The System of Linguistic Indicators (SIL): purpose and general features

by Joan Solé Camardons

Abstract

This article defines the concept of linguistic indicator and formulates the central features of the System of Linguistic Indicators (SIL), in consultation with a group of experts. This System has been developed by the Institute of Catalan Sociolinguistics (ISC) of the Directorate General for Language Policy (DGPL), and limited examples of indicators in the languages of Catalonia are given.

Summary

- 1. What is a linguistic indicator?
- 2. Precedents and types of indicators in Catalonia
- 3. What is the system of linguistic indicators?
- 4. The basis for the system of linguistic indicators (SIL).
- 5. Recommendations of the SIL commission of experts.
- 6. By way of conclusions
- 7. Basic bibliography on social and linguistic indicators

1. What is a linguistic indicator?

The term cultural indicator was introduced in 1969 by G. Gerbner, a researcher at the University of Pennsylvania to assist in understanding the effect of the media on culture. In the mid seventies, UNESCO began the study of cultural indicators.

Here, we define *linguistic indicator*¹ as a serial variable or relationship between quantitative-type variables, whose measurement over a period of time will provide relevant information on the linguistic situation of an organisation, of its environment or of society in general, and assist in the taking of policy and technical decisions in language planning.

The indicators have the following features, among others:

- a) Clarity of definition: the concepts that are utilised have to be explicitly stated, without any ambiguity or confusion.
- b) Relevance of formulated objectives: the latter have to be explicitly related to the working hypotheses of our approach to our work .
- c) Relevance of variables: variables in question have to measure the most relevant aspects of what we want.
- d) Feasibility: it has to be possible to collect the data by means which are at our disposal or which can be put at our disposal. The timetable and the place of data collection also have to be agreed upon, among other aspects.
- e) Stability: the data indicators have to constitute a series over time. The indicators have to be arrived at by consensus, but once adopted cannot be submitted to discussion.
- f) Reliability: they have to be reliable, such that any change in the indicator will correspond to a change in the variable which is measured.
- g) Comprehensiveness: they have to be comprehensive but not specialised, although the techniques involved in processing them may be complex.

¹ Solé Camardons, Joan; Valero, Albert: "La presa de decisions estratègiques i operatives en els processos de planificació lingüística" in *Actes del II Congrés Europeu de Planificació Lingüística* Andorra, November 2001 (in press).

2. Precedents and types of linguistic indicators in Catalonia

Among the different projects and tools involving linguistic indicators which have been developed in Catalonia, we would particularly mention the following:

- a) The data on knowledge of Catalan provided by the censuses and voting lists² have been the first and often the most relevant of the linguistic indicators³.
- b) A second point of reference, initially, was the Index of Linguistic Normalisation in Catalonia (ILNIC), ⁴ a planned project, not carried out. A presentation on the project was given at the II International Conference on Catalan Language in 1986.
- c) Between 1993 and 1997, the project on the Index of Use of Catalan (INUSCAT)⁵ measuring the state of the language by means of an objective indicator and a subjective indicator.
- d) From 1995 onward a tool was developed and piloted throughout the territory: Indexplà.⁶ The latter had a double purpose, as a battery of micro-indicators of the Catalan language in any given organisation, and as a tool of the programme of language normalisation developed especially at the Consortium for Language Normalisation.
- e) The *indicators* ⁷ of the General Language Normalisation Plan, directly related to the key results⁸ of the Plan in various sectors.
- f) Ofercat (facility which measures the presence or provision of the Catalan language in a given organisation.

All these projects and tools provided the theoretical and practical basis for much of the present project, which we shall refer to, from now on, as the System of Linguistic Indicators (SLI).

3. What is the System of Linguistic Indicators?

From 1998 onward, in accordance with the normative framework, 9 the DGPL embarked on a project known as the System of Linquistic Indicators (SLI) with a double purpose in mind:

- a) To collect and process the data on knowledge, provision and use of the Catalan language by general population and by specific sectors.
- b) Collect and process the data relating to the results, in terms of sociolinguistic impact, of action taken by Language Policy.

This project sets out to systematise a multiplicity of data from different information sources and multiple collection methods: linguistic census, official and non-official questionnaires, observation, Indexplà, Ofercat and other projects and studies in series.

On the other hand, it should also be remembered that since 1998 the DGPL has been regularly compiling the Informe de Política Lingüística (Language Policy Report) which is presented to the Catalan Parliament and the Catalan Language Social Council. While it is

² Farràs, J; Torres, J. and Vila, X. "El coneixement del català: l'Enquesta Oficial de Població". NOVES SL, Autumn 2000. [Barcelona] (2000).

³ Vila, Xavier "Els censos lingüístics: un indicador de l'evolució del català" in Catalunya-Quebec Legislació i polítiques lingüístiques: actes sobre el Col·loqui Internacional sobre Polítiques i Legislacions Lingüístiques Comparades, Barcelona, 4, 5 and 6 October 1999.

⁴ Aymà, J. M.: Allò que no se sol dir de la normalització lingüística. Barcelone: Empúries, 1992.

⁵ Romaní, J. M., Aragay, J. M., Sabaté, J.: "INUSCAT. Un indicador de l'ús del català" in *Treballs de* Sociolingüística Catalana, no. 13, pp 15-2.

⁶ Escolà, A. [et al.]: "Indexplà: Programa de seguiment i avaluació de Plans i acords de gestió lingüística per a Organitzacions", *Llengua i ús*, no.5 , first quarter 1996.

Claveguera, Mercè; Solé Camardons, Joan: "Nivells de seguiment i d'avaluació de la planificació: elaboració de la Memòria d'uns programa de normalització lingüística" in *Llengua i ús*, no. 3, second quarter 1995.

Solé Camardons, Joan: "Resultats clau del Pla general de normalització lingüística" in Llengua i ús, no. 6, second quarter, 1996.

9 Article 20 of Law 1/200

Article 39 of Law 1/1998 of the 7th January, on Language Policy.

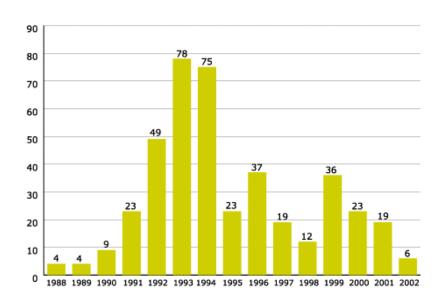
true that a part of the data contained in the Report are indicators, the SLI project, as we have seen, is intended for a different purpose and complements the Report. In 2001, a database of linguistic indicators with three dimensions: situation (knowledge, supply and language use), activity (language policies) and impact (result of these policies).

The *situation* measures the conditions in which those in receipt of the actions and the environment in which they take place(percentage of population who speak Catalan, the percentage of use of Catalan in the municipal documentation, in the posters, in the signs, etc.). We see here an example of a situation indicator in graph 1.

6.500.000 can speak it 6.000.000 can write it 5.500.000 5.000.000 4.500.000 4.000.000 3.500.000 3.000.000 2.500.000 2.000.000 1.500.000 1.000.000 500.000 1986 1991 1996

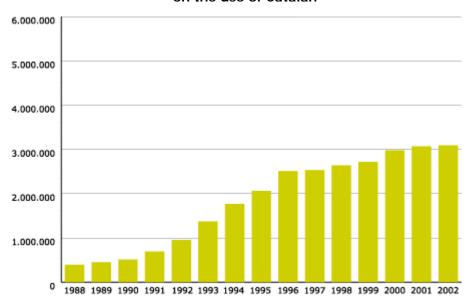
Graph 1. Change over time in population able write Catalan and speak Catalan 1986-1996

The *activity* dimension measures the volume of products and services (number of courses, students, agreements in force, number of local corporations who have approved legislation promoting Catalan). Below in graph 2 is an example of an activity indicator.



Graph 2. Legislation supporting the use of Catalan, passed by local corporations

The *impact* measures the results achieved by the actions in favour of Catalan: number of inhabitants living in local government areas with legislation on the use of Catalan, percentage of personnel with sufficient knowledge, law courts and offices where Catalan can be used orally, number of transmitters that broadcast more than 50% in Catalan, etc. Graph 3 shows an example of an indicator of impact .



Graph 3. Accumulated population of inhabitants with local legislation on the use of Catalan

This project comprises, therefore, of a system of indicators which have to be simultaneously available, and constitute indicators of the activity, impact and situation, supply and use of Catalan.

In 2002 a commission of experts and language policy managers wrote the report on the System of Linguistic Indicators (SIL), centred principally on indicators of the Situation of the language and also the Impact. See appendix 1: provisional list of Linguistic Indicators

The commission consisted of some twenty experts with backgrounds in such diverse fields as: statistics, sociology, policy evaluation, sociolinguistics, psychology, language planning, law, education and other professional activities. This commission was headed by Lluís Jou and other members were: Josep Maria Aragay, Joaquim Arenas, Joaquim Capellades, Francesc Domínguez, Albert Fabà, Jaume Farràs, Yvonne Griley, Marc Leprêtre, Marta Masats, Josep Missé, Mònica Pereña, Miquel Pueyo, Enric Renau, Elvira Riera, Mercè Romagosa, Joan Maria Romaní, Marta Rovira, Mercè Solé, Joan Subirats, Albert Valero, Francesc Vallverdú, Àngels Viladot, Josep Maria Vilalta and Joan Solé Camardons who acted as coordinator.

4. Basis for the System of Linguistic Indicators

These are the outcome of oral and written observations by the commission of experts in many different general and section meetings. The observations were reordered and put in context to facilitate their comprehension.

4.1 Tree system of sectors and subsectors

The term "System of Linguistic Indicators" is adopted, as adequate for the purposes of this project. It will be seen that the list given above is not in itself a system in the full sense. In its present version it consists of 7 sections, 35 subsections and 85 indicators. See Appendix 2: List of sections and subsections.

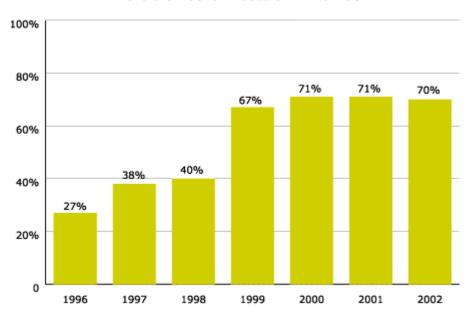
The SIL is a collection of variables expressed in the form of indicators relative to the situation of the language in a given context and with specific language policy objectives; these variables need to be sensitive to exterior change, they have to be quantifiable, and lend themselves to analysis in an integral way.

4.2 Sources of information

Turning now to the sources of information for the SIL, these have to contain series of data, not isolated or one-off data, either derived from official figures or from studies over a period of time. The distinction needs to be made between official or non-official surveys (observational data and counts) and answers to direct questioning. The SIL is a statistic which is included in the Pla estadístic anual (Annual Statistical Plan) of the Generalitat of Catalonia. It is proposed that part of the data collected via Ofercat or Indexplà should also be used for the System of Linguistic Indicators.

4.3 Types of Indicator

In terms of types of indicator, it is useful to distinguish between: language knowledge, language use, and language provision. There are also "structural" indicators (every five years and containing few variables) to be distinguished from "conjunctural" indicators (annual, and more sensitive). In general, it is observed that many of the indicators of the current version are indicators of presence or provision of Catalan and need to be filled out with language use indicators. Graph 4 features a "provision" indicator, indicating supply or availability of Catalan.



Graph 4. Percentage of commercial radio stations that broadcast more than 50% in Catalan 1996-2002

4.4 Matrix structure

In terms of structure, the SIL can be visualised as a matrix in three dimensions: *type of indicator* (knowledge, use and provision), *ongoing nature* of the indicator (structural and conjunctural) and its *sector* (current or otherwise). It is not so important to have data for all cells of the matrix, so much as to see its limits and shortcomings.

4.5 Languages analysed

While the SIL is mainly used to gauge the Catalan language, it can equally be used to obtain data on both of the official languages of Catalonia -that is, Catalan and Spanish. It will prove useful to compare data on the two official languages, and indeed compare with other languages where necessary.

4.6 International comparisons

Where possible, the indicators have to be comparable internationally (to be used for international comparisons). The proposal is to establish the necessary contacts to be able to compare with other languages and other multilingual countries. Often the comparison between different indicators in different ambits or subambits and the comparability with different years is more important that the data seen in isolation.

4.7 Modular system

In the first version, it is recommended that the SIL have a basic battery of indicators which can be progressively added to. It will be acceptable, in the initial phase, to have a good if not so extensive selection of indicators. Special emphasis is put on the fact that the SIL may be "read" at two levels: a complex level with all the indicators and a simpler level with few indicators. Table 1 shows the present number of indicators with data and with no sectorial classifications.

Sector	With data	Without data	Total
1 Population	11	0	11
2 Public Administration	6	7	13
3 Education	9	4	13
4 Media and cultural	14	9	23
5 Economy	5	7	12
6 Health and social institutions	0	6	6
7 Outside dissemination	5	2	7

50

35

85

Table 1. Number of indicators by sectors

4.8 Synthetic indicators

Total

It would be worthwhile having available aggregate or *synthetic* indicators for each of the sectors of the current list. It would also be useful to give priority to indicators in each sector or to introduce objective weightings by means of objective information relating to the economy and productive sectors. Also under consideration is the creation of an overall synthetic indicator and the difficulties involved in weighting and aggregating. To give a familiar example of a synthetic indicator, there is the Retail Price Index (measuring inflation) which aggregates information on various products. It should be noted that there are two ways of looking at a synthetic indicator: *a*) as an aggregate indicator resulting from a mathematical operation and *b*) as a representative indicator, which results from a strategic selection and incorporates other indicators. It can be seen that not all sectors, nor all indicators will be aggregatable in a single general or sectorial indicator. For example: "external dissemination" indicators will not be able to be aggregated with the remainder of the indicators.

4.9 The study of new phenomena

The SIL has to be able to integrate new phenomena as they emerge such as (modern) immigration or the information technologies which are important enough to have an influence on the whole of Catalan society.

4.10 Methodological consensus

Positively valued is attached to the search for consensus in the SLI, across experts on social issues and the professionals of language planning.

5. Recommendations from the commission of experts

Apart from the indicators and weightings in SIL about which there is a generalised consensus, the commission of experts made the following recommendations:

5.1 Citizen interest

The indicators have to put emphasis the interests of the general public, not just satisfy the experts' interests and priorities. That is, ordinary folk have to be able to see that the linguistic indicators are useful. To that end we suggest that there should be a qualitative analysis with a focus group who would evaluate the proposed indicators put forward by the experts. Elements have to be found that connect the indicators put forward by the experts and those which are perceived as necessary by ordinary citizens.

5.2 Analysis of the linguistic situation versus evaluation of language policy

A distinction should be made between a SIL which evaluates language policy and a SIL which provides information on the sociolinguistic situation and measures knowledge, provision and language use. Both systems are possible, but they have different objectives and methods.

5.3 Public system

Another positive aspect is the fact of an institution like the Directorate General for Language Policy proposing a public system of linguistic indicators, and thus enhancing its credibility and prestige. It would be very desirable for the political authorities to take stock periodically of the evaluation of the policies in their particular ambits.

5.4 Unification of protocols

It is proposed to unify protocols of questionnaires on language use and language identity. For example. "Read the answers / don't read them". It is also proposed to use the same linguistic protocol in questionnaires (whether statistical or not) promoted by the Generalitat and other administrations. This would give us access to sociolinguistic data at a low cost. This unification would affect both the sociolinguistic studies sponsored by the Generalitat and other research that might contain one or more questions on language. Below, we give exemplification in the shape of 4 studies that ask questions on language identity in different ways, with the result that the data obtained are not strictly comparable. See tables 2 and 3.

Table 2. Forms of asking questions on identity and language use

Year	Source	Question asked
1993	CIS	What is your main language?
1997, 1999	DYM	Which language do you habitually use?
2000	Fabà et al.	Which do you consider your language?
2002	IN3-UOC	What is your language?

Table 3. Which is your (main / habitual) language?

	1993	1997	1999	2000	2002
Catalan	50	49.1	49.6	51.4	40.1
Spanish	49	50.2	49.9	37.3	43.2
Both	1			8.1	14.2
Others		0.7	0.5	3	2.2

5.5 Studies of interpersonal language use

There is seen to be a need for data on interpersonal usage. And under the heading of language use we can distinguish various types of use: "listening, speaking, reading and writing", in the same way as we can in language knowledge (understand, know how to speak, know how to read, know how to write).

5.6 Social usefulness of the indicators

Regarding the usefulness of the indicators it will be remembered that within the processes of social intervention there are three types of elements that form a pyramid consisting of social perceptions, arguments and evidence. In this pyramid, the indicators take their place as evidence. Good indicators can help to maintain a worthwhile debate and can in the long run modify social perceptions.

5.7 On synthetic indicators

It is observed that in the case of institutions with a social function synthetic indicators in use can be iceberg-like in grouping many other indicators or aspects, as well as being easily interpreted or understood. The system of indicators will have a visible part (the tip of the iceberg) with public indicators on the "situation of the language" and a non-visible part with different indicators on evaluation and management of policies. Example: "When the wild salmon can live in the river again" is a synthetic indicator of sustainable environment implying or subsuming other ecological indicators.

5.8 Subjective perception data

It was judged useful to have data on the subjective perception on the situation of the language which speaker may have and which would complement objective data.

5.9 The tunnel effect of an indicator

Also noted are certain perverse or tunnel effects which indicators may have, seen as specific negative effects that are the product of the almost exclusive focalising of a single indicator. Despite that, it is preferable that indicators have effects that do not go unnoticed.

5.10 Academic research

It is proposed to provide the academic world, and other specialists, with a list of the sources of information for the linguistic indicators. Also we need to know the areas where sociolinguistic research is lacking to be able to orientate universities in their research.

6. By way of conclusions

In this article we have proposed a definition of linguistic indicator and we have developed the general basis of the System of Linguistic Indicators sponsored by the Generalitat of Catalonia.

We trust that this project may prove useful to all professionals working with the language, and the institutions responsible for language policy and planning and to society in general.

What we have here, then, is a flexible, participatory project which is both systematic and reliable and which will be able to take onboard all the needed changes and improved policies and techniques that professionals, institutions and general public might convey to us.

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¹⁰ The bibliography can be consulted at the Documentation Centre on Sociolinguistics (CDS) of the Institute of Catalan Sociolinguistics, which in turn is a part of the Directorate General for Language Policy. The bibliography has been selected by Elena Heidepriem.

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Appendix 1. Provisional List of Linguistic Indicators

Contains the contributions of the SIL Commission of experts (18-6-03)

Guidelines for inclusion of indicators

This list of indicators contains the most relevant sociolinguistic data derived from official statistics, records and from studies that have been repeated (or done longitudinally). In all, there are 7 sectors, 35 subsectors and 85 indicators (50 with current data and 35 without data).

The 22 subsectors most rated by the Commissiond of experts are shown here, the subsectors that we could take as most basic or priority.

Also shown are the indicators for which we have no data in series (i.e. over time) and where it would obviously be a good idea to start collecting data, which will involve setting aside funds or seeking new channels of funding and human resources not so far quantified.

Number of indicators per sector

Sector	With data	Without data	Total
Sector 1	11	0	11
Sector 2	6	7	13
Sector 3	9	4	13
Sector 4	14	9	23
Sector 5	5	7	12
Sector 6	0	6	6
Sector 7	5	2	7
Total	50	35	85

1. General population

1.1 The Catalan language and the other languages of Europe

- a) Indicator: Population of the territories where Catalan is official and the population of the states with an official language of the European Union (IDESCAT, INE and Eurostat).
- b) Indicator: Population of the territories where Catalan is official and the population of the states that are candidates for joining the UE (IDESCAT, INE and Eurostat).
- c) Indicator: Population speaking the minority languages of the EU (EBLUL and Euromosaic).

1.2 Language knowledge among the population

a) Indicator: Percentage of the population that understands, reads, speaks and writes in Catalan (IDESCAT, Language census).

1.3 Identity and language use among the population

- a) Indicator: Percentage of the population stating "Which do I consider my own language?" (CIS-1993, DYM-Dept of Culture 1997-99, Fabà *et al.* 2000).¹⁴
- b) Indicator: Percentage of the population usually using a certain language in a particular situation (when you are buying something, with someone you don't know, at work, with friends and when writing a note (CIS 1978, 1993 and 1998 and Fabà et al. 2000).
- c) Indicator of use of Catalan Percentage mean use of Catalan among the over fifteens in the population (DYM-Dept of Culture 1997).

1.4 Language of the population of the Metropolitan area of Barcelona

- a) Indicator: Percentage of the population stating "Which is my language?" (Institut d'Estudis Regionals i Metropolitans, 1985-2000).
- b) Indicator: "Combined" language of all members of the household. (Institut d'Estudis Regionals i Metropolitans, 1995-2000).

1.5 Knowledge and use of Aranese

- a. Indicator: Percentage of the population who can understand, read, speak and write Aranese (IDESCAT, language census 1986-2001).
- b. Indicator: Percentage of the population who use Aranese (IDESCAT, Language census 2001).

2. Public administration

2.1 Generalitat, Government of Catalonia

- a) Indicator: Weighted mean NL index of the departments of the Generalitat and sister organisations¹⁵ measured by means of Indexplà (Forecast: ULIP poll, 2003).
- b) Indicator: Percentage of users of each language access into the gateway of the Administració Oberta de Catalunya (Open Government of Catalonia (Forecast: AOC data).

2.2 Local administration

- a) Indicator: Number of local corporations and the population living in municipal areas with ordinances on the use of Catalan (DGPL, *Informe sobre política lingüística 2001*, page 31).
- Indicator: Weighted mean NL index of a sample of local councils¹⁶ measured by means of Indexplà (Forecast: ULIP poll, 2003).

¹⁴ We need to arrrive at a consensus methodology as used for the Metropolitan area or IDESCAT to be used for the whole of Catalonia.

¹⁵ Forecast: *Enquesta sobre Usos Lingüístics a Institucions Públiques* (Poll on Language Use in Public Institutions -ULIP), 2003.

¹⁶ Forecasts of a sample of local corporations (Example: towns and cities with more than 2,.000 inhabitants).

2.3 Administration of Justice

- a) Indicator: Number and percentage of law courts offices with real availability of use of language¹⁷ (Dept. of Justice, *Informe sobre política lingüística 2001*, page. 40).
- b) Indicator: Mean use of Catalan (identification and informative notices, written communications and oral language of identification and convergence on other's Catalan) in law court offices measured by means of Ofercat¹⁸.
- c) Indicator: Number and percentage of rulings in each language in the Tribunal Superior de Justícia de Catalunya.

2.4 Public records and documents

- a) Indicator: Number and percentage notary documents in each language (Col·legi Notarial, *Informe sobre política lingüística 2001*, page 44).
- b) Indicator: Number and percentage of associations, foundations and co-operatives with statutes in each language (Dept. of Justice, *Informe sobre política lingüística 2001*, page. 46).
- c) Indicator: Number and percentage of documents on mercantile organisations ¹⁹ in each of the languages (Dept. of Justice, *Informe sobre política lingüística 2001*, page. 45)

2.5 Professional associations, chambers of commerce, guilds and official academies

- a) Indicator: Percentage use of Catalan in reports seen by professional associations or "colleges" (architects, surveyors and engineers).
- b) Indicator: Weighted mean NL index of a selection of the main professional associations²⁰ measured by means of Indexplà (Forecast: ULIP Poll, 2003).

2.6. State / Central government agencies

 a) Indicator: Weighted mean NL index of state agencies (Tax office, Social security, Police) in cities of more than 100,000 inhabitants in Catalonia²¹ (Forecast: ULIP poll, 2003).

3. Education

3.1 Infant and primary

- a. Indicator: Percentage of pupils on role who are competent in Catalan and Spanish in primary schools (Department of Education, 2001).
- b. Indicator: Percentage of language use of pupils with teachers in the classroom and general interaction in school (Pilot study, SEDEC).
- c. Indicator: Number and percentage of teaching staff with accredited competence or recognised level in Catalan. (*Informe sobre política lingüística 2001*, page 59).

¹⁷ Real language availability will entail at least one employee per law court office who answers in written or spoken Catalan on an habitual basis. Data from 1998-2002. In 2002 the Dept. of Justice has piloted a plan, with a methodology for collecting new data.

¹⁸ This indicator and others with data reliable to a contract of the contract of th

¹⁸ This indicator and others with data originating from Ofercat should be seen as a draft proposal. The data will not be meaningful until a cycle of observations have been completed (minimum of 15 populations, 25 being optimum number).

¹⁹ We need to extend data collection to include mercantile registers and records in Catalonia. In *Informe de Política Lingüística 2001* there are data from the mercantil register for Barcelona.

²⁰ We need a sample either strategic or by quotas from the professional associations (137) where Indexplà is administered (sample: 46 questionnaires, one in every three associations).

²¹ Cities of more than 100,000 inhabitants: Barcelona, l'Hospitalet, Badalona, Terrassa, Sabadell, Mataró, Tarragona, Lleida and Santa Coloma de Gramenet, plus Girona.

3.2 Secondary education

- a. Indicator: Mean mark attained in the state examinations in competence in the Catalan and Spanish languages in secondary education (Instituto Nacional de Cualidad y Educación, 1999-2000).
- b. Indicator: Percentage language use of pupils with teachers in the classroom and general interaction in school.
- c. Indicator: Number and percentage teaching staff with accredited competence in Catalan. (*Informe sobre política lingüística 2001*, page 63)

3.3 Higher education

- a. Indicator: Number and percentage of students answering in one or other of the languages in the University Entrance exam (DURSI, *Informe sobre política lingüística 2001*, page 63).
- Indicator: Number and percentage of essays and doctoral theses presented in each of the languages.
- c. Indicator: Percentage of classes (or hours of lectures) in each of the languages in core subjects (or subjects in first cycle) in the Universities.

3.4 Adult education

- a. Indicator: Percentage of adult education centres which offer courses in each of the languages (Dept. of Social Welfare, *Informe sobre política lingüística 2001*, page. 65)
- b. Indicator: Number of students enrolled for Catalan courses at the CPNL, Escola Oficial d'Idiomes and adult training centres ²² (CPNL, Informe *sobre política lingüística 2001*, page. 71; EOI and others)
- c. Indicator: Number of certificates of knowledge of Catalan language issued by JPC and the DGPL, EAPC, CPNL, EOI, IRL and other equivalent (*Informe sobre política lingüística 2001*, page 73).

3.5 Non-regulated education

a. Indicator: percentage of teaching hours in each of the languages in a sample of educational centres affiliated to the Institut Català de Noves Professions (Catalan Institute of New Professions -INCANOP).

4. Media and cultural industries

4.1 The media

4.1.1 Television

- a. Main indicator: Number of broadcasting hours in each of the languages in the cable channels weighted by the viewing figures. *Informe sobre política lingüística 2001*, page. 75) (supply indicator).
- b. Secondary indicator: Audience figures for the CCRTV television channels as a proportion of total general viewing figures (Dept. of Culture, *Indicadors Culturals*). *Informe sobre política lingüística 2001*, page 76) (use indicator).
- c. Secondary indicator: Number of hours of transmission in Catalan in a strategic sample of local television stations, compared with the total hours of broadcasting (supply indicator).

 $^{^{22}}$ We need to ensure that the data provided by institutions and organisations constitutes a series over time.

4.1.2 Radio

- a. Main indicator: Accumulated audience in the two languages (in thousands and in percentages) of the main radio stations (Dept. of Culture, *Cultural indicators*). *Informe sobre política lingüística 2001*, page. 80) (use indicator).
- b. Secondary indicator: Number and percentage of municipal or local authority and commercial radio stations that broadcast more than 50% in Catalan (DG Radiodifusió, *Informe sobre política lingüística 2001*, page. 82-83) supply indicator).
- c. Indicator: Audience (in thousands and as a percentage) in the two languages of the local radio stations, in towns and cities of more than 50,000 inhabitants²³ (use indicator).

4.1.3 Press

- a. Main indicator: Circulation as a figure and percentage in each of the languages for general, local, sports and economy and free distribution daily papers (OJD and Dept. of Culture, 1994-2001, *Informe sobre política lingüística 2001*, page. 86) (supply indicator).
- Secondary indicator: Circulation figures for national, local and county weeklies certified by the OJD²⁴. (*Informe sobre política lingüística 2001*, page. 88) (supply indicator).
- Supply indicator: Number of visits per week to the electronic press put in Catalonia certified by the OJD (*Informe sobre política lingüística 2001, page. 93*) (use indicator)
- d. Secondary indicator: Circulation in figures and as a percentage in each of the languages of the free newspapers (*Informe sobre política lingüística 2001*, page. 91-92) (supply indicator).

4.2 Cultural indicators

4.2.1 Publishing

- a. Main indicator: Number and percentage of books published in Catalonia in each of the languages, as a whole and by subject (Comercio interior del Libro en España, 1992-2000, Informe edición en Cataluña (Internal Book Trade in Spain 1992-2000. Report on publishing in Catalonia) and Informe sobre política lingüística 2001, page. 96). Here we need to see the effect on the indicator of excluding institutional books and textbooks supply indicator).
- b. Indicator: Proportion of books sold in each of the languages in Catalonia, as a whole and by subject (use indicator and consumption indicator).

4.2.2 Cinema, video and DVD

- a. Main indicator: of cinema viewers as a figure and a percentage in each of the languages (*Estadístiques Culturals 2000* and *Informe sobre política lingüística 2001*, page. 103) (use and consumption indicator).
- b. Secondary indicators: Number and proportion of titles in each of the languages (supply indicators).
- c. Secondary indicators: Number and proportion of film showings in each of the languages (use indicator).
- d. Secondary indicators: Proportion of tapes and DVDs borrowed in one or other of the languages (use or consumption indicator).

²³ A selection of local stations should be made.

²⁴ Would it be useful to distinguish between weeklies and other magazines published less frequently on the one hand and weekly supplements of the daily papers on the other?

4.2.3 Discography

a. No indicator: Number of copies issued in one or other of the languages of all the tracks in Catalan (*Informe sobre politica lingüística 2001*, page 111). Given the magnitude of counting here, it was decided at this stage of the work this indicator can be left out of calculations. The category could be narrowed down as a subsector ("folk music and pop") or alternatively a few well-known aspects. Need to contact the SGAE and Enderrok (spply indicator).

4.2.4 Theatre and scenic arts

- a. Main indicator: Audience as a figure and as a percentage at theatre shows in each of the languages (*Informe sobre política lingüística 2001*, page. 114) (use and consumption indicator).
- b. Secondary indicator: Number and proportion of scenic presentations in each of the languages (*Informe sobre política lingüística 2001*, page. 113) (supply indicator).

4.3 Information and Communication Technologies 25

4.3.1 The Internet

- a. Main indicator: Percentage in each of the languages of the websites visited by Internet users according to survey (IDESCAT, DURSI, *Enquesta 2001*).
- Secondary indicator: Proportion of websites per million inhabitants in each of the languages on the Internet (Study by Jordi Freginals at *Vilaweb* and in *El Punt* 9-06-01).
- c. Indicator: Absolute number of websites and web pages in Catalan.
- d. Indicator: Situation of the Catalan language on the Internet in relation to the number of speakers of languages in the world.

5. Socio-economic world

5.1 Public service companies (public utilities)

- Main indicator: Weighted mean LN index of the headquarters of a strategic sample of public service companies²⁶ measured by means of Indexplà. (Forecast: ULIP poll, 2003).
- b. Alternative indicator: Data on language use on the Internet²⁷ in a strategic sample of public service companies. (Forecast: improvement of the WICACC barometer).

5.2 Shops and service companies

- a. Indicator: Weighted mean of the Ofercat index²⁸ of shops and service companies of towns and cities with more than 25,000 inhabitants.
- b. Indicator: Percentage of the main signs and informative notices in each of the languages in a sample of six cities (Aragay 1997, 1999 and 2003).
- c. Indicator: Percentage advertising in each of the languages and by type of medium in Barcelona (Ipsos Eco-Consulting, 1997 and 1999).
- d. Indicator: Mean overall use of each of the languages in supermarkets and hypermarkets (Ipsos Eco-Consulting, 1998, 2000).
- e. Indicator: Mean overall use of each language in 3-star, 4-star and 5-star hotels (Consultur, 2003).

 $^{^{25}}$ A number of experts have proposed adding a section on Information and communication technologies (ICT), which it is proposed to subsume in the sector of Communication media cultural industries.

²⁶ Needed now is a strategic sample of public service companies to then apply Indexplà. Telephone, gas, water, electricity, aeroports, ports, train stations (RENFE - state railways) metro (underground), buses (Barcelona, Lleida, Tarragona, Girona, and others).

Observation of the language in the websites in a strategic sample based on the address, WICACC.
 It should be remembered that the data from Ofercat will not be significant for Catalonia as a whole until we have a complete cycle (a minimum of 15 cities and 5 years).

5.3 Other private companies

- a. Indicator: Mean overall use of each of the languages in a sample of private companies²⁹.
- b. Alternative indicator: Data on language use on the Internet in a strategic sample of private companies³⁰. (Forecast: improvement WICACC barometer).
- c. Indicator: umber and percentage of companies labelling in Catalan, by production sectors (ADEC catalogue³¹).

5.4 Unions and employers' associations

- a. Indicator: ean weighted index of their territorial union headquarters of a sample measured by means of 'Indexplà (Forecast: ULIP poll).
- b. Indicator: weighted NL index of union headquarters in a sample measured by means of the Indexplà (Forecast: ULIP poll).

5.5 Health and social welfare institutions

6. Health and social welfare institutions

6.1 The world of health and social welfare

- a. Indicator: Weighted mean NL index of a sample of hospitals and other healthcare centres³² measured by means of the Indexplà (Forecast: ULIP poll, 2003).
- b. Indicator: Number of healthcare staff with accredited or recognised level in Catalan (Forecast: ULIP poll, 2003).

6.2 Associations and civic organisations

- a. Indicator: Weighted mean NL index of a sample of civic associations and organisations measured by means of the Inexplà (Forecast: ULIP poll, 2003).
- b. Indicator: Religious institutions. Weighted mean NL index of a sample of religious institutions measured by means of the Indexplà (Forecast: ULIP poll, 2003).

6.3 Sports clubs and organisations

a. Indicator: Weighted mean NL index of a sample of Sports clubs and organisations measured by means of the Indexplà (Forecast: ULIP poll, 2003).

6.4 Young people's activities

a. Indicator: Number and percentage use of each of the languages in infant and children's activities (Compare observations by the Observatori de la Joventut / Youth Observatory).

7. Projection of Catalan overseas³³

7.1 Translation of Catalan literature to other languages

a. Indicator: Number of works of literature translated from the original Catalan to other languages and comparison with other languages in this respect³⁴ (UNESCO, *Informe Mundial de la Cultura 1998* and Institució de les Lletres Catalanes).

²⁹ There is a range of information in: *Usos lingüístics a gran empreses 1993* and *Usos lingüístics a grans empreses amb vocació internacional presents a Catalunya l'any 2002.*

³⁰ Observations of the language in the websites of a strategic sample of private companies based on the WICACC directory.

³¹ The ADEC catalogue is not statistically representative. It is a catalogue with a majority of family-owned businesses and handcrafted articles.

³² We need a sample of XHUP and non XHUP (centres in which to administer Indexplà).

³³ It is proposed to work in collaboration with the Institut Ramon Llull (IRL).

³⁴ The proposal is to take the number of works translated into Catalan, per year and accumulated. And also the place occupied by Catalan in the word.

b. Indicator: Number of other languages with works translated into Catalan and comparison with other languages in general, and more particularly with those in the middle demographic range (Institució de les Lletres Catalanes).

7.2 Teaching of Catalan outside Catalonia

- a. Indicator: Number of lecturers in Catalan, part-time or fulltime (DURSI, IRL, *Informe sobre política lingüística 2001*, page 159).
- b. Indicator: Number of foreign students attending classes of Catalan language in foreign universities.
- c. Indicator: Number of candidates sitting for the International Certificate of Catalan (ICC) in proportion to levels of certificate (DGPL, *Informe sobre política lingüística*, 2001, page 162)
- d. Indicator: Data on Catalan courses and students of Catalan outside the university ambit in proportion to the population in general, organised by *casals* and Catalan cultural centres (IRL.)

7.3 Projection of Catalan in the outside world

a. No indicator: Data on the international dissemination of culture with linguistic content (music and others).

Appendix 2. Classification of the system of linguistic indicators

In its present form, the System of Linguistic Indicators (SLN) has 7 sectors and 35 subsectors and has inherited other classifications developed at an earlier stage intended for similar purposes. The first of the sectors is general in scope and the five subsequent ones are specific, while the last is concerned with external projection.

In relation to other classification systems, this proposal has 14 of the 18 headings³⁵ of the *Informe sobre politica lingüística 2001* (Report on Language Policy, 2001). And in the case of the CPNL, five sectors of activity³⁶ coincide with sectors 2, 3, 4, 5 and 6 of the SLI.

Ofercat, on the other hand, is a territorial planning tool, concerned with the provision and presence of theCatalan language, and groups the information in five sectors: public administration, health and education, economy, news media, and society and leisure. Outside the "health" subsector, situated in the "education" sector, the other sectors coincide also with SLI and the CPNL classifications.

Unification (to arrive at a general system of classification for indicators and actions in accordance with the principles of participation, simplification and effectiveness³⁷ to arrive at a general system of classification for indicators and actions) should at the very least be applied to the first level of classification and leave the second level for specific classification.

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³⁵ The following sections of the *Informe* have not been included: Onomastics (personal names), Cooperation with other territories where Catalan is spoken, Dissemination of the terminology and collaboration with the IEC.

³⁶ CPNL activities classifications are: Official use and legal regulations; Education, research and youth; Media and cultural industries; Socio-economic; and Health and social Institutions.

³⁷ Article 39 of the 1/1998 language policy Act. "...The development of planning tools should be in collaboration with the different agents and groups involved, and these have to reflect the principles of participation, simplification and efficacy."

System Linguistic Indicators (SLI)	CPNL Activities	Ofercat
General population		
Administration	Official or legal use	Administrations
Education	Education, research and youth	Health and education
Media and cultural industries	Media and cultural industries	Media and cultural industries
Socio-economic world	Socio-economic ambit	Economy
Health and social support institutions	Health and social support institutions	Society and leisure
Outside diffusion		

1. General population

- 1.1 The Catalan language and the other languages of Europe
- 1.2 Language knowledge among the population
- 1.3 Identity and language use among the population
- 1.4 Language among the population of the Metropolitan Area of Barcelona
- 1.5 Knowledge and use of Aranese (Vall d'Aran, N.W. Catalonia)

2. Administration

- 2.1 Generalitat, Catalonian government
- 2.2 Local government
- 2.3 Justice
- 2.4 Registers and public documents
- 2.5 Professional associations, chambers of commerce, guilds and official academies
- 2.6 State/ Central government

3. Education

- 3.1 Infant and primary education
- 3.2 Secondary education
- 3.3 Higher education
- 3.4 Adult education
- 3.5 Unregulated education

4. The media and cultural industries

4.1 The media

- 4.1.1 Television
- 4.1.2 Radio
- 4.1.3 Press

4.2 Cultural industries

- 4.2.1 Editorial production
- 4.2.2 Cinema, video and DVD

- 4.2.3 Discography
- 4.2.4 Theatre and the scenic arts
- 4.3 Information and information technologies

5. Socio-economic world

- 5.1 Public service companies
- 5.2 Commerce and service companies
- 5.3 Private industry (not included under the previous sections)
- 5.4 Trade unions and employers organisation

6. Health and social institutions

- 6.1 World of health and social assistance
- 6.2 Associations and civic entities
- 6.3 Sports clubs and entities
- 6.4 Young people's activities

7. Exterior projection of the Catalan language

- 7.1 Catalan literary works in other languages
- 7.2 Teaching of Catalan outside Catalonia
- 7.3 Projection of Catalan in the outside world