Asymmetries in the teaching of translation technology

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Abstract. The teaching of translation technology in a face-to-face environment involves the problematic presence of computers in the classroom. In many cases, the computer screens can hinder or replace teacher-student communication. However, computers offer various commonsense alternatives to the classical teacher-centered translation class. Students can do group work, interacting directly with the screen. However, in some cases, interactive teaching means doing away with computers altogether. Discussion of these problematics in terms of the normal asymmetries of the classroom (teachers and students are equal in neither number nor power) may lead us to see computer-based technologies as a liberating redistribution of power, since students become relatively free to work in their own groups and at their own pace. Questions should be raised, however, about the relative loss of a learning community, and more importantly about the apparent transfer of authority from teacher to technology. When analyzed in terms of asymmetry rather than symmetry, translation technologies do indeed replace the teacher with respect to the generation of translational alternatives. Yet they offer virtually no guidance, and little pedagogy, at the moment when trainee translators have to select between alternative renditions.

Teaching is a profoundly asymmetric activity. Teachers are supposed to know things; learners are supposed to be learning things. Any equality, as teachers and students engage in shared discovery procedures, is surely illusory, no matter how much theory is thrown in that direction (“social constructivism” and the like). What happens, however, when computer-based technologies enter the classroom? Now we have three-way interactions: teacher, student, and technology, at least to the extent that translation technologies have various kinds of voices. That changes things. In principle, technology makes information and processes available to all. It

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could have a great equalizing effect on traditional classroom asymmetries. It
would decide what works, and what fails. Or is this leveling also illusory?

Here we shall pursue this issue by considering two practical considera-
tions. First, how do teachers and students interact spatially when computers
are present? Second, more conceptually, what general relation might there be
between translating and the tools available for the task? Both questions
concern asymmetries, and both might receive a common kind of solution.

But first, let us explain why the questions are of some importance.

What can go wrong

The teaching of translation technology is worth discussing because it can be
done badly. The following notes are based on passing observations in recent
years:

- Everyone teaches technology in the hope and belief that it will make
  translating more efficient, in one way or another. However, few curric-
  ula bother to include touch-typing, which is the basic way translators
  can make their work faster.
- Translation technologies are thought to be difficult, so they are placed
  toward the end of a program of study. This ensures that students first
  get used to translating without the technologies, and then have no time
  to get used to the technologies in their normal practice sessions.
- Translation technologies are often taught in one class, and translation in
  another. Since the teaching staff do not communicate with each other
  about such things, the technologies are not used in the translation class.
- At one university, translation courses are given in a traditional
  classroom, where the students write with pen and paper. But the univer-
  sity is not deprived. Some 50 meters away it has a superb computer
  laboratory, mostly empty. The translation students never go there, since
  it belongs to the Computer Science department.
- One large translation school has more than 3,500 students, who are
  supposed to learn technology in a computer room with some 15 com-
  puters. This is one of the world’s most prestigious schools.
- Yet another school, similarly prestigious, has invested respectable sums
  in hardware and software for training conference interpreters. All that
  technology lies idle, since the teaching staff has not learned how to use
  it.
- The same school has computers installed in the interpreting booths,
  since students should be able to use them while interpreting. None of
  the computers work. They have not been repaired because none of the
  teachers or students feel the need to use them.
• Another school has two large language laboratories, equipped with booths and tape-recorders. The technology was installed in the 1970s. The rooms are no longer used.
• Many centers buy computers and fail to contract technicians for their maintenance.
• Many centers then ask themselves why the computers are full of viruses after the students have used them.
• And so on.

We could all add a case or two. The solutions are fairly obvious, and there is no need to insist on them here. Let us just insist that, in most instances, the problem is not in the technologies, nor in the students, nor in the money required. The real problems are on the level of policy, coordination, and communication between teaching staff.

Those problems also affect the very spaces we work in.

Where is the teacher?

Policy and coordination (or the lack of it) determines how technology interacts with our teaching spaces. Since most traditional teaching is done with the teacher at the front of the class, rooms full of computers tend to

Figure 1. A full-frontal teacher at work
have the teacher at the front of the computers (typically as in Figure 1). What happens? Look at the photo in Figure 1. Only one student is actually looking at the teacher; the others are gazing at screens, and the teacher has no idea what they are looking at or doing. Soon the students are interacting with the screen, not the teacher. They circulate notes, laugh at secret jokes, do their email, indulge in off-topic images, and other assorted expressions of individual liberty. Not much actual teaching can be done like this. Either the computers are in the way, or the teacher is in the way. After a few minutes of this, any intelligent teacher will give up competing with the screens. A task is set, the students start a practical exercise, and the teacher can move around to offer individual help where needed (Figure 2).

![Figure 2. Over-the-shoulder teaching](image)

There is much to be said for this. Now the teacher can see what the student is doing, and individual problems can be solved. On the downside, one loses the “eavesdropping” effect of communication with the whole group, whereby one student asks a question and the whole group benefits from the answer. Further, the student here is not seeking help from her peers; she has no need for a learning community of any extensive kind. In many cases, the solutions found in the teacher-student-screen interaction here could equally be found in student-student-screen interaction, as in Figure 3.

In our postgraduate courses in Tarragona (which is where these photos are from), we now mostly make students work in twos at the one computer, simply so that they talk with each other. This socializes the learning process,
preventing lost sheep from suffering in embarrassed silence. Two quick notes on this:

1) If one student has hands on the keyboard for one class, then the other student is doing the typing in the next class.

2) Only in rare cases will students with advanced computer skills repeatedly work in tandem with students needing technical help. This is a great idea (effectively have the advanced students be the teachers), but the advanced students tend to get frustrated then bored, and the not-so-advanced students become even more embarrassed. In classes with technology, tandem pairing is better done by putting together students with similar technological competence. More generally, in all translation classes the pairing should be done on the basis of different L1 competence, rather than technological competence. For example, an L1 speaker of English is made to work with an L1 speaker of Spanish. This encourages a kind of symmetry of peer support that is not found with respect to the more critical variables of technological competence. (For project work, the groups are of four or five, and the dynamics are quite different.)

For some activities, particularly post-mortem analysis of group work, the best teaching space is created by getting rid of the computers altogether (Figure 4). Here we find a return to the primitive technologies of printed paper and people actually looking at each other. Not everything is best done electronically.
Where is the teacher in these photos? When we analyze the photos in our teacher-training seminars, some participants eventually answer: The teacher is in the computer (except for the last situation). All our courses do have web-based lessons, so this is literally true, at least to the extent that the website contains previous input by the teacher. However, all translation tools these days come with their own Help files, tutorials, and online back-up, either official or unofficial (students can solve many problems by searching the archives of discussion lists). In fact, there is so much information on the technology that paid classes should not be necessary. Anyone with average computer literacy and search techniques can find it all on the web. In a very real sense, then, much of the teaching is indeed done from within the computer screen. Human teachers are just there to point the way and then provide moral support when things go wrong.

Except for the last photo, of course. Something different seems to be happening there.

![Figure 4. Back to people-with-papers](image)

**Designing the teaching space**

The teaching space depicted in these photos can be represented schematically as in Figure 5. Some of the shortcomings are clear from the photos and comments above. Most seriously, the room is arranged so that the teacher is supposed to be at the front (this is a teacher-centered learning space), which
means that teacher-student communication is hampered by the surrogate teacher (and everything else) that is in the computer screens. Yes, teachers can get around the problem by moving about the class. But in this particular case the teacher can only get to the students at the left of the class by jumping over four other students (and their chairs, which threaten some delicate parts of the male anatomy).

![Figure 5. The world’s worst teaching space?](image)

In various teacher-training seminars, we have given the elements of Figure 5 to teachers and we have asked them to rearrange the same elements, in the same space, in such a way as to solve all the practical problems. So far, the
winning answer is the one given in Figure 6, which is actually inspired by a computer room at Monash University in Australia. The advantages here are that, thanks to swivel chairs, the students can see both the screen and the teacher, and the teacher can see what the students are doing on their computers.

Of course, the solution in Figure 6 is now outdated. In Tarragona we no longer use the desktop computers depicted in the photos. Students bring their laptop computers (we supply a few to those that do not) and they put them on the one large table (Figure 7). Wireless Internet connection makes this easy. Everyone can see everyone (the laptop screens are smaller and do not block vision); there is a beamer projecting onto a screen at the teacher’s end of the table; the teacher can move around the table easily; students form groups as the tasks require.

The general point is that serious thought must be given to the spaces we work in. Empowerment begins in architecture.

Figure 7. The classroom as a moveable feast

Time

Workspaces also involve time. If you are going to teach a class with computers, you need time to set all the equipment up, for the students to find the right place, and for tasks to be completed at various different rhythms.
For all those reasons, the class must last at least two hours (ours are actually two-and-a-half hours, with an optional coffee break in the middle). If not, you are wasting your time.

An even better solution is not to have time frames for the teaching process. When our student groups are given projects to complete, they usually have about 10 days in which to work. What they do in those 10 days, and where they do it, is their business. The classroom space is there, but the students take quite naturally to working from several different locations (there homes and, sometimes, places of work), communicating electronically. Daniel Gouadec recommends that all teaching should be like that. Unfortunately, many of us have institutions that like to divide the world into hours.

**Gender**

The most obvious asymmetry in the teaching of translation is gender. As can be seen in our photos, the vast majority of our students are women. Unfortunately, almost all our teachers are men. We might pretend that we are fighting the gender divide by teaching traditionally male-dominated technologies to women. But that is the kind of lame excuse one puts in EU funding applications. A serious imbalance still remains, and pious platitudes will not be enough to change the situation.

**Categorizing translation tools**

Here we shift gears, although we would hope to be moving in the one direction (as might become clear at the end).

How should we categorize the array of electronic technologies available to us? If the technology teaches, as we have suggested, can we say in what way the different technologies teach translation?

Frank Austermühl, more than anyone else, has given several good answers to the problem of categorization. They are good answers because they involve thinking about translation as well as technology. The first answer (in Austermühl 2001) is given in Figure 8, where we find translating divided into a three-part process (reception of source text, transfer, formulation of target text). Some of the electronic tools are mapped onto the reception process (all the data bases of various kinds), others help the formulation process (more data bases, presumably in the target language this time), and still others correspond to the transfer process (are these “culturally sensitive information systems” then bilingual?). Most interestingly, there are then “direct transfer” tools, which seem not to involve translation (translation memories do not actually translate?), or better, they do not involve the psychological processes of the translator.
There are many interesting questions that could be raised on the basis of this diagram. However, let us just insist on the incredible symmetry of the picture. Left and right balance perfectly, and top and bottom are by no means out of kilter. Translating is a symmetrical process, and so are its technologies, suggests Austermühl.

Austermühl has more recently offered a second categorization (Figure 9, in fact reproduced in Austermühl’s paper in this volume). Here the picture is rather more sophisticated. The three-stage translation process now only occupies the right-hand half of the space. The “direct transfer” tools have developed into a whole second half of the universe, on the left, where they belong to localizers. In the middle there are tools shared by both localizers and translators. Note, also, the intriguing division of objectives. It seems that localization is only interested in productivity (efficiency, money). Translators, on the other hand, have tools to help them with knowledge, as if efficiency were not part of their real nature. As a map of the way two professions might meet, the diagram has considerable conceptual elegance. Once again, note the beautiful symmetry.

Is there any reason to think that our technologies, or indeed our work processes and professions, are really so perfectly balanced?

Let us try a slightly different model. Translators, let us suppose, basically offer competence in a two-stage problem-solving process (from Pym 2003):
• The ability to generate a series of more than one viable target text (TT₁, TT₂ ... TTₙ) for a pertinent source text (ST);
• The ability to select only one viable TT from this series, quickly and with justified confidence.

This is not quite the same as the traditional reception-plus-formulation model used by Austermühl. We would hope it is rather closer to what happens in the learning process, where students spend their time solving problems in a profoundly intercultural space, without any clear separation between the source and target sides.

Now, which tools help us to generate alternative renditions? Almost all of them, surely. The more data bases you have, the more alternatives you can produce. This has been the most profound revolution in the way translators work. Years ago we used to wade through dictionaries and libraries; now we have instant access to more information than we need. Even the most faulty translation memories suggest alternatives, which the human translator does not always discard. Technology has brought about several explosions in the generational side of translation competence.

More problematically, which tools help the translator to select final renditions? Very few, we suggest. Only in the case of solid, up-to-date field-specific glossaries, and in deceptively trivial examples like spell-checkers, could we say that the tools allow us to select with full confidence. And in those cases, of course, we are no longer using the psychological processes of translating. We do not have more than one viable alternative; we are in the realm of Austermühl’s “direct transfer”; we are pushing buttons that a non-translator could push equally as well.

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<th>Translation and Localization Technology</th>
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<tr>
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<td>Quality Assurance Tools</td>
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<td>Project Management Tools</td>
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<td>Workflow Systems</td>
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<td>Content / Globalization Management Systems</td>
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<td>Translator / Knowledge Tools</td>
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<td>Term Extractors, Term Bases, Term Bases (Glossaries)</td>
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<td>Translation Memories Back Ends</td>
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<td>Localization Tools Back Ends</td>
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<td>Specialized Websites and Newsgroups</td>
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<td>Multilingual Knowledge Management</td>
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Figure 9. Translation and localization technology categorized (Austermühl 2006)
When it comes to the second part of translational competence, when the translator has to choose between alternatives and there is no absolute determination of which choice is correct, the technologies must fade into the background. Translators make those choices themselves, as humans solving human problems.

From this perspective, the impact of electronic technologies on translation must be seen as producing a marked asymmetry. We can generate a thousand possible translations, but we are in our own professional space when we select the one that is our translation.

**Boucle**

Why should a teacher push the computers aside, sit down and talk with students face-to-face? Why go back to paper in some situations? Why have everyone sit around a large table?

Because, quite simply, the most translational part of translating requires us to make decisions for which there is no certitude, no absolute authority. To teach that particular competence, one must discuss, suggest, converse. The teacher cannot convey any ready-made answers. Nor can (or should) electronic technologies.

It has taken us some decades to develop modes of teaching that reduce the asymmetric relation between teacher and student. We have found ways to teach translation without pretending to be absolute authorities. We have learned to live with the imbalances of our situation.

The risk is that we now make the technology an authority. We should not assume that its deceptive symmetries provide answers to all our problems.

**References**
