How Interlingua came to be
Precursors of Interlingua

Toward the end of the 1800's with the formation of far-off colonies, Europeans became conscious of the world and other cultures and languages. Wars were also breaking out between the colonial powers as well as with their colonial subjects. And frequently these wars were between peoples speaking different languages. Someone then got the idea that what was needed was a world language that everyone could speak and communicate in.

Volapük.

In 1879-1880 a Roman Catholic priest in Baden, Germany had a dream in which God told him to create an *international language*. Which he did. He called it *Volapük* from *vol* meaning "world" and *pük* meaning "speech" or "language". Taking bits and pieces from English, with some from German, French, and Latin, he altered the forms of basic words so that they would be easy to pronounce and of one syllable and not easily recognizable to anyone from their own language (which otherwise would give an unfair advantage to some). He developed a regularized grammar that he thought simple to learn, based on the IndoEuropean languages (English, German, Swedish, Russian, French, Italian, Spanish, and Latin are IndoEuropean languages). Word formation tended to be *agglutinative* in which words are formed by combining language units together without changing their forms. Certain endings indicated whether a word was a verb *–ön*, adjective *-ik*, adverb *–o*. *-il* indicated something small. Verbs combined pronouns with the verb. With *binön* the verb "to be", and *om* "he", and *cil* "child" and *jil "school"*: *Cil binom ün jil.* A child (he) is at school. The grammar also had 4 cases, like in German: nominative, genitive (possessive) , dative (indirect object of verb), and accusative (direct object of verb), with appropriate endings tacked onto words to indicate the case function performed by the word. When Scheyler published his language, the idea of it caught on like wildfire. It was fun to make up words out of basic words and affixes. And the idea of creating a language from simple elements and regular rules for putting them together became the fascination of many a language inventor. But Volapük like any fad soon faded away: it was a horrible language because, despite its pretensions to possess simplicity, no one could recognize the words without extensive practice or analysis. Today Europeans often say that something written is nonsensical by saying it is "Volapük", meaning it is gibberish.

The following is the Lord's Prayer in Volapük:

O Fat obas, kel binol in süls,
paisaludomöz nem ola!
Kömomöd monargän ola!
Jenomöz vil olik,
äs in sül, i su tal!
Bodi obsik vädeliki givolös obes adelo!
E pardolös obes debis obsik,
äs id obs aipardobs
debeles obas.
E no obis nindukolös in tentadi;
sod aidalivolös obis de bad.
Jenosöd!

Esperanto

In 1887 another language inventor took up where Volapük left off. L. L. Zamenhof was a Polish oculist, who had grown up in Bialystok in what today is Eastern Poland but then a part of Russia. The city was inhabited by numerous ethnic groups, each speaking a different language, and there was

mistrust and hatred between these groups. Zamenhof came to believe that differences in language created barriers to communication and understanding between peoples, and he believed that one way to break down these barriers was to make it possible for everyone to speak in one auxiliary language.

To make it accessible to everyone it had to be simple to learn, logical, strictly regular, with few rules, and easy to pronounce. Zamenhof reduced the rules to 16. For example, all nouns end in –o, the plural form indicated by adding –j. Adjectives always end in –a. Verbs do not change for person or number. Tenses are regular : present time –as; past time –is; future –os, conditional –us; command mood –u; infinitive, -i. The accusative case is indicated by appending –n to the noun. Esperantists believe this disambiguates between subject and object by using –n on the end of the object. Furthermore they feel this allows for a greater freedom in varying word-order. (In Latin with 6 cases and declinations on words for distinguishing them, word-order is of lesser importance, but then analysis of the sentence is important to see how word endings indicate the connections between the words. So, what may seem liberating of expression also can imply added labor in comprehending).

Many language inventors at some point let their inventiveness get the better of them. This is true of Zamenhof's "ingenious" Table of Correlatives, a 9 x 5 table of grammatical particles that are arranged by columns, the 9 words of which are each

	ki- which, what	ti- that	i- some	nen- no	ĉi- every, each
-u one	kiu who	tiu that (one)	iu someone	neniu no-one	ĉiu each, everyone
-o thing	kio what thing	tio that thing	io something	nenio nothing	ĉi- everything
-a kind	kia what kind of	tua that kind of	ia some kind of	nenia no kind of	ĉia every kind of
-e place	kie where	tie there	ie somewhere	nenie nowhere	ĉie everywhere
-el way	kiel what way, how	tiel that way, thus	iel some way, some how	neniel no way	ĉiel every way
-al reason	kial what reason	tial that reason	ial some reason	nenial no reason	ĉial every reason
-am time	kiam when	tiam then	iam ever, some time	neniam never	ĉiam always
-om quantity	kiom how much	tiom so much	iom some	neniom none	ĉiom all
-es one's	kies whose	ties that one's	ies someone's	nenies no-one's	ĉies everyone's

prefixed by a common morpheme with a suffix for all words in a given row indicating a distinct category of application. At the intersection of each row and column is a word formed from joining the prefix to the suffix. Esperantists believe this simplifies learning 45 words because you only need to learn 5 beginnings and 9 endings and that you just combine each, beginning with each ending.

But things may not be as simple or as complex as it seems. One needs to learn the 45 concepts, their forms, and how they are used. Furthermore, in natural languages like English one does not need to

learn 45 distinct nonsense words. Notice how in each row, at the intersection with each column, the meaning of the Esperanto word formed has a translation into English. For example, in the row for *thing* we have "what thing", "that thing", "something", "nothing" and "everything". So all we need, to learn that row, is "thing" and the 5 qualifiers, "what", "that", "some", "no", and "every". And those 5 qualifiers can appear in each row attached to a different category word. Furthermore the 5 qualifiers can be applied to any number of concepts, not just these 9 abstract categories. We can say, "At what hour will you arrive?" instead of "At what time will you arrive?" The categories and qualifiers need not have nonsense forms. They can be words that stand alone in the vocabulary.

According to Esperanto sources about 75% of the vocabulary of Esperanto comes from Latin and Romance languages (especially French), 20% from German and English, and the rest from mainly Slavic languages. But there seems to be no systematic basis for the selection of these words. The words chosen often are not international. Zamenhof also held that each morpheme (the smallest linguistic unit in a language that could not be divided further into smaller units without loss of meaning) in Esperanto would have a single unchanging meaning regardless of how it was combined with other morphemes. Furthermore, Esperanto was invented with the expectation that the user would create additional vocabulary from a basic vocabulary by combining roots and affixes. For example a basic word in Esperanto is *viro*, meaning "man". There is not a basic word for "woman", but a derived word, "virino", meaning "female man". The suffix *–ino* designates a female counterpart to the root word. Similarly "father" is *patro* and "mother" *patrino. "boy" is knabo* (from German) and "girl" is *knabino* . Sometimes these creations are not always immediately understood but require analysis to discern their meanings. In recent years there has been criticism of the "male-oriented" vocabulary system, with a male word being basic and the female word derived from it. So much for political correctness.

Another example: any word can be changed to its opposite by preceding it with the prefix *mal-*. For example, *juna* means "young", *maljuna* means "old". The word for "healthy" is *sana*. Unhealthy is *malsana*. The suffix *–ul-* means person characterized by the root of the word. Someone with good health is a *sanulo*, and someone who isunhealthy is a *malsanulo*. The suffix *-ej-* means "place" where the action or thing of the root is especially found. Hence *malsanulejo* is "hospital", the place where an unhealthy person is especially to be found. That exists despite the internationality of the word *hospital:* French *hôpital*, Italian *ospedale,* Spanish *hospital,* Portuguese *hospital,* English *hospital,* German *Hospital, Krankhaus, hospitalisieren*. According to *Chambers Dictionary of Etymology* the word *hospital* originated around 1300 in the place named Ospitol (1242-43); it was borrowed from the Middle French *hospital,* a learned borrowing from Medieval Latin *hospitale,* a guesthouse, inn, from Latin *hospitalis* in turn from *hospites, genitive of hospes,* "guest", "host". So the original meaning was a guesthouse and shelter for the needy; later it took the meaning of an institution for care of sick people. Meanings change, while the word doesn't, as the thing named gets a new use. The prefix *mal-* is itself a bad choice to indicate opposites. It has the meaning of "bad" in many languages. While one may think that "bad" is the opposite of "good", the opposite of "conservative" need not be "bad conservative = liberal".

The Esperanto word for "bird" is *birdo*. This word was borrowed from English. But what is an "aviary"? This is a place where captured birds are kept. That suggests in Esperanto *birdejo* a "bird place", (*-ej-* = "place, location"). In Interlingua the word is *aviario,* with *–ario* the suffix for "place where ... is kept" or "collection of...". The word for "bird" in Spanish and Portugese is *ave,* in French *oiseau,* Italian *uccello,* German *Vogel,* in Interlingua *ave.* Although not immediately obvious, the French and Italian words for bird are derived as is the Spanish and Portuguese from Latin *avis.* Interlingua modernizes this by replacing the Latin suffix *–is* with *–e,* **ave**. French *oiseau* comes from Latin *avicellus,* meaning "little bird", as does also the Italian *uccello.* To understand this you need to know that in Latin *–v-* was originally pronounced as *–u-*. Hence /auicellus/ with *auic-* changing to *ois-* and *-ellu(s)* to *–eau.* "Aviary" in Italian is *aviario,* and in Spanish *aviario*. In French it is *volière* or *cage à oiseaux,* German *Vogelhaus,* Russian вольер from French *voliere* meaning a place big enough to let birds fly in it.

As indicated, Esperanto had 37 primary affixes by which new words could be formed. Some of these have etymological counterparts in other languages and thus a degree of internationality. However, they are often abbreviated versions of these with restricted meanings because Esperanto requires each affix to have just one meaning, and internationally corresponding affixes sometimes have several

meanings. The reason for several meanings is often the result of metaphoric use of words along with the literal meaning. A number of these 37 affixes is as follows: *eks- (ex-)* former, as in "ex-king". (However the more general meaning in other languages of *ex-* is "out, from, extreme"; but Esperanto does not give this meaning to *eks-*. Usually words with *ex-* in international words meaning "out", "from" are taken into the vocabulary as part of the total word, for example, *ekstrema* = "extreme", *exzameni* = "to examine", *ekzameno* = "examination", *estingi* = "to extinguish", *ekzerco* = "exercise". To add to the confusion, another prefix is *ek-* meaning "sudden or momentary action", *ekbrili* = "to flash". If you had never seen *ekstrema* before, nor a word like *strema you might wonder if this is sudden streaming like at a broken levy. *fi-* = "shameful, nasty", *bo-* = "relation by marriage" (e.g. *bopatrino* = "mother-in-law"), *ge-* = both sexes together, (*gepatroj* = "father and mother inclusive"). *−ec* = "abstract quality" (e.g. *sekura, sekureco* = "secure, security"). *−em* = "propensity, tendency" (*pensi* = "to think", *pensema* = "pensive"). *−ig-* changes intransitive verb to transivitive = "causing something to be" (*blankigi* = "to whiten", *kontentigi* = "to satisfy";   *−iĝ-* changes transitive verb to intransitive verb "to become, be" (*blankiĝi = "to become white"*). The point is that Esperanto's choice of words and affixes is often not international, meaning that a word and any words derived from that word with Esperanto's affixes may not look like any word in other languages. Interlingua's vocabulary includes all international words in a derivational family which is why Interlingua has *ave,* and *aviario, aviar, aviarista, aviation, avicultura.* Nevertheless, Zamenhof allowed that international words could be borrowed into Esperanto as needed as long as they conformed to the orthography and grammar of Esperanto. This has created at times dual pairs of words with the same meaning in Esperanto, one borrowed as an international word and the other one created within Esperanto by combining roots and affixes.

Despite these criticisms, or rejection of Esperantist claims for optimal simplicity and ease of learning, Esperanto functions as a living language among those who are converted to its use. This demonstrates that the formal qualities of a language are not necessarily of major importance to the functionality and propagation of the language. People will learn what must be learned.

From the start Esperanto has continually had a missionary zeal to convert people to its use. Without others who shared the same system of word formation, you would have no one with whom to communicate in Esperanto. This missionary zeal and a dogmatic resistance to reforms has kept the language alive over 100 years, independently of its linguistic attributes. Another factor has preserved its existence: a rigid rejection of almost any modification of the language. What modifications have come in were in the form of implicit consensual usage. Today among the planned, invented languages, it has had the most social success, but that success has never been what the Esperanto movement aspired to achieve, which was acceptance by major institutions, governments and international bodies with the power to put it into universal use. This is true not just of Esperanto but of most planned languages in general.

The Lord's Prayer in Esperanto:

Patro nia, kiu estas en la ĉielo,

Via nomo estu sanktigita.

Venu Via regno,

plenumiĝu Via volo,

kiel en la ĉielo, tiel ankaŭ sur la tero.

Nian panon ĉiutagan donu al ni hodiaŭ.

Kaj pardonu al ni niajn ŝuldojn,

kiel ankaŭ ni pardonas al niaj ŝuldant

Ido

Ido is an offshoot of Esperanto developed initially in 1907 as an attempt to reform Esperanto because of flaws that some Esperantists believed hindered it in its propagation as an easy to learn language. When orthodox Esperantists rejected the proposed reforms, the reformers left the Esperanto movement and formed one of their own, *Ido*. The name *Ido* comes from the Esperanto suffix *–ido* meaning "offspring of…." Among the changes implemented in Ido was the elimination of six non-Latin letters *ĉ, ĝ, ĥ , ĵ, ŝ, ŭ* and replacing two of them with digraphs, *ĉ* becomes *ch* and *ŝ* becomes *sh*. Ido does not require grammatical agreement between adjectives and nouns in number and case with noun modified. Ido practically eliminates the use of *–n* to indicate the direct object of a verb. Ido also replaced the table of correlates and other grammatical particles of Esperanto with particles from Romance or Latin (modified). The definite article *la* was eliminated. The plural was indicated by *–i* instead of *–j*. The number of participles was reduced from 6 to 2. Both adjectives and adverbs would take the same ending *–e*. In many other respects, Ido looks much like Esperanto.

Ido has had ups and downs since 1907. But it has a persistent existence with some ex-Esperantists joining it, along with new adherents. There is material for learning Ido in the World Wide Web.

The Lord's Prayer in Ido.
Patro nia, qua esas en la cielo,
tua nomo santigesez;
tua regno advenez;
tua volo facesez quale en la cielo tale anke sur la tero.
Donez a ni cadie l'omnadiala pano,
e pardonez a ni nia ofensi,
quale anke ni pardonas a nia ofensanti,
e ne duktez ni aden la tento,
ma liberigez ni del malajo.

Occidental

Edgar de Wahl (1867-1948) was an early follower of first Volapük, then Esperanto. But by 1906-07 he came to reject a totally schematic, artificial language by presenting a memorandum to the *Delagation pour l'adoption d'une langue auxiliaire internationale* (Delegation for the adoption of an international auxiliary language) in which he outlined general principles for constructing an auxiliary language. He argued that (1) none of the existing constructed languages is satisfactory, (2) the constructed international language should be based on international linguistic material, (3) it should have its own word-formation system, (4), it should have a grammar that renders no unnatural forms deviating from the ethnic languages, (5) it should have an international orthography (alphabet without characters with diacritic marks like *ĉ, ĝ, ĥ , ĵ, ŝ,* and *ŭ* in Esperanto). But his proposal was rejected, so he proceeded to work on developing such a language.

In 1922 he published his own language *Occidental* based on his proposed principles. In discussing his principles and their application, he said that its vocabulary should be based on the common

international forms in the European languages rather than artificial forms. It should also be (1) understandable at first sight without previous instruction, (2) it should have the appearance of a natural language, (3) it should be easy to read, speak, and learn with a simple grammar.

While championing naturalism, de Wahl was still under the influence of the methods of his predecessors in wanting to introduce a schematic system that would allow the learner to construct the vocabulary from a basic set of natural roots and affixes that would render other words also natural in form. By settling on a predominantly Latin and Romance vocabulary, he was able to abstract natural roots and affixes from Latin and the Romance languages by which Latin had formed new words.

The form of root words in Occidental's international vocabulary was determined on a word-by-word basis in most cases, in contrast to Interlingua which determines them on the basis of comparing words in entire derivational families in its source languages and seeking the nearest common prototype for the root in the derivative forms. (We will discuss more about that later). Because de Wahl lacked the concept of prototypes the result is a system that only generally produces approximate forms for derived words. When Romance variants were the basis for international words, sometimes the common form was determined subjectively according to subjective impressions of what was common to most of the variants.

For example, given French *dire,* Italian *dire,* Spanish *decir,* and Portuguese *dizer,* de Wahl chose the case with a plurality, *dire,* so that the Occidental word for the infinitive "to say" is *dir.* De Wahl drops the *−e* on the French/Italian infinitive because he has decided to end all infinitives in *−r.* Then using the prefix *pre-* he gets *predir* "predict", to say before. Next, he had to get the stem of the infinitive, which he did by dropping *−r.*

De Wahl then had a problem. Beginning with the stem of the infinitive of the verb, he wanted to have a simple rule for adding suffixes to it that would render international forms of the derivatives. In other words, the words derived from them by adding affixes needed to resemble the natural derivatives in the source languages. To add suffixes *-ion*, and/or *-or,* he creates and follows the rule of de Wahl (see below) and adds −t- following the last vowel, followed by *-ion* and/or *−or*: *predition* "prediction", *preditor* "predictor". In English this is *prediction,* in French *prédiction,* Italian *predizione,* Spanish *predicción* and Portuguese *predição.* The literal sense of *prediction* is "to say before". Next, French, Italian, and Portuguese lack a variant for *preditor,* but English and Spanish have *predictor.* Even Latin lacked a *praedictor although it was possible to produce such a word within the Latin word-formation system. In short, the problem with this is that the form of the infinitive in many cases has undergone much evolutionary change compared with the original derivatives. Originally, the ancestor of *dire* was Latin *dicere.* If de Wahl used the Latin infinitive, he would have been able to make a simple adjustment to his rules to produce many more exact derivatives in conformity with most of the European languages. Using *contra-* de Wahl gets *contradir* and *contradition,* with English and French *contradiction,* Italian contradizione, Spanish *contradicción,* and Portuguese *contradição.* In these cases the rendered derivative does not conform to the plurality nor the group of the three variants that are practically identical, in English, French and Spanish. And other derivatives of the root, like English *dictionary* are not rendered as *ditionario* but as *dictionarium,* an irregularity. Still the results in many cases were very successful in achieving great naturality with systematic regularity.

As mentioned before, to achieve that regularity he invented what came to be known as "The Rule of De Wahl": First, the sign of the infinitive, was a verb ending in *−r,* preceded by one of the vowels *−a-, -e-, -i-.* To find the form of the present tense, simply remove the final *−r.* To the root of the present tense form, add the suffixes *-da* = continued action;*-bil-* = able, possible; or *-ment* = the means, result or product of action. For example,

amendar	*amenda-*	*amendament, amendabil* amend	
parlar	*parla-*	*parlada, parlament, parlabil* speak	
perfecter	*perfecte*	*perfectibil (replacing final −e with −i-)* perfec*t*	
predir	*predi*	*predibil* predict	

To find the root of the perfect or past tense, remove *−r* or *−er* . Then
    1. If the the word stem now ends in a vowel, simply add *−t.*
    2. If the word stem ends in a *d* or an *r,* change these to *s.*
    3. In the remaining cases what remains is the perfect (past) root.

4. Special forms not governed by the above rules are

ceder	*cess-;*	*seder*	*sess-;*
mover	*mot-;*	*tener*	*tent-;*
verter	*vers-;*	*venir*	*vent-.*

Now, the suffixes *–ion, -iv, -or,* or *–ura* are always added to the perfect root.

Thus	*crear*	*creat-*	*creation, creator, creativ, creatura*
	decider	*decis-*	*decision, decisiv*
	currer	*curs-*	*cursiv*
	opiner	*opin-*	*opinion*
	predir	*predit-*	*predition, preditor, preditiv, predibil*
	contradir	*contradit-*	*contradition, contraditiv*

So, most of the time Occidental derives an approximate international form by this method. But Wilfrid E. Reeve (1956) in the *International Language Review* suggested that if de Wahl used Latin infinitives (when corresponding variants existed in modern languages), and simply changed his rule 1. to read "If the word stem now ends in a vowel or *–c*, simply add *t*," he would get many more correct derivatives. If he further changed rule 2. to include additional cases in addition to endings in *d,r,* such as, ending in *-h* or *-g,* change to *-ct;* in *–b* change to *–pt;* in *-v* change to *–ut* ; and in *–ell* change to *–uls*. And adding to rule 4. the special forms *sentir – sens-; rumper – rupt-; nascer – nat-; poner – posit-; -mitter –miss; -verger – vers-,* he would get the maximal number of correct natural derivatives without major changes

De Wahl developed a list of about 50 affixes. He first published a book called the *Radicarium* which listed a basic set of roots to which affixes could be affixed to create additional words in the vocabulary. Many of these affixes are very close to Latin affixes and produce words very similar to their counterparts in the Euorpean languages. We have already seen *pre-, –bil, –ion, -iv, -ment, -or, -ura.* But there are others that are equally quite international, such as *–ia, –ist, -ario, -ic, -al, -da, -ario, –ero.*

But some seem of doubtful internationality. Errors occur in interpreting the meaning of an affix. For example, de Wahl lists two similar suffixes *–isar* ("to make", added to adjectives and nouns , e.g., *colonia > colonisar; cristall > cristallisar; demon > demonisar*) and *-izar* (of persons, "to act in the kind or manner of", e.g. *tyranno > tyrannizar; mastro > mastrizar* = "to act like a …"). In actuality these should be one suffix, *-izar,* meaning to transform something into …. while leaving the underlying essence unchanged <indicated by the root> and not "to make" which should be *-ficar.* *tyrannizar*= to impose tyrany on, which transforms a people's society, but leaves its people intact. *demonizar* would be to transform in one's perception of someone that he or she is a demon.

Another suffix is *–iera* = denotes "a *place* containing", e.g. *carbon-iera* = coal mine; *calce* = "lime", *calciera* = "lime kiln"; *oliviera* = "olive grove". Etymologically it means the agent or thing or location that renders produces, or works with or is associated with. There is no distinct international suffix that means specifically "something that contains". De Wahl confused containers with the fact that they render or produce what is contained. Furthermore this seems inspired by French *–iere,* which is just the grammatically feminine suffix for an agent or thing. It should be equivalent to the suffix *–era. -iere* denotes a *thing* that contains, e.g. *incr/iere = "inkwell". –iero* denotes a *holder,* *candel/iero* = "candle holder". In the natural languages all of these usages are dealt with by the corresponding languages' suffixes for agent or thing which renders, produces, works with: French *–ier, -iere;* Italian *–iere, -iera, -aio, -aia;* Spanish *–ero, -era;* Portuguese *–eiro, -eira.* De Wahl already had *–ero, -era* denoting professions, but the same suffix as previously in the respective languages, meaning agent or thing that works with, renders, produces.

But the natural languages do not have two or more sets of these suffixes. So this is an artificiality.

In summary, Occidental is a natural language based on what is international in the European languages. However, the rules of word selection and standardization were not always worked out, and a fair amount of subjectivity entered into the process.

Combined with these subjective aspects of word selection and the schematic manner of deriving the words with a fixed set of affixes, these procedures did not always yield forms of words that corresponded well to the forms of the corresponding words in the natural languages. Nevertheless it is a language that is readable at first sight by many Europeans. But there was room for improvement. Occidental is rightly considered as a major step toward an all natural language like Interlingua.

Patre Nor in Occidental.

Patre nor, qui es in li cieles.
Mey tui nómine esser sanctificat,
mey tui regnia venir.
Mey tui vole esser fat
qualmen in li cieles talmen anc sur li terre.
Da nos hodie nor pan omnidial,
e pardona nor débites,
qualmen anc noi pardona nor debitores.
E ne inducte nos in tentation,
ma libera nos de lu mal.
Amen.

Latino sine Flexione: Interlingua de Peano

We now turn to the next step in the evolution of international auxiliary languages toward a language with a completely natural vocabulary: Latin. Giuseppe Peano (1858-1932) was a famous Italian mathematician at the University of Turin and founder of the field of mathematical logic. He was involved with the movements of the then new international auxiliary languages like Volapük. But in 1903 he announced his work on developing an international auxiliary language based on the language of Classical Latin. He initially called it *Latino sine Flexione* or Latin without inflections. Inflections are affixes added to words to build onto or change the meaning or use of the word. Like de Wahl, he recognized the pervasive influence of Latin on the languages of Europe. But unlike de Wahl who based Occidental principally on international forms in the modern major European languages, Peano took Classical Latin and simplified its grammar. Later the name of *Interlingua* was given to the language, not to be confused with the *Interlingua* of this book developed by the International Auxiliary Language Association (IALA). Today to distinguish these two Interlinguas, Peano's language is sometimes referred to as *Interlingua de Peano* and the second one as *Interlingua of IALA*. I will use *Interlingua P* for Peano's Interlingua.

The vocabulary of Peano's Interlingua includes every Latin word common to English, French, German, Spanish, Portuguese, Italian, and Russian, as well as Latin and Greek. It also absorbs every Anglo-Latin word in the form of the Latin stem or root.

 If you don't know an Interlingua P word you can look it up in any Latin dictionary to get its meaning. The alphabet is exactly the same as the English alphabet. Latin spelling is used but Latin digraphs like *oe* can be simply written as *e*.

Peano's idea was that grammar should be the minimum possible. He decides what that is. Being a mathematical logician he could see what logically could be eliminated.   But that is not the same as what is natural in the modern languages. None the less, all grammatical elements not necessary like declension, i.e. the inflection of case, number, gender, of nouns, pronouns and adjectives; conjugation, i.e. the inflection of verbs to indicate person, number, tense, mode and aspect, are eliminated.

The grammar of *Interlingua de Peano* notes that every Latin dictionary shows two roots for any noun. For example, *rosa, rosae* = English "rose"*; pes, pedis* = "foot". The first form is the nominative, and

the second the genitive. Peano's Interlingua uses the second. (That is because in the modern languages many derived words were built on the Latin genitive and not the nominative form). Since endings of Latin nouns come in five declensions, I – V, and the genitive form for each differs, Peano "modernizes" them as follows:

Declension	I	II	III	IV	V
Latin Genitive	*-ae*	*-i*	*-is*	*-us*	*-ei*
Interlingua P	*-a*	*-o*	*-e*	*-u*	*-e*

	Latin Nominative	*Latin Genitive*	*Interlingua P*	*English*
I	*mensa*	*mensae*	*mensa*	*table*
II	*bellum*	*belli*	*bello*	*war*
III	*princeps*	*principis*	*principe*	*chief*
IV	*fructus*	*fructus*	*fructu*	*fruit*
V	*dies*	*diei*	*die*	*day*

Plurality is indicated by –s added to the noun, but omitted where other words indicate the number, e.g. *Matre habe filios et filias . Matre habe duo filio e tres filia.*

Nouns only used as plural forms in Latin can take the following endings:

    Latin: *arma*   Interlingua P*: arma,*   English: *arms*
    Latin: *nuptiae* Interlingua P: *nuptia* or *nuptias* English: nuptials
    Latin: *liberi*   Interlingua P: *liberos*   English: children
    Latin: *majores* Interlingua P: *majore* or *majores* English: ancestry

Like Classical Latin, there is no definite or indefinite article in Interlingua P.
Specifications are made by using *uno* (indefinite) or demonstrative adjectives and pronouns (definite).

Da ad me libro.	=	*Give to me the book.*
Da ad me hoc libro.	=	*Give to me this book.*
Da ad me illo libro.	=	*Give to me that book.*
Da ad me uno libro.	=	*Give to me a book.*
Leone es forte.	=	*Lions are strong.*
Hoc leone es forte.	=	*This lion is strong.*
Illo leone es forte.	=	*That lion is strong.*
Ferro es utile.	=	*Iron is useful.*
Illo es forte.	=	*That is strong.*
Hoc es forte.	=	*This is strong.*

Latin adjectives were made to accord with the gender and number of the nouns modified. There were three genders, masculine, feminine and neuter. Peano wished to eliminate grammatical gender. Peano took the Interlingua adjective I. from the nominative neuter: (a) keeping it unchanged when it ends in *–e;* (b) by changing it to *–o* when it ends in *–um;* II. in all other instances from the genitive form: (c) by changing *–is* to *–e.* So, most adjectives end in *–e* and some in *–o:*

Latin			Interlingua P	English
Masc.	*Fem.*	*Neutr.*		
bonus	*bona*	**bonum**	*bono*	*good*
liber	*libera*	**liberum**	*libero*	*free*
acer	*acris*	**acre**	*acre*	*sharp*
fortis	*forte*	*-*	*forte*	*strong*
celer	*celeris*	**celere**	*celere*	*swift*

The verb of Peano's Interlingua is obtained by dropping the *–re* from the infinitive of the Latin verb. For example, *illuminare* → *illumina* = "to illuminate"; *docere* → *doce* = "to teach"; *currere* → *curre* = "to run"; *dormire* → *dormi* = to sleep. Peano gave a few exceptions for frequently used verbs: *dic, duc, es, fac, fer, vol.* The infinitive of the verb was obtained by adding *–re* to the present form of the verb.

The past tense is not inflected on the verb. It is indicated by some other word. For example *Heri me manduca carne. = Yesterday I eat meat. Me jam ama illa. = I already love her. In 1492 Columbus discoperi America. = In 1492 Columbus discover America. Duo anno post nunc nos habe novo domo.*

= Two year after now we have new house. Duo anno post nunc nos i habe novo domo. = Two year after now we go have new house. Nos vol habe novo domo. = We will have new house.

There are two participles. These are special verbal forms that function as adjectives.
They are (1) **present participle**, formed by adding *–nte* to present form of verb.
(2) **Past participle**, formed by adding *–to* to an appropriate stem of the verb. Actually it is just slightly more complicated than this. Consider the verb *amar* = to love. Latin dictionaries frequently give forms of the verb in the order of (a) first person indicative *amo*, the infinitive, *amare,* the first person perfect or past tense, *amavi,* and the supine or past participle, *amatum*. This gives anyone who knows Latin all they need to know to derive all the other personal inflections of the verb. To get the past participle in Interlingua P, we only need to know the supine or past participle form: ***ama-t-um.*** Note that the past participle adds *–t-* to the stem of the verb *ama-*, followed by *–um*, which in late Latin was muting the *m* at the end of words. Practically all verbs in *–ar* follow this pattern of adding *–t-* to the stem of the verb, followed by *–o*.

However, to most Latin verbs ending in *–ere,* the past participle is not formed always by adding *–to* to the stem of the infinitive (the part remaining after removing *–re* but rather by adding *–um* to the stem of the past participle or the supine form (both have the same form) which is irregular. Actually the irregularity is the result of several centuries in early Latin of slurring regular past participles in *–ere* formed by adding *–t-* followed by *–um* or *–us.* But thousands of international words build on these irregular past participle stems. Edgar de Wahl tried to come up with a simple rule to change the infinitive form into a past participle that would yield derivatives with other suffixes. Peano sacrifices schematicism for internationality and recognizability, and says *use the the past participle or supine stem in Latin dictionaries and add -o* . For example:

Latin: *scribere (*To write): *scribo, scribere, scripsi,* **script**um. Interlingua P: *scriber, scribe, scribente,* **script***o. description, descriptive, subscription, prescription.*

Latin: *ludere* (To play): ludo, ludere, lusi, **lus**um. Interlingua P: luder, lude, ludente, **lus**o. delusion, delusive, allusion, illusion, illusive,

Latin: *frangere* (To break): frango, frangere, fregi,***frac**tum.* Interlingua P: franger, frange, frangente, **fract**o. infraction, diffraction, fractura

Ad filio matre es multo amante. = To son mother is very loving.
Amante matre da balneo ad filia. = Loving mother give bath to daughter.
Saltante per fenestra filio parti foras de domo. = Jumping through window son depart outside from house.

Camera calefacto es bono in hieme. = Room heated is good in winter.
Vir amato per suo uxore, etiam ama suo uxore. = Man loved by his wife also loves his wife.

The passive voice is made by the use of the verb *es* (to be) and the past participle.
Vir es amato per suo uxore. Illa es amato per suo vir. = Husband is loved by his wife. She is loved by her husband.
Passive voice.
      The passive voice is expressed by *es* followed by the past participle of the verb. *Littera es scripto* = Letter is written. *Filio es amate per matre* = Son is loved by mother.

Pronouns are as follows:

me	=	I, me	*nos*	=	we, us
te	=	thou, thee	vos	=	you
illo	=	he, she, it, him, her	*illos*	=	they, them

Feminine forms are allowed:

illa	=	*she, her*	*illas*	=	they, them (girls, women)

Possessive pronouns

meo	=	*de me*	=	my, mine.
tuo	=	*de te*	=	*thy, thine*
suo	=			his, her, hers, its, their, theirs

nostro =	*de nos*	=	*our, ours*
vestro =	*de vos*	=	*your, yours*

Reflexives

se	=	himself, herself, it, itself, self, themselves
se ipso =		one's self, themselves

Relative

que	=	that, which, what (thing, idea)
qui	=	who (person or persons)
quod	=	that, which
quem	=	what, which *(*object of verb)
utro	=	whether, whichever (of two)

Demonstrative pronouns

illo	=	that (it, she, him, her)
ce, hoc, isto =		this, these
illos	=	those
ipso	=	self
idem	=	same
tale	=	such
quale	=	such as

Interogative

qui?	=	who?
que?	=	which? what?

Indefinite

aliquo	=	some, some one
alio	=	other, else
altero	=	either, one but not the other of two
nemine =		nobody, no one
neutro	=	neither
nullo	=	not any
omne	=	all, every
solo	=	alone, single, one
toto	=	whole, all, entire
ullo	=	some, any
uno	=	one
utroque=		either, both of two

Adverbs

alibi	=	elsewhere	*dextro*	=	at the right
ante	=	*before*	*ergo*	=	therefore
bene	=	well	*heri*	=	*yesterday*
bis	=	*again*	*hic*	=	*here*
certo	=	*certainly*	*hodie*	=	*today*
cras	=	*tomorrow*	*ibi*	=	*there*
in fine	=	*at last*	*quia*	=	*because*
interim	=	*meanwhile*	*saepe*	=	*often*
ita	=	*thus, so*	*satis*	=	*enough*
iterum	=	*again*	*semper*	=	*always*
jam	=	*already*	*sic*	=	*so, thus*
male	=	*badly*	*sinistro*	=	*at the left*
multo	=	*much*	*subito*	=	*suddenly immediately*
nam	=	*because, for*	*tale*	=	*such, like*

nimis	=	*too much*	*toto*	=	*entirely, wholly*
non	=	*no, not*	*tunc*	=	*then*
nunc	=	*now*	*tuto*	=	*safely*
nuper	=	*lately, recently*	*ubi*	=	*where*
post	=	*after*	*ut*	=	*as*
primo	=	*at first*	*usque*	=	*till, up to*
quam	=	*as, than*	*valde*	=	*greatly, every much*
quando	=	*when*	*quasi*	=	*as if, almost, nearly*

Prepositions

ab	=	by, from	*in*	=	in, into
ad	=	at, to	*infra*	=	below, under
adverso	=	against	*inter*	=	among, between
ante	=	before	*intra*	=	within
apud	=	near	*juxta*	=	near, next to
circa	=	about	*ob*	=	on account o*f*
circum	=	around	*per*	=	by means of, through
cum	=	with	*post*	=	after, behind
de	=	of, from	*prae*	=	before, in front of
ex	=	from, out of	*pro*	=	for, on behalf of
extra	=	*outside, without*	*sine*	=	*without*
trans	=	*across, beyond*	*sub*	=	*below, under*
ultra	=	*beyond*	*foras, foris*	=	out, outside

Conjunctions

ante	=	*before*	*ne*	=	*no, not*
aut	=	*or*	*nec*	=	*nor*
cum	=	*with, when*	*nisi*	=	*unless*
		though,	*quam*	=	*as*
		whereas	*quando*	=	*when*
		since	*quasi*	=	*as if*
dum	=	*during, until,*	*sed*	=	*but*
		when, while	*si non*	=	*if not*
ergo	=	*therefore*	*tamen*	=	*however, nevertheless,*
et	=	*and*		=	*notwithstanding, yet*
etiam	=	*also, even if,*	*ubi*	=	*where*
		though	*ut*	=	*in order that*
nam	=	*because, for*			

Syntax

   Having a minimal grammar, no inflections for case, person, or tense, Peano's Interlingua depends more on word order, prepositions, adverbs and conjunctions to express meaning. Actually the order of words is almost the same as in English. The subject usually comes first in the sentence. The verb usually comes after the subject. Adjectives follow the nouns they modify. Adverbs follow the verbs they modify, but precede the adjectives they modify. Demonstratives and interrogative pronouns precede their nouns but relative pronouns follow the word(s) to which they belong.
Prepositions usually precede their nouns, but may be placed between a noun and its adjective.

Affixes

Affixes are taken from Latin and Greek in international usage. Their meanings are governed by modern usage in languages using them (often in slighty modified form). Affixes can have more than one meaning. And several affixes can have he same or similar meanings. Manuals do not explain the precise meaning of these suffixes, but use examples of use from English or other languges.

Suffixes		Examples	
Interlingua P	English	English	Interlingua P
-ism	*-ism*	*communism*	*communismo*
-ico	*-ic*	*electric*	*electrico*
-ido	*-id*	*horrid*	*horrido*
-ista	*-ist*	*feminist*	*feminista*
-ale	*-al*	*natural*	*naturale*
-ano	*-an*	*Mexican*	*mexicano*
-ario	*-ary*	*aviary*	*aviario*
-astro	*-aster*	*poetaster*	*poetastro*
-bile	*-ble*	*legible*	*legibile*
-elo, -ela	*-el*	*sequel*	*sequela*
-ore	*-or, -our*	*color*	*colore*
-tivo	*-tive*	*active*	*activo*
-oso	*-ous*	*famous*	*famoso*
-ato	*-ate*	*sublimate*	*sublimato*
-tore	*-er*	*maker*	*factore*
-tate	*-ty*	*quality*	*qualitate*
-tione	*-tion*	*declaration*	*declaratione*
-tia	*-cy*	*tendency*	*tendentia*
-tia	*-ce*	*elegance*	*elegantia*
-ia	*-y*	*biology*	*biologia*
-fica	*-fy*	*magnify*	*magnifica*
-esco	*-esque*	*Romanesque*	*romanesco*

Prefixes		Examples	
Interlingua P	English	English	Interlingua P
anti-	*anti-*	*anti-liberal*	*antiliberale*
auto-	*auto-*	*automobile*	*automobile*
auto-	*self-*	*self-taught*	*autodocto*
bene-	*well-*	*wellsaid*	*benedicto*
co-	*co-*	*co-operator*	*cooperatore*
dis-	*dis-*	*disjunct*	*disjuncto*
im-	*im-*	*impede*	*impedi*
in-	*in-*	*inscribe*	*inscribe*
inter-	*inter-*	*interaction*	*interactione*
mis-	*male-*	*misform*	*malforma*
pan-	*pan-*	*pan-american*	*panamerican*
pseudo	*pseudo*	*pseudonym*	*pseudonymo*
re-	*re-*	*reconstrue*	*reconstrue*
sub-	*sub-*	*subjacent*	*subjacente*
super-	*super-*	*supersede*	*supersede*

Summary: Peano's Interlingua P has a totally natural vocabulary because it is based on a simplification of Latin. But it's grammar is not completely natural. Like Classical Latin it lacks definite and indefinite articles, which, along with other simplified forms of its grammar, conveys the

impression of a pidgin language, i.e. a simplified auxiliary language based on Latin for non-Latin speakers—which it intentionally is.

Yet Latin's daughter languages, the Romance languages, all developed a need for definite and indefinite articles, English and German has them, so, one cannot say that this lack of articles is modern; rather it is closer to a primitive language. Still, one can discourse on sophisticated subjects in science and mathematics in Interlingua P, since its potential vocabulary is quite large. Some of its features, being unique to Latin, make it less international than a language based on Latin could be. The numerous Latin grammatical particles, like *hoc, illo, hic, etiam, ex, ab, idem, nemine, alio, utroque, bis, cras, ita, nam, nimis, nunc, quia, ut, valde, apud, ob, dum, etsi, adhuc,* etc. were replaced by other grammatical forms in the modern Romance languages and are not international other than in certain Latin phrases that per chance modern educated persons may have learned. But they are the glue that holds the language together, and this may make the language less immediately comprehensibile to millions of persons in the world today.

There are a few Latin words that are not immediately recognizable although they may be roots of modern words, e.g. *atele* (postage stamp) in "philately"; *bello* (war) as in "belligerant", "bellicose", "rebellion",that has been replaced in the major Romance languages by *guerra; cona* (to try); *stato de celo* (weather), F. *temps*, E. *tiempo*, I. *tempo,* to name a handful.

Example of Interlingua P

Scola (from *Academia pro Interlingua* (1931) *Key to and primer of interlingua.* London: Keegan-Paul, Trench, Trubner & Co.)

Nos veni hic pro stude e disce Latino. In hoc edificio de schola es plure aula, ibi scholare et magistro assembla.

Aula habe parietes, pavimento, tecto; in parietes es fenestras et portas. Ab fensetra luce, ab portas personas et res intra.

Dimensione de aula es decem (10) metro longo, septem (7) metro lato et quinque (5) metro alto.

Colore de pariete es citrino, de tecto cano, de pavimento fusco.

Nos sede super sedile ad tabula. Magistro non sede, sed ambula in aula. Super tabula nos pone libro, charta, graphio, penna, capsula, regula.

Colore de charta es albo, de graphio nigro; alio graphio es de colore rubro, ceruleo, viride.

Dimensione de penna, graphio, regula es tenue. Graphio es solo decem (10) centimetro longo i.e., decimo parte de metro.

Pro mensura de longitudine nos ute metro aut decimetro. Nos pote compara longitudine aut alio dimensione sine mensura illo in modo exacto. Nos vide e.g., que graphio es plus longo quam penmna, penna minus longe quam graphio; graphio rubro non es longe, sed curto, fenestra non es lato sed stricto, libro ceruleo es spisso, sed libro non es spisso sed tenue; porta es ne alto.

Patre Nostro
Patre nostro, qui es in celos,
que tuo nomine fi sanctificato.
Que tuo regno adveni;
que tuo voluntate es facto sicut in celo et in terra.
Da hodie ad nos nostro pane quotidiano.
Et remitte ad nos nostro debitos, sicut et nos remitte ad nostro debitores.
Et non induce nos in tentatione, sed libera nos ab malo.
 Amen

IALA's Interlingua

In 1919, at the end of the First World War, there was still considerable interest among the public, academics, and business leaders in the question of the universal international auxiliary language. In this year the Committee on International Auxiliary Language was set up. By 1922 a number of auxiliary languages, including those we have just surveyed, had been proposed and were recruiting adherents. In 1923 the Chairman of this Committee, Dr. Frederick Gardner Cottrell, a physical chemist and inventor of the electrostatic method for cleaning up smokestack emissions still in use today, and member of the International Research Council, considered vital that an essential agreement be reached among the various auxiliary language moviments on the form of the international auxiliary language so that it may be implemented by the leading nations. He approached Alice Vanderbilt Morris and her husband, Dave Hennen Morris, who was the American Ambassador to Luxemburg, about forming an organization to work toward that end. Mrs. Morris was an heiress of the Cornelius Vanderbilt fortune and moved easily in the circles of social, institutional and business leaders and wealthy patrons of social causes. She was also vitally interested in the international auxiliary language question, because she was an ardent Esperantist. She and her husband agreed to work to form such an organization.

In 1924 under the guidance of Mr. and Mrs. Morris, the International Auxiliary Language Association was formed with the endorsement of leading academics and corporate leaders. The aim of the Association was to "promote widespread study, discussion and publicity of all questions involved in the establishment of an auxiliary language, together with research and experiment that may hasten such establishment in an intelligent manner and on stable foundations,"(Cottrell, 1924, quoted in Esterhill, 2000). The intent was to remain neutral with respect to the various proposed auxiliary languages while trying to coordinate their efforts toward a common solution.

The professional linguists in academia already had the view that the Greco-Latin vocabulary of the languages of western Europe should be the foundation of the vocabulary of the auxiliary language. This was a vast vocabulary of many thousands of words that would be readily recognizable by speakers of these languages. There was no need to invent the vocabulary for an international language. All that was needed was to extract and standardize it.

Numerous leading academic linguists provided professional support to IALA. Among these were W. E. Collinson, a British expert on German philology and an Esperantist, who later was to become the first Director of Research at IALA. Others were Otto Jesperson (Copenhagen), Edward Sapir (University of Chicago), C. K. Ogden, Morris Swadesh, Guiseppi Peano, Roman Jakobson, to name a leading few.

IALA began a number of basic studies. Funding was provided by the Research Corporation and the Rockefeller Foundation as well as by the Morrises and other wealthy patrons known to them. IALA sponsored research on language learning with E. L. Thorndike's *Progress in Learning* (1927), which was followed by Stephen Duggan's *Preliminary Investigation of the Teaching of Auxiliary Languages in Schools* (1927). Helen S. Eaton's *General Language Course* was also published in 1928, 1929. Research by W. E. Collinson (1937) and E. Sapir and M. Swadesh (1930, 1932) also was supported.

In 1935, The Committee for Agreement was formed under the chairmanship of Albert Debrunner (Berne), W. de C. Buning (The Hague) and William Collinson (Liverpool). Later J. Vendryes (Paris), N. Wijk (Leiden) and Alice Vanderbilt Morris joined the Committee. The aim was to obtain a compromise between various synthetic languages by putting into effect the *Plan for Obtaining Agreement on an Auxiliary World-Language* (1936) developed by IALA at several conferences.

Despite all these hopes for a compromise, none was forthcoming, because of the entrenched unwillingness to compromise on the part of the rival international auxiliary language moviments.

Faced with that opposition to reaching an accord, IALA decided to go it alone and do its own work on extracting the international vocabulary from the modern languages of Europe.

So, in 1936 IALA began this work at the University of Liverpool in England, with support by a grant from the Rockefeller Foundation under direction of Professor William E. Collinson. Professor Collinson was an academic expert on German philology and an Esperantist. A staff of linguists were assembled to represent different language backgrounds. In 1938 Ezra Clark Stillman, who had an M. A. degree in English from the University of Michigan and was a close associate of Mrs. Morris, joined the Committee for Agreement and succeeded Dr. Collinson as Director of the Technical Staff of linguists at Liverpool as World War II was about to begin.   Stillman was born 24 October 1907 in the small mining town of Eureka in central Utah. His father was Charles Clark Stillman, the Baptist minister of Eureka at that time and later Director of School Administration at Ohio State University, honored later by a building being named after him on the campus.

But the Second World War broke out in spring of 1939. Wisely IALA disbanded its research staff and moved the vocabulary research from Liverpool to New York. The Germans heavily bombed Liverpool later that year and the secretary for the British research staff was killed in the air raids. As fortune would have it Stillman was already in New York when this move was made and was able quickly to set in motion the assembling of personnel in the new site.

Stillman had the sense that the Committee for Agreement wanted the work to be conducted in as objective and scientific a manner as possible. It was felt that acceptance by academic and government leaders would depend on the intellectual integrity and utility of the results. As a result Stillman would only hire professional linguists without prior associations with any of the prior auxiliary language movements, depite the fact that Stillman was himself a well-known Esperantist poet
and Mrs. Morris was an Esperantist still imbued with the idea of schematicism.
Stillman also had learned from his work with the linguistic staff at Liverpool that there was a way one could do the work in an objective manner. He needed linguists who would be committed to such aims.

At Teacher's College of Columbia University in New York City, Helen S. Eaton was a Research Assistant of E. L. Thorndike of Teacher's College, Columbia University. She was in charge of a research project sponsored and funded by IALA. There already had been published lists of frequency of use of words in English, German, French, and Spanish, respectively. What was needed (especially for those developing dictionaries between these languages) was a list of the most frequent meanings common to these languages, compiled against the words in the frequency lists of the respective languages. Unfortunately the words in the individual language lists did not come with definitions. So, what was needed to check the meanings in the correlated lists was persons who knew well, besides their own native languages, two of the other languages.

Among the three language experts she hired to do the checking was a new Ph.D. , Dr. Alexander Gode-von Aesche, who received his Ph.D. at Columbia University in 1939 in German philology with specialization in the scientific writings of Johann Wolfgang von Goethe. Alexander Gottfried Friedrich Gode-von Aesche was born in 1906 in Bremen Germany, the son of Heinrich Gode (a German businessman) and Anna von Aesche (a Swiss). With a bilingual family he was multilingual from childhood. He studied language at the University of Vienna and the Sorbonne in Paris. In 1927 he immigrated to the United States and obtained an M.A. in languages from Columbia University in 1929. He also became an American citizen. From 1933 on he worked on and off on various projects of the International Auxiliary Language Association, but was not associated with any interlinguistic system. He taught German and Romance languages at Columbia University from 1934 to 1939. By then he was fluent in English without a noticeable accent. Not only did Dr. Gode contribute to checking the meanings in German, French and Spanish, in the correlated lists for Helen Eaton's study, he also proof-read the manuscript for her book *Semantic Frequency List* which was published in 1940 by the University of Chicago Press and issued by the Committee on Modern Languages of the American Council on Education. This book was used in determining the core vocabulary for the *Interlingua-English Dictionary*.

Thus it was in 1939 that Helen Eaton recommended Dr. Alexander Gode (he dropped his mother's surname) to E. Clark Stillman, to be his assistant in the new research offices of IALA in New York

City. At first Stillman was suspicious because Gode had worked previously on various projects of IALA. Was he an advocate for one of the existing auxiliary languages? Eaton pointed out that he was not, that he only worked on general basic research for IALA. He was hired. But we must wonder if Interlingua would ever have come to fruition if Stillman had not hired him. Dr. Gode often is credited with developing Interlingua, but he claims that everything he learned about interlinguistics came from E. Clark Stillman. Gode occasionally said that he was the midwife of Interlingua and not its parent.

One of the first projects assigned to him was to study the grammatical particles (little grammatical words) of English, French, Italian and Spanish/Portuguese to find a set of international particles for an auxiliary language. For example, *a, mais, de, alcun, pois, depois, aquelle, ille, etc.*. Unfortunately the study was doomed to fail to achieve its aim, since only three Romance languages were among the four languages. English could not contribute more than a handful to this list, because its particles were almost all Germanic in orgin, but dissimilar to German and Russian. The criterion of internationality for eligibility to enter the list was three languages with a common prototype. If any one of the three did not agree with the other two, then no solution was possible. And Gode was only able to find 73 international grammatical particles.

A list of about 185 particles was needed. Stillman, with Gode's concurrence, decided instead to use a list of Latin particles quite similar to those used in Peano's Interlingua. But if Stillman and Gode had considered searching the minor Romance languages, they would have found one or two needed variants to join with variants in the major Romance languages and thus would have found a complete list of necessary particles. About 4 years later IALA modified their methodology in connection with the general international vocabulary to allow for supplemental searches of German and Russian when 3 variants were not available from the four Anglo-Romance languages. This method justifies the use of additional minor Romance languages (the only other possible source of international grammatical particles consistent with the original four languages) to find eligible variants for particles. Thus the purely Latin particles selected by Stillman and Gode are inconsistent with the rest of the methodology used to determine the rest of the international vocabulary. In this book a complete set of international Romance particles determined by methods and principles used to establish the rest of the international vocabulary is taught.

From 1940 to 1943, IALA continued to work on developing its methodology.   IALA collaborated with two linguists, one at Ohio State University and the other, a Spanish teacher in a high school in Columbus, Ohio who was working on an auxiliary language along objective lines similar to those IALA was pursuing. By 1941 Gode had been promoted to Assistant Director of Linguistic Research under Stillman.

Between 1940 and 1943 Stillman and Gode worked on developing a manual to guide the work of the linguists at IALA in determining the eligibility and form of words in the international vocabulary. The manual came in two type-script volumes, with the title of *Interlinguistic Standardization*.   Only Volume I, which concerns methods for determining eligibility and form of words in the international vocabulary is still known to exist in a collection of materials under Dr. Gode's name, at the library of the State University of New York at Albany. I have obtained a copy of this first volume. Volume II concerned the grammar for the international auxiliary language to be developed. This second volume is now lost although a copy may exist among materials of IALA archived at the New York City Public Library. With the manual completed, work on extracting and standardizing the international vocabulary began in earnest. In 1942 Stillman left IALA to work for the State Department, leaving Dr. Gode the Acting Director of Research with 5 professional linguists under him by 1945. According to the *General Report of IALA* for 1945, some 20,000 standardized words in the international vocabulary had already been determined.

In 1945 fundamental decisions were still to be made. The decision of whether Interlingua was to be a purely naturalistic language, like Peano's *Interlingua* or one that involved some degree of

schematization, like Occidental or, to a higher degree, Esperanto, was not yet settled. And a push was needed to publish a 10,000 word dictionary for the international language and promote the language.

   At this point Dr. Gode did not have a high degree of professional visibility in the academic world. Mrs. Morris needed someone with greater academic stature to finish the work, produce the dictionary, and present the final product to the world. So, in 1946 she hired Prof. André Martinet from the Sorbonne in Paris to be the Director of Research. But she stipulated to him that Gode , who stayed on part time, was still to be in charge of the staff of linguists in their work, and that the vocabulary, if schematized, was to be based on the naturalistic vocabulary. Gode took a full-time position as Editor of Reference works at the publishing house of T. Y. Crowell Company where he helped prepare *Roget's Thesaurus* and *Bullfinch's Mythology* for publication. That experience would help him later in quickly preparing the *Interlingua-English Dictionary* for publication. In 1946 he founded his own publishing firm, Storm Publishers, Inc., which published not only the *Interlingua-English Dictionary* and *Interlingua Grammar* but his own translations of other works.

Mrs. Morris herself worked at IALA on methods of schematization and regularization with her assistant Hugh Blair, who knew several schematic auxiliary languages. This reflected her earlier involvement with Esperanto. The *General Report 1945 of IALA* described 3 variations for the international language: (1) a naturalistic, purely prototypic variant, with often several affixes with the same meaning, such as *–al, -il, -an* and *–ic; -icar,* and *-igar* ; (2) a minimally regularized variant; (3) a more schematic, regularized variant like Ido. In the more regularized variants the occurrence of several affixes with the same meaning was regularized by chosing one form for the affix with this meaning.

All variants were based on the international vocabulary, eliminated personal inflections on verbs, used *-s* for the plural, and had no requirements of agreement in number or gender between nouns and adjectives.

Examples of each of these variants is as follows:

Naturalistic
Le unitate que permitte de agere in commune pro le bene commune et contra le periculo commune es le sole methodo effective per que, in tempore de pace, le nationes que ama le pace, pote mantenere et guarantire securitate et progresso bene regulate, cum libertate et justitia.

Schematic E model with minimum regularization
Le unita' kel permise action commun por le bono comun e contra le periculo comun es le sole metodo efective per kel, in tempore de pace, le nationes kel ama le pace pote guarantir se securita' e progreso ben regulate, con liberita' e justitia.

Schematic K model with medium regularization

Le uneso kel permise komune akciono por le comune bono et kontra le comune perikulo es le sole efektive metodo per kel in temporo de paco, le nacionos kel ama le paco pote guarantire se bene regulate sekureso et progreso, kon libereso et justicio.

Upon arriving at IALA in 1946 André Martinet began work on assembling a 10,000 word dictionary and preparing a survey of opinions regarding preferences for four variants of the international language to be completed. The four variants, P, M, C, and K, were divided into two groups. The first group, P and M, emphasized accord with the etymological prototype of each word. *P* (for Peano) gave prototypes in their classic form, whereas M (modern) used the same vocabulary but in a more modern form. The second group, C and K, permitted schematization, with C based on Occidental (Martinet's preference), and K modelled on a more schematized language like Esperanto or Ido, but based on the

international vocabulary. The following are examples of segments from texts in each of the four variants shown in the survey:

P temas postale de le diverse pajeses, esseba le prime
M temas postal   del diverse paises, esseva le prime
C temas posta   del diverse paises, esseva le prime (unime)
K temi postale del diverse paisi,   estaba le une

P mundiale organisatione intergubernamentale. Quando ille esseba
M mundial   organization intergovernamental. Quando il   esseva
C mundial   organisation intergovernamental. Quando elo esseva
K mundiale organizo   intergovernamentale. Quando id estaba

P formate, le problemas que le confrontaba   pareba   complexe
M format,   le problemas que le confrontava   pareva   complexe
C format,   le problemas que lo confrontava   pareva   complexe
K formate, le problemi kel   konfrontaba id parecaba komplexe

P et difficile,   sed su successo habe essite sic con-
M e difficile,   ma su success have essit   tan con-
C e dificile (desfacile), ma su successe ha   esset   tan con-
K e desfacile,   ma sue succeso ha   esta   tan kon-

In 1947 Martinet sent the survey to 3000 linguists and others throughout the world interested in the international language. They were asked to indicate their preference among the four variants. The results indicated that the respondents had decisively rejected variant K , the form preferred by Mrs. Morris. Variant C had some support but this was less than the combined support for the more etymologically based groups P and M. The conclusion to be drawn from this was that a language between variant P and M was the most preferred.

In September of 1948 Martinet managed to obtain a position on the faculty of Columbia University. But he wanted to continue working part time at his position at IALA. He went to Mrs. Morris with the request that he be paid at IALA at the same salary level he was to be paid at Columbia. Mrs. Morris at this time was ill with cancer. Her son was Treasurer of IALA and wrote Prof. Martinet a letter that his request was unacceptable (Esterhill, 2000). Prof. Martinet then resigned as Director of Linguistic Research. By coincidence, Alexander Gode was also preparing to come to Mrs. Morris with his resignation. He had been offered a position on the faculty at Vanderbilt University. When he arrived, he learned of the situation with Martinet and was offered the Directorship, now open. He took advantage of the situation to demand a free hand without interference in developing the final version of the language along lines Stillman and he had originally developed and which had been rendered by the professional linguists. He must have also asked for a good salary. Mrs. Morris was in no position to refuse. Her life's work would see no fruit if she could not get someone thoroughly familiar with what had been accomplished up to that point to complete the work. Dr. Gode was reinstated and began rapidly to prepare the final dictionary, this time of 27,000 words. Forms that Martinet had preferred, seemingly on the lines of Occidental, were replaced with the original prototype forms, but modernized in a manner between P and M.

Dr. Gode's preference for the etymologically–based prototypes reflected his judgment as a professional linguist, that Interlingua had more to offer in that form than as just another auxiliary language, which would have to find converts to justify its existence, which was the problem facing all constructed auxiliary languages. The vocabulary of Interlingua was, after all, an objective, systematic

extraction and standardization of the international vocabulary in the major languages of Europe. It could be read by speakers of Romance languages practically at sight. As such it could stand alone whether or not it was chosen by governments to be an international auxiliary language. It could be of academic intellectual interest. And teachers of modern languages in the elementary and secondary schools could find it a useful introduction for students to modern languages. Europeans and people in the Western Hemisphere could regard it as their common linguistic heritage. English teachers would welcome the knowledge it could give students of Latin word families and the basic verbs and their meanings on which these families were based. More would generalize from knowing Interlingua than from knowing Classical Latin. And it would be quicker and easier to learn than Classical Latin or any modern Romance language. Students could easily learn then transfer what they learned of Interlingua to reading and learning the Romance languages. Interlingua was a bridge to the Romance languages. It was a bridge between the modern languages and the vast number of Latin, Greek, and Romance words in the modern languages, making transparent the meanings of words often opaque without knowledge of how they were derived or the verbs on which they were based.

   Mrs. Morris died of cancer August 15, 1950. Funding for completion of the *Interlingua English Dictionary* was ended. But Gode assumed the costs, and hired Hugh Blair, Mrs. Morris's assistant to assist him in completing the dictionary and writing a Grammar to accompany it. He published the *Interlingua-English Dictionary* and the *Interlingua Grammar* through his own publishing company, Storm Publishers, in 1951.

   At this point, we need to emphasize again that Interlingua is not an invented language. The developers of Interlingua did not have the free hand of the inventor to change anything according to their whims. It is an objectively extracted and systematically standardized natural language based on an existing phenomenon in the languages of Europe. The emphasis on "objective" means that there can be no reforms of the language not sustained by linguistic evidence based on the source languages. Dr. Gode made it clear in numerous writings that interlingua was not developed with a prior concept of what was desirable in a language for international communication. In a paper read at the 1954 meeting of the Modern Language Association in New York City, he said: The spell of the idea that interlinguistics is concerned with the definition of linguistic functions and the subsequent provision of efficient structural devices for their operation was totally discarded in the theory of Interlingua…. In methodological terms this signifies that the linguistic system now in use under the name of Interlingua was codified on the basis of observed forms and never by a process of supplying forms for functions previously analyzed and judged to be desirable…. The task of the interlinguist on this basis turns out to be the search for an objective methodology whereby a visualized pan-Occidental Interlingua can be put down on paper. I may note here in passing that to my mind it is not possible to doubt the reality of the idea of Interlingua -- if this somewhat paradoxical formulation is permissible. It is only possible to attack the methodology employed in the codification of Interlingua and condemn it as inadequate. In other words, it is not possible to improve the visualized reality Interlingua by extrinsic additions; it is only possible to ask and search for more refined devices which would permit the putting down on paper of a more perfect concrete likeness of the visualized idea." And in a reply to an Esperantist's criticism of Interlingua in the International Language Review, he said "The question of ease—of regularity, of 'logic', etc. —never occupied a place in the conception of interlingua. It is as easy as it is. We can be pleased to find that it resulted in being easy, but what we feel about it is not important, because, there is nothing that we can do in one way or another about it."

There are three principles on which the objectivity of Interlingua's extraction and standardization is based:
   1. *Eligibility of International Words.* According to the Introduction to *The Interlingua-English Dictionary,* "A word is eligible to enter the international vocabulary if it occurs—with corresponding

meanings and in forms deviating from etymological identity by nothing more than a meaningless difference in affix—in the current or historical vocabulary of at least *three* of the source languages, Italian, Spanish/Portuguese, French, and English and also German and Russian; it carries with it all formations differing from it in both form and meaning by the addition or omission of a "normal" affix, provided such formations occur in at least one of the units listed."

    2. *Form of International Words.* According to the Introduction to the *Interlingua-English Dictionary,* "The form under which a duly admitted word enters the international vocabulary is the *prototype* or *nearest* documented or theoretical *ancestor form* common to *all* its variants as well as to the stems of their derivatives in the contributing languages. It is determined in such a way that its variants in the source languages and the stems of their derivatives deviate from it only in accordance with the characteristic behavior of the languages they represent.   However, the resultant form must never be conditioned by a trait restricted to one single contributing variant," as long as excluding that variant's feature from determining the prototype does not reduce the number of variants remaining below three. Another way of putting it, is that the prototype is the common cause of the similarities in form and meaning between the variants in distinct languages. What is unique to each variant is due to accidents of historical change specific to the source language in question. We will discuss this with illustrative cases in a later chapter.

    3. *Grammar.* The grammar of Interlingua is "the minimum or simplest possible system fit to govern the use of the chosen vocabulary in coherent speech". A minimum grammar shall not permit the suppression of any grammatical feature which according to *all* the source languages is indispensable in governing their vocabularies. "In other words, every grammatical feature which is encountered in all source languages shall be retained, or negatively, no grammatical feature shall be retained if it is missing from as much as one of the source languages." This rule allows for an objective determination of minimal grammatical features without any prior presumption of what is desirable in detail in the grammar.   The grammar is dependent on the forms of words and their affixes already in the international vocabulary and the usage of the source languages.

How to learn Interlingua

In my book *Interlingua Grammar and Method,* I give you the basic grammar of Interlingua, beginning with pronunciation and spelling, followed by chapters on nouns, adjectives and pronouns, then verbs and adverbs, prepositions and numbers and dates. This is followed by a chapter on word formation. But since you are learning this on your own, we will emphasize reading. We will have texts in Interlingua followed by English translations for you to read. But we may give you some texts to translate. Sitting down with an English-Interlingua dictionary (available on the Web) and an English text to translate––a poem, a newspaper article, or excerpts from a book chapter––is the fastest way to learn Interlingua. English speakers often are able to write a full paragraph in Interlingua after a week or two of study. Some with background in several Romance languages and Latin have amazingly done it overnight. You will discover that Interlingua is like a dialect of English (or visa versa) and often you can substitute a word in Interlingua that is very similar to a word in English and go on your merry way. There are sites in the internet where beginners meet other beginners and experienced Interlinguaists and exchange messages. Some Interlinguaists communicate verbally using Skype in the Web. This will help you to learn Interlingua also.

    You have already learned that you know a lot of Interlingua already, even without studying it. For the most part the international vocabulary consists of similar appearing words that occur with the same or nearly the same meanings in at least three of the major European languages: English, French, Italian, Spanish/Portuguese (treated as a single language), German and Russian. The form of an Interlingua word is the *prototype*, the

theoretical or historically documented form from which each of the variants of the word deviate in ways characteristic of their languages. Interlingua roots and affixes are standardized across all variants of these in derivational series of thousands of words. These prototypes can usually be determined in an objective and systematic way. But as a beginner you need not worry about doing this yourself. Just accept the fact that much of the work in establishing the forms of the international words has been done. In a final chapter of my book *Interlingua Grammar and Method* I discuss for those who care to know, the principles by which the international vocabulary was extracted and standardized. But knowing this is not essential to learning to use the language.

The book by me referred to above is the following:
Mulaik, Stanley A. (2012). *Interlingua Grammar and Method*. Charlston, SC: Create Space. 377 pages.

The book is available at Amazon.com for $18.95, but you may find a discounted price at other book sellers.