The Linguistic Atlas Project

Preface

The number of languages spoken in Africa has been a subject of speculation. As a result, scholars have proposed different numbers, up to 2035 (Grimes, ed.1996). In order to gain precise knowledge about African languages and their dialectical variations, which can inform corpus and status planning for multilingual education in Africa in line with the goals of the second decade of education for Africa and which can be used in various domains in Africa, the African Academy of Languages (ACALAN), a specialized Institution of the African Union Commission whose mandate is to foster the development and promotion of African languages as a pragmatic means of securing the integration and development of Africa in collaboration with the Regional Economic Communities (RECs) and the AU member states, has embarked on a project aimed at producing a linguistic Atlas for Africa.

The aims of the Linguistic Atlas for Africa are:

- (a) To gain a clear knowledge of the linguistic situation in Africa, i.e. the precise number of African languages on the continent and their varieties
- (b) To facilitate language planning policies for multilingual education
- (c) To encourage the development of competencies for higher education and research
- (d) To promote socio-economic development and African integration

The project becomes very important because it will among other things serve as a source of information for development and promotion of African languages for political, socio-economic and regional integration. The Linguistic Atlas Project will produce language maps which are crucial tools to providing valuable information about the number of languages (and their varieties), the number of speakers in particular geographical areas, the status, use, relationships, levels of codification and other dynamics about languages in the continent. In various ways then, the project will promote African-led research initiatives which will support the African Union's agenda for sustainable development in Africa. In providing information on languages expansion and notably those mostly used in communication in a given region, the linguistic atlases will be very useful for economic studies that can be conducted by the Member States.

Secondly, it will help with capacity-building opportunities for African researchers and

institutions of higher learning, especially departments of Linguistics and language studies located in African universities. It is very important to note that the African Union in the second decade of education for Africa placed a strong emphasis on education capacity development as a tool for promoting sustainable development in Africa. Due to the inadequacy of financial and human resource competence, the majority of African institutions of higher learning have not been actively involved in the generation of knowledge and information which can adequately influence linguistic, educational and socio-economic policies. A cost-effective Language Atlas project will thus optimize the training of a pan-African critical mass of linguists who would in turn, support national research teams which would be involved in the project.

The information the atlas will provide when produced will be useful for all the relevant stakeholders and it will also provide African countries with competent language practitioners and other technicians who can produce reliable linguistic maps and who can also train a new generation of researchers who will ably undertake linguistic research initiatives which will respond to local, national, regional and continental needs in Africa.

In preparing for the development of the project, linguistic atlases already produced by some African Union member states and regional centres of culture and languages such as CERTODOLA, were taken into account. There have been a number of planning meetings for example; in 2007 ACALAN organized a workshop in Bamako, Mali, to develop a framework for the project. Similar meetings were held in Arusha, Tanzania, Lilongwe, Malawi and Yaoundé, Cameroon, in 2012. This booklet is a summary report of what were done in those meetings and the progress made so far on the project.

The project in brief:

As stated earlier on, the number of languages spoken in Africa and their respective dialects has been a subject of speculation. As a result, scholars have proposed different numbers, for example, Grimes, (ed.) (1996) estimates the number of languages spoken in Africa at 2035. Extinction has also made it difficult to establish the number of languages spoken in Africa. Thus, in order to gain updated knowledge about African languages and their dialectical variations, which can inform corpus and status planning for multilingual education in Africa in line with the goals of the second decade of education for the continent, ACALAN is

undertaking this project aimed at producing a linguistic Atlas for Africa. On the African continent many programmes have been or are being implemented in various countries namely in Cameroon, in South Africa, in Tanzania etc. Those maps or the linguistic related documents do not benefit from the large dissemination they deserve. The project will therefore take into account linguistic atlas already produced by these African Union member states and regional centres such as CERTODOLA, to discuss methodological aspects of the project. Altogether, this rich documentation will help to create linguistic atlases or maps, for the African continent

Main goal of the Language Atlas project

a) To gain a real knowledge of the linguistic situation in Africa:

The Linguistic Atlas for Africa that ACALAN is proposing to produce is a new step in this field, a step that is particularly important because of unprecedented technological means that can be mobilized today and that make it possible to take a qualitative important leap toward the objectives of the project. Through the Linguistic Atlas project, ACALAN seeks to produce a language atlas for Africa with key information on all the languages spoken in the different countries. This information will be useful for all the relevant stakeholders and it will also provide African countries with competent language practitioners and other technicians who can produce reliable linguistic maps and who can also train a new generation of researchers who will ably undertake linguistic research initiatives which will respond to local, national, regional and continental needs in Africa. The project will take into account linguistic atlases already produced by some African Union member states, universities and regional centres of culture and languages to provide methodological, scope and other technical dimensions of the project.

b) For linguistic planning policies through multilingual education

In developing the Atlas project, ACALAN seeks to promote an African research initiative working toward the objectives of the regional and continental integration of Africa pursued by the AU and, at national level, by the governments. These objectives integrate the multilingual educational programmes established in many countries, and which involve cross-border vehicular languages as well as lesser used and official languages. This

knowledge is useful, even essential to define linguistic planning policies at national level of the States as well as at regional and continental levels. It is certainly the main stake for ACALAN as a specialized bureau of the African Union.

c) For the development of competencies for higher education and research

The Atlas project offers an exceptional opportunity to all the African universities (namely linguistics, geography, statistics and Computing Departments) in order to cooperate in networks with non African research organisations so as to train students (doctoral) and young researchers (post-doctoral) in the professions of research in disciplines related to the project. The African ownership of the project and its implementation within the universities and research centres working in networks, but each one in its own field, is one of the main characteristics of this project. It is indeed, at African institutional level that most of the training and research work will be carried out (notably: surveys, statements, information collecting, measurements, etc).

d) For socio-economic development and communication

In providing information on languages expansion and notably the most used in communication in a given region, the linguistic maps will be very useful for economic studies that can be conducted by the central banks in each region. In West Africa for instance, there are cross-border languages that are used as main languages for economic exchange throughout the region. The identification of these languages and the number of speakers who use them, in other words knowing the language patterns of communication of the various economic communities is essential information for an organization such as ECOWAS which is in charge of defining economic policies for the region.

Specific objectives of the project

The main objectives of the Atlas project can be summed up as follows:

- The computerized production of African linguistic maps
- The development of human resources through a high level intensive training
- The development of networks of collaboration in all the fields of the project
- The creation of computerized documentation making scientific and technical information

- on African languages and their cartography accessible to all.
- The promotion of information and communication technologies in Africa in the particular field of linguistic maps.
 - a) African linguistic atlas production: To produce a current and dynamic African linguistic map which contains crucial information about African languages particularly, the number of languages (and dialects) and areas where they are spoken, the number of their speakers, relationships among the languages, the levels of codification, their status and other dynamics.
 - b) **Human Resources Development:** To train language practitioners, researchers, technicians and other stakeholders, through skills enhancement, about the development of linguistic maps
 - c) **Institutional Strengthening:** To create and/or strengthen research teams for the production of linguistic maps
 - d) **Networking:** To create regional, national and other networks for training, collaborative research and dissemination of linguistic maps and other relevant sociolinguistic data.
 - e) **Information and Communication Technology:** To promote the use of information technology and dissemination, through linguistic maps.
 - f) **Development of online language resource database:** To develop and keep a comprehensive language information database about African languages which can be easily accessed through online means.

Scope of the project

The scope of the Language Atlas project shall cover the following areas:

- a. Determination of the number of languages (and dialects) spoken, their distribution and location on the maps.
- b. Indication of the number of speakers of the languages
- c. Relationship among languages
- d. Levels of codification- including reference to the literature and other materials available on the languages.
- e. Language policies and the status or domains of use for languages.
- f. The dynamics of the languages, including their expansion and potential for endangerment. This information will enable policy or major decision makers and the

- users of the languages concerned to know the number of languages already going into extinction and the most appropriate interventions to be taken.
- g. A clear specification on the approach to be used in defining and explaining what is meant by the term language. The socio-linguistics approach which recognizes the communities own views and perceptions on what they consider to be their languages will be adopted.
- h. An indication of the attitudes of speakers towards their languages. This will serve as a mirror through which people's own views about their languages will be reflected.
- i. Information regarding languages which serve as second languages of other speakers in various countries.

6. Project Methodology

The scope of the project, as already defined, will be the guide on the methodology to be used in its execution. There are two fundamental guiding principles for the methodological approach to be followed in the project. Firstly, the philosophical basis of the project shall be a sociolinguistic approach which encourages the recognition of communities own perception and acceptance of what they consider to be their languages instead of using strict linguistic criteria for determining language boundaries. Secondly, the project recognizes the importance of producing a comprehensive language atlas for African countries. This implies the inclusion of adequate information about the languages to be documented. In this regard, the production of language atlases shall be considered as only a part of the output of the project.

6.1 Project phases

The project, which shall be coordinated and monitored by a technical committee, shall proceed in phases. The first phase shall comprise countries and regions where there already exist language atlases or if atlases have not yet been drawn, where there is sufficient data about the language situation to the extent that it will be possible to prepare atlases on the basis of that information. In this phase, consideration will also be given to countries where the linguistic position is less complex due to either a low population or the small number of languages spoken in the country. Phase two will involve countries with more complex linguistic situations due to either large populations or the numerosity of languages spoken in the countries. In such situations, there will, obviously, be a need for more sociolinguistic data to be collected to support any existing linguistic information. The third and final phase, will involve countries where there is absolutely no sociolinguistic data and where sociolinguistic surveys will need to start from scratch. This situation is, clearly, the most complicated and the most involving. As it can be seen, the guiding methodological principle, therefore, is that the project will move from situations/countries with known or available information to those where there is very little or no sociolinguistic information.

6.2 Operational modalities

The project will involve various stakeholders. In countries where focal (contact) points

exist, these will be the entry point. In other cases, and where it is possible, the approach to concerned countries shall be through the vehicular cross-border language commissions (VCBLCs) and other structures of ACALAN. These will be requested to monitor and provide guidance in the implementation of the process of preparing the atlas as informed by the data collected through socio-linguistic investigations and other ways of data collection.

Universities and other research institutions in the various countries will be primary agents involved in data gathering and interpretation. These institutions will identify staff and students who will be involved in desk research on what is available in terms of work already done using libraries, archieves, CD ROMs and a variety of internet sources. Wherever necessary, and depending on the availability of resources, training for field researchers and other personnel will be organized at various intervals and levels during the life span of the project. Such training will target capacity building in sociolinguistic research and language atlas issues particularly for the next generation of academics and researchers. This will guarantee the continuity of the project in future.

Besides institutions, interested individuals and NGOs concerned with language development matters will also be invited to participate in the project in various capacities.

The technical committee shall be at liberty to create subcommittees which will assist it to work on different aspects of the project and it is expected that an effective network will be developed among the relevant stakeholders involved in the project (e.g. academic institutions, research centers, language commissions, focal points, NGOs, individual researchers, publishing houses, cartographers etc.) and that through this, sustainable levels of collaboration, information sharing and a feedback system shall emerge.

6.3 Tools for data Collection:

The overall approach to be adopted in terms of data collection shall be the methods used by the Languages of Tanzania Project. It will, among other things, include the following tools:

- Questionnaires: These will contain structured questions which will put the scope of the project in perspective and shall mainly be addressed to communities rather than individuals.
- Desk research: In situations where language information is believed to be available in documentary form, desk research will be done in libraries, research centers, archives and other information sources.
- **Interviews:** Interviews aimed at collecting sociolinguistic data from individuals and groups of people from communities shall be carried out within the parameters of the project.
- **Census:** In order to estimate the number of languages (and varieties) and their speakers in a particular community and also to determine the geographical distribution of the languages, a language census will be carried out in all situations where such information is not available. This may involve the inclusion

of language information questions in government sponsored demographic surveys in countries where such an opportunity arises.

Although there will be many agents used in data collection surveys, in most cases, information will be collected from the communities using school teachers, students, academics, language practitioners and other relevant individuals.

6.4 Data analysis:

Data analysis will be done primarily by language and other specialists in academic institutions and research centers specialized in language matters. Various types of software will be used for the analysis.

Once adequate language information for a given country has been analysed and structured, the data will be presented to cartographers, who will be identified by the technical committee from various countries, for the preparation of language atlases.

The main role of the technical committee in the whole process will be to supervise and monitor the progress of the project and to ensure that it conforms to the agreed objectives. The committee will then do a final evaluation of the work done for authentication.

7.0 Capacity building for research in language map development and documentation

As earlier stated, one of the objectives of the project is to build capacity in sociolinguistic research leading to language documentation and the preparation of maps. In order to achieve this, the following initiatives will be taken:

- a) ACALAN and the Technical Committee will identify language and other experts to train students and other personnel in aspects of sociolinguistic research and language documentation for the development of linguistic atlases.
- b) A decentralized but effectively monitored approach to program and project implementation will be followed to guarantee effectiveness in the execution of the project.
- c) Research and information networks will be created at national and regional levels to enable ACALAN and the Technical Committee to conduct regular needs assessments in order to plan and organize training workshops.
- d) To minimize costs, ACALAN and the Technical Committee will, wherever possible, rely on national and regional experts to provide training in areas of sociolinguistic research and language atlas development.

- e) A training of trainers' model will be developed to ensure sustainability of training at national and regional levels.
- f) To ensure quality training and research, ACALAN, the Technical Committee, and the created networks will, whenever possible, organize regional workshops to share experiences, research findings and discuss the produced maps.
- g) The Technical Committee will conduct periodic evaluations at national and regional levels on the progress of the training programs and the ongoing research activities to guarantee quality.
- h) Wherever possible, researchers from African languages departments in universities will be encouraged to involve students in research projects deliberately designed to promote language mapping initiatives..

8.0 Time frame:

It is envisaged that the first phase of the project will take approximately 10 months since it basically involves the harmonization and updating of existing atlases and the inclusion of some additional data for countries where there are gaps. The rest of the project phases will follow accordingly.

9.0 Copyright

As part of the process of adopting the already existing language atlases, ACALAN shall write institutions which hold the intellectual copyright for the maps and seek from them permission to use their materials.

10.0 Information dissemination

The technical committee will work out the modalities for the effective dissemination of the finished products of the project, namely, sociolinguistic information about African languages and the language maps.

11.0 Project funding

ACALAN, in collaboration with the Technical Committee, will seek financial, technical and other forms of support for the project from strategic partners who are interested in the promotion of African languages as tools for achieving political, socio-economic, technological and human development in Africa.

12.0 Project risk management, sustainability and quality control

In order to reduce the risk of poor project management, including that of allocated

resources, the following measures will be taken:

- i) A project implementation team (a Technical Committee) comprising linguists who have experience in the development of linguistic maps will be created.
- ii) An effective model of capacity-building that facilitates the training of a significant number of qualified linguists and students in areas of sociolinguistic research and the development of linguistic maps at a minimal cost will be adopted.
- iii) A proper research methodology for the implementation of the project will be created by teams of experts in the production of language maps. In order to familiarize all concerned stakeholders involved in the language atlas project with the relevant aspects of the project and its methodology, ACALAN and the project executing committee will organize periodic briefing workshops for leading members from all the African regions who will, in turn, conduct similar orientation workshops with other relevant members at the national and regional levels. In this capacity, they will provide immediate and tailor-made technical support to these national and regional teams thereby ensuring the sustainability of the project.
- iv) Effective project coordination machinery will be developed, through the Technical Committee, in order to monitor the progress of the project at various levels and to develop specific training workshops for members of the project network whenever necessary.
- v) To ensure program quality and effectiveness, ACALAN and the Technical Committee shall continue to work in close collaboration with other partners, including renowned linguists, researchers and organizations which have extensive experience in carrying out major research initiatives in areas of linguistic maps in Africa and elsewhere. This will further assist to guarantee the effectiveness of the training programs, the data collection and reporting methods and processes, the quality and dissemination of the maps and other research findings for effective use by policy-makers and the communities at large.

Reports from various Meetings and Workshops on the Project So far

As stated earlier on, a number of planning meetings took place to facilitate a smooth implementation of the project. For example in 2007, ACALAN organized a workshop in Bamako, Mali, to develop a framework for the project. Other workshops/meetings that were held include the workshop in Arusha, Tanzania, Lilongwe, Malawi and Yaoundé, Cameroon, in 2012 and the cartographers' meeting in Lilongwe Malawi in May 2013. The Arusha workshop was solely to review the project by experts and to map out the strategies to implement it, while that of Lilongwe was for the take off of the phase one of the project and the Yaoundé workshop was to round off the phase one of the project and to strategize for phase two. The cartographers meeting on the other hand was to commence data analysis on phase one and the production of a harmonized map for the countries where maps already existed as stated in the project framework.

Arusha Workshop

In collaboration with the East African Community (EAC), the African Academy of Languages, (ACALAN) organized a technical workshop on the Linguistic Atlas for Africa Project, at the Naura Springs Hotel, Arusha, Tanzania, between July 02 and 04, 2012 which aimed at:

- Reviewing the original project designed in 2007
- Discussing the methodology and technical aspects related to the production of the linguistic atlas
- Identifying and harmonize existing linguistic atlases on African languages.
- Discussing and develop international networks focusing on the production of linguistic atlases
- Discussing the strategy of ensuring the dissemination of information related to African languages and linguistic maps and
- Identifying and put in place a Scientific or Technical Committee to coordinate the project.

The Workshop brought together about fifteen participants including experts from various countries and institutions in Africa, staff of the Executive Secretariat of ACALAN, ACALAN's National Focal Points (NFP) from the Republic of Kenya, the Central African Republic, the

United Republic of Tanzania, and representatives of the Regional Centre for Research and Documentation on Oral Traditions and Development of African Language (CERDOTOLA). Some of the dignitaries and experts at the workshop include Hon Jessica Eriyo, Deputy Secretary General of the EAC (Representing the Secretary General), Mrs Gladys Gatheru, (late) Director, Department of Culture, Republic of Kenya(Representing the government of Kenya), Professor Sozinho Francisco Matsinhe, Executive Secretary of the African Academy of Languages, (ACALAN), Professor Charles Binam Bikoi, Executive Secretary, Regional Centre for Research and Documentation on Oral Traditions and Development of African Languages (CERDOTOLA), Professor Herman Batibo, Professor of Linguistics, University of Botswana (presented on behalf of Botswana), Professor John Kiango, Professor of Linguistics, University of Dar es Salam and Chairperson of the Kiswahili Vehicular Cross-Border Language Commission, Professor Alfred Mtenje, Professor of Linguistics, University of Malawi and Chairperson of the Chichewa/Cinyanja Vehicular Cross-Border Language Commission, Professor Semengou Ndongo from Cameroon, Professor Josephat Rugemalira, University of Dar es Salam, Tanzania and others from various institutions.

The workshop was piloted by Professor Binam Bikoi because of his vast experience in projects like this over the years he has been in CERDOTOLA. So his choice as the chairperson was well applauded. Professor Charles Binam Bikoi, the Executive Secretary of CEDOTOLA, who was chairperson for the workshop, thanked the participants and warmly welcomed them to the workshop. In his address, he emphasised the importance of the workshop and gave a short background of ACALAN bearing in mind that not every participants are acquainted with ACALAN and its programs. ACALAN, he said, was established as a specialized institution of the African Union in 2006 when its statutes were adopted by the Assembly of the Heads of State and Government of the member states of the African Union in Khartoum; it was mandated to develop and promote African languages as a pragmatic means of fostering African integration and development. ACALAN's mission from its inception has equally been to promote a scientific and democratic culture through the use of African languages in partnership with languages inherited from colonisation, namely English, French, Portuguese and Spanish.

He made a special mentioned of ACALAN's six major projects which are:

- i. The Linguistic Atlas for Africa project;
- ii. The Pan-African Centre for Interpretation and Translation project;
- iii. The Terminology and Lexicography Project;
- iv. The Pan-African Master's and PhD Program in African Languages and Applied Linguistics, (PANMAPAL);
- v. The Stories Across Africa(STAAF) project;
- vi. The African Languages and the Cyberspace (ALC) project;

He indicated that the present workshop was therefore at the core of ACALAN's activities as it is directly linked to one of its principal projects, namely the Linguistic Atlas of Africa project. At the end of his introduction, he invited all the participants to give their utmost ability to make the workshop a success.

The Executive Secretary of ACALAN, Professor Sozinho Francisco Matsinhe, in his opening remarks, also welcomed the participants and thanked them for honouring their invitations. He thereafter paid a tribute to Professor Binam Bikoi who, he said, had always been a strong cornerstone to ACALAN. He also commended the efforts of Professor Herman Batibo and Professor Al Mtenje for their roles in the institution of ACALAN, and their unfailing support. He informed the participants that ACALAN decided to invite resource persons from countries and regions where linguistic atlases were produced, to participate in developing a methodology and technique of producing a comprehensive linguistic atlas for Africa. He said that the Focal Point of ACALAN in the Central African Republic was invited to the workshop because he had never participated in ACALAN's workshops. Those from the United Republic of Tanzania and the Republic of Kenya were invited because the workshop was taking place in their region.

On the choice of Arusha as the workshop venue, Professor Matsinhe explained that a central place was needed for the workshop and that Nairobi and Arusha are central to where participants were coming, but Arusha being the headquarters of the East African Community was naturally chosen because the Regional Economic Communities as building blocks of the African Union are the principal pillars and partners of ACALAN. He concluded by saying that the project would be in phases, and would start with countries and regions that had already produced Atlases.

Honourable Jesica Eriyo, the Deputy Secretary General, Productive and Social Sectors of the East African Community (EAC), in declaring the workshop opened, welcomed the participants to Arusha on behalf of the East African Community Secretariat. She congratulated ACALAN for the efforts in making this workshop a reality and for choosing Arusha amongst the many good places on the continent as a venue for the workshop.

She expressed her gratitude about the fact that the workshop brought together linguistic experts on the continent to discuss the methodological aspects of producing a linguistic atlas for Africa, evaluate the existing atlases in some of the African Union member states and regional organizations, and to draw a roadmap on the way forward towards the ultimate goal of realizing a comprehensive linguistic atlas for the African continent. While noting that the task was not an easy undertaking, it was nevertheless a noble one, and thereafter pledged EAC's support and cooperation in the enterprise.

She informed the participants that the East African Community as a regional intergovernmental organization is composed of five (5) partner states, namely, the Republic

of Kenya, the United Republic of Tanzania, the Republic of Rwanda, the Republic of Burundi and the Republic of Uganda, enjoys a rich diversity of linguistic heritage. The region, she said, has more than 240 indigenous languages spoken by the various ethnic groups which form the EAC citizenry. In this regard, under *Article 119 (d)* of the Treaty of the East African Community, partner states undertook to cooperate in the promotion and development of indigenous languages within the Community. She said that the linguistic identity of the community is part and parcel of its cultural heritage and is indeed a core value of its integration process. Therefore the idea of having a linguistic atlas developed for the EAC is a noble one.

In declaring the workshop open, she re-affirmed the EAC Secretariat's eagerness and commitment to collaborate very closely with ACALAN and other regional organizations in the implementation of the Linguistic Atlas for Africa project.

Honourable Jesica Eriyo's opening speech was followed by the adoption of the programme. The Executive Secretary then presented the context of the workshop by pointing out that the workshop was convened to look at existing atlases and determine which methodology and time frame can best be used to carry out the project.

Different presentations made by resource persons to furnish updated information on any work that has been done on linguistic atlases in their countries or regions, and on the methodology and technique of producing these atlases. The presentations were followed by discussions and observations in plenary sessions. A presentation of the 2007 work plan was made by Professor Al Mtenje, who was one of the producers of the initial project; the presentation was followed by discussions and recommendations and a technical committee was formed during the workshop to develop operational frameworks including data-processing methods and the drawing of a road map on the way forward. Some of the presentations are given below.

Presentations

This opening presentation on the original project as conceived in 2007 was done by Professor Al Mtenje.

Africa Linguistic ATLAS Project Professor Al Mtenje, University of Malawi

Background

In 2007, ACALAN organized a workshop in Bamako, Mali, to develop a framework for the development of the Africa Language Atlas project. Key members of the team assigned the responsibility of developing the project were Prof Marcel Dikikidiri, Prof Hassana Alidou,

Prof Al Mtenje.

Draft input from Prof Alidou best summarises the project's conception in terms of its justification, main objectives, development, funding, implementation, monitoring and sustainability.

Project Justification

1. Importance of linguistic maps and the Centre for Research and Documentation in Africa for Education and Regional Integration

- Language ATLAS project would promote an African-led research initiative which supports the African Union and national governments' agenda for the enhancement of quality education at the tertiary level
- It would also help with capacity-building opportunities for African researchers and institutions of higher learning (esp. Departments of Linguistics and Language Studies located in African universities or Africa).
- Linguistic maps are tools that provide valuable information about the number of languages and their speakers in particular geographical areas.
- Demographic and communication data is useful for policy-makers (e.g. in education, health, justice, local administration etc.) and regional economic institutions/communities e.g. ECOWAS, SADC which can use lingua franca for regional socio-economic and political transactions.

2. Cost-effective Capacity-building through intensive training, collaboration and the creation of research networks

- AU, African governments and the international development community place strong emphasis on education capacity development as a tool for promoting sustained development in Africa.
- Due to inadequacy of financial and human resource competence, the majority of African institutions of higher learning have not been actively involved in the generation of knowledge and information which can adequately influence linguistic, educational and socio-economic policies.
- For instance, very few African universities have produced national linguistic maps that inform policy-makers and communities about the sociolinguistic situation of their countries and the implication this may have for good governance, democracy and the promotion of sustainable development programs and quality education.
- A cost-effective Language Atlas project would thus optimize the training of a pan-African critical mass of linguists who would in turn, support national research teams which would be involved in the project.
- The Language Atlas project would involve the creation of a Pan-African Centre for Resource and Documentation which would serve as the hub for the implementation, monitoring and evaluation of the project.

3. Main goal of the Language Atlas project:

Through the Language Atlas project, ACALAN seeks to provide African countries with competent linguists who can produce reliable linguistic maps and who can also train a new generation of linguists to ably undertake linguistic research initiatives which respond to local, national and regional needs.

Specific objectives:

- **African Linguistic ATLAS production:** producing a more current and dynamic African Linguistic Map
- **Human Resources Development**: training of highly qualified linguists through skills enhancement for the development of linguistic maps
- **Institutional Strengthening**: creating or strengthening national research teams for the production of linguistic maps
- Networking: creation of regional and international networks for training, collaborative research and dissemination of linguistic maps and other relevant sociolinguistic data.
- Information and Communication Technology: promotion of information technology through language research and the use of online communication for knowledge creation, retention and dissemination as well as continuous learning among researchers and different stake-holders
- **Development of online library resources**: develop and keep adequate language resources which can be easily accessed through online means.

4. Operational Modalities of the Language Atlas Project

The Africa Centre for Language Research, Documentation and Map Production

- Will be headed by a Director who would be appointed on ACALAN terms
- Will be funded by ACALAN and donor agencies and institutions interested in the promotion of language research
- Director will be support encouraged by team of professional staff specialized in areas of language studies, ICT, and documentation
- Researchers from across Africa involved in sociolinguistic research, including language mapping, will be encouraged to deposit their material at the Centre which will serve as a data bank for language material on Africa
- Researchers from across Africa who are involved in language documentation related projects will be attached to the Centre to access relevant resource
- -African language specialists will, from time to time, use the Centre and its documentation resources for training programs on language documentation and other relevant courses

Funding for research

- ACALAN and the Centre will allocate funds to national research teams for research projects geared towards the collection and processing of data for the development of linguistic maps.

Capacity building for research in language map development and documentation

- ACALAN and the Centre will identify international experts to train local linguists on request.
- The Centre will allocate funds to national and regional teams to carry out research projects on language documentation.
- A decentralized, but effectively monitored, approach to program and project implementation will be retained to guarantee program effectiveness.
- Regional research networks will be created and ACALAN and the ATLAS project will conduct regular needs assessments in order to plan and organize training workshops.
- To minimize costs, ACALAN and the ATLAS Project will rely first of national and regional experts to provide training.
- A training of trainers' model will be developed to ensure sustainability of training at national and regional levels.
- To ensure quality training and research, ACALAN and the project ATLAS, and the networks will organize regional workshops to share experiences, research findings and discuss the produced maps.
- Peer evaluation will also be conducted to determine the quality of national and regional studies and the maps produced.
- Following evaluation, the Center will support national and regional research projects and researchers in cataloguing and disseminating their maps.
- Wherever possible, researchers from African universities will be encouraged to involve students in their research projects.

5. Risk management, sustainability and quality control

ACALAN will reduce the risk of poor management of resources allocated to the project by:

- vi) Creating a project implementation team comprising linguists who have experience in the development of linguistic maps.
- vii) Providing for a provisional period (e.g. 2 years) for project implementation to allow ACALAN and the ATLAS project executing committee to establish the project and assess the effectiveness of its implementation.
- viii) Developing a model of capacity-building that facilitates the training of a significant number of qualified linguists at a minimal cost.

- ix) Organizing a meeting of experts to develop a proper research methodology for the implementation of the project. In order to familiarize all linguists involved in the ATLAS project, ACALAN and the ATLAS project executing committee will organize a training workshop for Lead experts from all the African regions who will carry out similar training at the national and regional levels. These experts will be designated as sub-regional facilitators of training. In this capacity, they will provide immediate and tailor-made technical support and training for national and regional teams.
- x) An effective program coordination will be developed. Regional coordinators will work closely with the Centre in order to monitor projects and develop specific training workshops for members of the network.
- xi) An effective accountability system shall be developed. ACALAN and the ATLAS Project executing team will develop an effective strategy for monitoring the implementation and the use of funds at national and regional levels. They will produce a periodic report related to the management of the project.
- xii) A scientific board shall be created to ensure program quality and effectiveness. The board shall be composed of world-renowned linguists and researchers who have extensive experience in carrying out major research initiatives (including linguistic maps and other linguistic projects) in Africa and elsewhere. The role of the scientific board shall be to guarantee the effectiveness of the project which includes the development of the Centre, the effectiveness of the training programs, the data collection and reporting processes, the quality and dissemination of the maps and other research findings for effective use by policy-makers and communities.

SUBPROJECTS UNDER ATLAS PROJECT

The Atlas project created 5 subprojects under it.

Stock-taking workshop

Objectives:

- Identify institutions and experts specializing in African languages and production of language maps
- To do stock-taking on work already done on language maps in Africa
- Identify partners to financially support the project
- Determine modalities/methodologies for data collection
- Develop international networks

Creation of African Centre for Research, Documentation and linguistic maps Objective:

- To serve as the hub for the implementation of the atlas project

Technical Coordination Workshop

-An annual midterm workshop involving atlas project implementation team/committee, language experts and others to assess the success of the project and provide solutions for improvement.

Regional Conference

Participants:

- Atlas project committee
- Director of Center
- Consultative scientific committee
- Policy makers, technical and financial partners
- Regional projects experts

Objectives:

- To disseminate results of research undertaken by center and its networks
- To get recommendations from experts on how to improve the project and minimize risks.
- This conference is held in each region of Africa.

Pan African Conference on African Linguistics

Participants:

- Language experts
- Center Director
- Consultative scientific committee on atlas project
- Regional members
- Policy makers
- Development partners
- Conference will take place every 3 years after regional conferences

Goal of conference

- Present to stakeholders results of research done by the centre and its networks.
- Assess results achieved over 3 years
- Make recommendations for improvement on project over next 3 years.

Important points and observations on the presentation:

- 1. A lot of emphasis had been placed on the research aspect, i.e. the project as conceived then was too academic;
- 2. The scope should not be too broad to the extent that the project becomes unfeasible;
- 3. Desk research is required in order to see what other people elsewhere have done;

- 4. Key institutions to work with ACALAN should be identified and notified, for example bureaux of statistics:
- 5. Because of the time lag 2007 to 2012, there is a need to review and update the project document;
- 6. The result of the project should be introduced in the education system in Africa.

Presentation two:

Language mapping as part of language documentation and preservation: Learning from Experiences

-Herman M. Batibo
University of Botswana

- 1. Introduction
- 1.1. Language mapping is an important activity in the field of linguistic geography. A number of language maps have been prepared for several of the African countries, such as Cameroon, Gabon, Central African Republic and Kenya. Most of these projects were foreign sponsored. (e.g. UNESCO, ACCT, Ford, etc).
- 1.2. However, some questions have been raised in recent years whether language maps are at all, useful in Africa, given its fast changing linguistic ecosystem (e.g. Batibo, 1999).
- 2. The traditional language mapping:
- 2.1. Main Goal:

To determine the distribution of languages or dialects in a country or area, and establish their respective boundaries, i.e. *isoglosses*

- 2.2 Methods and goals
- 2.2.1 The narrow-based method (detailed surveys on local variations of language)
- (a) Questionnaires distributed by post (Georg Wenker, Germany, 1877; Angus MacIntosh, Scotland, 1952)
- (b) Detailed field interviews (Jules Gilliéron, Edmond Edmont, France, 1896. Other surveys based on the same method were undertaken in Italy, Switzerland, Spain, Romania, England, and USA.
- (c) Dialectometric surveys (grid based) (Wilhelm Moehlig, Kenya, 1976; Gladys Guarisma and Christine Paulian, 1986, Cameroon, Gabon)
- 2.2.2 The Broad-Based Method
- (a) Speakers' intuition interviews (Michael Mann and Mubanga Kashoki, Zambia, 1968;

?Bernd Heine, Kenya, 1976

(b) Village based surveys (Sue Hasselbring, 1996; Batibo, Mathangwane and Tsonope, 2003, Botswana (No detailed maps were drawn))

2.3 Constraints of the narrow-based method

- (a) Changing linguistic ecosystem (reduction, expansion.
- (b) The existence of multiple linguistic overlaps and inter-mixtures
- (c) Limited human and financial resources
- (d) Limited technological support
- (e) Time factor.
- 1,2. Toutefois, certaines questions ont été soulevées ces dernières années si les cartes sont de langue du tout, utile en Afrique, compte tenu de sa rapide changement de l'écosystème linguistique (par exemple Batibo, 1999).

2. La cartographie linguistique traditionnelle:

2,1. Objectif principal:

Pour déterminer la répartition des langues ou dialectes dans un pays ou une zone, et d'établir leurs frontières respectives, à savoir isoglosses

2.2 Méthodes et objectifs

- 2.2.1 La méthode à base étroite (enquêtes détaillées sur les variations locales de la langue)
- (a) Questionnaires distribués par la poste (Georg Wenker, Allemagne, 1877; Angus MacIntosh, Ecosse, 1952)
- (b) des entrevues détaillées sur le terrain (Jules Gilliéron, Edmond Edmont, France, 1896. D'autres enquêtes basées sur la même méthode ont été entrepris en Italie, Suisse, Espagne, Roumanie, Angleterre, et aux USA.
- (c) enquêtes Dialectometric (grille fondée sur) (Wilhelm Moehlig, Kenya, 1976; Gladys Guarisma et Christine Paulian, 1986, Cameroun, Gabon)

2.2.2 La méthode Broad-Based

- (a) des entretiens intuition orateurs (Michael Mann et Mubanga Kashoki, la Zambie, 1968;? Bernd Heine, Kenya, 1976
- (b) des enquêtes basées sur Village (Sue Hasselbring, 1996; Batibo, Mathangwane et Tsonope, 2003, le Botswana (Pas de cartes détaillées ont été formulées))

2.3 Contraintes de la méthode à base étroite

- (a) changement de l'écosystème linguistique (la réduction, l'agrandissement.
- (b) L'existence de multiples chevauchements linguistiques et inter-mélanges
- (c) L'insuffisance des ressources humaines et financières

- (d) Prise en charge limitée technologique
- (e) Le facteur temps.
- 3. Relevance of language mapping in Africa
- 3.1. The African perspective:
- (a) AU Plan of Action:

March 1997 UNESCO/OAU Harare Conference noted the "richness of the linguistic diversity in Africa and its potential as a resource for all types of development". One of the projects which were agreed in the Conference's Plan of Action was to establish a Linguistic Atlas of Africa, providing "an exhaustive <u>inventory</u> of all African languages and language areas". So far the number of languages in Africa is contestable: 1,500 (Maho, 1998); 2200 (Heine and Nurse, 2000).

- (b) One of LASU's (Linguistics Association of the SADC Universities) is to establish linguistic atlases and make a "thorough description of the local languages", Hence one of its Working Groups (established in 1987 in Harare) is supposed to work in this area.
- (c) Some African countries (e.g. Tanzania, Botswana, Malawi) would like to include language mapping as part of the general <u>documentation</u> of the countries' languages.
- 3.2. The main goal of language mapping in Africa could be described as:

 To indicate the approximate location and distribution of languages or language varieties in a country or area as part of linguistic information.
- 3.3 The other information would include:
- 3.3.1 Historical-Comparative:
 - (a) language origin and classification
 - (b) language varieties
 - (c) inter-relationship or intelligibility with other languages
 - 3.3.2 Sociolinguistic:
 - (a) number of speakers
 - (b) main socio-economic preoccupation;
 - (c) levels of description and codification
 - (d) levels of literacy
 - (e) patterns of language use
 - (f) levels of vitality (attitudes, transmission, domains of use)
 - 3.3.3 Documentation schedule:
 - (a) Priority list of languages in relation to description, codification etc.

- (b) Category of languages in terms of empowerment and preservation processes
- 3. Pertinence de la cartographie linguistique en Afrique
- 3,1. Le point de vue africain:
- (a) Plan d'action de l'UA: Mars 1997, l'UNESCO / OUA à Harare Conférence a noté la "richesse de la diversité linguistique de l'Afrique et de son potentiel en tant que ressource pour tous les types de développement». L'un des projets qui ont été convenues dans le Plan de la Conférence d'action était d'établir un Atlas linguistique de l'Afrique, fournissant "un inventaire exhaustif de toutes les langues africaines et les zones linguistiques". Jusqu'à présent, le nombre de langues en Afrique est contestable: 1.500 (Maho, 1998); 2200 (Heine et Nurse, 2000).
- (b) Un LASU (Association Linguistique des Universités de la SADC) est d'établir des atlas linguistiques et de faire une «description approfondie des langues locales», où l'un de ses groupes de travail (établi en 1987 à Harare) est censé fonctionner dans ce espace.
- (c) Certains pays africains (Tanzanie, par exemple, le Botswana, le Malawi) aimerait inclure la cartographie linguistique dans le cadre de la documentation générale des langues de ces pays.
- 3,2. L'objectif principal de la cartographie linguistique en Afrique pourrait être décrite comme suit: Pour indiquer l'emplacement approximatif et la distribution des langues ou variétés de langues dans un pays ou une zone dans le cadre de l'information linguistique.
- 3.3 Les autres informations seraient les suivants:
- 3.3.1 historico-comparative: origine langue
- (a) et de classification
- (b) variétés linguistiques
- (c) inter-relation ou d'intelligibilité avec d'autres langues
- 3.3.2 sociolinguistique:
- (a) nombre de haut-parleurs
- (b) principale préoccupation socio-économique;
- (c) les niveaux de description et de codification
- (d) les niveaux d'alphabétisation
- (e) les modes de la langue utiliser
- (f) les niveaux de la vitalité (les attitudes, la transmission, les domaines d'utilisation)
- 3.3.3 Documentation calendrier: Liste prioritaire
- (a) des langues par rapport à la description, etc codification
- (b) Catégorie des langues en termes d'autonomisation et de procédés de conservation
- 4. Uses of the linguistic maps and related information
 - (a) In education planning (categorization of languages for educational purposes, e.g. mother-tongue education: Botswana, Namibia, Ethiopia)

- (b) In information planning (e.g. radio and TV programmes, newspapers, etc. Uganda, Zambia).
- (c) Cultural planning (e.g. linguistic and cultural preservation: Botswana).
- (d) Academic studies (e.g. dialectology, historical and comparative linguistics, sociolinguistics, etc.);
- (e) Community use: (e.g. To benefit the respective communities in knowing about the location, status and dynamism of their languages)

5, The Tanzanian experience (A critique)

Tanzania published a monumental atlas project *Atlasi ya Lugha za Tanzania* in 2009. It is a very informative and comprehensive study of the number, location and status of the Tanzanian languages. However, the challenges include:

- a) What informants provide: ethnic identity? primary use of languages? or personal attitude towards the languages they speak? e.g. Kiswahili, according to the atlas, is spoken by only 2.4 million people in Tanzania (out of a population of over 45 million), and yet it is the national language!!
- b) How do we capture language proficiency information without systematic testing?

5. The Botswana experience

In Botswana, no serious attempt has been made to prepare a language atlas. Individual scholars have maps to accompany specific surveys, such as Hasselbring (2001, 2002), Monaka (2003). The reasons are:

- a) The country's national language policy recognizes only Setswana and English;
- b) Most studies have dealt with language description, patterns of language use and language endangerment. The mapping aspect was seen as cumbersome and unnecessary.
- 4. Utilisations des cartes linguistiques et des informations connexes
- (a) Dans la planification de l'éducation (catégorisation des langues à des fins éducatives, par exemple éducation en langue maternelle: le Botswana, la Namibie, l'Éthiopie)
- (b) Dans la planification de l'information (par exemple les programmes de radio et de télévision, journaux, etc Ouganda, Zambie).
- (c) La planification culturelle (par exemple la préservation culturelle et linguistique: le Botswana).
- (d) les études universitaires (par exemple la dialectologie, linguistique historique et comparative, sociolinguistique, etc);
- (e) Utilisation communautaire: (par exemple au profit des communautés respectives à connaître l'emplacement, le statut et le dynamisme de leurs langues)
- 5, L'expérience tanzanienne (Une critique) Tanzanie a publié un monumental projet d'atlas

Atlas Entrées ya Lugha za Tanzanie en 2009. Il s'agit d'une étude très instructive et détaillée sur le nombre, l'emplacement et le statut des langues tanzaniennes. Cependant, les défis sont les suivants:

- a) Quels informateurs de fournir: l'identité ethnique? principale utilisation de langues? ou de l'attitude personnelle envers les langues qu'ils parlent? EX. Kiswahili, selon l'atlas, est parlé par seulement 2,4 millions de personnes en Tanzanie (sur une population de plus de 45 millions d'euros), et pourtant il est la langue nationale!
- b) Comment pouvons-nous saisir l'information maîtrise de la langue sans le dépistage systématique?
- 5. L'expérience du Botswana Au Botswana, aucune tentative sérieuse n'a été faite pour préparer un atlas linguistique. Des érudits ont des cartes pour accompagner des enquêtes spécifiques, tels que Hasselbring (2001, 2002), Monaka (2003). Les raisons sont les suivantes: a) La politique de la langue nationale ne reconnaît que le setswana et en anglais; b) La plupart des études ont porté sur un langage de description, les modes d'utilisation des langues et langues en danger. L'aspect de cartographie a été considérée comme lourde et inutile.

6. Conclusion

There is a need to opt for the practical (i.e. broad-based) approach in view of the colossal number of languages un Africa. The drawing of maps should support documentation efforts and provision of information on our languages.

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6. conclusion Il est nécessaire d'opter pour la pratique (c.-à-large) approche en vue du nombre colossal de langues de l'ONU en Afrique. Le dessin des cartes devrait soutenir les efforts de documentation et la fourniture d'informations sur nos langues. Références: Batibo, H. M. (1999). "Quelle est l'utilité serait cartes linguistiques être pour la SADC?" Un document présenté lors d'un atelier parrainé par l'UNESCO sur les perspectives d'un projet linguistique de l'Atlas pour les pays de la SADC, qui s'est tenue à Mangochi, Malawi, 22-24 Octobre 1999. Batibo, HM, Mathangwane, JT et Tsonope, J. (2003) Le troisième enseignement de la langue au Botswana. Un Rapport de consultation nationale pour le ministère de l'Éducation, du Botswana. Gaborone: Imprimantes associés et éditeurs; Brenzinger, M. et HM Batibo (2010) Afrique sub-saharienne. Dans C. Moseley (ed) Atlas des langues du monde en danger. Pp 120-25. Paris: UNESCO. ISBN 978-92-3-104095-5; Chambres JK et P. Trudgill (1980), dialectologie. Cambridge: Cambridge University Press. Hasselbring, S. (2000) une enquête sociolinguistique sur les langues, Vol.1. Gaborone: Impression glands et des livres; Hasselbring, S. (2001) une enquête sociolinguistique sur les langues, Vol.2. Garorone: Impression glands et Livres. Maho, JF (1998) Peu de gens, Languaghes nombreux: Les langues de la Namibie. Windhoek: Gamsberg Macmillan; Monaka, K. (2003) La situation des Sekgalagarhi Langue au Botswana (Mme)

Comments and observations:

This second presentation put emphasis on the methodology used in the collection of data. Determining the appropriate location and distribution of languages or varieties of languages in a country or region is part of linguistic information. It is also to advice on education and information planning, as well as cultural and academic planning.

- 1. Care should be taken while developing the tools for data collection so that people are not misled; open-ended questions should be avoided altogether.
- 2. There is a need to define what language actually is and the boundaries to be set in doing so.
- 3. A unified and standardized method should be developed that could be useful in all the countries of Africa so that results could be slightly the same.
- 4. Pressure on the researcher should not be allowed to interfere with the focus which is both academic and for community usage.
- 5. The need for networking was emphasized.

Presentations from Tanzania and CERDOTOLA cannot be displayed here for some reasons but will be displayed on the real atlas when it is finished. Presentations from CERDOTOLA covers Central Africa's experience in producing the linguistic atlas of the region, under the Linguistic Atlas of Central Africa project sponsored by the Agency of Cultural and Technical

Cooperation (ACCT) the precursor to what is now the International Organisation of the Francophonie (OIF). It dealt with the methodology, instruments and time frame of the project as well as the challenges encountered. The presentation showed the countries of the Central African region that has produced atlases such as Burundi and Cameroon, in1983, and others like Gabon and Chad that have not produced any atlas.

Among the challenges faced then which led to updating some of the atlases in the region included the unavailability of modern day technology and having to do the data computation and analysis by typewriters. It then suggested that for a meaningful linguistic atlas for Africa, the objective must be clear. Also data must be collected where there is none and existing data be updated for adequate information to be obtained. The exercise must be based on the socio-linguistic situation of the country or region under study.

Main points and observations

- 1. The linguistic atlas for Africa should not only be based on determining the number of languages in a country or region, but it must also aim at giving extra information on the language;
- 2. The scope should neither be too narrow nor too broad;
- 3. The languages and the number of people speaking the language should be identified;
- 4. The relationship between the languages as spoken in different countries or regions must be established;
- 5. The atlas must take cognisance of codification;
- 6. The approach must be bottom-up and field researchers must be involved for adequate coverage;
- 7. A continental technical committee should be put in place to coordinate the project;
- 8. There should be training programmes for the project workers;
- 9. ACALAN's National Focal Points should be the focal points of the project at national level;
- 10. The RECs and other regional structures should be involved in the project.

Tanzania Language Atlas as presented by Professor Josephat Rugematira from the University of Dar es Salam was on a comprehensive linguistic atlas with exhaustive data and statistics on the exact number of languages spoken in Tanzania. It showed that the methodology used also sought for capturing socio-linguistic information which include language and population issues. Questionnaires and other forms of collecting data from the population census were used.

Main points and observations:

- 1. The involvement of stakeholders is necessary;
- 2. A pragmatic approach should be used in the dichotomization of languages into

- dialects and variations;
- 3. The necessary motivation, finance, professionalism and consistency should be used as elements in projects like this;
- 4. The scope of the research should not be too large;
- 5. The specificities of the countries concerned should be considered when preparing data collection tools.

After the various presentations and debates on them, a consensus was reached on how to implement the project.

A Technical Committee was formed, with a chairperson, to coordinate the project. The coordinative responsibility of this committee would be to update the initial project document, draw the Terms of Reference, and form sub-committees as ad hoc committees whenever necessary. Two people were selected from each of the five economic regions of Africa as members of the technical committee for the sake of geographic representation. Experts in atlas production were put on the committee regardless of the principle of geographic representation. At the workshop, the following were proposed as members of the technical team:

- 1. Professor Al Mtenje, Chairperson of the Technical Committee and Coordinator of the Linguistic Atlas for Africa Project, also chairperson of the Cinyanja / Chichewa Vehicular Cross-Border Language Commission, Malawi, Southern African;
- 2. Professor Josephat Rugemalira, University of Dar es Salam, Tanzania, expert in linguistic atlas production Member
- 3. Professor Charles Binam Bikoi, Executive Secretary of CERDOTOLA, Central Africa Member.
- 4. Professor François Lim, Director, Institute of Applied Linguistics, Bangui, Central African Republic, National Focal Point ACALAN in Central African Republic, Central Africa Member
- 5. Professor Chrispen Mulugungi, Central African Republic, Central Africa Member
- 6. Professor Kimane Njogu, University of Nairobi, member of the Kiswahili Vehicular Cross-Border Language Commission, Republic of Kenya, East Africa Member
- 7. Dr. Moaniki, University of Nairobi, Kenya, East Africa Member
- 8. Professor Ndolente, Uganda, East African Member
- 9. Professor Baye Mekonen, Ethiopia, East Africa Member
- 10. Professr Herman Batibo, Botswana, Expert (Southern Africa) Member

Professor Bamgbose Ayo (Nigeria) was to be contacted to give names of three people from West Africa; The Department of Arts and Culture of South Africa would also be contacted to

give a name for membership of the Committee.

It should be noted however that, some of the committee members were not invited to this workshop and as a result not all of them were present in Arusha. But the ones that were present immediately commissioned as a provisional technical committee to start working.

This provisional committee convened a meeting to draft a document on the framework for implementing the project on the second night of the workshop. The framework was presented to the participants on day three and was exhaustively discussed before being ratified. (See the report below):

During the meeting of the technical committee in the evening of the preceding day, at this Arusha technical workshop, the following points as a way forward for the Linguistic Atlas Project were considered.

- i. Scope
- ii. Methodology
- iii. Aapproach
- iv. Networks
- v. Time frame
- vi. Training

Scope

It was agreed that the scope of the project will determine:

- j. The number of languages spoken on the continent, their distribution and location;
- k. The number of speakers of each African language;
- I. The relationship between the languages;
- m. Levels of codification with reference to the literature available in the languages;
- n. the status of the languages and the availability of language policies;
- o. The dynamics of the languages;
- p. The Approach to be used in defining and explaining what a language is.

It was agreed that this philosophical or ideological position of the Technical Committee should be used. In other words, as much as possible, a socio-linguistic approach will be used to define languages in terms of their relationships, acceptability to the communities and to render the approach user-friendly.

Methodology

The scope of the project as defined above would guide the methodology to be used in the

implementation of the project. The following factors were therefore identified:

- i. Approaching the countries: the different countries are to be approached through ACALAN's National Focal Points and the Vehicular Cross-Border Language Commissions (VCBLCs) (where available) and other structures of ACALAN to implement the results while the universities and other Institutions will be involved in data collection. Universities will identify staff and students who will be involved in desk research on what is available in works already done, using libraries, archives, etc. Clear Terms of Reference would be prepared and training sessions would be conducted. Independent individuals and NGOs that can be of use to the Committee could participate in it.
- ii. **Tools for Data Collection:** The Tanzania Language Atlas project approach was to adopted:
 - Questionnaires should put the scope in perspective, indicate the aim of the project very clearly, and be addressed to the communities rather than to individuals; Interviews would also be conducted.
 - Reliance would be made on census findings if possible to estimate the number and names of languages spoken in a particular community.
 - Information will be collected from the communities using school teachers, students, lecturers and other individuals.
- iii. **Data and tools for analysis**: Institutions that do data analysis will be identified and various softwares would be used for analysing data, only the end result would get to ACALAN.

The role of the Technical Committee for the Linguistic Atlas for Africa Project (LAAP), as said, would be to supervise and monitor the progress of the project; it would also conduct a final evaluation of the work done before validation.

Approach: The first phase of the project will start from countries and regions where linguistic atlases existed to where there were none. The second phase would start from countries with fewer languages and lower population extend to the more complex ones. Phase three would then consider larger countries that had no atlases at all.

Networks: The networks will majorly include research and academic institutions, ACALAN's National Focal Points, Vehicular Cross-Border Language Commissions, NGOs, e.g *Ethonologue* of SIL International, and individuals. A relationship should be established with a reputable publishing house, but copyright issues must be clearly defined.

Time frame: a time frame of six months was set for the first phase which would basically involve the harmonization and updating of existing atlases; ACALAN should write for permission to use materials of institutions concerned. The Technical Committee in collaboration with ACALAN Secretariat will work out ways of disseminating the information. Resources for the harmonization will be made available by ACALAN. Phase two will proceed taking into account the experience obtained from the first phase.

Training: Training will be conducted for the people involved in the project depending on the need for it and the available resources. This will build the capacity of the actors and will allow for continuity of the project in the future. Sub-committees as ad hoc committees will be established if and when necessary.

General recommendations

Participants of the technical workshop on the Linguistic Atlas for Africa Project held in Arusha, Tanzania, on July 02 to 04, 2012, recommended that:

- 1. The existing project document be updated and sent to the participants for inputs by Professor Al Mtenje in his capacity as Chairperson of the Technical Committee and Coordinator of the Linguistic Atlas for Africa project, in two weeks.
- 2. The project budget be prepared by the Programme and Project Department of the Secretariat of the African Academy of Languages (ACALAN).
- 3. Training programme for implementation be linked to ACALAN's other projects e.g. PANMAPAL, and the sociolinguistic aspects be taken into account in the training of field workers
- 4. The scope of the project determines the definition of language, and documents on the various aspects of the language in order to make the research user-friendly.
- 5. Member states of the African Union designate National Language Structures as Focal Points for ACALAN where there are none because of their strategic importance.
- 6. The VCBLCs, Universities and other academic institutions participate in data collection and processing. Member states of the African Union be approached through ACALAN's National Focal Points for the implementation of the results.
- 7. The project adopts the Tanzanian linguistic atlas model of research (see annexes presentation on Tanzanian Language Atlas).
- 8. The project start from the known to the unknown and the time frame for the first phase i.e. collection and analysis of existing data take six months.
- 9. The networks of the project include universities, ACALAN's National Focal Points, ACALAN's Vehicular Cross-Border Language Commissions, and Non-Governmental Organizations etc.
- 10. Sub-committees as ad hoc committees are formed whenever necessary.
- 11. The products of the Linguistic Atlas for Africa Project get into the education system

in Africa.

- 12. Desk research could form a part of the research methods, and the method of data collection be comprehensive taking into account the definition of language and the objective of the project etc.
- 13. Key institutions that can get the information to the grass-root level be involved.
- 14. National structures that have information on language development, eg the bureau of Statistics be involved in the information gathering phase of the project
- 15. Professor Al Mtenje, Chairperson of the Cinyanja / Chichewa Vehicular Cross-Border Language Commission becomes the Coordinator of the Linguistic Atlas for Africa Project.

The Executive Secretary of ACALAN in declaring the workshop closed thanked all the participants for their efforts and devotion to African languages. He expressed his gratitude to the participants for their time, and especially CERDOTOLA for accepting to host the preparatory workshop for the Technical Committee of the Linguistic Atlas Project for Africa in Yaoundé. He expressed his gratitude to the EAC for their collaboration and support. He urged participants to continue their dedication to the development and promotion of African languages in general and in particular the Linguistic Atlas for Africa Project which can be considered as one of the pillars of ACALAN's language development programme. He said that more members of the Technical Committee should be identified, especially in regions like West Africa that have no representatives yet.

Outcomes of the workshop

The successful completion of the technical workshop on the Linguistic Atlas for Africa Project led to the following results:

- The commencement of updating a new project document based on the initial document prepared in 2007;
- Formulation of a new work plan and Terms of Reference for the project;
- Commencement of the harmonization of existing atlases into an abridged atlas to form the basis on which subsequent works will be based;
- Identification of strategic partners, creation of synergies and the drawing of a roadmap;
- Strategy for dissemination of information related to African languages and the linguistic Atlas developed;
- A Technical Committee responsible for the overall coordination of the project established.

Mrs Gladys Gatheru, Director, Department of Culture, Kenya and National Focal Point of ACALAN in the Republic of Kenya, delivered the vote of thanks, by praising the Almighty God for giving all the participants the good health and ability of working together in the workshop. She then congratulated ACALAN Secretariat for sponsoring and successfully

organizing such a fruitful technical workshop on Linguistic Atlas for Africa Project. She thanked all the presenters who took time to prepare and present their papers on the Linguistic Atlas for Africa Project, with enthusiasm and efficacy, presentations she said, were a learning session for most of the participants. Mrs Gladys conveyed a special thanks to the Principal Culture and Sport Officer of the EAC, Mr Bekaye L. Bernard who ably represented the EAC Secretariat at the workshop. She also thanked the hotel management for the good accommodation and delicious meals that they provided. Mrs Gatheru thanked the rapporteurs from ACALAN's Secretariat for compiling the report. She ended by acknowledging the major contribution by the Executive Secretariat of ACALAN for the entire coordination of the project

Annex:

The document below was presented by Prof Batibo as an addendum to his main presentation. It is to serve as a guideline for preparation of Atlases for Africa by the various member states in order to make the works of the cartographers easy during harmonization.

POINTS TO FOLLOW FOR LINGUISTIC ATLAS FOR AFRICA TEXTS (At National Level)

1. INTRODUCTION

For the sake of consistency, the text of each country's Linguistic Atlas should start with a short introduction highlighting the location of the country in Africa, its size in square kilometers and the number of languages.

The text should also give a brief account of the historical origins of the various language groups, how they settled in the country and the current language situation. The definition of key words, including the notion of language should also be included.

2. NUMBERS

A list of the languages with the known or estimated number of speakers for each, in the following manner:

- (a) List of languages in alphabetical order
- (b) List of languages according to their size (i.e. number of speakers)

3. RELATIONSHIP BETWEEN LANGUAGES

There should be an account of the genetic and areal/contact relationships between the languages as well as their general intelligibility. This will involve:

- (a) A genetic classification of the languages in each family or group;
- (b) An account of cases of inter-mixture, hybrids, Creole and Pidgin, etc;
- (c) Mention of cases of obvious intelligibility or name alternation.

4. LEVEL OF CODIFICATION

There should be an account of the degree to which these languages (in general) have been developed, so as to be used in the written mode, literacy, education and official dealings.

The areas to consider will include:

(a) Orthography:

Which of these languages have standard orthographies? In what characters? (Roman or Arabic)

(b) Grammars

Which of these languages have comprehensive reference or descriptive grammars?

(c) Dictionaries

Which of these languages have comprehensive dictionaries? Are they monolingual or bilingual?

(d) Literacy materials

Are there enough literacy materials for use by the relevant communities? How much are the people literate in their respective languages?

(e) Other publications

Are there scholarly publications on any of these languages? What type?

5. Language status

Are some of the languages given special status in the country, such as:

- (a) Nationally: Official, national, provincial, areal, local;
- (b) **Education:** Language of instruction at pre-school, primary, secondary or tertiary levels;
- (c) Functional: Lingua franca at national, provincial or areal levels;

6. NATIONAL LANGUAGE POLICY

What is the prevailing national language policy? Is it:

- (a) Inclusive (all languages are functionally or symbolically national languages)
- (b) <u>Partially inclusive</u> (only some languages are functionally national/official languages)
- (c) Exclusive (only one indigenous languages is national/official languages)
- (d) <u>Hierarchical</u> (all languages have recognized public functions, but differing according to their status and sizes)
- (e) <u>Status quo</u> (countries which have decided to adopt the ex-colonial language policy) it should be stated whether the prevailing language policy is explicit)

It should also be stated whether the prevailing language policy is **explicit** (enshrined in the constitution) or **implicit** (deduced from government decrees and reports)

7. THE DYNAMICS OF THE LANGUAGES

What is the state of the languages in terms of their vitality? Usually some languages will be expanding or gaining grounds at the expense of others. Hence we can categorize the languages as:

- (a) Expansive (if expanding in other territories and therefore having many L2 speakers)
- (b) <u>Vibrant</u> (if actively used by their speakers and readily transmitted to younger generations)

- (c) <u>Moderately endangered</u> (if some of the speakers are shifting to L2 and transmission to the younger generation has diminished)
- (d) <u>Severely endangered</u> (if a sizeable number of speakers is shifting to L2 and transmission to the younger generation is mainly towards L2)

8. ATTITUDES

Where the speakers of a language are multilingual, they often form positive or negative attitudes towards the languages they speak or in their midst. What are therefore their language attitudes towards:

- (a) Their own language?
- (b) The neighbouring language(s)?
- (c) The major (dominant) language(s)?
- (d) The ex-colonial language?

What are the implications of these language attitudes to language endangerment, choice of languages for education, public use or literacy in mother-tongues or other languages?

9. LEVEL OF PROFICIENCY IN CROSS-BORDER OR MEGA LANGUAGES

To what extent is the mega or cross-border language in the country spoken by members of other communities? How successful is it as a means of national/regional communication or integration?

10.BIBLIOGRAPHY

Make a list of any major references, particularly on reference grammars, dictionaries, orthographic guides, key literacy materials and general works on the history and relationship of the languages.

Technical Committee Meeting in Lilonawe, Malawi 19 - 22 Sept. 1912

Background.

The African Academy of Languages (ACALAN), in collaboration with the East African Community (EAC), organized a technical workshop on the Linguistic Atlas for Africa Project, at the Naura Springs Hotel, Arusha, Tanzania, between July 02 and 04, 2012 to have an update on the number of languages spoken in Africa and their dialectical variations, which can inform corpus and status planning for multilingual education in Africa. In line with its vision and mission, ACALAN has decided to implement the decisions and recommendations of the Arusha i;e to commence work on the linguistic Atlas Project with the aim of producing a comprehensive linguistic Atlas for Africa. The project would take place in phases taking into account linguistic atlases already produced by some African Union member states and regional centres such as CERTODOLA and then moving into regions and countries where the atlases are not available.

It is within this context that ACALAN set up a technical team to work out modalities on how best the project will be carried out. The coordinative responsibility of the committee would be to update the initial project document, draw the Terms of Reference, and form subcommittees as ad hoc committees whenever necessary. The committee was made up of Linguists and experts in atlas production regardless of the principle of geographic representation.

Following the Arusha workshop on the review of the Linguistic Atlas for Africa as it was conceived in 2007, the Technical Committee in collaboration with the ACALAN Secretariat held their first technical meeting in Lilongwe to commence work on the first phase of the project.

The meeting which took off by 15.40 hrs local time under the chairmanship of Prof. Alfred Mtenje had in attendance the following:

- Prof. Al Mtenje Chairman and Coordinator of the project(Malawi)
- Prof. H.B Batibo Expert (Gaborone)
- Prof. Josephat Rugemalira Expert (Tanzania)
- Prof. Henry Muzale Expert (Tanzania)
- Prof. Charles Bikoi Executive Secretary, CERDOTOLA (Cameroon)
- Prof. S.F Matsinhe Executive Secretary, ACALAN
- Mr. Alick Bwanali Expert (Malawi)
- Dr. B.J Ojo Snr. Program and Project Officer, ACALAN
- Ms R. Tamuliza Accounting Officer, ACALAN.
- Mr. Gwaligwali J. Cartographer, (Malawi)

There were various observations and reflections on the Arusha workshop reports especially on page 10 which was taken as the guide for the present meeting. Suggestions were made on how the project should be approached which are:

- Trans or Cross boarder language basis
- National/Regional language basis

These was further expatiated upon to mean that the project should be conceived in terms of languages that can cut across Africa and languages that are more national or regional in outlook. After a short preliminary deliberation on the outlook of the project, the language expert from Malawi, Mr. Bwanali was asked to present the linguistic atlas of Malawi.

Linguistic Atlas of Malawi - Mr. Alick K. Bwanali

In his presentation, Mr. Bwanali pointed out that their focus while carrying out the study was to know the number of languages spoken in Malawi, the geographical spread, variants/dialects of the languages, and the attitude of the people towards their languages. To determine the number of speakers, the statistics were obtained from the Census conducted by the National Population Bureau. The methodology adopted was the sociolinguistic approach in order to make the work user friendly. He reported that the researchers were more interested in the respondents' first language and any other language/languages that they speak. Other things the study took into consideration were the acquisition method, availability of publications or literatures in the languages and whether there are languages that are already going extinct.

Matters for discussion from the presentation

The following issues came up for mention after the presentation:

- The issue of endangered languages
- How to get information on languages not currently shown on the map
- Attitude of the speakers to the languages-which do they regard as L1 and which are secondary
- Sufficiency of information on the maps for users
- Determination of who the users are clearly are
- Methodology

Recommendations:

After deliberating on the aforementioned points, the following came up as recommendations for further development:

- Where similar variants or dialects are present across borders and they are called different names, the variants should be documented as one language, though their different names should still be maintained
- The book form should be used to provide full information on languages that may not have appeared on the atlas
- The tools for data collection should still be the socio-linguistic one in order to get the people's feelings about their languages
- The map to be produced should contain detailed information for the consumers as the principal consumers are the policy or decision makers, education sector, etc
- Information contained therein should also put the Education sector into focus when data are being collected
- The need to build a comprehensive data base for the consumers was also emphasized.

The second day of the meeting which was chaired by Prof. Charles Binam Bikoi (Executive Secretary of CERDOTOLA) saw members agreeing that there was no need to represent works already presented at Arusha, rather focus should be on how to harmonize the existing data and maps. It was also agreed that the committee and the cartographers should be made to concentrate on the harmonization of the atlases using the checklists as produced in Arusha (page 10 of the report refers). It was also agreed that the methodology for the phase one work should be limited to how to put the atlases together since there may not be any need to go back to the field for data collection before the phase is concluded. It was finally agreed that discussions should be focused mainly on the gaps and further information that can help in updating existing data and information that are available.

Discussions on key group that chould be considered in Change in Albania March 1860.

A presentation by Prof Batibo from Botswana which was based on the key areas that should be considered while putting together a comprehensive linguistic atlas for Africa was discussed. Cogent points raised include:

- The aims of the project
- Content of the atlas must include:
 - Main languages of Africa
 - The main language of the region
 - The languages of each country
 - The position of languages at provincial/area level
- Methodology

- Census
- Estimation
- Socio-linguistic survey
- Level of proficiency
- Language attitudes
- Level of language endangerment or spread to other language territory
- Other information
- People to be involved in the project

Prof. Batibo referred the meeting to the checklist on page 10 of the Arusha draft report as being very crucial. Before discussions were concluded on this matter, the meeting agreed that:

- The first phase can be based on approximation of data
- The issue of mapping should be redefined. Maps should be the last thing to be done after every other processes have been carried out
- Focal points should be carried along as the project progresses in order to get access to every government apparatuses that may be needed for the authentication of the project at the end
- Mobilization of fund at the various country level is very important to support whatever ACALAN has on their project budget
- The need to identify the cartographers who will do the harmonization of the existing maps. They could be called for the meeting in Cameroon
- Dr. Manaka (a cartographer) should be involved and other cartographers at the University of Botswana.
- Botswana as a country should not be among the countries on phase one at the moment. This is because; Botswana does not have a comprehensive linguistic map for now but an area map. Also that the atlas focused on the endangered languages in the Western part of the country and codification of smaller languages are not yet done except the major languages that are recognized by the authority and finally, that approximation/Estimation were used to get the data that was used for the atlas

Prof. Rugemalira from Tanzania made a brief presentation of a comprehensive work with sufficient data on the speakers and the spread of the languages considered in the atlas work for Tanzania. A more detailed presentation of the atlas work had been done earlier in Arusha, hence, the brevity of the presentation. His emphasis in the presentation centered on

the need to get a robust database which he said was very essential for the cartographers to do a good job in representing the languages on the atlas to be produced. Putting all the data obtained from all the countries together for a better result especially where there are cross border languages. E.g chiyao appeared on the atlas in Malawi, Tanzania and Mozambique, their data could be put together to get a comprehensive and exact number of speakers of the language and he also talked about certain gaps which may be hard to deal with at this first phase especially in relation to second language situations.

The meeting agreed that at this stage, it would be good to concentrate on the works already done on the first language situations in Malawi, Botswana and Tanzania. Then the L2 and cross border languages would be taken care of at the second and third phases of the project.

Prof. Binam Bikoi pointed out in his own contributions that the Central African Region has done a lot of works in terms of developing linguistic atlas for the countries in the region. Out of the ten countries making up the region, four (Burundi, Central African Republic, DRC, and Cameroon) already have comprehensive atlases while others are in the process of producing. Field works are already done in countries like Rwanda, Congo Brazzaville and others all that is needed now is to get the cartographers to standardize what is on ground. Two volumes of linguistic mapping which have just been completed in the Cameroon were presented to the meeting. The published volumes contained inventory of the languages spoken in the Cameroon both the ones that are known and the ones that are hitherto unknown and the bibliography on the other hand contained what has been published in the languages mentioned earlier on in the other volume.

Certain things came up which are very crucial to the phase under discussion which are:

- Integration of hitherto unrecorded languages in the linguistic atlas to be compiled
- Resources were found inadequate to cater for the DRC's works as a result of the large volume of the works in that country
- The number of languages spoken in Cameroon to be reconciled before the number of speakers can be determined
- Languages in danger of extinction also came up
- The information produced on the region seemed to be very elaborate. It was recommended that the works should be summarized to ease the cartographers works during harmonization
- A methodology has to be agreed on in order to harmonize the works.

After the discussions, the coordinator Prof Al. Mtenje spoke briefly on the Arusha agreements with a view to setting up a comprehensive checklist that will guide the project from this point. He referred the meeting to page ten of the Arusha report and urged members to take a closer look at the checklist while mentioning that certain things should be added to the check list on the page to make it more comprehensive. These are the points

that have constantly featured in the discussions since the beginning of the meeting the previous day. They include:

- The issue of endangered languages
- Attitude of the speakers of the languages which needs to be measured
- Level of codification
- Integration of unknown languages
- Second language situation and
- Reconcilin the number of languages spoken in the countries

Before the meeting took a break, the reporter was asked to make a checklist of what was done in Arusha and merge with the suggestions above. In order words, he should prepare the variables that should go into the project bearing in mind all the gaps that were identified which needed to be filled by the presenters.

It was also suggested that a meeting of the cartographers to fashion out a common atlas from the available data bases was very necessary, existing maps may not be tampered with but can be updated and developed on by the cartographers with the information provided for them. ACALAN should request for the copyrights from those holding them.

The presentation of the summary of all discussions and the gaps plus the comprehensive checklists for the project was later done by the reporter below:

Check list as conceived in Arusha and elaborated upon in Malawa

Following the Technical Team's meeting in Arusha, Tanzania the following issues were discussed and were further elaborated in Malawi:

- 1) The Scope of the project
- 2) Methodology
- 3) Approach
- 4) Network to establish
- 5) Structures, e.g the subcommittees
- 6) Time frame for the project.

Scope:

Under this section, it was agreed that the project will take care of:

- q. Determination of the number of languages spoken, distribution and location of the languages on map/maps.
- r. Number of speakers of the languages
- s. Relationship between languages
- t. Levels of codification-reference to literature that have been done on the languages
- u. Language policies and the status of the languages
- v. The dynamics of the languages/their expansion

w. Approach to be used in defining and explaining what language is. It was agreed that the philosophical or the ideological position of the committee should be used. In other words, as much as possible, the socio-linguistic approach will be used to define language as a result of relationships, acceptability to the communities and to make it user friendly.

The scope of the project as already defined will be the guide on the methodology to be used in the execution of the project.

The following were therefore identified and discussed:

1. Approaching the countries:

The different countries are to be approached through the focal points (where it can work), the vehicular cross-border language commissions (VCBLCs) and other structures of ACALAN in order to implement the results; while the universities and other Institutions will be involved in data gathering. The universities within the countries under study will asked to assist in identifying staff and students who can be involved to conduct desk research on what is available in terms of works already done using the libraries, achieves, CD ROM, etc and field works. Training and setting a clear TOR will be done for the people who will be involved. Independent individuals and NGOs who can be of good assistance to the committee can also be contacted. Information will be collected from the communities using school teachers, students, lecturers and other individuals.

2. Tools for Data Collection:

The Tanzanian approach which is visible is to be adopted which include:

- The use of questionnaires- the contents/questions to be included in the questionnaires should put the scope in perspective, make the aim of the project very clear and should be addressed to the communities rather than to individuals.
- Use of interviews
- Use of census, because of estimation of the number and names of languages spoken in a particular community
- 3. Data and tools for analysis:

Institutions that do data analysis will be identified and various software would be used for analysis; only the end result gets to ACALAN.

The role of the technical team will be to supervise and monitor the progress of the project. They do a final evaluation of the work done before authentication.

Approaches: (where to start from). It was agreed upon that the project should start from (a) countries and regions where we have atlases to where we don't have. This will be the first phase, (b) from countries with fewer languages and fewer population to the more complex ones which will be phase two, (c). Larger/unknown countries (phase three).

Time frame: a time frame of six months was set for first phase since it involves basically the

harmonization and updating of existing atlases, ACALAN should write for permission from the Institutions concerned to use the materials. The technical committee will work out how best the finished information is disseminated either on regional basis, districts or national level. Resources for the harmonization will be made available by ACALAN. Phase two will follow as an experience from the first phase.

Networks to be established.

The entry point will be majorly institutions, focal points, Commissions, NGOs, e.g SIL and individuals then, establish relationship with a reputable publishing house but copyright issues must be clearly settled.

Sub-committees: will be established if and when necessary.

Training: A training component should be established for the people who are going to be involved in the project depending on the available resources. This will enhance the capacity of the people and will allow for continuity of the project in the future.

Other major propositions considered along the aforementioned include:

- 1) Endangered languages
- 2) Attitudes of the speakers
- 3) Codification of the languages
- 4) Integration of unrecorded languages
- 5) Second language consideration

Endangered Languages.

This will enable the policy makers or the major decision makers and the users generally to know the number of languages already going into extinction.

Attitudes of the Speakers.

This was agreed upon because of its socio-political implications. This can be captured using the socio-linguistic tool/questionnaire to reveal what the languages mean to the speakers, either as a first language or not.

Codification of the languages:

This will show the proficiency level of the speakers of the languages in a particular environment. It will show if there are written materials available in the language.

Integration of Unrecorded Languages.

Certain languages are not given prominence yet they exist, such languages should be captured in the atlas for mention or information to users.

Second language consideration.

Apart from the first language consideration, the second language of speakers should be put into consideration. For example, languages like Ciyanja in Malawi cuts across the entire country, while it is first language to some; it is second language to some this should be

clearly stated in the atlases.

Table showing each country on the first phase as they stand for now

Countries/Regions Central African Region Burundi Cameroon DRC	Presentation of works done Four of the eleven Central African Countries have established linguistic maps; others are in the in progress.	Gaps Existing The gaps are: The works presented are too large, they need to be reduced to more		
Chad CAR Gabon Equatorial Guinea Angola Sao Tome Congo	The four countries are: 1. Burundi 2. Cameroon 3. Democratic Republic of Congo (DRC) 4. Central African Republic (CAR)	manageable volumes. Number of languages in Cameroon(especially) should be reconciled		
East Africa Tanzania	Presented a comprehensive work with sufficient data and maps	The second language situation was not adequately dealt with, this may be dealt with in the second phase.		
Southern Africa Botswana	 No comprehensive Map, but a sectional work is available Focused only on an endangered language in Botswana It has useful information for the current project as conceived No codification and recognition by the authorities Codifications of about halve the languages in Botswana are available. 	 Not on the major language or main language on the cross border level Did not focus on any regional/national language but an endangered language Codification of smaller languages 		

■ Malawi	Malawi	= 7	o	know t	he	number
			f	languag	ges	spoken
		i	n	Malawi		

- The geographical spread
- Variants/dialects of the languages
- Attitude of the people towards their languages.
- Language choice

- The issue of endangered languages
- How to get information on languages not currently shown on the map
- Attitude of the speakers to the languages-which do they regard as L1 and which are secondary
- Sufficiency of information on the maps for users
- L2 situation not considered
- Cross border issue not considered

General Recommendations on the presentation.

- 1. Yaoundé meeting (Tentatively fixed for the second week of December 2012)to finalize the first phase of the project and draw a road map for the second phase
- 2. Cartographers to be identified within the higher institutions who shared the vision by the focal points or the country representatives/experts present in the meeting within one week of the meeting
- 3. Countries to update their data base before Yaoundé- probably within four weeks after the meeting
- 4. Trainings: Two levels recommended: a) Country level b) Regional and Continental level
 - Workshops for stakeholders who will continue the work in the process of time
 - Students who are on their MA and PhD in Linguistics could be motivated for this purpose
 - Prof. Rugemalira could assist ACALAN by supplying the Secretariat the contacts of the trainers who has been working with him that could be contacted for the purpose

5. Funding issue:

• For now, the seed approach can still be adopted as it is being practiced now.

The gaps are to be amended in the next four weeks before the next meeting in Yaoundé. A table was proposed by Prof. Rugemalira and was adopted for use by the cartographers for ease of access to data for the atlas. This was done with a view to making the Yaoundé meeting more meaningful and eventful. Participants were encouraged to help in providing information on published works that can help ACALAN in its works. This will help ACALAN to know what has been done in the past and what needs to be done more.

The third day of the meeting which have as the chairman Prof. H. B Batibo, took off with a proposal from the chairman that the cartographer in attendance, Mr. Jonathan Gwaligwali should be given a chance to state how he and his team intend to carry out the harmonization of the existing atlases. The proposal was accepted and the cartographer was given the floor.

In his speech, Mr. Gwaligwali outlined a number of things that will be done to make the work easier for them. These include making data available from the different countries by the holders of the data, merging the various data bases, symbolization of languages per country, language level, support information on the atlas, negotiation of how the maps will be produced, the map scale whether small large or medium. This will determine on how the languages will appear on the map, the layout of the map, which will show key information for display, typography, quality of the output and logos to display on the atlas. He thereafter braised certain issues for discussion by the committee which are availability of spatial data going by the gaps in the presentations, should the work be done nationally, regionally and continentally, volume and form of maps to be produced, the production procedure and reliability level of data at hand bearing in mind the date of collection. All these he said will affect the work to be done considerably.

After a thorough deliberations on these issues, it was agreed that individual country's bureau of statistics be contacted for data update where necessary. It was also agreed that the cartographers should determine the methodology to use in the harmonization process when they meet and they should also make projections on the data treatment where necessary.

The reporter was then asked to read the report of the proceedings for day two. The report was reviewed and minor corrections were pointed out for the attention of the reporter upon which the report was ratified as a true reflection of the proceedings.

A) Phase One

- All relevant details and data per country should be ready before the Yaoundé meeting so that the cartographers would have comprehensive information to work with. This should be done within the next fourteen days.
- ACALAN will approach the Botswana focal point to officially nominate a cartographer and /a specialist who will work with the Technical Committee on the Botswana linguistic atlas
- B) Phase Two:(Beyond Yaoundé)

- It was agreed that informal networks/contacts should be made with colleagues who have at one time or another worked on similar project in order to give the project a wider publicity
- The East African Community countries especially Kenya and Uganda should be put into consideration when planning and nominating countries for the second phase, though these two countries may not fall into the categories of small countries with less complex language structures but they are very strategic to the project on the whole
- ACALAN should set the parameters for the selection of countries for the second phase, choose them an intimate the committee with their choice for works to commence
- Training- ACALAN will get in contact with SOAS on the possibility of getting their services to train the people who are going to be involved in the project, Prof. H. B Batibo will do the ground works for the training while the University of Dar-e- Salam will host. Participants will be drawn mainly from countries in the first phase of the project
- The text to accompany the linguistic atlas to be drawn by Prof. Batibo for uniformity purposes. This will be sent to the secretariat as soon as the texts are ready.(see appendix i)

Outcome of meeting:

The successful completion of the technical meeting on the Linguistic Atlas for Africa Project led to the following results:

- The updating of the checklist and work plan for the project;
- Commencement of the harmonization of Malawi and Tanzania atlases into an abridged atlas;
- Identification of cartographers for the harmonization;
- Strategy for dissemination of information related to African languages and the linguistic Atlas developed.

Conclusion:

In bringing the meeting to a close, the Executive Secretary, Prof. S.F Matsinhe commented briefly on the observations of the participants on the error in the Swahili translations on the ACALAN banner, promising to take a good care of the error as soon as the team arrived in Bamako. He commended the participants for their efforts and thanked them for leaving everything behind to attend the meeting. He specifically welcomed the new members of the committee into the ACALAN family; i.e the two cartographers from Malawi and Dr. Henry

Muzale, an expert from Dar e Salam. He thanked the coordinator of the project, Prof. Al Mtenje for hosting the meeting and for bringing young people into the program, he implored all participants to keep their e-mails open for constant communication with the Secretariat. He removed the fear that the economic meltdown in Europe will have any adverse effect on the project. He gave the assurance that there will always be fund for the project. While thanking the participants once again, he wished everyone a safe trip back to their respective homes. Prof. Al Mtenje thanked the Executive Secretary and the ACALAN team for the meeting, he thanked the participants for giving their best for the meeting to be a success, while bidding all participants bye, and he offered to drive every participant to the airport to catch their flights back.

Yaoundé, Cameroon Workshop from 12 to 14 December 2012

Background:

In collaboration with the International Centre for Research and Documentation on African Traditions and Languages (CERDOTOLA), the African Academy of Languages (ACALAN), organized a technical workshop on the Linguistic Atlas for Africa Project in Yaoundé, Republic of Cameroon, from 12 to 14 December 2012 to finalize phase one of the project. The workshop was a follow-up to the two technical workshops on the project organized in Arusha, United Republic of Tanzania and in Lilongwe, Republic of Malawi, from 02 to 04 July, and 19 to 22 September, 2012 respectively. It brought together 37 participants (see annex for list of participants) including resource persons, experts, staff of ACALAN's Executive Secretariat and CERDOTOLA. The workshop aimed at updating existing data from member states with linguistic atlases, discussing the methodology and technical aspects related to the harmonization of existing linguistic atlases, discussing and establishing networks for the commencement of the second phase of the project, designating cartographers and preparing their terms of reference, developing strategies and procedures for the harmonization of the linguistic atlases and to draw the way forward and identify the training needs for the second phase of the project.

The opening session which was very colorful had in attendance His Excellency, Mr. Yoossem-Kontou, Ambassador of Chad Republic and Dean of the Diplomatic Corp of the member states of the African Union in the Republic of Cameroon; His Excellency, Mrs. Gisèle Bouanga-Kalou, Ambassador of the Republic of Congo; Madame Chantal Mfoula, Director of African Affairs, Ministry of Foreign Affairs of the Republic of Cameroon, Mr Vincent Seck, programme specialist of culture, UNESCO, Cameroon, Yoaundé; Mr Ntady Jean Omer, representative of CERDOTOLA in the Democratic Republic of Congo; Professor Sammy Beban Chumbow (a member of ACALAN's Assembly of Academician); Prof. Maurice Tadadjeu-Coordinator of PANMAPAL; Prof. Pius Mba, University of Yaounde 1; Country Representatives from Central African Region; Distinguished linguists; PANMAPAL students and the press.

Welcoming the participants to the workshop, the host who is also the Executive Secretary of CERDOTOLA, Professor Charles Binam Bikoi thanked all the participants and warmly

welcomed them to CERDOLA. He recalled the context of the collaboration between ACALAN and CERDOTOLA since 2007, when ACALAN started to establish its organs and working structures. He then highlighted the importance of the workshop and the challenges facing the experts. He urged them to consider the works realized by CERDOTOLA in terms of developing linguistic atlases, because it has been engaged in atlas production since the end of the 1970. He wished the participants a successful workshop.

Prof Bikoi's remarks were followed by those of the Executive Secretary of ACALAN, Professor Sozinho Francisco Matsinhe who symbolically greeted the participants in a variety of African languages, thanked Professor Binam Bikoi on and CERDOTOLA for accepting to host the workshop. He also thank the Ambassador of Chad, and Dean of African Ambassadors in the Republic of Cameroon; the Ambassador of the Republic of Congo in the Republic of Cameroon; the Director of African Affairs, Ministry of Foreign Affairs of the Republic of Cameroon, the representative of UNESCO in Cameroon, Yaoundé and the representative of CERDOTOLA in the Democratic Republic of Congo and other country representatives present.

Professor Matsinhe said that it is important that what a linguistic atlas is should be clearly defined. He metaphorically compared linguistic atlases being produced by others for Africans to someone organizing a party in his neighbor's yard. The time you are going to start dancing they would tell you that they were sleepy and were going to bed, meaning you have to go away. He added saying that food cooked in borrowed pots never kill hunger. This linguistic atlas for Africa project is therefore important because in producing it Africans are producing their own linguistic atlases for the first time. He pointed out that as Africans, if we are serious about developing African languages and about promoting the African Cultural Renaissance, we have to produce a linguistic atlas that would determine how many languages are spoken in Africa. The main objective of the Linguistic Atlas for Africa Project is therefore to determine the number of languages in Africa and their variations. Since CERDOTOLA have produced linguistic atlases, we have to rely on their expertise and use the atlases they had produced to avoid duplication. The atlas in itself is not the end product; the goal is to develop African languages as a factor of continental integration. He reiterated the idea that ACALAN and its partners are not abandoning the languages inherited from colonization, but are continuing to use them as partner languages. He concluded by thanking the participants again for their time, efforts and dedication.

The afternoon session was much business like. It began with Professor Charles Binan Bikoi introducing the programme, and the chairperson, Professor Sammy Beban Chumbow. Professor Chumbow, a member of the ACALAN's Assembly of Academicians and an Emeritus Professor of Linguistics invited every participant to introduce themselves. Done with the introduction, a presentation of data and format, one of the items given to the cartographers at the last meeting was made, because it allows the participants to know and understand the gaps we need information on from the different countries. It therefore served as useful inputs for the rest of the discussion especially with regards to the gaps to be filled up.

Presentation of the summary of the Lilongwe report

Dr Ojo Babajide Johnson, Senior Project and Programme Officer, ACALAN, presented a summary of the main points discussed during the Lilongwe meeting by the Technical Committee.

The Chairperson then asked the participants to suggest how to go about matters arising from the presentation. The report presented was revisited page by page for observations, by the participants.

Observations:

Malawi

The following observations were made on the Malawi presentation:

- I. The attitude of the people towards African languages, particularly endangered languages, and information about the languages such as dialectal variations, was not considered. It was suggested that this should be considered.
- II. The number of speakers of the languages in Malawi is not in the Malawi atlas.

Botswana

There were two observations on the Botswana presentation.

- I. Botswana does not have a comprehensive Linguistic atlas, and it was suggested that a specialist who worked with a cartographer be brought to this meeting to share his or her experience, and to determine what the concentration should be while developing the atlas. This was what justified the presence of Dr Monaka Kemmony.
- II. Concentration should be made on mapping which was the objective of this meeting too.

Countries like Gabon and Chad which were not mentioned in the last two workshops on the project have useful information about their language situation is available; an atlas is being produced for Gabon and information on the language situation in Chad is available.

Observations on the general recommendations of the Lilongwe report:

It was noted that the project cannot go far with the seed money that is being used for the identification phase. With only the seed money, the work is being done on voluntary basis and volunteer work do not last for projects like this because if a volunteer is not available you have to find other volunteers, which might cause disruption. On page 17 of the Lilongwe report, it was said that countries should update their database before the Yaoundé meeting, which was a bit ambitious. When reports are presented that point should be discussed. It was said however that updating might not necessarily mean finishing the work; it is an ongoing process until full information is available.

Professor Batibo had been requested to contact the School of Oriental and African Studies (SOAS), University of London, as a ground work for the training for thephase two of the project. He accordingly contacted two people at SOAS who wanted to know about the

period required for the training, which was given to them but they have not come back to him since then.

It was suggested that he should make a follow-up. The question as to why SOAS and not other institutions was asked. In response, it was said that the idea behind the choice of SOAS was that there is a Department at SOAS that funds projects on endangered languages and that ACALAN could use it a source of funding.

It was further suggested that if SOAS does not respond the Technical Committee should contact other institutions in Africa that have experience in the domain.

Discussion on the gaps existing in the atlases produced in the different countries

Before full discussions commenced on the gaps existing in the different countries, Dr. Monaka, a linguist from the University of Botswana was called upon to make a presentation on the situation in Botswana. As mentioned previously, Botswana has no linguistic atlas, but a linguistic atlas is in the process of being produced. The text for the atlas is ready based on the check list prepared in Arusha and Botswana has worked on the existing 28 languages in the country.

Dr Monaka's Presentation centred on:

- 1. Both the languages that are transmitted from mother to child and those that are not transmitted from mother to child,
- 2. The languages that are Cross-Border in nature,
- 3. Proficiency in the languages,
- 4. Language spread: amongst the 28 languages in Botswana, 12 are Bantu languages, and only four are codified.

Dr Monaka presented her work showing the mapping of the Shekgalagari language in Botswana.

The presentation raised a number of interesting questions.

- 1. Census: one of the issues is that governments in the area are not willing to count people in terms of their languages, to avoid instigating tribalism; a situation that contradicts the proposal that governments should be motivated to include language issues in censuses. Census results are interesting, but varying for many reason,
- 2. Methodology is another problem here. For example interviewing elderly people, but how much do these people know about the proficiency of their languages,
- 3. Should the second language situation be included in the research concerning primary speakers?
- 4. What to do with language naming, i.e. speakers with different names for the same language

Professor Josephat Rugemalira from the University of Dar-e-Salam also made a short presentation on the Tanzanian country atlas. He graphically showed the 150 languages of Tanzania, showing information about the number of languages, their number of speakers, whether the languages are L1, the availability of orthography, dictionaries, grammar, literacy material, the trend of transmission to the next generation, etc.

The following two issues were raised after the presentations:

- I. The use or not of prefixes in Bantu languages, for example Kiswahili and Swahili;
- II. The names employed by the speakers to refer to their languages.

It was thus suggested that the prefix should be maintained and a footnote be used to explain the difference. Other presentations from Malawi, Cameroon, Gabon, Central African Republic, Chad and Burundi were taken.

The Malawi presentation used the table format developed by Prof. Rugemalira earlier in Lilongwe and showed the 16 languages spoken in Malawi. The major problem with the presentation was that the number of speakers of the languages was not determined. It was noticed that the Cross-Border column of the Malawi presentation was not informative enough and was asked to be more elaborative.

On the Linguistic situation in Cameroon, the presenter gave a background of the linguistic situation in Cameroon saying that the languages of Cameroon were harmonized with the atlas that had been produced by CERDOTOLA.

On Gabon, the presenter noted that the linguistic atlas of Gabon was started by Professor Daniel Franck Idiata when CICIBA was founded in the 1970s. It stopped for a long time. One and a half years ago the project was revisited and is on track now. The linguistic situation of Gabon is globally imprecise. The atlas is the basis of work and enables to identify and situate the national linguistic family. It will take into account the Hausa language recently integrated in the national linguistic family, as well as the pigmy languages that are still problematic in the sense that no descriptions of them have been made yet.

From Central African Republic, it was gathered that the Linguistic Atlas of the Central African Republic was funded by the *Agence de Cooperation culturelle et Technique*, (ACCT) in collaboration with CERDOTOLA that administered the Linguistic Atlas of Central Africa project (ALAC), it was published in 1983. There are 78 languages in the Central African Republic amongst which two are already extinct, one is dying and 6 VCBL.

Amongst these languages Sango has a legal status of official language alongside French. The others are only considered as national languages. With the new data, it is left to the Central African team to update the maps and information. During the last general population census L1 and L2 descriptions were incorporated in the questionnaire.

In Burundi, a linguistic atlas was produced in collaboration with CERDOTORA. Burundi has one language across the country called Kirundi. It is spoken in Burundi, as the national language, with about 8,053,574 inhabitants. It is a language that has numerous dialects intelligible amongst themselves. Kirundi has many similarities with the Kinyarwanda spoken in Rwanda. It is also spoken in the neighboring countries of Burundi, including Rwanda, Tanzania and the Democratic Republic of Congo. In addition to French (co-official language of Kirundi) and English, Kiswahili has established itself in almost the entire region of East Africa. Work has already been done by ACALAN on Kiswahili in Burundi.

Kiswahili is taught from primary school to university; it is used in the media and is spoken by many young urban Muslims and foreigners of African origin. There are also foreign languages in Burundi, spoken by people from the Democratic Republic of Congo, Tanzania,

Mali, Guinea etc.

After the presentations two issues were raised for discussion.

- 1. Funding: it was noted that no presenter mentioned the sources of funding the project.
- 2. Expansion of languages: no presenter mentioned the attitude of the people towards the expansion of the languages; for example Fulfulde in Cameroon.

It has become clear from the presentations and discussions that there are challenges if data from censuses are to be used. Therefore we have to use methods according to the situation. The following recommendations were made after the presentations:

- 1. Maps should be one of the end products
- 2. There should be a description on the maps to explain or provide further information on the state of the languages under consideration.
- 3. There should be a list of probable challenges that may be encountered as the project progresses.
- 4. A pragmatic approach to research should be used.
- 5. Definition of terms should be provided, e.g. tribe in Tanzania is different from tribe in Botswana.

Discussion on the issue of copyright:

As it had been agreed in Lilongwe, the issue of copyright was supposed to be considered by the Technical Committee. The issue now is to determine the level of progress concerning that.

- 1. Botswana: the cartographers hold the copyright. The atlases have not been published yet.
- 2. Malawi: The Malawi language atlases was produced by the Centre for Language Studies, University of Malawi, it was funded by OSISA. Therefore it is an intellectual property rights, and any reproduction or usage should be approved by OSISA and the Centre for Language Studies.
- 3. Tanzania: the Tanzania map was produce by the Language in Tanzania Project, University of Dar Salam. It has to be authorized; therefore any reproduction or usage has to be authorized by the University of Dar es Salam.
- 4. Burundi: Professor Lothaire Njogu who is a member of the Kiswahili VCL Commission participated in the atlas project, which was produced for the first time. ACALAN's Secretariat will contact Prof. Lothaire Njogu for information.
- 5. Central African Republic: CERDOTOLA
- 6. DRC: CERDOTOLA.
- 7. Cameroon: CERDOTOLA

It is to be noted however that as agreed in Lilongwe, these data as presented cannot be used in their present state; they have to be updated, especially with regards to the L2 situation. It was indicated that the copyright issue is not for profit making, it should rather be seen as service to the continent. Before the adjournment of proceedings of the day, Terms of Reference was proposed for the work of the cartographers. These include the type of data,

methodology, software, presentation or representation of the data, different layouts, and copyright issue.

Cartographers' report

Following their meeting earlier in the day before the commencement of the morning session, Mr Jonathan Gwaligwali presented a report on behalf of the cartographers.

The presentation showed that they worked according to the TOR as indicated by Professor Herman Batibo the previous day: on the data type and the methodology to use in the analysis. They recommended the software called WGH 1984 could be used for the map, and indicated that a conversion of all available data is possible with that software. Observations:

- 1. The data varied in terms of quality and focus, and the challenge would be to see how accurate this data could be after harmonization. It was therefore proposed that the cartographers should identify the software that could generally be used.
- 2. The issue of isoglosses emerged, as to whether it would be use or not. To help the cartographers professor Batibo explained that iso means one, and glosses means language, i.e (one language). It signifies a line drawn to show the same language and their boundary. It was suggested that colors could be assigned to each language and names could also be used.

The following recommendations were made after the discussion.

- 1. Colors as opposed to lines in the development of the maps be used.
- 2. The Technical Committee works with the cartographers to provide guidance in the production process.
- 3. In developing the maps, all political aspects and considerations be omitted; only linguistic aspects should strictly be considered.
- 4. Magnify the scale of the map for congested areas.

The way forward:

Going by all presentations and discussions, the Yaoundé workshop on the final day discussed three major points which are:

- 1. Time frame for the project(phase one)
- 2. Budget for the project
- 3. Gaps to be taken care of by the countries concerned

On the timeframe for phase one of the project, it was discovered that the time allocated for the first phase was not sufficient, therefore an extension of the time frame to allow cartographers do their work conveniently was recommended. More discussions on the timeframe will be done by the Technical Committee in their next meeting.

Concerning the budget, it was agreed that the Technical Committee will have to meet and propose a realistic budget for the project.

With regards to the gaps, it was observed that certain information may not be available for

this phase in some countries such as Malawi, but it was recommended that various other sources of information could be relied on, for example the Ethnologies as a working document. Consequently, this will allow for many countries to be included in the phase.

To conclude discussions on the first phase, it was agreed that the first phase output should be based on themes, e.g. Vehicular Cross-Border Languages, political considerations should not be entirely neglected and the Technical Committee should be mindful about how countries should be included in the phase.

Second phase of the Project:

It is to be noted that developing a linguistic atlas is an ongoing process, therefore the younger generation should be involved as researchers.

Training needs for the second phase

- I. Resources available, Tanzania is ready to host the training.
- II. The content of the training have to be determined to include methods of language survey and use PANMAPAL students.
- III. It is preferable that trainers come from Africa.
- IV. The Tanzanian experience should be used.

In conclusion the Technical Committee should design an advocacy campaign to raise funds for the project and ACALAN will use its National Structures (Focal Points) to have member states get involved in the project.

Chair: Prof Al Mtenje

The programme of the day began with the Chairperson of the session, Professor Alfred Mtenje, inviting Mr. Jonathan Gwaligwali to present the report of the technical meeting of the cartographers held the previous day (see annex).

The following observations were made on the report:

1) List of materials:

Three important points were raised concerning the list of materials need for the practical work:

- I. Storage of the materials.
- II. Coordinator of the activities of the cartographers and centre of coordination.
- III. The manner of acquiring materials bearing in mind that the Technical Committee is already far behind schedule.

2) Data processing:

Participants wanted to know if the data needed by the cartographers to do their work has been provided by the presentations from the countries represented. They equally wanted to know how the data received would be processed to be translated into maps for the atlases, and how the software would be put to operation.

3) Editor:

The role of the editor not being clearly defined by the cartographers, the Technical Committee asked the cartographers to identify the roles of the editor for the Committee to outline the criteria for the selection of the editor.

4) Time frame:

The cartographers did not set any time frame for their work. It was recommended that the time frame should not be set in a hurry; that it should be set between July and December 2013. This was opted because phase one countries were chosen based on the fact that data and maps already existed in these countries, the task of the cartographers will thus be to take the documents and extract the information needed for the maps. The Technical Committee wanted assurance from the cartographers on how the existing data will be processed bearing in mind that the data they are provided with were collected at different times and sometimes with different focus and objectives. The cartographers also have to clearly identify the type of instrument they would require for their work and the issue of license.

Decisions by the Technical Committee

The Technical Committee at the end of the workshop made the following decisions:

- Training for Phase Two
- I. There is a need to have a framework and a comprehensive plan of action for the training. The training programme should be carried out for the people that are going to participate in phase two of the project. The training should be informed by the experience undergone during phase one of the project. This experience should be a guideline for training in phase two.
- II. The cartographers' work just like the other aspects of the programme should overall be coordinated from the University of Malawi, since the coordinator of the project works there.
- III. The coordinator of the program should write a detailed programme which would focus on:
 - a. The Term of Reference for the training
 - b. Time frame for the training
 - c. The mode of the training
 - d. The training manual
 - e. Funding
 - f. Participants in the training programme
- IV. The University of Dar e Salam in Tanzania should be the venue of the training, and Professor Josephat Rugemalira and Dr. Henry Muzale should coordinate the training.

The choice of the venue and Professor Rugemalira and Dr. Muzale as direct coordinators of the training was based on their experience in the field of Linguistic Atlas production.

- V. The time frame should be between July and December 2013 by which the cartographers must submit their reports on phase one of the project.
 - Budget

The Technical Committee should propose a comprehensive budget to the Secretariat covering all the activities to be carried out, including:

- i. The cost of updating existing data from countries in phase one
- ii. The cost of equipment for the cartographers including the software needed
- iii. The budget for Technical meetings, field works, research, and publications.
 - Operational framework for the Technical Committee:

There should be regular meetings of the Technical Committee with the different parties to monitor the progress of the work.

Additional Countries for Phase one:

No country should be added to phase one of the project arbitrarily; the project coordinator should write to the countries presumed to qualify to obtain useful information that will determine their inclusion. Guinea Bissau, Gambia, Sierra Leone, Liberia, Equatorial Guinea, Chad, Gabon, Chad, Seychelles, Swaziland, Lesotho and Botswana were suggested to be added.

Gaps in Country Data should be sent to the cartographers through ACALAN Secretariat and the coordination center in Malawi.

ACALAN's Reports on the Cartographers' Meeting in Lilongwe

Date: 7-9 May 2013

Venue: Bridgeview Hotel Lilongwe, Malawi

Background:

The African Academy of Languages (ACALAN), in collaboration with the East African Community (EAC), organized a technical workshop on the Linguistic Atlas for Africa Project,

in Arusha, Tanzania, between July 02 and 04, 2012 to produce a comprehensive linguistic atlas of African languages and their dialectical variations, which can inform corpus and status planning for multilingual education in Africa. In line with this, ACALAN began the implementation of the decisions and recommendations of the Arusha workshop by setting up a Technical committee to commence work on the first phase of the project which is their principal task. Other coordinative responsibilities of the committee include updating the initial project document, drawing the Terms of Reference, and forming sub-committees as ad hoc committees whenever necessary.

Subsequently, the committee met in Lilongwe, Malawi from 19 to 22, September, 2012 to commence work on the harmonization of the existing atlases from Member States. Preliminary works and data updating were done during the Technical meeting in Yaoundé, Cameroon from 12-14 December 2012.

In its efforts to conclude the first phase of the project and produced a harmonized atlas for Malawi, Tanzania, Cameroon, Central African Republic, Burundi, Democratic Republic of Congo (DRC) and Botswana ACALAN organized a Technical meeting with the Cartographers from these countries as a follow-up of the Yaoundé meeting to finalize the first phase of the project.

The workshop aimed at achieving the following objectives:

- Update all existing data from member states and regions with linguistic atlases,
- Discuss the methodology and technical aspects related to the production of a harmonized existing linguistic atlas,
- Set the time frame for the cartographers to do the harmonization and produce a draft of the atlas.

Participants, who are expected to provide updated information on the presentations made in Lilongwe, Malawi and Cameroon in December, 2012 were drawn from the affected countries and region. Hence, the workshop brought together Cartographers from Malawi, Tanzania, Cameroon, Central African Republic, Burundi, Democratic Republic of Congo (DRC), Botswana and staff of ACALAN's Executive Secretariat and CERDOTOLA.

Proceedings:

The workshop took off as expected under the chairmanship of Prof. Al Mtenje (from Malawi) who is the Project Coordinator. Others at the workshop include:

- Professor S.F. Matsinhe Executive Secretary, ACALAN
- Professor H.B. Batibo Linguistic expert (Botswana)
- Dr. B.J. Ojo Senior Program and Projects Officer, ACALAN
- Dr. Philip Mwanukuzi Cartographer (Tanzania)
- Mr. Thompson Sumani Cartographer (Malawi)
- Mr. Guy Maphorisa Cartographer (Botswana)
- Mr. Jean Ngoute Cartographer (Cameroon)
- Mr. Silas Bong Cartographer (Cameroon)
- Mr. Jonathan Gwaligwali Coordinating Cartographer (Malawi)

In his opening address the Executive Secretary of ACALAN, Prof. S. F Matsinhe welcomed everyone to the program. He apologized for the shifting of the program from February to May which he attributed to the challenges being faced in getting the data from the member states who are holders of the rights to the data bases for the work. He thanked the cartographers and the eminent Professors at the meeting for creating the time to honor the call. He then gave an insight to why the workshop was necessary. He implored all the participants to give of their best to make the workshop a success. He stated that the workshop becomes necessary in order to know what the cartographers will do with data, the framework for the work, the methodology and to also discuss on how to get Tanzania and CERDOTOLA to release the copyrights to their data banks for the work to move smoothly forward.

The participants were asked to introduce themselves and the program was reviewed before its adoption.

A very important observation was made by the chairperson, Prof Al. Mtenje. This has to with obtaining permission to use the copyrights of the member states concerned. He observed that only two countries gave the permission while others are still reluctant or are not willing to give their nods to the rights issue. He expressed his concerns about the non-committal of CERDOTOLA to the project at this stage, noting that CERDOTOLA was an arrow head for the project all along. He therefore appealed to all stakeholders to more opened and positive in their response to issues like this. He was of the opinion that people should be more opened in their demands so that the committees work can be seen to be

progressing.

To this, the Executive Secretary responded that preliminary discussions have been held over the copyright issues right from Arusha, Lilongwe and Yaoundé and CERDOTOLA has always been part of such discussions and agreements. What ACALAN did was to follow the baseline by writing to all the holders as required by the technical committee and responses were obtained from each holder. CERDOTOLA's position was that ACALAN should make a concrete proposal and bring it to the table.

Other issues like incentives and remuneration for people that are working with ACALAN for motivation purposes were raised. To this, the Executive Secretary replied that ACALAN works with people that are known, but that the Secretariat has decided that at some point, incentives would be worked out for people working on projects noting that the time of everything for nothing is gone. He therefore told participants to be opened and be sincere and positive in their approaches and demands. He informed the participants that Prof. Charles Bikoi and Prof. Josephat were invited for the workshop although the notice was short, which was due to new directives from the African Union Commission Headquarters on obtaining permission for programs and activities and therefore plead for understanding. He then requested the Yaoundé representatives to brief the participants on the meeting they had with Prof. Bikoi before coming for the meeting for the workshop, the decisions on the data and what is going to be the way forward.

Mr. Silas Bong, a cartographer from CERDOTOLA reported that there was a meeting between him and Prof Bikoi on the 23rd of April 2013 on the last book published on the Administrative Atlas of Cameroon, it was there he informed him about the meeting and ha was released to attend on a technical capacity. On the question of whether or not they discussed on data matter or copyright matter, he said there was no such discussion.

A member of the Technical Committee, Prof H.B Batibo observed that copyright issue looked very tricky because of the people that are involved. He was of the opinion that there might be fears from the publishers and they want some assurances that their publications will not be affected in any way in the future. He concluded that they need to be re-assured that the data will not be used as they are but will be updated before usage by ACALAN. He also wanted ACALAN to open a face-to-face discussion with CERDOTOLA on the copyright matter as soon as possible.

In his response, the ES assured that a meeting will definitely take place. He was of the view that ACALAN will invite Prof Bikoi and some other members of the Technical Committee in addition to Prof Chumbow to Nairobi when it will be meeting with Longhorn Publishers and other members of the Kiswahili VCBL. But he said this can only be after the month of May. The issue of incentives for VCBL Commission members and other people working with ACALAN was again brought up by Prof. Alfred Mtenje. In response, the ES gave assurances that this will be taken care of by ACALAN urging the youngsters particularly not to relent but to be more committed in putting their best in whatever project they are asked to work on because the projection is not only for Africa but for themselves too. He concluded by saying that for the partners to be encouraged to donate more funds, there must be something to show, so he wants the cartographers to work harder as they will be rewarded at the end of it all.

During the afternoon session, Prof. Batibo took the participants through the framework on which the analysis of data and harmonization will follow. This is to enable the cartographers to get to the root of their works very easily. After other counsels from the chairperson, the program was then handed over to the coordinating cartographer Mr. Jonathan Gwaligwali for the cartographers to go on with their works.

Reports from the Cartographers (see adjoining document)

The presentation was done by Dr. Mwanukuzi from Tanzania. Various observations were made and after the participants were satisfied with the document presented, the workshop was brought to a close with a short speech from the Executive Secretary of ACALAN.

CARTOGRAPHERS' MEETING ON LINGUISTIC ATALS OF AFRICA PROJECT LILONGWE, MALAWI 7th – 9th MAY, 20 13 REPORT

Background

As a follow up of the recommendation of the Yaoundé workshop on the Linguistic Atlas for Africa project held in December 2012 and in line with recommendations of the Technical Committee meeting in Lilongwe in September 2012, the African Academy of Languages (ACALAN) organized a workshop for cartographers at Bridge View Hotel, Lilongwe, Malawi, from 7th to 9th May 2013. The meeting deliberated modalities for implementation of Phase 1

activities of the Linguistic Atlas for Africa Project. The meeting reviewed different data types submitted by the member states and concluded that the data will be analyzed and used to produce the Linguistic Atlas for Africa using the Geographic Information Systems (GIS) technology. The meeting also discussed the data harmonization strategies and set the map production plan which will involve: data collection, data compilation and creation of database, reviewing ACALAN database, identifying gaps in the ACALAN database and determining the symbols to be used for language variations representation and data analysis. Other issues that were discussed are the budgeting, procurement of software and other tools for data analysis, setting the project time frame for Phase 1 and the working terms of reference for cartographers.

In attendance at the Lilongwe workshop were:

- ❖ Professor S.F. Matsinhe Executive Secretary, ACALAN
- ❖ Professor Alfred Mtenje Chairman and Coordinator of the project (Malawi)
- Professor H.B. Batibo Linguistic expert (Botswana)
- Dr. B.J. Ojo Senior Program and Projects Officer, ACALAN
- Dr. Philip Mwanukuzi Cartographer (Tanzania)
- Mr. Thompson Sumani Cartographer (Malawi)
- ❖ Mr. Guy Maphorisa Cartographer (Botswana)
- Mr. Jean Ngoute Cartographer (Cameroon)
- Mr. Silas Bong Cartographer (Cameroon)
- Mr. Jonathan Gwaligwali Coordinating Cartographer (Malawi)

The issues that were discussed in the cartographers' meeting on Linguistic Atlas of Africa project in Lilongwe, Malawi from 7th to 9th May, 20 13 are explained in details below.

Data type

To produce the linguistic map, **graphic data** and **attribute information** will be used. The graphics are the maps that describe the administration boundaries ranked hierarchically from a country to a small possible area in which data are collected within the country. Six categories of administration boundary were identified based on Malawi and Cameroon country division and the approach will be applied to the rest of the countries in Africa. Since Cameroon has 7 hierarchy of country division, compared to 6 of Malawi, but the census

information are collected at the two lowest levels of the country division in Cameroon, the last two divisions for Cameroon were merged to have six levels of hierarchy division as Malawi. The six categories of the administration boundary which will be used to produce linguistic map are as follows:

Table 1: Hierarchical divisions of country administrative boundary to be used for production of linguistic map

Malawi Country Divisions	Cameroon Country Divisions		
Country	Country		
Regional	Regional		
District	Division		
Traditional /Constituent	Subdivision		
Extension planning Area	Chiefdom 1		
Enumeration Area	Chiefdom 2-3		

The attribute information will include the information obtained from linguistic survey database, census data, reports and published materials. These materials will be obtained from the statistic bureaus, country linguistic database, country linguistic atlases and research reports. This information will be collected by cartographers in collaboration with linguistic experts involved in the project.

Methodology

Graphic data and attribute data from database and reports will be combined using the Geographical Information Systems (GIS) technology. The first step will involve constructing the GIS database that will include linguistic information and other relevant information for constructing the linguistic atlas. The GIS software and computers will be needed to establish the GIS based linguistic database. Information to be included in the database will be deliberated by the linguistic experts.

Once the GIS based linguistic database is constructed, the linguistic atlas map will be constructed with the level of details that need to be decided by the linguists. With a detailed database, linguistic maps for entire continent, the particular region, a country, the district, the division or the constituent can be created. The linguistic experts have to decide for the

level of details required from the six hierarchies in Table 1. For example the Linguistic Atlas for Africa may contain information up to the region level. But specific information of interest that may need to be added on this broader map such as, endangered language could be obtained from lower units such as constituencies in Malawi or chiefdoms level in Cameroon and added to a broader category. If a scale used does not allow such a small administrative units, information of particular interest will be represented by symbols, color, numerical and text codes. However, a meeting is required between cartographers and linguists to decide the symbolization of information that need to be represented in the map (refer to schedule).

Data harmonization

Data harmonization will involve combining spatial data from different sources by using a common set of data products specification. To achieve this, data sets which have been produced using different software such MapInfo will be converted to ArcGIS readable format.

Reclassification is another method to be used for harmonization. That is exemplified by reclassification of the Cameroon administration boundaries that have been merged into six classes instead of 7. If we refer to table 1 above, Malawi has six administrative units and Cameroon had seven but the last two administrative units for Cameroon i.e., Chiefdoms 2-3 had to be reclassified into one unit to be at par with Malawi to create a common ground for harmonization. The reclassification shown in Table 1 will be followed by other countries.

Another data harmonization that has been deliberated is the **projection of map information**. The projection need to be harmonized so that maps produced in different countries become compatible. For example, the data set for Cameroon may be in different projection and coordinate system from that of Tanzania, then the two data sets will have to be brought to a common projection and coordinate system that will allow two different maps to be combined. The projection that will be used is the UTM with the datum WGS 1984. All the data in respective countries can be allocated in their respective zones, but all the data will be transformed into Zone 35 coordinate system for the final map production. UTM Zone 35 coordinate system has its datum passing subdividine equally the Africa continent in the N-S direction.

Another area which was deliberately was **symbolization**. For example, representation of cross-border languages will require a common symbol that will help harmonize the extent of a particular language across national boundaries. The common symbols to be used in map production will be identified during the next cartographers and linguists meeting.

Map Production Activities Phase 1:

Data collection

Existing information such as country linguistic atlas, census data, linguistic glossaries, linguistic database etc., will be gathered from ACALAN, bureau of statistics, linguistic surveys and reports. Sources of maps that define the country divisions in electronic or hardcopy form also will be collected from their source to have an information archive. Some of this data are sold and can be purchased from, the mapping divisions, universities and bureau of statistics. Technical committee will need to assist in acquiring this data when difficulties arise.

Data compilation and creation of databases

The data which will be collected are of different formats and in different medium. Some are in hardcopy, some are in text format and some are in digital format. After gathering this data need to be compiled, coded, transformed into a digital form, entered into the computer and translated into the GIS database. The database created will be informed by the ACALAN linguistic experts, therefore this database will be the ACALAN database.

Reviewing ACALAN database

The ACALAN database that will be produced will be reviewed. The review will involve indentifying the linguistic variables that are explained by the linguistic experts but are not represented in the database.

Gap identification in the ACALAN database

In addition to indentifying linguistic variable that is not represented, missing cartographic variables will be identified. These are the gaps in the linguistic database. Cartographic variables need to be included in the database to enable the linguistic variables to be presented in the map form.

Determining symbols to be used for language variation representation

The shades of colors, patterns, text, numerical codes and line size, colour and type will be developed to represent each language characteristics as defined by the linguists. The symbolization developed will be used uniformly by all countries to produce the African linguistic map. This is an important task as the cartographer needs to be conversant with the meaning and terms of the linguists. The linguistic terms and meanings need to be translated into a map by using symbols and colours. Therefore, for this task a meeting is required that will involve cartographers and linguists.

Data analysis

Data analysis will involve producing information that cannot be obtained directly from both the linguistic database and other sources of data. Such information needs to be derived from existing database through analysis. A good example is quantifying the number of people in a certain area who are speaking a certain language. Once the analysis is performed, the products of information produced will be included in the database.

Updating the country database to conform to ACALAN database

Once the missing information, e.g., linguistic variables, cartographic variables, variables derived by analysis, symbols and codes for particular language characteristics are developed they will be included in the database so the information missing into the country database are included, so that the country database is updated to conform with ACALAN database.

Map production for phase one countries

This is a final activity in phase one to be performed by individual cartographers. The graphic data will be represented with the colour that represent the pre-determined symbol or colour. Different layers of information will be overlaid together using predetermined symbols and colour to produce the country linguistic maps of the countries which already have data for phase 1. As the data get available for other countries which do not have data, more national linguistic maps will be produced for specific countries. These country maps will be finally combined to produce the African Linguistic Map.

Table 2: Activity Time Schedule

S/N	Activity	Duration (months)	Period
1	Literature review country	0.5	15 th May-30 th May 2013
	profile		
2	Data collection	1	15th May-15th June 2013
3	Data compilation/creation of	4	1st Jun-30th Sep 2013
	database		
4	Reviewing ACALAN database	0.5	1st Oct-15th Oct 2013
5	Gap identification in the	0.25	16 Oct-21st Oct 2013
	ACALAN database		
6	Determining graphic	3 days meeting	Suggested dates
	specification to be used in		August- October (Need to be
	representation(needs a three		done after compilation of data)
	days meeting)		
7	Data analysis	1	16 Oct-17th Nov. 2013
	Updating the country database	1	1st Nov30th Nov. 2013
	to conform with ACALAN		
	database		
8	Map production for phase one	3	1st Dec-28th Feb 2014
	countries		

Cartographer remuneration

The total working days for the following activities are --- days. The duration of the activities is 9 months and half as shown in the activity time schedule. Since the cartographers are the working staff of the different universities it was deliberated that at least 4 hours out of 8 hours of a working day will be put in the project activities. These hours will produce 65 hrs for the period of 9 month and half. Therefore an individual man hour is 65 hrs for the phase 1. The rate deliberated to be paid was pegged at less than half of the normal consultation rates, which is about \$300 dollars per hour. For example the University Consultant Bureau of the University of Dar Es Salaam for a PhD holder with more than 10 years of working experience is \$700 per man hr.

The total services costs for expert is \$ 117,000 as per table 2

Table 3: Remuneration cost for cartographers

HRS	Rate (\$)	Total Cost (\$)	Expert No.	Grand Total
65	300	19,500	6	117,000

Payment modalities

The payment need to be paid in installments. 40% need to be paid at the signing of the contract, 30% after compilation and harmonizing the data and 30% at the end of phase1 after production of maps and presentation. Therefore, the technical committee of the project needs to prepare the contract for individual cartographers after this meeting that state the TOR according to the plan shown in this report. The contract should be sent to individual experts who will sign the contract and send back the contract with their bank accounts, so that the money is paid in individual accounts.

Budget

Table 4. Materials and Equipments

				SUB-		GRAND	
SN	ITEM	QTY	COST(USD)	TOTAL(USD)	10%CONTINGENCY(USD)	TOTAL(USD)	*PRIORITY
1	Laptops	6	1540.23	9241.38	924.14	10165.52	1
2	Desktops	2	594.49	1188.98	118.90	1307.88	2
3	A3 Scanner	6	2700.00	16200.00	1620.00	17820.00	1
	A3 LazerJet Colour						
4	Printer	2	1500.00	3000.00	300.00	3300.00	1
5	Printer Ink Cartridges	2	38.01	76.02	7.60	83.62	2
6	External Hard Drives	6	98.37	590.22	59.02	649.24	1
7	Blank DVDs(Boxes)	8	15.22	121.76	12.18	133.94	2
8	Antivirus	8	17.80	142.40	14.24	156.64	1
9	Adobe Illustrator	4	799.25	3197.00	319.70	3516.70	2
10	ArcGIS 10.1	6	3000.00	18000.00	1800.00	19800.00	1
11	USB-Memory Sticks	6	29.00	174.00	17.40	191.40	2
12	UPS Battery Back Ups	2	356.34	712.68	71.27	783.95	2
13	Internet Dongle	6	15.99	95.94	9.59	105.53	1
14	Laptop carrier bags	6	395.00	2370.00	237.00	2607.00	1
	A3 Photocopying						
15	paper	10	10.00	100.00	10.00	110.00	2
					TOTAL	60731.00	

*1-Priority 1, 2-Priority 2

Budget Grand Total = Remuneration + Material and Equipments is 174,908.88

The items indicated as priority 1 are required to be obtained as soon as possible. The one that are priority 2 can be obtained at later stages.

Table 5: Justification For The Items In The Budget

SN	Name of Item	Qty	Justification
1	A3 High Resolution	6	Scanning existing maps for digitization to obtain vector data, i.e.
	Quality Scanners		certain information could be in books and to capture this data a
			scanner will be used. Though our respective Universities could
			be having such a facility, there would not be an automatic access
			for the facility because this would be ACALAN project.
2	A3 ColorLaserJet	2	Printing copies of maps for proof reading at respective centres.
	Printers		Though our respective Universities could be having such a
			facility, there would not be an automatic access for the facility
			because this would be ACALAN project.
3	Adobe Illustrator	4	This is the best software for map output, what would you see in
	Licenses		the colour panel of this software is what you would get as output.
			We need two Single user Licenses for Tanzania and Botswana.
			For the centres we need one license each with three users.
4	ArcGIS 10.1	4	The adopted GIS software adopted by cartographers, it has the
			ability to digitize, query and analyze data. We need two Single
			user Licenses for Tanzania and Botswana. For the centres we
			need one license each with three users.
5	UPS battery back-ups	2	Power surge protection for safety of desktop computers. One for
			each centre (Malawi and Cameroon).
6	Boxes of Blank DVDs	6	Data storage as a back-up. Collecting data from
			various/respective offices is best done on CDs as they don't
			transfer viruses.
7	High Graphical Spec	2	For data processing and storage at the two centres. More office
	Desktops		graphical work shall be done at Centres thus the need for
			Desktops.
8	Computer Consumables	2	5 A3 Paper Reams and 2 Cartridges each for the 2Centers.To
			serve the two colour printers at their respective centres
9	Laptops	6	For each one of the six cartographers, these will assist in
			promoting efficiency in the sense that cartographers will at times
			be required to work at night in their respective homes in an
			effort to meet the dead lines. In addition these will also be useful
			during workshops where some technical issues will be raised
			and resolved using the appropriate software.
L	1		

10	Anti-virus	8	All the seven laptops and the two desktops will need protection
			from viruses.
11	USB-Memory-Sticks	6	Data will be required to be transferred from one media to
			another. One for each cartographer.
12	External hard drive	6	GIS data comes in huge mega bites, as such a big storage device
			like ext, hard drive will be required. This also stores data
			Permanently and as back-up

Remarks

In his concluding remarks, Professor Matsinhe commended the amount of progress made at the meeting as a positive development. However, he commented on cartographers' remuneration that any payment beyond 10,000 dollars will result in tendering the project according to ACALAN's policy and that may derail the project. However, he promised to work on the formula that will be used to pay cartographers in consultation with the African Union (AU).

On data availability for all phase one countries, Professor Matsinhe assured cartographers that data will be made available and plans are underway to meet all stakeholders in the project including Executive Secretary of CEDOTOLA, Professor Charles Binam. Meanwhile, cartographers were requested by the technical committee to commence work immediately following the activity time schedule above as other modalities are being sorted out.

Observations

It was observed by Professor Batibo that some issues were not tackled during deliberations like document size i.e. atlas size that will be produced at the end of the project and paper quality that will be used in the production of the atlas. To distinguish between official and national languages proved to be a difficult task for cartographers and linguistic experts were requested to make some clarifications during the next meeting on the same to avoid confusion.

Vote of thanks

Professor Al Mtenje thanked the leadership of ACALAN for the meeting and also thanked all participants for a Job well done. He then wished everybody a safe journey back home.

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