INTERNET LINGUISTICS

Professor David Crystal, OBE

5 June 2007

Part 1.

Thanks very much. Well, as I was saying when I was last lecturing in this lecture theatre twenty years ago, the. Time is ripe for a linguistic revolution. I didn't really expect my word to come quite so true. The revolution that we are taking about today, the internet has its linguistic consequences. And I should say, by the way, that unlike the theatre where you normally get a message at the beginning of a show saying 'please ensure that your mobile phones, pagers, heart pacemakers, are switched off',..... today, you may leave them on. The downside is that if they ring during the lecture they are data, for analysis, and you come up here and re-look at your message, and we analyse it and have some fun with it. So, it's up to you entirely, I really don't mind, you know, but because one of the problems with this field is that data is very hard to come by, extremely hard to come by. Extremely hard to come by. If I want to analyse email, chat in chat rooms, virtual world's messages in games, logging instant messages, are you going to let me have them? Will you let me have your instant message for analysis? Text messaging, will you let me have your texts? No you won't, no you won't. People are very reluctant to give data from their electronic store, that's one of the problems in researching this business.

It's all so recent I suppose, yes I was last lecturing in here about 1985, I suppose. Well, just think what you didn't have, in 1985. That you now take for granted. Indeed, you don't have to go so far back, just ten years ago, what you didn't have. When did you first send an email, most of you? (beep) I want it, I want it, I want it, When did you first send an email? 1995 perhaps, 1996, perhaps a few of you before that because after all, email was on the system on the university world since the late 70s actually, but most of us 1995, 6, 7, 8 you know, less than 10 years for many of us. When did you first look something up on the World Wide Web? Well, you couldn't have done that before 1991 because World Wide Web wasn't invented until 1991. And most of us didn't realise it was around until the mid-90s. When did you first Google? Well, you couldn't have done that before 1998.

I wrote a book called 'Language and the Internet' it had its first edition in 2001, and it had to have a second edition in 2005, four years between the first and the second edition, that's crazy, that doesn't happen usually. Why? On the 2001 book didn't even mention instant messaging, didn't exist then, did in theory, but nobody was doing it. Blogging, the term blog actually appeared for the first time in the English language in 1997. But nobody was blogging before about 2002. And it really only became a big thing in 2003 and thereafter. So, we are talking about something that is very very recent as far as the technology is concerned and thus as far as the linguistic implications are concerned. As soon as this technology arrived of course it became, well I suppose 'addictive' is perhaps the right word.

Are you addicted to the internet? Yes, yes, a loud yes. Or – well there are tests, you see, there is a criteria, you can use to judge whether you are addicted to the internet or not. If you want to find these criteria in great detail, all you've got to do is typing to Google 'addicted to internet'. And they will tell you what they are. There are various criteria. For example, you are addicted to internet if you wake up in the middle of the night to go to the toilet, and check your email on your way back to bed. Yes, I see several nods of recognition there, absolutely. You are addicted to internet if you place your fridge by your computer, yes few nods there, absolutely. When somebody talks to you and you haven't quite heard what they said you are addicted to the internet if you say to them 'scroll up' rather than 'I beg your person', right? That's a very important point for English learners, that are happening a lot at the moment.

You are addicted to the internet if you call a taxi and say 'hi, can you take me to www.for/forward slash you are addicted to internet. I could go on, I could go on, you are addicted to internet if all your friends have an @ in their names. You are addicted to the internet if are yes, are yes, you call up your email account and it says 'no new messages', so you call it up again. You cannot believe that nobody is talking to you.

Part 2.

Yeah, this is all internet stuff. And it has generated what some people have called a linguistic revolution. And the term is contentious because other people say there is no revolution here at all. And the reason why it's contentious is because it all depends what you are talking about. If you mean, has the arrival of the internet had a major effect on the English language, the French language, the Chinese language, and so on, well the answer is no it hasn't, in terms of usual criteria of what language changes all about. If you ask how many new words have come into the, let's just take the English language, as a result of the internet, well I counted them at one point, a few years ago, and, the figure will be a bit larger now, I got up to a few hundred, I think I got up to about four or five hundreds, certainly not a thousand, you know. New terms like, what you know, menu and chat and blog and all of those, when you start, you think, there is a huge amount new vocabulary coming to the language as a result of the internet. That's not so. We are talking about few hundred terms, which might seem a lot, but compared with the size of English vocabulary, a million words or more. What the few hundreds new words, it's a tiny section in English lexicon. I think the same applies to other languages. Same point applies to texting, text messaging. And all the abbreviations that have come in with text messages, like C U L8R, and all of that. Capital C, capital U, and number 8 instead of the eight. Something happening all over the world, I've collected examples from a couple dozen languages, they are all doing the same sort of thing. And prophets of doom, this is a disaster, this is the end of the English language, as we know it, this is end of language, as we know it. Nobody will be able to spell any more, everybody will be saying C U L8R in their exams. Which is an odd thing to say because I can't think of one circumstance where an exam answer, prompt the phrase C U L8R unless you are trying to get off with the examiner, I suppose.

But everybody is saying that text messaging abbreviations are an absolutely disaster because children especially teenagers are using them, and nobody knows how to spell any more. Well, a couple of facts; there have now been two or three studies done of text messaging. What percentage of the words in text messages do you reckon use those abbreviations, what sort of figure comes into your head? Because the popular impression, is it's 100%, everything is abbreviated, well certainly 50%, actual figure is in one study 6% and in other study 8% in another In other words, only a tiny number of texts actually use the abbreviations that have attracted all the headlines and the disaster scenarios. And even the teenagers don't use them all that much. Because, all right they might turn up in C U L8R, but how often in your texting day do you want to say that? You know not all that often and in fact an awful lot of the abbreviations that are said to be very frequent tare actually rather rare. And ask for the teenage issue, well the age rage of texting is drawing all the time, and there have now been a number of text messaging poetry competitions where the aim is to write a poem on your phone in 160 characters. And the first prize in the one that was held this year was indeed won by a sixteen year old and the second prise was one by the coolest granny on the God's Earth, aged 68. So, everybody seems to be texting these days.

The linguistic effects are minimum, very little influence on vocabulary, negligible influence on grammar, if you start looking for new grammatical constructions that have come into the English language, as a result of the internet., you can find hardly anything. You do find tendencies of course, short sentences, average number, the average length of a sentence in a chat room is 6 words, for instance. In instant messaging, the average is shorter - in texting the average is shorter, you'd expect that. So, there are certain tendencies in the use of, in the frequency with which grammatical constrictions are used, but new grammatical constructions as a result of the internet, I can think of only one or two trivial examples. For instance, the wonderful revitalisation of the old plural ending n, as in oxen, ox plural oxen, is it now? You have to learn that, as an exception to the rule, it is not, ox plural oxes, it's ox plural oxen, what a pain you said that English should be so stupid once upon a time, I bet.

And then you found another one, brother plural brethren. I know, wow, this is very good, this is a really live ending, I shall use it all the time. Except you didn't find any more except children. And that was it, really. Well now, the internet is giving us more. Because based on the ox oxen plural, any internet piece of technology that ends in x has been giving the ending 'en.' So, if you've got a fax computer, and you've got a lot of them, you have got a lot of faxen, not lots of faxes, and there are several cool internet words ending x, and they all have the plural 'en', if you are in a business, I mean, I mean outside, people just say faxes, what do they know?

And to take another example, the plural z in English now, I've got some wares for sale, some wares, w a r e s, but on the internet, you will see warez very often. Now what's the z plural doing there? Well, z has a reason as a means of signalling the wares in question are illegal, or elicit, they are pirated, they are downloaded and shouldn't be there at all really except of course they are very widespread. And this z meaning 'pirated plural', you find quite a lot now, any kind of download from all sort of circumstances you might find a plural ending in

z. That's a little grammatical point too. But I can find only handful of points of this kind, and they only affect very small amount of the language.

Part 3.

So there is very really vocabulary change, very little grammatical change, orthographic change, very little change in the orthographic system, well there is more experiment here certainly, but change, long term change, I don't know. What's the experiment, well as we all know if you write an e-mail, you don't have to punctuate as in standard English or standardise your language, whatever it happens to be. You don't have to capitalise as in standard English, you don't have to spell as in standard English. You will get away with all sorts of orthographic murder. I write my emails all the time, in low case for the most part. I don't sometimes I do sometimes I don't put capital I for the first person pronoun sometimes it's lower case. Sometimes I put full stops in, sometimes I don't. Sometimes I put exclamation marks in sometimes I put ten exclamation marks in, like all you do when you want to really express something that you are excited about, exclamation mark, exclamation mark, exclamation mark, exclamation mark.

So, I play about with the punctuation system, as indeed does pretty well everybody I know who uses the internet - except as older people started to use the internet and feel that they can't possibly do anything like that. And there are quite a lot of people around who are totally scrupulous in putting in every traditional punctuation mark, every capital letter and would never dream of spelling a word if it wasn't in the Oxford Dictionary.

Notice that when I send you a message like this you do not accuse me of being illeducated, If you get a message from David Crystal, which has a spelling error in it, and it says compture instead of computer, you do not deduce from that Crystal cannot spell. You do not say he is an idiot. What you say is he was typing very fast and he hasn't bothered to correct it and I'm not bothered about that because I do the same sort of thing. And that kind of tolerance level is around as a norm in internet interactivity. It is not a tolerance level that you would associate if I wrote you a letter or typed you a letter and typed compture, then you'de have a very different reaction, then you would say that's very sloppy, that's careless of Crystal we shalln't give him a job, whatever. But on the internet, that level of tolerance level is perfectly normal. So, new style has emerged undoubtedly your way of using the language, and there are many styles in fact the styles that you associate with email is different from the style you associate with chat rooms, so on, so forth, as we will see in a minute.

So there are new tolerances around. And whether some of these tolerances will have a long term effect on the language is anybody's guess, I mean we are talking about 10 or 15 years' worth of language development, and that's a drop in the ocean as far as language changes is concerned. And I don't know whether some of these affects are going to be long term. Type the word, rhubarb into Google spelling it with the 'h' and you will get a lot of hits. Type rhubarb into Google without the 'h', and you will get millions of hits also. Now the 'h' should never have been there in the first place. I mean a lot of English spellings are crazy

simply because people in the 16th century thought that it would be helpful to organise English spelling along classical etymological lines.

And when you go back to the 16th century and you encounter a word like debt, money debt, d-e-b-t. Now you've all asked yourselves haven't you, where did that 'b' come from and what is it, why is English such a stupid language as to put a b that you don't even pronounce in a word like debt, shouldn't it be just d-e-t, and then we would all be happy. Well, you are right because once upon a time, that's what it was. In Middle English, the word for debt was det or dett or dette, but basically det. And then in the 16th century, a group of scholars who felt that the English language was - the spelling of English was becoming complex, and indeed it was, because everybody was spelling as they wrote more less and the dialect forms of the language were being represented in the spelling and the thing was indeed getting complicated. A number of scholars got together - you had the first attempt to simplify the spelling movement in English. And they thought we know how to solve this problem of complicated spelling. It's because the words don't represent the etymology where they came from historically. If we give people clues about the etymology of the words, then they will all be able to spell so much better. They will understand spelling better and life will be wonderful. And so, they looked at lots of words in English, traced the etymology and added letters to the word to show the etymology. So they found a word like debt and said oh no, no, n,o no. Debt comes from Latin, debetom, debetom has a b in it. If we include a b in the word everybody will be happy because they all now know where a word came from, so they did. And blow me down it caught on, you see. But most of the words that were brought in at that time that were changed in that way, caught on, in that way. The 's' in island, for instance and many such words. So, there is an irrationality in the English spelling system, which came from many people interfering with it over quite a long period of time. We are talking about hundred years of spelling modification in the 16th and 17th centuries.

Part 4.

Today for the first time, people are able to demonstrate how they really would like words to be spelled. Up until internet, there was no way of exercising linguistic democracy. Because the language was in the hands of a small group of people who were in charge of it. And some of your languages that you speak here, it's even more so the case if you have an academy in your country for instance which looks after the language, it's even more rigid than in the case of English, which has no academy. But even in English, there are, as it were, academician that is people who set them sells up to be authority on the language and what they say goes. And this has been the case since the 18th century. The first people who set themselves up were people like Dr. Johnson who wrote the first people who set themselves up were people like Dr. Johnson who wrote the first really big and authoritative English dictionary. Bishop Louth, this is about 1755, Bishop Louth, 1762, who wrote the first influential English grammar. And John Walker 1773, who wrote the first English pronouncing dictionary. And that amazing 20 years from 1750 to about 1775 when top-down people said this is how you will use the language, and everybody said OK we will.

It is extraordinary to think, that a small group of people could have such an influence on usage as they did. But they did. And then in the 19th century, their role was taken over by the publishing houses. So the style guides of Oxford

University, and Cambridge University, and several others similar in the States, Chicago. These started to lay down the rules about how you should use the language. The rules were always top-down. The definition of standard English, how you should write English, what grammar should you use, what words should you use, what spellings, what punctuation, all of these rules were formulated in the 19th century for the most part by the major publishing houses.

So, you mentioned the book I've written. Well, when you read me, are you reading what I wrote? What I wrote? No you are not. I write what I write. I send it into a publishing house. They then attach a copy editor and a proof-reader to my manuscript. And they then ensure that my manuscript fits the house style of the publishing house that it is going to appear with. And they will change my style. They will punctuate it differently, they might choose a different relative pronoun. The book that was there, the book which was there, might go one way or the other. They might spell things differently, should my verb end in 'ise' or 'ize', for example. And all together there about five or six hundreds points of style in a typical publisher's house style manual.

And my book for Cambridge University Press is going to appear as a Cambridge book and all the questions of I have mentioned, hyphenation, is it 'flower-pot' with a hyphen or 'flower pot' with a space 'flowerpot' with no space or no hyphen, three options here. A decision will be made, somewhere in the press, and the copy editor's job is to make sure that Crystal's confirms to those rules. Can I object? I can only object if I feel that a copy editor decision has altered the meaning in some way. I cannot object just on the grounds of 'I don't like it' it's my style rather than yours. That's hard luck. The only people who can get away with that kind of objection are poets and novelists, and people where the creative element in the work, you could sensibly argue, is bound up in the actual linguistic choices that I made.

The irony of course is that the book I write for Cambridge University Press, which might change all my 'ise' verbs to ize, if I then sent the book into Oxford University Press, they would change them in the opposite direction because that's one of the big differences between Oxford and Cambridge is some of the spelling rules that they operate with.

So the points I'm making is that over the last 250 years, the rules of the languages and how you see standard English in print before you, have been governed by top-down people, copy editors, proof-readers, editors in general. And genres of written in English are affected in that way. Doesn't just mean books, same thing applies to magazines, newspapers, everything is in the hands of the editors and they all got style guides. Only now, in the last five years really, maybe ten, have we seen bottom-up writing. Once again in English.

Part 5.

Un-interfered with by copy editors and proof-readers and the whole editorial business. If I write a blog, then you are seeing the language at its most naked, as it were. Now before I go any further, not wishing to take anything for granted in a business which is relatively recent in origin, how many of you blog? One two three four five six seven, so we are talking about a handful of people really. How

many of you routinely look at blogs? A sprinkling more. But still we are taking 5% of the audience or 10%. How many of you know what a blog is? Mmm pretty well, but not everyone is putting their hands up. You see it is a relatively recent phenomenon blog, web-log, it is short for web log. It is a diary effectively, only the diary can be carried out by an individual or by an institution, or by any organisation. The reason why it is all so recent is that the software which you need in order to construct your blog is relatively recent in origin. Most software firms that do this only came online in about 2003. It is now the fastest growing area of internet activity. And it has a demotic kind of motivation because it allows you to express in public, and in a print medium - that's important you see - in a print medium therefore looking very posh indeed, the craziest of ideas that you may want to express to the rest of the world. It can be any subject, it can be any topic, and it really is quite exciting.

So for example, I might decide today I want to write a blog about something that really excites me, little black control boxes. Ah, they are wond – you know, you just...... do you not realise the beauty in little black control boxes I love them. I wonder if anybody else in the world shares my love for little black control boxes? I will have a blog about little black control boxes. So I call down my software, and I call my blog, 'Dave's black box control boxes,' and I type up my first blog and say 'today I found at University of Reading Theatre, I found the most wonderful little black box control thing, and I think I want to tell you all about it, it was like this, it was like this, it was like this. Go, send, off goes my blog into the blogerspher.

And I tell all my friends about it, I say I got this blog on black boxes. They say, 'oh yeah, all right, ok', but they do go and read it because they want to see what sort of a lunatic I am and they are, I am reading their blogs too, so we're sharing each other's interest here. So we are starting to get a little coterie of people who are aware these little black boxes are really something special, wow. Meanwhile, in Argentina, Juan, also interested in little black control boxes, and like me thinking he is the only person in the world to have this interest, one day Google' 'little black box, control boxes'. By that time, Google has 'spidered' my blog. Spidered? - has crawled through my blog and indexed it, so that it's ready there for a search. And one day Juan put into Google, 'black control boxes' and up comes my blog, and Juan is so happy. Because now he has found a soulmate, across the sea, who is interested in little black control boxes like he is. And he sends a comment to my blog, and says 'hey, hola! I have 'dadedadeda', and he tells me about his little block control box he has got in his house. And I am really interested in this so write back to - and we will have a real discussion and then before you know where you are, you have a blog read by millions of people. And of course the biggest blogs are read by millions of people every day. The big political blogs for example. Some of the media blogs that follow radio and television programmes have millions of hits every day. Now that's the background of blogging.

But the linguistic point is, when I write my blog there is no copy editor changing me. I'm writing it as I want to write it, and when you actually start analysing the language of blogs, what you find is an extraordinarily spontaneous sort of grammatical construction that previously you would only ever have encountered in informal speech. Never have seen it written down unless you were a linguist transcribing these things for an exercise or something. And certainly, never

written down in a beautiful typeface. Looking like its traditional standard English, but when you actually start to read it, you realise it's not like any standard English you've ever read before, ever. Because the last time that kind of spontaneous writing appeared in public was in the Middle Ages and standard English didn't exist then. So this is the first time you are seeing an extraordinary variety of English emerging. Sentences that ramble all over the place, that don't finish, that have interpolations and parentheses inside. Where rules of traditional grammar are not broken. They are simply - people simply don't know they are there, so they just write as they speak, use vocabulary of all kinds, colloquial as well as semi-colloquial and occasionally formal. And in a bilingual or multilingual situation, mixing languages.

Part 6.

Mixing languages dramatically I mean. Code mixing, switching in and out and in and out of one, two, three or more languages. Which is probably globally speaking the norm, because when you think about it most people in the world are bilingual, three quarters of the worlds population is bilingual, we know that. And of that three quarters, well I don't know what percentage actually is on line, it will only be a relatively small percentage I imagine. But most of the people I would generalise and say most of the people who use the internet in the world these days are bilingual. So you are going to get an awful lot of code mixing around. I have seen relatively little of it because as I have said it is difficult stuff to get hold of but when you do happen to get hold of it, it floods you. And so there is all kinds of really new and interesting stylistic change taking place on the internet simply because people are now voting with their linguistic tongues. And deciding, because nobody can say nay, that this is the way it shall be.

Whether some of that is going to have long term consequences for language change, I do not know. I don't know whether in 50 years time because most people think that rhubarb should be spelt without an 'h' that one day rhubarb will be spelt without an 'h'. A lot of spelling change does come from the people, as it were. It only takes a few very influential people to spell rhubarb without an 'h' in public, and the Oxford English Dictionary people will pick it up, and record it and after a certain amount of time they will say a 'variant' spelling and then maybe one day it will be come the 'normal' spelling; that's how spellings change.

25% of the spellings in the dictionary have variants, 25%, You know is it flowerpot or flower pot? Is it Bible with a capital 'B' or is it bible with a small 'b'. Is it advertise with an 's' or is it advertise with a 'z'. Is it archaeology with an 'ae' or is it archaeology just with an 'e'? When you go through a dictionary and count up all the words that have a variant spelling of that kind whether it's British English or American English or whatever the reason is, it's about 25%. 1 in 4 words have a variant spelling, it's extraordinary. That figure is going to increase as a result of the internet I have no doubt.

So in answer to the question what is the impact of the internet on an individual language, my answer is, at the moment not very much, but the potential for change is enormous. That nonetheless allows me to say I think, that the internet has been a revolution, but not because of its influence on individual languages but because of it's influence in forming a new medium of communication. Now

new mediums of communication do not appear very often, in the history of the race. I suppose the first medium of communication was the invention of speech whenever that was, some 50,000 or so years ago plus or minus several tens of thousands. Then the second revolution was the invention of writing, about 10 or 12 thousand years ago, again at various parts of the world at more or less the same time. So we've got speech, we've got writing and they're the two things that you people who are studying language spend all your time worrying about. Speech and writing, spoken language, written language, and looking at the differences between the styles and all of that.

And now we've got a third medium, electronic communication. Neither speech nor writing, something new 'computer mediated communication' they call it 'CMC'. Computer mediated communication, that is the jargon in the business. Internet-speak if you like, there are all sorts of popular names for it.

Now the question is why is CMC. so fundamentally different, why isn't it just speech, why isn't it just writing? One talks about having an email conversation so that sounds like speech and yet we are talking about typing onto the screen, that looks like writing. So why is the internet different from spoken language and written language? And here are some reasons.

First of all the difference is with speech. The bottom line here is what is it that makes a spoken conversation work? Conversation is the norm for speech isn't it? Something like 95% of all the speech you will ever use in the world will be a conversational setting. So what is it that makes a conversation work? And the answer is, the simultaneous feedback that accompanies the dialogue. Simultaneous feedback. So let me just 'role play' this out. I am having a conversation with somebody, here is me, here is my interlocutor over here. I am now speaking at some length to my interlocutor and telling him something that he needs to know about, and I am going jabber, jabber, jabber, over here. What is he doing or she, because I do sometimes talk to women. What is that person doing? They're not being passive, they are giving me feedback. The interlocutor is saying things like 'aha, yeah, yeah, yeah, uhm, uhm, no really ha, ha, well cor' blimey I don't know, yeah, yeah, aha, yeah' - and so on. And you've got to learn these things when you are learning interaction in a new language, haven't you? Because not everybody does the same thing, you know some crazy languages go that way instead of that way, you know and I know - there are lots of examples like that.

Now the point is you mustn't not do that. You mustn't not do that. If you withhold those features the speaker cannot continue. If I am just jabbering away and my listener withholds those feedback cues it can't work. I mean imagine it – there's me talking over there and here is the listener who then – and you can try this out by the way, try it out any time you like. Choose your target carefully. Not your chief examiner or head of department, or the Vice Chancellor, not if you want to keep your job and switch if off. So at one point you just go '(silence)'.

Now the point is the speaker will not be able to continue. Imagine it, he won't. He'll be going jabber, jabber, jabber, jab, jab – hello? Are you alright? Stroke? Heart? I mean you can't continue, if somebody withholds simultaneous feedback then you cannot continue. So that's the basic point about speech. It needs – speech is interactive – it needs that kind of dynamic and here's the difference

with the internet, isn't it. Because you don't get simultaneous feedback on the internet, you can't, can you. With one or two technological modifications that might make it possible soon, but traditionally you don't get it. If I'm sending you an email, having a conversation with you, then it isn't a conversation because while I am typing my email, I am getting no feedback from you. Why? Because you don't know you are getting an email from me yet until I press 'send' and it reaches you, then you can give me your feedback, but it's got to reach you first. While I am writing it there is no simultaneous feedback, so I am on my own. And I'd better take care because in the absence of feedback you can make all kinds of errors because if I'm saying something stupid here or something unclear my listener can say 'oh hang on a sec, excuse me, sorry I didn't follow that, are you trying to be rude? And I get the reaction straight away.

On the internet I can be unclear, not necessarily trying to be rude, but inadvertently being rude and all these other things can be, I send it to you. Have you ever had the situation? I bet you all have where you get an email back saying 'what was that all about? Sorry, hah? excuse me' and so on. And you look at your email and you say 'oh perhaps I shouldn't have done it like that. Now that wouldn't have happened in conversation but it happens quite a lot.

Even instant messaging is not instant from that point of view. You send your message, but while you are doing it -yeh I mean the response comes back pretty damn quick – but, not always pretty damn quick, depends which way round it goes, and you are still on your own. The only real breakthrough will be when you get the kind of video conferencing techniques becoming more routine, and while you are sending your message you are seeing the person at the other end who is reacting to your message. And with things like *iChat* that sort of thing is more or less available now except those of you who use *iChat* will know that it often doesn't work very well and the person at the other end sort of goes '?' because of the frame that's cutting, that is taking place and often there is a lag and the person at the other end goes '?' and you really don't know what's going on at all. One assumes that the technology will improve. But the point is, up until now, there hasn't really been simultaneous feedback so that is one of the big differences between internet CMC and speech.

Part 7.

The second big difference between CMC. and speech. Illustrated perhaps best from chat room activity. Many of you have been in a chat room. If you haven't you ought to go, and have some fun. You don't have to chat you can just lurk, the technical term is believe me, lurk in the corner, l-u-r-k, lurk in the corner, and just observe what's going on. You will be noticed after a while and they will say 'who are you?' You can say then 'I am a linguist actually and I am observing your chat room' – and then you get some interesting language. But reflect for a moment on what a chat room does.

In a chat room you are sitting there at your terminal in a room in which there might be 10, 20, 200, 2,000 other members sitting at their terminals around the world. And they are sending messages into the chat room and the messages are scrolling down your screen one at a time, as they come from whoever wants to make an observation. You yourself, can send a message anytime you like, to react

to one of the messages that you see. And you send your message, and after a delay which might be very brief, but in some cases is really quite substantial, your message will appear on the screen. It is the craziest of discourse systems,. Because, depending upon the nature of that delay, your answer may appear long after the question that motivated it, has scrolled off the top of the screen.

But, people do it. And reflect on what is going on here now. You are observing and monitoring and reacting to - depending upon your interests and typing speed - 10, 20 conversations taking place. Because the topics of the chat room can be varying, all over the place, one person might be saying 'I thought the latest James Bond film was absolutely fantastic' the next person might be saying 'I hate James Bond, I'd rather read Winnie-the Pooh. What do you think about Winnie the Pooh? And so it goes on with people talking about whatever they want to talk about whatever they want to talk about, and not necessarily continuing a single thread at all.

You can monitor and interact with all of this, and reflect, never in the history of the human race; have you ever been able to monitor and interact with twenty conversations at the same time. If you go into a cocktail party and there are twenty conversations going on, it is I suppose, theoretically possible for me to interact with all of it, and to go, start and say 'hello, good evening, how are you?' 'yes, that the interesting point about J...,' 'excuse me second,' 'yeah, oh, yeah, oh, really? 'Winnie-the-Pooh?' 'oh, I don't believe that 'excuse me a second' and go on. They - the men in while coats - would take you away if you did that sort of thing. It is aberrant behaviour, but not on the internet. On the internet, perfectly routine, you know. And nobody thinks twice about it, that's not like speech either, is it?

And there are various other differences, between speech and cmc activity. There are also differences between writing and CMC activity. There are things you do with a written language on the internet that are nothing like traditional writing,and time now just for a couple of examples. If you ask what is the most, what is the most fundamental feature of the written language, the most basic and obvious feature of the written language. And it makes me, excuse me, may I, here is a piece of written language. What is the obvious feature of it? Well, it's not changing. It's the same, put it down, pick it up, it's the same, wow. The permanents of writing, it's not like that on the internet. On the internet, you call up a site, a page, there it is, close it down, call it up again, few minutes later, it may have changed. It may have been refreshed. Its owner may have altered it in some way, same address, different writing. Indeed, you don't even have to call it up a second time; with many sights you can see the language changing in front of your eyes. Call up BBC News online and there are the news headlines, scrolling across the top of the page, written language moving, I say. I mean, if I that happened to your piece of paper, you'd think they'd landed. Something strange is going on. Dr. Who stuff.

But in the internet, it's routine to see animated language, animated written language. Pop up advertisements, you may not like them, but up they flash and down they go. All kinds of dynamic written language. Traditionally the only time you would have seen dynamic written language was on things like neon signs in Piccadilly Circus and a few cases like that. Certainly not in a personal interactive way, and that is a pretty fundamental difference when you think about it. Second,

just take for two examples of each, spoken and written, the second big difference. If you ask what is the fundamental functional property of the World Wide Web. What is it? Without which the World Wide Web couldn't exist at all. Well, the word "Web" is the clue, isn't it? It's the thing they call the hypertext link, the hypertext link. That is the little things in blue usually, or sometimes another colour often underlined, which if you click on it, send you somewhere else. OK? So we all know what that is.

Click and off you go from one part of the page to another part of the page, from one page to another page, from one site to another site, and so on. "The hypertext link." Without that, there can be no web. It was based on that, very simple notion. Now when did you last see a hypertext link before the internet? When did you see such a thing in the written language? Does traditional writing have hypertext links, and you start thinking about it, you say 'well, yeah, there were one or two things of bit like that in traditional writing. Footnote, yeah? Footnote is bit like hypertext, isn't it really? Number one, it sends you somewhere else. Cross-reference is a bit like hypertext link, see page so and so, click, and away you go except you can't click because it's just a book. But the difference, is that you don't have to have those things in the written language. You can have a whole book without any footnotes, without any cross-references.

You can't have an internet without a hypertext link. So that's a big difference between the two. And there are other differences, but that's enough I hope to persuade you that CMC is a new medium of communication, that is not like speech, and is not like writing. It has some other properties of speech, and it has some other properties of writing, but deep down, we are taking about electronic communication as offering new ways of communicating with each other that were not available in traditional spoken and written language. So I return to the point I made at the beginning of my talk is the internet revolution. Well from one point of you, no, its impact on individual languages so far, has not been revolutionary at all in my view.

From another point of view, as an introduction of a new electronic medium, then yes, we haven't seen anything like this in 12000 years. And I think that's a fair point to make for using the term 'revolutionary'. So, one has to keep a watching brief on it. The whole business has been only around for twenty years. It's difficult stuff to study as I said at the beginning because you can't get hold of the data very easily. But slowly that difficulty is being overcome. And it may be that as research increases then we will make findings that will make some of the remarks I'm making today seem out-of-date very quickly. In the meantime, thank you for your attention. We have a short time for questions. Thank you.