use against all proposals of improvement, just as the advocates of spelling reform fail to get a fair hearing and support. The longer errors exist, the harder it is to eradicate them.

The one all-sufficient, all-compelling argument against the special letters is their lack of internationality. It has been stated that the Esp. alphabet has a considerable resemblance to the Polish, Lithuanian and especially the Czech alphabet. Doubtless the Esp. alphabet seemed natural enough to Dr. Zamenhof with his limited linguistic training and his Polish-Russian outlook, but what a basis for an alphabet suitable for international use! A scientific I. L. must take as the basis of its vocabulary those roots which are most international, that are easiest for the greatest number of men. Why then, in the name of common sense, should this principle be rejected in the selection of the alphabet? Is not internationality and consequent facility of use as much needed in that most fundamental of all things, the alphabet, as well as in the vocabulary? The facts of the case are simple: The great majority of the nations of Europe and the Americas, peoples vastly superior in numbers and culture to the rest, do not use these special characters—they use the Roman alphabet. Even the Germans, Russians, Czechs, print many books and papers in the Roman type and all printers of importance have some stock of the characters and can readily and cheaply procure additional ones if needed without going to the expense and delay of having special type cast. As a practical example of the widespread use of the Roman type, I will state that within the last few months several bids for printing the new Ido-English dictionary were submitted by small printing establishments in Germany and Czecho-Slovakia. They could not do this except they had in stock the Roman type. The Czecho-Slovakian alphabet is practically unprocurable outside of the national borders, yet this alpha-
bet most nearly resembles the Esp. alphabet! With the Roman alphabet we have hundreds of thousands of printing establishments, linotypes, typewriters in a position to print Ido at will. For Esp. none, unless specially equipped. It is well to remember that the equipment of special type must cover all sizes and kinds, both for small and capital letters. These types must be specially cast or procured from possibly half a dozen printing establishments throughout the world. An American author of a small Esp. grammar printed some years ago was compelled to pay over one hundred dollars for the type necessary for the special letters to set up his booklet. In order to avoid errors in setting up the type, double the attention and labor is demanded. In writing, it is constantly necessary to stop and insert supersigns, thus slowing down the rapidity of the writing and interrupting the attention to the subject.

One who is not a learned philologist must, of course, speak with difference on the selection of the letters which should compose the best alphabet for the I. L. The Ido alphabet is the outcome of the advice of competent philologists from the different linguistic groups. Prof. Otto Jespersen played a leading part and it is fully recognized that no philologist stands higher in learning and special competency than this eminent scholar.*

* Note: One of the most difficult phonetic problems which confronted the Delegation was the proper sound to be given the letter "c" — the acceptance or rejection of "k". In the original Latin alphabet, the "k" sound was represented by the letter "k", the letter "c" having the sound of "g". Unfortunately for future phonetic regularity, "k" became practically obsolete and "c" usurped its place. As a consequence modern Italian (also Spanish and Portuguese) lack the letter "k", replacing it by "c" or "ch" before vowels, and admitting it only in words taken from other languages. The English "c" consequently sometimes represents the hard "k" sound, and sometimes has the value of "s", to say nothing of the variations in sound represented by the digraph "ch". We have catholic and catholicism, publicity and publication.

The different authors of the I. L. projects have variously solved, or attempted to solve these difficulties. Some Italians and Latinists, as Peano in Interlingua, reject the letter "k" altogether and give to "c" (and "ch") the "k" sound. In Ido (as in Esp.), the letter "k" is retained and "c" given the sound of "ts" as the "ts" in bits and the "cz" in czar. The use of "c" for the "ts" sound enables us to retain the ordinary spelling for such words as cento, civila, instead of
GENERAL ESPERANTO PHONETICS.

To the Poles, to the Russians, possibly to the Germanic races, the presence of the various supersigned letters, the continued "ch" and "sh" sounds, the frequent diphthongs, the forests of "j's" in the plurals, and the constant accusative ending in "nu", seem not to disfigure the text but even to beautify it. To the majority of Europeans and all Americans, their presence, to say nothing of the difficulties of pronunciation, has a strange and disagreeable aspect. De gustibus non est disputandum. The fact, however, that the English and Romance groups compose a vast majority and have a cultural predominance makes it necessary in any scientific form of I. L. that their usages and prejudices be taken into consideration. Take the diphthongs: aj, ej, oj, uj, au, eu, which are disagreeable both to eye and ear because of their frequency and which present more or less difficulties of pronunciation to all Romance peoples. One of the recommendations of the Committee on the I. L. of the American Philosophical Society was that no future I. L. should contain diphthongs—Esp. bristles with them.

Take the c', s', of the supersigned letters (replaced in Ido by the digraphs: ch, sh) which all Esp. textbooks in English inform the student are to be pronounced as in the Ido digraphs: Kotzin (Historio kaj teorio de Ido, p. 23) informs us that these digraphs are really not the equivalents of the supersigned letters, that chambro and posho do not correctly represent the sounds of c' and s' in

being compelled to write tsento, tsivila, etc. thus losing facility of recognition. There is an excellent discussion of the problem in the August, 1910, number of Discussiones. Prof. Meysmans, who is an advocate of some sort of a Latin-based I. L. comes to the following conclusions: (1) If we retain in the I. L. the Latin roots and differing conjugations with their vowel endings in a, e, i, o, u, it is possible to use "c" for the "k" sound; (2) that if we do not retain the Latin final vowels and have only one conjugation, the retention of "c" (with the "k" sound) is difficult, if not impossible. In this latter event, the "k" must be used and "c" given the sound of "ts" (as in Ido). As Prof. Meysmans stated elsewhere (see p. 51) that he found a perfect wall of prejudice against the Latin finals, it is evident that he would vote for the retention of "k". The dropping of "k" from the Latin alphabet is one of the phonetic catastrophes of history from the I. L. standpoint.
c'ambro, pos'o — what the proper sounds are he does not state.

Take the diphthongs: aj, oj, uj: According to Dr. Zamenhof (Esperantisto, Jan., 1893) the letter "j" is always a consonant, either before or after a vowel. Therefore these so-called "diphthongs" represent a vowel combined with a consonant: aj- "a", vowel, plus the "j" (consonant). In English, these combinations are true diphthongs, pronounced as if composed of two vowels: aj- ai sound, like "y" in my; oj- oy sound as in boy. Yet if the "j" is to be considered a consonant, the English usage is not correct for Esp.

The combination "uj" as found in such ordinary words as unuj, tiuj is especially difficult—for the English speaker—the exact pronunciation I cannot attempt to state. It was noted that out of 22 successive numbers of the British Esperantisto, six contained articles on the pronunciation of the aj, oj, uj. This would not have happened if the pronunciation were as easy for the English as claimed.

To inform the English speaker that h' is to be pronounced as "ch" in the Scottish word "loch", does not give us much of a guide when this supersigned letter is used as an initial consonant.

Take "au", "eu": Zamenhof claims, I believe, that in these two "diphthongal" combinations each letter is to be pronounced separately. Yet how that can be done, especially with the "au" is not clear.

However, it is not necessary to stress the difficulties too much. Esp. seems in practice to be orally intelligible to all European peoples, though the language does present some difficulties of pronunciation, especially to the English. These difficulties arise in part from the unusual letter sounds or combination of letter sounds which are not found, or rarely found in the English. These sounds so difficult to the English seem easy and simple to the Russians and Poles, just as certain sounds (the "th" for example) seem easy and simple to us but very difficult to many foreigners. Take, for instance, the three j's: g', or, gh with the value of the ordinary English j sound or soft g; j like the y in yes; j' or "jh" like the
s in leisure. The Esp. sounds for these letters are unfamiliar to English ears and tend to mislead the student or user from the correct pronunciation.

Another criticizable point is the constant succession of "ch" sounds which, to Western European ears seem disagreeable, as found in chio tio chi, chiuj tiuj chi, char ech che tiuj. Ghu shia fiancho serchis shin. (In Ido: Kad lua fianco serchis el?) Char shi ne scias, chu shia chapelo estas tie-chi au che shia chambro, serchu ghin chie. (In Ido: Pro ke el ne savas, kad lua chapelo esas hike od en lua chambro, serchez ol omnube.) The Slavic languages are, I understand, very rich in such sounds consequently they seem easy and euphoneous to Slavic races, but such is certainly not the case to the majority of Europeans.

Still other questionable phonetics are the difficulties of pronunciation of such letter combinations as: sc in absceso, sceptro, sci; kc in akcepti, akcio, funkcio; the kv sounds which replace the qu in many words of Latin derivation, as: akvo, kvar; the gv where the "v" takes the place of "u", as: lingvo, gvidi.

According to the domocratic and scientific principle of "the greatest good to the greatest number", Slav phonetics should not be given a preference over the phonetics of the majority languages.

**AGREEMENT OF ADJECTIVES WITH SUBSTANTIVES.**

The only substantial arguments for the accord of adjectives with their substantives are: (1) That such is the linguistic usage of certain peoples; (2) that it is useful to show the plural number in cases where the adjective is unaccompanied by the noun-form it qualifies.

Against it is the fact that it serves no logical purpose (except possibly in the substantive use) and that it is a bit of grammatical lumber which encumbers the language without compensating advantages. Dr. Zamenhof in 1894 called it "superfluous ballast" (see p. 71), and proposed its abolition in his proposals of 1906 (see p. 76).
No member of the Delegation Committee attempted to speak in its defense. The fact that the English has no such usage is an overwhelming practical demonstration of its futility. We do not find it necessary to speak of "the good(s) fathers (la bonaj patroj), or to say: Many(s) competent(s) persons are convinced that some(s) changes and betterments are desirable(s) and even necessary(s). The retention is contrary to the evolution of languages by the sloughing off of archaic grammatical forms. It is a very considerable practical embarrassment to the student unlearned in the classic languages or to one whose native tongue contains no such forms. It multiplies the forest of "j’s" and thus disfigures the text to a majority of Europeans.

The Ido Academy permitted its retention in cases of plural adjectives unaccompanied by their proper substantives until 1913, when it was decided that the plural could best be indicated in some other manner, as by the plural article le or some suitable indefinite pronoun (uli, kelki).

The following comparative text shows better than any argument the wisdom of the Delegation Committee in suppressing such use:

**ESPERANTO.**

Multaj kompetentaj personoj estas konvinkitaj, ke kelkaj s’ang’oj kaj plibonigoj estas dezirindaj, kaj ec’ necesaj. Exemple, la multaj groteskaj kaj absurdaj finaj ‘j’ devas esti aboliditaj. Tiuj kaj aliaj malbelaj’oj kaj malfacilaj’oj estas aboliditaj de la Internaciona Lingva Delegacio.

**IDO.**


**COMPULSORY ACCUSATIVE FORMS.**

The only argument, worthy of consideration, for the retention of the obligatory use of the accusative is that

*Note: The Espists also use the arbitrary accusative form, instead of the appropriate preposition, to indicate direction (mi iras Roman), and for words expressing date, weight, measure, price and duration, and even in words of salutation (bonan tagon, sinjoro).
it permits freedom of word arrangement, permitting each linguistic group to place the words of a sentence in the idiomatic manner to which it is accustomed, thus preserving the spirit of the national literary works and facilitating the writing of poetry.

In order not to befog the issue, it should be clearly understood that what the Delegation objected to was not the permissive use of the accusative, but its compulsory use. Ido uses the accusative forms with relative pronouns in the same manner that it is used in the English and Romance languages where it is necessary to distinguish the accusative from the nominative (la viro quan vu vidis, etc.), and it permits, though does not recommend its use with nouns.

The absence of the accusative inflection in the English, Scandinavian, French and other Romance languages, shows that the compulsory use is not a necessity for logical expression. In German, even, the accusative differs from the nominative neither in the plural nor the feminine nor the neuter. Therefore, following the postulate of "greatest internationality", the obligatory accusative has no place in the I. L. The classic languages with their agreements of words in number, gender, case permitted and treasured a word order very different from the modern style. Prof. Meillet, the eminent linguist, states, that all European languages are tending toward the normal uniformity of word order (subject, verb, complement) found in the less inflected languages, as English and French.

As to its suitability for writing poetry and for the word for word translation of literary "gems", it suffices to say that the primary value of an I. L. is that it can render logical thoughts in a universally intelligible manner; that the writing of poetry and literal translation of elegant diction are subsidiary considerations. One of the great practical mistakes of the Espists is that they use their language mainly for the translation of these literary gems (even Shakespear) where the natural languages will always remain supreme. It is the translation of scientific works, books of social import, business letters, which have chief utility to the intellect, not to the sentiments,
that constitutes the chief value of an I. L. However, it is not just to underestimate the value of the I. L. as a vehicle of literary expression. It has far greater possibilities in that direction than it is ordinarily credited with. But its main purpose is to convey thought. To put one's thought into such a logically coherent form as to be clearly and exactly understood by peoples of varying linguistic origin is no mean job. We express ourselves by customary sentences, rather than by logically building up our sentences out of the separate words. The greatest obstacle to writing the I. L. comes from the tendency to follow literally purely nationalistic idioms. To get the best results, one must put the idea to be expressed into the simple, logical form of subject, verb, complement, with modifying words next to the words they modify—a true mental gymnastic. Now a permissively illogical word order tends to follow the idiomatic usages which sometimes makes the meaning completely obscure to the foreigner. Clear intelligibility, unambiguity of expression is a fundamental demand on an I. L. translation. We cannot get lucidity and precision of expression in the long, loosely constructed sentences wherein the accusative inflections precede the nominative.

The following examples of use are more convincing than argument: La bonaj patrinoj amas la belajn infanojn. In Ido, we write: La bona matri amas la bela infanti. To literally Anglicize the Esp. text, we should have to write: The good(s) mothers love the beautiful(sn) children(n). **Atendante vian baldauan respondon** seems as absurd to the English as it would be to write, "Awaiting-your(n) early(n) response(n)." Zamenhof wrote: "Shi envolvis sin en siajn densajn longajn harojn." (In Ido: **El envolvis su en sua densa longa hari.**) To Anglicize the Esp. text: She wrapped herself in her(n) thick(sn) long(sn) hair(n). Are such constructions logically necessary? Do they aid in the understanding of the meaning of the sentences? Do they embellish the text or add to its euphony? leave the answers to the good sense of the reader.

In conclusion I give the two following excerpts from the 'Bulletin Français-Ido', page 114, which show the use of the accusative:
ESPERANTO.

Kaj ili prenu bluan tukon kaj kovru la kandelabron de lumigado kaj ghiajn lucernojn, kaj ghiajn prenilojn, kaj ghiajn cindruojn, kaj chiujn ghiajn oleujojn, kiuj estas uzataj che ghi.

(151 letters, 12 accusatives, 29 words.)

Malgrau chiuj niaj petegoj, defendoj au kontraubataloj, la morto nepre rabos nin chiujn iam, nepovajn kaj senigitajn, -junulojn kaj maljunulojn, richulojn kaj malrichulojn, scienculojn kaj malklerulojn, fortulojn kaj malfortulojn, humilulojn kaj malhumilulojn senkulpulojn kaj kulpulojn, bonulojn kaj malbonulojn, malsh~areniuloin kaj avaruloin.

(350 letters, 24 accusatives, 47 words.)

** TABLE OF THE 45 CORRELATIVE WORDS. **

The logical relations shown by the Esp. correlative words (ia, chia, kia, nenia, tia, etc.) have a certain attractiveness to logical minds which appeals at first sight. The table was, however, unanimously rejected by the Delegation Committee, largely because of the unnecessary burden it places upon the memory. It belongs essentially to the a priori forms of I. L. which indicate related ideas by one arbitrary root form and differentiate them by the change of one or more terminal letters (see p. 39). Practical experience shows that the memorizing of these arbitrary forms with their slight differences is

* Note: This text is taken from a translation by Zamenhof.

** Note: This is a translation of the following French text:

"En dépit de toutes nos supplications, défenses ou résistances, la mort nous emportera tous un jour infailliblement, impuissants et dépoullés — jeunes et vieux, riches et pauvres, savants et ignorants, forts et faibles, humbles et orgueilleux, innocents et coupables, bons et mauvais, prodigues et avares, insatiables et blasés, heureux et malheureux . . ."
a greater task than the learning of entirely different words which have their base in the natural languages. It may be asserted that the tax on the memory of keeping the forty-five significations firmly in mind is greater than the tax on the memory of learning the whole of the Esp. grammar. Their facile use is only possible to those who constantly use the language. The presence of these artificial creations in almost every sentence gives to Esp. an unnatural appearance which is out of place in an a posteriori form of language.

In view of the fact that international words or phrases can be substituted for these arbitrary forms, it is contrary to the spirit of maximum facility to retain them.

Several other objections (phonetic etc.) have been raised against this table which may be found by those interested in the "Conclusions of the Report" presented by the Secretaries of the Delegation Committee.

These forms do not, in my opinion, constitute as important a detriment to the language as do the other fundamental defects discussed in this paper, but they are sufficiently important to justify separate mention.

**DERIVATION.**

Said Prof. Couturat:

"The system of derivation in Esp. is incontestably the most characteristic feature of that language. More than anything else, it gives an aspect of logical simplicity and lucidity, which at the same time seduces the theorist and makes the language very easily learnable and practicable even for persons of but little education. This system is also a font of richness and makes the language living and autonomous."*

We have as a word basis the invariable morpheme or stem (ordinarily termed "root") which, at least in Ido,

* Note: 'Studio pri la Derivado en la Linguo Internaciona', Delagrave, Paris, 1910. This brochure should be studied by those who desire to make a thorough study of the subject.
is selected on the principle of maximum internationality or facility. Disregarding the particles and adverbial forms, these roots fall naturally for the most part into three categories: (1) Verbal roots, indicating an action such as: *ir(ar), bat(ar), parol(ar), salt(ar), dorm(ar).* (2) Nominal roots, as: *dom(o), hom(o), puer(o).* (3) Adjectival roots, expressing a quality, as: *bon(a), facil(a), avar(a).* These roots, plus the appropriate terminal letters: *-ar, -o, -a,* constitute the fundamental grammatical forms of the words. The addition of the grammatical finals: *-o, -a, -ar,* is usually termed "immediate" or "direct" derivation. "Mediate" or "indirect" derivation is accomplished by means of affixes (prefixes or suffixes), such as *anti-, retro-, -estr-, -in-.* The sum of the words that can logically be formed from any one root by immediate or mediate derivation constitutes the "word family". An I. L. is therefore natural in its vocabulary and philosophical in its grammar and derivation.

Natural languages express some of the relationship of ideas in a similar manner, but because they result from a natural and uncontrolled growth, the terminal forms and affixes are very often irregular and arbitrary. Sometimes the same affix is used to express different meanings, sometimes several affixes are used to express the same meaning. An example of fairly regular use in English is the *-er* as in sleeper, and the *-less* in sleepless. We often change the form of root, as from peace to pacify, or even use an entirely different word to express a related idea, as dormitory, as a sleeping place or use the same form of word indifferently as noun, verb or adjective (see note p. 28). We understand these arbitrary and formless words because we are familiar with the diction. In an international language intended to be easily understood by all peoples they are inadmissible.

A logical system of derivation, word-building, makes not only for economy and precision of statement and consequent intelligibility, but permits a fecundity in the coining of new words to express certain shades of meaning which the affixes and dictional forms of the natural languages do not permit. In other words we get both richness and ecenomy which means a conserving of
energy and the maximum of simplicity of expression compatible with the clear and exact expression of thought. For example, in Ido, we have the word dorm-o to express the idea of sleep; dorm-eto, lit. a little or short sleep, translates logically and clearly the idea which the English expresses by the separate word "nap"; such a derivative form, therefore, makes for intelligibility and facility on the part of the non-English speaker. In Ido, the word hom-o: stands simply for the idea of a human being, either man or woman; hom-ulo signifies only a person of the male sex; hom-ino: only a person of the female sex. In English, we can express the first of these ideas by the use of the two words: human being (homo), and are compelled to resort to the two differing words man and woman to express the related ideas which Ido expresses through the two common affixes applied to the same root. Suspekt-ema does not only translate the English word "suspicious", but the related word "mistrustful".

It is fundamental principle (theoretical in Esp., theoretical and practical in Ido) that a root expresses one basic signification, modified as it may be by the different affixes each of which in turn carries one invariable sense. One root, one meaning; one affix, one meaning. Knowing the form (spelling) and meaning of a root, we can logically and clearly express all related ideas by the use of the proper affix. This characteristic is termed the principle of "unasenceso": one sense, one word, uniqueness in signification, unambiguity, which was so clearly formulated by Prof. Ostwald.

For example, the fundamental idea of music is expressed in Ido by the root: muzik-, this idea of music therefore is carried in all forms of the root: nouns, adjectives or what not. The suffix -ist indicates a person occupied professionally with something. Muzik-isto can only therefore signify a (professional) musician. Given the verbal root: dorm-ar: to sleep, we know that the substantive form is dorm-o and means sleep. The noun form can only end in -o (or -ado) and cannot mean indifferently sleep, sleeper or a place for sleeping, but can only refer to sleep as a substantive. As Ostwald stated: "There exists a unique and reciprocal correspondence between the ideas and the morphemes which express them."
Now this reciprocal relation of form and sense logically carries with it a second principle, that of reversibility, which Couturat formulates as follows:

"Every derivation must be reversible; that is to say, if one passes (forward) from one word to another of the same family by virtue of a certain rule, one must be able to pass inversly from the second to the first in virtue of the rule which is exactly the reverse of the preceding."

"Given pac-o: peace, pac-ar can only signify to be at peace, be in a state of peace. Pac-ar cannot signify, to pacify, because if it did the substantive: pac-o would only mean pacification, the making of peace. To express the idea of pacification, we must add the suffix -ig- which adds to the root the idea of: to make, render, cause to be; pac-ig-ar therefore logically expresses the idea of to pacify, and pac-ig-o translates pacification.

If we depart from the substantive: kron-o: a crown, the verbal form kron-ar (kron-i in Esp.) could only logically signify "being a crown", like the form pac-ar. Kronar (as derived from krono) cannot logically express the idea of: to crown (someone), because the meaning of the substantive inversely derived from "to crown" is and can only logically be: coronation, the act of crowning, not the crown itself. As will be shown more in detail hereafter, Esp. does have this illogical derivation in this and hundreds of other words, but it is not logical or sensible. Ido having the suffix -iz- which adds the idea to the root of covering, furnishing, providing, logically expresses the idea of "to crown" by kron-iz-ar: kron- (crown), -izar to cover with. Working back from the verbal form kron-izar one logically gets kron-izo meaning coronation. If Esp. were consistent in its derivation, lacking as it does an appropriate suffix to express this special idea of: to cover with, it would start with the verbal kron-i as the fundamental form; then kron-o would logically signify coronation, and kron-ilo: the instrument for crowning, the crown itself.

The capability of reversing a derivative form and arriving at the original meaning is the practical test of the rightness of a derived form. A substantive derived form a verb can logically only stand for the idea of the state or action expressed by the verb.
The above-described system of derivation, dictated though it be by logic and common sense, is but imperfectly carried out in Esp. As Couturat stated: "The Esp. textbooks inform us how from a given root one can derive a substantive by adding -o to it, or an adjective by the addition of -a, etc. but it does not inform us what is the meaning of the word thus formed. Yet this is an essential part of derivation; for it is entirely useless to form new words if one does not know exactly their sense. Each form of derivation should correspond to the special sense (or change in sense); that is the simple consequence of the principle of unasenceso: unambiguity."

Now Zamenhof, mislead by the example of many words in the natural languages, often assigned significations to the derivative forms which the grammatical finals or affixes did not logically justify. As a consequence, in Esp. one has to burden the memory with these arbitrary significations or, if one wishes to be certain as to a meaning, consult the dictionary. Again, lacking as it is in certain affixes, Esp. simply cannot give unambiguous and logical forms to certain derived meanings which logic and the accurate use of language demand, much less permit the student to work out the meanings in the inverse direction from certain derived forms. These illogical derived word-forms in Esp. are not to be found in a few isolated cases, but abound throughout the language. It is impossible in a paper of this length to discuss all phases of the subject or to discuss exhaustively any one point. I shall confine myself to a few instances of incorrect immediate derivation which will be sufficient to demonstrate how impossible it is to accept the Esp. derivation as it stands.

The Ido system of derivation is mainly the work of Prof. Couturat. He arrived at his conclusions, not by a priori methods but by a long exhaustive examination of the requirements of the vocabulary. Recognizing the many excellencies of primitive Esp. and desiring no break with its adherents, he accepted the Esp. system of affixes and by rearrangement and addition worked out a system which satisfies the demands of logic and common sense.

It is an obvious fact that a substantive derived from a verb can have logically no other meaning than the state
or action expressed by the verb and, consequently, no verb can be directly derived from a noun unless the noun expresses an act or condition, in which case the verb must signify to do that act or be in such a condition. **Dormar**: to sleep, can only have as a substantive the word sleep or sleeping, expressive of the act. **Frapar**: to strike, can only produce *frapo*, meaning a blow. **Paco** in verbal form can only mean to be at peace, and cannot mean to pacify because the substantive form of to pacify is pacification, a different idea than peace. If *krono* refers to the object crown, we cannot logically derive the act "to crown" from it, because, working back from "to crown" to the substantive form, we do not get the idea of the object "crown" but a substantive expressive of the act, namely "coronation", which is a different idea from "crown".

Given a certain verb in Esp., we have no logical certainty as to what may be the meaning of a substantive derived from this verb, or, conversely, the meaning of the verb derived from the substantive or adjective. As one of the Esp. textbooks informs the student: "The nouns, adjectives, etc. obtained from these (grammatical) endings are not always of the same kind . . . It follows that the exact meanings of nouns, adjectives, verbs, have to be looked up in the dictionary. It is not safe to form, for instance, from a given verb a noun by changing -i into -o."

For example, in Esp. the substantive form derived from a verb may mean a person: *friponi*: to cheat, swindle, but *fripono* does not signify as it logically should the act of cheating, swindling, but, according to the Esp.

* Note: Espists sometimes attempt to avoid this obvious error in such words as *kron-i, -o*, by using the suffix-*ado* in place of -o. Such use of -ado is only an illogical makeshift not permissive by the definition of that suffix as shown by the Esp. **Fundamento** or present Esp. dictionaries where we find that it denotes: continuation or repetition of an act. A classic illustration of the meaning is: *paf-i*: to shoot, *paf-o* a single shot, *paf-ado* signifying repeated discharge, a volley. **Frap-o** refers to a single blow; **frap-ado** to a beating. Now applying the above to *kron-i*, we find that *kron-ado* can only logically refer to a continuous crowning or the crowning of several persons and cannot refer to the single act involved in coronetion.
dictionaries, it means a rogue, knave, rascal! Other examples of this sort are: gast-i: to board, be a guest, visit, but gastó has a dictionary signification of "guest, boarder", though it should logically refer to the act of boarding, visiting. Profet-i means to prophesy, but profet-o does not refer to the act of prophecy, but the prophet himself.

The substantive of a verb may denote a substance: or-i signifies to gild, plate, cover with gold; but or-o does not signify the act of gilding, plating, but the gold itself! Sal-i means to salt, but sal-o does not refer to salting, but the substance salt. Gudr-i means to tar, but gudr-o does not signify tarring, but the tar itself. Kolor-i means to paint, but kolor-o refers to color as an impression on the eye, a hue, and kolor-ilo means the painting substance. Vest-i means to dress, clothe; vest-o does not refer to the act of clothing but to an article of clothing, such as a coat, trousers, etc.

Now if the above illogical derivations did not permit of correction by reason of the imperfections of our mental processes or our language, or were even very difficult to correct, we should have to let them stand as illogical, arbitrary forms. In the case of fripon-i, -o, for example, the mistake arises in the first place by coupling together two ideas which are not necessarily connected. A rogue by no means always exhibits his roguery by swindling. Such use exhibits a poverty of vocabulary. Ido adopts one root (eskrokar) for the idea of to swindle and retains fripono for the idea of a rogue. If the Idist finds it desirable to verbalize the substantive form, he does not proceed by blindly tacking on the verbal termination -ar without stopping to consider that such a verbal form must logically signify; -ar added to fripon-o would have no practical meaning (to rogue!); but -esar added thereto clearly expresses the idea of being a rogue. For the class of roots indicated above which primarily refer to substances, Ido provides a logical derivation by the use of the suffix -iz- which is added to substantive roots to signify: to cover, supply, furnish, provide with. Such an affix is simply indispensable for the accurate translation of thought and to provide a logical way to verbalize such words. There are thousands of cases were such an affix
is necessary. Applying it to or-o: gold, the verbal idea signifying to gild, to plate is logically formed by or-izar and the substantive derived from orizar can only be or-izo signifying the act of platting. There is thus permitted a logical derivation both forward and backward. And so on throughout the list. It may be said, however, that in the last word given: koloro that color is by no means always synonymous with the idea of paint, therefore paint needs a separate root. This is another case of poverty of vocabulary, as in the case of friponi. Ido uses separate substantives for paint, as used on buildings, on the face, etc. and verbalizes the root by means of -iz- as in the other cases. There is nothing difficult in the comprehension or use of the few additional affixes which the Idists have been compelled by logic and common sense to add to the existing stock of primitive Esp.

There is another large class of roots in Esp. which are directly verbalized by the simply addition of -i to indicate the intransitive idea of: to produce, generate the substance or thing denoted by the nominal roots: gherm-o: germ, -i: to germify; burghon-o: bud, -i: to bud; flor-o: flower, -i: to flower, bloom; vers-o: verse, -i: to versify; urin-o: urine, -i: to urinate; nest-o nest, -i: to build a nest, and nest-ighi to nestle(!); fum-o: smoke, fum-i: to smoke (a pipe, cigar; subject being a person!); fum-ajhi: to smoke-dry (subject being fish, beef!); fum-ighi: to emit smoke (subject being a chimney!). Disregarding the illogical and arbitrary meanings which Esp. attempts to express by such forms as nest-ighi: to nestle, and confining our attention to the immediate derivative forms, we find that we are unable to work back inversely from the verbal forms ending in -i to the logical meanings of the substantives. Firmly bearing in mind that a substantive derived from a verbal root can only express the state or action corresponding to the act, we see that gherm-o, burghon-o, flor-o, etc. as the substantive forms of the verbs, can only signify: germinating, budding, flowering, etc. and not the objects: germ, bud, flower.

To obviate such illogical attempts at derivation, Ido uses with such words — they are very numerous — the intransitive suffix -if- joining it to nominal roots to denote
production, generation.* The introduction of this new suffix not only gives precision and clarity to the derivation but also enables the primitive -ig- suffix to be used only with a transitive sense (not both intransitively and transitively as in Esp.). In Ido, therefore, burjon-o: is the bud burjon-ifar: to bud (produce buds), and burjon-ifo: logically signifies the act of budding; urin-o: urine; urin-ifar: to urinate; urin-ifo: urinating, etc.

This suffix is also particularly useful to indicate the manufacture of tools and other articles: martel-o: a hammer: -ifar: to make hammers (to hammer something is expressed by martel-agar) -if-isto: a hammer-maker (in Esp.: martel-fabrik-isto). In Ido, we find klov-o: a nail; (klov-) if-isto: a nail-maker; -agar: to nail up (a box, etc.); -izar: to stud, garnish (something) with nails. In Esp., we find najl-o: a nail; najl-i: to nail (thus making impossible the inverse derivation), and chirkau-najli (!) to garnish with nails.**

The correct use of -ifar, -igar, -izar may be indicated by the following examples: pom-ifar: to bear, produce apples; sudor-ifar: to prespire (produce sweat); a salt works sal-ifas, i.e. produces salt; the chemist salifies (sal-igas) a certain base to transform it into a salt, or we may convert ordinary water into brine by salification (sal-igo); we salt (sal-izar) or butter (butr-izas) our food to give it the proper flavor, or we may salt (sal-izas: put salt on) fish to preserve them.***

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* Note: We find this suffix in English in such words as fructify, liquify, etc. though it is often used transitively in such words as b-beautify, glorify (a person, etc.) and in such words as crucify has another meaning altogether and certainly does not mean "to produce crosses"—an example of illogical, "natural" use.

** Note: The old suffix -ig- cannot be properly used in such connections because -igar has the sense of "to transform something into another, or to impregnate something with something". It is very often difficult in Esp. to determine whether a given verbal form is to be used transitively or intransitively because the proper usage is not indicated in the dictionaries—this makes for inaccurate use and difficulty of comprehension.

*** Note: Because Esp. lacks proper affixes and suffers from a general poverty of vocabulary, it often attempts to remedy these defects by illogical and unjustified use of the primitive affixes: for instance, kulp-a: guilty, has the derivative form kulp-igi which is translated: to accuse (of). Now kulp-igar can only logically mean:
-igar have therefore a transitive sense; -ifar an intransitive sense.

Another class of verbs in Esp. are derived from the names of the instruments themselves: bros-o: a brush, bros-i: to brush; martel-o a hammer, martel-i: to hammer; baston-o: a stick, baston-i: to cudgel; kanon-o: cannon, kanon-i: to fire a cannon; shraub-o: a screw, shraubi: to screw; tambur-o: a drum, tambur-i: to drum, etc. Here is another case where an inverse derivation is impossible, because inversely the substantive of the verb denotes an action, not an instrument. Derived from the verb, bros-o: logically denotes a stroke of the brush (and bros-ado, brushing, the continued action), and not the instrument brush; martel-o: logically indicates a stroke of the hammer, not the instrument hammer. The unrightness of the derivative senses as given in the Esp. dictionaries is therefore apparent and is in fact unnecessary in this class of words even with the affixes afforded by primitive Esp. To be sure, the primitive idea may properly be considered to be the instrument itself and therefore the fundamental derivative form as shown in the dictionaries should be the instrument, rather than the verb denoting the act. But in view of the fact that Esp. does not pretend to be absolutely logical, it would have been better for Esp. if the verb had been regarded as the primitive word and then the name of the instrument derived from the verb by means of the suffix -ilo: In fact, in some words, Zamenhof did this: komb-i: to comb, komb-ilo: a comb; raz-i: to shave, raz-ilo: a razor; fajf-i: to whistle, fajf-ilo: a whistle; plug-i: to plough; plug-ilo: a plough, etc. Why such derivation was not consistently carried throughout the language is not evident. Bros-i, -ilo; martel-i, -ilo would then in logical agreement with komb-i, -ilo, and the other words.

In view of the fact that in most cases, the instrument, the object, may be regarded as more fundamental than to make guilty which is a far different idea from "to accuse". This arbitrary translation was used simply because "to accuse" was an ordinary conception for which an official word was lacking in the vocabulary. It may be added that to use a word which logically signifies that the accused is guilty is contrary to the spirit of modern jurisprudence.
the act performed by means of the instrument, Ido has as the primitive word the name of the implement and adds the verbal suffix -agar (the stem of the verb: agar: to do act) using it in the sense 'to make use of' the substantive to which it is added: martel-agar: to hammer; kanon-agar (or -pafar): to shoot a cannon; manu-agar: to handle; kruc-agar: to crucify. In a few cases, however, the act, rather than the implement has been taken as the primitive word: raz-ar: to shave; raz-ilo: a razor. In either case, the Ido derivation is consistent and reversible which is not the case in Esp. words where the implement is the foundation form.

There are many other instances of illogically derived verbal forms which are difficult to classify. I shall only mention a few: afish-i: means to placard, but afish-o: does not refer to the posting but the bill, poster, itself; broshur-i: to stitch together (in pamphlet form), broshur-o: does not refer to the stitching but to the brochure, tract; form-i: to form, form-o: the form, shape itself, not the forming; silab-o signifies a syllable, but silab-i means "to spell" (!).

To perpetuate such absurdities and illogical forms of derivation because they are found in the natural languages, or because Zamenhof introduced them without consciousness of their imperfections, or because mistakes once made in the sacrosanct Fundamento must forever be preserved, or because it would hurt Esp. propaganda to acknowledge the fact that the language is far from perfect, or because it would be an expense to the publishers to get out new textbooks and dictionaries, were not reasons which appealed very strongly to the Delegation Committee, nor do they appeal very strongly to the common sense of the average person.

ADJECTIVAL SUFFIXES.

Esp. textbooks and dictionaries inform us that all adjectives end in -a, but they do not attempt to inform us of the various significations which this one terminal letter carries. The Idists, recognizing the utter inadequacy of this sole adjectival suffix, were compelled to introduce
several new terminations of which -ala, -oza, -iva are prominent examples.* 

In Ido, -a is the primary grammatical final of that great class of words which fundamentally express quality (see p. 43), such as blu-a, simpl-a, facil-a. It carries the signification and answers the question "what is"; consequently blu-a: (what, which is) blue; simpl-a: (what is) simple; facil-a: (what is) easy. Added to nominal roots denoting a substance, it has the same meaning, example: 

marmor-a statuo: marble statue (a statue made of or which is marble); or-a vazo: gold (made of) vase; hom-a ento: an entity which is human; aqu-a voyo: water way (a way composed of water).

The suffix -ala is the ordinary adjectival termination (except where the adjective is used to denote a substance out of which a thing is made, composed of, as in marmora, aqua above) for that great class of roots which are nouns in the fundamental significance. It expresses the idea: pertaining to, relative to, suitable to. We have thousands of words where there is such use in English: autumnal, royal, poetical, mural, etc. Therefore we find in Ido: sexu-o: sex, sexu-ala: sexual; spin-o, -ala; statistik-o, -ala; cerebr-o, -ala; manu-o, -ala; kordi-o, -ala; braki-o, -ala, etc. which the Espists have to express in adjective form by -a: seks-a, spin-a, statistik-a, cerb-a, man-a, kor-a, brak-a, thus differentiating them in no way from adjectives which carry a different meaning: blu-a, simpl-a, etc. The use of -ala permits not only a necessary distinction in meaning, but is consonant with the usage of natural languages and tends to euphony. A puer-ala ago signifies a childish act, not 'an act which is a child' (!); aqua-ala ludi: water sports, does not refer to sports 'made of water', but sports relating to, pertaining to water; nacion-ala legi: national laws, does not mean laws 'which are a nation' (!), but laws relating to a nation.

The Ido suffix -oza is used to form adjectives signifying: full of, containing, provided with, ornamented with: kuraj-oza: courageous (full of courage); danjer-oza: dangerous (full of danger); ambici-oza: ambitious (filled

* Note: Prof. E. Monseur, who is an advocate of neither Esp. nor Ido, wrote (Discussiones, Feb. 1910): "Le système de l'adjectit en esperanto . . . est outrageusement simpliste."
with ambition); joy-oza: joyous (full of joy); (Esp. has: kuragh-a, dangher-a, ambici-a, ghoj-a). The use of this suffix is so widespread and its need so evident, that I forbear to give it any extended comment. A ston-a voyo: a road made out of stone is surely different from a ston-oza voyo: a road full of stones. An aqu-a voyo: a waterway (as a canal) differs from an aqu-oza voyo: a road full of water. A nerv-ala morbo: a nervous disease, i.e. a disease relating to the nerves. Nerv-a tisuo: nerve tissue, i.e. a tissue composed of nerves. Nerv-oza persono (or nerv-ika persono) a person abounding in nerves (or a person with sick nerves).

The suffix -iva, though the use is not so widespread as the suffixes mentioned above, is useful and essential to express the idea: that can (do), capable of, and is added to verbal roots, ex.: instrukt-iva: instructive; nutr-iva: nourishing; sugest-iva: suggestive. The nominal form of this suffix: -ivo, is especially useful in technical and scientific language: astrikt-ivo: an astringent; nutr-ivo a nutrititous substance.

Let us take a sentence which expresses the distinctions above mentioned: The Esp. word instru-a may be used to express three essentially different ideas: (1) what belongs to instruction, what relates to instruction (in Ido: instrukt-ala); (2) which can (is able to) instruct (in Ido: instrukt-iva); (3) which contains abundant instruction (in Ido: instrukt-oza). Therefore, we may say in Ido: Quankam ta verko ne estas libro instruktala, tamen ol esas instruktiva e mem instruktoza. In Esp.: Kvankam tiu verko ne estas libro instrua, tamen ghi estas instrua, kaj mem instrua.* In English: Although this work is not an instruction book (like a textbook), yet it is instructive (capable of instruction) and even full of instruction. Any

* Note: It is impossible for Esp. to get over this difficulty by writing the phrase: tamen ghi estas instruanta kaj ech tre instruanta. Such translation does not exactly express the sense because -oza is a much stronger expression than -anta, and -iva also presents another shade of meaning. Furthermore, the participle form -anta cannot be used to express this idea because -anta denotes a present fact and does not denote a constant quality. An instrukt-anta libro an instructing book, cannot be "instructing" if no one is reading it. I am indebted for the above example to the 'Bulletin Francais-Ido' p. 66.
form of I. L. incapable of making such simple distinctions is lacking in an essential manner.

The substantivizing of the verb and the lack of exactness in the signification of the adjective have been dwelt upon at some length because the subjects are very important and are matters which affect the very fundamentals of ordinary usage. I shall not attempt to do more than mention other important problems wherein Esp. is imperfect, such as the substantivizing of the adjective, the proper use of -aj with verbal roots, the necessity for additional affixes, such as -uro which enables us to distinguish the result or product of an act from the act itself,* or the desirability of having -atra useful and necessary in thousands of words, ** or the affix -end signifying "what must be done."*** Nor shall I attempt to fathom the Zamenhofan psychological process which lead him to double or even triple certain root words **** for related ideas all of which are properly derivable from one root, or why Esp. has mistiko to signify the doctrine mysticism (mistik-ulo: a mystic) and romantiko to signify romanticism while such forms as katoliko and skeptiko are used for the persons who hold such beliefs.

Nor dwell on the fact that Esp. has only one termination to denote sex, -ino a female.*****

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* Note: Imit-uro: imitation, is not the act (imito) but the result of the act; signat-uro is the signature, the result of the act (signat-o); pikt-uro is the picture itself, not the act of making the picture; apert-uro an aperture, distinguished from the act of opening (aperto); abort-uro is the abortive object, not the act.

** Note: Ex., sponj-atra: spongelike; metal-atra: metallike.

*** Note: Carthage destrukt-enda: Carthage must be destroyed certainly differs in meaning from Carthage destrukt-inda: Carthage is worthy of destruction — the first denotes an intention, the second an opinion. Kred-enda: must be believed, is different from the idea contained in kred-inda: worthy of belief, for ex. in a creed.

**** Note: Redakti, redaktoro, redakcio. Iniciati, iniciatoro, iniciativo.

***** Note: In Esp. the affix -o denotes fundamentally simply a substantive, something existing, and the affix -ulo a person (male or female) characterized by a certain quality. By convention these terminations are understood to refer mainly to the male sex. In Ido, we have -o, (when standing for a person) denoting either male or female, -ulo is the regular masculine termination and -ino the feminine. "Esp.", as one eminent writer put it, "is a language of one declension and one sex", an apotheosis of feminism!
The fact of the matter is that when Zamenhof first constructed his simple code language with less than a thousand roots, scientific exactness of expression was not thought of. The practical success of his code language was so great as to incline the author to believe that it was a scientific instrument expressive of all thought. Zamenhof attempted no prolonged analysis (as did Couturat) of the relations of language and thought and his practical followers for reasons of propaganda have stood in the way of any changes. For the Esp. it suffices that the -o, -ar indicate the respective parts of speech without any close inquiry as to the meanings of the parts of speech so formed. The fact that a substantive form of a verb does not as it logically should refer to the act, but to an implement, a person, or what not, does not bother the Espist, he simply refers you to the vocabulary for the signification or to the usage of the "best authors." That one simple adjective form may stand for widely differing ideas matters not — one can divine the proper sense.

I think, I have made it plain to the reader that Esp. as it stands to-day is lacking in many fundamental points of logical and common sense derivation. Though supporters claim it to be an instrument "ready and fit" for all uses, such is not the case. All the innovations which the Idists have felt compelled to introduce into primitive Esp. are not merely subtle distinctions, without practical use, which make appeal only to logicians, but are essential to form a coherent derivative system, necessary to express ordinary relations of thought for which the old affixes do not suffice. As Couturat once said: "There can exist no other system (than that of Ido) entirely regular and logical. For the whole system depends not upon the election and use of some affixes (the forms of which are more or less arbitrary), but upon the immediate derivation, i. e. upon the relations between the substantive, adjective, verb and adverb formed from the same root by the grammatical endings -o, -a, -ar, -e. These relations cannot be invented arbitrarily nor defined in several ways. For the whole language is founded upon the principle that every root, even every element, of a word has only one invariable meaning which it retains in all the compositions it enters into;" (PROGRESO, vol.
The changes though but comparatively few in number, go down deep into the words of every day use. The effect of their adoption was far reaching and demanded a complete reworking of the vocabulary. The derivative system of primitive Esp. contained many excellent ideas and marked a great advance on what had before been presented, but it was imperfect and could not be accepted as it stood by the body of scholars composed the Delegation Committee.

VOCABULARY.

The facility of comprehension and use of the vocabulary is perhaps the most important factor in an I. L. It may be worth our while to review briefly the methods by which a vocabulary for the I. L. may be formed:

(1) The a priori method of selecting arbitrary combinations of letters. Such a vocabulary is the very height of neutrality, for it would be equally difficult to all. It is a sufficient objection to state that such a language would lose the great facility of one founded on an a posteriori basis and would put an intolerable burden on the memory.

(2) The method of "equal difficulty", i. e. of apportioning the roots among the different languages, so that no one linguistic group would have any advantage in facility over another — taking so many words from the Italian, a like number from the French, etc. No form of I. L. based on this principle of selection has ever been worked out, or is likely to be. It is evident that a vocabulary so constructed would be at least neutral in theory and therefore less likely to arouse nationalistic and linguistic prejudices than a form of vocabulary which is easier for some peoples than for others.

* Note: During the past five years, the writer has done a large amount of Ido lexicographical work. I have found the Ido system of derivation entirely efficient and sufficient in every respect. Nothing more is needed. nothing less would do.

** Note: Among the numerous sophistical arguments given by Kotzin in his 'Historio kaj teorio de Ido' p. 93 is one which asserts that if we conformed to Jespersen's principle of selection: "the best
Such a scheme is impracticable under the existing linguistic facts. If all European languages differed from one another even as much as the Russian differs from the English, and the French from the German, then there might exist good reason for attempting such a solution. The fact is, however, that our languages are not entirely independent growths and several of them are closely interrelated. A large number of Latin roots have penetrated even into the Germanic and Slavic languages. The English and Romance groups have a very large number of common roots which it would be exceedingly unwise to ignore. On the supposition that the selection was made by apportioning one-sixth to each of the great languages: DEFIRS, four of them: EFIS would doubtless select their portions from the stock common to all the members of this related group and consequently four-sixths, two-thirds, of the vocabulary would be easier for all members of that group than it would be for the Germans and Russians. To suppose, for example, that the French would go out of their way to select their share of the roots from words peculiar to the French alone is to suppose the improbable. The result then could not greatly differ from what we now find in Ido or Esperanto. To make something more difficult to others without thereby gaining any corresponding advantage is contrary to common sense and our moral sentiments. Even if the languages did not possess a common fund of root words, there would arise many practical difficulties of selection.

language is that which is easiest for the greatest number of people", "we should have to accept the English . . . because that language is spoken by the greatest number of people and because, for the English, the English vocabulary is certainly the easiest, therefore, logically, Ido should simply "borrow" the English vocabulary."

We answer (1) that if English happened to be a language easy of acquirement by the foreigner, instead of being one of the most difficult; (2) that if the English vocabulary was of an independent, distinct character, unrelated to the other European languages, like the Russian, instead of being an amalgamated language derived from European sources, related in almost very word to some European tongue, then Kotzin's argument would have some force. Ido has adopted thousands of roots found in the English, not because they are English alone but because they are roots common to the English and other languages — have an internationality of several languages, of which the English is but one.
To give the rarely used words to one group and the common, every-day words to another group would be manifestly unfair. Yet how difficult it would be to apportion exactly and fairly a number of roots which in use would give no advantage. We must decide that such a scheme, though seemingly fair and impartial at first sight, is impracticable under existing conditions. It is only mentioned because of the general haziness of the whole problem in the public mind.

(3) The "etymological" or purely Latin-root method of selection. No word would be admitted (except possibly a few technical words, as telephone, boycott) which does not have its origin in the classical or medieval Latin. This method of selection might claim to do away with the labor of seeking some medium form of root from the divergent forms as they have developed in modern languages or the selection of one word from the several totally different ones which appear in modern languages to express a similar idea — all one would have to do would or to seek the Latin etymological form. A purely Latin vocabulary would be easy for peoples of the Romance group, especially the Italians, and would offer a certain degree of facility to all peoples because of the interpenetration of Latin words.

Against such a method of selection may be said (1) that any disregard of modern, maximum internationality means that the resulting I. L. must be less efficient, less easy for the peoples as a whole; (2) that it is an obvious concession to scholars trained under the classical tradition and perhaps to the Italians. To make concessions to small groups, however important they may regard themselves, is unfair. Because Latin is easy for scholars and Italians, it by no means follows that Latin words have easy intelligibility and facile use to the common run of people for which an I. L. is chiefly intended; (3) that the purely etymological roots to be selected often

* Note: From the individual point of view, that type of I. L. is best which most closely resembles his native tongue and is therefore easiest to him personally. But the desires of one individual must be limited by the wishes and rights of others. Under existing facts, therefore, any form of I. L. is a compromise, a medium type, easiest for the body of individuals.
differ considerably from all the developed forms of the same roots as they now appear and that as a consequence they would be more difficult to remember and use than medium forms selected from modern languages; (4) that if the etymological forms of the roots were disregarded and some common spelling be selected from the modern form of the words, the resulting vocabulary would not greatly differ from that found in Idiom-Neutral and Ido; (5) that it ignores that large body of words common to the English and German which by reason of predominance of population (to say nothing of cultural standing) have as much, if not more right to be taken into consideration as words derived from a dead language. If we are to let down on the principle of maximum internationality why should we not endeavor to favor especially the linguistic peculiarities of these two great and growing peoples, as distinguished from the Romance group, they certainly are of more importance than the small group of classical scholars; (6) that the classical and medieval Latin was the reflex of a bygone civilization and is not applicable to modern conditions; (7) that the Latin words and sentences were used in an ambiguous and idiomatic manner which is extremely difficult to learn because they differ much from the modern significations and uses found in the varying modern language development; (8) that the resulting "dog-Latin" language would offend the classicists quite as much if not more than any I. L. based on purely modern internationality. The I. L. is a very practical affair. No concessions should be made for sentimental reasons to any one group. Any form of I. L. based on modern internationality is bound to contain a predominance of words which originally had their roots in the Latin, but this Latinity of the vocabulary should exist only to the extent that these particular roots are most international. In other words, the Latinity should be a consequence of the facts, not an unbending rule of selection by which we cannot make the most efficient use of the facts.

(4) Another method would be to select the root found in the greatest number of (European) languages — that was the method of Idiom-Neutral. Each language is therefore to be considered on a parity with another,
to have equal weight. Such a method marks an advance in efficiency over the restrictions imposed by the iron rule of selecting only Latin roots (and over the arbitrary selection of Zamenhof), because it definitely follows modern internationality, if not maximum internationality. The principle of selection is defective in that it fails to take into account the great disparity in the numbers of the populations using the different languages and the cultural importance of the different linguistic groups. By this method, a stem or root-word used by the Spanish and Portuguese (85 millions) has theoretically an equal importance to a word common to the English and French (210 millions) or to the English and Germans (270 millions). As a language is a matter of individual use, such a method, if strictly followed, is likely to result in a loss of efficiency. As a matter of fact, however, the roots selected by the Academy of Neutral did not greatly differ from the selection made by the Idist Academy. The Romance group, plus the English, have such a large body of common root words that the selection is practically forced in a majority of instances. A stem peculiar to the Spanish and Portuguese would be offset by a stem common to the French and Italian and probably the English. The Idist Academy recognizing the careful work of the Idiom-Neutral Academy (also that in the Novi Latin of Dr. Beermann) availed themselves of it for purposes of comparison and control.

(5) The Idist method of selection follows the principle of "maximum internationality of the roots", taking into consideration, euphony and easy pronounceability. The principle is but part of the formula upon which the whole language is based: "That international language is best which offers the greatest facility to the greatest number." "The internationality of a root is therefore measured by the number of persons of European culture who are able to recognize and understand it, without knowing any other language than their native tongue;" (Couturat). "Every one would naturally like to find in the I. L. the greatest number of roots that he is already familiar with, and, to be impartial we must attribute the same value to the natural preferences of the 120 million English-speaking persons as to each of the 75 million
German speakers;" (Jespersen). Each language therefore enters into the calculation, not as a unit, as in Idiom-Neutral, but as a factor proportionate to the number of people who speak it. The facility of any scientific form of I. L. is founded upon the fact that the languages are not independent entities which must be balanced against one another but compose an interrelated growth wherein certain common forms can be uncovered and extracted. **It is this great mass of interrelated roots which must characterize and form the vocabulary of an efficient I. L. constructed on an a posteriori basis.** Maximum internationality, the greatest facility, are principles not only democratic and fair but the only principles which will produce the most efficient type of I. L. This mass of interrelated words virtually compel their selection. As said Couturat, "the establishment of an international vocabulary certainly is not a matter of personal inspiration, fantasy or arbitrary selection (as in Esp.) but a work of science . . of patience." The roots selected come not from a search for the original etymological form of root, which is known chiefly to scholars, and produces but a theoretical internationality, but by extracting a common, medium form from the words as they appear in the living languages. Using these extracted stems to express one unvarying basic meaning we build up the various grammatical forms of the idea, verb, substantive, adjective, by the addition of affixes which in turn carry but one constant meaning and always qualify a root in the same way.

Because of phonetic changes, the spelling of these common roots often varies considerably from language to language. It is therefore essential to find by comparison some common form which is most international and at the same time fits into the phonetics of the language. A search for an absolutely natural spelling for the vocabulary of the I. L. is absurd and chimerical. Almost invariably some small differences are found in the spelling of the same root word in the different languages, therefore whatever form that may be adopted will seem somewhat strange and distorted to some linguistic groups. The only common-sense procedure is to adopt some medium form which is easy to recognize and use, by reason of its
internationality and euphony, by the majority of peoples.* Because Ido does not adopt whole words but simply stems expressing a primary idea and builds up thereon, by means of affixes, the various verb and substantive forms, it is almost always possible to find some form of stem which is common to several languages either as expressing the primary idea in direct way or expressing it in some commonly known derivative words. These "derivative", or subsidiary forms of international roots are especially characteristic of the English, which has a foundation of Anglo-Saxon with superstructure of "derivative" words from the Latin or Romance group. What may be termed the "primary" word in the English may have come from the Anglo-Saxon, but the "subsidiary" words for the same idea have almost always come into the language from the Latin group. For instance: L.: mori; I.: morire; S.: morir; P.: morrer; F.: mourir; D.: sterben; E.: to die, may be termed "primary" words wherein the LISPF languages have a certain amount of agreement as to spelling, so that one might suppose at first sight that the most international form expressive of this idea should be mor-, following the majority languages. Such, however, is not the case. All these languages, inclusive of the English and German, contain subsidiary, derivative words wherein the root mort- is found.** Take the idea of "brother", the German form for which is "bruder". Because the English and Germanic races together exceed in numbers any other related linguistic group, it might at first seem probable that the best form for this idea would be some recognizable spelling of the two English and German words, but further investigation shows the root frat-,** found in DEFISP, is more international and suitable to express the idea. The same occurs when the E.: hundred and the D.: hundert

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* Note: Take the following root as an example: L.: communicare; F.: communiquer; I.: comunicare; S.: comunicar; E.: communicate. Which form is "natural"? Ido adopted the form komunik-(ar) which does not exactly agree in spelling with any "natural" form, yet it is an easily recognizable form consonant with the spirit of all.

** Note: In English, we have the derivative words: mortal, mortality, mortuary, immortal; German has: Mortalität.

*** Note: As in our English word: fraternal; German: fraternisieren.
are found to be less international than the root cent-* which is DEFIRS. Of course, this substitution of mort-ar for "to die" and frat- (u1) o: for "brother" may seem at first sight to the English and Germans as forms difficult to recognize and use, much more so than they appear to the Latin races. Yet when one stops to consider the English and German subsidiary words for this idea, we see that the secondary forms are obligatory. It is a necessary presupposition in such selection that each individual is thoroughly acquainted with his own language. Individual ignorance or slowness of comprehension on the part of the English speaker that his language contains such a root as mort- in mortuary, etc. expressive of the idea of dying cannot be taken into consideration in selecting the roots. This interrelation or interpenetration of certain roots into many languages, whether in the form of primary or secondary signification, is the fundamental factor making for facility. It is only of late years that the extent and significance of this common group of stems as the only proper basis for the vocabulary of an I. L. has met with clear recognition.

Because Ido takes as its basis of internationality, not the languages as units as did Idiom-Neutral, but the number of individuals using the different languages, it is desirable to know what importance each language has as an independent group. The following statistics are taken 'The World Almanac', 1921 edition:

<table>
<thead>
<tr>
<th>Language</th>
<th>Number of Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>150,000,000</td>
</tr>
<tr>
<td>German</td>
<td>120,000,000</td>
</tr>
<tr>
<td>Russian</td>
<td>90,000,000</td>
</tr>
<tr>
<td>French</td>
<td>60,000,000</td>
</tr>
<tr>
<td>Spanish</td>
<td>55,000,000</td>
</tr>
<tr>
<td>Italian</td>
<td>40,000,000</td>
</tr>
<tr>
<td>Portuguese</td>
<td>30,000,000</td>
</tr>
<tr>
<td><strong>Total of Romance group</strong></td>
<td>185,000,000</td>
</tr>
<tr>
<td><strong>Total of English and German</strong></td>
<td>270,000,000</td>
</tr>
<tr>
<td><strong>Total of Romance and English</strong></td>
<td>335,000,000</td>
</tr>
</tbody>
</table>

*Note: As found in centenary, centennial, and the metric notations. Another good example is the E.: son; D.: Sohn, which is not as international as the root form: fili- (as found in filial).
As can be seen from the above, the English occupies a strategic position. Where the English has a word common, to the Romance group (and four-fifths of our borrowed words have a Latin or Romance-group origin), it becomes a predominant factor.

In the same publication, Mr. F. H. Vizetelly, Managing Editor of the 'Standard Dictionary', gives a table showing an analysis by origin of approximately 20,000 words found in the 4th edition of the Skeat 'English Dictionary'. From this table the following facts are taken:

Total of words derived from the Anglo-Saxon and Germanic languages 5040 (25\%)
Total of words derived from the French 6782
  do. Latin direct 2880
  do. Italian " 99
  do. Spanish and Port. " 129
  do. Greek direct or through
    Latin or French 2493
  \[\text{Total} = 12383 (61\%\)]

It is to be noted that these statistics are based on a vocabulary of common words. If the larger vocabularies were analyzed, which contain the more scientific and technical terms that are largely of Latin would be about 70 or 75\% for the whole vocabulary. Again, it should be remembered that this table gives the origin of words, not their existing relations to other languages. A word may have come to us, for example, direct from the Latin, but the French may have independently derived the same or a similar word and therefore considered relatively the word is common to the English and the French. The Anglo-Saxon and Germanic part of English (25\% by this table), though not as large in proportion as that derived from the Romance group or the Latin, is yet very important in that it comprises many words in common use, especially connective words found in almost every sentence. Whewell said (as quoted by Trench): "It would be just if we were to say that the English language is a conglomerate of Latin words bound together by Saxon cement." As shown in the first table, the total of English and German is 270 millions, which is greater than the total of the Romance group (185 millions). It might there-
fore seem likely that a goodly proportion of the root words of the I. L. would, by reason of the number of words common to the English and German, have to be adopted from the words peculiar to these two languages. There are two main reasons which prevent this: (1) The difficulty of finding some medium forms for words between the German and the English which would be easily recognizable (and pronounceable) by both peoples. The phonetic development of the early Saxon words has been so divergent in the two languages as to create practically two different words from the original Saxon. The Anglo-Saxon "toth" has become "tooth" in English and "Zahn" in German; the Anglo-Saxon "waeter" has developed into "water" and "Wasser"; Anglo-Saxon "specan" into "speak" and "sprechen"; Anglo-Saxon "sape" into "soap" and "Seife"; the Anglo-Saxon "wucu" is now "week" and "Woche"; the Anglo-Saxon "genoh" is now "enough" and "genug". (2) The fact that because English is composed by a fusion of languages there often exists in English two words, one from a Saxon or Germanic source, the other from a Latin or Romance source expressive of the same idea (ex.: yearly, annual; begin, commence; work, travel; sheep, mutton, etc.). Also there exist a very large number of instances where the Germanic source has provided us with one word expressive of a primary idea which is paralleled by several words expressive of the same idea in a subsidiary form derived from the Romance or Latin. "To die", for instance, comes from the ancient Scandinavian "dien", and stands isolated in our language with many subsidiary words derived from the Latin root mort.

The largest group of words adopted into the English came direct from the early French. The fact also that a majority of the English words, though originally derived direct from the Latin, Greek, etc. have also been adopted by the French, besides the fact that the English and French orthographies are not so divergent as to prevent the easy adoption of a common recognizable form, tends to make the French words powerfully influential when it comes to adopting international roots for an I. L. The French and English together outnumber the rest of the Romance group. Again French has a large proportion
of words which are common to the other members of the
Romance group, which makes possible the adoption of
a French root in cases where no common form exists
between the English and German, or the English and
Romance group. Standing as it does midway in the
development between the Latin and the English, the
French occupies peculiarly advantageous position.

In this connection it should be noted that it is very
often impossible to adopt English words in their purity
because of the chaotic condition of the English spelling
and pronunciation. We have in English, not five vowel
sounds as in the Spanish and Italian, but thirty and each
of these vowel sounds is spelled in a multitude of different
ways. Many of these various sounds are difficult to
peoples whose languages have a close correspondence
between the spelling and pronunciation. It is a demand
of common sense that the I. L. should have a phonetic
system easy to all peoples. We cannot admit unusual
sounds or difficult combinations of consonants and
vowels. The literal transcription of many of the special
sounds of the English words would result in such distor-
tion of the original spelling as to render the text un-
telligible at sight to the English and burden the foreig-
ner without corresponding advantage. For example, the
word "die" would be pronounced according to the method
of the ordinary continental pronunciation dee-ay and thus
pronounced would be unintelligible to the English
speaker; if spelled as pronounced in English it would have
to be written dai which form no Englishman would
recognize at sight. The word "brother" is unpronoun-
ceable by most Europeans because of the presence of the
"th" sound, to say nothing of the fact that the "o" as
pronounced in the English has the value of "u". Zamen-
hof adopted for Esp. several words from the English
literally copying our spelling without thought of the
resulting pronunciation. For instance, Esp. has boat-o
and bird-o, pronounced bo-ah-to, beardo. The English
do not recognize their own words if thus pronounced and
all other peoples do not recognize them by sight. Take
the word "beauty": this is in German Schönheit; in F.:
beauté; in I.: bellezza; in S.: belleza. Here the English
and French have a similar form which seems more inter-
national than the others. Yet the pronunciations of the English and French differ considerably and the vowel combination "eau" is a difficult one and could only be properly pronounced by separating the "e" from the "au" which would make it strange to both the English and the French. Ido (and Esp.) has adopted the root bel- as the best form to express this idea, it being DEFIS (found in the English word embellish, belle) and easily pronounceable. The fact that this root is immediately recognizable only by the Romance group and only indirectly by the English and Germans results from the linguistic facts, not from any theoretical ideas as to portioning out words among the different languages. Taking the linguistic facts as they exist, any a posteriori form of I. L. is bound to be easier for some peoples than for others. It must have a compromise vocabulary resulting from the fact that the mass of international roots are unevenly distributed. We have seen that the method of "equal difficulty" is impossible of realization. The method of "greatest internationality", while lacking in theoretical neutrality, is the sole guarantee we can have of practical neutrality, efficiency and facility.

The following statistics, based on the original roots selected for Ido, demonstrate the high degree of internationality:

<table>
<thead>
<tr>
<th>Roots</th>
<th>Languages</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2024</td>
<td>6</td>
<td>38%</td>
</tr>
<tr>
<td>942</td>
<td>5</td>
<td>17%</td>
</tr>
<tr>
<td>1111</td>
<td>4</td>
<td>21%</td>
</tr>
<tr>
<td>585</td>
<td>3</td>
<td>11%</td>
</tr>
<tr>
<td>454</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>255</td>
<td>1</td>
<td>5%</td>
</tr>
</tbody>
</table>

Total: 5371 (100%)

This table shows that a majority of the stems are common to 6, 5 or 4 languages, therefore, the stability and finality of the Ido vocabulary is proven. It is extremely improbable that other roots of a greater internationality could be found.*

* Note: All such tables are, however, misleading in a small degree in that they do not show the degree of facility for each language, i.e. each of the 2024 roots common to the six languages are not in every case equally easy of apprehension by the individual
A somewhat different method was employed by Professor Couturat in counting the same roots: He found that of these the following numbers occur in the international languages:

<table>
<thead>
<tr>
<th>Language</th>
<th>Number</th>
<th>Per 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>French</td>
<td>4880</td>
<td>91</td>
</tr>
<tr>
<td>Italian</td>
<td>4454</td>
<td>83</td>
</tr>
<tr>
<td>Spanish</td>
<td>4237</td>
<td>79</td>
</tr>
<tr>
<td>English</td>
<td>4219</td>
<td>79</td>
</tr>
<tr>
<td>German</td>
<td>3302</td>
<td>61</td>
</tr>
<tr>
<td>Russian</td>
<td>2821</td>
<td>52</td>
</tr>
</tbody>
</table>

How many words are necessary in an I. L.?

No exact number can of course be given. Close consideration of significations and experience in use can alone determine just how large a vocabulary is needed. As far as the requirements of logic go, it is obvious that no words should be admitted which are precisely synonymous with one another, though it would be entirely practicable for the purposes of diction and euphony to permit such words. At any rate, we should possess a vocabulary sufficient for the precise and clear expression of all ideas which the requirements of our ordinary life and the exact sciences make it desirable to distinguish. Legal papers, conventional agreements, our sciences, and our technical processes demand a clarity and exactness of expression for which only a rich vocabulary, wherein the significations of the words are clearly defined, can suffice. It should also be possible to accurately express the numerous concepts and shades of thought which arise from the infinite diversity of our sentiments and other psychical phenomena: repentence, remorse, penitence; courage, audacity, temerity; proud, haughty; affirm, assert, etc.*

* Note: In Ido: repento, remorso, penitendo; kurajo, audaco, temerareso, fiera, superba; afirmar, asertar.
Metaphorical use of technical and common words must be permitted, as is done in all languages, as long as the figurative uses do not logically conflict with the basic ideas expressed by the roots.*

The adoption in Ido of the principle of unasenceso: one word, one meaning, which applies not only to the roots but to the affixes, marks a great advance in precision of expression over what has heretofore been attempted. Also the fact that the use of affixes in Ido is not restricted to certain dictional uses in their combinations, as is the case with affixes in our languages, constitutes a powerful instrument for exact expression. The words of our natural languages, especially verbs and noun-forms in common use where they are applied in a multitude of different senses according to the idiomatic use of the word in a phrase, are very often largely ambiguous in significations when considered by themselves, i.e., the same word carries different senses according to the other words used in connection with it.** For example, yesterday, I had occasion to note the different idiomatic uses of the verb: to take. I found more than twenty-five possible meanings for this verb in my dictionaries, differing according as the word may be used, some of them so extremely idiomatic as to depart entirely from the primary signification. Now in an I. L. ambiguity of meaning is entirely inadmissible. The words and phrases must be unmistakable in meaning because they must be understood by peoples of widely differing linguistic traditions. We may excuse or overlook ambiguity in natural languages, but not in the I. L.. Except in simple phrases, a mere word for word translation would be utterly unintelligible to the foreigner.

* Note: Such words as konceptar (to conceive) may be used in both the physical and mental senses because there is a logical relation between the two uses and furthermore such double sense is supported by internationality. Again, the use of kanon-o in the double sense of weapon and ecclesiastical use is permissive, because the root is international in both meanings, though there exists no logical relation.

** Note: The English is especially "rich" in these ambiguous meanings. The French, though by no means lacking in idiomatic uses of words is, in comparison with the English, more precise and clear.
What we have to do in the I. L. is to translate the thought, not the mere words without consideration as to the meanings. In primitive Esp. where there were available only a few hundred roots of widely differing significations, it was not necessary to closely define the meaning of each root, but with the adoption of many roots, many of them closely synonymous in meaning, such as has been done in Ido (and many of the neologisms of Esp.) it has slowly become evident that if the words are to be easily and properly understood by all nationalities, the significations must be made unmistakable by definitions, examples of use, and explanations of synonyms. Because a certain root is found in several languages that does not always imply that the root is always and everywhere used in the same manner, the same signification. The I. L. is essentially a "book language", i. e. that it is language only for occasional use by the ordinary person who must depend largely for his phraseology upon his dictionaries, therefore, the dictionaries must make intelligible the proper use of each word. The work of the Idist Academy and the discussions as to significations which have appeared in the pages of PROGRESO have done much to this end and it will be the work of the future to bring ever greater exactitude into the significations of all words. This point is very important and can only be properly appreciated by those who have undertaken lexicographical work or done considerable translation of difficult matter. Experience shows that by reducing our thought to its simplist terms, a small vocabulary can be made to suffice for the expression of ordinary thought, but an I. L. which will meet in all points the demands of our intricate social, legal, technical and scientific life must be richer than any of our living languages and the words must carry such precision of meaning as to be intelligible to all peoples without shadow of ambiguity.

Ido, in its present state of development, is composed of over 9,000 root words which with the appropriate affixes is about equivalent to a 60 to 80 thousand word English dictionary, or, in the French, practically covers the well known Petit Larousse dictionary. Doubtless many words, especially in the scientific and technical
domains, are yet needed, but for the ordinary expression of thought it is fairly complete.

**ESPERANTO VOCABULARY.**

The vocabulary of Esp. results from what may be termed "empirical selection". That is, personal preference of Dr. Zamenhof or his individual followers.

The Ido vocabulary is the result of a study of the international linguistic facts in regard to each word proposed for selection. The Ido Academy has been constantly at work since 1908 (except for the period when active hostilities prevented international communication) and is still at work. The selection of each new word is put to the vote of the members of the Academy which are selected from different linguistic groups and is only officially adopted when it has received the approval of the majority of the members. The needs of the ordinary vocabulary were considered to have been fully met by the studies up to 1914. However, at the time of the outbreak of hostilities there were several hundred scientific and technical terms that had been proposed in the pages of PROGRESO that had not as yet been put to official vote. As the French- and German-Ido vocabularies were printed during the war, these technical and scientific terms had to be marked as unofficial words. Upon the resumption of the work of the Academy after the close of hostilities these words were voted upon and officialized.

As has been stated, the Lingva Komitato of the Espists is not primarily intended to be a body of scholars whose aim is to perfect the language, correct its errors, supply its deficiencies, as is the case with the Idist Academy, but its purpose is rather to watch over the "purity" of the language, to see that the "spirit" of the original language of Zamenhof as exposed in the Fundamento is not infringed upon. During its history it has officialized the adoption of several hundreds of new words in addition to these found in the Fundamento by two "Aldoni".*

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* Note: Notice this word as a specimen of Esp. word building: "aldoni" literally, "al-": to; doni: to give; "to give to" vice the international root Adicion- which is DEFIS. It is a good example
Zamenhof at first attempting merely a code language had but 925 root words in his vocabulary, inclusive of his affixes which are in some cases used as separate root words.* Part of this original Fundamento was invented outright from Zamenhof's "inner consciousness", especially the 45 particles which enter into the composition of almost every sentence and are therefore particularly burdensome. The vocabulary, as a whole, was selected from French, German, Slavic and English roots largely by the personal predilections of the author. Especially because many of the roots were taken from the French, a considerable degree of internationality was attained, though "maximum internationality" as a principle of selection was never clearly formulated.**

The final form of the Fundamento contains 2825 root words, out of which, according to de Beaufront who is a philologist of repute, no less than 1055 are lacking in internationality, either by improper selection of the root itself, or by distortion of the most international form of the root word. This is no reflection upon Zamenhof as a man of limited linguistic knowledge working alone at a time when the full import of the necessity of securing maximum internationality was not clearly recognized. His work marked an important advance upon what had

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* Note: For example, -ilo is properly simply an affix added to roots to express the idea of instrument; in the Zamenhofan vocabulary it is also used as a separate root to translate the word instrument.

** Note: The Idists at first seeking to avoid a schism and to leave the way open to reconciliation, also because it was impossible in a few months to make a thorough study of all the words, adopted en bloc a large number of Esp. words which possessed some internationality. A good part of the later work of the Idist Academy consisted in the gradual elimination from the original Idist vocabulary of that part of the adopted Esp. words which were most characteristically Zamenhofan — that is, roots which did not have maximum internationality or were distorted out of their international forms.
heretofore been done. His error consisted in permitting the "petrifying" of the defects of his language and making them a sacred tradition to be preserved. Esperanto claims to be a "living language" subject to accretion only by a "natural" growth of vocabulary. Just as Zamenhof, conscious of the inability of his original 925 root words to properly express thought gradually enlarged his vocabulary, so also his followers, feeling the poverty of the vocabulary of the Fundamento even in its final form to exactly and clearly express their thought, kept on and keep on introducing new words into their translations, "neologisms", according to their knowledge and need. If the user of a new word is a "best author", therefore worthy of trust, or some word obtains currency by wide use, this neologism may in time receive the official blessing of the Lingva Komitato and thus become authorized. The Esp. vocabularies as they stand at present are therefore the result of the cogitations of Zamenhof and the individual selection and use of his followers. It cannot help being rather chaotic. While loudly acclaiming the possibility and desirability of expressing all thought by means of the original vocabulary of the Fundamento, actual practice shows that there is hardly an Esp. translation of length which does not contain some words not to be found in the official vocabularies. Editors of the later Esp. dictionaries incorporate hundreds, even several thousands of new words selected from "best authors" or from their own judgment as to the necessity, in addition to the official vocabulary. As a consequence, no two of the larger vocabularies exactly agree, so far as I can ascertain. Most of the later Esp. roots selected are international and appear to be taken from the Idist vocabulary. As one Esp. writer so happily put it: "The Idist bee does the work and the Espists gather the honey" (without acknowledgment of the source). In order to see how far the vaunted economy and sufficiency of the original Zamenhofan roots suffices, I have made a count of the root words under the letter "A" in the Millidge

* Note: The Esp. phrase "shtelita de la Idistoj" signifies both "stolen from the Idists" and "stolen by the Idists". A language where an ordinary preposition can be used to indicate diametrically opposed ideas can hardly be said not to need amendment.
'Esp. English Dictionary'. In favor of this dictionary is the fact that it marks a distinction between roots that have official sanction and those which are neologisms. I find by rough count that 256 root words are marked as official, and that 314 root words under this letter are unofficial. The present Ido vocabulary shows 776 root words under this letter, roots which are not the result of individual choice, but the careful selection resulting from the combined study of several competent linguists. On the basis of the official vocabulary, Ido has therefore 520 more officialized word than Esp. in "A". As a consequence of permitting Esp. authors to introduce neologisms into their text, neologisms which perhaps are not to be found in any Esp. vocabulary, one is often in doubt as to the meaning of a particular phrase. A translation where one has to guess at the meaning of words is no proper translation. In the case of rare scientific words, such unauthorized use is admissible in the present state of development of the vocabularies of either Ido or Esp., because, for the most part, scientific terminology is international, but such is not the case in regard to words of every-day use — here official words are alone permissible.

It is to be remembered that in Esp., owing to the inviolability of the Fundamento, all changes are by way of augment, not correction of past errors. The errors being embalmed for eternity in the amber of the Boulogne resolution. The root ment-, for example, must continue to be used to represent the botanical word mint and never used for its proper international sense, that of mind, mental. Such "natural evolution" finds it parallel in the "natural evolution of a living tongue", but it is not the scientifically controlled evolution which one has a right to expect in the I. L., nor is it the method of common sense. So far as a vocabulary is arbitrary and inefficient, so far it is a matter for suspicion and investigation in any form of I. L.

It is of course impossible in a paper of this character to go into a detailed examination of every word in the Esp. vocabulary which needs correction. I will, however, list 155 official roots which exemplify in a striking manner the arbitrary character of so many Zamenhofan
words. These added to the 45 a priori formed table of correlative words, make a total of 200 words of undoubted lack of internationality:

ajn, des, edz, el, chel, ci, cir, fart, fortik, fulg, fulm, graci, gros, gurd, ghis, haladz, ju, ken, kler, kroch, krisp, lad, lau, lert, lim, lien, lut, mac, nepr, okaz, ol, orf, pasht, pat, pav, pekt, penik, pisht, plej, polur, prav, pulm, punt, pup, sag, sap, shat, shir, skadr, shlos, sorb, spel, spez, sprit, spron, shpruc, stip, tachment, tavol, tegment, tern, traf, trik, trud, tuj, turt, vant, vigl, vic. (69)

brog, buk, burd, chan, dung, elast, cerb, cherk, fand, fraul, gren, imag, kard, kluz, kon, krad, kraken, kren, kubut, kukurb, kup, lea, libel, log, lojt, mirh, mustel, osced, pelt, prujn, put, sakr, sark, seke, sonor, sorik, sorp, farun, stabl, teg, varb, vert, vesht, viburn, vost, bet, blek, blov, boj, bot, bram, buf, chap, char, chif, citr, chiz, distr, edif, erp, fit, frand, fring, jak, kahel, konval, koturn, kul, laks, tol, pent, pep, pere, petol, petromiz, plot, servut, sciur, sharp, skolop, sku, shlim, shtip, rab, testud, veruk. (86)

To explain more clearly the Zamenhofan method (or psychology), let us look a little more closely into the origin of some of the above words:

ajn: ever. Origin, so far as can be ascertained, purely arbitrary.

des: the . . . the, so much the. Probably an arbitrary contraction of the D. "desto".

edz(o): married person. Origin unknown. (Ido has spozo (EFIS) as found in E. spouse, espousal.)

chel(o): cell (biol.). Internationality imposes the form celul- (as found in the E. cellular).

fart-(i): to be (in health, etc.) to do, fare; kiel vi fartas? = How do you do? This word, so shocking to English ears, was inspired by the English word "fare". Zamenhof, in order to avoid collision with another Esp. word: fari: to make, to do, simply elided the "e" from "fare" and replaced it by "t": far(e): fart. A striking example of "intuitive genius".

* Note: I am indebted for this list to an article by de Beaufront in 'Bulletin Francais-Ido' Nos. 25, 26, 27, 28, entitled "In-internationalité de l'Esperanto".
fulg-(o): (soot) and fulm-(o): lightning. Examples of arbitrary shortening of the international form of root: fuligin-, fulmin-. Such mutilation renders words unintelligible without reference to a dictionary.

ghis: till, until. A Zamenhofan conception of the proper spelling of the F. "jus". (Ido has taken til from the E. as the best available form for this preposition.)

haladz-(o): fume, exhalation. Chop off the initial ex-from exhalation change -lation to -ladz and we arrive at the incomprehensible haladz- of the Fundamento. (Ido has exhal- which is EFIS.)


lau: according to. Apparently an invented word. (Ido has segun ISP from the Latin secundum.)

boj-(i): to bark. Apparently a distorted and disguised form of the F.: aboyer.

shvit-(i): to sweat. From the D. schwitzen.

parkare: by heart. From the F.: par coeur.

char: because. From the F.: car (pronounced: kar).

lert-(a): clever. From the F. alerte with a changed signification.


nepre: without fail, absolutely. From the Russian nepremенно. This mutilation is like taking "abso" to represent the word absolute.


punt-(o): lace. Origin unknown but possible a deformation of F. point (d'Alencon, etc.).

sag-(o): arrow. Probably from the Zodiacal word: Sagittarius, The Archer, or from the L.: sagitta.

sap-(o): soap. Mutilation of international root: sapon-. Moreover sap-(ar) is needed to express the idea of: to sap, to undermine.

shat-(i): to prize. One might suppose this word was a form of the German schatten: shade, shadow, but it is a mutilated form of the German: schätzen.

skadr-(o): squadron. This form of root is so obviously bad that Millidge introduces eskadron-o (probably taken from Ido) as another word to express this idea.

These examples might be extended indefinitely, but enough instances have been given to demonstrate the unscientific character of the Esp. vocabulary and the impossibility of scholars accepting it as it stands.

The ability to express logically related ideas by means of affixes, or new distinct ideas by combining two or more roots (as is especially characteristic of the German) is an invaluable quality both of Ido and Esp. But the subsidiary idea to be expressed should be clearly and logically intelligible by the combination of stem and affix, and the same may be said of new conceptions created by compounding roots. Esp., however, by its boasted economy in the use of roots (and affixes) goes to such an extreme in word building (in order to avoid the use of new roots) that the component parts of the combined word do not always make the intended meaning sufficiently clear. One has often to arrive at a signification by guessing or a sort of divining, which makes the language very imperfect means of communication.* Instead of using an international root to express an idea, the attempt is made to build up the idea out of existing materials. Vapor-mashino as a composed word very well expresses the idea of steam engine and is in accord with natural practice. El-pens-ajo: lit.: something thought out, is used by the Espists to translate the idea of an invention and may be said to express the idea fairly well, though in a somewhat hazy manner, as "something thought out" refers quite as well to a book, a sentence, a poem, as a concrete machine. But in such cases as this where there exists a separate word of wide internationality to express the special idea there is no good reason for attempting to construct it in an artificial manner. The

* Note: For examples of this misuse, I give the following: el-paroli: lit.: to speak out, but used in Esp to translate, to pronounce; kelp-igi: lit.: to make guilty but used in the sense of: to accuse; al-doni: lit.: to give to, used in the sense of to add.
root: invent- is EF'IRS and should be adopted.* The Es-
pists use parol-ado: lit. continued talk, to translate the
idea of (formal) discourse, which possibly might be con-
sidered sufficient as a makeshift did we not possess the
international root: diskurs- which is DEFIS, therefore
comprehensible at first sight and which expresses the
idea more exactly.**

The world of science, especially, needs for the ex-
pression of its ideas a very precise and perfect form of
I. L. and has consequently built up in all great cultural
languages a technical terminology which is in great part
international. The attempt, therefore, on the part of Es-
pists to express scientific ideas by means of a few thou-
sand common root-words constitutes a backward step
not conformable to the existing state of the international
terminology. To illustrate the poverty of Esp. scientific
vocabulary, I give the following from an article by Prof.
R. Lorenz, in the Volumn 'I. L. and Science':

"For example, in Esperanto the beginning of the
sentence. "A rotary transformer might be called a
motor-generator, but the latter term is usually applied
to machines with independent armatures, is translated
in the following way: Turnighan alispecigilon oni provas

* Note: In the new Fulcher-Long 'Esp.-English Dictionary' I do
find the root invent- given alongside of el-pens-ajo. However, the
authors of this dictionary, like the producers of the other Esp.
dictionaries, present many innovations in the introduction of un-
authorized roots which cannot be found in other Esp. dictionaries.
Invent-, for example, is not found in the companion Esp.-English
dictionary of Millidge. A German then when he comes across the
root invent- must guess at its meaning, because his language does
not have this root. There are many such instances of disagreement
between the national-Esp. dictionaries and the Esp.-national diction-
aries. A few days ago, for instance, I happened to look up the
Esp. word for "(railway) train". In the Fulcher dictionary, along
with the authorized translation: vagonaro (fervoja), I found the
neologism: trajno; yet upon turning to the Millidge dictionary which
has thousands of neologisms, no such word as trajno could be found.

** Note: Mal-viv-ulo in Esp. is logically intelligible in a com-
posite way for the idea ordinarily expressed by the international
root: kadavro. Or, we might build up, if necessary, a descriptive
word for the idea of telephone (as the Germans have done in "Fern-
sprecher") if the root telefon- was not universally intelligible;
for-parol-ilono: lit.: an instrument for speaking at distance, would do
very well.
nomi motoroproduktanto, which literally translated reads, "A self-turning otherwise-making-instrument can be called a motorproducer."

One Esp. author (Kotzin) in his polemic against Ido asserts that Esp. can translate the phrase as follows: "La rotacantan transformilon oni povas nomi motorgeneratoro." Now the translation given by Prof. Lorentz is the only authorized translation, if we use only those words out of the Esp. vocabulary which have received official sanction. But let us examine Kotzin's statement in the light of the latest standing:

Millidge 'Esp.-E. Dictionary' Fulcher-Long 'English-Esp. Dict.'
The root rotac(i) not given, Rotac-i not given. Has the authorized turn-ighi and the un-%

turn-igh-i alone appearing. However, another neologism appears: rotaci-i.

transform- not given (yet this stem is DEFIS). Ali-igi, ali-form-i; and the unofficial word transform-i.

generatororo not given. generatororo (unofficial word).

The above shows better than any argument the paucity of the Esp. scientific vocabulary and the arbitrary, chaotic introduction of new words.

The very extensive use in Esp. of the prefix mal- to express antonyms where international roots exist for these ideas is contrary to the spirit of all languages and is only appropriate in a simple code language. An antonym expresses an idea clearly distinct from its opposite, not merely a subsidiary form of the opposite conception, and where simple conceptions in common use are concerned it is easier to recognize and use some international form of the appropriate root. In Esp. we have such words as mal-bona, mal-richa, mal-forta, mal-alta, mal-granda, mal-pli, mal-supre, mal-antau, mal-fermi, mal-ami, etc., etc. Ido expresses these ideas through the international root forms: mala, povra, febla, basa, mikra, min, infre, dop, klozar, odiar, etc. The forms des-bona (the Esp. mal-bona), des-richa, des-forta, des-granda, etc. remain as authorized and regular forms in Ido, if one desires to use them, but they are almost never
found. Obviously, Ido, with a richer system of affixes, can make any combination that can be made in Esp. Of course, a constant use of mal- permits a small number of root words. We might designate the idea of summer by mal-vintro, and be understood, but such use is not desirable in a fully worked out language, fit for all uses. These constant forms require a sort of intellectual back somersault which is fatiguing and makes for clumsy diction that can be avoided by using the appropriate word.

The Idist have substituted des- for the Esp. mal- to express the opposite of the idea carried by the root to which it is joined, because des- (found in English words ordinarily under the form dis- as in: dishonest, disarm, disadvantage, etc.) is a more international form for this affix. Mal- has as its sole support only four French words of which one: "malhonnête" has an exact synonym in "deshonnête". Mal- is properly used internationally in the sense of bad, evil, as we find it in the English words: maladaptation, maladjustment, etc. and is used in this sense in Ido. Dis- is used in Ido as an affix signifying separation, as in English word "dissect".

In order that the reader may not think that unusual examples of the Esp. vocabulary are adduced and that he may judge fairly the nature of the differences between the Idist and Esp. vocabularies, I give below a translation in both languages of the first words found in the English:

<table>
<thead>
<tr>
<th>ENGLISH</th>
<th>IDO</th>
<th>ESPERANTO</th>
</tr>
</thead>
<tbody>
<tr>
<td>aback</td>
<td>dop-e (1)</td>
<td>I mal-antauen</td>
</tr>
<tr>
<td>abacus</td>
<td>abak-o</td>
<td>DEFIS none (2)</td>
</tr>
<tr>
<td>abandon</td>
<td>abandon-ar</td>
<td>DEFIS for-las-i (3)</td>
</tr>
<tr>
<td>abase</td>
<td>(abas-ar(fig.), (humil-igar)</td>
<td>EFI humil-igi</td>
</tr>
<tr>
<td>abate</td>
<td>(gen.) diminutar (fin.) rabat-ar</td>
<td>DEFIS (gen.) mal-pli-igi (4), (fin.) rabat-i</td>
</tr>
<tr>
<td>abattoir</td>
<td>buch-eyo, -erio</td>
<td>buch-eyo</td>
</tr>
<tr>
<td>abbot</td>
<td>abad-(ul)o (5)</td>
<td>abato</td>
</tr>
<tr>
<td>abbreviate</td>
<td>abreviar</td>
<td>DEFIS mal-long-igi (6)</td>
</tr>
<tr>
<td>abdicate</td>
<td>abdikar</td>
<td>DEFIRS eks-regh-ighi (7), eks-ighi (8)</td>
</tr>
<tr>
<td>abdomen</td>
<td>abdomino (9)</td>
<td>DEFIS ventro</td>
</tr>
<tr>
<td>abduct (a woman, etc.)</td>
<td>for-rapt-ar; for-rabi (10)</td>
<td>abduktar</td>
</tr>
</tbody>
</table>

(anat., physiol.)
<table>
<thead>
<tr>
<th>ENGLISH</th>
<th>IDO</th>
<th>ESPERANTO</th>
</tr>
</thead>
<tbody>
<tr>
<td>aberration</td>
<td>aberaco</td>
<td>none (11)</td>
</tr>
<tr>
<td>abhor</td>
<td>abominar</td>
<td>abomeni</td>
</tr>
<tr>
<td>ability</td>
<td>kepabl-eso</td>
<td>kapabl-o (12)</td>
</tr>
<tr>
<td>abject</td>
<td>abjekta DEFIS</td>
<td>mal-nobla (13)</td>
</tr>
<tr>
<td>abjure</td>
<td>abjur-ar DEFIS</td>
<td>for-jhuri (14)</td>
</tr>
<tr>
<td>ablative</td>
<td>ablativo</td>
<td>ablativo</td>
</tr>
<tr>
<td>ablution</td>
<td>ablucio DEFIS</td>
<td>lav-(igh)i</td>
</tr>
<tr>
<td>abnegation</td>
<td>abneg-o, -eso (from abneg-ar: to abnegate, deny oneself) DEFIS</td>
<td></td>
</tr>
<tr>
<td>abnormal</td>
<td>ne-, des-norm-ala</td>
<td>mal-norma</td>
</tr>
<tr>
<td>abode</td>
<td>loj-eyo, habit-eyo</td>
<td>logh-ejo</td>
</tr>
<tr>
<td>abolish</td>
<td>abolisar DEFIS</td>
<td>for-igi (16)</td>
</tr>
<tr>
<td>abominate</td>
<td>abominar</td>
<td>abomeni</td>
</tr>
<tr>
<td>aboriginal</td>
<td>(original inhabitant) indighen-a, -o</td>
<td></td>
</tr>
<tr>
<td>(native of country)</td>
<td>aborijen-a, -(ul)o; EFIS indijen-(ul)o</td>
<td></td>
</tr>
<tr>
<td>abort</td>
<td>abortar</td>
<td>aborti</td>
</tr>
</tbody>
</table>

**NOTES.**

(1) The selection of the Italian word: dop for this conception is one of the very few words in Ido to which the writer objects. It is, however, far better than the Esp.: mal-antauen which has no internationality and literally means: the opposite of front.

(2) Abako as a neologism appears in some Esp. vocabularies.

(3) Lit.: to let or leave away.

(4) Lit.: the opposite of to make more.

(5) Ido uses the Spanish and Port. spelling for this root: abad-o vice abat-o in order to avoid confusion with the root: abat-ar, -o: to fell, strike down.

(6) Lit.: the opposite of to make long.

(7) Lit.: to become an ex-ruler.

(8) Lit.: to become an "ex", "a former" — this is a translation given in the Rhodes' Eng.-Esp. Dictionary.
9) Ido uses **ventro** for the vulgar use of "belly" and **abdomino** for scientific use.

10) Lit.: to steal away.

11) **Aberacio** as a neologism appears in some Esp. dictionaries.

12) Ability represents an idea of quality, therefore it should logically be translated in Esp. by **kapabl-eco**, not **kapabl-o** (The Esp. suffix: -eco is equivalent to the Ido: -eso.)

13) Lit.: the opposite of noble.

14) Lit.: to swear away.

15) Lit.: **for-las-ado**: leaving away; **neigado**: "making not" (taken from Rhodes). Some dictionaries have **abnegacio** as a neologism.

16) Lit.: to make away.

**Note:** It has been asserted that Ido tends to "Frenchify" the I. L. There is this amount of truth in the assertion: As pointed out on page 114, French, stands mid-stream in the philological evolution between the I. Latin and the English. It has therefore intimate relations not only with the other members of the Romance group but with the English which it has provided with the largest group of words common to the English and any other language. The French orthography is ordinarily better adapted for incorporation into the I. L than the phonetic forms which are purely English. The English is chiefly important because of the greatness of the population that uses it. Therefore, the one great determining factor is the large group of words common to the French and the English which must be adopted into the I. L., not because of any preference or prejudice, but because of their internality.

Secondly, the significations of the roots as they appear in Ido ordinarily follow the French, rather than the English, or any other language, in there basic significations. It is not meant that the uses of the words follows the French into all the idiomatic meanings, but that the fundamental significations ordinarily are those used by the French. For example, **larja** has the French sense of: wide, broad, not the English sense of: big; **asistar** has the French meaning: to be present at, attend; not the English sense: to help; etc., etc. This undoubtedly tends to facilitate the use of Ido by the French and permits the imputation of "Frenchifying" the language. While recognizing the fact that such consistent use of French and Romance definitions tends sometimes to grate upon the feelings of the English, such practice is, in my judgment, the best solution that can be found. By practically following the usage of one language (and that language the clearest and least ambiguous in expression in Europe), the language becomes one consistent whole, with less synonymous words overlapping in meanings. To take, for example, a French
word an give it some meaning found in English or German could only result in a potpourri sort of language with its intolerable confusions. Furthermore, it is safe to assert that French significations are far more widely understood in Europe than English significations of the same words, and it is Europe with its diversities in language where the I. L. is of the most use. It does not suffice merely to object to this method of selecting definitions, a better way should be pointed out, if the objections are to have force. In a highly evolved language, like Ido, with its many nearly synonymous words, only careful definitions can guide the student to the right use of the words. To take definitions indiscriminately from various sources must result in overlapping in meanings and confusion in use.

RESUME OF DIFFERENCES BETWEEN IDO AND ESPERANTO.

Enough evidence has been set forth to enable the student to judge the comparative character and merits of Ido and Esperanto. The Delegation Committee, after seven years of consideration, recommended the adoption of Esp. with the proviso of certain reforms. These reforms related to certain, definite, precise, points, and have been carried out in detail in the course of the development of Ido. The following summary indicates the points of difference. If the student considers the reforms introduced into Esp. by the Idists to be unnecessary, there is nothing more to be said that can convert him — he belongs to the Esp. camp; if he considers the reforms necessary, he belongs to the Idist camp. There is no mistaking the issue:

(1) The Esp. alphabet has certain special letters peculiar to that language. The Idists use the Roman (or English) alphabet which is the alphabet of the majority of European peoples and is found in type stock throughout the whole of Europe.

(2) Esp. phonetics, especially in the multitude of its diphthongs, markedly resembles the Slavic or eastern European languages, rather than the phonetics of the "majority" nations of western Europe. Ido does away with the diphthongs: aj, ej, oj, uj, especially frequent as terminal sounds, and has a phonetic system which closely resembles the Spanish and Italian, which is natural in
aspect to a vast majority of Europeans and easy of pronun-
ciation by all.

(3) Esp. has the compulsory forms of accord of ad-
jectives with substantives. Ido has the same form of
adjective for the accompaniment of singular and plural
substantives, rejecting the plural form because it serves
no logical purpose and seriously encumbers the practical
use of the language.

(4) Esp. has the compulsory accusative forms for
substantives, pronouns and adjectives. Ido rejects in
great part these compulsory forms as a superfluous
embarrassment, though retaining the use for distinction
of case in pronominal forms and permitting (but not re-
commending) their use elsewhere.

(5) Esp. informs the student how to form verbs and
nouns, but frequently furnishes no obvious clew as to the
meaning of the words so formed; especially is this true
of the substantives derived from verbs and verbs derived
from substantives. Its adjectives lack precision in
meaning. Ido, by the introduction of a few additional
suffixes, makes the language logically coherent in meaning
and uniform in derivation. New adjectival suffixes permit
the just and exact expression of thought.

(6) Esp. because of the poverty of its authorized
vocabulary constitutes a sort of "code" language, rather
a than language sufficiently rich for the exact translation
of thought in the scientific and literary domains. It con-
tains a number of roots which are entirely a priori, such
as the 45 correlative words. Its word selection is arbitrary
and lacking in internationality. It deforms and distorts
into unrecognizability many of its root words. Because
of the lack of words for the full and exact expression of
thought, its writers and lexicographers have introduced
by arbitrary selection a multitude of new words and as a
result the later vocabularies are in a chaotic condition.
Ido, following the principle of maximum internationality
and facility, has, after careful study of each root by an
authorized body of scholars, constructed a rich and suffi-
cient vocabulary for all except the most technical uses.
It has substituted a posteriori for a priori words.

The need and justification for these changes are, so
it seems to me, unmistakable and plain to any one who
has not been blinded by subsidiary arguments introduced to confuse the issue or by practical considerations of propaganda. The arguments put forth to substantiate the necessity for these reforms are but the dictates of common sense, and any one who is willing to give unprejudiced and objective consideration to the facts of the problem can judge of their validity and decide the problem as a whole quite as well as the learned linguist.

I have no wish to minimize the effects of the changes introduced by the Idists. Each and every reform is far reaching in its effect and to a very considerable degree changes the whole aspect and character of the language. Esp., as Professor Couturat said, forms a consistent, interlocking whole, which cannot be modified even in one point without changing very considerably the whole character of the language. The substitution of the Roman for the special alphabet, easy vowel forms for diphthongs, the cutting out of the accord of the adjective and the compulsory accusative forms, the introduction of new affixes, to say nothing of the many changes in the vocabulary, have far reaching effects in each and every case. Change it in one point, and there exists no reason for not changing it in all, as far as the textbooks and dictionaries are concerned.

Many people, recognizing the commonness of purpose of the two languages, urge the adherents of both sides to get together and compromize their differences. Such a recommendation, though admirable as an exhibition of good will, has nothing to commend it from the point of view of common sense. Even the introduction of the Roman in place of the special alphabet would not only change fundamentally the whole aspect of Esp. but make all of the thousands of its textbooks and dictionaries out of date and largely useless besides upsetting its precious propaganda by introducing the poison of doubt as to its infallibility. Ido cannot give way on a single one of the six points above mentioned without lessening its efficiency in a material way. As a matter of fact, an I. L. is simply an instrument for the expression of thought, and while it is doubtless desirable and necessary to have discipline in the ranks and not to introduce any changes except those really necessary, in order to retain the
support of a large body of adherents and not unnecessarily upset the continuity of its evolution, it remains in itself simply a machine to be improved upon until its most efficient form is attained. In ordinary life, when it is found that a machine can be improved on by the introduction of something new, the manufactures do not attempt to "compromise" the necessary changes in order not to hurt the sensibilities of early inventors or users. Change Esp. in any material way, and you might as well change it in others. In fact, the opposition of many leading Espists to Ido is so violent and intense, as to make it probable in the event of a great public success of Ido, that they personally would support almost any type of I. L. which widely differed from Esp. and Ido, in order to prevent the official acceptance of scientific Esp., that is, of Ido. To recommend the change of Ido back into primitive Esp. in any one point, so as not to hurt the feelings of the Esp. quite so much, is on a par in logic with the advice to cut off the dog's tail by inches, instead of one close-up stroke. The great outside world, that now cares little or nothing for either language, will demand and finally get that type of I. L. which is most efficient, irrespective of any sentimental considerations.

Note: The uninformed reader may ask what are the arguments adduced by the Espists to combat the reforms. Esp. journals are usually entirely silent concerning the existence of Ido, although they sometimes refer to it under the name of Idiom-Neutral. Neutral never had any followers other than the few linguists interested in the construction of the language and has been completely out of date for a decade. When comment by Espists on Ido is attempted it is, according to my knowledge, simply a note on some isolated detail. The only long and detailed criticism of which I am aware is that of the 'Historio kaj Teorio de Ido', which appeared in 1913. The author is Kotzin, an editor of a Russian Esp. journal. Doubtless some of the arguments of Kotzin have weight with peoples of eastern European linguistic traditions. Esp. is essentially Slavic in construction, and to Russians, Poles, and the like, the presence of the supersigned letters, the odd phonetics, and the lack of proper Romance roots, make the language seem as natural as it appears unnatural to peoples of western European culture, (and the Americas) who constitute a vast majority of the peoples. However, Kotzin's general method is that of a clever lawyer who with a bad case attempts to distract attention from the main facts by throwing a smoke screen by discussion upon subsidiary points. Prof. Couturat thus characterizes Kotzin's book: "This work pretends and seems to be a scientific study; but it is in reality only a cleverly disguised
pcelmical work. The author has never seriously and impartially studied Ido. He has only read through with patient zeal the Idist books and journals in order to discover in them seeming contradictions and deceptive arguments." As Couturat states, most of the material facts found in this booklet have evidently been culled from the pages of the Idist journal PROGRESO. That journal, especially in the first years of its existence, opened its pages to the free discussion of all I. L. questions whether by Idists or not. Many writers took advantage of the opportunity to air their own particular linguistic ideas and prejudices. It is not to be expected that all men of diverse linguistic traditions will agree on all points. Kotzin by cleverly dovetailing all the contrary arguments he could find in these pages built up his book.

The student of the subject should not allow arguments on subsidiary points to confuse the issue between the Espists and the Idists. The points of difference, though far reaching in extent, are but few. They have been summarized above. It is by the rightness or unrightness of these reforms alone, and no others, that the question must be decided.

IS IDO THE FINAL FORM OF THE I. L.?

The history of the I. L. shows Esp. winning out over the seemingly powerful Volapuk movement because of its greater efficiency. On a fair competitive basis, Ido is bound to win out over Esperanto because it is a more efficient form of I. L. But is there not reason to suppose that sometime in the future some new form of I. L. may be constructed which will be as superior to Ido as Ido is to Esperanto? Many people, even Idists, have a vague idea that such new discovery is possible. I shall endeavor to show why we have no right to expect any substantial advance over Ido. I am speaking here of Ido as a whole. No Idist supposes that every jot and tittle of the language as it now stands is absolutely perfect and final. But I do assert that taking the language as a whole we have no reason to expect far reaching improvements, such as were made by Ido over Esp.

In the physical and mechanical sciences, some Galileo, some Newton, some Darwin, some Edison, may, by the discovery of a heretofore unknown body of fact, or some new law or rearrangement of existing fact, upset all previous conceptions. This is possible because the scientist has as his material the infinite field of the universe. Now the I. L. has no infinite field of facts to deal with. A priori solutions of the I. L., even if possible,
must be rejected as too difficult and unpractical. It is now absolutely evident that the solution of the auxiliary language must be found in the linguistic facts as they now exist in the living languages. Existing languages form a fixed, limited body of fact that has now been so thoroughly considered from every point of view that nothing new in the way of individual fact or theory is likely to be found. We are dealing, as it were, with a problem which has but a few factors or numbers where only certain combinations are mathematically possible. After a certain amount of trial and error, we arrive at the best solution, or the nearest possible perfect solution. It is beyond question evident that the most efficient vocabulary for an I. L. is to be found by applying Jespersen's principle to that body of interrelated roots which are found in European languages. This vast body of interrelated root material is known and fixed, and cannot be increased, decreased or changed. Any type of I. L. which is not based on a scientific, impartial consideration and use of this body of fact must necessarily be inefficient in the degree that it departs therefrom. The interrelated roots practically force the acceptance of certain forms of words. How far Ido incorporates this root material is shown by the table on p. 56.

It might be possible, out of deference to the sentiments of classical scholars, to select only those Romance roots which come from the Latin. Yet the main body of Ido roots would still remain much as they are now because internationality imposes a very large proportion of Latin-derived words. But just in the degree that such an I. L. departed from maximum internationality by insistence upon purely Latin-derived roots, would be the degree of loss of efficiency. It would be possible in an endeavor to follow in part the principle of "equal difficulty" to insert into the I. L. a number of solely English, German and Russian root words, but just in the degree of the insertion of these words which lack internationality, so would be the increase in the amount of inefficiency, and still not greatly change the character of the Ido vocabulary because the majority of its root words have an internationality of four or more languages. It is simply impossible therefore that an efficient form of I. L. would
greatly differ in vocabulary from what is now known as Ido.

Take the alphabet of Ido, that of the Roman, which is the alphabet of the greatest internationality in Europe to say nothing of the millions of people who use it in the two Americas. What other alphabet can we take for a scientific form of I. L.? Take the phonetics of Ido, simple, clear, easy as they are for all peoples. There seems little or no possibility of selecting a better system. Take the derivative system of Ido which trial, as well as logic, shows to be efficient and sufficient in every respect. As said Prof. Couturat: "There can exist no other system (than that of Ido) entirely regular and logical," because the relations of the verb, substantive, adjective and adverb, as applied to one root carrying an invariable signification, are fixed in the thought-processes of the mind and so expressed in all languages. To attempt to give an arbitrary root-form for each grammatical form of the idea could only result in a tremendous loss of efficiency.

It is seen therefore that there exists no substantial basis for this vague idea that possibly sometime in the future some body of scholars of eminence will get together and invent a form of I. L. which would be vastly superior to what we now have. As shown, such is impossible for the simple reason that the materials out of which an efficient form of I. L. can be formed are very limited in extent, a fixed quantity which has now been considered and experimented with until little or nothing remains to be discovered. As said Prof. R. Lorenz, in I. L. and Science, p. 20: "One must bear in mind that there also exist things which in their essential features can only be invented once, and that the international languages in its final form is one of these."
APPENDIX A.

As an instance of how little as yet the true bearings of the problem have percolated into the traditional, scholarly mind, I give the following excerpt from the 'Preliminary Report of the Committee on International Auxiliary Language of the American Philological Association.' The Report was dated December 7, 1922, and signed by six professors. There was one dissenting member, Professor Carl D. Buck, (may his name be honored!) who was of the opinion that the I. L. need not necessarily be Latin:

"The Committee entertains grave doubt of the practicability of finding any language, either Latin or an artificial speech, which will commend itself alike to scholars, men of letters and of affairs, and to the common run of mankind. For the last named, Latin, even in a somewhat enlarged and simplified form, will probably prove too difficult, for the others an artificial language will be repellent because of its uncouthness and inflexibility, while the introduction of idiomatic and varied expression would deprive it of its one serious claim to consideration, that it, simplicity and perspicuity.

Furthermore the Committee is not convinced of the need for direct communication between uneducated and imperfectly educated individuals in different countries. That direct communication between classes or groups of such persons who have common interests is desirable, may not be gainsaid, but such contact will inevitably have to be made through leaders and representatives, and these can readily employ a medium of communication which the rank and file would never have either the patience or the leisure to master thoroughly. In the opinion of the Committee, therefore, the real desideratum is a language which will satisfy the intellectual and aesthetic demands of edu-
cated people of every land, and that language can hardly be any but Latin.

It may not be amiss in this connection to quote an eloquent sentence from Bishop Christopher Wordsworth: "When men of learning have ceased to possess a common language, they will soon forget that they have a common Country; they will no longer regard themselves as intellectual compatriots; they will be Englishmen, Frenchmen, Dutchmen, but not Scholars." (The correspondence of Richard Bently, London, 1842, pa. XV.)

The form of Latin to be adopted should be essentially, in vocabulary, syntax and word order, what is known as "classical," with some slight simplifications, perhaps, such as the rejection of a by-form materies (!), and the free inclusion of many words, which, though appearing only in Late Latin or in the Middle Ages, have demonstrated their usefulness by being incorporated into modern languages, and for which classical Latin must employ paraprases, no matter how eloquently these may at times be conceived.

The vocabulary must be further enriched by the arbitrary creation of Latin or Latin-like words for the objects or ideas which have come into use only in modern times, like "telephone," "soviet," or "deflation of currency."

In matters of style, each competent scholar must, of course, remain a law unto himself, but in general the Committee would deprecate the employment of intricate and highly ingenious locutions and constructions, and recommend, as far as the subject matter will allow, a somewhat Stoic simplicity and directness of expression."

The ordinarily intelligent person, college bred or otherwise, who has no facile use of Latin will please consider themselves out of the running. The thousands of people of only a medium degree of education who have used Ido and Esperanto (one might add: Volapuk) for the most varied uses in all departments of life will have to consider that part of their experience as non-existent. The facility, flexibility and beauty of the Latin diction
of those who have trodden the classic quads is so well known that I see no reason why this loquaciousness should be weakened by barbarisms through simplifications of "by-forms" or mediaeval words of Latin origin. Why thus mar the fair fabric of the classical Latin! Why pollute the crystal cup by even semi-modern innovations and simplifications when such a language is unsuited to persons of the baser sort!

This report is chiefly useful in showing what we might expect were the job of creating an I. L. turned over to the classicists. With a "somewhat Stoic simplicity and directness of expression," I will say that while this committee must be recognized as composed of well-intentioned and highly learned men in their own specialty, the report shows a truly astounding lack of comprehension of what has been done toward the building up of an efficient I. L. suitable for the understanding and use of any ordinarily intelligent man, whether he has studied Latin or not. The ordinary man is not squashed so easily, at least now-a-days.

In the same year, I believe, in which the Wright brothers actually flew in their machines, I remember of reading an article by one of our most prominent mathematicians, Professor Simon Newcomb, which "demonstrated" mathematically the impossibility of flight with heavier than air machines.

The sole objection of worth herein raised against a properly constructed artificial I. L. is in regard to the danger of the introduction of idiomatic expressions which would lessen the intelligibility. The same objection might well be raised, with even a higher degree of force, against any wide endeavor to use any form of Latin. An artificial I. L. is from its very nature subject to international control and correction. Its very character, being strange to all, forces the user to clothe his thoughts in logical expression. Actual experience (not theory about it) shows that the average person in writing it, well educated or not, does employ it in a clear intelligible way. Difficulties of understanding sometimes, though rately, arise from the attempt of the translator to follow in a mere word for word fashion some literary matter where the thought to be expressed is apt to be unclear even in the
original, where words have been used for stylistic pur-
poses rather than to express thought simply and accu-
rately. It may be granted that to translate difficult, in-
volved matter so it will be easily understood by all
peoples needs study and practice, though nothing in com-
parison with the labor and practice needed for a like use
of Latin or any modern language. Purely idiomatic ex-
pressions arise chiefly through attempts after short cuts
or striking expressions in the spoken tongues. The I. L.
is a secondary language to be employed only occasionally
and that mainly in a written form where care can and
must be exercised. The man who cannot distinguish
between the idiomatic phrases he uses and the ideas he
wishes to convey has no place in any sort of I. L. No
sensible person, well grounded in the language will
attempt purely idiomatic, illogical ways of expression,
and if he did he would soon find himself corrected by
people from other linguistic groups. As I have said,
actual experience shows that this objection is not well
founded. I have read thousands of pages of Ido written
by hundreds of different people and I have failed to note
any tendency toward the introduction of any amount of
purely idiomatic expressions that seriously harm the
intelligibility of the texts. Long before the I. L. attains
a semi-universal use, it will have received official recog-
nition and thus come under international control and
fixed canons of style.

APPENDIX B.

Professor G. Peano, of the university of Torino, Italy,
is the author, or rather responsible editor, of what is
known as the "Vocabulario Commune ad Latino-Italiano-
Français-English-Deutsch pro usu de interlinguistas", a
work that lists separately about 14,000 Latin words, or
rather neo-Latin words which have survived in modern
languages. It is a work of erudition and valuable for the
general study of the problem.

As a scholarly storehouse of material there need
nothing be said. As demonstrating a workable form of
I. L. there is much to be said. Professor Peano and a
half-dozen or so of his friends of the Latinist persuasion have used this vocabulary for the translation of the relatively simple words needed for the discussion of his and their linguistic theories regarding the I. L. and for the translation of a number of mathematical articles. The professor is primarily a mathematician. Mathematics has to do with the relatively clear relations which exist between quantities, magnitudes. For such ideas a small vocabulary fairly suffices (it can almost be done by the use of mathematical symbols alone). This leads him to suppose, at least so I imagine, that his vocabulary is fairly sufficient to express all the necessary translation of thought. As a matter of fact, the concepts of shape, magnitude are relatively very simply as compared with the multitudinous concepts where the will, the sentiments are involved, and for which a relatively simple vocabulary does not suffice for exact expression. He has created a vocabulary, not a language. Attempt the translation of any difficult, literary matter and it is soon found that this vocabulary is lacking. However, the mere poverty of words in any vocabulary can easily be remedied by further research, though he might find it difficult if he continues to insist on only those words which have the sanctity of a Latin root word behind them. In fact as it is, a very large proportion of his vocabulary is not properly Latin at all, that is, classical Latin. It is rather a list of mediaeval Latin words which have survived in the Romance languages with a strong bias toward the forms found in the Italian. The Latinists are constantly stressing the relations which exist between the English language and the Latin and the "immediate intelligibility" which such a language has for peoples of all Romance groups and the English. As a matter of fact, the text put out by Peano and his friends have "immediate intelligibility" at the most only for those who know Latin, though like Ido it is fairly easy for all to learn to understand. French, for instance, is Latin in origin but not in form. English, so largely derived from the French has still further departed from the Latin and has a large admixture of Anglo-Saxon roots. There is no "immediately intelligibility" of Peano's dialect by the French and English. In fact, it is probable that a larger body of more closely
allied words could be extracted from the words common
to the English and French than is given in the book of
Professor Peano, such form of vocabulary would not,
however, be entirely scientific in all cases because it
would disregard the form of the same root-words as they
exist in other languages.

It should not be considered, however, that, in the
fundamental choice of root-words, Professor Peano's
differs much from what is found in Ido. The interrelations
of words in the different languages being what they are,
it is impossible to depart widely from a common body
of words as the basis of an I. L. vocabulary. It is doubtful
that if more than 10 % of the roots would differ. It is
probably less than that. To demonstrate how closely
the languages correspond, I have just made a rather hasty
inspection of the first 170 words of the Vocabulario Com-
mune (omitting therefrom all forms which are there listed
as proper derivatives). Of the 170 words, 145 of them
are common as regards root material with those found
in Ido; only 25 (14 %) were not found in the Ido voca-
bulary. In fact, if we except from these 25 such words
as abes, abnorme, achate, acino, acotyledone the ratio
is still further reduced. I list the following differences
in these vocabularies with the Ido words given in paren-
theses (this is, of course, disregarding the double letters
and other "natural" spellings of the Voc. Com.): ab (de,
for); abecedario (espel-libro); abes (esar absence); ab-
horre (abominar, hororar —note the presence of two "rs"
abhorre); abnome (anomala); abrasione (exkorio, skrap-o,
-uro; the verbal root of abrasione is according to the
V. C.: rader!) abscinde (de-tranchar); absconde (celar;
not the equivalent of the E. abscond); abusu (mis-uzo,
male traktar; tro-uzar); abute (mis-uzo, etc.; note the
form abusu for the verb and abute for the noun); accede
(asentar, konsentar; accede is pronounced: akkede); aceto
(vinagro); achate (agato); aciario (bordo); acino (in E.:?
grape stone; ? berry); acotyledone (sen-kotiledon-a, -o
acquiesce (asentar, konsentar); acu (agulo); aculeo (piko,
dardo); acumine (sagac-eso, akut-eso); adamant (dia-
manto); adipe (graso); adit (aceso); adminículo (helpo).

One can easily understand from this comparison how
chimerical is the idea that some body of scholars will
some time in the future find some new body of roots on
which to form an I. L. which differs much from these we
now have. The real conflict between Ido and Interlingua
lies not so much in the root material used but in the way
this root material is handled.

In an endeavor to appear "natural", the Latin dialects
generally permit the introduction of unphonetic spellings,
especially the use of double letters. When this oppor-
tunity is afforded of constructing a really scientific lan-
guage, why, in the name of common reason, I ask, should
we retain in that language unphonetic spellings which
are simply pious mementoes of a bygone Latin spelling
which survive in part in most of our modern languages
to plague the student and embarrass almost every writer?
There exists no "natural" use of these spellings which is
entirely international. Contrast, for example, the Italian,
which absolutely swarms with double consonants, to the
Spanish, which is spelled phonetically and in which prac-
tically no double letters appear. An inventor which
would insist in retaining in his new machine some useless
part which simply had historical associations would be
regarded as somewhat of an ass. In another endeavor
to follow the Latin and appear "natural", the letter c is
used in place of the k and is pronounced as c in cat, can,
even in such words as commercia, concede, concentra,
concetto, publicitate, aseceno, accentu, etc., etc. (pro-
nounced: komerka, konkede, konkentra, konkesso, etc.).
In Ido, if you know how to pronounce a word, you know
how to spell it and vice versa. To the intelligent, practi-
cal man, unburdened with a vast weight of tradition, the
Ido method is the only sensible method.

Take the question of terminal letters, suffixes which
in Ido are uniform in use and meaning. The ability to
add a determinate meaning to a root by a regular use of
certain forms is the most valuable characteristic of Ido
and Esperanto. This lack of uniformity in the terminal
letters, so-called "suffixes", and the significations such
chaotic terminations are intended to convey is the grea-
test defect of all Latinist projects. Professor Peano lists
about 130 of the so-called "suffixes" followed by examples
of words in which they are used, for example: -ile as in
aed-ile (noun), infant-ile, ag-ile (adjectives). When termi-
nations can be used almost indiscriminately without fixed significations, they might just as well be omitted altogether and the writer left to end his words in any manner which seems natural to him. In Interlingua one is constantly in doubt whether one is dealing with a verb, noun, or what not, as from the point of view of the vast majority of Europeans, the terminations are merely arbitrary and have to be learned separately for each form of word. Take verbal terminations: we find *ama, abdica, educa; lege, crede, perde, audi, dormi, fini.* Take the collection of grammatical forms which cluster around the English word progress. Peano gives the verb the form of *progregdi,* noun forms appear as *progressu, progress-ione* and *progress-u;* two other forms of this root appear of which I do not know whether they are to be understood as nouns or adjectives or both: *progress-ista* (progressist!), *progress-ivo.* The author asserts that he has done away with all grammar. It may also be asserted that he has done away with sense. To be sure, in English we very often employ the same form of word for the different parts of speech (we "ship the man" and "man the ship") but that does not add to the gayety of the poor foreigner who is attempting to understand our language. In short, in the Latinist projects there are many suffixes for one idea and many ideas for one suffix. It is a case of striving after "naturalness" (especially for Latinists) at the expense of regularity, facility and accuracy of writing and speaking. The multitude of terminal forms may lend a superficial air of naturalness to the aspect of the text for reading purposes, though such texts are in fact very often hard to understand because the parts of speech are not clearly indicated, but the lack of a uniform, coherent system of derivation makes it extremely hard to write. Even if it could be read with facility, it would be but half a language.

In order that the reader may not think that I have exaggerated this lack of proper derivation in Interlingua, I give the following examples which are, I think, characteristic of the whole:

From *abdica* (verb) is derived *abdica-tione;* from *abbrevia,* *abbrevia-tione;* but from *abole,* *aboli-tione* (why not-*etione?); from *abstrahe,* *abstractione* and ab-
stricto as nouns; from accede, accessione; from adhaere, adhaesione; from admitte, admissione; from adopta, adoptione (why not adopt-atione as in abdicatione?); from allude, allusione, from annecte, annexione; from assenti, assensu; abusu (verb), abute (noun); absinde, abscisso; absorbe, absorptione and absorpto; accende, accensione (meaning: to light; Ido: acendar, -o). acre (eager; sharp) gives acritate (acrity) and acritudina (acritude); age (to act); actione (act, noun; also share of a public company); actionista (shareholder); acto (act); actu (act); actu (to actuate); actuale (actual); actuario (actuary); acu (needle); acue (to sharpen); from affige (to affix) we get affixo and afficione; the word for abbot is given as abbate; how we are to translate abbess we are not instructed; perhaps the old Latin abbatissa would do just as Peano derives actrice from actore or asinino from asino; we find ave (to be avid); avaro (avaricious); avido (avid) and aviditate (avidity) not to speak of avi (bird), avo (grandfather) and aviatione (aviation); exsule (to banish, exile) and exsilio (an exile or bandit); we find ambi (to have ambition, to aspire to) and ambiente (ambient) and ambitione (ambition), etc., etc. There are no fixed rules to go by, no uniformity. We must learn each separate word, as in the Latin.

Said Professor Couturat: "The profound error and illusion of the Latinists (literally: "dog-Latinists") is that they understand Latin and they believe that the Latin vocabulary is easily and directly understandable by everybody. They adopt as a whole (though not cleverly) the Latin words, or preferably the Italian, for, in fact, in their texts they write in a scarcely deformed Italian. That sort of thing can only deceive Italians whose nationalistic amour propre it flatters, presenting as a form of I. L. only a barbarized form of Italian."

Interlingua is an example of the type of language we might expect if the task of constructing an I. L. be turned over to scholars of the traditional type. Professor Couturat remarked in his History of the I. L. that the ordinary linguistic professor tends to construct a form of I. L. too difficult for the facile use of the ordinary intelligent man. Shut up as the professor is in his study and class room, with a lifetime devoted to the zealous study of bygone
grammatical forms and civilizations, he loses touch with present realities and needs. The things that are interesting and dear to him, he tries to impose on others. Any type of I. L. which does not sufficiently take into account the necessities and point of view of the ordinarily educated and intelligent man is doomed to failure, even though it may receive the approbation of the governments. The plea of "naturalness" and "easy intelligibility" is in reality valid only for those who are conversant with Latin. And even the Latinist would find his task greatly simplified and bettered if a systematic form of derivation replaced the superficially natural forms which now appeal to him. It is not enough that a language be easy to read, it must be easy to write and speak, and more exact in the expression of thought than any language living or dead.

The college graduate part of the population amounts, I believe, in the United States, to less than one per cent. A goodly proportion of even this one per cent lack any real knowledge and appreciation of Latin. It is hardly wise to cater to the particular prejudices (or opinions) of that small part of the population to the practical detriment of the remaining 99 per cent. Intelligence, fortunately, is not the unique characteristic of those who have trodden the classic quads. We are trying to construct a machine for general use which will do the work as efficiently as possible. We should reject nothing, because of traditional likes and dislikes, which helps us to attain that end.

The most important task of the future, as I see it, is not so much the selection of a vocabulary, because it is now clear that the main body of such vocabulary is imposed by international roots and the fringe of ideas for which international roots are lacking can be selected in a spirit of scientific compromise as has been done in Ido, but lies rather in giving precision to the ideas carried by these root ideas and their derivative forms and the cultivation of a clear international style.

APPENDIX C.

Among the systems considered by the Delegation were several, Idiom-Neutral, Novolatin (of Dr. Beeman),
and Universal (of Molenaar) which indicated the sexes through the finals -o, -a, instead of as in Ido: -ulo, -ino. This proposal was again revived after the decision of the Delegation by Michaux in a system known as Romanal. As both Ido and Romanal were mentioned in the late book of Professor Guérard as good solutions of the I. L., and as such indication of the sexes appeals strongly to certain peoples of the Romance group, it may be worth while to give some of the reasons why the Delegation refused to adopt such method. It must certainly be granted that any uniform use of final vowels, whether indicative of the grammatical class of the word or to indicate gender is a step in advance over the ugly and hardly pronounceable words found in Universal and Idiom-Neutral which terminate in two or more consonants, such as: patr, votr, regn, and over such systems as that of Interlingua wherein the final vowels are used chiefly for phonetic reasons and carry with them no fixed significations. In using Romanal as a late example of such projects, it should be understood that Romanal is not a developed language like Ido and Esperanto. It was merely put out, like a majority of proposals, in the shape of a three or four page pamphlet containing a new grammatical outline. In Romanal, -o stands as a sign for the masculine, as patr-o: father; -a indicates the feminine, as patr-a: mother; -u, both sexes, as patr-u: parent; -e for the undefined or inanimate, as acid-e: acid; -i indicates an adjective, gener-i (or perhaps, general-i) general; -im for adverbs, as separat-im: separately. For the vocabulary, one is simply referred to neo-Latin words. The system has no body of followers.

In this connection it may be stated that Professor Guérard in his book gives the reader the impression that such proposals as that of Idiom-Neutral, were not thoroughly considered by the Delegation. Such was decidedly not the case. The reports of the work of the Delegation and the numerous references in the pages of PROGRESO are sufficient evidence to the contrary. As Professor Couturat stated, some of the members of the Delegation had a previous inclination toward such adoption and rejected these views only after the matter was thoroughly thrashed out. If the student desires a thorough
explanation and examination of the merits of such systems as Idiom-Neutral, let him turn to the pages of PROGRESO. I refer him particularly to vol. II—274; vol. V—351, 432.

To return to the question of using the finals -o, -a for the sexes: There is, of course, nothing in logic or general linguistic practice which demands that the -o and -a be used as in Ido and Espo simply to denote a part of speech. They are simply arbitrarily selected vowels used as perhaps best suited for the purpose intended, just as -ulo, -ino are suffixes chosen for the masculine and feminine. One may shuffle around these terminal forms indefinitely and come to no solution which will please the phonetic taste of all. In favor of the use of -ulo and -ino for indicating the different sexes, it should be noted that when the suffixes are used the accent falls upon the -ul and -in thus giving special distinctiveness to the sounds. In the Romanal practice, we do not find distinctive syllables and the accent does not even fall upon the finals -o, -a, etc. As far then as clearness of hearing goes, the Espo-Idist system is the better.

The main argument for the use of -o and -a as sex suffixes comes from a like usage in certain Romance languages where it appears to be "natural" and consonant with linguistic sentiment, especially if the vowel of the definite article is also changed to correspond with the noun. However, even for these languages, there being no neuter terminations, the feminine and masculine gender forms apply as well to inanimate objects.

The following are some of the reasons which lead the Delegation to reject the use of terminal vowels for gender designation. In the first place, if one admits the finals -o and -a for the masculine and feminine respectively, one must of necessity admit another vowel for the neuter and, in all probability, still another vowel for use where the sex is undetermined. We have as terminal vowels: a, e, i, o, u. By using a, e, o, u, as Romanal has done to indicate gender alone, we find all vowels exhausted, except the i which may be used to indicate adjectives, and consequently have no vowel left to indicate adverbs and are thus driven to the use of -im or -ment for that purpose. It is therefore apparent that the use of
vowels as useful distinctions for the parts of speech is very much weakened. Again, such usage harms the language from a phonetic standpoint. "There is," to quote Guérard, "an overwhelming predominance, among nouns, of the ending -e, which is the least sonorous of the three. The sound of Esperanto-Ido is more pleasing than that of Romanal."

Another result of this attempt to distinguish genders in nouns by vowels is that such distinction must be further applied to the numerous pronominal forms which in turn must have three or four gender forms. In Espo, for example, there is found tio and tiu which apply, quite logically, to all three genders; Ido has likewise ito and ita (ilta, elta, oltu), quo along with qua, etc. The use of -a merely to indicate the feminine sex would of necessity do away with the use of -al(a) as a natural and useful adjective form. It would also demand changes in the participle forms -inta, -into; -ita, -ito. In Ido, the final -o and -a indicate nouns and adjectives consistently throughout all grammatical combinations or forms. If we restrict the use of these two letters to merely masculine and feminine significations, we break up this harmony.

Another result of this change would come in the plural. As the sign of the plural in Romanal must be added to the vowel, it is naturally -s. In Ido, we do not add a letter to indicate the plural, we change the final -o to -i, which is consistent at least with the usage of Russian and Italian and familiar to all in such words as bolsheviki and dilettanti. Furthermore, the Ido usage enables us to have the important advantage of forming a pronounceable accusative ending by the addition of -n to the -i which could not be done if we use -s for the plural.

Still another important consequence would be the necessity of changing the present Espo-Ido verbal finals: -as, -is, -os, -us, because the s in these forms would collide with the sign of the plural. I hold no brief for the Espo-Ido verbal finals, but they are at least regular, uniform and fit in easily with the numerous combinations of the verb es-ar (to be) needed especially in passive synthetic constructions. M. Michaux conjugation is thus changed from a synthetic form such as we find in Espo-Ido (esas
amata, am-ab-esis) to a combination of analytic and synthetic construction, as haba aman or am-ab-an. Now I do not venture to say whether a partial or optional form of analytic conjugation, where some auxiliaries are used in the manner of the English have and had, is or is not preferable to what we now have in Ido. But I can assert, from long practical experience, that the synthetic forms of Ido and Espo present no practical difficulties, in spite of our being accustomed to a use of auxiliary forms. Doubtless, linguists could argue this point for years without agreement.

We thus see that this apparently simple attempt to distinguish sexes by the use of -o and -a, to accommodate the language to certain linguistic tastes, introduces profound changes throughout the grammar and does away with clear grammatical distinctions of the parts of speech. If such a system had been adopted, Ido would have no right to be considered as a "scientific Esperanto", for the characteristic feature of Espo (aside from its special alphabet) would have been changed. Ido would be a species of Idiom-Neutral reformed. At least it may be said for the system Espo-Ido that it works easily and well and that we cannot see how any pronounced advantage could be gained by change.

APPENDIX D.

Since the main body of this work was written, there has appeared, "A Short History of the I. L. Movement" by Professor A. L. Guérard. The professor is a Frenchman domiciled in the United States and is at present a professor of French in the Rice Institute, at Houston, Texas. His book, intended to interest the general public, is historical and informative, rather than argumentative. As the only book of importance that has appeared for many years on the subject, it is bound to have influence, and is therefore worthy of comment.

In its popular aspect, the book seems to be a boost for Espo. It is unfair to Ido because it tends to disparage the importance of the Delegation and does not expose in detail the fundamental defects of Espo. Professor has a practical knowledge of Espo and because that form of
I. L. has the widest diffusion, he has thought it wise, "as a matter of tactics", to recommend the learning of Espo to the general public who have little interest in linguistic discussions. The professor's knowledge of Ido is evidently not great. It appears to be derived from a mere reading of the back pages of PROGRESO, rather than from a practical study of the language. However, he recognizes the necessity for a system of logical derivation and gives as his own personal conclusion that the official I. L. of the future is likely to be Ido or some type of I. L. akin to it, though his desire is that it should have a purely neo-Latin vocabulary with its "natural" spellings (double letters, etc.). His hope is that some time in the future a committee of scholars will make an exhaustive study of the subject and render an authoritative decision.

The motives for recommending to the ordinary student the learning of Espo rather than Ido appear to have been: (1) It is easier to interest the student in the more widely known type of I. L. than in Ido which is at present not so widely known and for which dictionaries are lacking in many languages. Tactics, rather than excellence. (2) Ido in its present state has a vocabulary founded on modern international roots. The type of vocabulary which appeals to Guérard as a scholar is one founded entirely on neo-Latin etymological roots, plus a few words which are purely modern and international like soviet, geisha. (3) Ido, if it became very popular in its present form, might make it too difficult for the Latinists to change, therefore, as a matter of tactics, it is better to relagate it to the same level as mere projects of languages which now have no body of followers. "The Idists and the Peanists may legitimately consider themselves as special committees of the I. L. movement." In other words, the Idists will please "go way back and sit down" until some Great Minds get together and give authoritative decision on some type of neo-Latin I. L. which they may regard as suitable for common people. I want to say that Ido is practically a complete language, not a mere sketch of a language like the other projects. That it has a very considerable body of adherents and is a living movement growing stronger every day. The Idists preferred to perfect their language through
the years rather than to make bids for popularity by an imperfect and unchanged vocabulary. When funds can be found to publish its costly dictionaries, Ido can well look after itself. I may also say that any I. L. needs something more than theoretical views to perfect it. It needs practical use by people of ordinary learning, experimental use with difficult translation matter. Such cannot be gained if a type of I. L. is relegated to the studies of scholars. Whether Professor Guérard likes it or not, Ido in its present form cannot be subdued and placed on a subordinate plane until it is reshaped to desires of Latinists. The alleged 'improvements' thus far offered for inspection by Latinists are not of a kind likely to commend themselves to Idists. No future official body of scholars will have as its data for consideration any new body of fact not already considered by the Delegation and now open to the inspection of those who desire to inform themselves. Nor is it likely that any new committee would succeed in discovering any more effective ways of using linguistic material than have already been presented. Certainly Idist do not look upon their language as perfect, but as perfectible on its sound basis.

In the author's zeal for a purely Latin based language, his attitude toward the Delegation, Professor Couturat and the Idist movement in general has not been entirely fair and scientific. He makes much of the fact that five of the prominent men who had been invited to participate in the deliberations failed to appear and that some others were only present through authorized representatives. It would certainly have given more weight to the decisions if a greater number had participated, but the real interest in the subject on the part of prominent men was not great, and the fact that some by reason of distance or other personal considerations failed to assist should not be allowed to detract from the worth of the deliberations. He has no right to minimize the work of that truly remarkable man, Professor Couturat, and the work of the only competent body of scholars who have attempted to pass on and build up the I. L. Professor Couturat was a scholar who stood and stands, in his real greatness of intellect and knowledge of the subject, head and shoulders over any other scholar past or present in
his competency for the task. Couturat was not perfect. His very energy and earnestness, plus his Gallic temperament and training, led him to oppose fiercely those whom he considered to be treating him and his work unfairly. I quite agree also that Professor Couturat sometimes attempted to give too much weight to the authority and importance of the Delegation. The Delegation as finally composed (through no fault of Professors Couturat and Leau) chiefly has the authority which goes with demonstration of facts. The fact that the delegates were prominent scholars certainly added weight to their decisions, but their prominence was not the fundamental thing, the convincing thing in the mind of the public. No decision of any committee, however prominent its personnel, will long be followed by the general public if the findings of such committee do not work well in practice. The value of the judgment, for example, of the learned scholars from the American Classical Association, who decided that no form of I. L. could be constructed suitable for the common run of people, is immediately discounted by those who know the facts through experience. If Espo were gotten up by the Pope and Ido by the Bolshevists that could not and would not prevent adherence, in the long run, to the more efficient of the two. The Delegation has the same sort of authority that a competent body of electricians would have in passing judgment on some new electrical contrivance, nothing more, nothing less. Couturat undoubtedly "steered" the Delegation and the subsequent Idist movement, but Couturat had only one vote in the findings of the Delegation and in the subsequent Idist Academy, and his influence resulted simply from the greatness of his ability. To get anything done, to get practical results in any form of I. L. there must be some discipline, some pooling of somewhat divergent views, otherwise the individualistic type of scholars who take a part in that sort of language construction will break up the movement through insistence upon their own particular pet views. It is a fact well attested in the experience of Idists that there exist a very large number of scholars, or people of scholarly pretence, who after a few days, or even a few hours study of Ido feel perfectly certain that the language would be all right if it be
changed in some particular to correspond with his own preference. Unfortunately, to understand and appreciate Ido demands considerable study, not a more reading. Wisely, so I think, the Delegation was unwilling to break with Espo more than was necessary. They recognized the fact that Espo possessed great excellencies and a body of followers. It did not seem wise to change anything for the sake of mere change.

In the opinion of Professor Guérard, the only proper basis for the I. L. is the Latin etymological root. One might suppose from his numerous references to "etymological roots" that he means by this only the classic Latin forms. From his letters, I judge that this is not the case, that what he has reference to is the mediaeval Latin words which are yet "alive" in some form or other in our modern languages. Doubtless his idea is that the spellings and perhaps the significations should follow the original Latin as far as it is possible so to do without too much distorting the modern equivalents. In cases where significations in modern languages have no Latin equivalents, or have survived only in obscure forms (the prepositions for example), he would, like Professsor Peano, return to the classical Latin. Now as I have stated elsewhere, the root material on which any efficient type of I. L. must be composed is much the same. Probably nine-tenths of the roots proper found in Peano's vocabulary are likewise to be found in the Ido vocabulary. Of course, Ido has adopted the root material in the modern form, irrespective of its Latin forms, and furthermore has added many roots which are to be found only in modern languages. The essential difference however between the Latinist camp and the Idist is in the way the same root material is handled. In Ido a common form of root is selected which nearest agrees with modern international usage to which is appended uniform affixes to form a consistent method of derivation. The Latinists endeavor to follow as far as practicable not only the original Latin spellings for the roots, with all their unphonetic forms, but the multiform ways of spelling affixes, losing thereby any coherent derivative forms. How Professor Guérard, acknowledging as he does the need for a regular system of derivation, expects to unite a
logical system of derivative forms with the unphonetic root spellings of the Latin, I do not know, and I very much doubt if he does. The Espo-Ido method seems to the Latinists to be artificial, to "distort" the spelling of the roots and their derivatives. My judgment is, and it is based on prolonged lexicographical work, that any future body of scholars who approach the problem with a prejudice in favor of a pedantic use of etymological roots will soon find themselves under the imperative necessity of (1) so "distorting very many of these etymological roots as to cause them to lose the "natural" spellings, (2) of inserting, for reasons of proper expression of thought, such a large amount of modern root material, not belonging to the Latin, as to make their resulting form of language to very closely approximate Ido as it now stands. In other words, if the Latinists would sit down and attempt the practical working out of a language, not merely words in the vocabulary which have Latin roots, they would find, I believe, that some of their theories about I. L. language construction do not fit in efficiently with modern linguistic facts. Doubtless, as Guérard asserts, the strict following of the Latin roots and their spellings would be of aid to students who are studying or expecting to study Latin, but what about the aid afforded by such a language as Ido in learning modern Romance languages? The knowledge gained and the feeling of relationship and kinship thus aroused is quite if not far more important than that which would come from a like recognition as regards the ancient Romans.

The presupposition in favor of a purely Latin type of I. L. is so strong in the mind of the average linguistic professor that he would deny entrance to the linguistic heaven to any one not familiar with the classic tongue. Only prolonged practical tests can rid him of it. I think I echo the sentiments of all leading Idists when I assert that they would be glad to see every root and form in Ido put to the test of a fair examination by a representative body of scholars. If there be imperfections, points that can be bettered, we wish to know it. The Idists, however, are not eager to see their language judged only by scholars who represent the traditional, pedantic point of view. For fair decision, it is absolutely essential that a future
official committee should be big enough to represent all points of view and must include scientists, publicists, and the like who will have to use the language practically for all departments of life.

Because of his reverence for the etymological roots, Professor Guérard is led to utterly reject Jesperson's formula: "That international language is best which offers the greatest facility to the greatest number. The internationality of a root is therefore measured by the number of persons of European culture who are able to recognize and understand it, without knowing any other language than their native tongue." This formula Guérard considers "pseudoscientific" or "absolute nonsense", as he expressed himself in a letter. He says: "Granted that the method, properly applied, would make each separate word easiest for the greatest number of men, this would not be true of the language as a whole." I must confess myself quite unable to follow the logic (?) of the above quoted sentence. I should suppose that the best nation, from a moral and intellectual standpoint, is that which contains the greatest number of the best individuals. Why this does not apply in the linguistic field, I do not know. You may differ from it certainly. You may consider, as does the professor, that an I. L. with a purely Latin base is better than one founded on modern internationality, but to call the formula "nonsense" is simply to display prejudice. It is a dictum of common sense that the more people a certain form of word is intelligible to the better it is. Latin roots would find no appreciation were they not, in a majority of cases, the most international in their fundamental form. It is the very basis of their selection for any form of I. L.

The grounds of his opposition to the formula probably are: (1) Scholarly preconceptions which makes him see nothing but the Latin. (2) His imagining that the Idists have constructed their vocabulary by slavishly counting heads without taking other considerations into account. This is simply not the case, as I can testify who have watched the building up of the vocabulary during many years. If mere populations was the sole basis of selection for the vocabulary of an I. L. the purely English type of word would have to be, in many cases, selected. But any
simple, workable system of phonetics forbids the selection of most English words as they stand because of their spelling or pronunciation. In spite of being used by the "largest number of people", they often do not fit into the phonetics. Yet if the Idists had slavishly followed the Jesperson formula, they would have had oftentimes to have been adopted in their purity. In fact, in my judgment, in a number of roots it would have been better for Ido if the formula had been followed more closely. (3) Guérard has been unable to see the fallacy involved in the assertion of the Espist author, Kotzin, that if we follow Jesperson's formula, "we should have to accept the English because that language is spoken by the greatest number of people." I have already exploded, I think, that sophistry by a note an page 107. Therefore, I will simply say here: (a) That the fact that the English is a very difficult language for any foreigner to learn absolutely debars it as a language which offers the "greatest facility to the greatest number." (b) That the English is not an independent language unrelated to other European tongues. As the vast majority of our words come from and are related to words in other languages, it matters greatly to other linguistic groups what roots, or form of root, is selected. The words "high", "tall", "lofty", for example, are purely English words, now unrelated, I suppose, to any like words for this idea in any living languages. If they were selected they would impose upon all Europeans the learning of arbitrary words unrelated to their own languages. However, because the Idists selected the root alt- (found in such English words as: altitude) to express this idea it is easy of recognition and comprehension not alone to the English but to the French, Italian and Spanish peoples. This shows that Kotzin's assertion is untenable. The English language mainly counts as a factor only when its words find a counterpart in other languages. (4) The Latin predilections of the professor are so strong that he wishes to ignore the common word forms of the English and Germanic races which have in some instances been inserted in Ido. We have, for example, send- and dank- in place of the Latin mitte and gratia. To the unprejudiced observer, the common linguistic heritage of the Germanic and English races, outnumbering as they do all Romances
peoples, might seem at least worthy of consideration. If an L. L. is to be constructed on grounds of efficiency rather than sentimental and racial sentiment, it seems unwise to leave out of consideration this common body of root material even though it be unsanctified by a Latin origin. Mitte, for instance, has to be spelled with two "ts" and is therefore objectionable in a phonetically spelled languages, besides having only a remote connection in sense with the English words in which the root has survived: transmit, permit, etc. In their zeal to preserve the antique spellings, the Latinists too often forget the changes in meanings that words have undergone. It excites the ridicule of Guérard that the Idists (and Espists) have selected the Russian root word: dejur(ar) to express the military idea of: to be on duty; dejur-oficiro: officer-of-the-day. It may be that there may be found some other simple word from a Latin source that better expresses this common but somewhat complex idea but the professor does not give us the benefit of it.

Guérard in his appendix pp. 243-4 attempts a detailed refutation of the Jesperson formula; to quote:

"Mere numbers do not provide an adequate criterion of the relative importance of languages. This basic fact (How can a formula be "basic" and at the same time "pseudo-scientific"?) ought to be modified: (a) by a coefficient of culture based on literary, or literary and scientific, production; (b) by the fact of geographical diffusion, or better dispersion: the superiority of English over Russian, for instance, is much greater than mere numbers would indicate; and the fact that Spanish is spoken by twenty different nations, scattered over three continents, is an indication that cannot be neglected; (c) tradition, the degree of internationality already achieved by a language, the number of people who have learnt it next to their mother tongue; (d) possibly the intrinsic beauty and facility of a language, although that is is point upon which it is even more difficult to agree than upon the other three."

I answer: Jesperson's formula simply means that the easier a word or a root is for the greatest number of
people, the better it is. This is but sheer common sense. It is a mere general statement rule, meant to be modified by other factors. Guérard's exceptions are not refutations of this general rule but additions or modifications of this rule which must be taken and have been taken into consideration. (a) It is admitted elsewhere in his book that a coefficient of culture is practically impossible; it does not lend itself to mathematical or exact statement. Yet Idists have consciously or unconsciously had this necessity in mind. No one of common sense, other factors being equal, would give the same weight to, say, a Portuguese form of word that he would give to a corresponding word from the French. Some have objected that the Idists have given too much weight to the French as a "cultural coefficient." (b) I quite agree. The Idists have not slavishly followed a mere numerical formula. For example, the easy phonetics and wide dispersion of the Spanish have undoubtedly entered into the selection of roots. (c) Tradition: This is, I suppose, a rather roundabout way of insisting upon Latin etymological roots. The Latininity should exist in the I. L. only in the degree that neo-Latin roots are most widely and 'efficiently' international. You should not be allowed to diminish the efficiency of the language by the forced introduction of Latin words or Latin spellings when other forms are more international and "easiest for the greatest number." We should not bend linguistic facts to fit a Latin formula. (d) Beauty: The phonetics of Ido, founded on that found in Spanish and Italian, necessitate and show an agreeable phonetic system. On the next page to that above quoted, Professor Guérard states: "Ido has other qualities — the harmonious and lucid vocalic endings inherited from Esperanto, a more logical system of derivation than that of the parent language, and especially that of Neutral and Interlingua."

In short, Professor Guérard has made certain disparaging statements in regard to the root selection of the Idist vocabulary which are quite evidently founded upon supposition, and prejudice in favor of a more pedantic selection, not on exact knowledge. It is easy to make wide assertions; it is quite another thing to prove them in detail.
However, in a few instances the professor does condescend to show what he considers evidently a bad selection of roots on the part of the Idists. This is just what we need and welcome, not general assertion: He objects to the composite word: kun-laborar (the preposition kun added to labor-ar: to work with (somebody), to collaborate), and states that "collaboratione is both easier and more helpful" (to whom?). Now although the composite word indicates the true sense of the word very well, there is no reason why the Idists should not adopt both forms; we have done the like in a number of cases. But we certainly should not attempt to pedantically follow the etymological root as spelled in Latin and use a c as the sole representative of not only the k sound proper but the numerous sounds of c as they exist. Guérard sees "no difficulty" in the Peanist spellings: concede, concentra, acceptu, as pronounced konkede, konkentra, akkentu! Nor should we insert two "ls" because double letters seem "natural" to the Latinists. The Spanish spell the word with one l. It is wise to burden the Spanish writer with such exceptions to phonetic spelling, to say nothing of other nations? Again, what about collaboratione being "both easier and more helpful" to the Germans, Russians, etc. who do not have such a word, but who can express the idea very easily by putting together the two common roots: kun: with; labor-ar: to work?

The professor regards dubitare as preferable from a scholarly standpoint to the Idist (and Espist) form of dub-ar. What about the adjectival forms upon which the Idist root is based: E.: dubious, F.: douteux; S.: dudoso? The short form of the root: dub- is about all we can easily build upon if we adopt a regular system of derivation. The minute you adopt a logical system of derivative forms (which necessity Guérard admits, though he seems to forget it at times), you find "naturalness" in terminal forms and even in the unphonetic spelling of the roots, all shot to pieces. The best we can do is to follow the "naturalness" and internationality of the roots, so far as they are easily pronounceable. If we take dubitar(e) as the root form, we should have in Ido a verb: dubitar-ar, and the adjective forms: dubitar-a, -ala, -oza, -inda, -ema
all of which may seem "unnatural" as the forms: dub-ar, -oza, etc.*

He cites the English and German root: vund-ar: to wound; vund-ebla: woundable, vulnerable, found in both Espo and Ido, and prefers for this conception forms based on the Latin root: vuln-. If the adjective form were the primary conception, possibly vuln- might be the better. The primary conception, under a system of derivation, is the verbal root: to wound: vund-ar, which form of root has immediate intelligibility to 270 millions of English and Germanic speakers; the adjectival idea of vulnerable, woundable, is simply a derivable form. However, I do not wish to be understood, in this case or in the other words here criticized, that I regard the Ido selection as absolutely unattackable, I am simply engaged in showing that there is no prima facie case against them. I am quite willing to admit the possibility that some future linguistic committee with different linguistic taste might here as elsewhere substitute a few other roots other than what we now have. In very many cases, the result must be a compromise, liked by some, disliked by others. In my judgment, there is little to be said, from the standpoint of first sight intelligibility against the Espo-Ido root: vund-.

He also objects to the English and Germanic root: vorto, word, preferring vocabulo, as found in the English word vocabulary. From the "mere counting of heads", which Guérard so much objects to, he is quite right in preferring the more international form. If the Idists have slavishly obeyed the principle of "maximum internatio-nality", here is a case where they seemed to have failed to apply the rule. It is a seriously debatable question in an official I. L. whether we should not give place to as many English and Germanic roots as possible where there is close correspondence, even though there may be

* Note: I note that even Peano endeavors to put this root into some derivable form. He gives dubio, doubt, as a noun, also another noun form: dubio-tione: dubitation? (his follower, Canesi, also shows dubita-tione); dubio-ioso for dubious, and dubita for the verb, to doubt. All of which he doubtless regards as more "natural" and easy than the systematic derivative forms from one root found in Ido and Espo.
some slight loss in etymological internationality. They are not many in number, yet they are helpful to the English and Germans to the degree inserted, and moreover give at least the appearance of fairness in the method of selection. The mere fact that *vocabul* is from the Latin and the other is not, should not have decisive weight. Personally, I incline toward the retention of the shorter (and perhaps uglier) word.

The Idist word *ucelo* for bird is another word to which objection is made and the preference given to *ave* (what becomes of *Ave Maria*?). Here is one of those common words which are differently expressed in all languages: E.: *bird*; D.: *Vogel*; I.: *uccello*; F.: *oiseau*; S. and Port.: *ave*. *Ave*, derived from the Latin *avis*, has first sight intelligibility only to the Spanish and Portuguese, though it is found in the form of *avi* in such English words as aviary, aviculture. *Bird* is the form most widely used from the standpoint of population of any of the direct equivalents and is adopted in Espo in the form of *birdo*. It is pronounced as if spelled *beardo* and has double consonants at the end which are probably unpleasing to Romance peoples. The *ucelo* of the Idists, taken from the Italian, was probably substituted for the Espist word *birdo* because of its euphony and ease with which derivative forms may be constructed (*Guérard* in his criticism gives the impression the euphony and beauty has not been regarded!). From the sheer standpoint of internationality, the form *ornit-* as found in ornithology, is probably the best selection that can be made, though such word has not the euphonic distinction of *ucelo*. This is another example of how difficult it is to suit every one. Whatever is adopted, some persons will prefer another form as best suited to their linguistic taste.

*Note*: Peano's vocabulary gives *avi*, which seems preferable from an etymological standpoint to *Guérard's* *ave*. His use of *avi*, though, makes liable possible misunderstanding with other of his words. He has: *ave* to be avaricious; *ave*: es sano, vale, have (what these definitions mean is not clear); *ave*= *avi*: bird?; *avi*: bird; *aviario*: aviary; *aviatione*: aviation; *aviatore*: avitator; *avido*: avid (derived from *ave*: to be avid?); *avo*: grandfather (How grandmother is to be translated is not stated. A language which lacks a word, or an equivalent for grandmother can hardly be regarded as quite complete).
Of course, what Guérard is aiming at in this criticism is to eliminate all roots of non-Latin origin. If the professor would actually undertake some of this language construction in detail, instead of merely giving *ex cathedra* criticisms of the work of others, he would better realize what difficulties arise in attempting to compose the vocabulary of the I. L. from purely Latin sources. As an example of the practical difficulties which arise in actual linguistic work (not criticism), I give the following example: Some weeks ago, I was looking for a word to translate the word statesman. At present we have in Ido no separate word for this common and distinctive idea. The best we can do is to use the composed word: *politik-estro*: a leader of politics. The Espists use *stat-isto* which logically termed a *stat-isto*. Now the equivalents in the various languages are: D.: *Staatsmann*; F.: *homme d'Etat*; I.: *uomo di stato*; S.: *estadista*; Port.: *homem d'estado, estadista*. From the point of view of widest internationality there is no question but a form like *statsman-o* is the best solution. But such a form agrees only with the English and German — has no Latin sanctity! Must we then reject such a solution?

I have no wish to seem to disparage Professor Guérard's work. It is informative to all. His recognition of the possibilities and nature of the I. L. marks a refreshing advance over the obscurantism of the vast majority of his colleagues. Guérard's treatment is broad and his conclusions somewhat hazy. This haziness is probably due to the fact that the professor has not as yet come to entirely definite conclusions and wishes to leave all matters open to future discussion. All interested in the I. L., no matter what 'denomination' he may belong to, will find something to support his faith. The Espist can read with satisfaction the almost fulsome praise of his language and, as he beholds the multitude of changes suggested, find his conservative tendencies strengthened against admitting even the least reform. The Idist, though he will probably consider that the treatment of his language has not been in all respects fair, may yet console himself with the apparent conclusion of the professor that Ido is the most promising of all. An examination of the goods offered for the improvement of Ido by
Guérard is not likely to shake his confidence in his language as it stands, or make him desire to throw his linguistic contributions into the melting pot to be cooked over again by the Latinists. The Latinist will view with complacency the professor's desire to force the general adoption of Latin roots and look with amused tolerance on Guérard's belief that a coherent derivative system is desirable when he gazes at the magnificent array of his own "natural" terminations.

The professor has an apocalyptic vision of a newer, better linguistic world wherein shall reign a type of I. L. known as Cosmoglotta* (the product of Great Minds). It may be the vision of a true seer. It may be but another exhibition of personal preference which, like so many Latinist projects in the past, get the I. L. movement nowhere and will meet with no wide approbation.

* Cosmoglotta: from two Greek words which literally signify the tongue (anatomical) of the universe; with a c in place of a k to give it a Latin flavor, and two ts to lend it "naturalness."
ATTESTATIONS

Je pourrais, certes, allonger considérablement ces pages, mais à quoi bon, puisque j’aboutirais toujours à la même conclusion. N’invoquons plus que des témoignages appuyés sur la pratique. Mais auparavant, nous demanderons si les Espérantistes qui sont devenus, et restent Idistes, ont été décidés et sont fidèles à l’Ido, parce qu’ils l’ont trouvé et le trouvent encore plus difficile que l’Esperanto. En tout cas voici le genre de leur appréciation :

„Quiconque se connaît en langues et notamment juge de leur difficulté d’après l’expérience de l’enseignement régulier, ne peut manquer d’arriver à cette conclusion : l’Esperanto réformé, dit Ido, n’est pas seulement très supérieur à l’Esperanto en bien des parties essentielles, mais il est la Langue internationale relativement parfaite. Si l’idée de la Langue internationale doit triompher un jour, alors aussi triomphera l’Ido. Cette conviction, établie sur un examen personnel et approfondi, se trouve confirmée par ce fait que d’éménents Espérantistes, des hommes qui se sont occupés de la Langue internationale, non pas pour l’amour de la nouveauté, mais avec compétence, ont abandonné l’Esperanto et se sont ralliés à l’Ido.” (Dr. SCHRAG, inspecteur des Écoles secondaires du canton de Berne.)

„Etant Allemand et ayant appris à fond l’Esperanto, puis l’Ido, je puis certifier que l’Ido est, pour les Allemands, plus facile à apprendre et à comprendre que l’Esperanto. La future langue mondiale sera ou l’Ido, ou une langue qui sera beaucoup plus proche de l’Ido que de l’Esperanto, car cette dernière langue est remplie de défauts.” (Dr. Léopold von Pfaundler, professeur à l’Université de Graz, membre de l’Académie des Sciences de Vienne.)

„Je me suis occupé longtemps de l’Esperanto que j’ai abandonné dès que j’eus l’occasion de connaître l’Ido, m’étant aperçu que cette dernière langue est beaucoup plus facile pour tous les Italiens que l’Esperanto.” (Prof. Armando Versan, professeur de langue italienne à l’Académie de Commerce de Graz.)

„L’Ido doit être préféré à l’Esperanto à cause de sa facilité même, pour les peuples slaves, de la plus grande régularité de ses règles, de sa prononciation plus harmonieuse et de son homogénéité.” (J.-F. Khun, ancien membre des deux Sociétés espérantistes de Bohême.)

„Pour toutes les nations et spécialement pour mes compatriotes danois et pour les autres nations scandinaves, la langue Ido est certainement plus facile à apprendre et à manier que l’Esperanto. Pour cette raison, comme aussi pour sa construction scientifique et par sa grande souplesse, l’Ido me semble plus capable que toute
autre langue à remplir le rôle de langue auxiliaire pour toutes les nations civilisées." (Prof. Otto Jespersen, docteur ès philosophie et lettres, professeur de linguistique à l'Université de Copenhague, membre de l'Académie danoise des Sciences.)

"Si l'Esperanto par une propagande inconsiderée, ou en vertu de l'avance acquise, devenait pour quelque temps la forme de la langue protégée et favorisée par des gouvernements, des institutions officielles, des écoles, etc., ce serait un grand et déplorable recul dans la marche vers la réalisation de la langue universelle. Le génie de Zamenhof, de l'éminent inventeur de langue a d'abord crée la base rationelle de la langue auxiliaire — cela je le reconnais très volontiers — mais l'Ido renferme une grandiose amélioration sous bien des rapports.

"Les deux langues sont très faciles à apprendre, mais l'Ido est beaucoup plus facile que l'Esperanto.

"Par sa dérivation plus logique et d'une transparente clarté, par toute sa structure aussi, l'Ido délimite plus exactement les notions; il est plus distinctif et par là aussi plus propre à servir aux besoins de la science, de la diplomatie et du commerce." (Judgement formulé en Ido par le docteur P. Renlund, polyglotte-philologue suédois renommé.)

El Obrero (Calanas, 13 janvier 1912), contenait ces lignes, à la suite d'un article sur l'Ido: "Celui qui écrit cette lettre n'est qu'un simple ouvrier. Il y a six ou huit ans il ne savait pas ce que c'était qu'un livre, excepté ceux qu'il avait tenus à l'école dans son enfance. Il a appris la Langue Internationale (Ido) sans avoir besoin de maître, en lui consacrant seulement une heure par jour, soutenu par le grand stimulant d'arriver à échanger des pensées et des impressions avec des hommes de tous pays. Je suis parvenu ainsi, au bout de trois mois d'étude, ce qui représente 90 heures, à échanger des idées avec des ouvriers allemands, français, danois, anglais, autrichiens." (Urano Ujes)

"Je suis très heureux de l'ardeur avec laquelle nos ouvriers étudient l'Ido", écrit le 2 avril 1912 l'avocat docteur en droit A. Peipers, de Cologne. Je constate de nouveau, par expérience, avec quelle surprenante facilité l'Ido peut être appris par des hommes peu instruits. L'un de mes élèves actuels avait déjà appris tout seul l'Ido, avant le cours, en peu de semaines."

"Au séminaire de Gedved, on organisa deux classes d'élèves ne connaissant ni l'Esperanto ni l'Ido. Les deux classes commencerent en même temps à apprendre les deux langues. Elles étaient de même force et leur consacrèrent un temps égal, sans aucune aide extérieure. On les examinait toutes les semaines pour constater leurs progrès. Eh bien, la classe d'Ido avança toujours de plus en plus sur la classe de l'Esperanto. Au bout d'un mois et demi, les Espérantistes furent dégoûtés de la chère langue et l'abandonnèrent pour adhérer à l'Ido. Ce furent surtout la quantité de petits mots arbitraires et artificiels, avec l'accusatif, qui les gênèrent. Cette brillante expérience se passe de commentaire." (Progreso, juin 1913.)
C'est parce qu'ils sont sûrs à l'avance d'un résultat identique, partout où l'on tentera l'expérience, que les chefs espérentistes se refuseront toujours à tout essai parallèle analogue.

Sur un texte scientifique de sa langue, un jeune Anglais de 14 ans, sans avoir appris l'Ido et sans connaître le sujet, est arrivé à rétablir le texte anglais d'une façon satisfaisante. Il ne possède, en dehors de sa langue maternelle, qu'une très faible connaissance du français.

Après avoir lu ce qui précède est-il bien possible d'acquiescer aux deux opinions suivantes, parues récemment sur l'Ido:

1° Jamais il ne pourra devenir la langue internationale des hommes d'instruction moyenne. Nous penchons donc à croire que l'étude de l'Esperanto est plus à recommander que celle de l'Ido.

2° Il semble que cette langue perfectionnée est très difficile à apprendre.

On croit rêver, quand on voit un homme cultivé émettre cette opinion, pendant que de simples ouvriers s'unissent à des linguistes de valeur pour certifier le contraire, d'après leur propre expérience. Cela rappelle la boutade d'un vieux maître: „Décidément ce sont les gens intelligents qui se trompent encore le mieux.”

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de la Société française pour la Propagation de l'Esperanto,
vingt ans Espérantiste;
Président de la Société Idiste Française.
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