

Satellites of Knowledge Networking the voices of academia and the profession

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Abstract

This paper seeks to present the challenges and obstacles faced by academics from within universities as they attempt to reconcile humanities-based objectives with the pressing need expressed from the profession for translation students adequately prepared in technologies, including for localization projects. The global economy and globalization, in which information and knowledge and their transfer play a fundamental role, would seem to necessitate a more global approach to training and education and continuing professional career development. The exponential rise in the volume of translation worldwide, clearly resulting from the development and dissemination of computer, information and communication technologies, renders the successful introduction and implementation of technologies in translation and localization courses all the more urgent. How can this most effectively be done, particularly when the lines between training, education and business seem to be crossed more substantially and frequently than most academic institutions might initially feel comfortable with? Perhaps the answer lies within a new paradigm of collaboration.

1. Academic environments

Academic environments are unique spaces. They thrive on the cultivation and implementation of ideas. They allow for the divulgation of information, circulation of knowledge and mentoring of skills by encouraging and facilitating productive exchanges within a wide community that intersects scholars, researchers, professors, part-time instructors, students, invited speakers, consultants, professional practitioners and many others. They afford participants in this community with an opportunity to step back from the fast-paced environment of the professional world and to contemplate product and the mechanisms of process in a different light, be it through relations of power, gender, race, class, economics, philosophy, cultural studies, and so on. In the best of scenarios, the research undertaken through the community can make a real difference in practice.

The practice of translation has been carried out across the globe since the earliest of human times. Yet, translation and translator training and education within the infrastructure of the academy and academic community is a relatively recent phenomenon. The discipline in the humanities we currently know as "Translation Studies" has developed and evolved remarkably over the past 30 years. Significantly interdisciplinary in nature, it studies and teaches theoretical frameworks, conceptual models, practical

application and skills acquisition. As succinctly noted by translation scholar Michael Cronin with regard to this discipline's trajectory:

In the history of translation studies, the tendency at one stage was to dwell on *translation and texts*. Translation studies compared source texts and target texts to see what happened and used the results of the analysis to form prescriptive or descriptive laws (depending on the School) of systemic change. In more recent times, there has been a greater focus on *translation and translators*. In part, this is due to the strong emergence of translation history as a sub-discipline of translation studies [as well as] theoretical contributions [...].(Cronin 2003: 9-10)

It comes as no surprise to those of us present here at this conference that translation has now fully encountered the world of technology, both in the professional and in academic domains. In fact, it could be argued that technology's main port of entry into academic translation studies has been guided by the hand of localization. Localization, defined by Bert Esselink simply as the "combin[ation of] language and technology to produce a product that can cross cultural and language barriers" (Esselink 2003: 4), has shown signs of rapidly developing into a sister discipline. Specializing in linguistic-cultural transfer *and* technology, it moves with ease in an increasingly networked and multimedia digital world and global economy. Globalization and the Internet have thrust translation studies, which has traditionally felt secure in its pronouncements on linguistic and cultural transfer, into an often uneasy truce with this newcomer on the block. Responding to the immediate needs of the globalizing marketplace and configured by the professional domain, localization has evolved hand-in-hand, and at breakneck speed, with businesses and organizational workflows adapting to expansion and technological innovation, indeed already spurring subsequent areas of specialization known as "internationalization" and "globalization". For traditional academic scholars in the humanities, however, a definition of localization as proposed by Cadieux and Esselink, and expounded on by Dunne, while grounded technologically and reflective of the new realities, is still most likely going to resonate more of business and commerce than translation. This has sometimes proved problematic.

[Localization] - [t]he process by which digital content and products developed in one locale (defined in terms of geographical area, language and culture) are adapted for sale and use in another locale. Localization involves: (a) translation of textual content into the language and textual conventions of the target locale; and (b) adaptation of non-textual content (from colors, icons and bitmaps, to packaging, form factors, etc.) as well as input, output and delivery mechanisms to take into account the cultural, technical and regulatory requirements of that locale. In sum, localization is

not so much about specific *tasks* as much as it is about the processes by which products are adapted. (cited in Dunne 2006: 4)

Given the variety in the nature of projects (from voice-over to traditional string-based compiled software user interfaces to Web services, to games, etc.), and given the scope and complexity of the tools used to both author and localize products, it can be argued that localization is both an art and a science. (Dunne 2006: 4)

Attempts to introduce technologies into translation courses and programs have sometimes been thwarted by the confusion generated by localization, which has been seen as the primary instigator of the need for learning (now mainstream) software applications and tools like translation memory. Professional human translators, unless they specialized early in technology and technical translation, have likewise had to learn about computer-assisted translation tools in the context of their work on a wide array of localization projects. A main source of confusion throughout the years has been in the defining of localization itself, which has proved notoriously slippery and context-dependent according to the degree of technologization in any given area. That said, publications online by professional translators and recent publications by notable translation scholars such as Anthony Pym (*The Moving Text: Localization, Translation and Distribution*, 2004) and Michael Cronin (*Translation and Globalization*), are paving the way in the academy for a more serious discussion on tools and processes, and how the new technologies relate in myriad ways to translation and localization. As perceptively noted by Cronin:

[R]elatively little attention has been paid to *translation and things*. By things, we mean here all the tools or elements of the object world which translators use or have been affected by in their work down through the centuries. Though tools are routinely described in an instrumental fashion in the periodical literature of translation technology, thinking on the relationship between translation and the technosphere has been in the main underdeveloped. And yet like any other realm of human activity, it is impossible to conceive of translation outside the object-world it inhabits. (Cronin 2003: 9-10)

A cursory look at the translation and localization courses and programs offered throughout the world (<http://isg.urv.es/tti/tti.htm>) reveals an amazing assortment of course combinations, objectives and local focus on translation practice. Translation theory too constitutes a vast repertoire of local perspectives and linguistic and culturally-specific points of view. It is not infrequent for specific translation or localization course content, design, implementation and delivery, to emerge as the result of a particular

convergence of faculty specialization and experience, and institutional infrastructure.

However, the global economy and globalization, in which information and knowledge and their transfer play a fundamental role, would seem to necessitate a more global approach to training and education and continuing professional career development. The exponential rise in the volume of translation worldwide, clearly resulting from the development and dissemination of computer, information and communication technologies, renders the successful introduction and implementation of technologies in translation and localization courses all the more urgent. How can this most effectively be done, particularly when the lines between training, education and business seem to be crossed more substantially and frequently than most academic institutions might initially feel comfortable with?

2. Bringing technology into translation and localization programs within academic institutions

As Logan and Stokes (2004) persuasively argue, we are living in the era of knowledge. Emerging disciplines such as that of knowledge management (KM) were unheard of until quite recently. If knowledge has indeed eclipsed information in terms of priority (information abounds, now we must make sense and use of it all), then perhaps the timing is now right for professional and academic minds to focus on innovative ways for learning and teaching the technologies that our students will need to know. Logan and Stokes propose an avenue that might well prove fruitful and conducive to fulfilling both professional and academic objectives. Recognizing that knowledge cannot be achieved by the passive reception of information, and that a "command-and-control environment" is not adequate for learning in our contemporary times, they suggest that we view knowledge transfer, i.e. teaching and learning, as a phenomenon that arises out of interaction. "Knowledge arises out of interaction, and interaction arises out of dialogue and collaboration." Collaboration ultimately allows one to better compete. (Logan and Stokes 2004: 66)

Indeed, the views of many important scholars are no longer confined to considering technology exclusively in terms of its instrumentality or in the form of tools with which to merely carry out certain necessary functions and processes. While this instrumentality can never be denied, as it makes sense in terms of enhancing efficiency in the marketplace, technology has also acquired a powerful social dimension of late. Use of technologies worldwide, and their continual transformation, in part informed by users themselves, have instigated global change and radically transformed real and virtual geographies. They have prompted knowledge to the fore and attributed value to learning. Again, as noted by Logan and Stokes, "the Internet has changed the relationship of information and knowledge", and "has become the natural medium for continuous learning." (Logan and Stokes 2004: 41) By focusing on creating situations of interaction, dialogue and collaboration, translation

end localization programs may find that the desired transfer of knowledge is capable of moving beyond the perimeter of mere acquisition of skills on the tools and into the domain of the broader problematics and issues that have traditionally been the mainstay of academic thought in the humanities.

3 Concrete challenges and tips for educators within academic environments

A genuine willingness by individual faculty members to incorporate the study of tools and technologies into a bona fide translation and/or localization program is not singly, in and of itself, the key to its success. Quite the contrary. Professional and private sectors must be aware that academic institutions in particular are not always as light on their feet bureaucratically as some might wish. Any given program of studies (degree, certificate or diploma) is usually planned two to three years in advance. Once the institutional mechanism for the agreed-on planned changes is set into motion, it is difficult to reformulate or modify them without facing serious obstacles, if not downright opposition. For technology-dependent courses, this can be a challenge, due to the constant updates and version changes in existing software and the continual introduction of new software tools in the market. In this regard, continuing education programs are usually better poised to justify the need and to introduce new courses on the fly from year to year, should the case warrant it. However, given that these courses are usually either non-credit or offered as continuing education credit, this poses a dilemma for students who wish to earn academic credit that is valid as a unit of measurement recognized by institutions of higher learning for the fulfillment of standard higher education requirements.

If the goal of studies in translation and localization technologies is to achieve more than just meeting immediate market demands (for skilled translators adept at managing the tools), then professionals and academics will need to engage in more serious discussion. First and foremost, professional and academic goals must be translated and adapted into a language of working terms that allows both domains to understand, and in so doing communicate with, each other. If professional workplaces need graduates who are prepared and ready to go, capable of integrating easily into the world of work, then they must be prepared to make their case to the academic community and administration which will sign off on creating and maintaining the necessary infrastructure for the professors. If academic institutions wish to prepare graduates for a realistic future and career in the world of work, then they must be prepared to make their case to the professional community as to why "education" is more important to them at this stage than "training." Given the current solid scholarship and research on philosophies and sociologies of technology in academic disciplines other than translation, there is no reason to think that this is not possible to do in translation and/or localization studies. Theory and practice can productively nourish one another. However, in addition to theory, there must be practice, and this entails first-hand use of the technologies being discussed.

Although circumstances will differ worldwide (even city-wide) for every academic institution hoping to create and instate a firm technological component within a program of translation and/or localization courses, the following areas to take into consideration during this process will generally prove useful:

a. Facilities

The importance of facilities, usually in the form of labs, cannot be underestimated.

- Is the lab a dedicated one, specifically designed for translation and/or localization technologies and software, or is the lab shared with members of other departments within the university? If the lab is a public one designed to service other university needs, then concrete questions to the lab's technical administrator will need to be asked in advance regarding compatibility with other existing software applications, network security and firewall issues, student user rights, etc. In a dedicated lab, the translation and/or localization program can exert a certain degree of control and maintain firm policies; in a public lab, this control is not possible.
- Is the lab going to be used for classroom time and also available to students for practice on their own? Who will students consult if they experience technical problems?
- Where will students save their data? If they save their work to temporary folders on the local drives, will they have access to their files when they log in to work the following day?

b. Software

Software applications must be acquired, installed and maintained. It is important to remember that even though software developers and vendors do offer academic discounts, the software applications themselves have not been designed exclusively for an academic environment (contrary to language-learning software, for ex.). You may discover that the problems you typically expect to find while installing the software in a business organization will be aggravated considerably in an academic lab, if the lab has been set up in a way that is not receptive to the logic of the software (the need to write and modify the registry for ex.) or if lab administrator experience is limited to language-learning environments, etc.

- Acquisition of software

Researching the software that is currently in use and available can sometimes prove daunting for the uninitiated. It is important to seek information on the pros and cons of specific software from those who

already have experience. Networks and discussion groups established by translators, localizers, project managers, developers, etc. on the World Wide Web (Yahoo groups, for ex.) are also illuminating and instructive. The decision on which software to acquire must be an informed one. Does your local market differ from the international, global market in terms of the tools and applications used? How many sessions will be devoted to learning the software? How much can students realistically hope to assimilate and *learn*? (Perhaps it is more beneficial for basic concepts and functions to be discussed in class, and for real practice to take place in the lab by students on their own time. There is much to be gained for the students when they work on their own, in pairs, or in small groups, to supplement their classroom learning by learning to learn through software help files, inter-peer assistance, etc.) At least a couple of tools for comparison and contrast through conceptual design is very educational for students, for ex. learning a tool that functions by interfacing with standard office suite packages, versus a tool that functions in a standalone environment.

Once the decision is made about which software to acquire, the institution must provide clear information as to 1) who in the institution is responsible for payment and what the channels for payment are; 2) who is responsible for liaising with the vendor salesperson and vendor technical support; 3) who is responsible for negotiating the terms of the contract and determining how the terms will be met; and 4) who is responsible for liaising between the academic department and the university lab's technical administrator.

Finally, unless funds have already been specifically earmarked for translation and/or localization software by the institution, it is going to be very difficult for most programs to have enough in their budgets for purchase of these tools. This is a very real problem that software vendors must be aware of. Not every academic institution is in a position to afford purchasing the software and regularly paying for maintenance fees and technical assistance. Does this mean that only students who can manage to attend a more generously funded university should have an opportunity to learn these tools? This would impose yet another kind of digital divide one that in reality does not have to exist.

- Installation of software

First-time installers of the software should not automatically assume that everything works without taking the necessary steps to test for basic functionality. If the lab's technical administrator is unfamiliar with the fundamental functions of the translation or localization software, the professor may very well be called in to do the testing him or herself. In this case, it is imperative for the professor to create a list of the problems and to communicate effectively with the lab's

administrator. Admittedly this is more often the scenario that plays out when programs are using a university public lab. If the university, department or program is short-staffed, it will be impossible for one administrator to know all the technical nuances of each and every application installed for every department within the school. The professor may become the key person liaising between vendor technical support and the university technical support. Software vendors and technical support should keep in mind that job requirements for university professors include program administration, student advising, teaching, writing and research - not technical support. If the professor becomes laden with too many technical problems, in all honesty he or she will be more inclined to drop the project altogether because there is simply not enough time and incentive after a certain point.

Once the software has been installed and tested, the professor and the technical administrator of the lab must agree on how students will set up their accounts, access the applications, save and retrieve data, etc. Testing a student account for the basic procedures you will have them carry out in class or on their own is vital. Once students understand the "best practices" to follow, they will not have a problem. It is important for the software installation to be correct and reliable in terms of its functionality, otherwise the professor will find the task of grading student homework difficult, particularly when trying to determine if the student experienced an installation error, a software error, or comprehension error.

- Maintenance of software

Once the software has been acquired, installed, tested and used, it must be regularly maintained. Several problems may emerge. First, it is important for both students and faculty that new versions of the software not be installed when the semester is already underway. Depending on the degree to which the software is modified with each successive update or new version, the exercises prepared by the professor will need to be adjusted and adapted. New files and content might need to be prepared. There are no textbooks or workbooks on the market for professors of this subject, so every professor in every institution, unless there is sharing of resources, is creating content and exercises for the students on his or her own. The content and exercises are indicated in the class syllabus at the beginning of each new course, and should remain relatively fixed until the end of the term.

As mentioned earlier, it is also important for lab procedures to be clearly outlined to the class at the start of the term. It is the responsibility of the professor and technical administrator of the lab to ensure that students are *technically* capable of fulfilling lab

requirements and procedures. Likewise, a faulty installation or the appearance of a technical bug in the software may cause a class to be rendered useless for the week. If we take into consideration that most academic terms will only allow for a total of 35 to 45 hours of on-site contact between professor and students in the classroom (equivalent to approximately 1 week in professional private sector work), we can see that every minute does indeed matter.

c. Professors

My assumption thus far in this paper has been that translation (and/or localization) technology-related and -dependent courses are more often than not going to be created and imparted within already existing translation programs. In most cases, this means that translation professors will either have to make a concerted effort to learn the technologies first (in order to administer and/or teach) or have to hire new professors with the appropriate work experience. The supply still does not meet the demand, despite the appearance in the academic marketplace of recent graduates of programs already in place. For those who have had experience setting up and teaching technologies and tools in an academic environment, the challenges mentioned above may already sound familiar. For those who have left behind full-time professional work to embrace full-time academic work, there are additional factors to take into account. Working full-time in the professional world means that one is in daily contact with the technologies and the changes taking place regularly and rapidly in the professional domain. These changes are assimilated while procedures are refined with daily practice. It is crucial that full-time professors committed to teaching these technologies receive every possible means of assistance to keep up to date, as the disconnect from the daily world of professional work can very quickly translate into a Sisyphean task of trying to keep up with the profession, the industry players and trends, the software, the installations, the troubleshooting, the preparation of realistic materials and content, and so on. Physically teaching one basic class on computer-assisted translation software involves precise coordination and collaboration between and among several parties. If one component in this network of relations falters or disintegrates, the whole teaching project may come to a screeching halt. As for highly complex localization projects, communication among the parties involved - lab, software technical support, university technical support, etc. - is of paramount importance. Professors must be prepared to be pro-actively engaged in the endeavor.

It is also worth reiterating that academic institutions do offer more than one type of possible infrastructure for housing translation technology and localization programs. For those universities wishing to teach translation and localization technologies, it may prove useful to consider a few options, i.e. to: 1) offer single, individual courses or

small certificate programs for full academic credit, with the sole goal of introducing concepts and basic functions to the students (Concordia University); 2) offer in-depth full-fledged localization programs for continuing education credit, and developed in partnership with companies and organizations with expertise in the field (see for ex., Austin Community College and Language Weaver; California State University at Chico and Lionbridge; Université de Montréal FEP, etc.); 3) offer full-fledged degree and certificate programs for full academic credit, through university, institutional and governmental grants and funding (Kent State University's Institute of Applied Linguistics; the Monterey Institute of International Studies; the Université de Québec en Outaouais and Language Technologies Research Centre; the Université de Montréal, etc.)

d. Students

Student profiles continue to change, sometimes dramatically. Whereas the average full-time university student two decades ago could safely be portrayed as in their early twenties and lacking professional work experience, today's full-time university student not only includes the "traditional" profile but also thousands who are returning to university studies at a later age, after having acquired some, at times extensive, experience in the professional workforce. It is important for translation and localization programs to "know their students". On one hand, programs may wish to provide young, inexperienced students with a solid base in fundamental concepts, theoretical and practical, which are complementary to their overall general university education. This would allow the students exposure and give them a sense of areas they might wish to specialize in through subsequent training and education. On the other hand, programs may choose to target working or temporarily unemployed students wishing to upgrade their skills for immediate (re-)integration in their current organization of employment or in the marketplace. These decisions will have a direct impact on the infrastructure, resources and sources required.

4. Sources and resources - towards a new paradigm of collaboration

To take up Logan and Stokes once again, perhaps the most effective option resides in creating authentic "situations of interaction, dialogue and collaboration," not only locally but also regionally and globally - and on multiple levels.

One such option is academic/non-academic collaboration. While some translation and localization programs will choose to target the lucrative multinational or corporate sector and to forge teaching and internship links directly with industry and the professional world (and in so doing, profit from the most current technologies, research and knowledge available), other programs may opt to collaborate with social services, non-profit

organizations and NGOs on concrete projects so that their students may acquire hands-on experience in a setting that has fewer means at their disposal but whose needs are nonetheless equally as pressing.

Another option is inter-university collaboration, which would allow for the sharing of resources and knowledge. The Localisation Research Centre, based at the University of Limerick in Ireland, has been particularly active in both articulating the need for shared intellectual and technical resources around the globe, and proposing programs based on their negotiations with professional software providers which would allow a greater number of institutions to provide courses in translation and localization technologies, and expose a higher number of students to software applications and typical multilingual project processes and procedures. One such collaborative project is GILC, the Global Initiative for Local Computing. Likewise, the eCoLoRe project has been a remarkable attempt to combine partners, resources, and content for trainers and educators of translation and localization technologies through the Web.

Yet another option is inter-institutional and inter-organizational (academic and professional) collaboration. A case in point would be TILP (The Institute of Localization Professionals), responsible for the Certified Localisation Professional (CLP) Programme which certifies successful completion of localization courses provided by TILP-accredited organizations throughout the world.

5. Conclusions

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