# MINUTES OF THE MEETING FOR THE UPDATING OF THE POPIN THESAURUS (27th, 28th, 29th November 1995)

The meeting was opened by Philippe Collomb who welcomed the members of the Working Group. He briefly presented the history of the thesaurus reminding the participants when the first edition was made and the reasons behind it.

He thanked Daniel COURGEAU for accepting the responsibility of managing the thesaurus for CICRED.

He also thanked the Director of INED, Patrick Festy for welcoming the Working Group at INED.

He welcomed Françoise MEUNIER who is in charge of the INED library and is supervising its computerisation.

He thanked UNFPA for covering the expenses of the meeting and for enabling CICRED to give new impetus to its activities in the field of the Thesaurus.

He welcomed David Rose representing UNFPA.

He also welcomed Susan PASQUARIELLA representing the Population Division. Joseph CHAMIE, the director of the Population Division was unable to attend the meeting.

Philippe COLLOMB made five observations concerning the current status of the Thesaurus

- The total number of descriptors seems excessive, even for the needs of a very large library, maybe even for a specialised library.
- The balance between the different themes dealt with does not always seem to be fully satisfactory. Certain themes appear to be too detailed, whereas others seem insufficiently developed, especially for certain new fields of demography.
- More than one third of the descriptors is not attached to the structure.
- He would like the thesaurus to include 3 levels of descriptors to be used by managers of small, medium-sized and large libraries.
- He would like the Thesaurus to be an effective tool for use by libraries, providing with its descriptors terms for appropriate headings and a means for measuring the frequency of consultation.

He suggested, that the group may therefore ask CICRED to implement a reorganisation of the hierarchy of descriptors rather than simply make an update.

He felt that it was very important that the Thesaurus should adapt to the changing situations the world will encounter in the coming decades and that it should be adapted to the requirements set out in the Cairo Programme of Action. He pointed

out that the differences between the geographical distribution of resources and that of populations would lead to substantial movements of resources and to large migration flows in the future and he welcomed Jacques DU GUERNY representing FAO and Reinhard LOHRMANN representing IOM.

He then welcomed the representatives of the different organisations that had made important contributions to promoting the thesaurus, either by translating it into other languages (Arab, Chinese, Portuguese) or by using it to set up demographic information systems.

The members of the Working Group presented themselves.

Ms PASQUARIELLA said that Anne COMPTON, was not able to attend the meeting

Mr GONNOT was absent but was expected to join the group later on.

Mr VILQUIN was also absent.

#### 1 Future of the Thesaurus

Mr COURGEAU stated that a choice between two objectives had to be made. Either to continue to update the existing PMT and use a controlled vocabulary or to change the thesaurus and introduce a natural language possibly leading to systems operating without indexing in the conventional sense.

This is an old debate which is being renewed with the increasing number of machine-readable data bases.

He asked whether it was time to let the thesaurus disappear and give way to an open-ended vocabulary.

He went on to present the advantages and disadvantages of the two procedures before opening a general discussion on this subject.

The reasons he presented for maintaining and even improving the existing PMT were that the main costs and efforts were expended at the beginning at the time of the input and which were made by Jean VIET, the first editor of the PMT, between 1975 and 1979. Even if there hierarchical structure required improvement, the existing PMT mainly needs trimming and the addition of a few new descriptors, and these changes will require less effort given that the structure already exists.

Secondly, most of the Population research centres around the world are very far from having access to indexes in machine-readable form. They mainly produce and use printed indexes. Even a centre generating a data base in both hard copy and machine-readable form may be forced to continue to maintain a thesaurus applied by human indexers (Lancaster: Vocabulary Control for Information Retrieval, 1986). We must be aware of the fact that that the main obstacle to abandoning the PMT may well be the continued production and use of printed indexes. As Lancaster said in

1986, "It may take 20 years or more to bring the gradual replacement of print on paper by electronic access".

Thirdly, the use of controlled vocabulary presents major advantages for the user. It facilitates conducting comprehensive searches without incurring high output costs and effort. This will lead to faster response time and relatively low search costs. Which is no longer the case when using a natural language. This is an important advantage to take into account and is of particular interest for researchers.

The reasons he presented for introducing a natural language thus letting the Thesaurus disappear were:

Firstly that there seems to be no major input problem in transforming the current Thesaurus into a natural language system. A list of the frequency of use of descriptors from the different demographic information systems existing throughout the world will make it possible to permanently establish an open-ended vocabulary. Secondly this low cost in input will be offset by substantial output efforts required. Because of the large number of words to be manipulated to perform a search approaching completeness a researcher will be obliged to construct a segment of controlled language each time he/she prepares a search strategy. Therefore, a variety of tools will be needed to assist the researcher.

Mr COURGEAU believes that the best tool for relieving researchers from having to think of all the words that might express a given idea is a post-controlled vocabulary (tables with names and identifying numbers that can be called up and consulted by users of natural language data bases with an on-line network). As for the moment very little work has been done on the concept and on elaborating a post-controlled vocabulary, important efforts need to be devoted to constructing it which is a long-term task.

He believes that even if the use of a natural language with a post-controlled vocabulary were to become the norm for information retrieval, this would not occur in the near future. Therefore he believes that it would be useful to update the PMT since a great number of centres will continue for some time to come to generate data bases in printed form even if they produce machine-readable versions.

Mr COURGEAU asked Ms PASQUARIELLA to give her opinion on this subject.

Ms PASQUARIELLA preferred not to give an opinion but stated that Mr COURGEAU had done a good summing up. However, she felt that the future of the PMT should be in the hands of the users. The question that must be posed is how the PMT is used and what the Working Group feels will be needed in future. The capabilities of the users also has to be taken into account, for example, in Latin America certain centres cannot make changes to the vocabulary used because of staff shortages. So Ms PASQUARIELLA raised the question of whether users will be able to follow when the Working Group makes changes to the Thesaurus and pointed out that users are no longer just libraries.

She also pointed out that the situation has changed in the last 5 years with the WWW and asked whether the Working Group intended to serve the needs of non-librarians. She said that she did not have the answers but that maybe some of the users did.

Mr LEBRUN stated that it was important to question users. He proposed that a small survey be condcuted to make sure that the group make decisions corresponding to the expectations of the users.

Mr SOLBI pointed out that it is important to take users needs into consideration. Especially in Africa, one of the major concerns is accessibility to material.

An important issue is that of moving from Bibliographical databases to the Internet. He feels that many developing countries need help in learning how to use new information technology.

Regarding Internet Mr ROSE said that full text is not available necessarily and there are constantly problems with document delivery. Few documents are in machine readable form. Source documents need to be scanned and made available. For most researchers bibliographical and controlled vocabulary has proved useful. He agreed with Ms PASQUARIELLA that a radical change will be difficult for everyone to absorb. However, UNFPA believes that new terminology needs to be reflected and that the Thesaurus should not be re-edited but an additive or an annex should be made to reflect current needs. A radical restructuring may not necessarily serve users on a day-to-day basis.

The proposal for 4 level deep hierarchy might be interesting theoretically but not necessarily useful for the users.

He believes there is a need for controlled vocabulary and that it should be updated to reflect the present situation, at least at a political level following the conferences in Cairo and Beijing.

Mr DU GUERNY asked who were users.

Mr LOHRMANN answered that he occasionally was a user and said that his concern was to obtain exactly what he wanted and to obtain it with a limited number of words. He asked whether the Thesaurus should not be reduced to the smallest number of words.

Mr ROSE asked whether CICRED had made a formal survey of users and said he would have liked to see the results of such a survey. He also said that he would have liked to see more Latin American and Asian organisations represented.

Mr COURGEAU said that ESCAP and CELADE were invited but had not been able to attend.

Ms PASQUARIELLA pointed out that if ESCAP was absent it was because negotiations with UNFPA were under way, that there was a schedule conflict and that the representative of CELADE was undergoing bypass surgery.

Mr HANKINSON said that as Population Index was a subsidiary organisation of POPLINE it had to use the POPLINE thesaurus. He had consulted a number of French providers and they don't use the POPIN thesaurus. For example "Espace Societé" uses key words but not key words from the PMT. Neither does and there must be reasons for this. He felt it would be useful to have information from providers as an input for the group's work and that CICRED should also look into the reasons why people are not using the PMT.

Mr ROSE asked which key words.

Ms GUBRY answered that the key words were terms chosen by researchers. They decided which ones to use and there was no control over this.

She said that she did not use the POPIN Thesaurus because it was not suitable, it is too extensive and that she uses something adapted from the Thesaurus.

Mr LOUHICHI said he had consulted with several demographic documentation centres in Arab countries and that the users were librarians. He said that training is needed.

Ms MEUNIER said that at INED POPIN was used. The demographers had made choices and she wondered whether the question had been correctly posed. She agreed that the users are important but felt that the real issue concerned how information was accessed. She believes the Thesaurus is the right approach. It is made for users and that the library bears the needs of the researchers in mind. Although decisions about key words may at times be arbitrary POPIN is a good tool for classifying and retrieving information. She believes natural language is not the right approach and she is not sure the right software for full text is available.

Mr COURGEAU said that defining who were the users was an important point. Users are researchers and librarians.

Ms PASQUARIELLA said that expecting the Thesaurus to serve all information needs was maybe too ambitious. As Mr Rose pointed out maybe a supplement including terms covering the field dealt with at the women's conference in Beijing and the Cairo conference might suffice in the short term and that another product could be defined later.

MS VALENTE stated that the PMT was a very important tool used by demographers and librarians.

Mr LORHMANN stated that there was no contradiction between librarians and researchers. Researchers use the language of librarians for quick access to information. He asked Mr HANKINSON why he did not use the Thesaurus.

Mr HANKINSON answered that Population Index was a subsidiary contributor to POPLINE.

Ms GUBRY said that some French-speaking African countries were beginning to use it although it was too extensive because nothing else is available in French.

Ms PASQUARIELLA stated that in the past PMT only included demographic terminology, so medical libraries used POPLINE. During the last ten years each time a demographic term has been added to POPLINE it has been taken from the PMT. Family planning for instance. She added that POPLINE has been translated into Spanish and is being tested in Latin America to see if can be used easily. A French version will soon be ready too.

Mr ROSE suggested merging the two thesauri. He felt they should not compete especially as they are symbiotic.

Mr COURGEAU agreed that this was an interesting idea.

Ms PASQUARIELLA said that POPLINE had been developed for use with the POPLINE data base and not as a classification system in another context. It does not include a hierarchy but is simply a list of descriptors.

Mr LINGYONG said that in China they used thesauri like POPIN as a vocabulary source and had been developing the use of machine-readable documents combined with data base management software which is much more practical than using hard copy. He felt that there should be more research made in combining search words within a computerised system. He also believes that the structure should be improved and that more effort should be made in training on how to use the thesaurus.

Mr COURGEAU asked how controlled and natural language could be used.

Mr DU GUERNY thought that in the past the problem with PMT may have been that it was launched as a tool with no accompanying strategy. He thinks researchers and scholars should be made to understand how the Thesaurus can serve them. This could avoid problems such as the one experienced at CEPED with researchers using their own vocabulary. Training might help researchers to dialogue with librarians and know which vocabulary to use.

He also said that his concern as a representative of FAO was that the Thesaurus should not be restricted to demography otherwise it would not be useful for his organisation. FAO works on interrelationships, on population linked to other fields. Research exclusively concerned with demography will diminish proportionally in future and therefore this issue needs to be addressed too.

Mr COURGEAU said that other thesauri could be developed around a core thesaurus specialised in demography.

Mr SOLBI pointed out that Mr COLLOMB had mentioned the fact that there were too many descriptors and asked how they could be reduced. He said that demography is related to environment, health, agriculture, etc. Integrating all these Thesauri in PMT would be a problem. He said that it would be important to find ways of coupling controlled vocabulary with natural language. When dealing with a list of references, it can be done technically, but files will be huge and the relevance of documents will be lost. Another technical aspect he mentioned was that as the file grows in size its relevance will reduce proportionally and asked how the different fields might be linked.

Mr LOHRMANN pointed out that the PMT was supposed to be a sub-set of the Macro-thesaurus and that over the years the need had been felt to broaden subjects to include family planning, etc. He did not feel that this group could take on the task of adding other fields such as environment, resources, etc.

Mr SOLBI mentioned the development of thesauri with software able to integrate several thesauri.

He has seen a multi-link system used by the Canadian Library which seems able to generate different thesauri.

Mr HANKINSON did not think that Jean VIET had designed the Thesaurus as a satellite of a macro-thesaurus and referred to page 161 section 080700 of the English version of the Thesaurus pointing out that all the terms in this section are basic development terms and not demographic terms. He asked whether these were needed in the Thesaurus.

Mr ROSE said that one could not expect people to have a wide variety of books on their shelves covering all areas and felt that Mr COURGEAU's idea of satellite thesauri would not work. He believes that one of the problems with the PMT is bad marketing.

And that if it had proved difficult to market one tool, how much more difficult would it be to market 4 or 5 different ones? He feels that what is needed is simplicity and comprehensibility.

He did not feel that there were too many words except for perhaps some of the general culture terms and said that appropriate terms were what was needed. Specialists in a given field must be able to find the appropriate term in the thesaurus.

Mr HANKINSON took another example p 175, section 140102 listing terms with "rate", "birth rate", "fertility rate", "total fertility rate", which are all demographic, and pointed out that there may be some confusion as to which one to use.

Mr ROSE said that the basic concept was to use the most specific term.

Mr HANKINSON replied that a person in a small library in a developing country might have trouble and find such a list too specific.

Mr COURGEAU said that with different levels it is possible, small centres can stick to one same level but if the researchers are more specialised they can carry out more in-depth research.

Mr ROSE said that the group should decide whether a controlled traditional Thesaurus is needed and if so it should decide how to improve it.

If the group decides it is obsolete then the question that remains is whether to adopt natural language. He did not feel that full-text retrieval was possible everywhere in the world. He said that it might be useful to have the PMT on Internet since it would increase the number of users. However, he believes that a controlled vocabulary is still needed. He stated that the purpose of the meeting was to decide whether the PMT has a future.

Ms PASQUARIELLA pointed out that within the POPIN context a controlled vocabulary is still required, that maybe in future this would change but that this was not yet the case. She also said that although more developing countries will progressively obtain access to the Web this access was not yet widespread. She added that if the group felt that controlled vocabulary was the right type of language, what was needed was to pinpoint its deficiencies and find ways of remedying them without competing with other thesauri.

Mr COURGEAU summed up that the group agreed not to discuss the issue of language, but rather about how to improve the PMT.

Mr GUERNY expressed his concern about the fact that if at this stage there were no controlled vocabulary this might create a lot of confusion. For example a library in Seoul or in Cairo might use the same words with very different meanings and it would be difficult for researchers to carry out comparative studies.

He pointed out that with new technology a one word search might provide thousands of useful references. He said that controlled language helps to order information and that this might also be useful for developing countries when accessing information.

Ms MEUNIER pointed out that having a controlled language is very important.

Mr HANKINSON said that if the group agreed on the value of controlled language it might be interesting to ask Mr LEBRUN about the IUSSP dictionary as an experiment in controlled vocabulary.

Mr LEBRUN said that IUSSP had organised a meeting in September to look into reviewing the dictionary. At the outcome of the meeting it had been decided that there would be several publications. A review of the multilingual dictionary in its present form and the creation of a dictionary in alphabetical order. Versions would be made in three languages. English, French and Spanish.

The alphabetical dictionary is meant for researcher and indexers and the narrative dictionary is intended for translators.

Mr ROSE pointed out that if the idea is to present an alternative to a thesaurus with definitions and so on to be used by students that was one thing but that if it is to be another indexing tool this would present a problem.

Mr LEBRUN answered that it was for indexers working on publications.

Mr ROSE pointed out that it was not for computerised database retrieval that it was an excellent document and a very useful one but that he hoped it would not be another indexing tool for information retrieval.

Mr LEBRUN said that before writing the three versions, the group would try to compile a comprehensive list of demographic terms and he expressed the hope for collaboration with CICRED in this.

Mr HANKINSON expressed the hope that there would be a built-in compatibility. As a frequent user of the dictionary he finds that there is not a complete compatibility between the English and French versions.

Ms PASQUARIELLA said that one of the flaws in the PMT which may explain why it is not more widely used is that the terms are not defined and this may make it difficult for a newcomer to apply them. POPLINE had this problem and decided to add definitions to all of its terms. She felt it would be extremely useful to have the assistance of an international organisation as an authority.

On Internet there are no authoritative bodies, IUSSP could provide this label. She believes that the "marketing" of the PMT would be made easier if terms were defined.

Mr HANKINSON said that more scope notes were needed.

Ms GUBRY pointed out that for 2 300 descriptors there were 350 scope notes.

Mr COURGEAU asked how could there be greater collaboration between the PMT and the Multilingual Dictionary.

Mr LEBRUN stated that it depended on the issue of the meeting. If CICRED wishes, the IUSSP would be interested in compiling an inventory of demographic terms.

Mr ROSE asked whether it might not be a good idea for the dictionary to be included in the Thesaurus.

Ms PASQUARIELLA stated that as non-users the group should not make any decisions as to adopting definitions but that users should be polled before deciding.

Mr SOLBI said that it is important to generalise the scope notes by adapting some of definitions used in the dictionary.

Ms PASQUARIELLA agreed and said that POPLINE should be used too. She pointed out that users have been rather confused and that sometimes people have

made their own compilations which meant that some care had to be taken when making decisions.

Mr SOLBI asked whether the alphabetical dictionary would be extended to languages other than English, French and Spanish.

Mr LEBRUN stated that these 3 languages are the official languages of the dictionary but that the Union would encourage translations as it has done in the past.

Mr SOLBI asked about the software that would be used with the PMT. He raised the question of non-Latin character sets and asked which software could deal with this. He also asked whether the existing organisation of the terms were valid and suggested that a statistical test on connectivity for a number of isolated descriptors was required as well as other tests.

Ms GUBRY was asked to present an evaluation.

**5 MINUTE BREAK** 

Ms GUBRY presented her report on the PMT.

#### SOME COMMENTS ON THE

# THESAURUS OF POPIN, MULTILINGUAL THESAURUS OF POPULATION

(Third edition)

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CICRED, Paris, 27 November 1995

#### 1. PRESENTATION OF POPIN

The POPIN thesaurus is a very complete tool the objective of which is to describe the areas covered by demography. The CICRED version is trilingual (English, French, Spanish) and has been translated into others languages, such as Portuguese.

The interesting aspect of a thesaurus when compared to a simple alphabetical list of terms is that these terms (or descriptors) have hierarchical relationships to describe a phenomenon. The notations in POPIN, standardized in the three languages, are:

BT (Broader Term): generic term (of a more general meaning)

NT (Narrower Term): specific term (more precise) that is always linked to one or several generic terms (polyhierarchy).

Chains of descriptors form the hierarchical structure descend seven levels in the POPIN.

Scope Notes (SN) provide indications on the meaning of the descriptor. Related Terms (RT) do not belong to the same chain, but guide to underlying concepts and Synonyms, the use of which is prohibited and which have to be replaced by the term indicated after USE. The reciprocical relation is UF (Used For).

#### Example:

MIGRATION ILLEGALE / MIGRACION ILEGAL / ILLEGAL MIGRATION

SN: Sont incluses les migrations clandestines de toutes sortes.

[15.04.02]

**UF: MIGRATION CLANDESTINE** 

BT: MIGRATION [15.01.01]

NT: IMMIGRATION ILLEGALE [15.04.02] RT: IMMIGRANT CLANDESTIN [15.02.02]

MIGRATION CLANDESTINE

USE: MIGRATION ILLEGALE [15.04.02]

## ILLEGAL MIGRATION / MIGRATION ILLEGALE / .MIGRACION ILEGAL

SN: Includes undocumented immigration, emigration and internal migration.

[15.04.02]

**UF: UNDOCUMENTED MIGRATION** 

BT: MIGRATION [15.01.01]

NT : ILLEGAL IMMIGRATION [15.04.02] RT : ILLEGAL IMMIGRANTS [15.02.02]

# **UNDOCUMENTED MIGRATION**

USE: ILLEGAL MIGRATION [15.04.02]

Each descriptor is presented with its translation in the two other languages. Numbers between hooks indicate the thematic facet of descriptors that are gathered by theme.

The third edition of the thesaurus presents those characteristics with linguistic specificities:

	Common	French	English	Spanish
Descriptors	2368			
Synonyms		521	588	509
Scope notes		345	337	337
Hierarchical relationships	1303			
Associative relationships	4296			
Hierarchies 1124/7	777/297/96/38/13/7			

The third edition presents four objectives for POPIN:

- indexation of documents and documentary retrievals in documentation centers
- terminological guide for the standardization of descriptors
- search aid with other subject-related vocabularies in bibliographic databases in other subject areas
- linguistic equivalencies for translation purposes.

It is also specified in the thematic descriptor presentation that the two first levels of classification can be used as generic codes for the classification of documents.

An improvement of the POPIN thesaurus therefore requires an attentive examination for the best adaptation of descriptors (addition of terms in badly described areas together with a reduction in the number of the quasi-synonyms and compound terms) leading to a more rational use. That may greatly change the structure of the thesaurus.

The contents and the form of thesaurus are governed by international norms regularly updated and translated in various languages :

ISO 2788: 1986. Guidelines for the Establishment and Development of Monolingual Thesauri. Geneva: International Standardization Organization, 32 p.

ISO 5964: 1985. Guidelines for the Establishment and Development of Multilingual Thesauri. Geneva: International Standardization Organization, 61 p.

These international norms have been adapted in national norms including national specificities.

The three editions of POPIN refer to the ISO norms or to what preceded them although they have not always been really followed.

My comments deal with the French version. However, except for some special aspects of the French language, they are transposable to the other linguistic versions. They are illustrated by examples, but of course this list is not exhaustive.

### 2. HISTORICAL

Management of POPIN was insured, under the management of CICRED, by different working groups meeting regularly to define major orientations (such as better compatibility with other thesauri) and to adopt modifications proposed by centers using POPIN in various languages. Changes to the thesaurus for the third edition are summarized as follows:

- "- Implementation as far as possible of the suggestions for additions, changes and deletions of terms suggested by users of the thesaurus since the previous edition published in 1985.
- Review of all POPIN Thesaurus terms in the area of socio-economic development, to see if there was an equivalent Macrothesaurus<sup>1</sup> term. Wherever a Macrothesaurus term was identified, the POPIN Thesaurus term has been changed in English, French and Spanish editions to match the Macrothesaurus term.
- Review of all demographic terms, changing them as appropriate in all three languages to ensure greater compatibility with the terms in the Multilingual Demographic Dictionary<sup>2</sup>
- Review of all terms in the areas of contraception and family planning, making changes where possible to correspond more closely with the terminology used in Popline <sup>3</sup>;
- The addition of a new category/facet WOMEN IN DEVELOPMENT".

As a consequence, most of the modifications focused on the substitution of terms rather than the addition or deletion of descriptors or the modification of the hierarchical structure.

# 3. CONTENTS OF POPIN

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<sup>&</sup>lt;sup>1</sup> 1. OCDE, ONU.- Macrothesaurus for Information Processing in the Field of Economic and social Development. Fourth Edition; Paris: OCDE, 1991

<sup>&</sup>lt;sup>2</sup> 2. IUSSP.- Multilingual Demographic Dictionnary. 2nd Edition. Liege: Ordina Ed, 1982

<sup>&</sup>lt;sup>3</sup> 3. Population Information Program, Centre for Communication Programs, Johns Hopkins University.- A User's Guide to Popline Keywords. 3rd Edition. Baltimore, Maryland, 1991

# a) Subject scope

It is specified in the introduction of the third edition that "this thesaurus provides a core terminology in the field of population and demography. Included in these subject areas are population characteristics, family and household, spatial distribution, labour force and employment, population policy, morbidity and mortality, nuptiality, fertility and family planning, migration and population dynamics. All these topics are treated in some depth; however, they all impinge to some extent on virtually all aspects of human activity, involving many fringe, as opposed to core, areas. The thesaurus includes some terms from such fringe areas [. ..] However, all these fringe areas represent the core areas of other disciplines the thesauri of which should be consulted..."

It is clear that the objective of exhaustive coverage in the core areas has been accomplished, as it will be shown in some examples. Nevertheless diseases that are important for studies on morbidity and causes of death are relatively poorly represented.

In agreement with the first objective of to POPIN, the thesaurus also contains terms that have no direct connection with the area but that are very useful to index the various documents of a documentation center (computer manuals, dictionaries, etc...). This is why, for example, there is a "documentation -information" area. But technology changes rapidly and new terms are adopted only after a trial phase, a long time after. That probably explains the absence of terms describing new technology or phenomena (for example compact disc, spread-sheets software for computer, remote sensing, the greenhouse effect for the environment).

Geographical terms have been put aside in the third edition. It is a pity that the same decision has not been taken for the names of international organizations the list of which has shortened considerably, but that are very specific and not very useful in the alphabetical list.

# b) Precision of terms

The main subjects of the thesaurus are obviously processed in depth with a maximum precision. For example, one may find the area of infant mortality linked to the descriptor MORTALITY:

BT: MORTALITÉ INFANTILE

NT : MORTALITÉ NÉONATALE

NT: MORTALITÉ NEONATALE PRÉCOCE

**NEONATAL MORTALITY** 

NT : MORTALITÉ POST-NÉONATALE

MORTALITY

BT : MORTALITÉ FOETALE

NT : MORTALITÉ FOETALE PRÉCOCE

MORTALITY

INFANT MORTALITY

NEONATAL MORTALITY

EARLY

FOETAL DEATH

EARLY FOETAL

POST-NEONATAL

NT : MORTALITÉ FOETALE TARDIVE LATE FOETAL

MORTALITY

BT : MORTALITÉ PÉRINATALE PERINATAL MORTALITY

NT : MORTALITÉ FOETALE TARDIVE LATE FOETAL

**MORTALITY** 

NT : MORTALITÉ NÉONATALE PRÉCOCE EARLY

**NEONATAL MORTALITY** 

The following descriptors can be added: STILL BIRTHS, LIVE-BORN CHILDREN, INFANTS (NT: PREMATURE BABY; NEW-BORN), INFANT MORTALITY RATE, ENDOGENOUS MORTALITY, CHILD SURVIVAL, SURVIVING CHILD and also FEMALE MORTALITY, MALE MORTALITY, MEN, WOMEN for the sex of new-born.

Mortality around this period (without taking into account descriptors characterizing causes of death) can be described by some twenty different terms.

Concerning multiple births, the following can be found:

ACCOUCHEMENT MULTIPLE, TRIPLÉ, QUADRUPLÉ, JUMEAU and its specific terms JUMEAU BIVITELLIN et JUMEAU UNIVITELLIN / MULTIPLE BIRTHS, TRIPLETS, QUADRUPLETS, TWINS, DIZYGOTIC TWINS, IDENTICAL TWINS.

These examples show that precision is very great and specialized documents can be described without looking for terms in other thesauri. It concerns obviously central subjects of the area. You do not find the same precision on subjects on the fringes of the discipline of demography because it is not the objective of POPIN that recommends consulting specialized thesauri.

# c) Pre- and post-coordination

For the choice of descriptors, pre-coordination gives very precise descriptors for each concept (FERTILITY SURVEYS) while post-coordination proposes to combine several descriptors (often uniterms) to describe the concept (DEMOGRAPHIC SURVEY and FERTILITY). Each option presents advantages and disadvantages. A very precise indexation is available through pre-coordination if the person indexing knows the exact vocabulary or does not hesitate in frequently consulting the thesaurus, however, this requires a good knowledge of this vocabulary (which is often different from the first one) using keywords for information retrieval and could be the cause for deficiencies. On the contrary, post-coordination limits the vocabulary needed but requires more knowledge to explain the concept and increases the risk of "noise" in the interrogation. A thesaurus is the result of permanent compromises between these two options.

The choice in POPIN is very clearly in favour of the pre-coordination. For example : MIGRANT, TRAVAILLEUR et TRAVAILLEUR MIGRANT / MIGRANTS, WORKERS, MIGRANT WORKERS

RISQUE, INVALIDITÉ, CONCEPTION et RISQUE D'INVALIDITÉ, RISQUE DE CONCEPTION / RISK, DISABILITY, CONCEPTION AND RISK OF DISABILITY, RISK OF CONCEPTION.

This option prevails regarding the differentiation between male and female since the use of keywords MEN and WOMEN is systematically rejected in the following cases for men:

HOMME MARIÉ, RÔLE DES HOMMES, CÉLIBATAIRE DE SEXE MASCULIN, CONTRACEPTIF MASCULIN, CONTRACEPTION MASCULINE, GÉNÉRATION MASCULINE, MORTALITÉ MASCULINE, ORGANES GÉNITAUX MASCULINS, STÉRILISATION MASCULINE / MARRIED MEN, MEN'S ROLE, BACHELORS, MALE CONTRACEPTIVE AGENTS, MALE CONTRACEPTION, MALE GENERATIONS, MALE MORTALITY, MALE GENITALIA, MALE STERILIZATION.

# The female specificity is even more often expressed:

CÉLIBATAIRE DE SEXE FÉMININ, CONTRACEPTIF FÉMININ, TRAVAIL FEMININ, CONDITION FÉMININE, CONTRACEPTION FÉMININE, GÉNÉRATION FÉMININE, MORTALITE FÉMININE, ORGANISATION FÉMININE, STÉRILISATION FÉMININE, ORGANES GÉNITAUX FÉMININS, DROITS DE LA FEMME, ÉMANCIPATION DE LA FEMME, FEMME AU FOYER, FEMME ENCEINTE, FEMME MARIÉE, FEMME RURALE, MOUVEMENT DE LIBÉRATION DE LA FEMME, SAGE-FEMME, ÉDUCATION DES FEMMES, PARTICIPATION DES FEMMES AU DÉVELOPPEMENT, RAPPORT ENFANTS-FEMMES, RÔLE DES FEMMES, INFIRMIÈRE / SPINSTERS, FEMALE CONTRACEPTIVE AGENTS, FEMALE EMPLOYMENT, WOMEN'S STATUS, FEMALE CONTRACEPTION, FEMALE GENERATION, FEMALE MORTALITY, WOMEN'S ORGANIZATION, FEMALE STERILIZATION, FEMALE GENITALIA, WOMEN'S RIGHTS, WOMEN'S EMANCIPATION, HOUSEWIVES, EXPECTANT MOTHERS, MARRIED WOMEN, RURAL WOMEN, WOMEN'S LIBERATION MOVEMENTS, TRAINED MIDWIVES, EDUCATION OF WOMEN, WOMEN IN DEVELOPMENT, CHILD-WOMAN RATIO, WOMEN'S ROLE, NURSES.

If it was difficult to avoid HOUSEWIVES, EXPECTANT MOTHERS, TRAINED MIDWIVES, most of the other concepts could have been expressed by terms combined with MEN or WOMEN or in French with SEXE MASCULIN or SEXE FEMININ that, curiously, do not exist.

The same distinction appears for urban and rural zones:

AMÉNAGEMENT RURAL

AMÉNAGEMENT URBAIN

DÉVELOPPEMENT URBAIN

MILIEU RURAL MILIEU URBAIN

COLLECTIVITÉ RURALE COLLECTIVITÉ URBAINE POPULATION RURALE POPULATION URBAINE SOCIOLOGIE RURALE SOCIOLOGIE URBAINE

ZONE RURALE ZONE URBAINE

RURAL PLANNING
RURAL DEVELOPMENT
RURAL ENVIRONMENT
RURAL COMMUNITIES
RURAL POPULATION
RURAL SOCIOLOGY
RURAL AREAS
URBAN PLANNING
URBAN DEVELOPMENT
URBAN ENVIRONMENT
URBAN COMMUNITIES
URBAN POPULATION
URBAN SOCIOLOGY

On the other hand, some terms have not have equivalent terms in both zones: RURAL SQUATTERS, RURAL WOMEN: their urban equivalents have to be obtained by combining SQUATTER OR WOMEN with URBAN AREAS;

URBAN UNREST, URBAN PROBLEMS : this notion does not exist alone (SOCIAL PROBLEMS).

These examples reveal a preference for the greatest precision of the vocabulary, with the desire to allocate a precise descriptor to each concept even when it can be expressed in combination with others present in the thesaurus. The introduction to the second edition said that "the development of bibliographical databases, based on the use of the documentary language, [. ..] required the addition of new terms and provided an impetus toward the development of pre-coordinated terms which had been rejected in the first edition". This approach is similar to the search for precise keywords described in the preceding paragraph for very specific concepts that could not be expressed with a combination of descriptors.

# d) Choice of concepts

This same concern for precision is also found in the descriptors used for abstract concepts and there very often is a duality with the object subjected to this concept:

ATHÉISME ET ATHÉE / ATHEISM, ATHEISTS

CHÔMAGE ET CHÔMEUR / UNEMPLOYMENT, UNEMPLOYED

ESCLAVAGE ET ESCLAVE / SLAVERY, SLAVES

MIGRATION FRONTALIÈRE ET TRAVAILLEUR FRONTALIER / FRONTIER MIGRATION, FRONTIER WORKERS

MOBILITE RÉSIDENTIELLE ET CHANGEMENT DE RÉSIDENCE / RESIDENTIAL MOBILITY, CHANGES OF RESIDENCE

NUPTIALITÉ ET MARIAGE / NUPTIALITY, MARRIAGE

SURVIE DE L'ENFANT ET ENFANT SURVIVANT / CHILD SURVIVAL, SURVIVING CHILD

This results in a considerable increase in the number of descriptors that could be considered more or less as quasi-synonyms in the fringe areas because one very often studies an idea through those that are subjected to it. Although the terms NUPTIALITY and MARRIAGE seem both indispensable, the term SLAVERY may suffice on its own.

Others terms are too close to be distinguished, especially if they have no scope notes explaining the different variations, as for example :

NOMBRE D'ENFANTS DÉSIRÉ, NOMBRE D'ENFANTS ENVISAGÉ, NOMBRE IDÉAL D'ENFANTS / DESIRED FAMILY SIZE, EXPECTED FAMILY SIZE, IDEAL FAMILY SIZE

MOBILITÉ DE LA MAIN D'OEUVRE ET MOBILITÉ PROFESSIONNELLE / LABOUR MOBILITY, OCCUPATIONAL MOBILITY which could have a different meaning if they were not both linked to MOBILITÉ SOCIALE / SOCIAL MOBILITY and presented without any scope notes. RENOUVELLEMENT DE LA MAIN D'OEUVRE / LABOUR TURNOVER also exists.

DISPONIBILITES ÉNERGETIQUES ET RESSOURCES ÉNERGETIQUES / ENERGY SUPPLY, ENERGY RESOURCES

HETEROGÉNÉITÉ SOCIALE ET DIFFÉRENCIATION SOCIALE / SOCIAL HETEROGENEITY, SOCIAL DIFFERENTIATION

DISCRIMINATION RACIALE ET PREJUGÉ RACIAL / RACIAL DISCRIMINATION, RACIAL PREJUDICE PROLÉTARIAT, PROLÉTARIAT, CLASSE OUVRIÈRE, CLASSE INFÉRIEURE / PROLETARIANS, PROLETARIAT, WORKING CLASS, LOWER CLASS

CONSERVATISME ET RÉSISTANCE AU CHANGEMENT : CONSERVATISM, RESISTANCE TO CHANGE

The existence of descriptors regularly used by demographers, such as BIRTHDAY may be justified, but they are not very convenient as keywords for indexing a document, furthermore there is the distinction between YEAR OF BIRTH and DATE OF BIRTH.

Others are too far from the area because they describe a mathematical technique such as MÉDIANE, MODE, MOYENNE, MOYENNE ARITHMÉTIQUE, MOYENNE GÉOMETRIQUE, MOYENNE PONDÉRÉE / MEDIAN, MODE, MEAN, ARITHMETIC MEAN, GEOMETRIC MEAN, WEIGHTED MEAN, while descriptors would have to focus on demographic variables. Generally speaking, the number of descriptors under the heading of " statistical analysis" must be reduced.

There are many terms of which the meaning and use as keywords in a demographic context is not clear, such as :

AMI, BESOIN FONDAMENTAL, CARACTÈRE CONFIDENTIEL, COMMUNICATION VERBALE, COORDINATION, DIFFUSION DES INNOVATIONS, HYBRIDATION, HYBRIDE, HYBRIDITÉ, EFFETS CONTRAIRES, MESSAGE, MÉTAL, PÉCHÉ, RÉFÉRENCE, SATISFACTION, SIGNE DE VIE, SOUCHE, STIMULANT, TRANSIT, VIE, VIE PRIVÉE, ZOROASTRISME / FRIENDS, BASIC NEEDS, CONFIDENTIALITY, WORD-OF-MOUTH COMMUNICATION, COORDINATION, DIFFUSION OF INNOVATIONS, HYBRIDATION, HYBRIDS, HYBRIDITTY, ADVERSE EFFECTS, MESSAGE, METALS, SIN, REFERENCES, SATISFACTION, VITAL SIGNS, STEM, INCENTIVES, TRANSIT, LIFE, PRIVACY, ZOROASTRIANISM

POPIN appears as a collection of very precise terms. In what could be qualified as a central part of the science of "demography", it tends to associate a descriptor to each concept handled by the demographer so that it is not a very user-friendly work tool for people who are less knowledgeable about the discipline. This is perhaps a consequence of the way the vocabulary is created from the outset, with only a small number of documentalists among demographers. Furthermore, the initial use made of POPIN by CICRED itself to index articles of the "Review of Reviews" fostered a specialization of concepts since the concern was to describe the document as precisely as possible without having to find it by further interrogation.

Many minor modifications were made for the third edition by putting a synonym which was previously proscribed in place of a keyword to ensure the greatest possible compatibility with Popline (monolingual English, therefore with a lesser influence on the French terms in POPIN), with the Multilingual Demographic Dictionary and especially with the Macrothesaurus. Unfortunately, some terms often used in French have sometimes been put in the place of others which are more seldom used in demography (for example, ZOOTECHNIE instead of ELEVAGE / ANIMAL HUSBANDRY instead of BREEDING).

There is also a need to homogenize terms. One finds:

COMPOSITION DE LA POPULATION

POPULATION COMPOSITION

NT: COMPOSITION ETHNIQUE

**ETHNIC** 

COMPOSITION

NT : RÉPARTITION PROFESSIONNELLE OCCUPATIONAL

**DISTRIBUTION** 

NT : STRUCTURE PAR ÂGE ET SEXE AGE-SEX DISTRIBUTION

NT : RÉPARTITION PAR SEXE SEX DISTRIBUTION NT : STRUCTURE PAR ÂGE AGE DISTRIBUTION

These French terms COMPOSITION, STRUCTURE and REPARTITION are used indifferently and this leads to confusion and error. It is not necessary the case in each language, but it is confusing if the thesaurus gives linguistic equivalencies.

Concerning documentary data-processing, it would also be necessary to reject some compound terms with the word AND which is a boolean operator and entails an empty reply if it is not handled carefully (DILATATION ET CURETAGE, BLESSURES ET LESIONS / DILATATION AND CURETTAGE, WOUNDS AND INJURIES).

### 4. FORM AND ORGANIZATION OF POPIN

# a) Hierarchical structure

For a better description of the different meanings of a term, POPIN has adopted a polyhierarchical structure, so that a descriptor can have two generic descriptors. This situation occurs rarely since this is the case of only fifty-five terms. It is nevertheless in the monohierarchical structure that rules according to ISO norms are not systematic. There are eight hundred and sixty two (862) descriptors (more than one third of them) that are isolated, that is to say they have neither a generic term, nor a specific term. Some of them have been introduced in the second edition, but most of them were that way from the outset.

The international norm for monolingual thesauri ISO twenty-seven/eighty-eight (2788) specifies that the hierarchical relationship is the basic relationship that characterizes a systematic thesaurus as opposed to a simple list of terms such as a glossary or a dictionary. The different relations are illustrated with examples from POPIN.

The generic relationship identifies the link between a class or category and its elements:

MORTALITÉ MORTALITY

MORTALITÉ INFANTILE INFANT MORTALITY

MORTALITÉ NEONATALE NEONATAL

MORTALITY

MORTALITÉ NÉONATALE PRÉCOCE EARLY NEONATAL

MORTALITY

The partitive relationship covers a limited number of situations in which the name of a part implies the name of its whole, whatever the context. This applies to four main classes.

- systems and organs of the body:

SYSTEME UROGÉNITAL UROGENITAL

SYSTEM

ORGANES GÉNITAUX GENITALIA

ORGANES GÉNITAUX FEMININS FEMALE

**GENITALIA** 

COL DE L'UTÉRUS

CERVIX

FOLLICULE OVARIEN...

OVARIAN FOLLICULE...

ORGANES GÉNITAUX MASCULINS MALE

**GENITALIA** 

CANAL DÉFÉRENT VAS

DEFERENS

EPIDIDYME...

EPIDIDYMIS...

- geometrical place

**EUROPE EUROPE** 

**EUROPE OCCIDENTALE** WESTERN EUROPE ALLEMAGNE **GERMANY** AUTRICHE... AUSTRIA...

- discipline or area of knowledge :

SCIENCE DU COMPORTEMENT BEHAVIOURAL SCIENCES

**PSYCHOLOGIE PSYCHOLOGY** 

SCIENCE SOCIALE SOCIAL

SCIENCES

**ANTHROPOLOGIE** 

ANTHROPOLOGY

**ETHNOLOGIE** 

**ETHNOLOGY** 

ANTHROPOMÉTRIE

ANTHROPOMETRY

CRIMINOLOGIE CRIMINOLOGY

DÉMOGRAPHIE...

DEMOGRAPHY...

- Social structures :

**DIVISION TERRITORIALE** TERRITORIAL DIVISIONS

CADASTRE CADASTRE

ADMINISTRATIVE DISTRICTS CIRCONSCRIPTION ADMINISTRATIVE

LOCALITÉ **LOCALITY** PAROISSE... PARISHES...

The last kind of relationship identifies the link that exists between a general category, expressed by a common name and an individual specimen of this category.

INSTITUTION SPÉCIALISÉE SPECIALIZED AGENCIES

**BANQUE MONDIALE** WORLD

BANK

**FAO** FAO

OIT... OIT...

A study of the hierarchical structure of keywords shows that these recommendations are often exceeded and that the structure is very inconsistent.

The next relationship, for example, combines two different notions, sciences and human system:

**ANATOMIE ANATOMY** 

**EMBRYOLOGY EMBRYOLOGIE** 

HISTOLOGIE HISTOLOGY

**CYTOLOGY** CYTOLOGIE SYSTEME CARDIO-VASCULAIRE CARDIOVASCULAR SYSTEM SANG

**BLOOD** 

HÉMOGLOBINE

**HAEMOGLOBIN** 

SYSTEME DIGESTIF... DIGESTIVE SYSTEM...

These terms must not be found within a same hierarchy but must have associative relationships.

Many relationships have been constructed from a uniterm word followed by compound words constructed with it or others of the same type:

TAUX

QUOTIENT INSTANTANÉ HAZARD RATE TAUX BRUT CRUDE RATE TAUX COMPARATIF STANDARDIZED

RATE

TAUX DE CROISSANCE **GROWTH RATE** TAUX DE DIVORCE **DIVORCE RATE** 

TAUX DE FÉCONDITÉ FERTILITY RATE

SOMME DES NAISSANCES RÉDUITES TOTAL FERTILITY RATE TAUX DE FECONDITE LÉGITIME LEGITIMATE

**FERTILITY RATE** 

TAUX GLOBAL DE FÉCONDITÉ **GENERAL FERTILITY RATE** 

TAUX DE GROSSESSE PREGNANCY RATE

INTRINSIC RATE OF TAUX DE LOTKA

NATURAL INCREASE

TAUX DE MIGRATION MIGRATION RATE

TAUX DE MORBIDITÉ PRÉVALENTE... PREVALENCE RATE...

Terms are issued from general methodological notions (HAZARD RATE, STANDARDIZED RATE for example) and specific thematic notions (LEGITIMATE FERTILITY RATE). Other RATES are isolated (ACTIVITY RATIO, ERROR RATE, CASE FATALITY RATE).

**FRÉQUENTATION ATTENDANCE**  FRÉQUENTATION SCOLAIRE SCHOOL

**ATTENDANCE** 

COÛT

COÛT DE L'ENFANT COST OF CHILDREN
COÛT DE LA VIE COST OF

**LIVING** 

COÛTS SALARIAUX LABOUR COSTS
COÛTS SOCIAUX SOCIAL

**COSTS** 

DURÉE DURATION

DURÉE D'ABSENCE LENGTH OF

**ABSENCE** 

DURÉE DE LA LACTATION DURATION OF

**LACTATION** 

DURÉE DE GROSSESSE DURATION

OF PREGNANCY

DURÉE DE RÉSIDENCE... DURATION OF

**RESIDENCE** 

Contrary to these examples of pseudo-relationships, one finds many compound words issued of the same uniterm that are not linked to any hierarchical chain: EFFICACITÉ D'USAGE; EFFICACITÉ DE LA CONTRACEPTION; EFFICACITÉ DÉMOGRAPHIQUE / USE-EFFECTIVENESS, CONTRACEPTIVE EFFECTIVENESS, DEMOGRAPHIC EFFECTIVENESS CONSENTEMENT; CONSENTEMENT MUTUEL / CONSENT, MUTUAL CONSENT ORIGINE ETHNIQUE; ORIGINE SOCIALE / ETHNIC ORIGINE, SOCIAL ORIGIN RANG D'ACCOUCHEMENT; RANG DE GROSSESSE; RANG DE NAISSANCE; RANG DU MARIAGE / CONFINEMENT ORDER, PREGNANCY ORDER, BIRTH ORDER, ORDER OF MARRIAGE

The case of descriptors compounded with the word TABLE is curious since one finds a combination of the two preceding situations. The term on the left is the head term and often the unique term of its chain:

TABLE A EXTINCTION DECREMENT TABLES

TABLE DE MORTALITÉ LIFE TABLES

TABLE DE MORTALITÉ DE GÉNÉRATION

GENERATION LIFE TABLES
TABLE DE SURVIE
SURVIVORSHIP TABLES

TABLE TYPE DE MORTALITÉ MODEL LIFE

**TABLES** 

TABLE D'ENTRÉE EN INVALIDITÉDISABILITY TABLESTABLE DE DÉCÈSDEATH FUNCTIONTABLE DE FECONDITÉFERTILITY SCHEDULES

TABLE TYPE DE FECONDITÉ MODEL FERTILITY

**TABLES** 

TABLE DE MIGRATION MIGRATION TABLES

TABLE DE NUPTIALITE NUPTIALITY TABLES

TABLE DE SURVIE A PLUSIEURS DEGRÉS MULTI-STATE LIFE TABLE

TABLE DE VIE ACTIVE TABLES OF WORKING LIVES

TABLE TYPE MODEL TABLES

TABLE TYPE DE FECONDITÉ MODEL FERTILITY

**TABLES** 

TABLE TYPE DE MORTALITÉ MODEL LIFE TABLES

Therefore it seems that no strict rules are applied which results in a real problem in estimating the level of precision of a term.

There are also repetitions in the hierarchical chain which probably occurred when introducing new terms:

DÉNOMBREMENT ENUMERATION

AUTORECENSEMENT SELF-

**ENUMERATION** 

DÉNOMBREMENT DIRECT DIRECT

**ENUMERATION** 

DÉNOMBREMENT INDIRECT INDIRECT

**ENUMERATION** 

AUTORECENSEMENT SELF-

**ENUMERATION** 

DÉNOMBREMENT PAR VOIE POSTALE MAIL

**ENUMERATION** 

DÉNOMBREMENT PAR VOIE POSTALE... MAIL

**ENUMERATION...** 

MIGRATION MIGRATION

DERNIÈRE MIGRATION LATEST

**MIGRATION** 

MIGRATION CIRCULAIRE CIRCULAR

**MIGRATION** 

MIGRATION RÉPÉTÉE REPEATED

**MIGRATION** 

DERNIERE MIGRATION LATEST

**MIGRATION** 

PREMIERE MIGRATION FIRST

MIGRATION

MIGRATION TOTALE GROSS MIGRATION
PREMIÈRE MIGRATION... FIRST

MIGRATION...

All these considerations show that POPIN is not therefore a very structured thesaurus. The third part of the first edition of POPIN (1979) displayed the complete hierarchical structure. It is no longer apparent since the second version, which is certainly preferable because it is often very misleading. If a very specific descriptor leads to an unfruitful interrogation, it is very often useless to try to retrace the hierarchical chain for finding a generic descriptor because you may obtain a different concept. Thus the generic term of MARRIED MEN is MEN. In database-retrieval, autopostage (when the software proposes it) which automatically widens research to generic terms is useless.

To make up for these disadvantages, a special effort was made regarding the presence of a great number of associated terms with descriptors in the alphabetical list and on the use of thematic facets presented in the second part called "thematic presentation of descriptors".

# b) Thematic presentation of descriptors and classification

The second part of the thesaurus presents keywords classified by topics (or main subject headings), themselves divided in-sub-topics and facets. These topics and sub-topics (that have a name and a number) are organized according to classifications. Facets that form the last subsection have only a number and regroup close terms.

```
Example:
[03.00.00] MÉNAGE. FAMILLE
                                      (topic)
      HOUSEHOLD, FAMILY
      [03.01.00] MÉNAGE
                                            (sub-topic)
      HOUSEHOLD
            [03.01.01]
                                                   (facet)
            [03.01.02]
      [03.02.00] FAMILLE
            FAMILY
            [03.02.01]
            [01.02.02]
            .....
            [01.02.08]
```

Each term belongs to only one facet. Instead of a widespread use that induces the structuring of the thesaurus, there is no systematic regrouping of a generic term and its specific terms in the same topic or sub-topic. Here are some examples (numbers between hooks indicate facet number and names of the topic and sub-topic):

```
BT: FINANCEMENT [08.04.01 Economie/financement, coûts]

NT: FINANCEMENT COMMUNAUTAIRE [04.03.05 Répartition de la population/zones urbaines]

BT: FINANCING [08.04.01 Economy/ financing, costs]

NT: COMMUNITY FINANCING [04.03.05 population distribution/urban areas]

BT: RISQUE [01.09.05 Démographie, recherche, méthodologie/analyse statistique]

NT: RISQUE D'INVALIDITÉ [12.01.03 Morbidité, mortalité/maladies]

NT: RISQUE DE CONCEPTION [11.01.05 Santé, vie/biologie]

BT: RISK [01.09.05 Demography, research, methodology/statistical analysis]

NT: RISK OF DISABILITY [12.01.03 Morbidity, mortality/diseases
```

BT : POLITIQUE DÉMOGRAPHIQUE [09.05.01 Administration, législation, politique gouvernementale /politique gouvernementale]

NT: MALTHUSIANISME [17.00.00 Théories de population]

NT: RISK OF CONCEPTION [11.01.03 Life, health/biology]

NT : POLITIQUE DE L'AVORTEMENT [09.05.01 Administration, législation, politique gouverne-mentale /Politique gouvernementale]

BT: POPULATION POLICY [09.05.01 Administration, legislation, government policy/government policy]

NT: MALTHUSIANISM [17.00.00 population theory]

 $\mbox{NT: ABORTION POLICY } [09.05.01 \mbox{ Administration, legislation, government policy }/ \mbox{government policy}]$ 

The descriptor POPULATION [02.01.00 Population, age, sex, ethnic group/population] has thirty specific descriptors belonging to seven different main topics.

These two different thematic and hierarchical structures are apparently a result of polyhierarchy (since here a term can belong only to one facet), of the great number of compound descriptors with a quasi-systematic pre-coordination of terms with different meanings but especially of the weakness of the hierarchical structure between descriptors. It makes understanding the system difficult, especially if it is necessary to add new terms.

The two first levels of the plan of proposed classification are supposed to organize the discipline in main themes but it is not convenient. If one looks at the links between the topics, one notices that specific aspects of population studies are not always isolated from others. Some purely demographic notions are mixed with vaster notions which might also be scattered. Thus, for example, the fundamental part [01.05.00] RECENSEMENTS-ENQUÊTE / CENSUSES-SURVEYS, appears as a sub-topic of the same importance as [01.01.00] SCIENCES NATURELLES-SCIENCES SOCIALES-MATHEMATIQUES / MATHEMATICS-NATURAL SCIENCES-SOCIAL SCIENCES of the topic [01.00.00] DEMOGRAPHIE-RECHERCHE-METHODOLOGIE / DEMOGRAPHY-RESEARCH-METHODOLOGY whereas sociology, for example, is stored in the sub-topic [05.01.00] of the topic [05.00.00] ORGANISATION SOCIALE / SOCIAL ORGANIZATION.

It is said that the first two levels can be used for generic coding for books but some sub-topics are of no interest in the organization of the discipline by area, such as SEX [02.03.00] or RESIDENCE [04.05.00]. This classification of descriptors is not operational. It is better to choose the classification used by the review *Population Index*.

## 5. DOCUMENTARY DATA-PROCESSING

Several allusions to data-processing which were made earlier need to be explained.

The second version of the POPIN thesaurus was edited with a specific program developed by INED but which could not be used for a later update. Since then, documentary software has changed and thesaurus management modules have been created. The third version of POPIN was edited with the software Dixit (now called Theso-Texto) working with the documentary software Texto of the Chemdata company.

Each software has its own ways of creating files. For Theso-Texto, it is necessary to choose a source language (here English), others being target languages. That does not imply any preponderance of one language over the others, but files of the source language and target languages are different. This is not the case of all software. Some problems may also arise with the classification of descriptors in facets that have no link with the generic term. At last, even if it is possible to have ASCII files, it can be very difficult to use these files with another program.

If a documentalist has a thesaurus program, it will be easy to undertake controls of form on descriptors, but the quality of indexation depends both on capacities of the documentalist and the quality of the thesaurus. If the hierarchical structure of the thesaurus is not good, envisaging autopostage to widen the field of the research will be pointless (if it is possible with the software). Descriptors containing words of a boolean interrogation (AND, OR...) may give nothing if these words are not hidden.

#### CONCLUSION

This report is an attempt to study some aspects of the POPIN thesaurus and to show some of the aspects that need improving. In other respects, it has many qualities, especially that of having been able to sort and compile many terms describing the area of population studies. On the whole it has fulfilled the objectives fixed in the introduction. It is the only reference tool in French and Spanish and is precious for many documentalists or demographers. Nevertheless, a thesaurus is never a finished work, it has to improve in symbiosis with the discipline it describes. There is therefore much work in store for the next working group for the management of POPIN.

Mr COURGEAU thanked Ms GUBRY for her report and asked for Mr HANKINSON's reaction.

Mr HANKINSON said that he was impressed by the report but pointed out that the conditions under which he worked for the 3rd edition resulted in contradictory instructions. Each dictionary or thesaurus is different and confusion arises when there are conflicting instructions.

Ms PASQUARIELLA asked to what extent did the group propose to change the Thesaurus. If the group decided to edit a supplement issue, how large would supplement be? She said that to correct some of the problems was a substantial task and that the group should define the task to be appointed to it.

Mr ROSE stated that if there were some flaws in the structure of the Thesaurus they should be corrected.

Ms PASQUARIELLA said that with reduced financial resources the group needed to be very practical, to define a goal and head for it. The group should decide which flaws are acceptable and which should be changed or whether the Thesaurus could be used as it is.

Mr ROSE stated that users on a day-to day basis may not be aware of these problems. The report revealed the fact that no one had been able to do a perfect job but that Mr HANKINSON had done an excellent job in difficult conditions.

Ms PASQUARIELLA said that the Thesaurus has developed in response to comments by users, inevitably giving rise to inconsistencies. In POPLINE hierarchies had been eliminated. Did the group wish to consider this?

Mr DU GUERNY said that he was incapable of making any comments on Ms GUBRY's report but that if any modifications concerning controlled and natural vocabulary the distinction between the two systems would become blurred. He felt that from the in bringing some order into a fast developing field, it is important to avoid too many inconsistencies.

Mr SOLBI said that if all of these flaws did not affect researchers and indexers, those inconsistencies that can be corrected must be corrected and those that cannot be corrected should be left unmodified.

He added that it would be necessary to assess how research formulation is affected and the relevance of the documents, to evaluate the systems and come up with some remarks that would lead to changing the hierarchy.

Mr COURGEAU pointed out that Ms GUBRY's report indicated that 40 percent of the descriptors are unattached and as different centres may wish to stop at a given hierarchical level this could present problems for users. He added that some users said that the PMT was too large and that this aspect could be worked on.

Mr ROSE felt that a survey should be conducted among users.

He asked the group what their opinion was regarding the correction of the inconstancies in the Thesaurus.

Ms PASQUARIELLA said that the problem has always been that of a design out of context. Links were made through theory rather than through use.

One of the reasons why there were isolated terms was that Population studies is a multi-disciplinary field.

CICRED could produce a document on the users, how they use it and how they would like to use it in the future.

Mr COLLOMB said that most of the demand came from small centres. 200 user libraries answered the CICRED's questionnaire.

Mr ROSE asked whether CICRED had conducted a survey already.

Mr COLLOMB answered that CICRED is planning to conduct a survey on computer equipment.

Ms PASQUARIELLA asked if the group might design a questionnaire.

Mr COLLOMB said that so far CICRED has reached between 600 and 700 centres and that in the beginning of 1996 it will reach 1000 to 2000 centres. A survey on the use of the PMT and computers linked to the net is planned for the beginning 1996.

Mr COLLOMB said that CICRED had sent a questionnaire to centres asking whether they used the PMT and that 200 answered that they used.

Ms PASQUARIELLA asked whether it could be inferred from the location of the centres which PMT they are using.

Mr COURGEAU suggested that the group prepare a draft for a questionnaire.

Mr COLLOMB said that for the moment the centres CICRED was in touch with were very different in size and orientation and that they had not yet been polled for this reason. When the number of centres in touch with CICRED will be stabilised it will be possible to carry out the survey. He said that CICRED only had information about centres asking for copies in the different languages and did not know what use was made of the PMT.

Ms PASQUARIELLA said that a certain amount of information had to be gathered from the centres before proposing a project.

Mr LORHMANN asked whether what the group decided would depend only on the responses from centres or whether it would not be possible to make proposals as well.

Mr DU GUERNY agreed that there are shortcomings and a problem of poor marketing of the PMT. He added that as one improves a product one must ensure people are properly trained.

Mr COLLOMB added that the definition of a centre was a unit including 2 demographers with a Director in charge. The reason for this was in order to include in the directory demographers working in a ministry on any kind of applied demography.

Mr ROSE said that in theory the size of a unit did not matter and that Mr COLLOMB suggested that units should not necessarily be demographic units. He felt that a wider constituency makes for a richer input of information.

#### **LUNCH BREAK**

Mr COURGEAU proposed discussing about the questionnaire.

He also asked whether the general structure of the PMT corresponded to the needs of centres.

He said that the PMT seemed very detailed in certain aspects and less in others i.e.: reproductive health. He also pointed out that centres may also need very detailed language in certain cases and less in others.

He felt that the answer might be a common core, then different micro-thesauri could be built around this common core.

He said that Ms GUBRY's report revealed that there are many new descriptors that could be reduced without reducing the performance of the PMT and that this would be an important task to carry out. However, new terms were also needed, i.e. "remote sensing", "multi-level analysis", "reproductive health", such new terms need to be introduced so as not to increase the number of isolated descriptors.

The question is, which terms must be kept and which must be eliminated?

He asked the representatives from the different organisations to give their opinion on this matter.

Mr DU GUERNY said that after the Population Conference in Cairo it became apparent that a new approach to development linked to other topics was needed. The primary concern was development. The aim was to develop an instrument to cut across language barriers. One way was to try to develop a standardised language which would enable countries to develop themes in their own languages and also to communicate.

He went on to talk about the types of problems FAO deals with. For example, presenting papers on interrelationships between population and development in which FAO is supposed to bring to the attention of organisations problems concerning food resources and population.

Another demand emerging is the identification and analysis of interrelationships between agriculture and population questions. A much more complex task but one which is much more rewarding because it is new in the population field.

For example, in the case of interrelationships between land tenure and farming systems, in the beginning it was impossible to establish a link with population issues. To conclude Mr DU GUERNY said that FAO uses population literature but also produces papers on land, on fishing, etc. And that all this research was conducted within the broad framework of the Cairo Programme of Action.

The question which remains is what means are required for better access and distribution of material and for decision-making and whether the Thesaurus can play a role in this.

At the Rio Conference the words "and development" were added and so were other subjects, such as AIDS, and Sustainable Development.

This raised several questions such as, are the existing descriptors representative?

Do they need to be reduced? Other questions he raised were that if the thesaurus is used as a tool to make bibliographic studies, how much overlap is there with other tools? and, which studies are important in different countries for allocating budgets?

He gave the example of the information system on women which included all the documents in the UN on women since the Nairobi conference. The picture obtained of women issues in Africa was based on Egypt, Ethiopia, Kenya, Zimbabwe, etc. This structural bias perpetuated itself since when organising conferences the same people were contacted each time and this did not always give a true picture of the situation. The idea was to try and correct this sort of bias.

Mr DU GUERNY felt that the PMT could be very useful for introducing a change and new approaches.

Mr ROSE said that within UNFPA the PMT was viewed as a tool for information retrieval and not as a decision-making tool.

He said that what emerges from the presentation is that certain areas are not covered. Whole areas need development and there is a need to develop ideas in a systematic way. Mr ROSE appreciated Mr DU GUERNY's point of view because of the interdisciplinary approach of FAO but he did not see any other application for decision-making.

Mr DU GUERNY felt that a preliminary necessary condition was to improve the tool and that this had to be done sequentially. He believes that applications can go beyond what has been considered so far.

Mr LOHRMANN said that IOM has used the PMT as a basis for its work. He said that they had never received a questionnaire about the use of the Thesaurus.

As IOM deals exclusively with migration they have used the Thesaurus as a base and have had to develop their own thesaurus. It became obvious that they had to go into greater detail. He said that some copies were available and that any comments on this provisional tool would be welcome.

Ms LAU said that when she first picked up the thesaurus there were some terms she did not understand at all and there was nothing on migration or the different types of migrants. That was why they developed a small migration thesaurus. The PMT was too specific in other fields and insufficient in migration.

Mr COURGEAU asked whether this thesaurus on migration could be used as a micro-thesaurus.

Mr LOHRMANN said that they had added the term security because it has become topical. They also started a section on legislation and migration. It is an open working tool to be developed according to need. This thesaurus has been worked on with quite a few centres.

Ms LAU said that there are other organisations that develop their own thesauri which can be useful also.

Mr ROSE felt that it would help if this work were included in chapter 15 of the PMT, migration being an integral part of population studies.

Mr LOHRMANN asked whether this was possible.

Mr HANKINSON said that the danger in his view was that an organisation such as IOM is specialised and if work from all the specialised agencies were included this might create a monster.

Mr COURGEAU asked whether a micro-thesaurus might not be used in special cases.

Mr ROSE said that if new tools are developed they should be included but with some selection.

Ms PASQUARIELLA said that the users should be kept in mind and proposed taking a scientific approach. Before adding or deleting descriptors it would be preferable to find out how frequently certain terms were used.

She congratulated IOM on their work but pointed out that there were other migration thesauruses. For example UNHCR are also developing a thesaurus. Like Mr ROSE she feels it is a very important issue. She added that the development of microthesauruses is a possibility but that it might dilute the POPIN.

Mr SOLBI felt it was difficult to decide which way to go. Whether to improve the Thesaurus or whether to size it down. Improvements could be made regarding overlapping areas. However Mr SOLBI did not feel that all the fields of POPLINE could be incorporated in POPIN. He suggested looking at another way of indexing. The question he felt was, how can one anticipate all the questions that may raised by users then design a thesaurus to respond all these potential needs?

Mr COURGEAU said that users might have many questions to ask.

Mr SOLBI answered that was what the group was there for. He said one could not just add migration and then wait for others to provide more information but rather one should have a more holistic or more focused approach.

Regarding the idea of adding a supplement to a core thesaurus he said this would increase the number of interfaces or models that could be used when needed.

For example CICRED is in contact with 1200 centres using different software. The question is how to exchange data and this raises the question of harmonisation.

Mr DU GUERNY said that indexing should be made to meet the needs of the users. Does it not have to do with interfacing with the users?

Mr SOLBI answered that new indexing methods deal with any expected query from all users. This can be taken even further.

Ms MEUNIER said this was not new and that when indexing documentalists think of what the researchers will ask them.

Mr SOLBI answered by saying that the documentalist does not use the document and that in trying to satisfy the precise needs of researchers the best approach would be full-text and that there are techniques that allow this already.

Ms PASQUARIELLA said that in Africa as there are many libraries have CD ROM and full-text because often they cannot be on a network system.

Mr LINGYONG said that creating a micro-thesaurus was a good idea. He said that keywords should be kept in the core thesaurus and that further development should be made through micro-thesauri. He added that this approach could be developed with the use of natural language in the future.

Mr DU GUERNY said that the idea of micro-thesaurus is very interesting. To keep the POPIN with the keywords as a core work and further development to be done under the form of micro-thesauruses.

The technical solution in future would be to coordinate this approach with the use of natural language.

Regarding the matter of harmonisation Mr SOLBI said that the group might receive applications for descriptors and try to incorporate them with the help of specialists in demography and other fields.

He reminded everyone that no centre can survive without exchanging data and that systems for exchanging information had to be developed. First by building on what exists, then by helping to develop systems that can migrate.

Ms PASQUARIELLA talked about procedure saying that the Working Group was concerned with discussing terms.

She went on to say that since CICRED have been responsive to the needs of the people in the different regions that a good way of proceeding would be to have proposals introduced by the different groups.

Mr COURGEAU presented the questionnaire Philippe COLLOMB had sent round. There had been 200 answers and 20 centres said they did not use the PMT.

Mr ROSE said he would like to see an expanded version sent out.

Ms PASQUARIELLA said she would like to consult CICRED's list of centres and possibly propose some other units.

Mr COLLOMB said that only centres responded to the questionnaire, not persons.

Mr ROSE felt that there was a need for a comprehensive survey to obtain some hard facts and use this input in the decision-making process.

He went on to suggest that another meeting could be held after the survey and that the task could be given to a consultant. The information could be pooled and presented to a steering committee.

Mr COLLOMB found this an interesting approach and suggested that the first step would be to try and find out about the population of centres in the world, after that to obtain a list of their activities and then to try to describe the information and the calculation capacity of the centres.

Ms GUBRY said that it was necessary to ask which keywords are used because there may very well be only about 1000 used and this would pose a problem when using CDS/ISIS

Mr SOLBI answered that this depends on which version is used.

With the latest version (37.1) there is the possibility of including the MTM (thesaurus management programme).

#### **BREAK**

Mr COURGEAU said that as a starting point there was the CICRED questionnaire which could be used.

Mr DU GUERNY added that when people answer that they do not use the PMT they should be asked why since it could be due to a staff shortage, etc.

Mr LEBRUN suggested that respondents should specify which department is concerned.

Mr COURGEAU suggested there be a question regarding the number of researchers.

Ms LAU suggested a question regarding the size of the library.

Mr ROSE suggested that there should be a question regarding direct users.

Mr COLLOMB answered that CICRED knew the size of the centres.

Mr ROSE returned that it was necessary to know what was the impact and that for management purposes which departments use the PMT.

Ms PASQUARIELLA said that it was necessary to know if centres used any other thesauri and how they used them. For example, the POPLINE thesaurus, and to ask whether they used the multilingual dictionary also.

Mr COURGEAU went on to suggest that the questionnaire ask which new themes need to be covered by the Thesaurus.

Mr ROSE added that people may be encouraged to submit revisions.

Mr DU GUERNY suggested questions on training since one of the reasons why centres do not use the PMT might be because they do not know how to use it.

Mr COURGEAU sakes Ms MEUNIER which improvements she might suggest for the PMT.

Ms MEUNIER answered that she would extend it. She added that POPIN had a permuted index, that not all thesauri have this and that it is useful for people who are not demographers.

Mr COURGEAU suggested that people should be asked whether they use a permuted index

Mr DU GUERNY said that some users are aware of semantic distinctions and that scope notes made in relation with IUSSP was a good idea.

Mr ROSE asked whether more scope notes were needed.

Mr LOUCHICHI suggested giving a detailed outline of this project and that a detailed questionnaire on the themes evoked in the meeting should be drafted. Each question should be accompanied by concrete suggestions. If the aim of this questionnaire is to define how to update the Thesaurus then all the questions should be posed.

He went on to suggest a survey with 1000 questionnaires adding that if the questions are closed it would make the task easier.

Mr DU GUERNY mentioned the need of including questions on how information is handled by centres since they may or may not have a library or a qualified librarian. Larger libraries may be faced with other problems if they serve other specialities, etc.

Mr LEBRUN suggested sending a simplified questionnaire to start with since sending a detailed questionnaire to a centre that hardly uses the PMT would not be necessary. Then to send a more detailed questionnaire to those people who do use it.

Regarding the question of who the users are several members of the Working Group suggested making use of Internet and E-mail to obtain this information.

Ms GUBRY suggested asking libraries using computers, which keywords they use.

Ms PASQUARIELLA said that in the past there were certain criteria for additions and deletions. A term had to be used 3 to 5 times before suggesting adding it and she suggested using this criterion when soliciting additions of terms to avoid being swamped with suggestions.

Mr SOLBI said that entries should be documented and suggested that the Regional Commissions are more in touch with the realities in the different countries. Another way Regional Commissions should be involved would be in the way information is disseminated, for example.

Mr COURGEAU suggested that CICRED prepare a questionnaire to be sent to the members of the Working Group for comments before being sent to the centres.

# End of Monday session 5 p.m.

## **Tuesday 28th**

Mr COLLOMB started by pointing out that the CICRED's primary activity of promoting cooperation between centres, of operations for the capitalisation of data with the directory of centres and the listing of activities is difficult to finance and he asked the people taking part in the meeting to help CICRED find funding to reinforce this institutional activity.

He went on to say that CICRED needed concrete recommendations from the group for its future work on the Thesaurus such as work on keywords and the hierarchy. He pointed out that CICRED would apply the group's recommendations in coordination with the Population Division.

Mr COURGEAU suggested talking about the links between the PMT and the Multilingual Dictionary before discussing the questionnaire again.

Mr LEBRUN suggested it would be useful to compile a comprehensive inventory of terms. This compilation should reflect the many changes occurred in demography since the last edition 15 years ago.

Regarding family demography, the current edition of the dictionary has only a small entry. Over the last 15 years formal aspects of family demography have developed which means that chapter 5 needs rewriting.

Another aspect is that the current structure of the dictionary is not adequate.

Chapter 9 deals with economic and social aspects of population.

It is a basket chapter, is unsatisfactory and new chapters need to be created.

The preparation of an inventory of demographic terms could be prepared in collaboration with CICRED and in the framework of PMT meetings.

Mr LEBRUN said that he could not speak in the name of IUSSP but that he would be glad to suggest it to the Union.

He went on to suggest that the Working Group could agree on principle for this collaboration for the development of a demographic inventory. However, the authorities must be consulted and the matter of funding discussed. Union and CICRED secretariats would have to finalise the arrangements.

Mr ROSE asked whether the new edition of the multilingual dictionary should not contain a disclaimer stating it is not intended for the retrieval of information to avoid having yet another active thesaurus in the field. Mr ROSE felt that the dictionary is a useful tool for training and use in an academic context but he feels that there is a danger that it might be adopted as an indexing tool.

Mr LEBRUN stated that the dictionary is used for the indexing of scientific books. He agreed that it is not meant for information retrieval.

Mr DU GUERNY said that a very forward looking strategy needs to be adapted. He pointed out that problem areas will be Africa, transition countries and that in Asian countries there would be substantial development of demographic studies.

He stated that the former editions were more westernised and he suggested the group think about how such an instrument can help population programmes in Africa with a dictionary adapted to their situations. 70 to 80% of the African population is rural. Urbanisation is different in Africa, and African centres need to be helped in order to provide them with a useful tool.

In Asia, there has been an explosion of new work. Ageing of the population, environment etc., needs to be developed.

He said that basket chapters have to be avoided and the group should work with Asian centres to help them in their population programmes.

Mr LOUCHICHI said that CDC, which is training centre for the whole Arab region is revising the documents it has edited since 73.

He said that coordination is needed for this work.

He said the CDC is updating its own dictionary but he did not know if they knew about the Union's project.

Mr GONNOT agreed with Mr DU GUERNY about the point of taking into account local specific needs. He said that in the same way as Mr LEBRUN mentioned that in 15 years certain fields have developed quickly political developments have also had an impact on vocabulary. Regarding Europe and the Former Soviet Union, migration there does not fall into the same framework. This vocabulary needs to be used by local administrations etc. And needs to be included.

Mr COURGEAU pointed out that these suggestion presented some concrete conclusions regarding possible changes to the PMT.

Mr SOLBI said that the Regional Commissions have a role to play in coordinating activities and can help at regional and national levels.

Ms PASQUARIELLA said that the primary objective is to develop a common terminology, however merging POPIN and POPLINE, for example, would be an impossible task.

IUSSP could collaborate with POPIN and POPLINE by compiling a list of population terms. By merging alphabetical lists this would make it possible to arrive at a common terminology.

Mr SOLBI suggested keeping the structure of the PMT and feeding it from POPLINE and the Multilingual Dictionary so as to end up with one tool using a hierarchical system.

Mr COURGEAU said that the user needs to have a hierarchy to see at what level he or she will be working.

Ms MEUNIER stated that the difference between thesauri and dictionaries is that a dictionary cannot be used for indexing. However, the dictionary is a useful tool when updating POPLINE and PMT.

Ms PASQUARIELLA repeated that merging the different thesauri was out of the question. However, if one throws out the hierarchies and compiles an alphabetical list many similarities will become apparent and descriptors could be picked from this list for retrieving information from different data bases.

Mr ROSE suggested putting a merged list of descriptors from both thesauri on the Internet, asking for suggestions for revisions and for the group to meet again.

Mr HANKINSON suggested that CICRED might create a database combining the three inputs into a machine-readable format.

Ms PASQUARIELLA proposed that the group endorse the continued production of information on different formats. Including printed format. If the list were available on a web site it could also be available in printed form.

Mr GONNOT suggested the list should be available on diskette and CD ROM also.

Mr DU GUERNY expressed concern about regions such as Africa and proposed a double-sided approach in which Internet would be supplemented by Regional Commissions defining what is relevant or not for that region.

Mr SOLBI suggested that the Regional Commissions might provide links between CICRED, POPLINE and the different centres. Regarding Internet and E-mail he

pointed out that there was the problem of the quality of telephone lines that had to be considered.

Mr COURGEAU pointed out that recommendations concerning this would have to be made at the meeting and added that many centres expressed the need for a simpler PMT.

Mr ROSE said that the task of reducing the number of descriptors would be impossible because of the impossibility of reaching a consensus on which ones to eliminate.

Ms PASQUARIELLA explained about taking the alphabetical list of terms from POPLINE and the Dictionary to merge them to create a common terminology.

She explained that a common list of alphabetical terms would reveal some similarities and synonyms. Some definitions might have to be added and a consultant could be given the task of deciding which terms were to be eliminated. From this core list the descriptors needed for information retrieval could then be selected.

Ms GUBRY said that this would be difficult to manage as in many small centres, in African countries for instance, the managers are not always demographers or librarians and having many keywords in a hierarchy can be confusing for them. She added that there are many centres in Europe too that do not need so many keywords and that there is a need for something smaller.

Mr DU GUERNY asked whether it would not be more rational to centralise the indexing of documents for each region.

Mr SOLBI said that the best system was cooperation with a Regional Commission gathering documents in a region or sub-region. He did not agree with Ms GUBRY and felt that a large choice could help centres index documents better and that for the purpose of exchanging data the larger a thesaurus is the better it can handle contributions from different institutions.

Ms PASQUARIELLA pointed out that a common terminology would help to eliminate some of the duplications and that this would be less confusing for people.

She went on to point out that the idea is to make production available to the whole world and to do so a relatively compatible tool was needed. The objective being to reduce the potential for conflict as much as possible and not to create small discrete vocabularies.

Mr DU GUERNY said that the Thesaurus needs an accompanying strategy which must include the collecting and processing of the documents. There is a need for a mechanism adapted to all situations. He wondered if a mini-thesaurus would be a good link for smaller institutions and went on to say that if there is a good global all-inclusive system, isolated researchers may meet up. He concluded by saying that a good networking system was needed.

Mr SOLBI said that he was familiar with problems of differences in technology and methodology but that there were always alternative ways for people to correspond (exchange of diskettes, etc.)

He added, however, that CICRED could help in getting regional centralised bodies to collaborate by centralising access. Processing could be organised according to subregional networks linked to a centralised regional body creating as many links as possible with the different organisations thus allowing everyone to contribute and receive information freely.

Ms MEUNIER said she understood the concern people had for the number of descriptors but simply suggested that when a descriptor is not needed people should not use it. She went on to ask what would be the total number of descriptors if the three thesauri were merged and how would one manage the links between the terms. She said that this would present a huge task and would produce yet another thesaurus.

Ms PASQUARIELLA said that no one would pay for another thesaurus but what she was suggesting was to merge the alphabetical listings of terms only. Not to map out the relationships. Just to list each term with a definition.

Mr ROSE said it was worth trying but that it would be the first order of approximation towards a merged thesaurus.

Mr DU GUERNY said that the vision of centralised catalogues was great but from the FAO's experience of trying to do this sort of thing with major libraries he felt that trying to so with so many libraries would be impossible.

What he had in mind was a decentralised system designed to compensate for theshortcomings of small centres. Such systems exist in Africa, for example.

However, one question remains and that is the question of gateways, i.e. would IOM be the gateway to introduce new terms in migration.

Ms PASQUARIELLA said that for the time being what she was suggesting was an alphabetical list with scope notes. Something flexible enough for any centre to take some of these descriptors to make their own lists rather than having to consult several tools.

Mr ROSE raised the problem of whether in the future POPLINE would be willing to adapt to a new list such as the one being proposed.

Ms PASQUARIELLA said that Anne COMPTON had made the suggestion of a compiling a common list in collaboration with POPLINE.

Mr HANKINSON said that POPLINE would be keen on adapting a common terminology.

Mr ROSE said that forbidden terms would have to be dealt with and term relationships would have to be narrowed.

Ms PASQUARIELLA suggested compiling an interim list and trying it out in English, French and Spanish at first and ultimately in many other languages.

She went on to say that the PMT would not be changed.

Mr ROSE said that if the working group produced a list in 5 years there would be the same problem of a proliferation of lists. He felt that the group had to agree on unifying the thesauri.

Ms PASQUARIELLA suggested that this would be a first step to bringing regions together into a common forum for better access to population information and at the next meeting the group could make a reassessment by seeing how well it was being used.

#### **LUNCH BREAK**

Mr COURGEAU proposed further discussion on Ms PASQUARIELLA's suggestion and proposed dividing the work between centres by speciality.

Mr DU GUERNY went on to propose that if IOM dealt with migration, they might work on the list, consolidate it, then add other entries that deserve to be entered. Afterwards this work might be submitted for approval.

Mr COURGEAU suggested that the DP department of INED might do the merging of the lists of the PMT, POPLINE and Multilingual Dictionary.

Ms PASQUARIELLA said that POPLINE is available in word perfect.

Mr ROSE suggested using the MTM thesaurus management software which works with CDS-ISIS.

Mr COLLOMB said that either CICRED or INED could carry out this task.

Ms LAU suggested that the scope notes be introduced at this stage, before sending the list out to the parties interested.

Ms MEUNIER asked whether the Multinational Dictionary was in electronic form.

Mr SOLBI suggested it could be scanned.

Mr COURGEAU pointed out that the working group should be able to make a choice between synonyms coming from POPIN and POPLINE.

Ms MEUNIER informed the group that a colleague of hers had compared the two thesauri and found that one third of the terms overlapped.

Mr ROSE suggested eliminating all the words of drugs and contraceptive agents which would reduce the number of terms.

Mr COURGEAU said that an important task was making scope notes since in POPLINE there are many terms which are not clearly demographic but deserve to be included.

Regarding health terms, he pointed out that there were very few in POPIN, therefore this area would not pose many problems.

Mr HANKINSON pointed out that whoever works on eliminating synonyms will be called upon to make value judgements.

Ms PASQUARIELLA said that data bases at the Regional Commissions had to consulted.

Mr ROSE suggested obtaining extra data through the questionnaire with such questions as: "Can you provide statistics on your use of the terms?"

He agreed for the need for scientific data but expressed the opinion that the information gathered should be as comprehensive as possible

Mr HANKINSON said that scope notes would have to be added to POPIN only. He added that the scope notes could be increased gradually from 15% to 25% until finally 100% was reached since providing scope notes for each term is a very time-consuming task.

Mr LINGYONG asked whether there would be any reference terms added in future.

Ms PASQUARIELLA answered that there would be and asked who would be given the task.

Mr COURGEAU said he could not speak on behalf of Mr COLLOMB who was absent at the time and suggested discussing about the questionnaire and returning to the issue of reference terms later.

Regarding the questionnaire Mr ROSE commented that there was no real question on what people use the PMT for and that he would like to have precise data on this point.

He also suggested that the order be changed. "If yes, exactly what do you use it for? Which departments?" and the item "Do not use it" should be placed after.

Mr LINGYONG suggested that another question once people say "Yes" to question 3 would be to ask the question "In what way?"

Mr GONNOT asked whether the group did not wish to code the questionnaire and add a format for computerising it.

Mr ROSE suggested eliminating geographical terms because it is a difficult area subject to change.

Ms PASQUARIELLA said that in POPLINE it turned out to be very useful. The Working Group's decision many years ago was to keep geographical terms.

Ms MEUNIER asked whether there was any point in sending out this questionnaire on POPIN since if the 3 thesauri were going to be merged there would no longer be a POPIN.

Ms PASQUARIELLA replied that POPIN exists now and will continue to exist for the foreseeable future, and that what the group was discussing was only a change in direction, not for POPIN to disappear but maybe to come up with another product. She specified that what the group was discussing was a feasibility study to see if the merger is useful to people.

## Thesaurus

## Questionnaire

The questionnaire will give the Working Group guidance on how the PMT might change in the future.

Should we spell out in the questionnaire that we plan a combined PMT/POPLINE/IUSSP Thesaurus?

Mr ROSE expressed the opinion that the purpose of this trial merge is to lay the groundwork for casting a fourth edition of the PMT and that the ultimate objective is to produce a combined thesaurus.

Ms PASQUARIELLA felt that the questionnaire should not include questions about value, quality etc. of POPLINE thesaurus.

Mr LEBRUN said that the questionnaire should include information on the institute/individual responding.

Mr LOUCHICHI suggested the questionnaire should include information on which edition and which language of PMT users are using. Also reasons why respondents want revisions.

Ms LAU asked that the questionnaire be structured to avoid respondents skipping questions of importance.

Mr LOUCHICHI asked why a second questionnaire was necessary so soon after the first.

Mr SOLBI suggested that the questionnaire should ask what hardware/software respondents are using.

Mr LEBRUN congratulated the working group on the improvements made to questionnaire.

Regarding the issue of the merging of POPLINE/PMT/IUSSP, the question of whether scope notes could be added was raised.

Mr COLLOMB said he would investigate the possibility and the costs involved.

Mr HANKINSON suggested that scope notes could be taken from the existing thesaurus.

Ms PASQUARIELLA said that scope notes should be in all three languages and assumed that the Spanish and French editions of POPLINE will have scope notes in those languages.

Mr ROSE said that some terms are so obvious that they do not need scope notes, e.g. MEN, JUDAISM, BLOOD...

Mr SOLBI suggested sending the combined list of terms to all UN regional centres and to distribute through the regional centres to their networks.

Mr COURGEAU said CICRED would first send the questionnaire to the centres it is in contact with before sending it to regional centres.

Ms PASQUARIELLA disagreed with Mr COURGEAU's suggestion and proposed sending it to the regions first before central organisations such as IOM.

She went on to ask whether the workload could be shared with IUSSP and/or POPLINE.

Ms GUBRY asked whether the last changes made to PMT were taken to get closer to IUSSP.

Mr HANKINSON answered that this was the case, where possible.

#### **Break**

Regarding the alphabetical list Mr COURGEAU raised the question of synonyms and how to decide which alternative to use. He asked whether a small working group should be given the task of choosing between synonyms and to look at how to cut back the terms to a reasonable number.

Ms PASQUARIELLA proposed that the group might suggest changes in the hierarchy or what changes to make to the combined list and that this task might be for the group to undertake at its next meeting.

Mr HANKINSON asked whether this task could be done by a working group and suggested that an individual consultant might be a better choice.

Ms PASQUARIELLA suggested that an alternative might be to issue a supplement to the PMT to add terms arising from the ICPD and the Beijing women's conference.

Mr DU GUERNY proposed setting up a working group to look at modalities on how to proceed to combining thesauruses and to prepare a discussion for the following morning.

#### PROGRAMME OF FUTURE WORK ON THESAURUS

<u>Phase 1</u> Merge PMT/POPLINE/IUSSP dictionary to produce alphabetical list (unedited), by CICRED (2 months)

<u>Phase 2</u> Produce frequency-of-use list (by Regional Commissions) at the same time as Phase 1 (2 months)

<u>Phase 3</u> To appoint a task force to review terms for possible elimination, to use other criteria to keep terms even if rarely used, to eliminate synonyms, etc. (Task Force - IUSSP/POPLINE/POPIN at least)

- N.B. Make sure reproductive health and women are properly taken into account as per UNFPA/WHO agreement on issues.

<u>Phase 4</u> Circulate ,consolidated list to full Working Group for comments, along with list of terms that were eliminated and rules to be followed for re-adding terms.

Phase 5 Add scope notes where necessary.

Phase 6 Write up user guidelines

<u>Phase 7</u> Test and evaluate final product e.g. by putting on Gopher web server for reactions.

<u>Phase 8</u> Working Group meets to decide on future developments, and to determine different hierarchical levels to create new Thesaurus fir narrow, medium-sized and large needs.

Ms PASQUARIELLA warned against eliminating terms that are popular with users and suggested asking users for frequency-of-use list before deciding whether to keep or to eliminate terms.

Mr SOLBI asked whether POPLINE could provide frequency-of-use information also.

Ms MEUNIER said that frequency-of-use should not be the only criteria for evaluating terms.

Ms PASQUARIELLA asked what were the other criteria.

Mr SOLBI suggested that specialists in the fields concerned should be asked about what terms are needed over and above those used frequently.

# Wednesday 29th Nov 1995

Mr COURGEAU asked Mr COLLOMB to give his comments on the work achieved at the meeting.

Mr COLLOMB said that the merged list would be a good tool for centres to communicate information, however, he had to clarify certain points. Any further tasks taken on by CICRED or INED will be paid by CICRED. He said that the costs of each stage set out in the work programme have to be evaluated then the Working Group must decide which institute will carry out which phases and the person in charge will communicate the costs for each phase of the programme.

He said that the new thesaurus must be at least as good as the current one and that the work will be started only when the funding required to ensure the proper completion of the work is obtained.

Mr COURGEAU summed up the points covered so far and the extension of the PMT. He also mentioned the proposal made by Ms LAU regarding international migration and suggested that other topics might be added, such as reproductive health, gender, sustainability, remote sensing, etc.

Ms LAU said that more migration terms should be added, such as terms dealing with security which is linked to migration. She added that it should not be difficult to add these terms without the hierarchy.

Ms PASQUARIELLA said that UNESCO has rules for multilingual thesauri and that the Working Group must make sure that it follows the established guidelines.

She added that in deciding to add many terms peripherally related the Working Group must avoid making the thesaurus unmanageable.

Mr LOUCHICHI said that the proposals on migration are important because there are changes in migration flows creating new research themes and therefore new categories and it is not difficult to insert these new terms.

There are terms that are important and more and more commonly used but there are not many of them. He felt that new terms on migration are more important than terms regarding reproductive health and gender because the latter are newly created themes so they are not as developed and rich as that of migration.

Mr COURGEAU said that it was necessary to include them. He asked whether Mr DU GUERNY could talk about the themes of reproductive health and gender.

Mr DU GUERNY said that he did not agree with Mr LOUCHICHI since although there are not many surveys on these topics there is a lot written on them and there is a lot of money going into these 2 points. So rather than deal after the event he feels that the group should prepare for it.

Regarding including gender, he also suggested that it should be done with the UN Women's Organisation because they have set up their own thesaurus using the macro-thesaurus and completing where necessary thus providing a list of descriptors already. He added that it would be easy for them to give information on frequency. Regarding reproductive health, he said it would more difficult and suggested getting in touch with WHO which has, with UNFPA, been defining the scope of reproductive health.

Ms PASQUARIELLA said that the UNFPA task force following up on ICPD was including their guidelines on the UNFPA gopher on the Internet and proposed asking this task force to help in this work.

Mr SOLBI said that what had just been said about these two fields can be extended to the other fields.

Mr COURGEAU said that remote sensing is becoming a new method and has a strong terminology. He said that it is useful to add this field because researchers in this field are attempting to assess the growth of urban areas between censuses because of their rapid growth.

Mr SOLBI said that remote sensing is already included in GIS.

Mr COURGEAU said that multilevel analysis is becoming more widely used and there is a method using data at individual, regional and family level to try to understand individual behaviour.

Ms PASQUARIELLA asked how many terms the group was thinking of adding.

Mr COURGEAU answered that he did not know but that there would probably not be a great many new terms.

Ms PASQUARIELLA said that in the case of remote sensing the single term would be enough in itself.

Mr SOLBI said that in the case of remote sensing there would probably be no more than ten words.

Mr SOLBI said that it would be better to establish coordination with guidelines. He suggested making forms and sending them to users, then to collect the candidate descriptors on paper or diskette according to defined format.

Ms PASQUARIELLA said that there would be about 50 terms with scope notes and asked whether the Working Group would collect them and add them.

Mr COURGEAU answered that the sharing of these tasks would have to be discussed.

Ms PASQUARIELLA said that the group needed to have a clear idea of costs and asked whether these tasks could be added without adding to cost.

Mr DU GUERNY said he could ask the FAO group on GIS. He said he would not select from the list himself but would send it on to the group.

Mr COURGEAU said that at the next meeting the group would have to choose the terms to be included. He added that information had to be gathered from different thesauri or information systems before making a choice between the terms.

Mr COURGEAU suggested the group might stop here unless someone had something to add on themes to include.

Regarding emerging themes Mr LEBRUN said that the Union has an active research committee, and that regarding gender and population, for example, the group could ask them for help, Karen Mason is the chairperson. He added that the Committee on reproductive health and on international migration could certainly help CICRED in identifying new terms.

Mr COURGEAU proposed that the group get in touch with them and ask them whether they could provide a first list of descriptors.

Mr HANKINSON said that he had no problems suggesting terms to add but rather a problem regarding terms to be taken out.

Mr GONNOT suggested that while editing the Review of Population Reviews CICRED could keep an eye on emerging themes.

Mr LOUCHICHI asked what would be the criteria for adding terms.

Mr COURGEAU answered that the next meeting would deal with the terms to include or the synonyms to delete.

Ms PASQUARIELLA said that it would be helpful to search through the thesaurus archives and come up with the minutes of previous meetings since some of these points regarding guidelines have been dealt with before.

Regarding the extension of the thesaurus into new languages Mr COURGEAU asked whether it should be translated into Russian and asked Mr GONNOT to comment on this point.

Mr GONNOT said that a Russian version is important because since the collapse of the former Soviet Union a number of new countries have emerged and these countries are starting from scratch when it comes to statistics and administration because such services were centralised before. Many people have moved from these Republics. In terms of research statistics and administrations, work is performed by people who had little access to the outside world before. There is a need for them to have access to population thesauri. He said that he had travelled in the former Soviet Union the preceding month and had found that the vocabulary used is not what one might expect. This fact raises problems regarding the application of international definitions, on migration i.e. They need access to clear definitions and also from their point of view they would need to look into what is going on in the outside world and have a clear idea of the English, French or Spanish terms used. Such a tool must be supplied rapidly.

It could be done with the financial support of the EU.

Mr GONNOT had originally intended to ask CICRED to identify Russian institutions interested in doing the work before the discussion of merging the lists and coming up with a common list with scope notes.

He felt that it would be better to wait to see how the list would develop and to translate a cutting edge-tool than to translate the PMT and then have to review it immediately.

He added that it is true that in Russia there are first class demographers but in the different republics there are other people who need this tool.

Ms VALENTE asked about a Brazilian version and added that the version could be adapted because there are no major difference between Brazilian and Portuguese.

Mr COURGEAU asked whether other European countries were interested in other languages.

Ms PASQUARIELLA said that to avoid confusion the working language for the development of the consolidated list should be in English but the goal is to develop the vocabulary into at least three languages and then into Russian, Chinese, Portuguese and so on.

Mr COURGEAU said he was thinking in terms of many other languages in Africa and Asia.

Mr SOLBI said that apart from the different language versions there were other problems and that the main idea is to be able to exchange information. He said that software that enables exchanges in different languages had to be used. For example, CDS/ISIS is able to deal with 9 languages. He said that the Working Group must encourage all users in future to use the same software and the same methodology.

Ms PASQUARIELLA agreed but said that many institutions use other software. She said that the Regional Population Networks should deal with harmonisation.

Mr SOLBI agreed that whatever software is used it is the task of the regional networks to enable the exchange of information but added that the Working Group must think of developing interfaces and possibilities.

Ms PASQUARIELLA suggested that Mr SOLBI might deal with the matter conversion for everyone since he has some experience in this.

Mr COURGEAU said that CICRED will use CDS/ISIS more for communicating with centres.

Mr GONNOT said that this issue should be looked at in a broader context because of computerisation and the development of Internet. He said that there is a lot of effort being put into automated translation. The EU is putting a lot of money into these techniques and has have a related programme on the development of thesauri. CICRED should get in touch with such programmes.

He agreed that there is a need to exchange information between databases and there is no problem with languages with international norm agreements. However, there are no such agreements for a number of languages, i.e. Russian.

Mr SOLBI said that he has seen many programmes but only those that went from English into Spanish were OK.

Mr GONNOT said that maybe in 5 years down the road things will change.

Ms PASQUARIELLA said that POPIN is already translated into French and Spanish. And that all that was being discussed were the new terms in POPIN.

Mr COURGEAU raised the point regarding electronic communications.

Ms PASQUARIELLA said that there is a web site at CICRED. Compiling the POPIN consolidated list would help disseminate the thesaurus. POPIN is already very popular and this could be done through the UNFPA site. She said that there is no problem for using this medium, it is the future and people are moving towards it very fast.

She added that Population Information Network is not specifically for libraries it is for the collection and distribution of population information. The audience is vast and the terminology is important because people will pick it up and it will gradually bring the whole community into accord about terms and contexts.

She said that she suggested an alphabetical list because there is a need for a tool which is easy to use for non-experts.

Mr DU GUERNY said that it was important to ensure that in Asia centres in the different countries are aware of these new tools as they come out.

Ms PASQUARIELLA said that the POPIN structure will be the key. The Regional Commissions can publish this information in their newsletters and incorporate it into their training programmes.

Mr DU GUERNY said that Ms PASQUARIELLA could make sure that the regional networks also play their role. Because of budget restrictions next year they should be ready to include this in their budget proposal.

Ms PASQUARIELLA said that the Asian regional networks were making budget proposals within the next 2 weeks and that she would inform them. She added that if a POPIN CD was produced the group might incorporate it in this section too for those countries were there is no interment access.

Mr COURGEAU suggested closing the meeting by discussing the following points:

- Distribution of tasks
- Funding
- Final recommendations

The group decided to discuss the final recommendations before discussing the distribution of tasks or funding.

#### FINAL RECOMMENDATION

POPIN working group recommends that the terminology in POPLINE, the Population Multilingual Thesaurus and the IUSSP Multilingual Dictionary be merged into an alphabetical list with scope notes to provide a controlled vocabulary of common terminology in the field of population and demography in order to better enable and facilitate international access to population information. This list should be compiled in English, French and Spanish at first and made available in other languages, Chinese, Arab, Portuguese and Russian, etc. as resources permit.

When completed the new edition of the POPIN thesaurus will be made available through the Internet in the POPIN GOPHER/Web-site, in other electronic formats such as diskettes and CD ROM, in hard copy and through the regional and national population networks. The vocabulary needs to be enlarged by the addition of new descriptors especially in gender, reproductive health, migration and other related topics. The Working Group recommends that CICRED should prepare a work plan and budget estimates for the implementation of this project. The revision is being undertaken to provide greater flexibility of use with new and emerging technologies.

This initiative will take advantage of these new technologies in order to enhance information capabilities at all levels.

The responsibility of producing frequency-of-use information for PMT terminology will be given to the relevant regional networks. ESCAP (EDIS POPFILE), PADDIS (POPIN-AFRICA), CELADE (DOCPAL), SEADE (DOCPOP)....

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