

## Only Connect: Living in Linguistic Fragments No Longer

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Let us begin with a little bit of passion. In Chapter 22 of *Howard's End*, novelist E M Forster has this to say about the relationship between Henry and Margaret:

Mature as he was, she might yet be able to help him to the building of the rainbow bridge that should connect the prose in us with the passion. Without it we are meaningless fragments, half monks, half beasts, unconnected arches that have never joined into a man. With it love is born, and alights on the highest curve, glowing against the gray, sober against the fire.

Connecting the prose and the passion. Without making this connection, we are meaningless fragments. And it is this insight which led to the imperative which would earn its place in all books of quotations:

Only connect! That was the whole of her sermon. Only connect the prose and the passion, and both will be exalted, and human love will be seen at its height. Live in fragments no longer. Only connect, and the beast and the monk, robbed of the isolation that is life to either, will die.

Only connect. Live in fragments no longer.

The dictum, I imagine, could apply to any subject; but it has a special relevance for the field of language studies, because language has always been viewed as the connectivity system par excellence. From the beginning of modern linguistics, it has been called a 'system', 'a structured system', a system of structures', a 'system of systems'. We see it everywhere we look. Entities define each other. Sets of entities define each other. Singular and plural in grammar. Voiced and voiceless in phonetics. Words of opposite meaning in semantics. Translation equivalents between languages. Connections are everywhere. The one generalization you can safely make in linguistics is that no utterance, and no part of any utterance, is ever alone.

Children learn this principle very early on. They hear it in action in the expansion that adults make of their utterances. When a child says 'dog', pointing correctly to a dog, parents do not say 'dog' by way of reaction. They say 'yes, it's a dog', or 'big dog', or something which (as the term is) *expands* the child's utterance. Such responses have long been recognized as an unconscious teaching technique – drawing the child's attention to other (and usually more advanced) possibilities of language use.

They hear it even more in action when the adult *extends* as well as expands. 'Dog', says the child, pointing to a cat. 'No', says the mother, 'that's not a dog, it's a cat.' And then they continue, saying such things as 'dogs go woof, cats go miaow', 'dogs are much bigger', and 'cats drink milk'. In this way children gradually learn the network of sense relations that will result in their acquiring the lexicon of their language. Expansion and extension are techniques that teachers use too. Both parents and teachers are saying, 'Only connect'.

### Connecting levels

At a higher level of abstraction, the connectivity operates between what are often called the 'levels' of language. We recognise such levels as phonology, grammar, and semantics – sounds, structures, sense. We are used to thinking of these as autonomous notions, and indeed we may teach them separately as 'pronunciation', 'grammar', 'vocabulary'. But there are all kinds of interconnections – not only at the level of linguistic analysis, but at a neuro-psycho-linguistic level too.

At the linguistic level, there are many features which seem to cross the divides between levels – where it is unclear, indeed, which level to assign them to. Is intonation,

when it is used to distinguish statements from questions or positives from negatives, a matter of phonology or grammar? We would have to say, both. And when intonation is used to express attitudes, is it phonology or semantics? Again, the only answer is, both. And what about those lexical items that behave in grammatically unique ways, so that we are not clear whether to deal with them as exceptions in a grammar or to list them alphabetically in a dictionary? Would you teach such words as *few* and *little* as separate items of vocabulary, or as part of a grammar lesson on quantification? Here too, for most people, the answer is, both.

The interaction between linguistic levels in the brain has been repeatedly demonstrated in psycholinguistic and neurolinguistic studies. We do not yet know exactly where or how the levels are neurally represented, but we do know, from behavioural observation, that learning at one level has implications for ability at other levels. I remember working once with Mike, a linguistically handicapped child of six, whose grammatical ability was roughly that of a two-year-old. Mike had a vocabulary of several hundred words and he pronounced them quite maturely – he could say *motorbike*, *dinosaur*, *chocolate*, *colouring-in*, and so on. But the most complex sentence he could come out with had just two elements, either two elements of clause structure – *motorbike go, see dinosaur* – or two elements of phrase structure – *big bike, green car*.

Our speech therapy programme was based on the principle of ‘follow the path of normal language acquisition wherever possible’. One of the next things a normal two-year-old would do is expand elements of clause structure, and this expansion would normally appear first after the verb, in object position – for example, *see car* would develop into *see big car*, *see green car*, and so on. In normal children this occurs some three months before the equivalent expansion in subject position. So that is what we started to do.

A lesson was planned using several differently coloured cars. Mike was first asked to describe them. ‘What’s that?’ asked the therapist. ‘Car’, said Mike. ‘What colour’s that car?’ ‘Red.’ ‘What colour’s that car?’ ‘Yellow’, and so on. Mike’s colour vocabulary was good.

The next step was a 2-element-phrase comprehension check. ‘Show me the red car’ said the therapist. Mike did so. ‘Show me the yellow car’. All correct.

The next step was a verb check. A number of basic verbs were selected, such as *push* and *drive*, and crazy situations devised, such as a dinosaur pushing the red car. ‘What’s the dinosaur doing?’ ‘Push car’, Mike would say, or ‘Pushing car.’

And then the therapy started. The aim was to elicit ‘push yellow car’. ‘What sort of car is he pushing – the red car or the yellow car?’ ‘Yellow car’. ‘So what’s he doing? He’s – ’ ‘Push car’, said Mike. ‘Yes, but what sort of car?’ ‘Yellow car,’ said Mike. ‘So the dinosaur’s – ’ ‘Push car’, said Mike.

After two or three loops getting nowhere, the therapist gave Mike the explicit answer: ‘He’s pushing the yellow car. What’s he doing?’ Mike saw the point straight away, and did his best. ‘Pu – pu- push... push...’ there was quite a long pause – then in a rush came out ‘yeyow – yeyow one’. ‘Well done, Mike’ said the therapist, ‘he’s pushing the yellow car. Say it again.’ And Mike did, with more confidence the second time: ‘push yeyow one’. ‘Yellow car’, said the therapist, articulating ‘yellow’ carefully, ‘he’s pushing a yellow car. Again?’ ‘Push yeyow car.’ Several attempts later, it came out as ‘push yellow car’.

This is a very typical sequence of events. The child is being made to process a more advanced grammatical construction, and in trying to do so he has trouble maintaining his established ability in phonology and semantics. The first symptom is non-fluency – ‘pu- pu- pu-’. Then a previously established pronunciation breaks down, and a simplified consonant harmony appears – ‘yellow’ becomes ‘yeyow’. Then there is a semantic simplification: the semantically specific ‘car’ becomes the semantically vague ‘one’. It didn’t happen in Mike’s case, but with another child the same exercise caused a word order variation: ‘push car yellow’.

Examples of this kind have motivated a ‘limited state’ view of linguistic processing, which applies to adult learners as much as to children, and to learning a second language as much as the mother-tongue. At a given point of development, there is only so much processing that a learner can cope with. I once referred to this as a ‘bucket theory’ (Crystal, 1987). I likened the child’s growing linguistic faculty to a gradually enlarging bucket. At any

one point in development, the bucket is almost full of water. With a normal child, the bucket grows naturally, keeping pace with the demands made by the linguistic environment. In the case of a language handicapped child, for some reason it does not. It has to be artificially enlarged, and this upsets the contents. In the example above, the therapist is trying to pour more grammatical water into the bucket, and she is succeeding, but only at the expense of having some of the phonological and semantic water slopping over the side. Eventually, she manages to get the grammatical water to stay in along with the other kinds, and, as a result, the bucket gets a little bit larger.

The same principle applies to adult learning. We have buckets, too, when learning another language, and we can sometimes be conscious of them. I remember, when I was learning French, discovering the wonderfully useful word *truc* 'thingy', which helped me out on many an occasion when the grammar of my sentence was getting tricky. 'Blow trying to remember the nouns', I remember thinking, 'it's the past historic tense ending I have to get right!' I still find *truc* useful, when the linguistic going gets tough.

The bucket analogy isn't brilliant, because buckets in real life don't get larger in the way I'm suggesting; but I hope the general thrust is helpful. Use a better analogy if you prefer - jugglers keeping balls in the air, perhaps - but the implication, from the point of the view of my present paper, is obvious. The language levels interact with each other in all kinds of subtle ways. Connectivity is everywhere. It is a commonplace of teaching that, in working on Topic X, we need to be aware that there may be consequences for Topics Y and Z. And often, a good diagnostic indicator of how we are doing - whether a student is being overloaded with new information at one level - is in the symptoms of regression that takes place at other levels in relation to topics that we had previously thought to be well established. Certainly with language learning, such regressive behaviour is routine.

#### Connecting sentences

Of all these symptoms, it is non-fluency which is the most informative. 'Normal non-fluency' - a label used to distinguish this phenomenon from the superficially similar phenomenon known as stammering or stuttering (Crystal, 1983). In child language acquisition, the most noticeable period of normal non-fluency occurs around the age of three, when the child makes the jump from simple to complex sentences and learns the use of coordinating conjunctions - in English, most notably, *and*. Most people have heard the primitive attempts at a long narrative by a three-year-old: 'we went on a - on a - bus and w- we - and we - we got an ice-cream and - and - and - and we did g- go to the fair...' Abnormal pausing, erratic tempo, lengthened sounds, and word and consonant repetition are the chief features of normal non-fluency. In the case of bilingual children, there may also be unexpected and unusual language mixing.

The difference with stammering is that normal non-fluency lacks the symptoms of anxiety and self-awareness that accompany the pathological condition. Stammerers know that they have a problem and are worried about it. Indeed, the worry is part of the problem. By contrast, a normally non-fluent child can hesitate away for ages without a care in the world. About three out of five children go through a period of normal non-fluency at around age 3, which in some cases can last several months.

It is not surprising to see normal non-fluency emerge at this stage in language development. Think about it. You have been happily operating in language with most clauses consisting of three or four elements. 'The cat / 's jumped / over the wall', 'Daddy / put / the car / in the garage'. Now you learn the word *and*, which opens up unprecedented vistas of self-expression. There is no longer a limit to the length of the sentences you can say. Just add an 'and' and keep going. But the jump from clauses of four elements to sentences of eight or sixteen or whatever is a major jump. It isn't just a matter of stringing the clauses together. You have to pay attention to the demands of coherence. If you start your narrative in the past tense, you must keep it there. If you talk about two people, then you must make sure your subsequent pronoun reference right.

This is another aspect of connectivity: connecting sentences to make coherent discourse. The kinds of discourse errors or uncertainties learners make in speech when coping

with this situation are easy to spot. 'He went on the bus cos – cos – cos he will go to the fair'. 'The witch gave the prince an apple – and – and she – and she - and he ate it all up.'

It is also not difficult to spot discourse errors in writing. You see them at any age, but they are most noticeable in the early stories that children write, which reflect their first attempts at spoken discourse – a string of sentences connected with *and*.

On Sunday we went to the beach and I went on a roundabout and she had an ice-cream and I saw a clown and we will go home on the bus...

You can see the corrections a mile off. You would underline 'she' and probably write 'Who?' in the margin. You would cross out 'will go' and substitute 'went'. A rather more radical correction would cross out some of the *ands* and replace them – but with what?

Until the last quarter of the 20th century, sentence connectivity was the most neglected area of grammar. Grammar books stopped at the sentence. How you formed paragraphs was a matter of 'style'. One of the major developments in reference grammars since the 1970s has been the careful analysis of the various techniques a language makes available to connect sentences, such as comment clauses (eg *you know, you see*) and connecting adverbials (eg *consequently, as a result*) (Quirk, Greenbaun, Leech and Svartvik, 1985). And one of the most interesting developments in child language acquisition was to draw attention to the long period of time it takes for these more sophisticated features to become a routine part of children's spoken language. You first hear some of the connecting adverbials, for example, around age 7: 'Where are you going, Jane?' And Jane replies, 'Actually, I'm going to the toilet'. The speech suddenly sounds more adult. And as children approach their teens there are still connecting adverbials to be learned – the more intellectual ones, such as *however, moreover, and nevertheless*, as well as more colloquial ones such as *to be honest* and *mind you*.

The message for language teaching here is 'take it easy'. There are hundreds of connecting expressions in a language and they impose different kinds of difficulty on the learner. It normally takes about six years to acquire them all – all bar the most advanced (like *notwithstanding*) and idiomatic (like *not to put too fine a point on it*), whose assimilation can trundle on into adult life. So they need to be introduced gradually, and their consequences for linguistic processing explored in all four modalities: listening, speaking, reading, and writing.

Discourse connectivity errors are usually first noticed in written work. But it would be premature to correct them in a piece of writing without checking to see whether analogous problems of connectivity operate in the writer's other modalities. The mantra of several reports into educational linguistics is now well-established: writing depends on reading depends on speaking depends on listening. It is an easy mantra to accept. Working it out in relation to specific features of language is more difficult.

A few years ago I worked with a group of primary-school teachers on sentence connectivity. They had identified the problem they wanted to correct – the 'and... and... and' phenomenon. They had decided that the alternative they wanted to elicit from the children was a better use of sentence-connecting adverbials appropriate to their age, such as *then, later, after a while, soon, next, first, in the end, instead, and happily* (as in *happily, we caught the bus*). The children weren't using any of them in writing. So, how to introduce them?

It wasn't a question of teaching the children what the words meant. They were all familiar with the words from adult speech – especially from having stories read aloud and from television – and most of them were frequently used in their own speech. The question was: how to focus on them as ways of connecting sentences in writing?

Only connect. Writing depends on reading. The first task was to find good examples of sentence-connecting adverbials in written language. This turned out to be surprisingly difficult, and our group ended up having to construct its own examples. The reading schemes were no help, you see: they are very poor at presenting sentence connectivity in a graded way. On the whole, there is a sudden jump from sentence reading to paragraph reading. Janet and John talk to each other for ages in sentences. Then one day they go off to visit their grandmother in the countryside and they do it in paragraphs. Even then there are hardly any connectives. And you have to search for them in imaginative sources too. You can read for pages in Harry Potter before you find a single sentence-connecting adverb. This of course

proves that you don't need them to write a good story. But that's no reason for ignoring them. There are other genres, such as sports commentary, where it's unusual to find a pair of sentences without one. And even Harry Potter needs one, from time to time.

So it's a joy when you stumble across a book that uses this feature as the basis of its effect. In Remy Charlip's *Fortunately*, each page of the story about the adventures of a little boy called Ned begins with a connecting adverb – either a *fortunately* or an *unfortunately*.

Fortunately a friend loaned him an airplane.

Unfortunately the motor exploded.

Fortunately there was a parachute in the airplane.

Unfortunately there was a hole in the parachute...

The story is a delight. I have never encountered a child – or, for that matter, an adult – who didn't enjoy it. As a human being, it is a great read. As a linguist – if I might make the distinction – it is a fine exercise in adverbial sentence connectivity.

Only connect. Reading depends on speaking. If children read such things, they will very likely develop their awareness of the expressive potential of adverbs and gradually introduce them into their own writing. That is how most people cultivate their style. But to ensure that we are fostering the development of an integrated language system, we must also draw the child's attention to the fact that sentence adverbials occur in speech also. It would be bizarre if children failed to see that there was a correspondence between writing and speech, in this respect.

My teacher group therefore spent some time exploring the extent to which the children were able to work with these adverbials in producing spoken narratives. In one exercise, a list of age-related adverbials was put on the board: *after a while*, *three weeks later*, *quickly*, *fortunately*, and so on. The teacher began a familiar narrative: 'Luke Skywalker took off in his spaceship'. She then pointed to one of the adverbials and asked a member of the class to continue the story. 'Three weeks later...' The pupil would say something like 'Three weeks later he landed on the Moon'. She might then point to 'fortunately...' and ask the next child. 'Fortunately, he didn't crash', would be a typical response. And so on.

Except that this wasn't what happened, exactly. Quite often the response was 'Three weeks later he will land on the moon'. But the story had begun in the past tense. The pupil hadn't paid attention to that, and had unconsciously altered the story-telling perspective. This is of course precisely the same kind of error that can be observed in written work, when writers lose track of the narrative perspective they introduced at the outset of their story. And it can be observed in any language.

#### Connecting genres

I have mentioned *genres* – or *varieties* (or *registers*), as linguists more usually call them. These are stretches of speech or writing identified by a particular purpose and displaying a particular set of linguistic features – we talk about the 'language' of science, or law, or religion, or journalism, or broadcast news, or television advertising, or conversation (Crystal and Davy, 1969). It is important here too to connect. The varieties do not exist in isolation from each other. Nor do the different stylistic parameters which enter into the definition of a variety. A 'formal' use of language is only understandable if we see it in contrast to an 'informal' use of language. An 'objective' report contrasts with a 'subjective' one. A 'positive' attitude contrasts with a 'negative'. And so on.

Authors and comedians force us to make connections between varieties all the time. Radio or TV sketches I have seen over the years include a radio broadcaster reading the news in nonstandard English ('The prime minister ain't got no chance of getting in at the next election...') and a cricket commentary in the style of the King James Bible ('And lo, he runneth down the line and bowleth...'). The Monty Python series was brilliant at this kind of thing, playing with regional accents and dialects as well. You will have your own examples to add.

In all such cases we know what is happening. We know how A normally behaves and B normally behaves, so we recognize the incongruity when A speaks (or writes) like B. Or at least, those of us with the most fluent awareness of a language do. This kind of stylistic

versatility is something we associate with the most advanced stages of language learning. And it is a stage that most learners never achieve. The kind of easy facility which allows native-speakers to tell a joke and switch from one accent to another as they become 'an Englishman, an Irishman, or a Scotsman'. Is something which is beyond most second-language learners. I have had a close encounter with French since I was a teenager, and I still know next to nothing about French regional accents. Why not? I was never taught. And it isn't something you can easily 'pick up'.

To what extent do textbooks, teaching materials and, more important, institutions reflect the dictum 'Only connect', when it comes to varieties? I think one of the most exciting developments in language teaching of the past couple of decades has been the increased amount of sociolinguistic awareness which characterizes classroom work. In the UK, the new (since 1992) National Curriculum in English is solidly grounded in sociolinguistic principles; so are Advanced-level courses in English language. I know there have been similar curricular developments in Australia and New Zealand, many of them due to the influence of the work of Michael Halliday. But if we look at the world as a whole, there are some striking failures to connect, and none more so than in the relationship between language and literature, 'lang' and 'lit'.

The two domains are becoming interconnected, but it is a slow process, and in some parts of the world it has hardly begun. In the UK, there has for some time been a combined lang/lit Advanced-level paper, which is extremely popular. There is now a determined effort by linguists, literary scholars, and theatre personalities to focus on language as a locus for the meeting of minds. In Shakespeare studies, for example, we have seen in the past six years (to choose just three examples) *Shakespeare's Language* by Frank Kermode, *A Grammar of Shakespeare's Language* by Norman Blake, and *Shakespeare's Words* by myself and my son Ben. Kermode is a literary critic; Blake is a philologist; I am a linguist; and Ben is an actor. And the new British Shakespeare Association welcomes membership from all sides.

These are healthy signs. But unfortunately they have to be set against instances where the study of language and the study of literature remain totally and artificially separated. Sometimes it is as if there are two parallel universes, of 'lang' and of 'lit'. Whether at school or at university (or beyond), the exams are separate and the departments are separate. At one university, a few years ago, I was invited to lecture to both the English language department and the English literature department, but on different days. Evidently the two departments didn't talk to each other very much. I – rather naughtily – decided to give the same lecture (it was on language play) to each department, and it seemed to go down equally well with the two audiences. But the thought that this might suggest a good reason for collaboration between the departments evidently could not breach the institutional mindset which, I had to acknowledge, had been present for many decades.

The total separation of lang and lit is intellectually indefensible, creatively limiting, and pedagogically absurd (Crystal, 1999). Some sort of unified approach is eminently desirable. And I do not mean a token unification – doing a bit of literature at the end of a language syllabus or doing a bit of language analysis at the end of a course on modern poetry. I mean a process of ongoing commentary, in which we routinely present language students with examples of literature which illustrate a particular linguistic point and routinely present literature students with an account of how a particular literary effect is linguistically achieved. It is something which can be done at any stage of language learning. Even the earliest lessons can be illuminated – as I have often seen teachers do – by exposing young students to instances of simple literature, such as nursery rhymes and songs.

I have time to give only one example of the common point of origin which underlies both the teaching of language and the teaching of literature. Questions are among the earliest structures encountered in a syllabus. And as ability to form the various question types increases, I have often noticed teachers inventing language games to make the process of acquisition more enjoyable. This is as it should be, not just because it makes language teaching fun, but because it actually simulates the sort of thing that native-speakers do. You may have seen the British television show, 'Whose Line is it Anyway?' A group of comedians are made to improvise sketches of varying levels of ingenuity, using cues supplied by the

studio audience or the master of ceremonies. One such game is to hold a conversation in which the participants address each other only in questions. It might run like this:

A: Can I come in?

B: Do I look as if I want you to?

A: Why are you always so cross?

B: Why shouldn't I be cross?

A: Are you going to let me in or not?

B: Will you promise not to break anything?

and so on. It looks easy, but it's quite hard to make it fluent and funny. You also (especially in New Zealand!) have to make some linguistic decisions about what counts as a question - for example, are intonational questions ('You're going to the cinema?') allowed? But it is, quite patently, an ordinary party-game, playable by ordinary people with ordinary subject-matter. It is certainly not 'literature'.

However, it is not difficult to find a parallel to this kind of ludic behaviour in literature. The best example I have found is from Tom Stoppard's play *Rosencrantz and Guildenstern are Dead*. The two protagonists, while they wait for their turn to appear on stage with Hamlet, are wondering what their life is all about, and what they are supposed to be doing. They look for ways to pass the time. Then Rosencrantz comes up with an idea.

Ros: We could play at questions.

Guil: What good would that do?

Ros: Practice!

Guil: Statement! One-love.

Ros: Cheating!

Guil: How?

Ros: I hadn't started yet.

Guil: Statement. Two-love.

Ros: Are you counting that?

Guil: What?

Ros: Are you counting that?

Guil: Foul! No repetitions. Three-love. First game to ...

Ros: I'm not going to play if you're going to be like that.

But they do play on, for another 20 or so exchanges. It is the same game as in 'Whose Line is it Anyway?'. But this is now 'literature'.

Any feature of language, or group of features – whether of pronunciation, grammar, or vocabulary - can be given a literary illustration in this way. In 2004 I spent a happy summer working my way through all the constructions in English grammar in order to find illustrations from literature and other varieties of the way individual constructions are used to best effect. The results were published in my *Making Sense of Grammar*. (Crystal, 2004). That was written with secondary school students in mind. The same exercise can be carried out at any level, and using any genre or example of literature. If Tom Stoppard is too advanced, try *Harry Potter*. If *Harry Potter* is too advanced, try *The Three Little Pigs*.

The ludic motive is the driving force and ultimately the principle on which both language studies and literary studies rely. Language studies teach the rules. Literary studies teach how authors bend and break the rules, to make literary effects. 'Bending and breaking' is not my metaphor. It is Robert Graves', who said in 1961, in a letter to *The Times*, that 'a poet has to master the rules of grammar before he attempts to bend or break them'. But it is not just authors who bend and break the rules. We do, all of us, every day, when we engage in the puns, riddles, jokes, crosswords, and scrabbles that constitute our repertoire of language play.

Children do not have to be taught about bending and breaking rules. It is their instinct to do so. When Chomsky presented us all with the notion that we are born with a LAD, a Language Acquisition Device, it always seemed to me to be a very high-minded, serious thing. I felt that it was more a Ludic Acquisition Device – more a MADLAD. Because when you listen to the spontaneous monologues of children who have just learned to talk, they

immediately, and without any evident training, begin to break or bend or adapt the rules of the language that they are still in the process of acquiring.

The point applies as much to genres as to individual structures. I have mentioned nursery stories: *The Three Little Pigs*. One of the most successful children's books of the 1990s was *The True Story of The Three Little Pigs*, by Jon Scieszka – told from the point of view of the wolf.

Everybody knows the story of the Three Little Pigs. Or at least they think they do. But I'll let you in on a little secret. Nobody knows the real story, because nobody has ever heard my side of the story.

And Al Wolf tells the true story, how the Big Bad Wolf thing was just a media thing. He was making a birthday cake for his dear old granny and ran out of sugar, so he went next door to the pig's house to borrow some. He had a terrible cold coming on, and when he got to the straw house he couldn't stop himself sneezing. So he huffed and he puffed... and the rest is history. The papers made a big thing out of it.

The story subverts the genre. It doesn't so much break the rules as adapt them, to meet the demands of a new scenario. It connects new passion with old prose, a fantasy world with the real world. The animated film *Hoodwinked* does the same, with Little Red Riding Hood. People talk about reality TV. This is reality nursery story.

#### Connecting with the Internet

The novelist Iris Murdoch had something to say about that. In a profile piece written for *The Times* in 1983 she said 'we live in a fantasy world, a world of illusion. The great task in life is to find reality'. And for many of us, these days, reality is the Internet. Some people call it 'virtual reality', but not all. For Andy Ihnatko, the author of an influential dictionary of cyberspeak, it is the other way round. He defines 'the real world' as 'That which cannot be accessed via a keyboard. A nice place to visit, a good place to swing by when you're out of Coke, but you wouldn't want to live there' (Ihnatko, 1997: 160).

Are you addicted to the Internet? There are various clinical tests, such as:

You wake up at 3 a.m. to go to the bathroom and stop to check your email on the way back to bed.

You place your refrigerator beside your computer.

When someone asks what it was you said, you say 'scroll up'.

All of your friends have an @ in their names.

You tell the cab driver to take you to <http://www.oxfordstreet/restaurant/chinese.html>.

You check your mail. It says 'no new messages'. So you check it again.

Whatever your opinions are about the Internet as a social and psychological phenomenon, there is one uncontroversial linguistic fact. It is the largest corpus of language that has ever been compiled. It already far exceeds in quantity the combined contents of all the libraries in the world. And in its evolving management structure, it is giving new meaning to the dictum 'only connect'. 'The vision I have for the Web is about anything being potentially connected with anything.' That is Tim Berners-Lee, on the opening page of his biographical memoir *Weaving the Web* (1999). That is why he called it a web, with the hypertext link the fundamental functional unit.

But how do we connect with the Internet? Note the preposition. I assume you are connected *to* it; but how do we connect *with* it? Linguistically, I mean. I'm not referring to Internet addiction. How do we relate to this new huge mass of language that is 'out there'? For relate to it we must. We can no longer continue operating with a model of language which recognizes only three mediums of communication – speech, writing, and sign language. There are now four.

This fourth medium goes under various names: the academic norm is to call it *computer-mediated communication* (CMC), but it has a variety of popular labels, such as *cyberspeak* and *netspeak* (Crystal, 2006). In its early days it attracted a great deal of suspicion, because the geeks who developed it were radical in their linguistic usage – introducing non-standard uses of punctuation, capitalization, and spelling, and employing a wide range of computer-related slang. In its likely effect on language it is 'a major risk for

humanity’, said President Jaques Chirac in 1996. Ten years on, things have begun to settle down, with deviations from the standard language balanced by usage which conforms to it, as the average age of the Internet community grows – it is now mid-30s, compared to mid-20s a decade ago - and more conservative language-users come online. Chirac’s pessimism has already been shown to be totally unfounded. The Internet has become increasingly multilingual - in 2003, for the first time, less than half of it was in English – and hundreds of endangered languages are now benefitting from the opportunities they have to achieve a global presence.

The influence of the Internet on our thinking is not to be found at the level of linguistic structure. That has been very limited. If we add up all the new words and idioms that have entered English (or other languages) since the arrival of the Internet – words like *download* and *spam* and *email* – we will find perhaps a thousand, which is a drop in the ocean of English vocabulary, currently well over a million words. There is hardly any sign of new grammatical features – though I am much impressed by some of the new plurals that have been invented. One is the extension of the rare *ox-oxen* pattern to words ending in *-x*. If you have lots of VAX computer systems, you have a lot of *vaxen*. If you have a lot of BIX information management systems you have a lot of *bixen*. Or again, the new *-z* plural ending. If you download some tunes legitimately, they are *tunes*. If you download them illegally, they are *tunez*. And likewise *filmz* and other *warez*.

A few new words, spellings, and playful inflections do not amount to a major development in linguistic thinking. That is not why I pay so much attention to Internet language these days. Rather, the influence lies in the way the new medium has extended the range of varieties, or genres, of language, and employed the familiar words, spellings, and structures of language in newly distinctive ways. Think back 15 years. None of us used the following CMC genres: email (available earlier, certainly, but in common use not until the mid-90s), chatrooms (ditto), interactive online games (ditto), the World Wide Web (introduced in 1991), mobile phone texting (or SMS messaging, widespread from 1999, though not used in all countries), blogging (known in 1999, but common only since about 2004), and instant messaging (another phenomenon of the early 2000s).

What have these genres done to language? Chiefly, they have extended the range of stylistic options available to us. We have all worked with the contrast between ‘formal’ and ‘informal’, in language teaching. Traditionally, writing was thought to be a more formal medium than speech, though both of course allowed major formality contrasts, such as the choice between *cannot* and *can’t* or between *the man I was speaking to* and *the man to whom I was speaking*. What we see now on the Internet is a huge extension in the range of informality options in the written language. Many of the features of spoken language which would previously never have been seen in writing – except in the most informal of personally handwritten letters – are now seen with considerable frequency on our screens, and in print.

I’m thinking of such features as ending a sentence with ten exclamation marks or question marks, or the use of repeated letters in a word, such as *yayyyy* or *hiiiiii*, capturing some of the dynamic of speech intonation and tempo. I’m also thinking of the use of highly elliptical and context dependent sentences in instant messaging, previously only encountered in informal conversation, such as:

- A     How many?  
B     Ten  
A     Go on!!  
B     Really!

These are now a basic feature of instant messaging, where sentences are very short and unintelligible to anyone who stumbles midway into an ongoing interaction.

We see other kinds of informal sentence structure in emails and chat interactions. We see systematic use of nonstandard spelling there too, such as *u* for *you* or *thx* for *thanks* – and these of course are a dominant characteristic of texting. But it is in blogging – currently the fastest growing area of Internet use - where the most fundamental changes are taking place.

Why is blogging so different? Because it is written monologue. It is the resurgence of the diary genre, but on a totally unprecedented scale. And also unprecedented is the way in

which it offers us the opportunity to write down what we want to say without interference from others. None of us, in our lifetime – until the Internet came along – have ever seen a writer’s language in print without interference. Every book, newspaper, or magazine article you read has had someone intervene between writer and reader – an editor, or sub-editor, or copy-editor, or proof-reader. Nothing I have ever written has appeared in press exactly as I wrote it. The article or book has to conform to the house-style of the publisher. If you did a meticulous analysis of my style, you would find that I sometimes spell *judgment* with an *e* and sometimes without an *e*, sometimes spell verbs in *-ise* and sometimes in *-ize*, sometimes write *the computer that was in the office* and sometimes *the computer which was in the office*. Crystal is very inconsistent, you would say. But they weren’t my decisions. Different publishing houses have different norms. There are thousands of alternatives listed in a full publisher style sheet – illustrating the point, of course, that a totally ‘standard’ English is really a myth.

But now, for the first time since the Middle Ages, we can put printed material into the public domain without it having to go through the editorial round. Blogs therefore show a much wider range of sentence patterns than is traditionally the case. There are sentences which change direction in the middle, just as they do in speech, loosely connected constructions, lack of concord between subject and verb, and a host of other features which offend against the canons of traditional grammar but which in fact are perfectly natural features of the language, causing no problems of ambiguity or intelligibility. Just one example. In traditional grammar we would be banned from using the so-called ‘dangling participle’ because it is misleading. ‘Driving down the road, the flags were fluttering in the breeze’. This is bad English, we are told, because it suggests that the flags were driving. But this is of course absurd. This is to take grammar out of the world. We all know that flags don’t drive, so the sentence could never be misleading. Sentences like this only worry us because some grammarians, once upon a time, told us we should always be worried. Grammarians have a lot to answer for. They have given most people an inferiority complex about their language. Blogging will help to change all that.

The Internet has an especially important role to play in relation to community languages, because it enthuses the teenagers, and they are critical. The teenagers are the parents of the next generation of children, and if they lose interest in their ancestral language, the cause is lost. A language can disappear within a generation. The Internet, in its various forms, is the best way I know of maintaining teenage interest in language. The kids love email, chatrooms, virtual worlds (games), search-engine exploration, instant messaging, blogging, and SMS texting. If we can find ways of using these genres to maximum potential, our languages are safe.

It is being done, as this story illustrates. A few years ago my daughter Lucy spent some time working with a group of North American Indian tribes in Arizona. The elders were concerned that the young people were not interested in their traditions and stories. So Lucy’s team taught a group of teenagers the technology of digital film-making, and how the equipment could be used for digital story-telling. The kids loved it. They mastered the techniques – sound, editing, and so on – very quickly. After a few days they were ready to record their first story. But what should it be? They discussed the problem among themselves: they had no story to tell. They turned to Lucy. ‘What should we make a movie about?’ they asked. ‘Go and ask your elders to tell you a story’, she said. And they did.

I have seen similar things happen in Wales. A few years ago there was hardly any Welsh presence on the Internet – a few dozen sites. Now there are hundreds. Welsh chatrooms energize the language in unprecedented ways. There are now Welsh virtual speech-communities out there. It is an opportunity available to all community languages, and it has arrived at just the right time, with language endangerment and death now at the forefront of our linguistic consciousness.

We need to connect with all CMC, in its various forms. As I said, we cannot ignore it, for it is a major feature of our world. It is not going to go away. On the contrary, its use is increasing. So we have to learn to manage it. And that doesn’t mean banning it. It means, first of all, understanding it. What does the technology offer? What are the linguistic features that

characterise the new genres? Secondly it means bringing these new features into a relationship with the old. In every case of CMC I have studied, I see a modification of an already existing language pattern. Students have to be able to see what those links are. Because eventually, what they have to do is *choose*.

Use of a language is always a matter of choice. Singular or plural. Question or statement. Formal or informal. The study of choice is the business of pragmatics. Linguistic pragmatics is the study of the alternatives of expression a language makes available to us, and of the factors which govern the choice we make of these alternatives. What the Internet has done is increase the range of choices. Whereas before, in our linguistic wardrobe, we had only formal and informal clothes, now we have a new range of very informal clothes. We need to familiarise our students with what the 21<sup>st</sup> century allows them to wear. A pragmatic perspective is – or should be – at the heart of what we do, whether as linguists or as teachers. If we implement it, I conclude, we shall live in linguistic fragments no longer.

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