

Development of Yoru`ba` Arok`o Communication System Application

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Abstract

This article explores the concept of Arok`o, an indigenous system of shared meaning for communication in the Yoru`ba` tradition. The research problem is based on the need to understand the structure and effectiveness of Arok`o as a communication method. The aim of the research is to investigate the various elements and their interaction in Arok`o communication. The methodology involves studying the structure of Arok`o and examining its use in the Yoru`ba` community. The participants are members of the Yoru`ba` community who are familiar with and use Arok`o as a communication method. The context of the study is the Yoru`ba` tradition and culture. The study was able to develop an application to show the system of communication in Arok`o and also provide insights into the effectiveness and importance of Arok`o as a communication system. The implications of the research are that understanding and preserving traditional communication methods like Arok`o can enhance cultural identity and promote effective communication in communities.

Keywords: Yoru`b`a Tradition, Arok`o, Communication, Knowledge Engineering, Soft-ware Application, Indigenous system

1 Introduction

Communication is a vital tool used in expressing one's mind and feeling from one person to another. It is the meaningful sharing of ideas between two people or a group of people which is inherently social interaction. Communication involves a wide range of activities which includes a sense and means by which ideas, thoughts, facts, intentions, and knowledge are transferred. Communication, which is etymologically related to both 'communion' and 'community' derived from the Latin verb *communicare*, which means 'to share' or 'to make common' (Weekley, 1967; Coates, 2009; Dima et al., 2014). Also, Coates (2009); Velentzas and Broni (2015); Craig (1999) define communication as to when the sender and receiver agree on the meanings assigned to the symbols used. The receiver does not necessarily need to be aware of the sender's intention of communicating at the time of communication. Distance and time is also not a barrier to effective communication. Another important and vital area in communication is the process and so also the understanding in terms of our interpretation and perception of the message being passed across. Communication can be conventional or unconventional signals, maybe through spoken and unspoken mode, may take linguistic or non-linguistic forms, and may be intentional or unintentional.

Arokò is a collection of objects which are usually packaged and parcelled together. It is a symbol-object that is sometimes sent by the means of a messenger to another person with a purpose of proper message decoding at the receiving end and conveyance of message from the source (Ogundeji, 1997). It is the indigenous system of shared meaning for communication between acquaintances and adversaries in the Yorùbá tradition. This communication method employs a set of symbolic objects and signs with mutually understood reasons for communication. Arokò is a system of communication, due to the fact that it has a set of object elements that operate and combine together, which are then used to accomplish information-sharing whose objective is generally established by it (Arnold and Wade, 2015). Arokò communication is a system involving the interaction of the various elements used in passing across the needed information.

In the Yorùbá community, Arokò has been an effective means of communication. Understanding the communication process (Shannon, 1949) alone is not enough as the manner, scene, setting in which the message is passed across cannot be exempted in deciding the understanding and proper interpretation of what the speaker or sender is passing across (Batens, 1977). Various researchers, especially Ogundeji (1997) have studied the structure of Arokò.

2 The Arokò System

Arokò has been used to communicate among the indigenous people of Yorùbá by conveying messages from one person to another or from one village/community to another. Objects are been packed together and passed from the sender to the receiver. Sometimes, Secretive messages are sent using Arokò using animals, messenger, or a friend but mostly sent by hand through a courier or messenger (ikò or ìrán sé) (Ogundeji, 1997). The Arokò must be well understood by the receiver. Stone, chewing stick, flywhisk, fruit, parrot, cowrie shell, blood, fabric, a stick of broom, calabash, kola nut, leaves, and other common things are utilized.

Arokò, like many other Yorùbá names, appears to be a derivative noun, according to Ogundeji (1997). If the term Arokò is seen as the word-formation of two combined verbs rò (to think) and kò (to agree) preceded by a which is changed to a noun, the result is Aròkò rather than Arokò. This usage of Arokò is comparable to how codes and symbols have lately been used. It helps to lessen the usage of spoken words by allowing objects to be utilized to convey information. Some of the objects sent to the receiver are kept for reference purposes.

In those days, Yorùbá used symbols to send warnings, warn a loved one of an imminent threat, alert a partner of a breakup or quarrel, and inform family members or close relatives of someone's death.

Arokò was also utilized in decision-making in Yorùbá society if a new king or chief was to be selected and the kingmakers were not in favour of a certain candidate, this was expressed by shaking hands with left hands. Similarly, the ladies of the town wore the wrong sides of their garments to demonstrate their opposition to the nomination of a new chief or king. When a couple is looking for a child or children, they employ a variety of methods. When the Ifa priest is consulted and it is discovered that the couple will not have children, eggshells wrapped in cotton wool are packaged and delivered to the parents. The information being passed along implies that the couple will not have children.

In Yorùbá culture, Arokò was also employed to offer a situation report. For example, if a group of individuals or a community wanted to know how calm people or another town were, they may send an empty snail shell. In answer, live snails wrapped in new leaves would be returned if there was harmony and peace among the people and their society. If there was turbulence and disruptions, however, a living snail with charcoal on its face and wrapped in dry leaves would be returned to the sender community or the people. Kolanut was added to charcoal on the face of the snail wrapped with dried leaves if aid or help from the sender community was required.

Arokò, a Yorùbá traditional technique of coding messages via the use of items, was one of the several systems of communication extensively utilized by Yorùbá people before the arrival of colonial authorities. According to Osisanwo (2009), the Arokò mode of communication, which is widely employed by the Yorùbá people of south-western Nigeria, comprises the transfer of physical items from one person or group of people to another in order to transmit a specific message. The things used frequently have symbolic importance within the cultural groupings, therefore this is usually within the same ethnic group (Elegbe and Nwachukwu, 2017).

It is so abundantly evident that there is a link between symbols, their meanings, and the people who employ them. Despite the fact that the Arokò system of communication is no longer widely used due to modern information technology, it remains popular among traditional rulers, rural dwellers, and literate old people, especially when communicating good news, messages implying catastrophe, impending doom or danger, and sad news (Gutaner, 2006). Arokò is a communication method that is ideally entrenched inside a cultural unit but may cut between cultures. Unless explicitly taught, Arokò, which is known within one ethnic group, may not be known to others (Elúyemí, 1987). The recipient must be well-versed in order to decipher the message that has been transmitted.

The Arokò system is part of Yorùbá culture in the sense that textit'Yor'ub'a people do not always need to use vocal words before passing along a message or information. Before delving into the various messages encoded in the Arokò symbols and objects, it is important to note that the facts contained in the object in question must be well-known to both interlocutors and essential to the encoding and decoding of the

message that forms mutual contextual Beliefs (Bach and Harnish, 1979).

There are long lists of coded messages sent through the Arokò system of communication, indicating that Arokò is a part of the Yorùbá cultural heritage and establishing the fact that the Yorùbá ethnic group used Arokò as a traditional way of communicating before the advent of western civilisation, with mutual contextual beliefs serving as the process of encoding and decoding the message sent.

Arokò is a collection of objects which are most of the time parcelled together sent through a courier or messenger and this is in order to pass across the message to be decoded by the receiver. Sometimes, it is placed in a suitable container or put in a sack, calabash, or wrapped with leaves. Arokò is believed to be an idea or thought upon which we have agreed to. Arokò, that is, Arokò: Ohun tí àjorò wa kò lé lórí ní à ní pè ní Arokò.

3 System Design

3.1 Data Collection

The various process of acquiring necessary domain knowledge so as to be able to build has always been called what we know as knowledge acquisition. In this study, the domain knowledge is from diverse sources such as historians, and linguists. Scenarios showcasing the various usages were collected and itemised. Arokò is a messaging system that has existed since the ancient Yorùbá period, so Yorùbá teachers who are more elderly were interviewed and enquiries were made from them on the usage of Arokò as regards the way it was used in passing the message across and the major materials used for message transmission. The various materials that are commonly used from various interviews, observations, and literature in Yorùbá Arokò System are listed in Table 1. There are various categories of people that get involved in the use of Arokò materials. They are majorly the Babaláwo, Ode, Oníḍírí, Ahunso, Onísé-òná, Oba, Ijòyè, Okùnrin, Onígbèsè, etc. The various places Arokò materials can be placed are Ehinkùlé, Léhin Odi, Ní ìdálè, etc.

Table 1: Materials Used in Arokò

| S/N | Material | S/N | Material | S/N | Material | S/N | Material | S/N | Material |
|---------|-----------|------------|-------------|---------|----------|---------|------------|---------|----------|
| | Ewé | 10. | Esun Isu | 19. | Ata | 28. | Ofà | 37. | Etù |
| Odán 2. | Eésan | 11. | Osé Sàngó | 20. | Ajè Ibon | 29. | Orun | 38. | Akò |
| 3. | Iyò | 12. | Aso Obìnrin | 21. | Awo Eran | 30. | Sìgìdì | 39. | Eye |
| | | | | | | | | | Ayékòótó |
| 4. | Koríko | 13. | Ota | 22. | Pàkúté | 31. | Opa Osugbo | 40. | Ewé |
| | | | | | | | | | |
| 5. | Aìdan | 14. | | 23. | Igò | 32. | Omi | 41. | Apópó |
| 6. | Apurù Ode | Igbálè 15. | | 24. | | 33. | Isu | Obi 42. | Ení |
| 7. | Séééré | Ehoro | | | Ahà'y | 34. | Okúta | | |
| kekere | | 16. | Ère Sàngó | a 25. | Efun | | | | |
| 8. | Òwù | | | | | 35. | Orí | | |
| 9. | Kuùku | 17. | Omorí | 26. | Omo | Eye 35. | Obi | | |
| Agbàdo | | Igbá 18. | Aso fuhfun | Ayò 27. | Tábà | | | | |

4 System Implementation

In computing, grammar can be defined as the mechanism for formal specification of the elements and structure of a language. Formal means there is a standard and generally accepted standard that everyone adheres to. In modelling the Arokò system of communication, one of the major components involved in the language of the material being sent. To do proper modelling of the language, the grammar of the language is developed. for Arokò system of communication can be derived and there are four major areas on which the production rules will focus on. The first is the one that derives its meaning from the verb of the material being used. The material used is a noun, why the action word, that is the verb gives the meaning of the Arokò. For example, Oòyà is a noun derived from the verb yà, which means to separate. Another example is in the use of Abèbè, which is also a noun but derives from the verb bèbè, that is to plead. So, when Abèbè is sent it is used

to plead to the receiver of the material. Therefore, when this material is used, the verb of the material is important.

5 Python Implementation

After the Protégé implementation of the Yorùbá Àròkò communication system, the Python implementation was done. The Python implementation as seen in Figure 1 is an application that gives room for choice of source where the material is to be sent, the message been sent and the recipient or receiver of the message. When this is chosen, the corresponding meaning of what the message is is given both in a summarised form and in detail. The application allows for more than one choice of message materials especially when there is a need to send more than one different material.

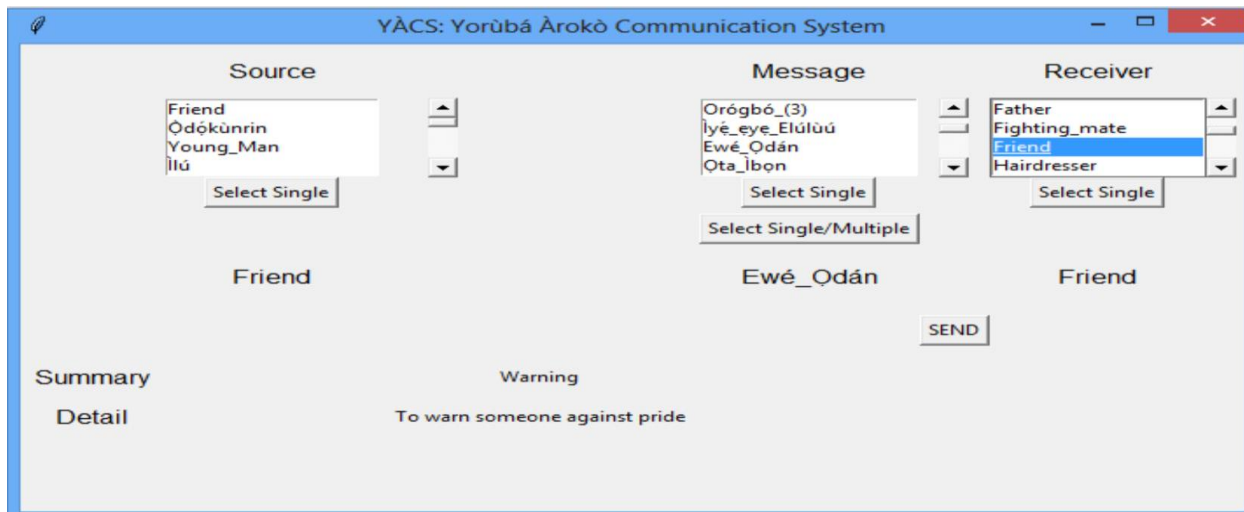


Figure 1: Yorùbá Àròkò communication system Desktop Application

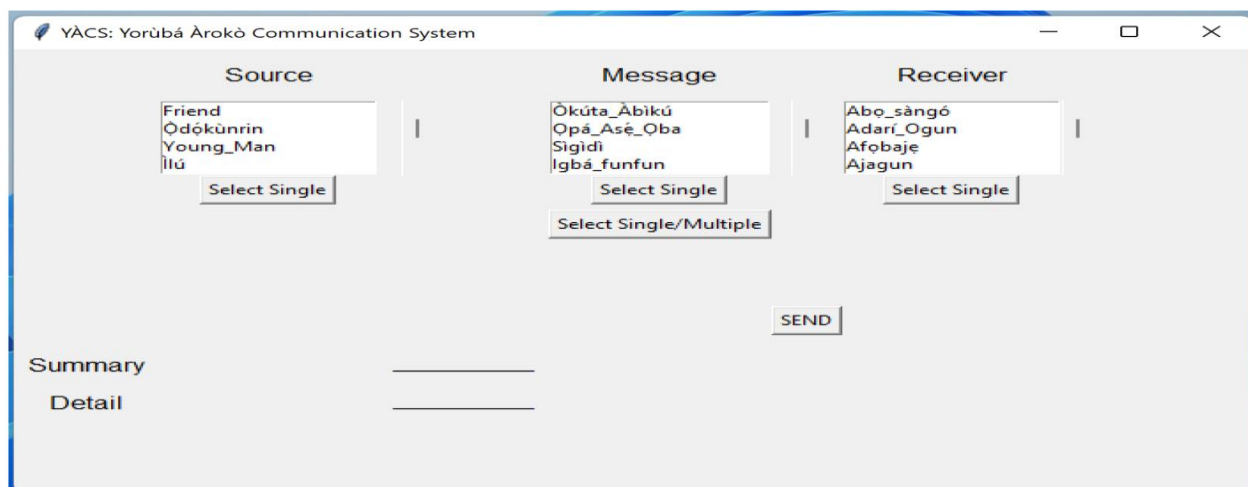


Figure 2: YACS Application Launch Page

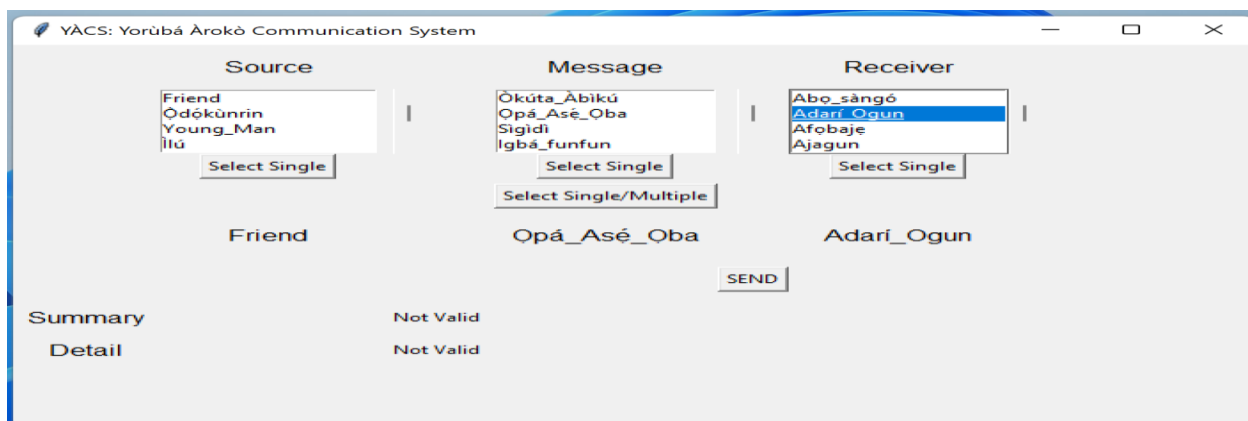


Figure 3: Result Page for Invalid Messaging

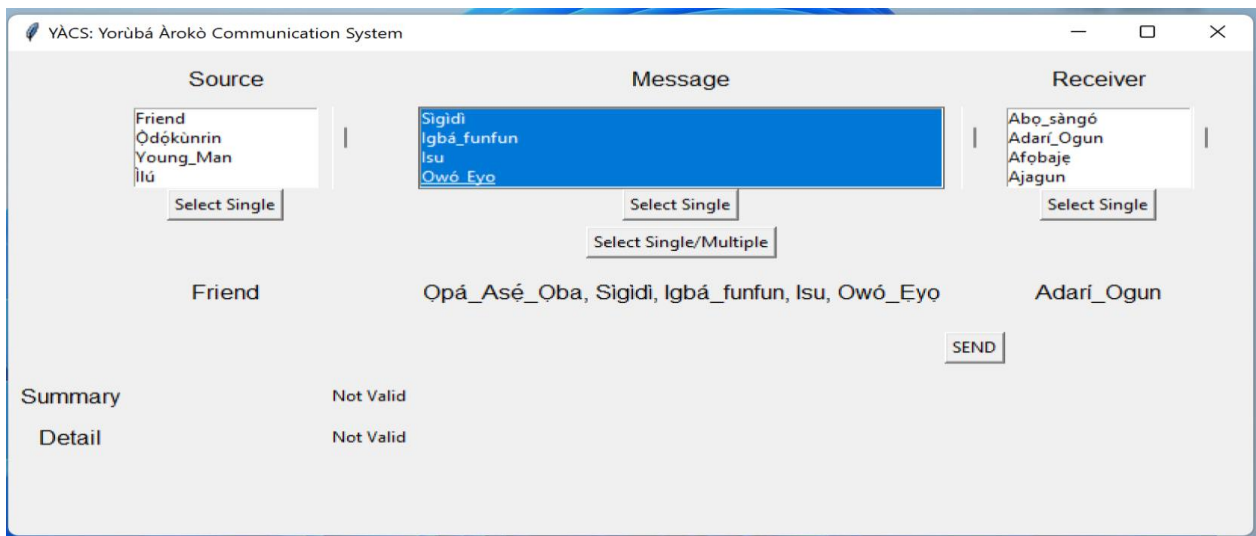


Figure 4: App showing the choice of multiple message sent

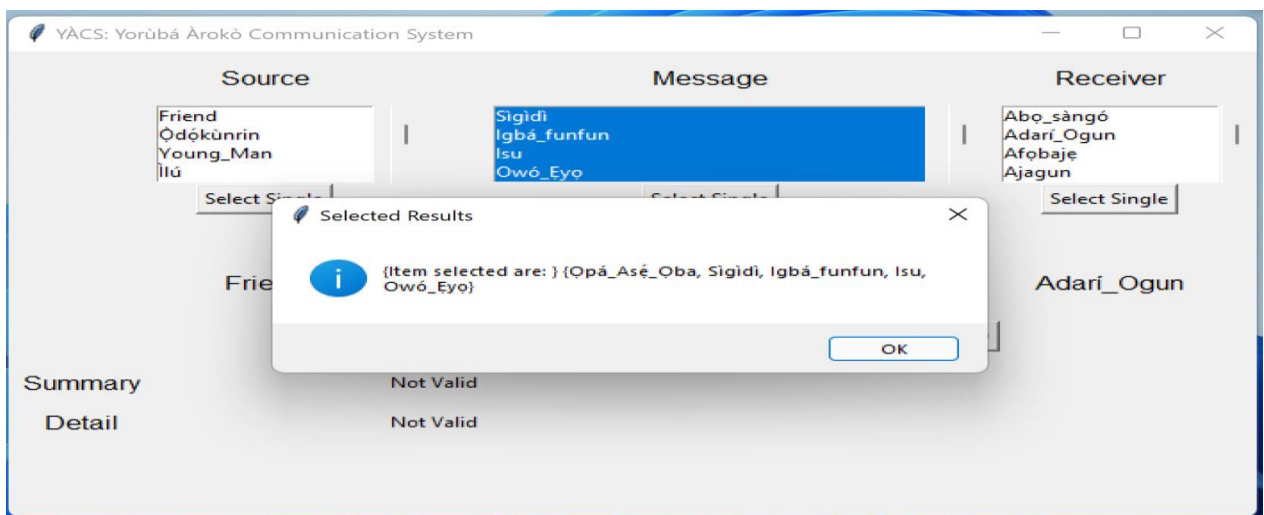


Figure 5: App showing the Pop Up message for more than one selection

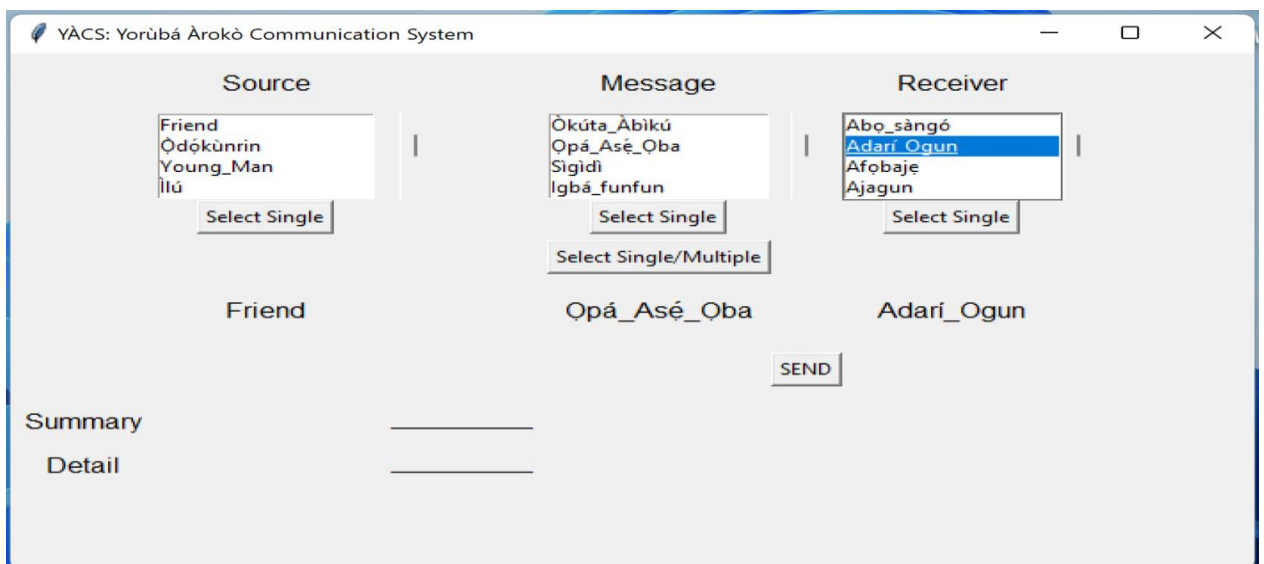


Figure 6: App showing the Receiver Selected

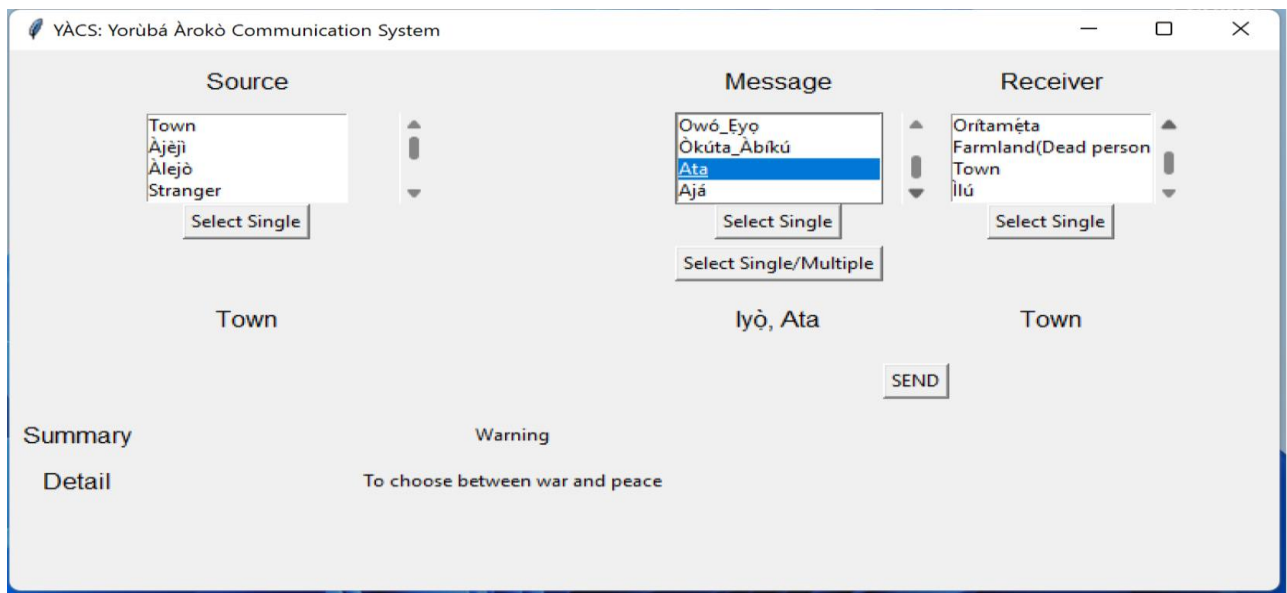


Figure 7: App showing meaning of Message based on S-M-R single object

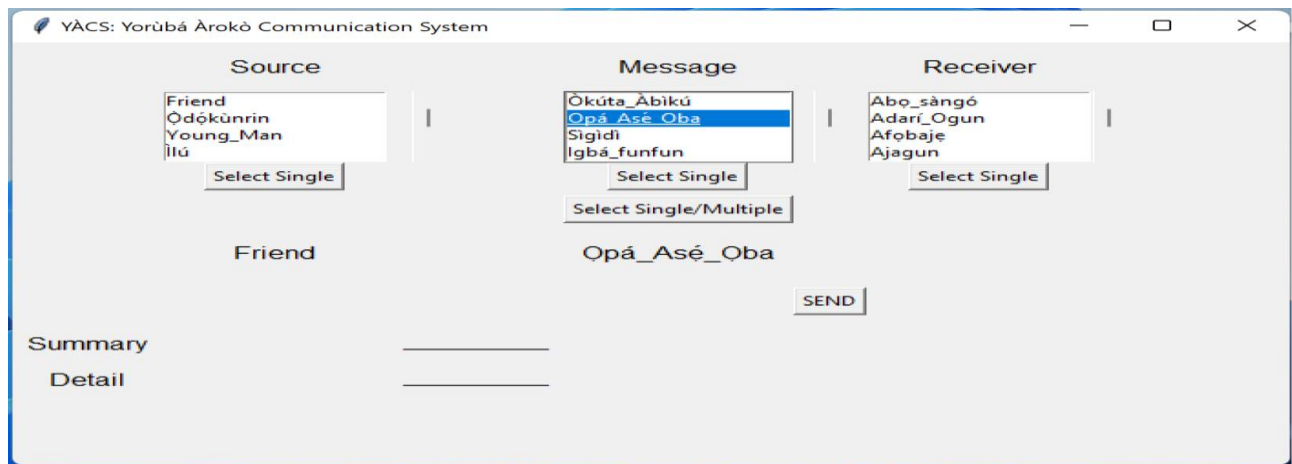


Figure 8: App showing meaning of Message based on S-M-R multiple objects selection

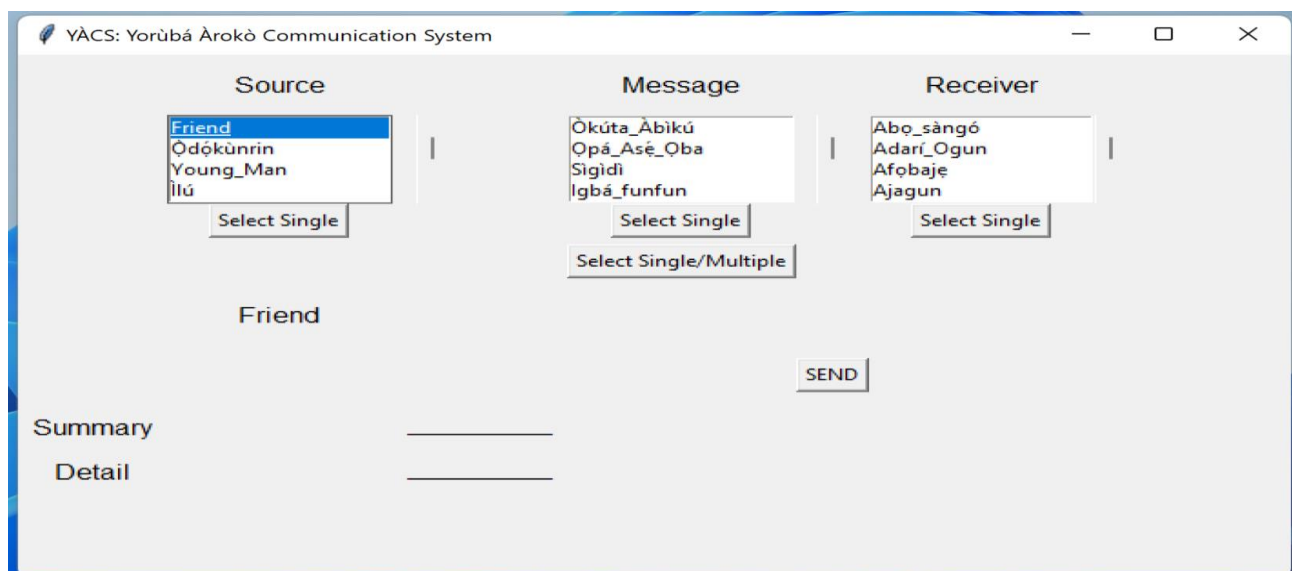


Figure 9: App showing One Object Selected as Message

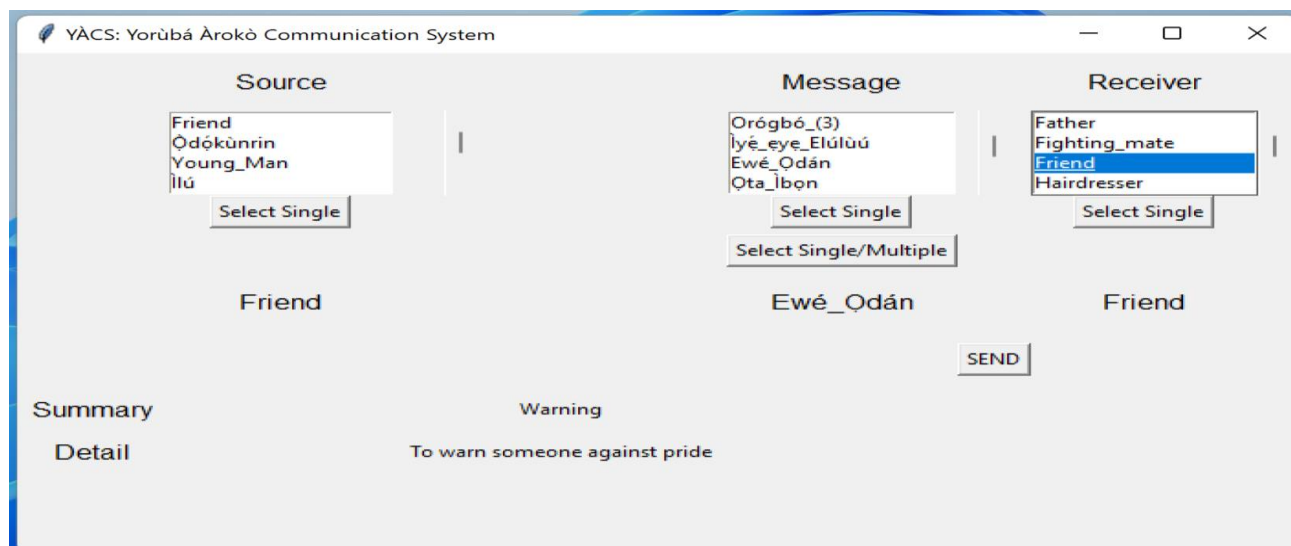


Figure 10: App showing source of message sent

7 Conclusion

The study has been able to develop a tool that can be of help in proper understanding of Arokò communication system among Yorùbá populace.

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