by Federico Gobbo and Reinhard Fößmeier

Since at least 1905, the Esperanto movement provides an alternative way of internationalization. The International Academy of Sciences (AIS) San Marino is a private university founded in 1985, which uses Esperanto as the main language of its curricula as well as its administrative procedures. It is a virtual university, whose activities split between summer schools, classes given at partner institutes, and distance teaching, mainly via the Internet. This paper describes the language policies followed in AIS activities, in particular the relationship between Esperanto and other languages used by the AIS or its faculty and students. Possible ways of analyzing different kinds of motivation for the use of Esperanto are suggested.

1. Introduction: a different internationalization

Launched as a planned language in 1887 by Lejzer Ludwik Zamenhof, Esperanto succeeded in forming a speech community which survived two World Wars and developed a culture of its own (Forster 1982; for a general introduction on the phenomenon of Esperanto, see Janton 1993). Well before the actual term "globalization" came into common use – with all the problems that this term entails –, users of Esperanto have practiced internationalization through the use of a 'neutral' language. In this context, a 'neutral' language is considered a language which belongs to no particular group, such that nobody can be considered to be a privileged user. In other words, it is a language defined by an *ethos* (the neutrality as defined above, which is called *interna ideo* within the Esperanto culture) instead of an *ethnos* (no people or ethnic group has the privilege of defining a linguistic norm).

Since there are no monolingual Esperanto speakers, all speakers of

the language are (at least) bilingual. The Esperanto community has never tried to establish any monolingual educational institution on any level from kindergarten to university, as there is no *Sprachraum* for Esperanto – i.e. there is no territory where Esperanto is rooted permanently, in the way in which, e.g., the Italian language is, more or less, tied to the territory of Italy (Gobbo 2009). As a consequence, all speakers of Esperanto have an experience of being schooled in other languages. An institution like the International Academy of Sciences (AIS) San Marino should be considered against this cultural background.

2. The languages of the International Academy of Sciences San Marino

The AIS San Marino was founded in 1985. One of the central objectives of its founders was to create an academic framework free from discrimination by language. The first paragraph of the AIS constitution declares that AIS members "communicate with each other mainly in a neutral language" ("komunikadas inter si precipe per neŭtrala lingvo"). They decided that the closest they could come to this aim was the choice of Esperanto as the working language. Among possible candidates, Esperanto was the only one in which a significant body of scientific literature and a suitable terminology to be used in a higher educational context already had been developed. Esperanto was not only considered as neutral in a sociolinguistic sense by not favoring any group of speakers, but also in the sense that its inner structure is not biased towards a specific group of languages, in spite of its largely European system of root words. (This issue has been thoroughly debated in the literature since Piron's seminal 1977 article, cf. Piron 1977, 1981; Dasgupta 2000; Gobbo 2005).

The AIS constitution did, however, not take up Esperanto's neutrality for discussion. For AIS Esperanto is taken for granted,

but in all AIS documents, beginning with the statutes of 1985, it has not been referred to as 'Esperanto', but as 'The international language' or for short 'ILo', an abbreviation of the Esperanto term *internacia lingvo*.

In any case, the 1985 statutes stipulated that for the time being this language would be the planned language "initiated by L. L. Zamenhof (under the pseudonym of 'Doktoro Esperanto') in 1887'' (Frank 2003: Art. 4.3, p. 105). While some of the AIS's founding members were also active in the Esperanto movement, they wished to limit the role of Esperanto in the AIS to a mere communication tool. Indeed Helmar Frank, the first president of the AIS, has never been active in the Esperanto movement and considers himself a mere "user" of the language. It is noteworthy that the very word *ilo* in Esperanto means "tool": the *ratio* of this name is to underline that the instrumental use of the language is by far more important than its ideological aspects. In fact, in the event that an international body such as the UN should ever introduce another neutral international language than Esperanto, the AIS constitution expressly allows to adopt this language for the AIS, too (Frank 2003: Art. 4.7, p. 105). Esperanto is not the only official language of AIS. According to the Art. 4 of the Statuto of 1985, "L'Accademia si esprime in tutto il mondo in Lingua Internazionale e inoltre, in aggiunta all'italiano (in quanto lingua ufficiale della Repubblica di San Marino), in inglese, in francese, in tedesco e, se ritenuto necessario e opportuno, in altre lingue." ("the Academy expresses itself all over the world in the International Language as well as, besides in Italian (this being the official language of the Republic of San Marino), in English, French, German and, according to necessity and opportunity, in other languages." Fößmeier and Frank 2000, p. 147). This official language policy was confirmed in 2003 by the Konstitucio (Constitution), which was written originally in Esperanto and German. Note that Italian is the official language of San Marino, a small sovereign state surrounded by Italian territory.

The four ethnic languages mentioned in the statutes are mainly used for administrative purposes, where AIS distinguishes between its Scientific Sector, its Supporting Sector, and its external relationships.

As all academic members in the *Scientific Sector* of the AIS must be fluent in Esperanto, and even novices at least must be able to read this language, Esperanto is the only administrative language in the Academic Senate and in the Assembly of Effective Members, the two highest governing bodies of the Academy. On the sub-faculty ("fakaro") level it is possible, though, that assemblies choose to use further meeting languages besides Esperanto. In such a case, the minutes must be made available in all languages used. This possibility is hardly ever made use of, though. Regarding faculty structure, scientific knowledge has been categorized following the distinctions of Windelband (by method) and Popper (by object). The Scientific Sector is divided into two areas, the "nomothetic" (rule-based, predictive) and the "idiographic" (fact-based, descriptive) sciences. Each of them is further divided by the nature of its objects (physical, informational, abstract). So the humanities are described as idiographic sciences about information, while natural sciences are nomothetic and treat physical objects (see Figure 1).

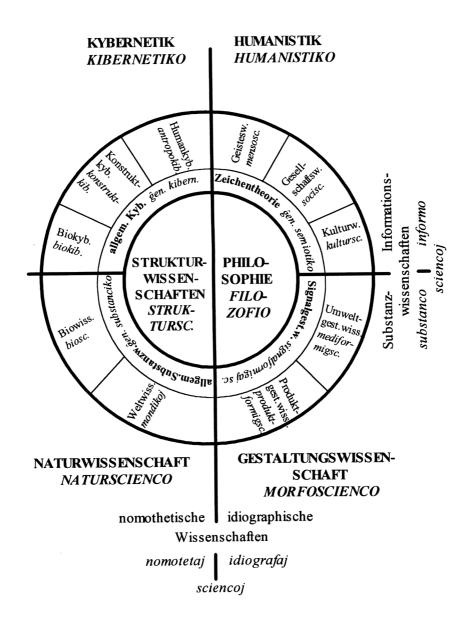


Figure 1. Categorization of scientific knowledge within AIS (Fößmeier and Frank 2000: 81)

The academy's *Supporting Sector* consists of persons who give financial support but do not (necessarily) take part in the scientific work. In January 1995, 91 individual and 6 collective members belonged to the Supporting Sector; in January 2009 there were 200 individual and 6 collective supporters.

Not all supporting members speak or understand Esperanto, and their assembly can decide to use any of the official languages for its sessions and also to provide translation during a session. Here, too, the rule about the minutes being available in all languages used applies.

In its *external relationships* the AIS prefers to correspond in one of the four permanent official ethnic languages, save for relations with associations using Esperanto, in particular the "Universala Esperanto-Asocio" (UEA, World Esperanto Association). Since 1995, AIS actively collaborates with UEA in organizing the International Congress University ("Internacia Kongresa Universitato", AIS-IKU), a special AIS session where lecturers give a course of 4 or 8 lectures in Esperanto, where participants can take exams at the end, receiving a diploma from AIS.

Special emphasis is given to the official AIS web site – http://www.ais-sanmarino.org/ – as it is used both for external and internal relationships. The site contains mainly information in Esperanto but also contains a "Frequently Asked Questions" (FAQ) section in all five official languages. AIS lecture notes are often published on the official web site and may, if detailed enough, serve students as material for a correspondence course. In this case they may take their course exam during an AIS session or at an AIS partner institute, with the author of the course material or another AIS member as an examiner. Thus AIS has actually been a virtual university ante litteram, i.e., before the theory and practice of teaching at university level partly or fully through e-learning was established. But the potential that lies in having a virtual university has still not been fully explored even at AIS. To take an example, in Fößmeier and

Frank (2000) a full database of curricula of AIS members can be found called International Documentation of Scientists ("Internacia Sciencista Dokumentaro", or ISD). Each entry contains a small biography, an account of research interests, a photograph and contact information. It has turned out that the AIS, founded before the birth of the World Wide Web, is still far from making full use of the possibilities of the latter and that contacts between AIS members, including students, still can be improved. In fact, any university, regardless whether it is virtual or real, is made up by both faculty members and students: hence, an "Academia 2.0" should also take into account the students, who now tend to be "digital natives" (Prensky 2010), thus generating the flow of content that guarantees a constant and vivid presence of their institution on the Web. To ensure this flow, every student who passes at least one exam should be traceable, e.g., through the teacher's home page. This strategy takes into account that today's students are tomorrow's AIS faculty members.

At present, there is no automatic choice on the AIS web site between language versions based on the preferences of the user; rather, different language versions of the same text are cross-linked. Sometimes, bilingual texts are published and appear in parallel columns on the screen. Furthermore, entries about AIS are found in Wikipedia; as of September 2011, besides in Esperanto, also in Catalan, English, French, Italian, Polish, Romanian, Russian and Turkish.

In conformity with the language policy advocated by ecolinguistics (Fill 1993), a special concern of AIS is to practise a non-discriminatory language policy. San Marino is only the seat of the university in a legal sense and sometimes host of the summer school called SUS, *Sanmarineca Universitata Sesio* (Sanmarinian University Session). When an AIS session is conducted elsewhere, the ethnic language of this place is granted a temporary status as an official language – for instance, Polish becomes an official AIS

language when an AIS session takes place in Poland. To scientific language use, no restrictions apply. Any developed language with a scientific literature can be used, alongside with Esperanto, as the second language in a thesis, or as a course language outside an SUS.

Finally, Latin has also a (small) place within the SUS, reflecting its former status of international language of science for centuries in Europe (Mortensen and Haberland 2012). Academic titles granted by AIS have likewise been worded in Latin since 1986, by the Resolution 431/86 of the *Dicastero della Pubblica Istruzione, Cultura e Giustizia* of San Marino (cf. Frank 2000: 158-159). Long before the Bologna Process, the AIS had prepared a standard basis for comparing academic degrees on a four-level scale with Latin terms (*baccalaureatus/a, magister/magistra, doctor, doctor habilitatus/a*). This standard comparison was introduced in order to make it possible for AIS faculty members to get their original academic degree (usually a PhD) confirmed by the AIS through a re-examination procedure in Esperanto, called *adapta adopto* (adoption by adaptation). This process implies a complete examination but is based on the candidate's original thesis.

3. The language policy of AIS publications

The AIS not only provides its scientific members with an academic platform where scientific exchange is made (though not exclusively) through the use of Esperanto, AIS also offers courses and degree programs in Esperanto. AIS regulations do not pre- or proscribe specific languages for research. However, for a scientific paper or book to be published as a "verkaĵo el la Akademio Internacia de la Sciencoj" (work from the AIS) at least half of its contents must be in Esperanto. This rule allows publishing bilingual works, and has been advocated by Frank and Franke (1997), who write that "(e)ine zweisprachige Texterstellung ... bewirkt eine höhere Präzision der

Aussage durch sofortiges Sichtbarwerden von kaum übersetzbaren, da inhaltsleeren Sprachhülsen'' (bilingual writing ... leads to a higher precision of the statement, as it immediately uncovers semantically void and therefore virtually untranslatable buzzwords). The book by the two German authors Frank and Franke is itself bilingual, in German and Esperanto.

As AIS lacks the necessary resources to fund research projects, the only available data about the use of Esperanto in scientific cooperation are joint publications of several authors in Esperanto, such as Galadí-Enríquez and Wandel (2001). It seems safe to assume that wherever co-authors had different native languages they used Esperanto to communicate (as do the authors of the present paper, an Italian and a German). To become a full member of the AIS it is required to present at least three scientific publications in Esperanto, though not necessarily in a peer reviewed journal, since they are unlikely to follow this particular bilingual pattern with Esperanto. A notable exception is *Acta Sanmarinensia*, a journal which publishes the proceedings of AIS conferences and other material from AIS members. A statistical evaluation of such publications may be the subject of a future study.

Due to the low print run of media in Esperanto, scientific text-books are available in this language only for a limited number of topics, and usually only on the bachelor level. An example is the introductory text book on astronomy by Galadí-Enríquez and Wandel (2001). Furthermore some AIS courses have been published in printed form in the series of *Acta Sanmarinensia*. A good example is the course on medical parasitology by Sachs (2004).

4. Teaching activities

As a teaching institution, AIS organizes courses and offers degree programs in Esperanto from bachelor to doctoral levels, with exams

held during the summer school called SUS, *Sanmarineca Universitata Sesio* (Sanmarinian University Session), which usually takes place around September 3, the national holiday of San Marino and official date of the foundation of the Most Serene Republic of San Marino. The SUS takes place at least once a year, since 1985 always in a European country, such as San Marino, Poland, Slovakia, or Bulgaria.

During SUS, all classes use Esperanto as the teaching language. As two credits from SUS classes are a prerequisite for graduation, all AIS students must follow at least two courses taught in Esperanto. Most AIS courses are, on the other hand, taught at AIS partner institutes, such as Lucian Blaga University in Sibiu (Romania), or the *Międzynarodowe studium turystyki i kultury* (International College of Touristic Science and Culture) in Bydgoszcz (Poland), and most of these classes taught by locals are held in the local language. Foreign guest teachers usually teach in Esperanto, except when they teach a course about their own native language, using the direct method. The purpose of making Esperanto courses mandatory for AIS students is not only to allow them to benefit from guest teacher courses, but also to prepare them for participation in the SUS and for their eventual AIS graduation.





La ĝisnunaj lecionoj montris, kiel kodi klare apartigeblajn datenojn, ekz. por unu teksto, letero, bildo, muzikaĵo. Tiajn datenojn oni ofte storas en "dosieroj", t. e. pecoj de komputila memoro, kiuj posedas jenajn du ecoj

- ili estas daŭremaj, tio signifas, ke ilia enhavo ne perdiĝas, kiam oni malŝaltas la komputilon; normale ili fizike troviĝas sur magneta aŭ optika disko aŭ bendo;
- ili posedas nomon aŭ alian adreson aŭ identigilon, per kiu eblas retrovi ilin.

Kutime necesas administri multajn tiajn objektojn, kaj estas penige trovi kaj memori apartajn nomojn por ĉiu el ili, se oni ne havas sistemon por tio. Sed ĉar komputiloj bone kapablas uzi sistemojn, ili proponas sistemojn por administri grandajn arojn roj en superrigardebla formo. Grava principo ĉe tio estas la hierarkieco.

La vorto "hierarkio" aŭ "hierarĥio" devenas de la grekaj vortoj "hieros" (sankta) kaj "arĥejn" (regi) kaj origine nomis la strukturon de pastra sistemo, en kiu ĉiu pastro havas super si (unu) pli altrangan pastron, sed povas havi sub si plurajn malpli altrangan. Tia pastraro do formas strukturon, kiu similas a "arbo", sed kiun oni kutime prezentas tiel, ke la "radiko" (la plej altranga) troviĝas supre, kontraŭe al botaniko. Kiel ekzemplon ni prenu strukturon, en kiu direktoro havas sub si fakestrojn, kiuj sub si havas grupestrojn, kiuj estras grupanojn. Tian strukturon eblas prezenti grafike kiel grafon el verticoj (aŭ nodoj) kaj eĝoj:

11 Organizo de datenoj: hierarkioj 11 Organisation von Daten: Hierarchier

Datenobjekte, zum Beispiel einen Text, einen Brief, ein Bild, ein Musikstück, kodieren kann. Solche Daten werden oft in "Dateien" gespeichert, das sind Abschnitte von Rechnerspeicher, die zwei Eigenschaften besitzen

- sie sind persistent (dauerhaft); das bedeutet, das ihr Inhalt nicht verloren geht, wenn der Rechner ausgeschaltet wird; gewöhnlich befinden sie sich physisch auf einer Magnetplatte oder optischen Platte oder einem Band;
- sie besitzen einen Namen oder eine andere Art von Adresse oder Identifizierer, durch den/die man sie wiederfinden kann.

Üblicherweise muss eine Vielzahl solcher Obiekte verwaltet werden, und es ist mühsam, für jedes einen eigenen Namen zu finden und sich die Namen zu merken, wenn man kein System dafür hat. Rechner sind aber sehr gut in der Verwendung von Systemen; sie bieten Systeme zur Verwaltung großer Mengen von Dateien in überschaubarer Form an. Ein wichtiges Prinzip ist hierbei die hierarchische Anordnung.

Das Wort Hierarchie kommt von den griechischen Wörtern "hieros" (heilig) und "archein" (herrschen) und bezeichnete ursprünglich die Struktur eines Priestersystems, in dem jeder Priester über sich einen höher-rangigen Priester hat und unter sich mehrere niedrigere Priester haben kann. Eine solche nat und unter sich meiner immeller niesten nach kann. Eine slodier Priesterschaft bildet eine Struktur, die einem "Baum" ähnelt, die man aber gewöhnlich so darsteilt, dass die "Wurzel" (der Ranghöchste) oben steht, im Widerspruch zur Botanik, wo die Wurzel meist unten ist. Als Beispiel betrachten wir eine Struktur, in der ein Direktor (direktoro) unter sich Abteilungsleiter (fakestro) hat, die unter sich Gruppenleiter (grupestro) haben, die Vorgesetzte von Gruppenmitgliedern (grupano) sind. Eine solche Struktur lässt sich grafisch als Graph aus Knoten und Kanten darstellen:



Figure 2. Example from the course material on the AIS web site (Fößmeier 2005)

To earn a degree from the AIS, candidates must fulfill four requirements: a number of credits required for a degree program, a number of credits from an SUS, a thesis, and an oral examination. Graduation exams for AIS students only take place during the SUS. These sessions must be announced publicly, and the oral exams are open for the public in order to make the examination procedures transparent and the quality of the degrees earned verifiable. Students participating in an AIS course may qualify for credit points by passing a course exam even without attending the classes: this is a significant option,

since a considerable amount of course material is freely available on the AIS web site to anyone. An example in German and Esperanto can be seen in Figure 2.

Course exams usually are held in the language of the course. In their graduation exams, where Esperanto is mandatory, candidates may use the services of an interpreter, in which case they have to prove their knowledge of Esperanto in another way. If a language is the topic of an exam it may also serve as the examination language. When course authors offer bilingual material for a distance course (usually in Esperanto and the teacher's ethnic language), they can decide in which language(s) they offer an exam. It has happened that the same AIS course was taught and examined in both languages by the same author. For courses taught within the scope of an SUS, Esperanto is mandatory both as the course language and as the examination language. It is recommended that such exams require only a passive knowledge of Esperanto. That means that answers either are chosen from a set of proposed statements ("multiple choice"), or consist in filling in a blank in a sentence presented in the exam material. The idea behind this is to give AIS novices a chance to benefit from an SUS programme even with a limited knowledge of Esperanto.

Theses for an AIS graduation are composed under the supervision of an AIS teacher, in two languages. One of them is Esperanto, the other is chosen by the candidate, with the restriction that an external examiner has to be available who at least has a passive command of that language. Usually the two versions of the text are arranged in parallel columns, with figures, tables, equations etc. extending over both columns. Students are allowed to have the text translated by someone else, but must mention this in the Acknowledgements. The purpose of the bilingual text is twofold: first, it allows students to present their work outside the AIS, and second, it allows outsiders to evaluate its quality. It turns out that students tend to choose their native language as the second language; speakers of other languages

can access the text in Esperanto. So as a secondary benefit the bilingual text helps keeping smaller languages alive on the scientific stage. For doctoral theses the regulations prescribe two external examiners. If one of them is chosen from outside the AIS (which is possible), this external examiner usually bases her or his report on the version not written in Esperanto.

A final exam for an AIS graduation consists of a lecture given in Esperanto by the candidate and a discussion (viva voce) between the candidate and the commission. As a rule this discussion is in Esperanto, too, but regulations allow the candidate to use an interpreter. At least three different native languages must be represented in the commission; the exclusive use of languages different from Esperanto normally would not be an option. The candidate lecture may be based on slides or written notes, and it may even be read aloud from a prepared text. The latter happens especially on the bachelor level, where both language knowledge and presentation skills still have to develop. Using an interpreter for one's viva involves considerable costs; as a result this option is made use of extremely rarely, and there are no full statistics about how many out of 315 AIS graduates (until 2009) chose it, but out of the 54 graduates since 2004 not a single one took it. The candidates who used an interpreter for their viva before 2004, usually also had their thesis translated by a professional translator. For most students, however, the costs of such a translation are prohibitive.

5. The practice of language usage

While the propagation of Esperanto is not the objective of the AIS, Esperanto courses are offered in its sessions and its affiliations in order to allow students to benefit from its course programme. For teaching sessions, such as an SUS, Esperanto courses are frequently offered before the beginning of the session. The idea behind this

is that trained scientists with at least a passive knowledge in one or two foreign languages should be capable of picking up enough Esperanto in one or two days to be able to follow an elementary scientific course.

As for many courses no text books in Esperanto are available, AIS teachers usually either offer their students more or less detailed lecture notes or base their courses on a textbook in a language all students are familiar with. The latter is usually possible at AIS partner institutes, where all students speak the local language, but not during an SUS. When a teacher prepares a course or students write their thesis it may happen that they need a technical term with no generally accepted Esperanto translation. In such a case Esperanto either tries to construct the missing term from existing root material or to introduce a new root (neologismo or novismo) borrowed and morphologically adapted from other languages. Both teachers and students would list and define the chosen expression in a glossary and also explain their motivation for the choice. Glossary definitions should be based on the established terminology in Esperanto and not resort to translations into other languages. Given that a large part of AIS students and courses are on the bachelor level, the necessity for using terms without an existing Esperanto equivalent rarely arises.

Even if there are some research findings in the practice of Esperanto-in-use, "one is immediately struck by the paucity of 'hard data'" (Edwards 2010: 189). In particular, language usage by AIS members or at AIS events has not yet been subjected to any kind of formal research. While more than 20 years of practice have shown the general feasibility of the AIS approach, the evidence from many fields remains more or less anecdotal and can be shown here only from the authors' angle. The best established facts about language usage at the AIS are the language skills of AIS members, as judged by themselves, which are registered in the ISD. By June 2009, the database contained 868 people, who

had 52 different native languages (23 people had two native languages). As can be seen from table 1, Esperanto had 11 native speakers, 557 other speakers, and 198 people with mere reading knowledge. That means that the remaining 102 people, being merely supporting members, could not even read Esperanto. The next largest languages by speakers were English, German, Russian, and French. By native speakers the order was Russian, German, Polish, Italian, with English in the 5th place. This shows, among other things, a certain Eurocentrism of the AIS: there were only 16 native speakers of Chinese, 8 of Japanese, 3 of Korean and Farsi each, and 2 of Hindi and Vietnamese respectively.

Table 1: Languages of AIS members

Language	Native speakers	Other speakers	Reading knowledge	Total
Esperanto	11	557	198	766
English	36	491	105	632
German	189	199	104	492
Russian	212	151	70	433
French	30	241	131	402
Italian	45	80	98	223
Polish	85	30	25	140

In the Esperanto movement there is a taboo about speaking other languages with Esperantophones. This is only partially tolerated if both actors share the same "native tongue" (whatever this means) and they are located in the appropriate *Sprachraum* – e.g., Italian Esperantophones speaking in Italy are allowed to speak Italian among themselves, but not elsewhere. This allows the creation of an Esperanto environment even where only speakers of one native language are present. Using another language where the use

of Esperanto would be possible is called krokodilado and is booed at. The AIS has not adopted such a taboo and prefers a more pragmatic approach to the choice of languages used. Like in many other language environments, it is considered impolite if anybody present is unnecessarily excluded from a conversation by the language choice. At AIS sessions it has been observed that AIS staff usually speak Esperanto even among compatriots but occasionally change to the common native language in a longer conversation. The use of a language other than Esperanto or the common native language of everybody present has very rarely been observed (except when somebody wants to take the opportunity to practice a foreign language with a native speaker). According to the authors' observations, code-switching is not infrequent while code-mixing is very rare. In one case it was observed that somebody with a limited knowledge of Esperanto was encouraged to resort to their native language (Italian), a language which everybody in the group understood, though not on a native-speaker level.

On a few occasions the AIS tried to practice a model of receptive multilingualism (cf. ten Thije and Zeevaert eds. (2007); cf. also Posner's "polyglot dialog" (1991)) - meaning that everybody was allowed to speak their native language. Among other occasions, the SUS 27 session in 2004 applied this model during its academic forum; all participants were from Europe or North America. The objective was to allow new participants, with only a passive knowledge of Esperanto, to take part in a discussion. While these experiments worked to a certain degree they showed two significant disadvantages. First, they discriminated against the speakers of small languages, who did not have much of a chance of being understood in their own language and so had to use Esperanto. Second, it was difficult to determine for a speaker how many of the listeners understood what they said, and to what degree. Moreover those experiments generally fell short of the purpose to provide newcomers with a gradual entrance into

the practical use of Esperanto, as only a small part of them later engaged in the AIS.

6. Conclusions and further directions of research

While not much of a formal evaluation of AIS language usage has been done, more than 20 years of practice have shown that Esperanto works quite well in the scientific as well as the administrative field. In other words, Esperanto is suitable for running a university and reducing linguistic discrimination by a significant degree. On the other hand, it seems that several approaches towards a gradual entry to the AIS practice, such as with translations or receptive multilingualism, have essentially failed to motivate novices to become active within the AIS; so far, no quantitative analyses have been undertaken. As usual, it is difficult to explore the motivation of drop-outs, who are normally not available for an interview.

The available data are insufficient to evaluate to which degree the apparent eurocentricity of the AIS is related to the choice of its official languages (Esperanto plus four ethnic European languages). More work is necessary to come to quantitative conclusions. This concerns both the evaluation of existing material (such as publications in Esperanto) and strategies to collect more data about the practical functioning of the AIS.

The analysis of the use the AIS is making of the Internet suggests that there is considerable scope for expansion of web-related activities of the AIS. Many of the more recent technologies are not being made proper (or any) use of. As much of the software concerned is either already available in Esperanto or could be easily ''localized'' (adapted to Esperanto), this seems an important field for the AIS in which to increase its activities. While there is no need of adopting an on-line e-learning tool, being connected is the most important

part of the external strategy to be implemented: would-be students are certainly present in places like Facebook or Ipernity (a website offering free services of multimedia sharing and social networking), which are highly popular among Esperanto-users as their interfaces are fully translated into that language.

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