

Teaching consecutive interpreting

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The authors provide two perspectives on the teaching of consecutive interpreting: The pragmatic approach and the cognitive justification. Consecutive interpreting is described as requiring outstanding skills in language comprehension and production; the article provides relevant exercises to enhance these skills and features an overview of CI practice and teaching. It concludes with a list of references of published and non-published sources dealing with the wider aspects of the CI process.

1. Overview of CI activities

1.1. *Outstanding consecutive interpreters who left no written record of their craft*

Paul Schmidt, who learned his trade on the job for the German diplomatic service, is reported by the French historian and politician Jacques Benoist-Méchin to have worked with the utmost fidelity at high-level political talks. The same has been said of Günther Haensch, himself a graduate of the Geneva Ecole d'Interprètes, as it was then called, and a former chief interpreter at the European Coal and Steel Community; he later succeeded Schmidt as head of the Munich school. Other alumni of the Geneva school (founded in 1941) were: Francisco Morales Macedo, who moved back to the Americas early in his career, where he worked for the World Bank; Eric [Rappeport] Longet, who worked for the ILO and also taught at the former Ecole d'Interprètes

(now ETI, Ecole de Traduction et d'Interprétation, Université de Genève), where he advocated an elaborate system of 2000 symbols; Vera Vicari, one of the luminaries of consecutive interpreting (CI) who worked for the European Payments Union, and also taught at the Geneva school; Marie-France Skuncke, who made her début at the Nuremberg trials and spent many years as a member of the ETI faculty (she was Seleskovitch's teacher at the then reputed HEC school in Paris); and Walter Keiser, who ultimately became head of the interpretation department at ETI. It is most unfortunate that none of them have left written records of their teaching methods. The same must be said of (Prince) Constantin Andronikof, who wrote countless reports as President of AIIC but never anything on consecutive interpreting, not even in his gentlemanly introduction to Seleskovitch's first book *L'interprète dans les conférences internationales* (1968). His career revolved around the Quai d'Orsay but he taught both at HEC and ESIT for many years, where I was lucky enough to catch some of his legendary courses when I was active there myself. They were brilliant performances, superbly articulated and immediately useful. His students used to say, "ces cours généraux, c'est être reçu à la cour, et c'est généreux".

Roger Glémet, apart from being an outstanding translator (and head of the GATT language services), was also very expert at CI, as was Georges Lafrance, who learned his trade with Boris Desfontaines at the CCC in Brussels and later joined Glémet's team at GATT where he eventually succeeded him. Lafrance was the one who interpreted, in consecutive, André Philip's hour-long, uninterrupted presentation of the newly-born European Common Market before the High Contracting Parties and earned more applause for his tour de force than the speaker himself. I worked quite often with both Glémet and Lafrance and always acknowledged their towering superiority. They did not take their notes in any systematic way, but both of them had a stupendous memory, and they were outstanding linguists, articulate and eloquent. Unfortunately, neither taught consecutive interpreting or wrote about his craft.

1.2. *Survey of publications on CI*

The very first publication on conference interpreting, by Jean Herbert (1952), former chief interpreter of the UN in New York, devotes a few pages to CI that are still worth reading today. His own style was that of the self-taught pre-war

old guard (Paul Mantoux; the Kaminker brothers, André and Georges), a brilliant summary, or at times a mere paraphrase based on minimal notes.

Unquestionably, the book all aspiring interpreters ought to turn to for the acquisition of CI skills is Jean-François Rozan's (1956), a classic. At the time of publication it was reviewed with great insight by Stefan Priacel (1957). Rozan based his note-taking on a thorough linguistic, semantic and cognitive analysis of the original, together with his own perceptive way of dealing with equivalent reformulation and effective communication. Above all he stressed the importance of abbreviating intelligently, keeping symbols to a mere handful. His main recommendation was to take down notes as much as possible in the source language — apart from standard short words such as connectives, taken mostly from English and used irrespective of the language pair — so as to avoid interference from the target language before the message was to be reproduced.

I studied under him in the 50s at the former Ecole d'Interprètes and subsequently shared consecutive assignments with him at ECE meetings of the UN European Office. Rozan and Robert Confino (who headed the Geneva UN interpretation division in Geneva) had both been active for the Security Council in New York and were masters of consecutive interpreting. Rozan worked with phenomenal accuracy, but relied mostly on memory; he hardly ever looked at what he had conscientiously taken down.

The Ecole Supérieure d'Interprètes et de Traducteurs (ESIT, Paris) never thought much of note-taking as an underpinning for CI and this field has remained fallow since Andronikof retired. Although Danica Seleskovitch subtitled her second book *Étude de la prise de notes* (1975), she focused on cognitive aspects and dismissed retention and recall as automatic by-products of the comprehension of meaning. Little has changed fifteen years or so later: the joint endeavour entitled *Pédagogie raisonnée de l'interprétation* (Seleskovitch & Lederer, 1989) is sketchy as far as the techniques of CI are concerned. Christopher Thiéry is another example of such benign neglect; the title of his contribution to Jean Delisle's (1981) account of ESIT philosophy is a statement in itself: 'L'enseignement de la prise de notes en interprétation consécutive — un faux problème?'

Wilfried Becker (1972) has contributed a useful, very straightforward booklet in German that was used at the Germersheim school for many years. He is close to Rozan though he recommends using considerably more symbols. Still, Becker's recommendations are extremely reasonable compared to

Matyssek's pictorial representations. Heinz Matyssek (1989) opts for a very systematic and detailed code of drawings and symbols, so much so that beginners tend to perceive his approach as an interpreter's shorthand and give up listening to the message. As a long-serving member of the Heidelberg school Matyssek taught generations of students. Despite his forbidding Germanic prose his method has exerted considerable influence: quite a number of 'Diplomarbeiten' at the Heidelberg and/or Vienna schools have discussed note-taking as a subject-matter in its own right (Lampe-Gegenheimer, 1972; Daller, 1986; Seemann, 1989; Skerra, 1989; Hegels, 1993). Some of Matyssek's followers found their way to a more personalised form of 'Notizentechnik' or introduced adaptations to cater for other languages. Sergio Allioni (1989) for his part defined a fairly structured 'grammar of consecutive interpretation' using English and Italian syntactic rules together with a moderate number of symbols.

A 'second-generation' evaluation of the Matyssek 'note-taking method' might be of interest to future researchers. The fact is that his persuasive personality and clever use of quips lent wide currency to such concepts as "sprachunabhängige Notation", "Auf-Lücke-Schreiben", "Platz-Aussparen", "Eine [Rede] Notizennahme ist keine 'Schreibe', sondern eine 'Male'". The danger however lies in teaching students some sort of pictorial Esperanto along the lines of Yraga's *Escritura ideada para uso internacional* (1988).

Ruth Willett (1974), a seasoned professional who also taught at the Heidelberg school, provided a counterweight of sorts to Matyssek's more extreme views. So did the legendary Hella [Helene] Kirchhoff who, though not an interpreter herself, was active for many years in the Italian department at Heidelberg. She held out the promise of an eagerly awaited *Didaktik des Dolmetschens*, which some were able to see in draft form (1974) but which remained unpublished. Kirchhoff's article on 'Notationsprache' (1979) is an interesting, more theoretical article which looks at the note-taking process according to linguistic categories.

David and Margareta Bowen (1980) wrote a stimulating primer in English which is a 'modèle du genre'. Laura Gran [Tarabocchia] (1979) is the author of an excellent introduction to CI intended for the Trieste school. She is close to the teachings of Herbert and Rozan and adds a limited number of well-chosen and useful symbols of her own. Her book is the Italian equivalent of Becker's book (1972).

The most illuminating presentation of CI in general can be found in González et al. (1991).

Livio HorraKh (1986) provides an analysis of the note-taking process seen from the perspective of a theoretical linguist. It is a highly perceptive account and worth studying in spite of HorraK's penchant for inflated Italian academic prose.

The comprehensive bibliography at the end of this article has been compiled in co-operation with Sylvie Lambert and is intended as an overview of references touching on all aspects relevant to the CI process.

2. Teaching consecutive interpreting

Teaching consecutive interpreting is one step in a chain of successive learning situations designed to develop the skill of communicating orally between two languages in either the consecutive or, later, the simultaneous mode (SI). CI should not be taught right from the start because it presupposes students already have the ability to carry messages across linguistic barriers. This must first be taught and acquired: in simplified, didactically oriented settings in which the analysis and transposition of a known written text are practised (sight translation); to be followed by work with unfamiliar texts and their transposition into impromptu verbal messages; and eventually unknown verbal information should be transformed into an extemporaneous verbal message in the target language.

I would therefore argue that *sight translation* be introduced very early in the training programme, as should a number of similar exercises such as summarising or expanding. Being myself a supporter of shadowing as a prelude to SI training, I also recommend at this stage *unilingual* exercises using written texts first and then verbal information, so that students learn how to syntactically *restructure* and/or *paraphrase* the content of written or auditory input. De Waard (1992) and Fuchs (1982, 1995) among others have confirmed the linguistic relevance of paraphrasing.

Gile (1983, 1986, 1991) gives good descriptions of this important introductory phase. The virtues of sight translation and the process itself are described by González et al. (1991) and Weber (1986, 1990). Kalina (1994) summarises the positions for and against shadowing and takes up the whole issue of CI as a prelude to SI, as does Palazzi Gubertini (1990).

Students will thus become aware of the main differences between a carefully planned written message and improvised speech, and will make use of them in *hybrid* form of partially memorised presentations delivered at considerable speed from detailed speaking notes. It is important to promote awareness of the relative position of texts on the orality-literacy continuum because this type of speech, for which Georges Mounin coined the term 'oral-scriptural' (*Clefs pour la langue française* 1975, Paris, p. 192), is quite often delivered in real-life conferences. Franz Pöchhacker calls this 'Vorformuliert-heit' (1994b:113).

Though linguists are expected to have an interest in words, would-be interpreters must above all develop an eye (and an ear) for *larger units*, for entire sentences and paragraphs. This is an elementary recommendation heard in any speed-reading course. Paneth (1957), a pioneer on many counts, had this in mind when she referred to the concepts of Gestalt psychology. Authors such as Le Ny (1978) further developed the holistic approach to the representation of meaning in SI. Recently, these concepts resurfaced in Franz Pöchhacker's use of 'semiotic whole' (1994a:171) and 'hypertext' as applied to conference typology (1994b:47).

The preparatory phase of CI teaching offers an opportunity to assess students' ability to process and analyse, quickly and efficiently, verbal material of various types: well structured or rambling, clearly delivered or mumbled, with or without a regional or social colouring, delivered at a reasonable pace or at top speed. It also provides an opportunity to explain and demonstrate the principle of linguistic redundancy. Extemporaneous speech, especially if produced by a non-native speaker, is often characterised by hedging, hesitations, corrections, incompleteness and agrammaticality, all of which seasoned interpreters take in their stride and even turn to advantage in order to produce more coherent, clearer and shorter versions.

Building on that, the teacher goes on to explain anticipatory strategies; students would thus become attuned to the most likely continuation and eventual outcome of statements during group interaction (informal discussions, brainstorming) or in didactic settings (lectures, seminars). The vital importance of prediction is underscored by Gile (1983:9) and González et al. (1991:381-382). A detailed treatment of *anticipation*, essentially in a SI

context, — but equally inseparable from CI — can be found in Moser (1978), Wilss (1978), Lederer (1981) and Chernov (1995).

In a CI course trainees need to focus on *speech comprehension* and *production*, i.e. ways of enhancing active listening according to one's personal associative schema (for full, non-selective comprehension), and on how to organise one's thoughts in order to plan a convincing statement (to chart, start, and finish, linguistically acceptable and meaningful sentences). Bowen & Bowen (1980), Gile (1983) and González et al. (1991) all point to the importance of these techniques.

Preparatory exercises to CI instruction proper routinely include *memory* drills without notes. Their main purpose is to let the student discover how his/her memory operates; one can then build on pre-existing skills. Some individuals have a predominantly verbal memory, others are more visual. This ought to be respected when trying out strategies to improve retention and recall, that is to organise hierarchically incoming information into meaningful units for more efficient STM or LTM storage.

When speaking in public we activate a considerable number of *set phrases* or idioms borrowed from parliamentary and judicial usage; they have to be studied by the students prior to tackling interpretation exercises that mimic conferences. Kirchhoff (1976:24, 1977:284) was the first to make this point. As Brian Harris once put it: "Phraseology is as important to interpreters — and to translators for that matter — as terminology" (cited in Ilg, 1985:65). All too often, familiarity with the language of debate and of persuasion (dialectics) is taken for granted. But students need to be aware of this particular register before they can put it to use in a simulated conference (Ilg, 1984, 1989b). Similarly, *public speaking* conventions and rhetorical devices have to be analysed and internalised before students know how to apply them in specific settings (eulogies, toasts, after-dinner oratory).

To sum up: note-taking explanations and demonstrations should come as late as possible in the curriculum. About one third of the hours available for CI instruction *lato sensu* might usefully be devoted to laying the essential foundations before the building is allowed to rise from the ground. Once this has been done, the acquisition of CI skills *stricto sensu* will advance much faster. The return on such prior investment is known to be considerable.

3. Laying the groundwork: A cognitive view

In an earlier article (Lambert, 1988a) on human information processing and cognitive approaches to the teaching of interpretation, I drew an analogy between the distinctive steps a driver would have to master when learning how to drive a standard gear-shift automobile and the successive, hierarchical and clearly delineated steps interpreter-trainees should go through when learning how to interpret. Briefly, these steps involve (1) listening and memory exercises, (2) shadowing, (3) dual-task training, (4) paraphrasing, (5) abstracting, (6) clozing, (7) sight translation, (8) sight interpretation, (9) processing of digits, proper names, technical words and acronyms, (10) lagging exercises, (11) anticipation exercises and (12) left- and right-ear processing exercises. In other words, consecutive or simultaneous interpretation *per se* would be introduced as exercises (13) and (14) once steps (1) through (12) had been properly mastered.

These exercises are staggered in such a way that they allow the students to be gradually introduced to the mechanisms involved during interpretation, first, as Ilg suggests, by asking the students to carry out the exercises in their mother-tongue and without translation (*no code-switching*). For example, students wanting to learn how to speak and listen simultaneously, would begin by *shadowing* material from their A language into their A language. Once this simple yet crucial step has been mastered, students should then be encouraged to attempt shadowing from their B language into their B language. By the same token, memory exercises can first be carried out in the student's A language (listening in English, followed by recall in English) before introducing the student to *code-switching*, i.e., listening in French followed by recall in English.

Ilg's suggestion that CI not be introduced at the very beginning of the curriculum and that CI be introduced before SI is very logical: Although no research has ever been carried out to determine the validity of this assumption, it is adhered to in almost all interpretation curricula. From a cognitive psychologist's point of view, CI and SI fall at the very end of the hierarchical spectrum of complex cognitive tasks, which should only ever be attempted once other more pragmatic tasks have been mastered such as written translation, paraphrasing, sight translation, shadowing and cloze exercises. CI still provides the student with the ability to process information in silence (meaning that the consecutive interpreter is able to take notes in silence, with no

concurrent vocal activity) and is able to take consecutive notes which can only help enhance subsequent recall provided that the interpreter has mastered the note-taking technique. At the very end of the spectrum we find simultaneous interpretation, where the interpreter no longer has the privilege of being able to process the incoming information in silence, and where the pace of delivery is very much dictated by the rate of the incoming information; furthermore, simultaneous interpreters rarely, if ever, take notes during simultaneous interpretation, other than for occasional dates, names and technical terms.

Ilg argues that sight translation should come very early in the training programme, as should a number of similar exercises, such as summarising and expanding a message. I could not agree any more whole-heartedly with him on this point. Based on the premise of Moser-Mercer's definition (Moser-Mercer, personal communication) sight translation involves the transfer of a text written in one language into a text delivered orally in another language. As it involves both aural and visual information processing, sight translation could be defined either as a specific type of translation or as a variant of interpretation.

From a human information processing point of view, sight translation appears to have more in common with interpretation (Moser-Mercer, in press), as a number of variables such as time stress, anticipation, reading for idea closure, not to mention the oral nature of the task, are either absent in written translation or are present only to a limited degree. Moser-Mercer goes on to propose several variants of sight translation. In another article on human information processing and a cognitive approach to the teaching of interpretation skills, the author (Lambert, 1988b) distinguishes between unrehearsed sight translation and sight translation in the simultaneous mode, namely "sight interpretation". Basically, the difference between these two tasks is that during sight translation, the student is able to render a translation of a given text at his or her own pace (internally controlled), whereas during sight interpretation, although students may have been given some time to prepare the text prior to the interpretation task, they are nonetheless expected to translate according to the pace of the speaker (externally controlled) and pay more attention to the input, meaning that what the students hear and what the students see on paper may not coincide (the interpreter trainer deliberately strays from the written version of the speech to ascertain that the student interpreter is paying closer attention to aural than to visual processing).

S.L.

4. Note-taking for CI

4.1. *Should note-taking be taught systematically?*

Some are sceptical (Thiéry, 1976, 1981), and some remain neutral (Seleskovitch & Lederer, 1989). Others view it as fundamental for all first-year students (Matyssek, 1989). However the latter school of thought tends to overemphasize note-taking instruction as a kind of third, pictorial code superimposed on language. The truth probably lies somewhere in between: Becker, 1972; Bowen & Bowen, 1980; Gran [Tarabocchia], 1982.

The consensus among those who have taught note-taking in a systematic manner is that any system should be highly individual but based on common-sense rules of *efficiency* and *economy*.

Note-taking is no more than a means to help overcome memory's shortcomings and could be likened to a crutch. Its use should therefore be restricted to the kind of information which is not easily stored in and retrieved from memory, that is structural aspects of a text, characteristic details (facts, figures, names) and deliberate nuances. However, amusing, evocative or otherwise striking features need not be taken down.

Enough time should also be spent finding the most economical and effective way of *abbreviating* concepts and terms, both on paper and in memory. Only Bowen & Bowen (1980:15-17) have discussed the vital issue of *script* from the point of view of its legibility and unmistakability. Horrah (1986) has reviewed the history of speedwriting and its applicability to CI. This is an aspect of note-taking which is mostly ignored.

Though shorthand has been banned right from the start, in what is probably the earliest writing on conference interpreting, by Antoine Velleman (1943), the founder of the Geneva school, some of the 'consonantic' techniques to abbreviate words and phrases (called 'Konsonantengerippe' in German) are worth looking at: Notescript (Hawkins, 1970), Agili-Writing (Gresham, 1990) and others. Galér (1974) is the only one who has come out in defence of shorthand.

Rozan (1956), Van Hoof (1962, modelled on Rozan) and Ilg (1980, 1982) have defined the *rules of note-taking* as follows.

4.2. *What does one take down?*

An initial answer is: the bare bones, to be fleshed out later, when producing the target language version. Then the *essential concepts* selected (primary information) are made more *general* (superordinates, archilexemes, hyperonyms) and possibly more *abstract*, using appropriate abbreviation techniques.

Interpreters must attend to the macro-text, and the details (the micro-text) will fall into place. But learners are forever on the look-out for acronyms and symbols; they should first get a feeling for the gist of paragraphs and sentences before worrying about words and phrases. They should learn to read the road map before looking for the footpaths in the countryside.

Vague, multisense (media) words such as Aide, Facility, Unit, are some examples of words that can be put to good use in interpreters' notes. Kirchhoff (1974:88, 1979) and HorraKh (1986) described this procedure employing linguistic tools.

Some of the characteristic details (modifiers, stylistic nuances) will have to be put on paper because they quickly fade from memory. But such details should always be seen and recalled in a broader context and carried by the general thrust of the statement.

4.3. *How does one take down the core message?*

One basic recommendation is to capture the main grammatical *constituents* of speech: S-V-O, or other preferred sequences, according to the language pair involved. This was Constantin Andronikof's main advice.

Nouns naturally tend to claim the lion's share of the notes (Lampe-Gegenheimer, 1972; Kirchhoff, 1974:72). This tendency should be resisted, as verbs supply the dynamic components of speech and should therefore not be lost. Arrows pointing in various directions are a common-sense graphical device to represent verbs whenever these verbs serve to assist recall. Straight lines or wiggles are helpful to connect repetitions to their first occurrence.

4.4. *In what form?*

Interpreters' notes can be either (literal) chunks taken from the surface structure, or signs and symbols. In practice they will most likely consist of a mixture of linguistic and graphic features (pictorials, drawings).¹

Surface structure chunks will take the form of simplified letter combinations (anagrams): internal vowels are omitted while plural endings and tense markers are retained. In English, one approach is to look for word roots (Smith, 1972); in Germanic or Slavic languages roots are easily perceived. Another approach is to scan the hundred most frequently used words in a language in order to find suitable abbreviated forms for the longer ones (Eaton, 1967).

Somewhere between *literalness* and *symbolisation*, there are useful polysemic short forms that have gained near-symbolic status (minimal lettering with an abstract aura), for example AKA, ASAP, AWOL, IOU, IQ, OK, KO, MC, PR, 3-D, HQ; disc, fx (forex), hi-fi, sci-fi, hype, info, lab, nuke, VIP. In the same vein, widely used *Greek* and *Latin* prefixes (and suffixes) tend to take on a life of their own: dia, dys, iso, meso, meta, nox, psy, sci, syn, sync, tele, tox, urb, xen. Regular three-to-four-letter-words obviously are very useful as such: ave, cave, bio, crux, dux, dia, geo, lex, pax, rex, vox.

Another source of abbreviations are expressive *colloquialisms*. Examples: hi!, bye!, hype, go!, mart, meet, gee!, go!, gosh!, wow! or 'compact' slang with fancy endings such as biz, pics, prez, nix, ties, of the sort found in *Variety* or *Mad*. Similarly, *typographical signs* can be used to convey puzzlement, indignation (including onomatopoeia used in comics): ?!, !!, **, **, oops!

The same is true of typographical quirks such as U\$, \$¢, Q-ing, to Q, U-turn, X-ing, X-out, X-exam, X-purpose, and Internet smileys used in e-mail communication: :-) or :-(.

Headlines such as used in newspapers is a treasure-trove of conference concepts: ACT, AD, AID, AIM, BAN, BAR, BET, BID, BLA, BUG, BUS, CAP, CUE, CUT, GAP, HIKE, HIT, JAM, KEY, PACT, PAY, NIL, PRO, REP, ROW, TIE, TRY, WAR, WIN. The same applies to zip-vocab verbals, favoured by news editors: to COW, to DUB, to EYE, to GAG, to INK, to NAB, to NET, to NIX, to OK, to KO, to PAN, to RAP, to SPUR, to SPURN, to TAP, to UP, to VET, to VIE.

Paired quasi-words such as bear-bull, Dem/Rep, Lib-Lab, giv(e)-tak(e), hi-lo, hit-run, max-min, pro-con, ups-downs, wax-wane are both compact and evocative, as are dual or triple acronyms patterned like I/O, H/P, Q/A, E/W, N/S, and BoP, M&A, P&L, S&L, \$&¢, £.s.d., S.E.&O., WWI, WWII.

General *abbreviations* and *acronyms* can be put to good use: Pt, ¥, agr, ind, demo, eco, Gvt, pol, pop, soc; cf., do., id., i.a., i.e., op., re, viz.; D.D.D., Q.E.D., R.I.P.; AGM, A.O.B., ATM, ID (PIN), IOU, NB, PS, POS, PM, MP, MEP, RQ, SG, WL, VP. (The set CEO - DG - GM can certainly be used widely ; but MD = Managing Director, a more ambiguous one, is better avoided because of MD = Medical Doctor. The same applies to CD = Certificate of Deposit + Cash Dispenser + Compact Disc.)

Acronyms for institutions, both domestic and international, are welcome because of their currency: FDA, Fed, Frisco, GAO, GOP, LA, NYC, NYSE, CBOT, LSE; LDC, LLDC, MFN, UN, UNDP, UNHCR, UNICEF, UNIDO, USA, US, Us, USAid.

Keyboard classics such as æ, Æ, å, Å, Ä, É, ö, Ö, ø, Ø, û, ü, Ü, ç, Ç, ñ, Ñ, ÿ, £, î, î, î, î, #, *, *, %, &, §, ¿?, ¡!, //, \, \, [], [], { }, { }, < >, < >, « », » «, ¶, ', l, ll, ÷ can be used to convey semantic content beyond their conventional meaning.

Mathematical signs +, -, ±, ~, =, ::, /, ||, ÷, x, y, f, n, $\frac{1}{4}$, $\frac{1}{2}$, log, and scientific symbols A, Å, V, W, Hz, cal, e, dyn, M, µ, gig, nan, come in handy for note-taking purposes.

Superscripts (and subscripts) are a feature of Rozan's notes: *att*^o for 'attention', *1*^a for 'first' (and also *1*^a, or *1st*) ; *pro2* for 'promote'; *bla2* for 'bla-bla' and *bla3* for 'bla-bla-bla'; *val* and *_val* for 'overvalue' and 'undervalue'. Rozan was also the first to recommend a little square □ to take down 'country', 'State'; so □s could mean 'several countries', together with □² and □³ for 'few countries' and 'many countries'.

All this goes to show that the emphasis should be on activating prior knowledge instead of imposing on students novel systems of encoding meaning in an abbreviated form. The best is to remember one's schooldays and retrieve old textbooks in mathematics, the sciences, and classical languages.

In general, abbreviations with two (maximum three) signs (characters) are considered optimal: *ec* rather than *eco.*, *po* rather than *pol.*, *ie* rather than *viz.*, *agr* rather than *agri.*, and *dem* rather than *demo*.

Single or double *underlining* helps to differentiate according to intensity:

aid (unqualified), aid and aid to indicate larger-scale assistance. The same applies to using lower-case vs. upper-case letters: *aid* (unqualified), *Aid* (larger-scale) and *AID* (massive); or *to ban*, *to Ban* (severe), *to BAN* (absolute).

It has become clear by now that such abbreviating and enhancing devices can serve a useful purpose quite irrespective of the language pair in which the interpreter is working. Rozan's recommendation to take notes in the original language was quoted above (1.2.). This is in stark contrast with the position of Seleskovitch & Lederer (1989:48) that notes should be taken in the TL.²

Interpreter's notes are basically a *network* of adjacent and intertwined meanings replete with cross-references (arrows pointing in all directions, linkages, connecting lines). *Tiering* — which Rozan typically calls 'verticalisme' — contributes to a 'visual' presentation of the ideas taken down. Graphically, this is achieved by indentation. Good examples of this can be found in González et al. (1991:387-392).

Students should therefore strive to develop a type of layout that carries meaning. The location on the page of a given abbreviation or sign should in itself convey some additional meaning (parallelism, precedence, subordination, anteriority-posteriority, cause-effect, origin-destination, active-passive). This is definitely more productive than an array of abstract symbols used regardless of their relative positioning.

Structuring and *tiering* as a reflection of ongoing linguistic and semantic analysis also serve to reinforce the *memory* trace. The Heidelberg motto used to be: 'Innere Auseinandersetzung mit den Notizen', which is indeed a way of securing evocative notes that support recall, with one important proviso, that note-taking should not compete with active listening to the point of hampering it. Mikkelsen (1983:6) provides a perceptive description of the act of note-taking; the subtle interaction between memory and note-taking was studied by Gran (1990).

The rationale of note-taking is to bring to light the structure underlying a speech and the general semantic orientation of paragraphs and sentences. This requires an explicit but economical (visual, graphic!) layout on the CI interpreter's notepad. A telling, two-dimensional presentation helps the interpreter pick up the thread of the message to be reformulated in the target language.

Interpreters' notes are highly individual, a point forcefully made by Weber (1984:36-37); they will also vary considerably according to the use they are put to: interpreting at a negotiation session, during a banquet or for

community relations is very different from a court interpreting assignment, where absolute accuracy is essential and even required by law. Schweda Nicholson (1990), Shlesinger (1991), González et al. (1991) and Mikkelson (1995, 1996) have discussed this fundamental distinction.

Interpreters' notes with comments (SL text, notes and their transcription in regular prose, sometimes with a rendition in the TL) have appeared in the literature devoted to CI: in Rozan (1956), Van Hoof (1962), Becker (1972), Gran [Tarabocchia] (1979), Ilg (1982), Matyssek (1989) and González et al. (1991).

G.I.

5. Note-taking and the "Depth-of-processing hypothesis"

If one were to stagger some of the activities involved during *consecutive interpretation*, it would be safe to assume that (1) *listening*, (2) *note-taking*, and (3) *consecutive interpretation* per se, meaning the rehearsal involved when reconstructing the original message by reading back from one's notes, represent three successive activities normally carried out by any consecutive interpreter and which deserve closer examination in terms of human information processing.

In an attempt to determine how much each of the three above-mentioned tasks contributes to the processing of information in terms of the depth-of-processing hypothesis (Craik & Lockhart, 1972), an experiment (Lambert 1983, 1988b) was devised to examine each individual task. Results indicated that *listening* and *consecutive interpretation* yielded the highest recall and recognition scores, followed by *simultaneous interpretation*, which in turn was followed by *shadowing*. Furthermore, the aim of the research was to examine the notes taken by subjects since these may provide clues to the nature of the notes themselves, about their relationship to the original material, and, hopefully, about the nature of the cognitive processes involved.

Individuals normally take notes with either or both of two aims in mind. First, notes provide a means of reproducing and storing knowledge for later consultation. Secondly, notes may contribute in a relatively distinct manner to the individual's acquisition of personal knowledge, in other words, his or her learning (Howe, 1975).

Literature justifying note-taking also tends to fall into two broad catego-

ries. The first one deals with the *notes* themselves, perceiving them as an external storage mechanism (Miller, Galanter & Pribram, 1960), and the second, deals with the *note-taking process*, viewing it as an encoding mechanism facilitating retention, and considering the notes per se as simple by-products of the above-mentioned process (Aiken, Thomas & Shennum, 1975; Di Vesta & Grey, 1972; see also Ilg's account of Rozan's use of his notes in this article).

In the thinking of Craik & Lockhart (1972), the existing dichotomy in cognitive psychology between short- and long-term memory stores is more a function of different forms of coding processes than it is a substantive difference in separate stores. In other words, it is the depth of the analyses required to encode the input which determines retention, and greater degrees of semantic or cognitive analyses are supposedly performed at deeper levels within this hierarchy. Craik & Lockhart's depth-of-processing hypothesis is therefore represented as a hierarchical series of processing stages through which incoming information passes.

By applying the Craik & Lockhart model to tasks which are highly familiar to conference interpreters, namely *listening*, *shadowing*, *simultaneous interpreting*, and *consecutive interpreting*, and by measuring the retentive ability of interpreter-subjects following each task, an attempt was made to determine which specific tasks require deeper or shallower processing for interpreters.

Of the three other forms of processing, *consecutive interpretation* yields the highest recognition scores as originally hypothesised. Consecutive interpretation was the only condition that allowed the subject to take notes as the stimulus material was being presented, which was not the case for listening, shadowing and simultaneous interpretation. This active and visual form of rehearsal may serve to reinforce the learning activity. Thus, a strong argument can be made that the consecutive processing may enhance learning and memory through the overt rehearsal of the passage, combined with the active involvement of the note-taker when taking notes, not to mention the visual reinforcement of notes per se.

Consecutive interpretation, therefore, seems to represent a deeper form of processing due to such factors as additional rehearsal time, longer exposure to the information, visual cues provided by the notes and the aural feedback when rendering the consecutive delivery.