**PROJECT PROPOSAL:**

**COMPLETION OF SUPYIRE DICTIONARY AND DIGITIZED TEXT CORPUS**

**PRESENTED TO THE DEPARTMENT OF LANGUAGE, LINGUISTICS, AND TRANSLATION**

**OF AFRICA INTERNATIONAL UNIVERSITY**

**BY**

**ROBERT CARLSON**

**July 24, 2025**

**Introduction**

Supyire is a language belonging to the Senufo branch of Niger-Congo languages, spoken in southeastern Mali by about 350,000 people (Ethnologue, 2025). Supyire is one of the national languages of Mali and is used in primary education in the Supyire-speaking area. The New Testament was published in Supyire in 2008. A translation team is currently engaged in translating the Old Testament.

Robert Carlson (henceforth RC) began working on the Supyire language project under the auspices of SIL International in 1979. As part of that SIL project, for the purposes of linguistic research, a lexical database and text database were created and have been added to over the years. This material is potentially of great value for the development of the Supyire language and for linguistic and cultural research.

Although no longer officially part of an SIL Supyire project since 1997, RC has continued to engage in linguistic research on Supyire, primarily in collaboration with Ali Sanogo, a speaker of Supyire. Together they have considerably enlarged and improve the databases. This material should be made available to the Supyire people and to researchers.

**Goals**

The goals of this project are to produce:

1. a Supyire-French dictionary in print form
2. a Supyire-English dictionary in print form
3. a Supyire-French/English app for smart phones
4. a Supyire text database available online

**dictionaries**

The production of the dictionaries will require the following activities:

1. standardization of current Toolbox entries
2. revision of Toolbox database coding to facilitate export to FLEx
3. correction of current entries, including French and English translation of examples
4. addition of orthographic information
5. addition of more and better example sentences
6. addition of entries to cover all lexical items in published Supyire literature
7. creation of French and English indexes
8. creation of an introductory grammar sketch
9. transferral of the database to FLEx
10. output and printing (in paper and electronic editions)
11. output and publishing as a smartphone app (or other appropriate technology)

**text-database**

The production of an online text database will require the following activities:

1. revision and regularization of transcription
2. interlinearization
3. translation
4. annotation (linguistic and cultural)
5. transferral to the formatting required by the host (to be determined)
6. publishing online

**Personnel**

Project Manager: Prof. Robert Carlson. RC has been engaged in linguistic research on Supyire since 1997, and has published a reference grammar and numerous journal articles on Supyire. In the course of this research, he compiled the databases which form the major part of the data for this project. RC is a faculty member in the Languages, Linguistics, and Translation Studies Department of AIU.

Supyire Specialist: Robert Sanogo. RS, who has a BA in accounting and business management is an L1 speaker of Supyire. RS speaks French and is acquiring English. RS needs to acquire expertise in linguistics, in particular in lexicography, morhosyntax, and data management.

Information Technology Specialist: Michael Otieno. MS has worked for three years with RC on the Supyire Toolbox database. He is doing a BA at ANU in computer science. He needs to acquire basic knowledge of linguistic analysis and expertise in the use of FLEx.

**Timeline**

**2025-2027**: revision and standarization of current Toolbox lexical database (RS, RC); addition of orthographic information to entries (RS, MO); revision of Toolbox database coding to facilitate transfer to FLEx (MO, RC); transfer of database from Toolbox to FLEx (MO)

addition of lexical entries to cover existing published Supyire literature (coordination with Supyire translation team, educators, and literacy workers) (RS, RC)

**training:** Robert Sanogo enroll in and complete MA in linguistics at AIU; RS will write four papers and a thesis on topics related to Supyire lexicography directly contributing to the project; RS will gain expertise in the use of Toolbox and FLEx

Michael Otieno gain expertise in FLEx and basic descriptive linguistics in courses from DIU

**2028-2029**: revision of the lexical database in FLEx: addition and improvement of examples (RS); creation of French-Supyire and English-Supyire indexes (RS, RC, MO); creation of introductory grammar sketch (RS, RC)

creation of digital app (for smartphone) (MO)

**training**: Robert Sanogo begin PhD in linguistics at AIU; RS will write 5 papers on topics contributing to the project; RS will begin dissertation research on a topic contributing to the project

Michael Otieno complete BA in computer science

**December 2029**: publication of print dictionaries and distribution of dictionary app

**2030-2031**: addition of more texts to the text database, with a goal of reaching 450,000 to 500,000 words (RS); interlinearize the texts (RS, MO); translate all texts into English and French (RS); annotate texts (linguistic and cultural annotations) (RS, RC); identify the best host for the text database, and transfer the data into the appropriate format for publishing online (MO, RC)

integrate the text database with the digital dictionary (MO)

**training**: RS complete PhD; MO enroll in MA in linguistic computing

**December 2031**: publish the database online

**Budget**

appended

**Operational Procedures**

This project is a project of the Languages, Linguistics, and Translation Department (LLTD) of AIU, and as such comes under the authority of the Head of the Department (HOD). The department and AIU will be acknowledged in all publications.

The project will be funded by individual and institutional donations.

The project manager will report on the progress of the project to the HOD quarterly (at the end of March, June, September, and December.

The project manager will be responsible for fundraising for the project.

All requests for disbursement of funds will be presented by the HOD to the Finance Department of AIU.

The Finance Department of AIU will provide a financial report monthly to the HOD.

**Risks and mitigation**

The success of the project is dependent on the successful training of RS and MO. RC will make every effort to ensure that RS and MO receive high quality linguistic training and succeed in their training.

The current political situation in Mali may pose some problems for travel by RC and MO to Mali. In the event that such travel is inadvisable, measure will be taken to meet with relevant Supyire stakeholders (e.g. the translation team currently working on translating the Old Testement; actors engaged in literacy and bilingual education in Supyire) in a neighbouring country.

Due to the age of the project manager (75) every effort will be made to transfer skills and responsibilities to the other personnel as rapidly as possible.

PROPOSED BUDGET (USD, assuming exchange rate: 1 USD = 125 KES)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **YEAR 1** | **YEAR 2** | **YEAR 3** | **YEAR 4** | **YEAR 5** | **YEAR 6** | **TOTAL** |
| **TRAINING** | ROBERT SANOGO | 1,881 | 2,307 | 2,053 | 1,690 | 1,692 | 1,812 | 11,434 |
|  | MICHAEL OTIENO | 8,700 | 1,240 | 1,240 | 1,304 | 12,020 | 11,940 | 36,444 |
|  | SUBTOTAL | **10,581** | **3,547** | **3,293** | **2,994** | **13,712** | **13,752** | **47,878** |
|  |  |  |  |  |  |  |  |  |
| **EQUIPMENT** | ROBERT SANOGO | 720 |  | 480 | 240 | 480 |  | 1,920 |
|  | MICHAEL OTIENO | 720 |  | 480 | 240 | 480 |  | 1,920 |
|  | SUBTOTAL | **1,440** |  | **960** | **480** | **960** |  | **3,840** |
|  |  |  |  |  |  |  |  |  |
| **SALARY AND EXPENSES** | ROBERT SANOGO | 6,685 | 5,149 | 7,025 | 5,943 | 8,035 | 6,581 | 39,419 |
|  | MICHAEL OTIENO | 8,381 | 8,717 | 9,070 | 9,446 | 9,836 | 10,301 | 55,750 |
|  | SUBTOTAL | **15,066** | **13,866** | **16,095** | **15,390** | **17,871** | **16,882** | **95,169** |
|  |  |  |  |  |  |  |  |  |
| **TRAVEL (INTERNATIONAL)** | ROBERT SANOGO | 1,296 |  | 1,360 |  | 1,360 |  | 4,016 |
|  | ROBERT CARLSON | 1,200 | 1,200 | 1,400 | 1,400 | 1,500 | 1,500 | 8,200 |
|  | SUBTOTAL | **2,496** | **1,200** | **2,760** | **1,400** | **2,860** | **1,500** | **12,216** |
|  |  |  |  |  |  |  |  |  |
| **TOTAL Expenses** |  | **29,582** | **18,612** | **23,108** | **20,264** | **35,403** | **32,134** | **159,103** |
| **Administration (10%)** |  | 2,958.2 | 1,861.2 | 2,310.8 | 2,026.4 | 3,540.3 | 3,213.4 | 15,910.3 |
| **TOTAL** |  | **32,541** | **20,474** | **25,419** | **22,290** | **38,943** | **35,348** | **175,013** |

**ROBERT SANOGO**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Item** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | TOTAL |
| **Academic costs (AIU)** | Tuition Fees | 200,000 | 200,000 | 225,000 |  |  |  | 625,000 |
|  | Thesis Supervision |  | 50,000 |  | 180,000 | 180,000 | 180,000 | 590,000 |
|  | administration fees | 13,100 | 13,100 | 16,100 | 16,500 | 16,500 | 16,500 | 91,800 |
|  | medical insurance | 7,000 | 7,250 | 7,500 | 7,750 | 8,000 | 8,000 | 45,500 |
|  | KPP | 7,000 | 7,000 | 7,000 | 7,000 | 7,000 | 7,000 | 42,000 |
| One time fees | Graduation |  | 11,000 |  |  |  | 15,000 | 26,000 |
|  | CUE Fee | 1,000 |  |  |  |  |  | 1,000 |
|  | Orientation | 2,000 |  |  |  |  |  | 2,000 |
|  | ID | 1,000 |  | 1,000 |  |  |  | 2,000 |
|  | Caution | 2,000 |  |  |  |  |  | 2,000 |
|  | Registration | 2,000 |  |  |  |  |  | 2,000 |
| **Subtotal (KES)** |  | **235,100** | **288,350** | **256,600** | **211,250** | **211,500** | **226,500** | **1,429,300** |
| **USD (1 USD = 125 KES)** |  | **$ 1,881** | **$ 2,307** | **$ 2,053** | **$ 1,690** | **$ 1,692** | **$ 1,812** | **$ 11,434** |
|  |  |  |  |  |  |  |  |  |
| **Equipment** | Computer | 60,000 |  | 60,000 |  | 60,000 |  | 180,000 |
|  | Phone | 30,000 |  |  | 30,000 |  |  | 60,000 |
| **Subtotal (KES)** |  | **90,000** | **0** | **60,000** | **30,000** | **60,000** | **0** | **240,000** |
| **USD** |  | **$ 720** |  | **$ 480** | **$ 240** | **$ 480** |  | **$ 1,920** |
|  |  |  |  |  |  |  |  |  |
| **Personnel expenses** | Settling In | 60,000 |  |  |  |  |  | **60,000** |
|  | Travel: international | 162,000 |  | 170,000 |  | 170,000 |  | **502,000** |
|  | Travel: local | 10,000 | 10,000 | 10,000 | 10,000 | 65,000 | 15,000 | **120,000** |
|  | Communications | 3,600 | 3,600 | 3,600 | 3,600 | 3,600 | 3,600 | **21,600** |
|  | Salary | 600,000 | 630000 | 694575 | 729303 | 765768 | 804,068 | **4,223,714** |
| **TOTAL (KES)** |  | **835,600** | **643,600** | **878,175** | **742,903** | **1,004,368** | **822,668** | **4,927,314** |
| **USD** |  | **$ 6,685** | **$ 5,149** | **$ 7,025** | **$ 5,943** | **$ 8,035** | **$ 6,581** | **$ 39,419** |
|  |  |  |  |  |  |  |  |  |
| **Travel (international) (KES)** |  | 162,000 |  | 170,000 |  | 170,000 |  | **502,000** |
| **USD** |  | **$ 1,296** |  | **$ 1,360** |  | **$ 1,360** |  | **$ 4,016** |
|  |  |  |  |  |  |  |  |  |
| **TOTAL (KES)** |  | **1,160,700** | **931,950** | **1,194,775** | **984,153** | **1,275,868** | **1,049,168** | **6,596,614** |
| **USD** |  | **$9,285.60** | **$7,455.60** | **$9,558.20** | **$7,873.22** | **$10,206.94** | **$ 8,393.34** | **$ 52,772.91** |

**MICHAEL OTIENO**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DIU BUDGET (USD)** | | | | | | | |  |
| **Category** | **Item Description** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Total** |
| **Tuition & Learning** | Tuition (16 credits × $415) | $6,640 |  |  |  | $11,200 | $11,200 | $29,040 |
|  | Learning Resources Fee | $60 |  |  |  | $60 | $60 | $180 |
| **Administration Fees** | Registration Fee ($45/term × 2 terms) | $90 |  |  |  | $90 | $90 | $270 |
|  | Student Activity Fee ($30/term × 2) | $60 |  |  |  | $60 | $60 | $180 |
|  | Technology Fee ($265/term × 2) | $530 |  |  |  | $530 | $530 | $1,590 |
|  | Administrative Fee (one-time) | $80 |  |  |  | $80 |  | $160 |
| **TOTAL DIU (USD)** |  | **$7,460** | **$0** | **$0** | **$0** | **$12,020** | **$11,940** | **$31,420** |
| **ANU BUDGET** | | | | | | | | |
| **Category** | **Item Description** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |  |
| **Academic Costs** | Tuition (5 classes × 15,500) | 155,000 | 155,000 | 155,000 | 155,000 |  |  | KES 620,000 |
|  | Graduation fee |  |  |  | 8,000 |  |  |  |
| **TOTAL ANU (KES)** |  | 155,000 | 155,000 | 155,000 | 163,000 |  |  | KES 628,000 |
| **TOTAL ANU (USD)** |  | $1,240 | $1,240 | $1,240 | $1,304 |  |  | $5,024 |
| **TOTAL TRAINING (USD)** |  | **$8,700** | **$1,240** | **$1,240** | **$1,304** | **$12,020** | **$11,940** | **$36,444** |
| **Equpment** | Computer | 60,000 |  | 60,000 |  | 60,000 |  | KES 180,000 |
|  | Phone | 30,000 |  |  | 30,000 |  |  | KES 60,000 |
| **TOTAL EQUIPMENT (KES)** |  | 90,000 |  | 60,000 | 30,000 | 60,000 |  | KES 240,000 |
| **TOTAL (USD)** |  | **$720** |  | **$480** | **$240** | **$480** |  | **$1,920** |
|  |  |  |  |  |  |  |  |  |
| **Personnel expenses** | Transport: local | 144,000 | 144,000 | 144,000 | 144,000 | 144,000 | 144,000 | KES 864,000 |
|  | Communications (WiFi) | 3,600 | 3,600 | 3,600 | 3,600 | 3,600 | 3,600 | KES 21,600 |
|  | Salary | 840,000 | 882,000 | 926,100 | 973,200 | 1,021,860 | 1,080,000 | KES 5,723,160 |
|  | Health Insurance | 60,000 | 60,000 | 60,000 | 60,000 | 60,000 | 60,000 | KES 360,000 |
| **TOTAL PERSONNEL (KES)** |  | **1,047,600** | **1,089,600** | **1,133,700** | **1,180,800** | **1,229,460** | **1,287,600** | **6,968,760** |
| **USD** |  | **$8,381** | **$8,717** | **$9,070** | **$9,446** | **$9,836** | **$10,301** | **$55,750** |
|  |  |  |  |  |  |  |  |  |
| **TOTAL (USD)** |  | **$17,801** | **$9,957** | **$10,790** | **$10,990** | **$22,336** | **$22,241** | **$94,114** |

ROBERT CARLSON

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **YEAR 1** | **YEAR 2** | **YEAR 3** | **YEAR 4** | **YEAR 5** | **YEAR 6** | **TOTAL** |
| **TRAVEL (USD)** | 1,200 | 1,200 | 1400 | 1400 | 1500 | 1500 | 8,200 |