6 Talking about Time

DAVID CRYSTAL

Introduction

When the heroes of Douglas Adams's *The Hitch Hiker's Guide to the Galaxy* arrive at the location described in Part 2, *The Restaurant at the End of the Universe* (pp. 79–80), the narrator pauses for a moment of quiet reflection about the difficulties involved in travelling through time:

The major problem is quite simply one of grammar, and the main work to consult in this matter is Dr Dan Streetmentioner's *Time Traveller's Handbook of 1001 Tense Formations*. It will tell you for instance how to describe something that was about to happen to you in the past before you avoided it by time-jumping forward two days in order to avoid it. The event will be described differently according to whether you are talking about it from the standpoint of your own natural time, from a time in the further future, or a time in the further past and is further complicated by the possibility of conducting conversations whilst you are actually travelling from one time to another with the intention of becoming your own mother or father.

Most readers get as far as the Future Semi-Conditionally Modified Subinverted Plagal Past Subjunctive Intentional before giving up: and in fact in later editions of the book all the pages beyond this point have been left blank to save on printing costs.

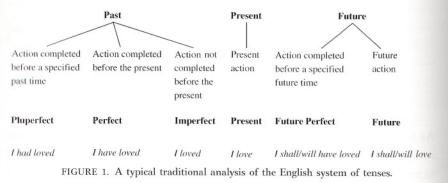
The Hitch Hiker's Guide to the Galaxy skips lightly over this tangle of academic abstraction, pausing only to note that the term 'Future Perfect' has been abandoned since it was discovered not to be.

The traditional view

As it happens, '1001' is probably not too far from the truth, at least rhetorically, when we begin to study the ways used by the languages of the world to enable us to talk about time. Certainly we must forget the mindset instilled

into most of us when we first encountered the study of the English language in school. There, in a tradition that extends back over 300 years, we would have been told that it is all, really, so very simple. Time is expressed by the verb, through the notion of tense. There are three basic tenses, because there are three logical times along the time-line: past, present, future. Other tenses can make further divisions along this line. We might have 'time completed before the present' - the so-called 'perfect' tense (i.e. the time is 'perfectly past'). We might have 'time not completed before the present' - the so-called 'imperfect tense' (i.e. the time is 'imperfectly past'). Or we might have 'time completed before the past' - the 'pluperfect', a contraction of plus quam perfectum (more than the past). Figure 1 illustrates this scheme of things, using one of the earliest and most influential works, Lindley Murray's English Grammar of 1795. For anyone brought up on an educational diet of Latin, this would all seem very familiar. In that language, we find exactly the same system, illustrated in Figure 2 for the forms of amare, 'to love'. The Latin system looks very neat: each form has a distinctive ending, and indeed it is this concept, of the word-ending changing the time-reference of the verb, that provides the definition for the traditional notion of 'tense'.

But if we compare the Latin and the English systems, with respect to this definition, we encounter a difficulty. Look at the endings in the English examples – or rather, ending, for there is only one. An *-ed* ending appears in four examples, and the other two have no ending at all: *loved* and *love*. Dare we talk about 'tenses' when there is no distinctive ending? Murray dared, and thus helped to form the orthodox traditional view. He affirms (*ibid.*, Chapter 5, Section 5):



Pluperfect Perfect Imperfect Present Future perfect Future

amaveram amavi amabam amo

amabo

amavero

FIGURE 2. The Latin system of tenses, using the verb amare (to love).

the English language contains the six tenses which we have enumerated. Grammarians who limit the number to two or three, do not reflect that the English verb is mostly composed of principal and auxiliary; and that these several parts constitute one verb. Either the English language has no future tense (a position too absurd to need refutation) or that future tense is composed of the auxiliary and the principal verb. If the latter be true, as it indisputably is, then auxiliary and principal united, constitute a tense.

Other grammarians thought this was a very good idea, and in some works the number of tenses grew and grew, as a result. As the author of the article on 'Grammar', in the first edition of the *Encyclopaedia Britannica* (1771) put it:

> The first and most obvious division of time is into *present, past,* and *future.* But we may go further still in our divisions of time. For as time past and future may be infinitely extended, we may in *universal time past assume many particular times past, and in universal time future many particular times future,* some more, some less remote, and corresponding to each under different relations.

And on this basis, he divided each tense into definite and indefinite types – the latter, for example, including *I did write, I may write, I can write* – and arrived thereby at an unspecified but extremely large number of tenses. The influence of this kind of approach is still with us – for example, in the locution 'conditional tense' for *I would write*, which is widely found in the world of teaching English to foreigners.

Of course, there were some who saw through this flagrant disregard of Ockham's razor very early on. Entities were plainly being multiplied well beyond necessity. In 1829 William Cobbett wrote *A Grammar of the English Language* in the form of a series of letters to his 14 year old son James – as the title continues, 'intended for the use of schools and of young persons in general; but more especially for the use of soldiers, sailors, apprentices, and plough-boys. To which are added, six lessons, intended to prevent statesman

[sic] from using false grammar, and from writing in an awkward manner.' The section on 'time' (*ibid.*, §255) begins thus:

Of *Times* there is very little to be said here. All the fanciful distinctions of *perfect, present, more past*, and *more perfect past*, and numerous others, only tend to bewilder, confuse, and disgust the learner.

And he goes on to explain (ibid., §257):

Why, then, should we perplex ourselves with a multitude of artificial distinctions, which cannot, by any possibility, be of any use in practice? These distinctions have been introduced from this cause: those who have written English Grammars, have been taught Latin; and, either unable to divest themselves of their Latin rules, or unwilling to treat with simplicity that which, if made somewhat of a mystery, would make them appear more learned than the mass of the people, they have endeavoured to make our simple language turn and twist itself so as to become as complex in its principles as the Latin language is.

A little earlier, he restates the minimalist position (ibid., §255):

There can be but *three* times, the *present*, the *past*, and the *future*; and, for the expressing of these our language provides us with words and terminations the most suitable that can possibly be conceived.

I can think of several people – not least, from France – who would dispute the last point! But here I want to address only his first observation, that English (and possibly all languages) may be analysed in terms of a simple three-part system. It turns out that the relationship is much more complex – not in the way Lindley Murray or the *Britannica* contributor thought, but sufficiently complex that no-one has yet presented us with a comprehensive account of all possibilities of temporal expression in English, or in any language.

The time reference of tenses

Virtually all traditional grammarians believed that the relationship between time and tense is direct and straightforward. Here is Cobbett again (*Grammar*, §259):

Time is so plain a matter; it must be so well known to us, whether it be the *present*, the *past*, or the *future*, that we mean to express, that we shall hardly say 'we work,' when we are speaking of our *having worked last year*.

The present tense, on this account, refers only to present time – to what is taking place at the moment of speaking. One of the major contributions of the linguistic accounts of English grammar written in the past century has been to demonstrate the fallacy here. It turns out that the present-tense form can refer to virtually any time along the time line. Let us work backwards.

We pick up a newspaper and see the headline, *Jim Smith dies*. It is in the present tense, but the time of the event is recent past: the sentence means 'he has just died'. It does not mean that poor Smith is dying while we read. *He dies*, with present time application, is found only in stage directions. In the newspaper, the use of the present tense gives impact, immediacy. It suggests that the paper is up to the minute. *Jim Smith has died* sounds flat, by comparison. *Jim Smith died* even more so. Figure 3 shows just how many such headline usages there can be, in just part of one page.

Hilary comes in and says to Lucy *I hear you've found a new flat*. But she is not hearing Lucy saying anything. She heard the news some time before – maybe even days before. *I hear you* is possible, as a comment made while someone else is talking, but only in rather special circumstances: for example, there is the acquiescent *I hear you* meaning 'I hear what you're saying (but am not necessarily agreeing with you)', or the confrontational *I hear you*, *I hear you!*, as an appeal to someone to shut up. The normal use of *I hear* (and *I see, I find*, and several others) is to describe the past as if it were hap-

THE INDEPENDENT versen shines in England count **Trinidad triumphs Castleford** send Montgomerie black day for cost of final World over boxing's Wigan crashing out of misses out on Sky Blues mar 2 Cup warm-up Golden Boy man play-offs Matth Paris pay-day

SPORT

BREMIERSHIP Wednesday woe for Wilson as Newcastle's eight-goal slaughter at St James' Park leaves him in danger of dismissal

Shearer hits five on Robson's big day

FIGURE 3. A typical newspaper section front page, showing the use of the present tense throughout. pening now – what is sometimes called the 'historic present'. It is to use the present tense to convey a somewhat dramatic effect.

We can make the present tense refer even further back in time, when telling stories or in imaginative writing. Listen to this, begins the raconteur, I'm walking down Oxford Street, and I see my brother on the other side of the road.... Only someone who is inexorably perverse, drunk, or under the influence of drugs would respond to this by saying, 'Excuse me, you're not walking down Oxford Street, you're here talking to me'. Once again, for dramatic purposes, the present tense is being used to convey immediacy. The storyteller could have said: I was walking down Oxford Street and I saw my brother on the other side of the road ...; but it distances the speaker from the action. There is no limit to the time gap which can be reported in this way. An imaginative historian might write: Finally, in 1215, the barons meet the king at Runnymede And it is perfectly normal to see chronological lists written entirely in the present tense: 264 BC First Punic War begins. Several instances of this can be seen in Figure 4, which is an extract from the 'Chronology' section of The Cambridge Factfinder.

What about the present tense being used to refer to future time? We leave for France tomorrow. I start a new job next week. Plainly, this is no problem, thanks to the use of adverbial constructions that refer to future time. The adverbial is critical. Nobody will bat an eyelid if I say *I'm leaving for France* tomorrow, and stay sitting in my chair. Not so if I say, Well, I'm leaving, without providing any evidence of movement. Eyelids will then be unquestionably batted.

Then there is the use of the present tense to refer to a time reference that extends from the past, through the present, and into the future. This is found when we want to express the idea of an event being repeated, or happening regularly. Here, too, we usually need to rely on an adverbial to express the notion of frequency of occurrence. *I go to town every Thursday* means that on Thursdays in the past I have been to town, on Thursdays in the future I shall go to town ('if I'm spared', as the Irish say), and – if it happens to be Thursday when I am making the remark – I might be going to town while I speak. Sometimes, the sentence has a 'habitual' meaning without any adverbial expansion. *James drinks*.

This last usage is very close to the 'general truth' meaning of the present tense. Here the time frame is extended to include all conceivable times – in

	Battle of the Somme.	1933	Franklin Roosevelt introduces New Deal.
	Irish rebellion (to 1921).	1933	Adolf Hitler becomes Chancellor of Germany.
1917	US Expeditionary Force in Europe.	1933	Reichstag Fire in Berlin.
1917	Russian Revolution.	1933	Prohibition repealed in the USA.
1917	Civil war in Russia (to 1922).		Discovery of polythene.
1917	Balfour Declaration promises Jews a home in Palestine.	1934	Long March of Chinese Communists begins (to 1935).
1918	Fourteen Points statement by President Wilson.	1934	Discovery of nuclear fission.
	End of First World War.		Italian invasion of Abyssinia (Ethiopia).
	Women over 30 given right to vote in Britain.	1936	Beginning of Spanish Civil War (to 1939).
	May 4th movement in China.		Anti-Comintern Pact between Japan and
	Foundation of Soviet Republic.		Germany.
	Amritsar massacre in India.	1936	Arab revolt in Palestine.
	Bauhaus movement established in Germany.		British constitutional crisis over Edward VIII.
	John Alcock and Arthur Brown make first Atlantic air crossing.		John Maynard Keynes publishes his economic theory.
1919	First woman MP in House of Commons (Lady	1936	First public television transmissions in Britain.
	Astor).		Queen Mary's maiden voyage.
1919	Adolf Hitler founds National Socialist German		Crystal Palace destroyed by fire.
	Workers' Party.		War between Japan and China begins.
1919	Spartacist rising in Berlin crushed.		Pablo Picasso paints 'Guernica'.
	League of Nations established.	1937	Golden Gate Bridge completed in San Francisco.
	Radio broadcasting begins.	1937	Hindenburg zeppelin destroyed by fire in USA.
	Treaty partitions Ireland.		Jet engine tested.
	USSR established.	1937	Germany occupies Austria.
	Benito Mussolini in power in Italy.	1038	Munich Agreement.
	Frederick Banting and Charles Best isolate		Discovery of nylon.
1544	insulin.	1938	Chester Carlson makes first xerographic print.
1922	BBC makes first regular broadcasts.	1930	Germany invades Czechoslovakia and Poland.
	Tomb of Tutankhamun discovered in Egypt.		Second World War begins.
	Munich putsch by Adolf Hitler.		Evacuation of Dunkirk.
	Republic proclaimed in Turkey.		Battle of Britain.
	Major earthquake in Japan.		Plutonium obtained by bombardment of
	Death of Vladimir Ilyich Lenin.	1940	uranium.
	Publication of Adolf Hitler's Mein Kampf.	1941	Germany invades Russia.
	General Strike in Britain.		Japanese attack Pearl Harbor.
	Jiang Jieshi (Chiang Kai-shek) leads movement		Death of James Joyce.
1940	for reunification of China.		Orson Welles makes Citizen Kane.
1926	John Logie Baird demonstrates television.		Construction of first nuclear reactor.
	Talking pictures begin.		Defeat of Germany at El Alamein.
	Charles Lindbergh's first solo flight across		American defeat of Japan at Midway.
1941	Atlantic.		Anglo-American landings in North Africa.
1927	Duke Ellington begins playing at the Cotton	1043	Surrender of German army at Stalingrad.
	Club.	1043	Capitulation of Italy.
1928	Alexander Fleming discovers penicillin.		D-Day landing in Normandy.
	Walt Disney introduces Mickey Mouse.		Education Act in Britain.
	Wall Street crash.		Atom bombs dropped on Japan.
	Lateran Treaty establishes Vatican as state.		Second World War ends.
	Amy Johnson's solo flight, England to Australia.		Yalta Conference.
	Creation of republic in Spain.		Nuremberg War Crimes Tribunal opens.
	Japanese occupy Manchuria.		United Nations established.
	Empire State Building built in New York.		Republic of Yugoslavia established under Tito.
	Foundation of Kingdom of Saudi Arabia.		Perón in power in Argentina.
	Chaco War between Paraguay and Bolivia (to		Civil War in China (to 1949).
	section and any and bound (10	1.10	on a mar at onina (to 1949).

1946 Civil War in China (to 1949). 1946 Civil War in Indo-China (to 1954).

FIGURE 4. An extract from the 'Chronology' section of the *Cambridge Factfinder*, illustrating the widespread use of the present tense.

1935)

other words, the statement is timeless. Oil floats on water. Two and two make four. Here, the use of some of the other tense forms is anomalous. Oil floated on water last week? Two and two will make four tomorrow?

Quite plainly, there is no straightforward correlation between the use of a present-tense form and the reference to present time. One linguistic form can have several time references.

The expression of future time

The opposite also holds: one time reference can be expressed by several linguistic forms. Future time is an excellent domain from which to illustrate this point, because in English it is not tied to a single ending. Strictly speaking, if by 'tense' we mean a system of verb endings chiefly expressing time, then there is no future tense in English, unlike in French (*Je donnerai*), and many other languages. Lindley Murray, you will recall, thought the view that there is no future tense in English to be 'a position too absurd to need refutation'. For him, *I will/shall go* counted as a future tense form. But there are serious problems with this view.

The main problem is this. If we allow *will* and *shall* to be counted as a future tense, because they express an element of future meaning, then we must logically include all the other forms in the language that also express an element of future meaning. There are many of these. Here are the chief contenders.

Alongside will and shall we have would and should. If I went to Paris, I would go up the Eiffel Tower may be hypothetical, but it is undeniably future. He should be arriving by boat likewise. If we insist on calling words and constructions that express future time 'tenses', then this would have to be called a 'hypothetical future tense', or some such.

The very common informal usage *be going to*, as in *I'm going to get something to eat*, typically pronounced /gona/. This construction allows us to express the notion that an event will take place very soon. On similar grounds, this would have to be called a 'near-future' tense.

The rather less common *be about to*, as in *I'm about to get something to eat*. This construction allows us to express the notion that an event will take place even sooner than *be going to*. It would, I suppose, have to be called an 'even-nearer-future' tense.

The rather more formal *be to*, as in I'm to get something to eat – in other words, someone has given me this instruction. Again, it is near future, though whether it is nearer than *be going to* or not is debatable. The time reference is probably very similar; it is the attitude involved that is different. A tense merchant might worry greatly about this, and try to persuade us that one points to the time-line in a different place from the other.

There are many other verb forms in English that express an attitude along with an element of future time. Think of *may* and *might*. I may go, I might go. These are plainly future, though the dominant notion they express is possibility or permission. A 'putative' future tense, perhaps? Or two, really, because *may* is not the same as *might*, referring to a greater likelihood of something happening. A 'definite putative' tense versus an 'indefinite putative' tense, doubtless.

We are up to six 'future tenses' now, alongside *will/shall*, but we have by no means completed all the possibilities, even in the verbs (e.g. *have to, had better, have got to*). And we have yet to consider all the adverbial expressions that are capable of expressing future time. Several are future time only: some refer to the very immediate future (*any moment now*); some refer to various kinds of removed times (*in a few minutes, later this afternoon, tomorrow, the day after tomorrow, next week, the week after next, next month, next year*); and some express varying levels of definiteness (*in 27 minutes time, next Monday* versus *one of these days, in due course*). It would be ridiculous to try to turn all of these into tenses.

The *reductio ad absurdum* of this approach is when we find the other tense forms, present and past, being used to express the future. We have already seen how the present tense can be involved in the expression of future time, when an appropriate adverbial is present (*We leave for France tomorrow*). But even the past tense can be used in this way. Consider: *I was going to Paris next Tuesday, but I'm not now*. Past tense, *was* going, referring to next Tuesday, but the event *not* happening now – a non-future future, in effect.

There is a second *reductio*, the complementary of the point just made. Not only do other tense forms express future time, but the two supposed future tense forms, *will* and *shall*, themselves express times other than the future. What does this next sentence mean? *John will keep coming in at midnight*. The intonation leads you into an interpretation of past time. This sentence can only mean that John has been routinely coming in at midnight in the past (and it is likely that this pattern of behaviour will continue). It does not mean that John is going to start coming in at midnight at some future point. Or consider this sentence: *Oil will float on water*. Here too, the sentence does not mean that, at some future point, oil is going to start floating on water. Once again, we have a 'timeless' expression.

The problem is evident. If tense is simply a matter of expressing time, then we have to recognise dozens of tenses in English. And the same reasoning would affect other languages. So it cannot be that way. It would make a nonsense of the useful notion of tense. The verb cannot take so much weight. Plainly what is happening is that other bits of the language – auxiliary verbs, semi-auxiliary verbs, adverbs, adverbial phrases – are contributing to the expression of time. Putting this another way: the linguistic expression of time spreads itself throughout the whole of a sentence. Some sentences illustrate this very powerfully. Just reflect on the temporal nuances that you find here:

> The former president is determined to keep on popping in and out of his brand-new office on Thursdays for the foreseeable future.

Past time in the former president. Present time in is determined. Ongoing (habitual time) in keep on. Popping – a momentary verb, which implies a very short period of time. In and out – a frequentative expression, which implies a longer period of time. Brand-new office – with a time-restricted adjective. On Thursdays – another frequentative expression. And for the forseeable future – a future time adverbial phrase. The time of the sentence moves from past through present to future. 'Time is so plain a matter'?

We are so used to thinking of verbs as the tools a language uses for the expression of time that we forget about the other parts of speech. I have already mentioned adverbs. Here are some examples of the others.

- Adjectives brand-new, old, fledgling, mint [condition], experimental, modern, latter-day, up-to-date, topical, traditional, ancient, bygone, obsolete, elapsed, brief, outgoing, punctual, eventual, venerable – and of course the words past, present and future themselves.
- Nouns date, hour, millennium, epoch, morning, day, week, year, season, etc. Also their proper names – January, Thursday, etc., as well as general notions such as tenure, period, interim, lull, interlude, adjournment, perpetuity, delay, aftermath, successor, occasion, relic, fossil.

Prepositions - during, throughout, until, up to, before, after, since.

Conjunctions – *when, whenever, while,* as well as many items that can also function as prepositions, such as *until, before, after, since.*

Even parts of words = affixes - can express a time relationship. In English this is chiefly done through prefixes, as in *ante-*, *proto-*, *pre-*, *post-*, *ex-*, *fore-*, *re-* (*rebuild*), *neo-*, *palaeo-*. We might stretch the notion to include the causative suffixes, such as *-en* (as in *frighten*) and *-ify* (as in *beautify*).

We have to conclude that there is no obligatory association between time and the verb.

Other languages and cultures

So far we have discussed time with reference only to English. We must not of course assume that other people, speaking other languages, will think of the time-line in the same way that we do, or even think of time as a line at all. The Amerindian language Hopi has three tenses, but they are not past, present, future. One tense is used for expressing general truths (such as 'Rivers flow fast'), one is used for reports of known or very likely happenings ('I saw her last week', 'I can see you now', 'I shall be with you in a minute' all use this form), and one is used for events that are uncertain ('She is arriving tomorrow', 'They will catch a moose'). These notions cross-cut our own concepts of time, and interact with other grammatical notions, such as aspect and mood.

The ending that might be best associated with tense may appear on parts of speech other than the verb. In Potawatomi, a noun may take an ending that places it in past time: 'my father' versus 'my deceased father', 'my canoe' versus 'my stolen canoe'. This is not the way we express our sense of time, but it is just as logical. We attach time categories to actions, through the verb. There is no reason why other languages should not attach them to things, through the noun. If we want to express the thought that my father has died – in other words father + exist + PAST – we can do it either by attaching the pastness to the action (died) or to the entity affected (as it were, the no-longer-existing-father). English can do this only in fun: do you remember Monty Python's, 'It's an ex-parrot'? In some languages it is the normal way to talk.

In Japanese, time relations can be found on the adjective as well as the verb. In this language, in an analysis made by the American linguist Bernard Bloch, adjectives are inflected for nine categories. One of these (the usual one cited in dictionaries) expresses non-past time: the attribute (e.g. 'good') is true now or in the future. The adjective does not mean merely 'good', but 'BE good' – that is, 'is good now' or 'will be good'. Another inflection expresses past time – the attribute 'was/has been/had been (etc.) good'. Another contrast distinguishes an indicative meaning from a presumptive one: for present time, the attribute is 'probably good, will probably be good, may be good', etc.; for past time, it is 'was probably good', 'must have been good', etc. And so on – nine contrasts in all. Several of the endings correspond to those used in verbs, making the adjective a much more 'active' part of Japanese speech than it is in English.

These linguistic differences relate to the formal ways in which languages express time relationships. They are central to the domain of grammar – its morphology and syntax. And, according to some, their significance goes well beyond grammar. For example, George Steiner, in *After Babel* (1975, p. 132), considers tense forms to exercise considerable control over our whole mindset:

> the inflection of verbs as we practise it has become our skin and natural topography. From it we construe our personal and cultural past, the immensely detailed but wholly impalpable landscape 'behind us'. Our conjugations of verb tenses have a literal and physical force, a pointer backward and forward along a plane which the speaker intersects as would a vertical, momentarily at rest yet conceiving itself as in constant forward motion.

This characterisation betrays its cultural origins, in its Newtonian metaphor of time as a line along which we progress, which we segment into durational quantities, and which we use to schedule things. But the general point is instructive, that the way we talk about time tells us something profound about how people think and how they live. So let us look at some alternatives.

Not everyone talks (thinks) of time in terms that can be related to a single dimension – a line, or path, or road. North American Indian people – the Hopi and Blackfoot, to take two reported examples – do not do so, nor do several peoples in Africa. For them, time is animate, alive, the activity of spirit. Time is what happens when things change. Among the Tiv of Nigeria, for example, time (according to the anthropologist Paul Bohannon) is like a capsule. There is a time for cooking, a time for visiting, a time for working, and, when people are involved in one of these times, they do not shift to another. The day of the week, for instance, is named after the things that are being sold in the nearest market – as it were, Monday is furniture day, Tuesday is cattle day. This means that, as you travel around, the names of the days of the week keep changing, depending on where you are. Cattle day might be (in Western terms) Tuesday in one part of the country but Thursday in another. You take two days to travel 80 kilometres, and find yourself linguistically on the same day as when you started out.

English does not routinely talk about time in terms of the way things change in the real world. We do admittedly sometimes encounter it through translation from other cultures: 'To everything there is a season, and a time to every purpose under heaven' says Ecclesiastes, and the writer goes on to list various options. But apart from this, the nearest we get to it is in the use of certain idioms, some of which seem to reflect a rural existence in which local events played a critical part. There is a hint of the Tiv way of life when we say *You can keep on saying that till the cows come home*, but it is only a hint. Just a few other time idioms show the possibilities: *till Tm blue in the face, at the drop of a hat, on the spur of the moment.* But they are marginal to the system of English expression.

Another kind of difference concerns the precision and explicitness with which many peoples talk about time. Because things do not change in exactly the same way, because circumstances alter, a language may not express a time system as an exactly repeating cycle of points (60 seconds, 60 minutes, 24 hours, 7 days, 12 months, 10 years, 100 years), and notions that are dependent upon this system, such as appointments, agreed starting times, and the like, do not make sense. This is far removed from our way of talking about time. Precision and explicitness are the bases of our mindset. It would be inconceivable for us to agree to meet without saying when, or to arrange a meeting without saying when it will start. However, such inexplicitness is common in many parts of the world. Edward T. Hall reports several such cases in *The Silent Language*. Here is one, from Afghanistan (*ibid*, p. 29):

> A few years ago in Kabul a man appeared, looking for his brother. He asked all the merchants of the market place if they had seen his brother and told them where he was staying in case his brother arrived and wanted to find him. The next year he was back and repeated the performance. By this time one of the members of the American embassy had heard about his inquiries and asked if he had found his brother. The man answered that he and his brother had agreed to meet in Kabul, but neither of them had said what year.

A second example. We would think it insulting or incompetent to schedule two or more meetings at the same time. If I were to say to you, 'I'll meet you to discuss your paper at 2.30 p.m. tomorrow' and then say to someone else in your earshot 'I'll meet you to talk about the finances at 2.30 p.m. tomorrow', you would feel affronted. You would say, 'But you're already meeting me at that time'. Anyone who persistently broke the 'one meeting at a time' rule would be considered inefficient. But this is not so in many parts of the world. In some parts of Latin America, for example, it is common to find that several other things are going on at the same time. Edward Hall again (*ibid*, pp. 19–20):

> An old friend of mine of Spanish cultural heritage used to run his business according to the 'Latino' system. This meant that up to fifteen people were in his office at one time. Business which might have been finished in a quarter of an hour sometimes took a whole day.... The American concept of the discreteness of time and the necessity for scheduling was at variance with this amiable and seemingly confusing Latin system. However, if my friend had adhered to the American system he would have destroyed a vital part of his prosperity. People who came to do business with him also came to find out things and to visit each other. The ten to fifteen Spanish-Americans and Indians who used to sit around the office ... played their own part in a particular type of communications network.

It is not the English linguistic way to dispense with temporal precision. The nearest we get to it is in colloquial speech, when we say such things as *it'll take years* (where we do not mean literally years) or *we'll be home in a while*, where *while* means different things to different people. The language does allow us a certain amount of fuzziness – *I've been here for ages, for yonks, I'll do it in due course, one of these days* – but they are marginal to the system.

We have to recognise that cultural differences enter deep within the system of time expression in a language. As Guy Bellamy puts it, in *The Comedy Hotel* (1992, Chapter 12):

A French five minutes is ten minutes shorter than a Spanish five minutes, but slightly longer than an English five minutes which is usually ten minutes.

And there are even more radical cases, where conceptions of past, present and future interact in more profound ways. The Aboriginal dreamtime is from the remote past, but is still alive, present, and accessible to modern members. Indeed, ways of talking about time in Australian Aboriginal languages present many differences from those familiar to Westerners. Some languages have the same word for 'today' and 'tomorrow', for example Ngiyampaa has *kampirra* meaning 'a day on either side of the reference time'. Eastern Arrernte has the same word, *apmwerrke*, for 'yesterday, a few days ago, in the last few days'. Wik-Mungkan uses *peetan* similarly.

Time expressions we live by

People sometimes express surprise that a language might not distinguish between yesterday and tomorrow. Such cultures can't have a very well developed sense of time, they say. This evolutionary way of thinking is misconceived. We must not fall into a Whorfian time-trap (see *The Cambridge Encyclopedia of Language*, 1997, Chapter 15): it is not that these people have no sense of the passing of time, or that time is not of importance to them. It is simply that their language encodes those aspects of time that they find to be of importance in carrying on their lives. If the distinction between yesterday and the day before is not of importance, it does not need separate words or inflectional endings. One might be able to ingeniously express the difference, but it is not routine.

We are the same. For us, 'yesterday', 'today' and 'tomorrow' are important, so we distinguish them, and we have standard locutions for 'the day after tomorrow' and 'the day before yesterday'. But we do not have a series of separate words for, say, different parts of the month: for us, the first week of the month, the second week of the month, and so on, are not usually important, especially in a system where weeks do not divide neatly into months, and where the months have limits that are so arbitrary we have to teach ourselves rhymes in order to remember how many days they have ('Thirty days hath September. . .'). Cultures that carry out activities on a strictly lunar monthly basis are likely to have developed an appropriate language to talk about it. Indeed, if a culture finds any particular time critical, then its language will reflect it in its lexicon or grammar. The Australian Aboriginal language Mervam Mir has the expression koki kerkerge, meaning 'in the middle of the north-west wind time' (i.e. the monsoon season). Such expressions would be of little value in the UK: what would we do with a conventional expression for 'in the north-wind season'?

You can always tell which temporal domains are not viewed as central by a culture through the absence of expressions for talking about that domain, or through the way words grow in imprecision and ambiguity as they approach that domain. Evidently times further backward and forward beyond two days are not so important to us, for we have no standard locu tions for them, and ambiguity can emerge. Weekly reference is fuzzy, for example. When exactly is 'a week ago'. I am speaking to you now, on Friday I say that something happened a week ago. Must it mean 'last Friday'? Did an event last Thursday not also happen a week ago? How far back may go before it becomes 'two weeks ago'? And if it happened last Saturday, which is less than a week, was this not also a week ago? Or again, I just said 'last Thursday', and you took me to mean a week ago. But strictly, in this case last Thursday was yesterday. To be precise, I might have added 'a week yesterday'. The same problem applies to 'next'. On Monday I say 'I shall see you next Friday', and we have no problem. 'I shall see you next Tuesday must, however, mean 'a week tomorrow'. So when is the boundary line? It is unclear. 'I shall see you next Wednesday' is ambiguous, and the exact date of the appointment had better be checked.

By contrast, the terms and locutions that are frequently used in a language do tell us something about the mindset of a culture. It is illuminating to examine the temporal metaphors we live by. Which verbs typically accompany the noun *time* in English? They are metaphors of value and ownership we *have* time, *find* time, *allow* time (for something), *take* time, *give* time, *fix* time, and *borrow* time (by *living on borrowed time*). We *need* it, *spend* it, *save* it, *waste* it, *lose* it, *gain* it, *buy* it, *value* it, *make* it *up*, and *play for* it. There are metaphors of speed and measurement: time *passes, whiles away, flies, runs, drags, hangs (heavily)*, or *stands still*; we can *mark* time and *keep* time. There are a few metaphors of creation and death. We can *make* time. Time can *heal.* ("Time wounds all heels', as Groucho Marx said.) And, if we don't like time, we can *kill* it ('before it kills us', as Herbert Spencer once added).

It does not have to be this way. All kinds of other metaphors could be used to talk about time. Ludic metaphors, for instance. We might play with time, or sport with it (as does Sanskrit). We might construct with time building or demolishing (as in some South Slavic languages). We might give it an aesthetic expression: time might sparkle or look nice, be clean or unclean. Time might have physical or biological properties (wet or dry, male or female). It might be sensual – auditory (listen to its sound), visual (see its colour or shape), tactile (feel its quality), olfactory (smell it), gustatory (taste it), telepathic (sense it). We lack a comparative idiomatology of time expressions. Unfortunately, we lack a comparative idiomatology of anything.

The literary dimension

But, you might be thinking: are there no auditory verbs used in relation to time? What about this sequence from the First Voice's opening monologue in Dylan Thomas's *Under Milk Wood*?

Time passes. Listen. Time passes.

Here an auditory verb is being made to collocate with *time*. That, in a phrase, is what creative authors are for. They are there to break the rules. But the rules have to be there first. As Robert Graves once said, 'A poet has to master the rules of English grammar before he attempts to bend or break them.' People like to play with time expressions, and when we examine a literary corpus we begin to see the way in which people can break out of their Western mindset and make contacts with those of other cultures. T. S. Eliot reaches out towards an Aboriginal conception of time when he says, in *Burnt Norton*:

Time present and time past Are both perhaps present in time future And time future contained in time past.

Tennessee Williams, in *The Glass Menagerie* (p. vii) relates to the Amerindian way of thinking in his comment that 'time is the longest distance between two places'.

Shakespeare revels in alternative conceptions of time. There are of course many instances of the standard collocations in his plays: people spend time, lose time, waste time, and so on, in the usual way. But in the nearly 1000 references that Shakespeare makes to 'time' we also find an extremely wide range of behavioural and mental metaphors, many of which in their personifications take us in the direction of the animating conception of time encountered in other cultures. 'A little time will melt her frozen thoughts', says the Duke in *Two Gentlemen of Verona* (III.ii.9). And in other plays we find time *untangling, reviving, sowing, blessing, conspiring, brawling, begetting,*

weeping, inviting, unfolding, ministering, expiring, and doing much more. People also treat time in a much more innovative way: they hoodwink it, redeem it, persecute it, confound it, greet it, name it, obey it, mock it, weigh it, jump over it, and a great deal else. Indeed, in As You Like It, we find a dialogue between the lovers Rosalind and Orlando that turns our standard conception of time on its head. Rosalind is in disguise, and recognises Orlando, but he does not recognise her. She is feeling mischievous, so she tempts him into a word battle (*ibid.*, III.2.292ff).

ROSALIND: I pray you, what is't o'clock?

- ORLANDO: You should ask me what time o'day; there's no clock in the forest.
- ROSALIND: Then there is no true lover in the forest; else sighing every minute and groaning every hour would detect the lazy foot of Time as well as a clock.
- ORLANDO: And why not the swift foot of Time? had not that been as proper?
- ROSALIND: By no means, sir. Time travels in diverse paces with divers persons. I'll tell you who Time ambles withal, who Time trots withal, who Time gallops withal, and who he stands still withal.

ORLANDO: I prithee, who doth he trot withal?

ROSALIND: Marry, he trots hard with a young maid between the contract of her marriage and the day it is solemnised; if the interim be but a se'nnight, Time's pace is so hard that it seems the length of seven year.

ORLANDO: Who ambles Time withal?

ROSALIND: With a priest that lacks Latin, and a rich man that hath not the gout: for the one sleeps easily because he cannot study, and the other lives merrily because he feels no pain; the one lacking the burden of lean and wasteful learning, the other knowing no burden of heavy tedious pedantry. These Time ambles withal.

ORLANDO: Who doth he gallop withal?

ROSALIND: With a thief to the gallows: for though he go as softly as foot can fall he thinks himself too soon there. ORLANDO: Who stays it still withal?

ROSALIND: With lawyers in the vacation: for they sleep between term and term, and then they perceive not how Time moves.

Beaten, Orlando then changes the subject. This early instance of temporal relativity, anticipating Einsteinian insights by some 300 years, brings us closer to the way in which some cultures routinely think of time, as a relative, dynamic, influential, living force, and express it so in their verb forms, vocabulary, idiom, and figurative expression. Nor should we take the Einstein analogy too lightly, given that some theoretical physicists, notably F. David Peat in *Blackfoot Physics*, have actually attempted to work out the parallels between quantum physics and Amerindian practices and ways of thought.

I have only begun to give an account of the way English and other languages enable us to talk about time, and many more areas await investigation. For example, there is the question of how deaf sign language copes with the expression of time. As can be seen from Figure 5, with concept-based sign languages, such as British Sign Language, a line along the vertical plane, near the signer's ear and cheek, is regularly used to express time relationships. It seems a simple, unidimensional matter, with degrees of pastness

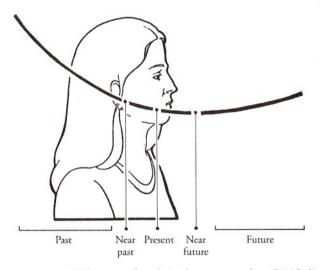


FIGURE 5. With concept-based sign languages, such as British Sign Language, a line along the vertical plane, near the signer's ear and cheek, is regularly used to express time relationships.

behind and degrees of futurity ahead. But do not be fooled by the unidi mensional appearance of the diagram. For there are two sides of the head, and two hands to use, plus head movements and facial expressions, so that it is actually possible to do something in deaf sign language that is virtually impossible in speech and writing - express several points of time reference simultaneously. I once saw a signer talking about two people (let's call them A and B) who had read the same book, and she wanted to say that A had read it much more quickly than B. She expressed this by first identifying distinct areas of activity within the temporal space around the upper part of the body, assigning one area to A and the other to B. One hand then showed A beginning the reading in the near past and going on into the near future; the other showed B beginning in the more distant past and continuing into the more distant future. Both activities were signed at the same time. And the whole comparison took less than a second to convey. The treatment of time in sign language is plainly very different from what takes place in speech or writing.

I have not discussed the expression of time relationships in a discourse, either conversational or literary: how do authors vary the ways in which they talk about time? Nor has there been space to discuss the acquisition of time expressions by children: when do children begin to talk about time? Nor the issue of what happens when people lose control of their temporal expression, such as following a stroke, and find themselves unable to talk about time. But I hope that I have done enough to demonstrate the scope of this topic, and to illustrate its interest and challenge. Charles Lamb, in one of his letters (to T. Manning, 2 January 1810) remarked: 'Nothing puzzles me more than time and space; and yet nothing puzzles me less, as I never think about them.' We should think about these things, though, because apart from their intrinsic intellectual fascination there are all kinds of ready applications - to the teaching of language in school, where children are I fear still often taught misleading information about English tenses, or to work on intercultural understanding, where failure to realise that there are different conceptions of appropriate temporal behaviour can lead to communicative breakdown.

As Vladimir said, in Samuel Beckett's *Waiting for Godot* (Act I), 'That passed the time.' Estragon replies, 'It would have passed in any case.' 'Yes,' replies Vladimir, 'but not so rapidly.' I too hope that you have not been too

conscious of time passing during this short excursus into (to adapt a term of Max Muller's) chrononomical linguistics.

FURTHER READING

Comrie, B., Tense, Cambridge: Cambridge University Press, 1985.
Crystal, D., The Cambridge Encyclopedia of Language, Cambridge: Cambridge University Press, 2nd edition, 1997.

Hall, E. T., The Silent Language, Greenwich, CT: Fawcett, 1959.

Palmer, F. R., The English Verb, London: Longman, 1974.

Peat, F. D., Blackfoot Physics: A Journey into the Native American Universe, London: Fourth Estate, 1995.

Quirk, R., Greenbaum, S., Leech, G. and Svartvik, J., A Comprehensive Grammar of the English Language, London: Longman, 1985.

Thieberger, N. and McGregor, W. (eds.), Macquarie Aboriginal Words, Sydney: Macquarie University, Macquarie Library, 1994.