

Ergonomics and the translator

How to be happy and healthy in a computerised monastery

by Lanna Castellano

Our working lives, we are constantly being told by the media, will be revolutionised by new technology. That revolution has already happened in the lives of translators. More of us are working from home, but no longer at the kidney-shaped dressing table in the bedroom. We are equipped with at least a word processor and telephone, and perhaps a modem for electronic mail, Prestel, dictating equipment, photocopier and telecopier. We can afford the equipment because ours is a high-added-value service industry. As one small link in the information chain, we are sent information in one form, we shuffle it and we pass it down the line, increasingly over the telephone rather than by post or messenger. We extract, sort, reorder, merge, add to and refer to the information in written form (books, documents), verbally (telephone, dictation equipment) and electronically (computer, electronic mail, telefacsimile). We may have never met our clients or know who uses our work. We live in isolation. But (and according to Goethe, *im ubrigen ist es zuletzt die grosse Kunst, sich zu beschranken und zu isolieren*) this means that we are in control of our own working lives. We make the decisions as to how, when and how much we work, in what surroundings and with what tools.

Taking those decisions is ergonomics. Being comfortable with our hi-tech equipment is good ergonomics. Being happy and healthy in our work is excellent ergonomics.

Why is the translator ergonomically different from anyone else

As we have said, home-based translators have discretion about how we order our work to achieve the standards we have set ourselves and meet the deadlines we have accepted. Everybody is subject to constraints, however, and teletranslators have to meet market demands, for example by saying "yes" to their clients although it means working longer and harder than a 9-to-5 office worker. The only muscular demand on us is made by our weighty reference books and the need to sit hours at a keyboard or dictating machine. Mentally, the work calls for intense concentration for reasonably long stretches of time.

New technology gives us an opportunity to work better, more intelligently, with better posture, with less strain. The dowager's hump, the swollen ankles, the hunched shoulders, the writer's crouch and the myopic, furrow-browed peering which have made the translator instantly recognisable (or would have done, had he ever ventured out into public), will become as obsolete as his 1920 *Petit Larousse Illustré*.

New technology – the unions and media tell us – and working with a visual display unit (VDU) lead to complaints such as eyestrain, aching shoulders and neck, migraine, stress, irritability and fatigue. Staff translators may suffer from them, but not homeworking translators. These and worse complaints arise in the open-plan office or at the checkout counter because people of different temperaments, shapes and sizes are told by others how to work and sit, how fast to work. Other people's fingers are on the lighting switch and

the temperature controls. There is no flexibility or adaptability. But what can be more flexible and adaptable than work unit of one? Especially when that one person takes the decisions, which will be all the more considered since he or she is the person who pays for, and earns money to repay, the equipment selected. Translators never have to conform with the average or put up with the mean (in either sense).

What's good for the computer is good for us

The standards institutes tell us what are the optimum environmental conditions for the computer and the word processor. Luckily they suit us very well too. A computer works happily in a temperature range of 18 to 23°C and with relative humidity of 50% to 70%, and so do we. It should be well ventilated, and so should we. The reverse is true, too: what is bad for it is bad for us. Static electricity causes problems to the computer and can lead to loss of text, and both we and the computer will find it pleasanter to work with a cork or anti-static mat flooring than a nylon carpet. Smoking shortens the life of software disks and ours too.

Son et lumière

To an intellectual worker, noise may be more disruptive than temperature or poor lighting or other ergonomic factors. The recommended decibel count for intellectual work is below 55 decibels, although some translators may find even this disruptive. Loudness is not the only consideration: the duration of noise counts, as does its quality. It can annoy but it can also soothe.

Translators are commonly irritated by the constant sound of their VDU unit fan but do not mind the shattering outbursts of a daisywheel printer working at 60 characters a second, partly because it only lasts about 40 seconds a page and partly because it marks the act of achievement: a beautifully typed printout embodying the drafting, researching, revising and polishing that have gone into the translation. Translators say they need quiet, but seven out of ten listen to music as they work (almost everyone to Radio Three, some to the encouraging beat of jazz, few to opera because of the distraction of the words). One says he has three essential tools: a coffeemaker, a Walkman with long-play cassettes and a word processor, in that order.

When deciding where to set up an office in the home, translators should not hog the sunniest room with windows on three sides but, like artists, face north. The advantage of computer-working with a north (preferably top) light is that it is diffused and without strong contrasts of shadow. Direct light falling on the VDU screen creates glare. A reflected image of windows or light source is superimposed on the screen characters, which fade by comparison. When artificial light is needed, a directional lamp creating a pool of bright light over papers and keyboard in a dark room is tiring because the eyes have constantly to adjust between light and dark; the contrast should be reduced by general background lighting. Even better is toplighting, in other words lighting directed towards the ceiling and bouncing off downwards, as it is diffuse, even and shadowless.

The recommended lighting level for office work has been creeping up over the years: from 400 to 500 lux, it now tends to be 500 to 700. The quality of light – its colour, the nearness of that colour to daylight, its stability – is just as important. The steady whiteness of tungsten burning in a halide atmosphere is less likely to trigger off headaches

than the subliminal yellow flicker of some fluorescent tubes.

The many translators who are leaving staff jobs to become self-employed – and a surprising number are doing so voluntarily – say that one of the new joys is having one's own choice of colour instead of civil service cream or decorator's avocado. There is a basic rule or two, like not having a bright red working top since its shape in complementary green would dance before our eyes, but we are free to paint our walls and choose work surfaces in colours – however eccentric – that add to our individual happiness, just as we can hang the pictures on our walls that stimulate or refresh us.

Space-suited

Home-based translators always need more: more house room, more desk area, more shelf space (quite apart from more time and more sympathy from their families). Their desk should be twice as deep as the maker thinks, so that the VDU screen can be used at a comfortable distance from the eyes and still leave room behind for a row of most-thumbed reference books and boxes of floppy disks. In fact a conventional desk is usually a waste of space: what translators need is an acre of work surface to spread out papers and dictionaries, preferably L- or horseshoe-shaped and of fascist proportions. An ideal ergonomic solution to the chore of handling the heavy, two-volume dictionaries that are the translator's staple reference – the Harrap's French-English dictionary, for example – is the two-faced lectern produced by translator-cum-cabinetmaker Roger L'Estrange. Not only do they not have to be picked up but they are at a better angle for consultation than flat on the table. Similarly, a document holder (perhaps on an extending arm) can keep a source language text at the same height and angle as the screen, usually at 80°. All this means that the translator wards off fatigue because he is sitting in the correct posture: upright rather than hunched, head straight or slightly inclined

downward and shoulders relaxed, provided that the keyboard is at the right height for him (the recommended working surface height in Britain is 71-73 cm, in Sweden about 68 cm) as well as his chairseat height (at which the upper half of his legs are parallel to the floor).

Not all the translator's equipment has to be on that precious working surface: the VDU unit can be on a shelf (a very deep shelf, to allow for ventilation), the telephone and answering machine can be wall-hung, for mobility and flexibility the printer can be on a trolley (Habitat has a cheap, smart metal trolley that provides space for stocks of paper too) and the calculator and dictating machine kept on a draftsman's trolley, with the added storage provided by its swing-out drawers.

With telephones, the computer and printer, office machines and music equipment in the home office, at least eight power points and professional wiring are vital for tidiness and electrical safety (and working from home means that children and pets will be around, to brighten up our lives and add to our frustrations). Cables can be trunked below the floor or under working tops.

The ironmongery

The keyboard should be separate from the VDU, because the right working height/viewing distance for one unit would be quite wrong for the other. If the characters on the screen are not clear and steady – and a refresh rate of 60 Hz or more is needed for this – work that involves looking at the screen will be fatiguing (translators do not normally look at the screen when they are keying in the text in the first place, but most of them revise on the screen rather than printing out a copy for amendment).

The brightness of the characters must be adjustable to the translator's eyesight and the level of lighting in the room. Despite what the suppliers say, a tilting and rotating VDU is not

worth paying extra for. When a machine is used by a single author, the position is not generally changed. A lazy susan turntable from the flea market is serviceable, and an unloved dictionary wedged below the unit will produce the optimum angle of screen. Screen colour is less important than novices think; a spot check on ten translators who work with a VDU showed that only four could remember the colours of both characters and background; all ten knew that they were comfortable with them, even though each combination was different. Although all the authors on working with computers recommend frequent visits to the optician, not one translator questioned has reported deterioration in eyesight, more frequent headaches or any problems with bifocals.

The ergonomics of time

We teletranslators can work at hours that suit us, following our own circadian pattern. We alternate a span of concentration – lasting 40 minutes to 18 hours, according to a mini-survey of translators – with a break for a different activity, usually coffee-drinking (or eating toast and butter to avoid having to start on the next job – the main health risk homeworkers suffers is probably over-eating, since they are released from the social constraints of the staff canteen). A more ergonomic schedule would be to iron a shirt or walk the dog every 1,000 words, leaving the mind free to mull over a stylistic nicety. Or sedentary keying in of text could be varied by filing or researching a job standing up, with reference books laid on a chest-height surface. (Victor Hugo was an early, if eccentric, ergonomist: he wrote *Les Misérables* standing up chained to a reading desk, a better posture than Dr. Johnson's crouch).

In large offices, under technology agreements VDU operators are allowed rest periods of, say, 10 minutes in the hour. Translators are more flexible: a demanding text may need more breaks, whereas at times when the adrenalin flows and the words pour out in a stream it would be ridiculous to stop and take a preset break.

Translators as ergo-pace setters

Think about yourself before you decide on your working environment. At what time of the day are you at your best? What colours stimulate you to work? How

do you like to sit? Know yourself and experiment. Don't splurge on an expensive typist's chair unless the shop lets you try it out for a fortnight first. Measure your ambient conditions: have a thermometer and hygrometer in your office, borrow a light meter from the lighting shop to find out how light your office is in the day in the evening.

There are few absolutes in ergonomics. If it is right for you, it is good. But this doesn't mean you shouldn't look around you or take note of what the experts say, bearing in mind that their word is not final: they themselves change all the time, and you could tell them more about your needs and work than they can tell you.

Don't assume you have made the right decision: be prepared to evolve, to look at fellow translators working and see whether they have developed better solutions, invite them in to criticise your working arrangements, make known your needs to the suppliers and ask them to meet them; if they can't, commission to your own design.

Translators today are sophisticated creatures, and they should be setting the ergonomic pace.

Bibliography

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