Teaching MT/CAT tools in Greece: The State of the Art

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Abstract

This paper reports the results of research into the current state of affairs with respect to teaching MT/CAT tools in Greece. Although a variety of methods is employed, this research essentially takes the form of a survey. According to the data provided by respondents, the current status of MT/CAT tools, now described as "poor" and "nonexistent" or at best as beginning to set off, appears somewhat disappointing. Yet, with respect to the future, it is our contention that the growing awareness at least among respondents of the need to integrate MT/CAT tools in their curricula, will sooner or later bring about the changes now anticipated.

1   Introduction – Research Aims

This paper reports the results of research into the current state of affairs with respect to the teaching of Machine Translation (MT)/Computer-Assisted Translation (CAT) tools in Greece. What we essentially set out to achieve is to explore whether MT/CAT tools are actually taught in any university or private school in Greece and if they are, to establish particular teaching centres and courses. By extension, our interest lies in establishing how MT/CAT tools are taught to whom and by whom so as to acquire a description of courses and course resources, as well as a description of students and instructors. Finally, given that MT/CAT tools appear to be taught only sparsely, we shall also attempt to address issues, such as why MT/CAT tools might be taught only marginally, whether any change is foreseeable and what might possibly be done to that effect.

2   MT/CAT

At this point it seems appropriate to briefly refer to the view adopted herein with respect to the term "CAT" and its relation to MT. Thus, the two often-made distinctions between MT and CAT on the one hand, and between Machine-Aided Human Translation (MAHT) and Human-Aided Machine Translation (HAMT) as distinct modes of CAT on the other, are retained (see Hutchins and Somers, 1992, p147). Although both distinctions are rather fuzzy and blurred, they remain useful for the purposes of this research, which may confidently be maintained to be less concerned with HAMT than with MAHT and MT.

Bearing these distinctions and predilections in mind, let us now look at some of the types of MT/CAT tools currently available to translators, especially the types of tools likely to be taught in a university or private school setting in Greece. As a matter of fact, for the purposes of the present research, it was deemed necessary to come up with a

more or less comprehensive list of tools in advance so as to provide a reference point for people in Greece participating in our effort who might not be familiar with MT/CAT.

Several works on CAT tools and the translator's workstation – including relevant chapters in books on MT and dictionaries – were consulted [cf. Kay (1980), Melby (1987, 1992), Hutchins and Somers (1992), Sager (1994), Clark (1994), Owens (1996), Isabelle and Church (1997), Shuttleworth and Cowie (1997), Hutchins (1998), Badia et al. (1999), Trujillo (1999) and Somers (forthcoming)]. An inventory of commonly-referred tools was composed and from this list the tools most likely to be taught in Greece were extracted; for instance, concordancing tools and desktop publishing software were seen as a highly unlikely subject matter for the Greek reality and were excluded. As a result, the following (non-exhaustive) list of MT/CAT tools was put together:

- fully automatic MT systems
- systems/software with some translation capability
- translation memory (TM) systems
- terminology management systems
- on-line dictionaries, encyclopaedias, thesauri and glossaries
- on-line term banks
- word-processing tools
  - spell checkers
  - grammar checkers
  - style checkers
- dictation tools

In addition, following the lead of Somers (2001), who does not restrict his discussion to MT/CAT, but extends it to related aspects of Information Technology (IT), a broader view of MT/CAT is adopted for this research. Thus, room is allowed for investigating not only the situation with respect to the teaching of MT/CAT tools, but also for exploring the status of IT, particularly the Internet, and computer science in the curricula of Greek universities and private institutes teaching MT/CAT tools.

3 Greek Education – Translation, foreign languages, linguistics

A preliminary Internet research on the basis of the distinction made by Somers (2001) between three sets of learners of MT suggested that the most likely places where MT/CAT tools might be taught in Greece are university departments and private schools teaching translation, foreign languages and linguistics. It thus seems appropriate to have a look on the one hand at the structure of the Greek educational system, in particular tertiary education, and on the other hand at the status of translation, foreign languages and linguistics in Greek curricula.

Tertiary education in Greece is primarily provided by the state. Through national university entrance examinations (or in some cases through examinations conducted by individual universities) administered each year by the Ministry of Education, students are admitted in the various departments of universities, including technical ones, and Technological Education Institutes (TEIs) all over Greece. In addition, due to the rapid growth of private higher education, there is also a multitude of private colleges and institutes often called "laboratories of liberal studies" offering a variety of courses at an advanced level, sometimes providing undergraduate and postgraduate degrees usually in conjunction with accredited universities abroad.

Within this educational context the status of translation, foreign languages and linguistics courses and modules is rather disparate between the state and private sector. To begin with, in the state sector translation as a separate course is not widely taught in Greek universities.

Indeed, there are only three dedicated courses: a BA and an MA offered by the Department of Foreign Languages, Translation and Interpreting of the Ionian University in Corfu, and an MA by the Foreign Language Departments of the University of Athens and the Department of Italian Language and Literature of the University of Thessaloniki. On the module level, however, the situation is different, as translation forms an integral part of the undergraduate curricula of foreign language departments all over Greece. As their title suggests, these departments are primarily the centres where foreign languages are taught: thus, for English, French, German and Italian there are two departments for each language, one in the University of Athens and one in the University of Thessaloniki respectively, while in Athens the Department of Italian is conjoined with a Department of Spanish. In addition, the curricula also include various modules on linguistics offered by a dedicated linguistics section within each department. It is however within Departments of Philology that the main linguistics sections are to be found. In all, there are five such departments all over Greece and apart from the linguistics section, there are usually also sections of Classical Greek and Latin Philology, and Byzantine (Medieval) and Modern Greek Literature.

A totally different picture emerges when looking at the private sector. Here, translation courses are widespread and are taught in various private schools and colleges, as well as institutes such as the Institut Français d'Athènes (IFA) and the Goethe Institut – in many cases, the certificate awarded is validated after a short period of studies in a university abroad. With respect to foreign languages, courses are offered by some private colleges, usually in English studies. It should be borne in mind however that it is not at tertiary education level that foreign languages are most widely taught in Greece: being avid learners of languages, in particular English, but also French, German, Spanish and Italian, Greeks start learning languages very early, in the case of English as early as during the first years of primary school. Thus, there is a multitude of private schools (*frontistiria*) where languages are taught; after a certain period of studies and through examinations students may obtain a relevant degree. The same is true with foreign languages institutes: apart from IFA and the Goethe Institut mentioned above, we should also mention the British Council and the Instituto Cervantes among others. Finally, linguistics courses seem to hardly appear in the programme of any private institute.

4   Methodology

Given our primary aim to identify teaching centres and methods in Greece, information had to be obtained from places in Greece where MT/CAT tools might potentially be taught, i.e. university departments and private schools teaching translation, foreign languages and linguistics. A wide range of methods was used for this research. On the one hand, in order to identify likely respondents and their contact details, the most central method was the use of the Internet; a supplementary source of information was the questionnaire addressed to the Greek graduates of the MSc in MT at UMIST. On the other hand, in order to get in touch with likely respondents and obtain the required data, two methods were employed: first, an initial letter was prepared and dispatched to all identified institutes and subsequently, a questionnaire was sent to all who had responded to that letter.

In more detail, in order to identify potential respondents, initially the Internet was searched for Greek university departments and private schools teaching translation, foreign languages and

linguistics; this research aimed on the one hand at obtaining contact details for institutes already known to the author, and on the other hand at identifying institutes and/or courses not previously known to her. A list of 30 courses along with their contact details was put together and this was supplemented by names and details with respect to two more courses supplied by responses to the questionnaire sent to the Greek graduates of the MSc in MT at UMIST.

Following the lead of Balkan et al. (1997), as soon as the list of potential respondents was put together, an initial letter was composed and sent to the identified institutes in Greece presenting the aims of this research and requesting permission to send a questionnaire (academic questionnaire) to anyone who might be interested in providing information. Positive feedback was received with respect to 16 courses.

Meanwhile the academic questionnaire, which constituted the major method of collecting data of direct relevance to this research, was constructed. It was addressed both to institutes teaching MT/CAT tools and to those not teaching this subject. It thus correspondingly consisted not only of questions relating to individual existing courses (resources/materials, students and instructors), but also of questions relating to why MT/CAT tools are not taught, and whether or not and why they might be taught in the future (Parts B and C of the questionnaire respectively). The last part of the questionnaire (Part D) also invited respondents to express their views with respect to the current situation and the future of teaching MT/CAT tools in Greece. Admittedly, despite major differences in scope and aims, this questionnaire was heavily influenced by the respective questionnaire used by Balkan et al. (1997); this is especially true with respect to Part B consisting of questions exclusively addressed to institutes already teaching MT/CAT tools.

As soon as positive feedback was received to the initial letter, a copy of the academic questionnaire was sent to the Department of English Language and Literature at the University of Athens where the course instructor had agreed to be the first one to fill in the questionnaire and make any pertinent comments and suggestions. No corrections had to be made and soon thereafter the questionnaire preceded by a short foreword was sent to the institutes running the remaining 15 courses. Responses were obtained with respect to ten courses.

5   Results

Due to time and space limitations, results drawn from the academic questionnaire will be discussed in an overall manner in the light of the particular aims of this research rather than be reviewed question by question.

i.   Identification of Teaching Centres

The primary aim of this research is to explore whether MT/CAT tools are taught in any university department or private institute in Greece and subsequently to provide a comprehensive list of courses/modules and institutes. According to the data provided by respondents to Part A of the questionnaire, it emerges that MT/CAT tools are indeed taught in Greece, as information was obtained with respect to six courses/modules on MT/CAT tools, the vast majority of them (five) within a translation-oriented setting. The resulting list of courses and institutes may be seen in the Appendix. However, it should be noted that this is far from comprehensive, as out of the 32 identified likely respondents only half accepted to fill in the academic questionnaire and what is more out of the 16 questionnaires sent only ten were returned. The list is also incomplete in another sense; being based on the academic questionnaire, it

does not include institutes which did not return the questionnaire themselves, but for which information with respect to the existence of modules on MT/CAT tools was nonetheless acquired. Such institutes include the Department of Foreign Languages, Translation and Interpreting at the Ionian University (FLTI Ionian), the Department of French Studies at the University of Thessaloniki (French AUTH), the Hellenic American Union (HAU) and the European Centre for the Translation of Literature and the Humanities (EKEMEL); information about MT/CAT tools for the respective modules was obtained by means of: answers provided to the academic questionnaire by other institutes (for FLTI Ionian), answers provided to the graduate questionnaire (for French AUTH), answer provided to the initial letter (by HAU), and the Internet (for EKEMEL).

ii. Description of Courses, Resources, Students and Instructors

Having identified particular courses and modules on MT/CAT tools in Greek university departments and private schools, the next aim of this research is to acquire a description of courses and course resources, as well as students and instructors. The relevant information was made available by the institutes teaching the six courses/modules identified.

Course description: It emerges that in the majority of institutes (four out of six) MT/CAT tools are taught as a separate module; for the remaining two institutes, in one MT/CAT tools are only taught as part of a module, whereas in the other they are taught as a separate seminar course.

With regard to the status of the course/module, two institutes replied that the relevant module is compulsory, while another two replied that it is optional. For the remaining two courses some of the modules are compulsory, while others optional.

The length of the courses ranges from 3 to 60 hours, the average being between 20 and 24 hours. Most courses are on average taught over 10 to 12 weeks, with the exception of one institute where MT/CAT tools are taught only for one or two weeks.

The vast majority of MT courses cover MT theory and practice. Both topics are assigned more importance than evaluation of MT, which, however, features in half of the courses.

Of the six respondents, four replied that computer science and IT are indeed taught in their department, whereas two replied that they are not. Of the four institutes, two cover all areas and sub-areas quoted in the questionnaire, i.e. introduction to computer science (hardware and Windows), word processing, and Internet (i.e. e-mail, resources for translators, and technicalities such as the creation of web pages). In addition, one of the institutes also offers modules on Excel, PowerPoint and Access. The remaining two institutes cover all areas and sub-areas except for Internet technicalities.

In only half of the six institutes are students required to undertake any assignment relevant to MT/CAT tools; no further details were provided as to the nature of the assignments except by one institute where they are relevant to Internet resources or require students to write essays describing particular MT systems and translation technology in general.

In most institutes, students are evaluated by examination alone; only in two cases are students assessed on the basis of both examination and assignments.

Course Resources: Most course material consists of reading lists and surprisingly lists of Internet addresses; both types of material are used in four institutes. Text

books are slightly less popular as they are used in just half of the institutes. Practical exercises are even less frequent being used in merely two institutes and in one institute the only material used is the notes by the course instructor

The vast majority of institutes (five out of six) replied that computers and/or the Internet are used for teaching.

A practical system is used in four of the six institutes teaching MT/CAT tools. In another institute only a short demonstration of Trados is made by the course instructor in class; along with the sixth institute where no kind of practical system is currently used, both institutes said they would be interested in using such a system in the future.

With regard to the type(s) of system(s)/software institutes already use or would be interested in using, the majority mentioned on-line reference works (five institutes), as well as TM and terminology management systems (four institutes). Half of the respondents referred to fully automatic MT systems, on-line term banks and spell checkers, while less frequent are grammar and style checkers (mentioned by two and one respondents respectively).

Only one particular system, that is Trados, seems to recur; indeed, the particular system is already used in three institutes. Other systems quoted include Déjà Vu and Word-Fast, Systran and Intertran, as well as two tools developed by the Institute for Speech and Language Processing (ILSP), i.e. Tr-Aid (TM and term management tool) and Symphonia (spell and grammar checker).

All institutes are interested in the language pair Greek↔English; three replied that Greek↔French is also of interest to them, two mentioned Greek↔German and Greek↔Spanish, while one also referred to Greek↔Italian.

The reasons most often quoted for choosing a particular system were availability (by four institutes) and cost (by three institutes). Two institutes merely mentioned necessity and completeness respectively.

All institutes make the systems available to students for self access and only one makes them available for class demonstration as well. In all cases, students also have access to the system(s) in their own time out of class.

Students: Most relevant courses/modules (four out of six) are aimed exclusively at undergraduates. Less frequently, courses are aimed only at postgraduates.

In five institutes all students have a background in foreign languages, translation and/or interpreting, as well as theoretical linguistics, except in one institute where no linguistics is taught. In the sixth institute on the other hand, students come from varying backgrounds; thus, 20% of the students have a background in foreign languages, 30% in theoretical linguistics and 50% in computer science

In half the institutes students are really interested in attending the relevant module(s) and think that it is useful for their training and preparation as future translators, as well as for their vocational rehabilitation. In another institute students are unfamiliar with MT/CAT tools and only comprehend the importance of the relevant modules to a certain extent, but few show the required interest. Even grimmer is the situation described by another respondent where students see the relevant module on MT as peripheral and of no interest. In yet another institute a mixture of attitudes is described: "before the module starts students are afraid of MT/CAT tools, because they are unaware of their existence; after a while they are afraid of them because they believe they are a threat to their livelihood as translators; towards the middle of the module they despise them because they find them complex and in the end they become familiar with them and are more curious to try them".

Instructors: The vast majority (five out of six) of course instructors have a background in translation and/or interpreting; only in one institute does the instructor have a background in theoretical linguistics alone. Out of the five instructors four also have a background in computer science, three in theoretical linguistics and two in computational linguistics, while one also mentioned Greek and French language and literature.

All teachers have an experience as users. Among these, one instructor also has experience as a developer of a research system, while another one participates in the upgrades and improvements made to Tr-AID.

iii. Why MT/CAT tools are taught only marginally

As anticipated, given that at the beginning of this research there appeared to be no teaching centres at all, it emerges that MT/CAT tools are taught only marginally in Greek university departments and private institutes teaching translation, foreign languages and linguistics. Accordingly, one of the subsidiary aims of this research is to provide an account of why this might be the case.

On the basis of the data acquired in answer to Part C of the academic questionnaire by institutes not teaching MT/CAT tools, except for the lack of adequately qualified teachers mentioned by two out of the four institutes, no other prominent reason seems to exist. However, looking at the answers provided to Part D addressed to all institutes, a clearer picture emerges and according to answers the main reasons why MT/CAT tools are taught only marginally appear to be in order of frequency of occurrence: the lack of funding by the Greek government, the lack of awareness by all relevant parties, and the lack of adequately trained staff and respective teaching posts. In addition, the situation is

further compounded by the fact that within Greek universities only one undergraduate and two postgraduate degrees in translation are available. Not only that, but there also exist only one department of translation (i.e. FLTI Ionian) and one section of translation within foreign language departments (in French AUTH); as a result, the teaching of MT/CAT tools cannot be easily integrated in the curricula of existing courses offered by departments.

Finally, we would like to add a further reason which appears to us to be equally important, but quite surprisingly was only mentioned in passing by one institute alone: the lack of the appropriate infrastructure both in terms of hardware and software. Without that, hardly any relevant modules and courses can be introduced and implemented.

iv. Is Change Foreseeable?

Given the marginal status of MT/CAT tools in Greek curricula, our next aim is to explore the extent to which change is foreseeable according to the relevant institutes. On the basis of the answers provided to Part D of the questionnaire, it appears that one may be optimistic about the future of teaching MT/CAT tools in Greece. Indeed, having described the situation both within most departments and in Greece as "poor", 'nonexistent" and "not particularly developed" or at best as beginning to set off, most respondents agree that changes are likely to take place and only two remain more or less sceptical expressing their reservations. Thus, a variety of types of changes were mentioned, such as the integration of teaching MT/CAT tools in the curriculum of relevant departments, the development of more departments and sections of translation, as well as the integration of modules in new undergraduate and postgraduate programmes, "the use of the know-how of Greek students studying MT/CAT tools,

translation in general abroad", the training of adequately qualified teachers and the increase in funding.

Yet, we should not overlook the fact that most institutes contacted showed an expressed lack of interest in participating in this research. The fact remains and should be borne in mind that out of the 32 initial letters sent there was positive feedback only with respect to half of them and out of the 16 questionnaires only ten were returned. Such a fact cannot but indicate among other things the lack of interest, the "suspicious" or "reserved" attitude, the indifference or even ignorance of teachers and institutes alike with respect to MT/CAT tools.

v.   What Might Be Done for Changes to Occur – Recommendations

Our final aim consists in identifying what might possible be done in order for the anticipated changes in the status of teaching MT/CAT tools to take place. On the basis of the suggestions made by respondents in answer to Part D, in order for things to change, first and foremost more funding should be allocated in particular by the Greek government in the case of university departments, and second the awareness of all relevant parties should be boosted. In addition, more relevant teaching posts should be created and adequately qualified teaching personnel should be acquired or existing teachers should undergo appropriate additional training. Last but not least, what would also be beneficial is the establishment of more translation departments and private institutes of translation, as well as translation sections within departments of foreign languages.

Again, although no reference is made to the updating and acquisition of appropriate hardware and software, yet we feel that this too is important not only for the continuation of existing courses/modules on MT/CAT tools, but also for the introduction and implementation of new courses and modules.

6   Conclusion

The overall aim of the present research was to explore the state of affairs with regard to the current status and future of teaching MT/CAT tools in Greece. In particular, our main aims were:

- first and foremost, to explore whether MT/CAT tools are actually taught in any university or school in Greece and if they are to identify particular teaching centres and thus come up with a comprehensive list of related courses and institutes, and
- by extension, to establish how MT/CAT tools are taught to whom and by whom, thus attaining a description of courses and course resources, as well as a description of students and teachers.

Complementary, given that from the outset of our research, MT/CAT tools appeared to be taught only sparsely, our intention was also to attempt to explain:

- why MT/CAT tools might be taught only marginally; whether any change is foreseeable; and what might possibly be done to that effect.

In order to achieve these aims, a variety of methods was employed, the most central being the use of a questionnaire sent to 16 Greek university departments and private schools teaching translation, foreign languages and linguistics that accepted to participate in our effort. By means of this questionnaire, data of direct relevance was collected and information was obtained with regard to all five aims mentioned above.

Overall, according to responses, the current status of MT/CAT tools in Greece, now described as "poor", "nonexistent" and "not particularly developed" or at best as beginning to set off, appears somewhat disappointing. However, one need not

interpret these results in a pessimistic manner. In particular with respect to the future, it is our contention that the growing awareness at least among respondents of the need to integrate MT/CAT tools in their curricula, will sooner or later bring about the changes now anticipated.

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Appendix

This is the list of the ten courses for which the academic questionnaire was returned along with the abbreviations used in this research for the respective departments and a specification (✓) of whether MT/CAT tools are taught:

Course	Department	Abbreviation
Interuniversity Interdepartmental MA in Translation and Translation Theory	Departments of Foreign Languages, University of Athens, and Department of Italian Language and Literature, University of Thessaloniki	Translation UOA ✓
BA in English Studies	Department of English Language and Literature, University of Athens	English UOA ✓ (translation-oriented)
BA in English Studies	Department of English Language and Literature, Aristotle University of Thessaloniki	English AUTH
BA in French Studies	Department of French Language and Literature, University of Athens	French UOA
BA in German Studies	Department of German Language and Literature, University of Athens	German UOA
BA in Italian and Spanish Studies	Department of Italian and Spanish Language and Literature, University of Athens	Italian UOA
MA in *Technoglossia* ("Language Technology")	Department of Philology, University of Athens, School of Electrical and Computer Engineering, National Technical University of Athens, and ILSP.	ILSP consortium ✓ (linguistics &computer-oriented)
Diplômes du Centre Européen de formation à la Traduction Professionnelle	Centre Européen de formation à la Traduction Professionnelle, Institut Français d'Athènes	IFA ✓
Diploma in Translation	Metaphrasi	(No abbreviation) ✓
BA in Translation	European Educational Organisation	EEO ✓