

Creating New Abilities with Language

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Abstract

This article explains how new abilities are acquired when speaking a language that I call the Soral language. The language is created with the aid of computer technology that organizes the words in a way that enables our brain to attach meaning to the sound of the words. The following abilities are acquired when speaking the language.

1. The ability to understand the meaning of words that have never been heard before or seen in a book.
2. Improved ability to recall words from memory.
3. Larger vocabulary.
4. Improved conversational skills.
5. Improved understanding of the meaning of words.
6. Ability to understand medical and other technical terms without formal training.
7. Ability to learn the language more easily than other languages.

Words in the Soral language are created by entering words in one of our existing languages into the computer program, then clicking buttons which are hyperlinked to other pages containing more buttons. Each button describes one characteristic of the entity that the word represents. A letter is assigned to each characteristic. By clicking on several buttons in succession a word is created that has a sound that represents the characteristics of the entity that the word represents. Speakers of the language can understand the meaning of words by the sound of the word. It is proposed that the Soral language should be adopted as a universal language.

Keywords: universal, universal language, language, international language

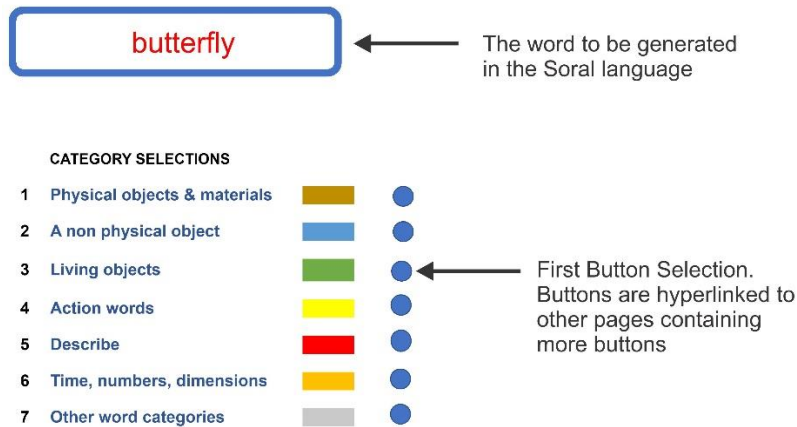
Introduction

Advances in telephone, radio, television, transportation (especially air transportation) have enabled anyone in the world to communicate with anyone else in the world. This has led to more and more people engaging with people whose native language is different from their own native language. Politicians must communicate with people in other countries through interpreters and within their own country with people whose native language is different from the speaker. Barriers to communication exist because one language group cannot speak directly to other language groups. The proposed solution is to create a universal language which is learned during childhood as a second language in the populations of participating countries. The Soral language is created with the help of a computer program that creates new abilities for speakers of the language. This article explains how and why the properties of the Soral language make it well suited to be a universal language.

I think it is generally assumed that we cannot change the way our brain works. But this article shows that it is possible to change the way our brain works when processing conversation. It is done by speaking a specific language, the Soral language. The Soral language has a structure that enables users of the language to acquire new abilities.

Method

I have used Visual Basic for Applications (VBA) programming language to write the code to program a Microsoft Excel spreadsheet. Words are generated in the Soral language by clicking buttons that are hyperlinked to other pages that contain more button choices. The text adjacent to each button describes one characteristic of the word being created as illustrated in Figure 1 which shows a portion of the opening screen of the computer program. The first button is selected from a group of broad characteristics. In this example, I am creating a word for butterfly in the Soral language. A butterfly is a living object, therefore the first selection is the third category which is green color.



Figures 2, 3, 4 and 5 illustrate the buttons that are clicked to generate the word butterfly in the Soral language. When the user selects the last button labeled Butterflies, a new page is displayed showing the category Butterflies illustrated in Figure 6.

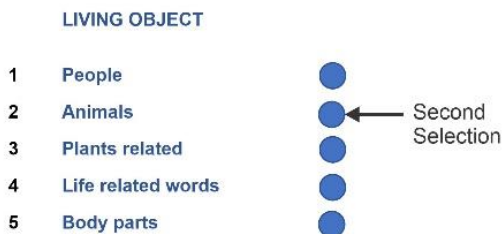


Fig 2
Second Button Selection

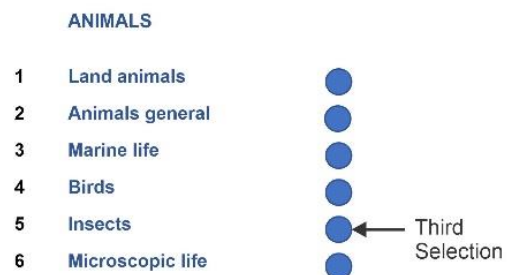


Fig 3
Third Button Selection



Fig 4
Fourth Button Selection



Fig 5
Fifth Button Selection

CATEGORY			
Butterflies			
Item Name	Property Name	Suffix Letters	Word Name
monarch	soflo	b	soflob
painted lady	soflo	cal	soflocal
swallowtail	soflo	mr	soflomr
jersey tiger	soflo	ra	soflora
cabbage butterfly	soflo	t	soflot
morpho butterfly	soflo	ral	sofloral
butterfly	soflo		soflo

Fig 6
Category Butterflies

The category Butterflies contains the word butterfly plus a list of butterfly varieties. The method generates the word soflo which is the word for butterfly in the Soral language. The word soflo is called the *property name* because the letters create a unique sound for the word butterfly. The *property name* forms the first part of every word in the category Butterflies, and is familiar to speakers of the Soral language, just as the word butterfly is familiar to speakers of the English language. Suffix letters are added to each of the butterfly varieties to give these words a distinct name. A suffix letter is not added to the word butterfly.

How the Soral Language Creates New Abilities

This section explains how speakers of the Soral language acquire new abilities. These abilities are an inherent property of the language and are automatically acquired by speaking the language.

Ability #1. The ability to understand the meaning of words that have never been heard before or seen in a book.

The *property name* is built into every word of the Soral language. Speakers of the language are familiar with the sound of *property names* because these are words that are used in everyday conversation. I will use the butterfly example to illustrate the difference between the English language and the Soral language. English speakers are familiar with the word butterfly but may not be familiar with a word like jersey tiger, swallowtail, morpho or painted lady. If these words are used during a conversation, they would not be understood by most people because, unlike *property names*, they are seldom heard in conversation. But in the Soral language, words like soflora, soflomr or soflocal would be recognized as being some kind of butterfly because of the sound soflo, which is the word for butterfly in the Soral language and is built into these words. This is how the Soral language is able to understand more words than the English language. The *property name* soflo will not identify a specific kind of butterfly, but in most situations the listener is primarily interested in understanding what the speaker is talking about and does not need to have detailed knowledge about the words within the category. Speakers of the Soral language can understand the meaning of words they hear or read for the first time because the language enables these speakers to understand the meaning of *property names*. Soral speakers can understand more words than speakers of other languages, and this makes Soral speakers more knowledgeable.

Ability #2. Improved ability to recall words from memory.

There is much we don't know about the process of recalling words from memory, but we do know it is helpful to be given a clue of some kind about the item being recalled. For example, if we are given the first one or two letters of the word, this is usually all that is necessary to recall the word from memory. Using the butterfly example, an English speaker who is trying to recall the word swallowtail knows that it is a butterfly, but that is not helpful to recall the word swallowtail because swallowtail does not sound anything like butterfly. Therefore, the English language is not able to provide clues that are helpful in recalling words.

Compare the Soral language to the English language. The Soral speaker is trying to recall the word *sofplomr* which is swallowtail in the Soral language. The person knows that the item is a butterfly. Since all words in the Soral language begin with the *property name*, the Soral speaker knows that the first five letters are *soflo*. This narrows the search field to the list of names in the category Butterflies, which is a smaller search field than the English speaker who does not have any help with recalling the word. For this reason, I believe that the Soral language can recall more words than the English language.

Ability #3. Larger Vocabulary

There are two ways that a speaker of the Soral language will acquire a larger vocabulary merely by speaking the language. The first way is by recalling more words. As discussed under ability #2, speakers of the Soral language can recall more words because the *property name* provides helpful clues about the sound of the word being recalled. If you can recall more words, you acquire a larger vocabulary.

The second way that speakers of the Soral language acquire a larger vocabulary is by recognizing the meaning of words by the sound of the word. This ability of the Soral language gives speakers of the language an additional method of learning new words. Speakers of our current languages learn new words typically by listening to how words fit into the context of a conversation. If a word is consistently used in a certain way, it is then possible to draw a conclusion about its meaning. But there are many words that we hear very infrequently or perhaps only one time. We need to look these words up in a dictionary to discover their meaning, but we seldom take the time to do that, hence these words never become part of our vocabulary. But speakers of the Soral language will understand the meaning of these words by the sound of the words and thereby acquire a larger vocabulary. It is somewhat like having a dictionary in our brain that is available 100% of the time. Soral speakers will acquire a larger vocabulary because (a) they can recall more words and (b) they can recognize the meaning of words by the sound of the words.

Ability #4. Improved conversational skills.

If you have a larger vocabulary, you can use a wider selection of words to express what you want to say. People on the other side of the conversation who are also speakers of the Soral language will understand what is being said because they also have the same abilities as the speaker. It follows that speakers of the Soral language will enjoy a more enriched level of conversation.

Ability #5. Improved understanding of the meaning of words.

The Soral language has a structure that resembles a tree, where words are located at the end of the branches and letters are located at the intermediate branches between the trunk of the tree and the end of the branches as illustrated in Figure 7. Words that are located on branches close to each other will have similar sounds, and the meaning of those words will be similar because many of the letters in the words will be the same. For example, the six categories shown as dots under the letter O in Figure 7 will have similar characteristics to butterflies and will have a similar sound. These categories might include beetles, flies, gnats, and mosquitos and they will all have a similar sound because they contain the letters SOFL. The fifth and last letter can be any letter of the alphabet except the letter O which identifies butterflies. Elephants will follow a different path from the trunk of the tree and will have a different sound. The first letter S is the only letter that is common to both butterflies and elephants because they are both living objects. The tree-like structure helps to explain why words with similar sounds have similar meaning. Our existing languages are unable to do that because the words in our languages have evolved randomly with no attempt to link the sound of words to the meaning of words. The tree-like structure of the Soral language provides a better understanding of the meaning of words.

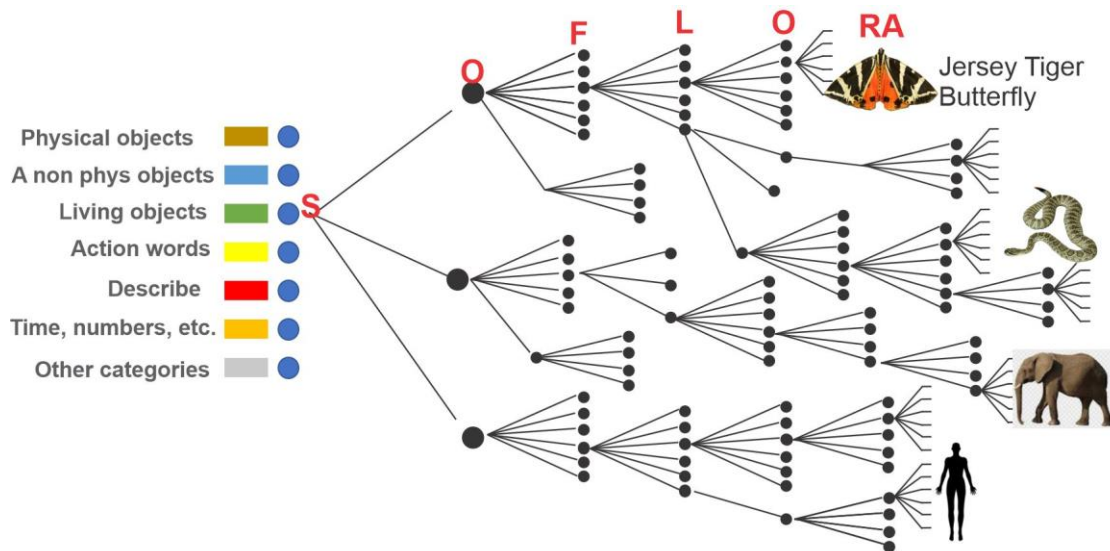


Fig 7
Structure of the Soral Language

Ability #6. Ability to understand medical and other technical terms without formal training.

The ability to understand the meaning of a word by the sound of the word enables the Soral speaker to understand technical terms used in fields such as the medical profession. For example, each of the letters in a medical word can represent one characteristic of a medical condition. Speakers of the language will become familiar with the sounds of medical words that they hear on radio and television and read in books and magazines and will recognize that a particular sound means a particular type of medical condition. The letters in a medical word can identify the location of the medical condition in the human body; whether the condition is a virus or whether the condition is an injury and more. This feature can enable people to understand medical language without being trained in the medical profession. Other technical fields such as auto mechanics, aerodynamics and climate can benefit by choosing the letters of the words to represent the characteristics of the meaning of the word. Our existing languages cannot do that because the words used in technical fields were chosen randomly.

Ability #7. Ability to learn the language more easily than other languages.

The construction of the Soral language illustrated in Figure 7 is helpful in learning the language because students can visualize how the language is put together. The visual image also helps to understand why words sound the way they do and why words with similar meaning have similar sounds. We are not able to make this type of visualization with our existing languages because words have been chosen arbitrarily.

Implementing a universal language in a population

Implementing a universal language requires agreement that a universal language is a worthwhile goal and is achievable. Governments have an important role to play to obtain coordination among participating countries. People are needed with the necessary skills, such as computer specialists and people to organize the categories that define the characteristics of each word. Testing is required to verify that the language satisfies the needs of users in participating countries who speak a variety of different native languages. The program needs the full support of the public, therefore public discussion is needed to explain the benefits of implementing the language. Finally, there needs to be education in schools and a program to familiarize the public with the language.

International Involvement

It is very important to have the full involvement of the participating countries to ensure that the language is not biased in favor of one country. This can be accomplished in the software which is adaptable to accommodate language groups that may have different preferences for composing a sentence. All language

groups have an equal opportunity to contribute to the development of the Soral language and create a blend of all the languages. More discussion about how this is accomplished in the software is presented in Appendix A.

Competition Among languages

In the commercial world, the company that produces a better product is the company that grows, and the product becomes widely used. There is also competition among languages. If a language can provide more abilities and enable a population to become more capable in achieving their desired endeavors and generally improve their lives, it is reasonable that the language will become widely used, which is the ultimate objective of a universal language.

Using the Soral language

How would the experience of speaking the Soral language be different from speaking our existing languages? Our existing languages have evolved over thousands of years and the words were arbitrarily given a certain meaning. We must rely on our memory to connect the meaning to the words. In the Soral language, the sound of the word conveys the meaning of the word, therefore the user has an additional way of understanding the meaning of words. This is a different experience compared to our existing languages. The structure of the Soral language enables our brain to associate similar sounding words with similar meanings, thereby enabling the user to make more mental connections with other words, and this creates a further difference in experience for the speaker and the listener. Data is not available to verify the exact nature of these effects, but I believe that these differences will provide a richer and more meaningful experience. I also believe that there are more properties and benefits yet to be discovered, but I will leave it up to others to seek these out. There is a field of research waiting to be explored.

Conclusions

This article has shown that new abilities can be acquired by speaking the Soral language. People spend much time and effort learning just one of the roughly seven thousand other languages in the world. There is a case to be made for developing a universal language that enables people to talk directly to people from other countries. A universal language will give everyone an equal opportunity to speak at the same level of competence to others who have a different native language. International relations can be improved by sharing a common language that provides equal benefits to all the participating nations. Users may find that it is easier to conduct an intelligent conversation in the Soral language because the brain is able to make connections with a wider selection of words. There are also potential advantages to be gained in technical fields such as medicine. The Soral language can provide these benefits plus something that no other language can provide, namely abilities that we have never had before.

Who should take the lead in developing a universal language? It would be most gratifying to see a large number of countries volunteer to take up the challenge, however in the absence of such an event happening, I suggest that Canada take the initiative to play a leading role because Canada has two official languages, English and French as well as many indigenous and foreign language groups. The creation of a universal language provides an opportunity for our generation to improve the way future generations communicate.

References

Author's website

<https://sorallanguage.com/>

Constructed languages

A search of the internet for constructed languages shows that many languages have been created through history, but none have attained widespread acceptance by the public. A short list is presented in Appendix B, and in the following reference.

Translationdirectory

https://www.translationdirectory.com/articles/article1912.php#Auxiliary_languages

Appendix A

The Computer Program

The following discussion explains how the computer program is used to create the Soral language. Figure 8 shows the opening screen of the computer program. An explanation of the function of each of the numbered items in Figure 8 is presented below. The computer file for the program is available as a free download on my website at: <https://sorallanguage.com>.

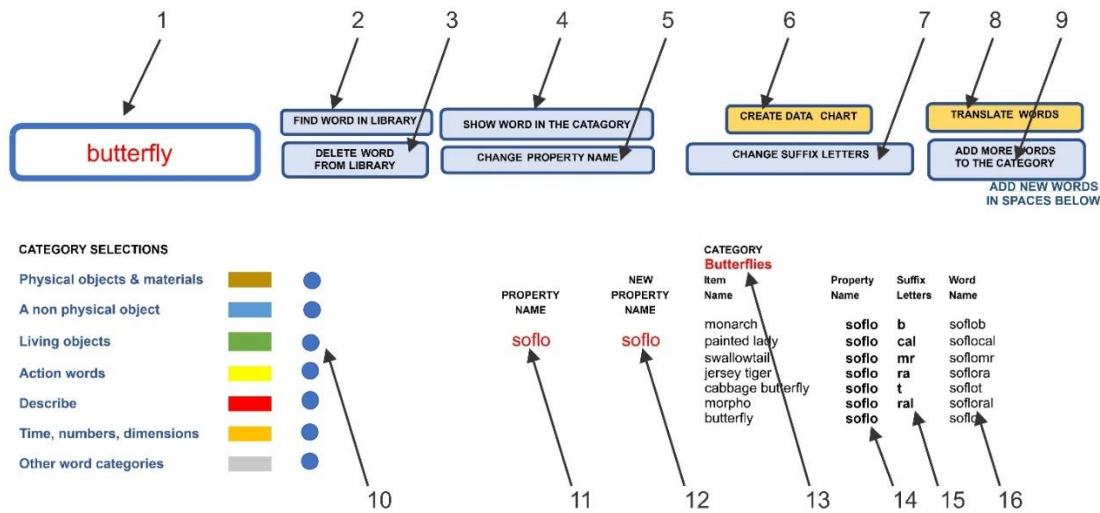


Fig 8
Opening Screen of Computer Program

Item 1. The word that will be created in the Soral language.

Item 2. Click this button to find the word in the library.

Item 3. Click this button to delete the word from the library.

Item 4. Click this button to show the word along with other words in the category Butterflies.

Item 5. Click this button after changing the letters in item 12 to change the letters in the *property name* item 11.

When changing the letters of the *property name* it is important to keep in mind the tree-like structure of the Soral language. Changing one letter of the *property name* can cause the same letter to be changed in many other words. Figure 9 shows where the third letter in soflo has been change from an F to an R.

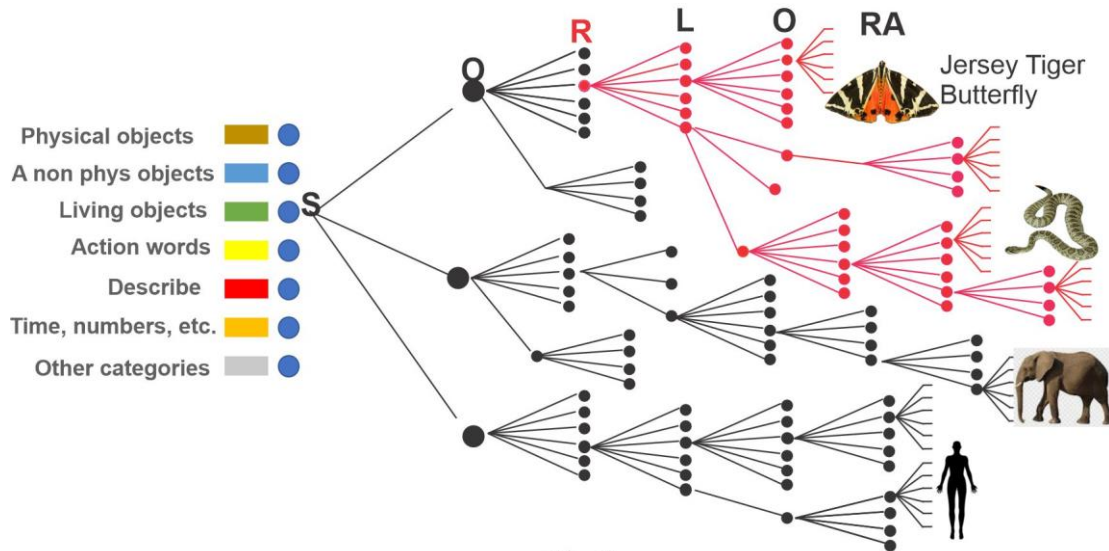


Fig 9

Illustration Showing How Changing One Letter Can Affect Many Other Words

Prior to changing the third letter in soflo from an F to an R, all the words shown in red color had the letter F as their third letter, but after changing the F to R in soflo, the words in red color will have the letter R as the third letter. Fortunately, these changes are made automatically by the computer code in the software. It is important for developers to create words that sound agreeable to the human ear. To avoid having letters changed inadvertently by the software, the preferred method is to start with the first letter and work progressively from the first letter to the last letter.

Item 6. Clicking this button will create a Data Chart illustrated in Figure 10.

The role of the Data Chart is to enable developers to see how changing letters of the *property name* are affecting other words that are located further out on the branches of the tree-like structure. Figure 10 shows a portion of the Data Chart containing the *property name* soflo, before and after changing the second letter from an “o” to an “A”. All of the “o”s have been changed to “A”s by the software. The Data Chart enables developers to understand how changing the letter in one word has affected other words. Changes can be made where necessary to improve the sound of the words, thereby producing a language that people find comfortable to use.

	slmno	s	l	m	n	o	
	slmnb	s	l	m	n	b	
	soar	s	o	a	r		
	soaba	s	o	a	b	a	
	soabb	s	o	a	b	b	
	soala	s	o	a	l	a	
	sob	s	o	b			
	sojl	s	o	j	l		
	sol	s	o	l			
	sofla	s	o	f	l	a	
→	soflo	s	o	f	l	o	
	sofmer	s	o	f	m	e	r
	sofmel	s	o	f	m	e	l
	sda	s	d	a			
	sdk	s	d	k			

Before changing letter “o”

	slmno	s	l	m	n	o	
	slmnb	s	l	m	n	b	
	sAar	s	A	a	r		
	sAaba	s	A	a	b	a	
	sAabb	s	A	a	b	b	
	sAala	s	A	a	l	a	
	sAb	s	A	b			
	sAjl	s	A	j	l		
	sAl	s	A	l			
	sAfla	s	A	f	l	a	
→	sAflo	s	A	f	l	o	
	sAfmer	s	A	f	m	e	r
	sAfmel	s	A	f	m	e	l
	sda	s	d	a			
	sdk	s	d	k			

After changing letter “o”

Fig 10

Data Chart showing how changing one letter affects other words

Item 7. Click this button to change the suffix letters.

Suffix letters are chosen manually to give each word in the category a distinctive name and produce words that sound favorable to the human ear. After manually changing suffix letters, Item 7 must be clicked to make the changes in the library of the computer. A suffix letter is not added to the word butterfly because this word represents the *property name* of a category. Speakers of the Soral language are familiar with *property names* because these words are frequently used in everyday conversation to describe a group of individual items, in this case butterflies. Figure 11 shows where changes are made to suffix letters in the computer program.

CATEGORY			
Butterflies			
Item Name	Property Name	Suffix Letters	Word Name
monarch	soflo	b	soflob
painted lady	soflo	cal	soflocal
swallowtail	soflo	mr	soflomr
jersey tiger	soflo	ra	soflora
cabbage butterfly	soflo	t	soflot
morpho	soflo	ral	sofloral
butterfly	soflo		soflo

Change suffix letters here. Click item 7 to make the change in the library

Fig 11
Changing Suffix Letters

Item 8. Click this button to enable the user to translate a sentence from English, or some other language, to the Soral language. The feature enables developers to test the sound of words in a complete sentence.

A universal language must not be biased in favor of one country. This is done by translating the words in the library to the language of the user. Users can compose sentences in their native language by clicking item 8 in Figure 8. This brings up the screen shown in Figure 12 in which the user enters a sentence in their native language. By clicking the button labeled TRANSLATE TEXT, the user’s native language is translated into the Soral language. In this way, all language groups have an equal opportunity to contribute to the development of the language and create a blend of all the languages from participating countries. In cases where there is no equivalent word in the other language, a new word is created by choosing the appropriate categories. The new word then becomes part of the Soral language. All the participating language groups can therefore benefit from the contributions of all the other language groups.

TRANSLATE WORDS

HOME
TRANSLATE TEXT

ENTER TEXT FOR TRANSLATION → Now is the time to create a new Soral universal language

Now is the time to

TRANSLATION → falu bal mua falum mul

Fig 12
Translating a sentence

Item 9. Adding words to a category

Several words can be added as a group to a category by entering the words in the space provided and clicking item 9.

Item 10. Category buttons

There are far too many buttons to be displayed on a single sheet, therefore it is necessary to display the buttons on multiple sheets. Figure 13 illustrates how button choices for sheet 1 are displayed on sheet 2. Note that

button choices on sheet 1 are positioned one above the other and on sheet 2 these choices are positioned side by side. When the button for Living Objects is clicked on sheet 1, the group of buttons under the heading LIVING OBJECT will appear on the screen of sheet 2. Similarly, if the button for Physical Objects is clicked on sheet 1, the group of buttons under the heading PHYSICAL OBJECTS will appear on the screen of sheet 2. This procedure is used to display all buttons in the program.



Fig 13
Method for Displaying Button Selections of Sheet 1 on Sheet 2

Item 11. Property Name

The *property name* for a category of words is assigned in the library with consideration to its position relative to other categories. Figure 14 shows how categories are arranged in the library. Category names are shown on the left side of Figure 14. Categories are positioned in the library according to the numbers on the right side of Figure 14. The numbers on the right side of Figure 14 are the numbers associated with each button that is clicked to create a word. The numbers in Figure 14 are in numerical order, therefore when a new category is created it is positioned in numerical order.

When a new category is created, a *property name* must be assigned to the category. This is done by referring to the *property name* of the category located directly above the newly formed category. It is to be noted that the number in Figure 14 for Butterflies 32512 is the same as the number for Beetles 32511 except for the last digit and the corresponding letters are also the same except for the last digit. When creating a new property name for a new category, the rule is: if the numbers are the same, the letters must be the same. If the numbers are different, a new letter can be assigned.

Beetles	rhinoceros beetle	sofia	sofiac	m	32511
	japanese beetle	sofia	sofiac	c	
	ladybug beetle	sofia	sofiac	s	
	beetle	sofia	sofia		
Butterflies	monarch	soflo	soflob	b	32512
	painted lady	soflo	soflocal	cal	
	swallowtail	soflo	soflocal	mr	
	jersey tiger	soflo	soflora	ra	
	cabbage butterfly	soflo	soflot	t	
	morpho butterfly	soflo	sofloral	ral	
ant	carpenter ant	sofmer	sofmera	a	32521
	fire ant	sofmer	sofmero	o	
	bullet ant	sofmer	sofmerl	l	
	red wood ant	sofmer	sofmerc	c	
	little black ant	sofmer	sofmerd	d	
	argentina ant	sofmer	sofmere	e	
	ant	sofmer	sofmer		

Fig 14
Method of Assigning a Property Name to a Category in the Library

Item 12. New Property Name

The function of item 12 is to enable the *property name* item 11 to be changed. *Property names* need to be changed during development of the language to create words that sound pleasing to the human ear. Enter a new *property name* in item 12 and click item 5 to change the *property name* item 11.

Item 13. Category Name

Category Names are the names of groups of words that have similar characteristics. It is the important job of designers of the language to form groups of words with similar meanings. This is what enables users of the language to understand the meaning of words by the sound of the word.

Item 14. Property Name

The *property name* forms the starting letters of all words in the Soral language.

Item 15. Suffix Letters

Suffix letters are added to words in a category to give each item in the category a distinctive name.

Item 16. Word Names

Word names are produced by combining the *property name* and suffix letters.

Appendix B

Constructed Languages

Many constructed languages have been created throughout human history but worldwide acceptance has been an elusive goal. The table below presents a limited number of constructed languages.

Language name	ISO	Year of first publication	Creator	Comments
Volapük	vo, vol	1879–1880	Johann Martin Schleyer	First to generate international interest in International auxiliary languages (IALs))
Esperanto	eo, epo	1887	L. Zamenhof L.	Fluent speakers: between 30,000 and 300,000 ^[1] ; Casual users: est. 100,000 to 2 million; native : 200 to 2000 (1996, est.) ^[2] . The most popular constructed language.
Idiom Neutral		1902	Waldemar Rosenberger	A naturalistic IAL by a former advocate of Volapük
Latino sine Flexione		1903	Giuseppe Peano	"Latin without inflections," it replaced Idiom Neutral in 1908
Ido	io, ido	1907	A group of reformist Esperanto speakers	The most successful offspring of Esperanto
Occidental	ie, ile	1922	Edgar de Wahl	A sophisticated naturalistic IAL (Interlingue)
Novial	nov	1928	Otto Jespersen	Another sophisticated naturalistic IAL
Glosa	igs	1943	Lancelot Hogben, et al.	Originally called <i>Interglossa</i> , has a strong Greco-Latin vocabulary
Interlingua	ia, ina	1951	International Auxiliary	A large project to discover common European vocabulary

			Language Association	
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