

## **AL Sy**

### **Problem**

My proposal addresses two important issues. The first problem is the successful teaching of all children in all Arab countries, without exception, in modern standard Arabic. The second problem relates to the creation of a means of easily accessible acquisition of Arabic as a foreign language for the population of all Muslim countries and the rest of the world. A special method of solving these problems will provide a lasting result for life.

### **Solution. Summary**

The problem of successful teaching of the Arabic language is solved by creating and using a reflexive system of the Arabic language, which will be further referred to as AL System or, even more simply, AL Sy. The main section of AL Sy will be called the System of Required Words. The content of this section will be presented in three or four versions.

First, the usual main meanings of words. In the second version of the content, the meanings of the words will be presented in accordance with the Holy Quran. The third option will contain the literary meaning of the obligatory Arabic words. In the fourth book, we can draw the children's attention to the meanings of words in sports and health topics. All four options will be accompanied by examples of using words in sentences. A prototype of the AL Sy mobile application has already been created.

### **Reflexivity**

A person is born with the ability to distinguish, differentiate surrounding sounds and objects. For speaking and reading, we use our natural capacity for what can be called superficial audiovisual differentiation.

My language teaching method is based on the transition from natural surface to artificial deep audiovisual differentiation using a reflexive system. I defined the main, primary property of the reflexivity of a language as the dominant phenomenon of successively identical letters in the direction opposite (reverse) to the direction of reading. Reflexivity exists as a relation of at least two words that form a group (cluster).

The reflexive system in teaching allows us to directly use the innate linguistic instinct of each student. Such usage is not complicated by the meaning of oral or written texts, no matter how good that meaning is. The performance of deep audiovisual differentiation by a schoolchild is always many times more effective than superficial differentiation aimed at recognizing individual words that are linked into sentences.

Unlike conventional direct morphology, the key concept of my reflexive or reverse morphology is the "(reverse) root stem". For example, the words 'talk' and 'walk' have the same root stem '-alk'. On the same basis '-alk', such words as 'balk', 'calk', 'stalk' and many of their derivatives arose. Thus, we see the main way of forming new words in any language.

The word 'told' is a form of 'talk' and is derived from the root '-old'. The root stem '-old', in turn, is the foundation of many other words. Such a list of reflexive weaves of vocabulary that express the internal logic of the language can be continued for a long time.

The direct or single root stem of ordinary morphology always refers only to different variants of one word. Therefore, it is singular. The reverse or plural root stem of reflexive morphology serves as a platform for the formation of many words. It is a mistake to think that reflexivity is limited only to this concept. It refers to the entire morphology of the language. Therefore, further we will see my System of Irregular English Verbs.

All methods of teaching a native or foreign language, based on the usual direct morphology, are fragmentary presentations of various aspects of the grammar of the language using variants of the communicative approach. Only reverse or reflexive morphology expresses the internal logic of the system for the formation of new words, the development of a language. Is it necessary to prove that a systematic presentation of the subject is much more effective than a daily kaleidoscope of new topics, after which most students cannot learn the rules even of their native language. The remnants of native grammar disappear from memory a year after graduation.

The back stem of a root can be the same as or part of the more general notion of "reflexion". Reflexions are such repeating parts of words that form their group (cluster).

### **Effectiveness factors**

Three main factors determine the effective learning outcome with the help of a reflexive system.

The first factor is the communicative semantic standard. The meaning of this concept is that fluency in a spoken language is possible only if you know the main words. I am the only author who has performed an analysis of the semantic composition of more than fifty thematic dictionaries and training courses (like Headway) of the main European languages. As a result, for the first time, it was possible to identify 47 most common topics of people's communication and the main words corresponding to them, which form a communicative semantic norm.

The systematic application of the logical comparison operation to all main words and grammar rules is the second efficiency factor. This special automatic word structure analysis can only be performed with a visible logical operator. As a rule, a logical operator selects about 62% of consecutively identical letters in the main words of any language and destroys 52% of all letters for perception, identifying them as the same. This greatly simplifies the perception and memorization of the pronunciation and spelling of the form of words in each group.

It is necessary to draw the reader's attention to the fact that AL Sy is the only analytical system in the world for mastering a foreign language. And in this capacity, it does not have and cannot have a single analogue.

The third factor in the effectiveness of the method is a certain pace and order of performing exercises for memorizing individual reflexive systems of all sections of reflexive morphology. For example, in English, the reflexive system contains such sections as the System of Compulsary Words, the System of Derivatives, the System of Tenses, and the System of Irregular Verbs. For example, you see for the first time how the System of Irregular English Verbs works.

### **Reflexive System of Irregular English Verbs**

1. Infinitive, Past Simple and Past Participle II are different
2. Infinitive, Past Simple and Past Participle II differ by one letter
3. Infinitive = Past Simple = Past Participle II

4. Infinitive = Past Participle II

7. Past Simple = Past Participle II

5. Infinitive = Past Participle II + n

8. Past Simple = Past Participle II + n

6. Infinitive = Past Participle II + en

9. Past Simple = Past Participle II + en

### **Teaching**

We will consider the practice of teaching on the example of the first, main section of the System of Compulsory Words. After all, it is precisely the lack of knowledge of the main words that is the cause of failure in mastering any foreign language. This disadvantage is due to two reasons. Firstly, such words occur in educational materials with very different frequencies (up to 40 times in the example of American Corpus). Secondly, course authors are forced to use a lot of second row words to make topics interesting.

The reflexive system contains only the main words and only three or four dozen secondary words that play a technical role. When our student trains the memorization of the reflexive system, he sees all the main words in groups with almost the same frequency and does not waste time on the words of the second row. Moreover, the assimilation of the rules of ordinary direct morphology is an automatic consequence of such training. This is in principle impossible with conventional training.

The teaching materials for the English language presented at the end of this letter should be considered as analogues of the future reflexive system of the Arabic language. Such a system is at the same time an ideal corrective phonetic system, a special morphological structure and a communicative semantic standard. On the example of the words 'believe, achieve', we see that the student learns to distinguish between the same and different parts of English words, analyzing and linking their structure. The words of the group also cause simple and complex associations of the meanings (translations) of these words.

bɪ'li:v	صَدَّقَ	أَمَّنَ بِـ	إِعْتَقَدَ	<b>bel..ieve</b>
e'tʃi:v			حَقَّقَ	<b>ach..ieve</b>

Then the words of the next group are added to this group. They have other distinctive cognitive letters. The student again analyzes structures and values, automatically generating associations.

bɪ'li:v	إِعْتَقَدَ	bel..ieve
ə'tʃi:v	أَمَنَ بِـ صَدَّقَ	ach..ieve
- - - - -		
draɪv	دَرَبَ	drove; driven
ə'raɪv	وَصَلَ إِلَى وَصَلَ جَاءَ	d..rive
		ar..rive
- - - - -		

During the period of studying AL Sy in elementary school, the lesson will begin with a survey of students on the educational materials of the previous lesson. Each student must take part in such a survey.

The Arabic teacher then performs a phonetic setup of the new page of the Compulsory Word System. When necessary, the teacher makes pronunciation corrections for individual students personally or with the help of other students. Depending on the number of children in the class, the teacher can perform group (all together) or individual installation of pronunciation. In any case, all students take part in this process. They read groups of words, constantly automatically analyze their structure and develop associative links, strengthening the memorization effect.

Page by page, children are moving towards the end of the Compulsory Word System. This is the fundamental difference between learning with the help of a system, a systematic and very effective deep audiovisual differentiation from a fragmentary study of individual parts of grammar using the example of dialogues and texts.

Recall that with the help of the reflexive system, all children learn the rules of word formation automatically, without effort, since the visible logical operator highlights suffixes and endings. All students, regardless of the degree of diligence, perform 100% logical processing of the main words and thus ensure unconditional mastery of the language being studied in the process of further education.

But we cannot be sure that each student is able to develop in his mind the semantic associations for each group of words. Therefore, after completing the phonetic installation of the next page, the teacher proceeds to reading the Examples section. In these educational materials, the features of the use of words of each group are presented on the example of at least three grammatical sentences. As a rule, one page of the System of Compulsory Words corresponds to 5 pages of texts. Therefore, the teacher has to work very intensively in order to have time to present the material in the lesson. All children are involved in this process. They take turns reading the sentences, accompanying them with their commentary.

At the end of the lesson, the Arabic teacher must conduct a written test. Students receive a sheet with all the words of this lesson, arranged in random order. They write each word, then check the result against the book, correct mistakes, and grade themselves.

Many details of the teaching process are not given here. For example, when presenting new teaching material, the teacher initially presents only the first half of the page. Then he introduces the other half. After that, students repeat the pronunciation of the entire page.

The issue of the pace of AL Sy memorization training, as well as the teaching of students in middle and high school, will be decided additionally. It is important to emphasize that the successful teaching of AL Sy will be available to all schools in the Arab countries without exception. Because the desired result is embedded in the system itself. The teacher only has to follow a simple lesson plan available to every teacher.

The next section of AL Sy will be called "Derivatives". It contains mainly derived forms from compulsory words. The first and second sections of AL Sy provide knowledge of about 2700-2800 of the most important words. Together with the words from the Examples subsection, our student is able to use over 5,000 words at the end, which is quite enough for the conversational level B2-C1.

During the development of AL Sy, at least one more section will be created, which will present important grammar rules in a reflexive form. This will ensure almost complete automatic assimilation of the entire grammar of the Arabic language, with the exception of syntax.

### **Books AL Sy**

The first book of AL Sy will present the usual, most common meanings of compulsory words. Such training ensures the almost complete elimination of functional illiteracy, because all children perfectly master the pronunciation, spelling and meaning of each word. Knowing the composition of the main words will greatly help children in learning a foreign language.

The second book will contain such meanings as are attached to the compulsory words in the Holy Qur'an. The lesson will be in five parts. First, the teacher checks the knowledge of the previous teaching material. Then he, with the help of students, performs a semantic installation of a new page in accordance with the values specified in the textbook. The teacher gives an interpretation of the given meanings of words from the standpoint of Muslim ethics. These materials will be presented in the teacher's book. He organizes the reading of Examples of grammatical sentences about the connection of concepts. At the end of the lesson, the children, as usual, will complete a written test in the prescribed manner.

In the third book, it is advisable to place figurative, literary meanings of words. The compulsory word system will introduce the rhythm and deep rhyme of the Arabic language for the first time. Therefore, the teacher can organize a poetry or rhyming text contest for each page. In fact, the reflexive system can become the environment for the formation of future poets and writers of the Arab world, starting from the age of elementary school.

The topic of sports and health may become the subject of the content of the fourth book. A variety of information about competitions, records, rules for taking care of your health will undoubtedly be useful for children and adults.

In the section Examples of a reflexive system, the student is given not one, as in the text, but at least three meanings, ways of using the words of the group. It is much more effective than texts in developing the conversational function. In the texts, students understand well how only those words that appear quite often are used. And in the Examples section, they evenly, with the same frequency, learn at least three options for using all the main words and at the same time replenish their vocabulary with new words of the second row.

The section Examples of a reflexive system fully corresponds to the psychological characteristics of modern children, who from an early age are accustomed to perceiving the constant change of pictures and meaning on TV or smartphones. In the Examples section, they read a new sentence each time, usually with interesting information. They also don't need to write out the words afterwards.

On the contrary, outdated teaching presents students with dialogues with a rather primitive meaning, since otherwise it is difficult to use the most ordinary words, or short stories, for example, about an old Scottish castle. The schoolboy translated this short story and wasted his time on completely useless information about the castle, which he does not need.


A very important circumstance is the fact that the reflexive teaching method can also be successfully used in classes with a large number of children. In such cases, instead of working with individual students, the teacher organizes teams to practice memorization of educational material.

The reflexive teaching method in each lesson provides listening, pronunciation, reading and writing of educational material. All classes are held with a very intensive participation of all students. Creating video lessons for teacher training will quickly solve the problem of their adaptation for the correct use of the reflexive method.

### **Mobile app**

The entire learning process under the AL Sy program is implemented in the form of a mobile application. A prototype of such an application has already been created. It will consist of an Instruction with an Initial Test and four sections: System, Tests, Examples, Control.

You see the desktop of the System section. The figure indicates the page number. The system of compulsory words of the English language is located on pages 1-31. The speaker mark below the page number indicates the phonetic setting that will be performed by the live voice.




СИСТЕМА ТЕСТЫ ПРИМЕРЫ КОНТРОЛЬ  
system tests examples control

## РЕФЛЕКСИВНАЯ СИСТЕМА reflexive system

1	2	3	4	5	6	7
8	9	10	11	12	13	14

Here is the content of the first half page of page 2. The arrow on the right will take you to the second half page of the same page.




СИСТЕМА ТЕСТЫ ПРИМЕРЫ КОНТРОЛЬ  
system tests examples control

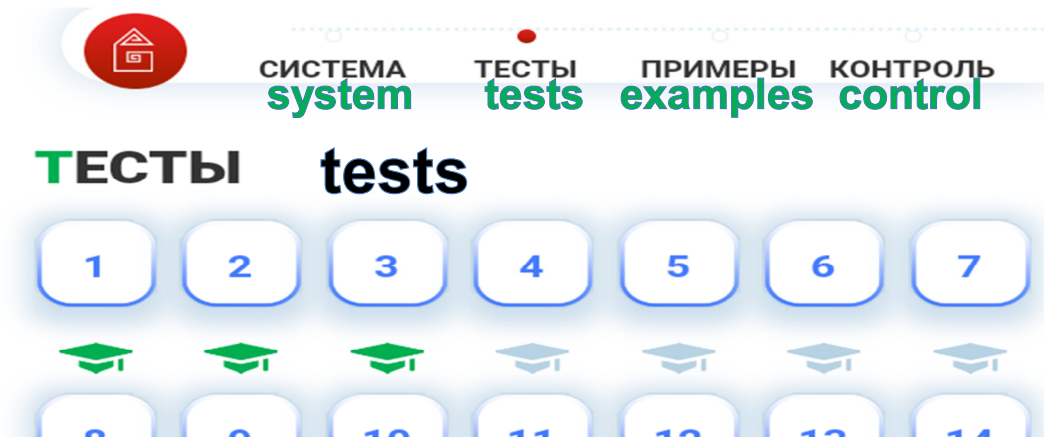
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## inside system


h ave	<b>had; had</b> иметь; обладать // <b>have to</b> быть обязанным, быть должным что-л сделать.
s ave	спасать; сохранять; сберегать, откладывать (деньги).
le ave	<b>left; left</b> оставлять; покидать; уходить, уезжать; отпуск.
bel ieve	верить, полагать.
ach ieve	достигать; добиваться.
d rive	<b>drove; driven</b> водить машину, ездить; привод; дисковод.
ar rive	прибывать, приезжать; прилетать.
f ive	пять; пятёрка; пятеро.
l ive	lɪv жить; laɪv живой; реальный; в прямом эфире.
g ive	<b>gave; given</b> (от)давать; предоставлять; дарить; уступать.
rece ive	получать; принимать (гостей, критику).



The number of tests in the Tests section corresponds to the number of pages in the System section. The sign of the master's cap under the test number indicates the training file. This file contains incorrect test answers. Thus, the student does not have to spend time testing those words of the page that he has already memorized. Each run of the full page test results in the creation of a new training file.



The uniqueness of the tests in the AL Sy application is that they are in fact the only morphological tests in the world. This is clearly seen in the fragment of the next page with the ‘-ment’ suffix.



СИСТЕМА  
**system**
ТЕСТЫ  
**tests**
ПРИМЕРЫ  
**examples**
КОНТРОЛЬ  
**control**

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## system

pa rent cur rent diffe rent	родитель (-ница) // <b>parents</b> родители. текущий обычный; течение; (эл) ток. разный, различный.
cent re cent per cent	цент. недавний // <b>the recent news</b> последние новости. = <b>per cent</b> процент.
present re present	preznt присутствующий; настоящий; настоящее; подарок (презент); pr'zent дарить // <b>be present</b> присутствовать. представлять (фирму, проект).
com ment depart ment	комментировать; комментарий, отзыв. отдел; ведомство, департамент.
pa yment emplo yment	платёж, уплата. занятость, трудоустройство, работа, служба.

In the Examples section, the main words that are connected in a grammatical sentence are highlighted in yellow. In the Arabic language application, all examples will be voiced, that is, they will be in the form of files with live sound.



СИСТЕМА  
**system**
ТЕСТЫ  
**tests**
ПРИМЕРЫ  
**examples**
КОНТРОЛЬ  
**control**

## ПРИМЕРЫ examples

1

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31

## inside examples

### have save leave

These words express, for example, the fact that we always **have** the opportunity **to leave** bad habits in order **to save** health.

If you **save** a cat and do not **leave** him, then you **have** a nice pet.

Before you can **leave** the program, you should **save** all the data that you **have**.

Эти слова выражают, например, тот факт, что мы всегда имеем возможность оставить плохие привычки, чтобы сберечь здоровье.

Если ты спасаешь кота и не оставишь его, то ты имеешь чудесного домашнего питомца.

Перед тем как ты сможешь покинуть программу, следует сохранить все данные, которые ты имеешь.



The Control section is created by analogy with the Tests section. It contains only six tests. Each test contains the most difficult words to remember from every five pages of the Systems section.

In the AL Sy application, it will also be possible to implement tests with writing answers for the Tests and Control sections. It should be noted that AL Sy will be the fastest application in the world. In it, any point of the educational process will be achieved in just two clicks. It couldn't be faster.

### AL Sy Center

I have researched the reflexive system of many languages such as English, German, French, Spanish, Italian, Czech, Polish, Russian, Tatar, Turkish, Irish, Cherokee and others. Therefore, I can say that the Arabic language is distinguished by such features of morphology that require great effort to study it. In Muslim countries, students have difficulty learning English. Therefore, every year their attention to the Arabic language will decrease.

I also believe that there is a need to significantly improve the level of teaching of Modern Standard Arabic in the MENA countries in terms of better coverage of students with AL Sy. Only the creation of AL Sy will greatly facilitate the acquisition of Arabic around the world, starting with expat children in the Middle East. They will master Arabic effortlessly, automatically.

I propose to create AL Sy Center, which will perform many functions for the dissemination of the Arabic language based on a reflexive system and related mobile applications for internal and external use. Such a center will be able to organize digital control and management of the development of Arabic language learning using AL Sy and AI technologies. I have also developed a technology for actively using the banking sector in stimulating an effective educational process.

## Final remarks

American experts issued a Patent for a Reflexive System called Dictionary of an alphabetic foreign language (5,934,708). They recognized that the system is a technical device. Over many years of teaching practice, I have established all the necessary and sufficient conditions for such use of the System, which ensure the implementation of the effect of a technical device, accurate and solid knowledge of the language being studied. It should be noted that reflexivity, as the main property of the language, is also patented in the European Union, Japan and Russia.

I have trained over 350 people with consistent success. One of my students, who failed in French at school, became so proficient in English that she became an FAO national consultant. (<https://www.amr.space/index.php/home/contacts/100-experts/11-t-harkavenko>).

In 2000, I applied to the Ministry of Education and Science of Ukraine with a proposal to use the English language system in the educational process in schools. The Ministry recommended the system for publication, but it was not introduced into the educational process. Now Ukraine has only 5-6% of university students who can speak English (B2-C1). Then I knew nothing about reflexivity and double morphology of the language. And since then I have not applied to the Ministry of Education of Ukraine.

Now in 2022, I am sending this message with a full understanding of the theory and practice of effective language teaching. Starting from the first steps, the creation of AL Sy requires certain knowledge and experience in various areas of linguistics and programming. Even at the final stage, an understanding of how to solve the problem of the correct technical and grammatical order of placing educational materials on a storage medium is required.

I want to emphasize once again that the use of the reflexive system will once and for all achieve excellent results in teaching standard Arabic, both native and foreign. Therefore, I propose to create a reflexive system of the Arabic language, either as a result of this competition, or out of competition.

## Appendix 1

## (System of Compulsory English Words)

## -e

hæv	على أن	I have to //	حَازَ	إِمْتَلَكَ	had; had	h..ave
seɪv			مِنْ أَنْقَذَ	وَقَرَّ خَلَصَ		s..ave
li:v			كف	تَرَكَ كَفَضْلَةَ	left; left	le..ave
-----						
			إِعْتَقَدَ	آمَنَ بـ	صَدَّقَ	bel..ieve
			حَقَّقَ			ach..ieve
-----						
			دَروَ	هَمَزَ	drove; driven	d..rive
			وَصَلَ	إِلَى وَصَلَ	جَاءَ	ar..rive
-----						
faɪv				خَمْسَةَ		f..ive
laɪv	عَاشَ حَيَّ	حَيَّ	إِرْتَزَقَ	حَيَّ	كَسَبَ رِزْقَهُ	l..ive
-----						
			أَعْطَى	مَنَحَ	أَعْطَى	gave; given
			إِسْتَقْبَلَ	تَلَقَّى	تَلَقَّى	rece..ive
-----						
ɪk'spensɪv			عَالِي	بَاهِظِ الثَّمَنِ	غَيْرُ رَخِيصٍ	expensive
ɪnɪk'spensɪv			رَخِيصٍ	مَعْقُولِ الثَّمَنِ		in..expensive
-----						
			مُوجِبٍ	إِجَابِيٍّ	'pɒzɪtɪv	posi..tive
			سَلْبِيٍّ	سَالِبٍ	'negətɪv	nega..tive
-----						
			نَشِيطٌ	فَاعِلٌ	نَشِيطٌ	a..ctive
			فَعَّالٌ	فَاعِلٌ	نَاجِعٌ	effe..ctive
-----						
lʌv			حُبِّ	حَبِّ	عَشِيقَ	عَشِيقَ
ə'bʌv			أَعْلَاهُ	فَوْقَ	عَرَامَ	مَحَبَّةَ
-----						
			بَرَهَنَ	أَثْبَتَ	pru:v	prove
			تَقَدَّمَ	تَحَسَّنَ	ɪm'pru:v	im..prove
-----						
mu:v			حُطْوَةَ	حَرَكَةَ	تَحَرَّكَ	حَرَكَ
rɪ'mu:v			أَزَالَ	أَزَاحَ	إِرْتَقَى	تَقَدَّمَ
-----						
						move
						re..move

## Appendix 2

## Examples of The Use of Compulsory Words

## الإجبارية الكلمات استخدام على أمثلة

## صفحة 1-1 Page

<b>h..ave</b>	had; had	إِمْتَلَكَ حَازَ // I have to	على أن	hæv
<b>s..ave</b>		مِنْ أَنْقَذَ وَقَرَّ خَلَصَ خَزَنَ حَافِظَ		seɪv
<b>le..ave</b>	left; left	كَفَ تَرَكَ كَفَضْلَةَ إِلَخَ هَجَرَ		li:v

In the first group of words of the first section on the second page, we have three words '**have - save - leave**'.

"اترك - احفظ - امتالك" كلمات ثلاث لدينا ، الثانية الصفحة في الأول القسم في الكلمات من الأولى المجموعة في

These words express, for example, the fact that we always **have** the opportunity to **leave** bad habits in order to **save** health.

الصحة إنقاذ أجل من السيئة العادات لترك فرصة دائماً لدينا أن حقيقة عن ، المثال سبيل على ، الكلمات هذه تعبر

If you **save** a cat and do not **leave** him, then you **have** a nice pet.

لطيف أليف حيوان فلديك ، تتركه ولم قطة بحفظ قمت إذا

Before you can **leave** the program, you should **save** all the data that you **have**.

لديك التي البيانات جميع حفظ عليك يجب ، البرنامج مغادرة من تتمكن أن قبل

= = = = = = = = = = = =

<b>bel..ieve</b>	صَدَّقَ إِعْتَقَدَ آمَنَ بِـ	br'i:ɪv
<b>ach..ieve</b>	حَقَّقَ	e'tʃi:v

'If you **believe**, you can **achieve**' - that's my motto! == "إذا كنت تؤمن ، يمكنك تحقيق"

He always **believes** that he can **achieve**, and I do not **believe**, but simply **achieve**.

يحقق ببساطة ولكن ، ذلك أصدق لا وأنا ، تحقيقه على قادر أنه دائماً يؤمن إنه

I **believe** that you can **achieve** the level of the master in swimming.

السباحة في الماجستير مستوى تحقيق يمكنك أنه أعتقد

I **believe** you need to decide what you want **to achieve** and write it down.

وتدوينه تحقيقه تريد ما تحديد إلى بحاجة أنك أعتقد

= = = = = = = = = = = =

<b>d..rive</b>	drove; driven	هَمَرَ	draɪv
<b>ar..rive</b>		وَصَلَ إِلَى وَصَلَ جَاءَ	e'raɪv

Just like "if you **believe**, then **achieve**" we can say "if you **drive**, then **arrive**."

"وصل ثم ، قُدت إذا" القول يمكننا "حقق فعندئذٍ ، تؤمن كنت إذا" مثل تماماً

She used **to drive** jerkily, sometimes fast, sometimes slowly, and finally we **arrived** in the city.

المدينة إلى وصلنا وأخيراً ، ببطء وأحياناً ، بسرعة أحياناً ، بسرعة القيادة اعتادت

We should **drive** fast **to arrive** not last. == أخيراً لا لنصل بسرعة نقود أن يجب

And So On ....