

Teoria linguistica e struttura delle lingue (a.a. 2009/10) - class handouts

Problems of linguistic analysis 1 : *Descriptive linguistics: describing/analysing the 'gerund' (V-ing form or derived from V-ing form) in English*

- a. *Different types of V-ing form*
 [1] Ideology provided another source of misconception. [2] **Having spent** a decade **defending** the sanctions regime imposed by the UN Security Council **following** the 1991 Gulf War, US officials appear to have resisted **acknowledging** the deep distress and **suffering** inflicted by it. NYR
- b. *Non-parenthetic uses of the gerund*
- a. **Finding no weapons of mass destruction in Iraq**, Bush and Blair have preferred to direct public attention to the other reasons for invading Iraq.
 - b. **Finding no weapons of mass destruction in Iraq** has considerably weakened the position of the US and the UK.
 - c. If Donald Rumsfeld regrets **finding no weapons of mass destruction in Iraq**, it is arguably only because his personal credibility has been further eroded by this failure.
 - d. It is clear that the Administration is seriously worried about **finding no weapons of mass destruction in Iraq**.
 - e. It is clear that the Americans never seriously considered the possibility of **finding no weapons of mass destruction in Iraq**.
 - f. The biggest disappointment of all was **finding no weapons of mass destruction in Iraq**.

All the examples above feature the same element *finding no weapons of mass destruction in Iraq*. It is important to realise that this element shows a close resemblance to a clause such as *They find no weapons of mass destruction in Iraq*. In particular the gerund verb *finding* is followed by an NP, which is clearly its Object, in exactly the same way that the finite verb *find* is followed by an NP/Object.

In the (a) example this structure is presented parenthetically (this is evident from the fact that it is separated from the rest of the content by a comma). Of course it is not completely independent from the rest of the sentence: it 'shares' the same subject as the main clause, as well as the same general time reference. But, these matters aside, in this example the gerund structure has nothing like the same degree of syntactic integration as it has in the others, where it is respectively: (b) Subject; (c) Object; (d) & (e) Complement of a P; (f) Predicative Complement. In fact these are all syntactic positions where we normally expect to find an NP:

- b'. **The failure to find weapons of mass destruction in Iraq** has considerably weakened the position of the US and the UK.
- c'. If Donald Rumsfeld regrets **the failure to find weapons of mass destruction in Iraq**, it is arguably only because his personal credibility has been further

eroded by this failure.

- d'. It is clear that the Administration is seriously worried about **the failure to find weapons of mass destruction in Iraq.**
- e'. It is clear that the Americans never seriously considered the possibility of **failure to find weapons of mass destruction in Iraq.**
- f. The biggest disappointment of all was **the failure to find weapons of mass destruction in Iraq.**

- 1a. **Although arriving late for an important appointment,** he did not look worried.
- 1b. **Despite arriving late for an important appointment,** he did not look worried.
- 2a. **Although living in Paris,** the boys do not speak French.
- 2b. **Despite living in Paris,** the boys do not speak French. WWW
- 3a. **Despite living in Paris from 2004-2009,** the boys do not speak French.
- 3b. ***Although living in Paris from 2004-2009,** the boys do not speak French.

c. *Small corpus of V-ing forms*

1. **Gerund clauses with aspectual value (similar to progressive value)**

i. At its heart, Tett's tale is a moral one. She believes that the history of the J.P. Morgan credit derivatives team shows that banking can be technically innovative **while remaining responsible.** LRB

ii. **Although living in Paris,** the boys do not speak French. WWW

2. **Gerund clauses as accompanying events/situations**

i. Roosevelt resisted vigorously, **maintaining diplomatic relations with the Vichy regime long after D-Day in 1944, and still rejecting any recognition of De Gaulle's administration in France as late as September 1944,** when the 'Big Four' were negotiating the structure of the UN at Dumbarton Oaks in Georgetown, NLR

ii. I rewind [= go back] in my memory to a hot day on the balcony of Jack's holiday home north of Rome, **the sunlight shimmering on Lake Bracciano and an assuring, restful silence enveloping the ancient cobbled village of Trevignano,** a human settlement from Etruscan times. OBS

iii. A bidding war has broken out between the parties, **each leader striving to prove he is more in command than his rivals.** Today the unctuous Nick Clegg is proposing that errant MPs be subject to instant recall – a recipe for tabloid rabble-rousing if ever there was. LRB

iv. It is conceivable, therefore, that more honest and less overbearing diplomacy by the Bush administration might have produced greater international support for a campaign against Saddam, even in the Arab world. But Washington chose not to go that route, **relying instead on calculations that Arab public opinion would be won over by a quick and clean American victory in Iraq.** FA

- v. Phillips points out, as have many before him, that laissez-faire was always a misnomer. The rich often worked closely with the government, **winning defence contracts or subsidies for their railroads, for example.** NYRB
 - vi. He told the FBI's chief agent at the conference that he, Rockefeller, was to be the conduit for FBI reports destined for Stettinius. The FBI obliged, **passing all its material on to Rockefeller**, despite the fact that he had no official role in San Francisco. NLR
 - vii. And despite sales that are down 40 per cent on last year, Ford has not so far sought government help, **having instead found ways of cutting its debts by \$10 billion.** LRB
- 2a. **Gerund clauses as accompanying events/situations - 'event controlled'**
- i. It is to the BBC's credit that it has preserved its independence during this traumatic period, **culminating in a bold decision to screen its undercover investigation of racism at Oakington reception centre.** GUAR
 - ii. Then he [= Sharon] ordered ground troops into the Gaza strip, **resulting in the deaths of 11 Israeli soldiers.** GUAR
 - iii. The collateral damage that will accompany a bombing campaign could rally even more Iraqis to Saddam, **making the war more lethal and the US occupation more hazardous.** AM
 - iv. The relatively undistinguished Florida State University brought in \$67.5 million in licensing revenues in 2000, **putting it in fourth place among all US universities.** LRB
 - v. The Russian firm Avtovaz has received more than 20 billion roubles in government support but has signed an agreement with Russia's state banks for a further 90 billion, **so ensuring that the market for cars will continue to be flooded even as many more buyers show themselves unable to meet their payments.** LRB
3. **Gerund clauses as subject arguments**
- i. There's no good polling evidence yet that **changing leader** will rescue Labour from its plight. GUAR
 - ii. **Opposing same-sex marriage** is likely to lead to the proliferation of alternatives, such as civil unions and domestic partnerships, and those "marriage-lite" alternatives might then prove attractive to heterosexual couples, **further reducing the centrality of marriage.** NYRB
 - iii. The British "denied the Arabs any political representation for as long as they refused to accept the Mandate Treaty." But **accepting the treaty** meant **accepting the**

Balfour Declaration — with its promise of a Jewish "national home"—and renouncing self-determination. NYRB

- iv. **Asking these questions** would **open the door to** the argument that regime change was worthwhile, so of course none of the people we read and hear will touch it because it removes the entire basis for their moral indignation. The malodorous stench of self righteousness mixed with intellectual dishonesty. GUAR

Compare:

- v. **Running throughout all of the new US security relationships in South and Central Asia** is an institutional divide that weakens the administration's ability to balance security and democracy. FA
- vi. Journalists never get inside these buildings, for they are restricted to the windowless media centre, which is sixty feet long, brightly lit, and heavily air-conditioned. Inside the front door is a large space with long counters at which reporters for second-tier news organisations work. **Extending out from this area** are three corridors housing the offices of the TV networks, wire services, and major newspapers. NYR

Appositional

- viii. But three broad approaches - **pulling back over the horizon, trying to form a local NATO-like defence pact, or trying to establish a security condominium** - have enough merits to be considered seriously. FA

4. Gerund clauses introduced by Ps

- i. Much of Roosevelt's effort in preparing domestic opinion for the UN involved building up such an idealistic appeal - **without compromising** in any way the requirements of an American state dedicated to global power politics and the international expansion of US capitalism. NLR
- ii. **With the recession deepening beneath its feet, jobs evaporating overnight, houses repossessed, retirement portfolios dwindling**, the public was in a state of fury at fat cats and hungry for revenge. Breaking three windows of Sir Fred Goodwin's house in Edinburgh and vandalising his Mercedes must have been fun for the people who did it, but didn't go far towards supplying the longed-for catharsis. LRB
- iii. For 10 years as prime minister, Blair was not allowed a free hand to run the economy. He certainly couldn't achieve many of his dreams, **like taking Britain into the euro or forming a pact with the Lib Dems**. GUAR
- iv. Louise, you have taken on huge debts **despite working as many hours as you can, while being a student**; and you are also sponsored by the military. As I understand it, military sponsorship schemes are considered fairly generous and they are certainly sought-after, with a great many candidates for each place. GUARBLOG

- v. In the 1998 crisis, **despite holding** the EU Presidency, Britain did not even consult with its European partners before sending additional ships and aircraft. LRB
In fact, the most recent figures from the Higher Education Statistics Agency (Hesa) show that the numbers entering higher education from the lowest income backgrounds decreased by 0.4% between 2007 and 2008 - **despite about £400m being ploughed into widening access to higher education.** GUAR
- vi. The British Medical Association estimates that medical students - who pay the current maximum £3,000 annual fee - graduate with, on average, £19,000 worth of debt. Like many working-class students, I will exceed this, **despite working as many hours as I can while studying and securing sponsorship from the military.** GUAR
- vi. **In addition to striking fear** into the ranks (only two officers were executed), military executions were a means for divisional commanders to impress on their seniors that they were keeping a firm grip on discipline and were sensitive to fluctuations in morale. TLS
- v. **Instead of** seizing upon such activities [= peacekeeping activities] as essential tasks, the Army has long resisted investing and engaging in postconflict and peace operations. NYRB
- vi. **As well as confirming many of the victims' accounts**, this seems to indicate that the brutality was endemic in what Anderson calls the 'culture of impunity' of the period; which in itself gives the lie to Lennox-Boyd's 'bad apples' defence. LRB
- 4a. **Gerund clauses with P as 'means adverbial'**
 - i. They argued, as Prime Minister Yitzhak Rabin had argued ten years earlier, that the only way of protecting the country from infiltration by terrorists was **by sealing it off** from the Palestinian territories, by removing the points of friction between the two communities. NYRB
 - ii. Despite his underwhelming personality, Mousavi's role is quietly critical. **By refusing to endorse the official vote tally and appealing for Iranians to persist in their protests**, Mousavi has defied the explicit edicts of the Supreme Leader. He has signaled that he is prepared to jeopardize the regime's survival in order to defend its representative institutions, a stance that has reinforced the fledgling street movement and emboldened other regime elites to confront Khamenei. FA
- 5. **Gerund clauses in non-subject argument positions (= subcategorised by verbs or other lexical categories)**

Type A

- i. When Milosevic started to cross-examine the witness, he **kept asking** about the village of Kamenica, which is where he came from. NYRB
- ii. "The day I was due to fly back, I had the first date with Don McLean in Ireland. Instead of **playing folk clubs** to 50 people, I **was playing halls** to 2,000 and then I **ended up playing at the Royal Albert Hall.** GUAR
- iii. It was in the early 1990s that Cornelio Sommaruga, the president of the International

Committee of the Red Cross, **began talking about** the new kind of warfare his delegates were witnessing, one in which there was no respect for either the laws of war or the sign of the Red Cross, no clear lines of command, and in which civilians, rather than enemy soldiers, were targets for marauding bands of killers, often in fanciful uniforms and heavily drugged. NYRB

- iv. One of the most difficult aspects of this is that there was obviously a danger that in attacking Iraq you **ended up provoking** the very thing you were trying to avoid. NYRB
- v. The prime minister put on a steely performance at his press conference - a show that will give his party pause to think before destabilising him further. It was tougher and more considered than anything managed by his critics, who **risk being labelled self-indulgent careerists**, attempting to bring down a leader without a candidate, or a manifesto of their own. GUAR
- vi. If he [= British Prime Minister Tony Blair] doesn't take note, he **risks destroying** the finest army in the world. LRB
- vii. This growing inability—in America above all, but in Israel too—to distinguish between Jews and Israel, Israel and Zionism, Zionism and fanatical theological exclusivism, helps explain why an Israeli like Amos Elon **would** in his later years **find himself living** in Tuscany (where he died on May 25). NYRB
- viii. These ministers believe they have won two assurances. First, that cabinet ministers such as Alistair Darling will not again **find themselves briefed against**. There was deep anger in cabinet when Darling **found himself being referred to** in the past tense by Brown earlier in the week. GUAR
- ix. Barely a month after Turkey had refused America permission to cross its territory, Colin Powell **was back in Ankara mending** fences. PROSP
- x. In November I **was in The Hague watching** the trial of the former Serbian leader Slobodan Milosevic. NYRB
- xi. Global warming may be occurring, as an administration report finally admitted in the spring, but the White House nonetheless trashed the Kyoto Protocol that the international community **spent ten years negotiating**, and it offered no alternative plan. FA.
- xii. Realism" has replaced democracy and nation-building as the central concern of the Bush administration's policy in Iraq. Unfortunately, it is **having trouble defining and carrying out** a realistic policy. NYRB

B

- i. People will naturally **resist paying** more taxes unless they believe social programmes are just and benefit most of the population. NYRB

- ii. If they want generous financial support from the government of the day, then they [= the UK universities] have to **accept becoming** answerable to that government and its conception of what the electorate will bear. LRB
- iii. Pyongyang **admitted abducting** Japanese citizens in the 1970s and 1980s. FA
- iv. We can also expect that Bush will strongly **advocate providing** private vouchers for education and **reducing** regulation of many industries, ranging from natural gas to telecommunications. NYRB
- v. The only way out of the current impasse is to **avoid rewarding** the North for its violations of past treaties with a new, more comprehensive agreement. FA
- vi. During his presidency, Clinton himself **considered partially privatising** Social Security. NYRB
- vii. There is no comparable sense of solidarity from the Sunni Arabs, who **fear being swallowed up** by the Shiite majority. NYRB
- viii. The Bush administration found that it could not **justify abandoning** the pact without having something better with which to replace it. FA
- ix. People will *give up* **smoking in restaurants**, they will agree **to recycle** their bottles, but the great majority won't *give up* **driving**, however heavily it is taxed. Drivers don't see what they do as a luxury: they see it as an essential tool for managing the world. LRB

C

- i. Bush brought a host of the Agreement's critics into his Administration, and they **set about dismantling** it. LRB
- ii. After Kelly's visit, Bush's strategy was to refuse to talk to the North about anything except how it would **go about** dismantling its nuclear programme. LRB
- iii. They have little experience with entrepreneurship or the market economy, although in order to make up for missing food rations, many have **taken to bartering** household goods at small markets tolerated by the authorities. FP
- iv. Anglophiles of yesteryear did not **apologize for arguing** that it was in America's best interest to come to the aid of Britain in 1940. NYRB
- v. In June 1994, Bill Clinton **came close to launching** a 'pre-emptive strike' against North Korea's nuclear reactors at Yongbyon. LRB
- vi. Now that both leaders are back home, many Kurds expect them to **concentrate on creating** a self-governing Kurdistan. NYRB
- vii. The President himself complained to the commission about the poor communications

that morning. (For some time after being informed of the attack, he **was reduced to using** a cell phone.) NYRB

6. **Other cases**

6a. **Gerunds as ‘enunciator controlled’**

- i. In any large organization working under pressure, never mind one charged with the CIA’s unique responsibilities, opinions will be divided and very often polarized. **Having said that**, it is only fair to acknowledge that source descriptions and corroboration are rather a lot to ask for in a book about how a secret intelligence service operates in a crisis. NYRB
- ii. **Judging by the ticket sales for this latest series of concerts**, Bob Dylan is just as popular as he used to be. GUAR
- iii. **Bearing in mind a background of illegality of the war itself and the war crimes committed in its execution** [.....], it is now time for the British government to sever its links with the Bush administration, to announce a staged withdrawal from Iraq and to initiate a thorough investigation. OBS
- iv. In short, middle-class people can relax; since there is no case for abolishing private education, and a very good case for abolishing state education, they can without fear of hypocrisy get on and do whatever they think best for their children - **assuming, of course, that they can form a clear view of what that is**. TLS
- v. **Excepting the newly arrived alien from a distant galaxy or those just emerged from persistent coma**, there are few people anywhere who have not reached pretty firm opinions about 9/11, the Iraq war and the circumstances surrounding both.. NYRB

6b. **Gerunds as prepositions**

- i. **Following its refusal to sign the 1999 Land-Mines Convention and its endeavour earlier this year to block the adoption of the long-awaited optional protocol to the Torture Convention allowing independent inspection of places of detention**, the US is currently seeking a series of bilateral agreements with states that have ratified the Rome Statute [= the statute of the International Criminal Court] to exempt US citizens from all process before the ICC. NYRB
- ii. Consider, also, the difficulties that North Korean defectors have experienced adapting to life in South Korea, **including finding and holding on to jobs, managing personal finances, and learning to communicate in South Korea’s cosmopolitan dialect**. FP
- iii. Saddam’s nuclear engineers are between one and six years away from developing the Bomb, **depending on whether they are able to acquire fissile material from abroad or are compelled to produce it themselves**. TLS
- iv. **Barring a miracle**, war with Iraq is inevitable. IND
‘excluding the possibility of a miracle’

Unclassifiable?

- v. His [= of Tony Blair] efforts, though in need of some refinement, deserve strong American support because they appear to offer the last hope of forcing Saddam Hussein to disarm voluntarily, and, **failing that**, to ensure that any war with Iraq is sanctioned by the Security Council. NYT

Descriptive linguistics vs. Theoretical linguistics

Observational adequacy

An observationally adequate grammar of a given language must be capable of specifying for any random string of words in that language whether that string is a well-formed sentence of that language.

Descriptive adequacy

It is not enough for a grammar simply to define the set of well-formed sentences of a language, it must also assign a structural description to each well-formed sentence that provides a basis for explaining native speakers' judgements about meaning, structure and structural relationships.

Explanatory adequacy

Besides being descriptively adequate, the grammar is part of a theory which provides an account 'of how these facts arise in the mind of the speaker-hearer' (Chomsky 1994), i.e. how they are acquired/can be acquired.

Theory-internal criteria (Van Valin, R. & LaPolla, R (1997))

- **economy** (is it the simplest theory?)

- **motivation** (are the crucial explanatory concepts independently motivated or are they *ad hoc*?)

- **predictiveness** (do the hypotheses predict phenomena beyond those for which they were formulated?)

Lexical derivation

follow V

V → N At that time Obama already had a large following

V → A Be careful to read the following instructions before beginning

V → P Following the operation, Tom's health has been reasonably good

Aspectual value of the *-ing* suffix:

NB: gerund forms in **perception verb** complement structures. These seem to provide clear evidence for the aspectual nature ('progressive/imperfective') of the *-ing* suffix:

Richard saw the other members of his family set up their tent/arrive

Richard saw the other members of his family setting up their tent/arriving

Richard saw the other members of his family sit down

Richard saw the other members of his family sitting down

In adverbial gerund clauses all actional types appear with the *-ing* suffix, including statives

(which are considered to be incompatible with the ‘progressive’ interpretation). In addition, ‘achievement’ actional types sometimes give a perfective interpretation:

Walking down the street, Tom slipped on a banana skin

Knowing the answer to the question, Tom raised his hand

Arriving late, Tom was worried about having to apologise in front of everyone

Arriving late, Tom missed half the lecture

Taking the lift, Tom arrived in no time

Picking up the banana, Tom threw it into the bin

Having arrived late the first time, Tom did not want to take any risks the second time

[Tom **knew**/***was knowing** the answer to the question]

[Tom **arrived**/**was arriving**]

Comparison of case-assignment contexts with non-case-assignment contexts: aspectual interpretation (‘progressive/imperfective’) appears obligatorily only in latter contexts.

Case of *despite living in Paris* vs *although living in Paris*

- 1a. **Although arriving late for an important appointment**, he did not look worried.
- 1b. **Despite arriving late for an important appointment**, he did not look worried.
- 2a. **Although living in Paris**, the boys do not speak French.
- 2b. **Despite living in Paris**, the boys do not speak French. WWW
- 3a. **Despite living in Paris from 2004-2009**, the boys do not speak French.
- 3b. ***Although living in Paris from 2004-2009**, the boys do not speak French.

Gerunds & the theory of lexical classes

Gerunds that occur in case-assignment contexts are a problem for any theory of the lexical categories: in these structures a single (but morphologically complex) element appears to have the properties of a V and an N together. Thanks to the *-ing* suffix a V root ‘behaves’ as a N (in terms of external syntax) but does not ‘become’ an N (internal syntax remains that of a V).

2. Identification of lexical classes: exercise.

Use the data that follow in order to demonstrate that *distant* and *beneath* belong to different lexical classes.

- 1a. The railway tunnel was [distant from us]
- 2a. The railway tunnel was [beneath us]

- 1b. The railway tunnel was [distant]
- 2b. The railway tunnel was [beneath]

- 1c. The railway tunnel was [ten metres distant from us]
- 2c. The railway tunnel was [ten metres beneath us]

- 1d. *The railway tunnel was [right distant from us]
- 2d. The railway tunnel was [right beneath us]

- 1e. The railway tunnel was [very distant from us]
- 2e. *The railway tunnel was [very beneath us]

- 1f. *The railway tunnel was [distant us]
- 2f. *The railway tunnel was [beneath from us]

- 1g. There, [ten metres distant from us], was the railway tunnel.
- 2g. There, [ten metres beneath us], was the railway tunnel.

Identification of lexical classes:

In this exercise we attempt to establish which lexical class or classes the two words *distant* and *beneath* belong to. In a traditional analysis *beneath* might receive a dual classification: as a P and as an Adv. The evidence for the former analysis is provided by (2a), where *beneath* is directly followed by an accusative pronoun (*us*). Ps are typically elements that can assign accusative case - in this respect they resemble Vs and contrast with As, Ns and Adjs (these elements are in fact all incapable of having a direct complement NP unmediated by a P - cf. **destruction the city vs destruction of the city* / **proud his results vs proud of his results* etc). Significantly this is also true of *distant* - see the contrast between (1a) and (1f)). So (2a) suggests an analysis of *beneath* as a P. There is, however, a sharp contrast between (2a) and (2b), where *beneath* appears without a complement (pronominal or otherwise). In traditional grammar the property of appearing without a complement is considered to be a clear sign that the word in question is not a P, and so that it is an A (or else an Adj). In other words, the presence of an NP complement is considered a defining characteristic of Ps (and also of Vs - though *beneath* clearly has none of the other characteristics, for instance Past Tense and Gerund forms, of this class). Thus on the basis of the fact that it can appear both with and without a following NP complement *beneath* - in traditional grammar - would be analysed as both a P and an A (this is to say that we would have to assume that there are two lexemes corresponding to the word form *beneath*, one belonging to the class P and the other belonging to the class A. Another way of putting this is to say that *beneath* is "homonymous": it corresponds to two underlying lexemes.

The dual classification of *beneath* can easily be overturned if we look at its syntactic behaviour within its own projection as revealed by the type of specifier element it selects. Significantly this does not vary, irrespective of whether the context is the "typically prepositional" one exemplified by (2a) or the "typically adverbial" one exemplified by (2b). In both these cases the same specifiers are allowed: *right* and *ten metres*. The second of these is also allowed by *distant* (which as we have already noticed behaves as an Adj rather than a P in not allowing a direct NP complement - cf (1f)) but, crucially, the first is not. Indeed, *right* is generally only allowed as specifier by words whose membership of the P class is not in doubt (*right to the end/right at the corner*). Typical As, by contrast, do not allow *right* (**right carefully* vs *very carefully*). What this - together with the fact that *beneath* is incompatible with *very* as (2e) shows - suggests is that *beneath* should be analysed as a P even when it is not followed by a complement, i.e. not just in (2a) but also in (2b). This means that the apparent similarity of *beneath* and *distant* - as shown by (1b) and (2b) - is indeed only apparent: in (2b) *beneath* is a P, while *distant* is an Adj.

This analysis suggests, then, that traditional grammar was wrong to make the presence of a complement NP criterial for attributing the status of P to a word; it seems that if we recognise that Ps - like many other categories - can optionally appear without their complements - we obtain a much simpler overall analysis: a whole series of words (*over, above, down, under, along* etc) that were previously given a dual classification (as in the case of *beneath*) can simply be classified as Ps whose NP complement is optional (in other words they can be treated like Vs such as *eat*, which can freely appear with or without its object).

3. Identification of lexical classes: exercise 2.

A. *Worth* (NB: *worth* + NP)

- 1a. A first edition copy of this book is **worth a fortune**.
- 1b. As the years have passed, this book has become **worth a fortune**.
[As the years have passed, this book has become **very expensive**/***at the highest price level**]
- 2a. The book finally sold for £500, **which** it is easily **worth**.
- 2b. *The book finally sold for £500, **worth which** it is easily.
[The book finally sold for £500, **for which** I had bought a copy in 1999]

B. *Like/unlike*

- 1a. Tom is **like his brother**.
- 1b. Tom is very **like his brother**/more **like his brother**.
- 1c. Tom is **similar** in this respect **to his brother**.
- 1d. **Similar** in this respect **to his brother**, Tom does not like competitive sports.
- 2d. **Like his brother**, Tom was questioned by the police.
- 2d'. ***Very like his brother**, Tom was questioned by the police.
- 2e. **Like last year**, Tom was questioned by the police.
- 2f. **Like in the previous episode**, Tom was questioned by the police.

C. *Due to*

- 1a. A refund of about £50 is **due** this month.
- 1b. We are **due a refund of about £50** this month.
- 2a. Sincere thanks are **due to all those who have provided assistance**.
- 2b. The delay was **due to a signal failure**.
- 2c. **Due to a signal failure**, a delay of more than an hour was registered.
- 2d. **Due to a signal failure**, the train was delayed for more than an hour.
- 2e. **Due to a signal failure**, there was a delay of more than an hour.

Criteria for distinguishing prepositions from adjectives (Huddleston & Pullum 2002: 606):

1. Prepositions but not adjectives can occur as a **non-predicative** adverbial in clause structure.
2. AdjPs (other than those restricted to attributive or postpositive functions) can mostly occur as complement to the verb *become*; in general, PPs cannot.
3. Central adjectives accept *very* and *too* as specifiers, and have inflectional or analytic comparatives and superlatives. In general, prepositions do not.
4. Central prepositions license NP complements; in general, adjectives do not.
5. Central prepositions accept *right* and *straight* as specifiers; adjectives do not.
6. Prepositions taking NP complements can normally be fronted along with their complements in relative and interrogative constructions (*The knife **with which** she stabbed him was lying on the ground*).

- D. *Near* (NB: same results for *close* & *far* - these elements are like *near to*, i.e. followed by a PP - *close to/far from*)
- 1a. They were **near the ship/near to the ship**.
- 1b. They waited **near the ship/near to the ship**.
- 1c. They parked the car **near the ship/near to the ship**.
- 1d. **Near the ship/near to the ship** there was some sort of riot going on.
- 2a. They were **nearer** the ship/**nearer** to the ship.
- 2b. They waited **nearer** the ship/**nearer** to the ship.
- 2c. **Nearer** the ship/**nearer** to the ship there was some sort of riot going on.
- 3a. They were very/too **near the ship/very near to the ship**.
- 3b. They waited very **near the ship/very near to the ship**.
- 3c. **Very near the ship/very near to the ship** there was some sort of riot going on.
- 4a. They were right **near the ship/right near to the ship**.
- 4b. They waited right **near the ship/right near to the ship**.
- 4c. **Right near the ship/right near to the ship** there was some sort of riot going on.
- 5a. *The ship became **nearer the jetty/nearer to where we had parked**.
- 5b. *Suddenly we became **at the front of the queue**.
- 5c. Suddenly we were/found ourselves **at the front of the queue**.
- 6a. The larger ship, **near which** we had parked, was about to leave.
- 6b. The larger ship, **which** we had parked **near**, was about to leave.

4. Exercises on I⁰ verbs:

a) Transform the following sentences into the corresponding **negative declaratives**.

Example: Tom can swim.
Tom can't swim.

- (1) Sally needed to see the doctor.
- (2) Anne had her friends helping her this time.
- (3) Henry did so.
- (4) Jane had to take a taxi.
- (5) Tom had his new car with him.
- (6) At that time the island used to export its wine.

b) Transform the following sentences into the corresponding **polar interrogatives** (i.e. yes/no questions).

Example: Tom can swim.
Can Tom swim?

- (1) Sally needs a new car.
- (2) Anne has lunch with Richard every day.
- (3) Henry does the same things each year.
- (4) Tom is used to eating early.
- (5) Tom used to eat early.
- (6) Tom had his new car with him.

c) Modify the following sentences so that temporal reference changes from **the present to the past**.

Example: Tom can swim well. >> *When he was young,*
When he was young, Tom could swim well.

- (1) [I doubt whether] Tom need come tomorrow.
>> **Yesterday**
- (2) [The more I think about it, the more I am convinced]: there must be a better solution.
>> [The more I **thought** about it, the more I **was** convinced]:
- (3) Before leaving, you should check that the gas is off.
>> before leaving **yesterday**
- (4) You might let us see the draft document before the next meeting.
>> Before the meeting **last Monday**
- (5) [The doctors are absolutely sure]: the patient needs to remain in hospital for at least another week.
>> [The doctors **were** absolutely sure]:
- (6) [There is considerable anxiety at the airport]: the plane could have been hijacked.
>> [There **was** considerable anxiety at the airport]:

d) **Exercise on modal verbs - interpretations of modal clauses**

In the following you will find various couples of sentences. Either the same modal verb appears in each of the two sentences or a semantically similar semi-modal appears. Identify the salient syntactic and semantic differences.

- 1a. That hotel has hundreds of rooms: you **shouldn't** have any problem finding one, even in the middle of August.
- 1b. That hotel is always full: you **should** book as early as possible.
- 2a. Tom **has to** see an eye specialist next week.
- 2b. Tom **should** see an eye specialist next week.
- 3a. In the end, Tom **didn't need** to buy a new television. The old one turned out to be repairable.
- 3b. In the end, Tom **needn't have bought** a new television. The old one turned out to be repairable.
- 4a. Before going to Bali, Jane **had to have** a number of injections.
- 4b. Before going to Bali, Jane **should have had** a number of injections.
- 5a. Fortunately, they found a spare part. Otherwise, Tom **would have had to buy** a new television.
- 5b. In the end, Tom **should have bought** a new television: it would have been much cheaper than having the old one repaired.
- 6a. As he entered the building where his ex-wife worked, Tom was apprehensive: she **might**, at this very moment, be coming down the main stairs to go for her coffee break.
- 6b. We can't say for certain whether we will be there tomorrow: it **might** be raining, in which case we are unlikely to come.
- 7a. The boys **should have had** a medical examination: this is clearly among the stated requirements for those taking part in the expedition.
- 7b. The boys **would have had to have** a medical examination: this is clearly among the stated requirements for those taking part in the expedition.

e) *Some interesting examples involving I⁰ verbs.*

- a. **In retrospect**, historians are likely to conclude that the biggest environmental failure of the Bush administration was not that it did nothing to reduce the use of fossil fuels in America, but that it did nothing to help or pressure China to transform its own economy at a time when such intervention **might have been** decisive. NYRB
- b. The physicists at Los Alamos, however, were driven by the fear that the Germans under Hitler **would make** atomic bombs first. NYRB
- c. Molotov and Gromyko arrived [= at the San Francisco conference leading to the founding of the United Nations] with briefs unchanged from Dumbarton Oaks. The veto powers of the permanent members of the Security Council **must encompass** matters not only of substance but of procedure, since—as Gromyko pointed out—nothing was easier than for the second to slide rapidly towards the first. NLR
- d. A. The joke I refer to is that Maazel [= conductor Lorin Maazel] has given up teaching and thinks his mere presence on the podium guarantees a great

- performance. [.....]
- B. **Did** Maazel **used** to teach? WWW
- e. A few weeks back, I was lucky enough to pick up a classical collection from a retired Lawyer. There **has to** be 400 to 600 records, mostly in very good shape. The old guy **obviously** took care of his records. WWW
- f. [1] Now, in the midst of this meaningless and increasingly disagreeable assignment, the Serbs had suddenly turned their artillery on them [= members of the Dutch peace-keeping force stationed in the Muslim enclave of Srebrenica]. [2] The two Dutch soldiers knew full well that a direct hit, which **had to** come sooner or later, would kill everyone in the observation post. NYRB
- g. Socrates **did not need** to die. He conceded that a fine **might be** appropriate punishment for the charges against him, but his “supercilious and enraging” manner seems to have provoked the jury to vote for capital punishment. Once judgment was passed, he **might have escaped** into exile, but he chose to remain and obey the laws of the state, demonstrating once again the foolishness of the citizenry and his own wisdom in thus curtailing the debilities of old age. TLS
- h1. [1] The first substantial study of Hitler was that of Konrad Heiden, which appeared in Zürich in 1936. [2] As its date indicates, it **could have** nothing to say about the greater part of the Hitler dictatorship.
- h2. [1] The first substantial study of Hitler was that of Konrad Heiden, which appeared in Zürich in 1936. [2] As its date indicates, it **can have** nothing to say about the greater part of the Hitler dictatorship.
- i. [1] I had just got the hand of a friend of mine, saying `farewell', and was descending nineteen stone steps from the pier into the vessel, with a heavy heart, when crack went the foremast, and broke off close to the deck. [2] The act of hauling up the foresail had finished this rickety mast. [3] But for this providentially happening in the harbour, the vessel **must have gone to sea**, and the consequences, if not fatal, **would at all events have been misery**.
1852 - Thomas Baines *History of the Commerce and Town of Liverpool* (p. 588)
- j1. For him, the Soviet Union was not an existential evil that **needed to** be vanquished but a legitimate nation-state with defined interests. LRB
- j2. If radio-telephony had been developed ten years earlier, the holocausts on the Western Front **need never have occurred**. TLS
- k. [1] Runaways [= runaway slaves] seldom headed north towards freedom, because the odds against making it were too great. [2] Most of them stayed in the South, often in the immediate neighbourhood, where they were assisted with some provisions by fellow slaves and sometimes gathered in gangs until caught. [3] The occasion or opportunity for running [= escaping] **might come** at any season of the year, but the only season when the recorded numbers dropped was during the autumn harvest.
NYRB

Solutions to the exercises on Modal Verbs:

Note: All the exercises involve verbs that are cases of ‘lexical splitting’: the verbs *do*, *need* & *have* all exist in two ‘versions’, of which one is an auxiliary (i.e. it can appear in I⁰) and the other a normal lexical verb (i.e. it can not appear in I⁰). The verb *used to* (which only exists in the Past Tense, with a meaning roughly equivalent to ‘soleva...’) is a case of incipient lexical splitting: for some native speakers (usually of older generations) it has the syntax of a modal auxiliary (i.e. it appears in I⁰, can be negated directly and can move to C⁰ in ‘inversion’ structures); for other native speakers, it has the status of a lexical verb (and thus appears with ‘do support’ in negative clauses and in inversion structures).

- a) Transform the following sentences into the corresponding **negative declaratives**. Rewrite the whole sentence.

Legend:

- * - ungrammatical/not well-formed (in the judgement of native speakers)
- ?? - of doubtful grammaticality/reduced acceptability
- ! - grammatical but has a different interpretation
- % - grammatical for a subset of native speakers

- (1) Sally needed to see the doctor.
Sally didn't need to see the doctor.
*Sally needn't to see the doctor.
!Sally needn't have seen the doctor.

The original example involves *need* as a (catenative) lexical verb. In this use it is ‘descriptive’ (i.e. it presents situations of necessity as factual and objective) rather than ‘evaluative’ (as when the speaker is understood to evaluate a situation/action as necessary). Given its descriptive value, it is not surprising that it can be used in the Past Tense (*needed*) with normal past time reference. Interestingly, it frequently carries an extra implication, to the effect that the action was preformed. Thus the original example may be interpreted as meaning not just that it was necessary for Sally to see the doctor but also that she did in fact go and see him/her. The same is true for the negative version of this sentence (where ‘do support’ is required): this describes a situation in which it was not necessary for Sally to see the doctor and may in addition imply that she actually did not go to see him (as in: *Yesterday Sally didn't need to see the doctor, so she was free to go to work as usual*).

The last example above (*Sally needn't have seen the doctor*) involves modal *need* (notice the formal differences: the verb is not followed by *to*, it is negated directly - there is no ‘do support’ - and it carries no Past Tense morpheme). The interpretation is also completely different: it expresses a ‘speaker evaluation’ (rather than being ‘objective/descriptive’). Indeed the speaker uses this form to evoke a situation that is the opposite of what really happened (this involves accessing a hypothetical world and is known as the ‘counterfactual use’). Thus the sentence carries the implication that Sally did see the doctor and expresses the speaker’s (retrospective) evaluation of this action as not necessary. Notice that the speaker is here looking back on past events and evaluating them from the point of view of the present - in view of this it seems semantically appropriate that *need* itself should not carry the Past Tense morpheme - anteriority is expressed by the perfect construction (*have* + participle) that follows. By contrast, in the original sentence (*Sally needed to see the doctor*) or its negative counterpart (*Sally didn't need to see the doctor*) the speaker is describing what really

happened, and it is thus appropriate that *need* itself should appear with the Past Tense morpheme. In this case the obligation is part of past reality; in the *needn't have* construction the obligation regards the past but is conjured up in the present by the speaker.

- (2) Anne had her friends helping her this time.
Anne didn't have her friends helping her this time.
*Anne hadn't her friends helping her this time.

In this use (one of the various possibilities with generally referred to as 'causative structures') *have* is a lexical verb. Thus 'do support' is required if it is negated.

- (3) Henry did so.
Henry didn't do so.
*Henry didn't so.

Do so can be used to replace a VP or V (it is thus a 'pro-VP' or 'pro-V'). When used in this way it has the status of a lexical verb and thus cannot be raised to I⁰ or negated directly (as is shown by the third example, clearly marked as ungrammatical). Thus, when a negation is present, 'do support' is required - and the result is a string in which the verb *do* appears twice, once as an auxiliary (directly followed by the negation) and once as a pro-VP (followed by *so*).

- (4) Jane had to take a taxi.
Jane didn't have to take a taxi.
!/%Jane hadn't to take a taxi.

The original sentence is an instance of *have* used in the semi-modal expression *have to* (this expresses obligation and thus has 'deontic' force). In this use *have* is normally treated as a lexical verb. Thus the second example - with 'do support' - is correct. Notice that *have to* is similar to *need* in the latter's lexical verb use (see first item above): it is used to present a description of reality (thus of an objectively existing obligation) rather than to present an obligation as stemming from a subjective evaluation on the part of the speaker/enunciator. It is thus appropriate that it should have genuine Past Tense uses (with past time reference) - compare *should*, *must* and modal *need*.

The last example shows a possibility of negation that exists for some native speakers. Here *have to* is treated as a verb in I⁰ and is consequently negated directly. Interestingly, the interpretation is different from that given to the *didn't have to* construction. The latter signals 'absence of obligation' (i.e. there was no obligation/necessity to take a taxi - perhaps one could have taken the bus or walked); *hadn't to*, by contrast, signals that there was an obligation NOT to do whatever it is (compare: 'no obligation to do *x*' & 'obligation *not* to do *x*'). Thus it is similar in interpretation to *mustn't*.

- (5) Tom had his new car with him.
Tom didn't have his new car with him.
??Tom hadn't his new car with him.

This example has the verb *have* in its basic 'possession' sense. When used in this way it is a lexical verb (in contemporary English), not an auxiliary. Consequently it is excluded from I⁰ and 'do support' must be used for negation and inversion.

- (6) At that time the island used to export its wine.

%At that time the island used not to export its wine.

%At that time the island didn't used to export its wine.

The expression *used to* is used with dynamic and stative verbs as a way of expressing 'habitual past' with the former (*Tom used to go swimming three times a week*) or 'continuous past' with the latter (*He used to know a lot about the Spanish Civil War*). It is always past and no present version exists. Its syntactic status (in terms of I⁰) is disputed. For some speakers it can appear in this position, and thus accepts direct negation. For others it appears in V⁰ (i.e. it is not an auxiliary in the formal sense) and requires 'do support' in negative structures (as well as in inversion). There is probably a third group of speakers who simply avoid using it in negative and interrogative structures. A similar problem exists with the negative and interrogative uses of *ought to* (some speakers find *Ought I to write him a note?* & *You oughtn't to devote so much time to that* archaic-sounding and in colloquial speech prefer *Did I ought to write him a note?* and *You didn't ought to devote so much time to that*; for other speakers these formulations are clearly sub-standard.

b) *Transform the following sentences into the corresponding polar interrogatives (i.e. yes/no questions). Rewrite the whole sentence.*

- (1) Sally needs a new car.
Does Sally need a new car?
*Needs Sally a new car?

Here *need* is followed by an NP/object (suggesting that it can project a θ role). In this use it is quite clearly a lexical verb (notice that it shows agreement and can inflect for tense - *needed*). Thus 'do support' is required and the inversion structure exemplified in the last example is strongly ungrammatical.

- (2) Anne has lunch with Richard every day.
Does Anne have lunch with Richard every day?
*Has Anne lunch with Richard every day?

Here *have* is used 'dynamically' (i.e. with a meaning similar to that of 'prendere/fare' in Italian - cf. *have a shower, have a holiday, have a walk, have trouble with..*). In such uses it is always treated as a lexical verb, and consequently has 'do support'.

- (3) Henry does the same things each year.
Does Henry do the same things every year?
*Does Henry the same things every year?

Here *do* is a lexical verb (notice the NP/object *the same things*). As a lexical verb it is in V⁰, not in I⁰. Thus it cannot be involved in inversion (where an auxiliary verb in I⁰ is moved to C⁰) and so requires 'do support'. The result is a string of two occurrences of *do*: the first is the auxiliary and the second is the lexical verb.

- (4) Tom is used to eating early.
Is Tom used to eating early?

This is a straightforward case of inversion involving *be* and it is included as a reminder of the difference between the copular/adjectival expression *be used to* (involving *be*, a verb that can occur in I⁰, and the adjectival predicate *used*) and the finite (Past Tense only) *used to*.

- (5) Tom used to eat early.
 %Used Tom to eat early?
 %Did Tom use(d) to eat early?

This example shows *used to*, an expression used primarily to present habitual/repeated actions in the past or past states (*A large equestrian statue used to stand on this spot*). By many speakers *used to* is treated syntactically as a modal auxiliary, yielding well-formed inversion structures as in the first solution above. For other speakers, however, its membership of the restricted group of modal auxiliaries is no longer firm and they tend to treat it - at least in informal speech - as a lexical verb, constructing interrogatives with *do* (the same applies to negatives: *Tom didn't use(d) to eat so early*). These structures (the negative perhaps a little less so) are quite common, even in educated speech. As regards the written language, modal auxiliary syntax prevails (negative: *Tom used not to eat so early*). Indeed it is not even so clear how the non-finite form of the verb (in the 'do support' version) should be written: *use* (theoretically the infinitive form, but one that is not otherwise instantiated) or *used* (with the Past Tense morpheme retained in a syntactic context where it would not normally be allowed).

It is worth underlining that neither form has the same pronunciation as the normal forms of the verb *use* (= 'usare') and thus should not be considered forms of that verb.

- (6) Tom had his new car with him.
 Did Tom have his new car with him?
 ??Had Tom his new car with him?

This is the normal 'possessive' use of *have*. Notice that 'do support' is required (neither the inversion structure nor direct negation is normal in contemporary English). Another very common structure is *have got*, a fossilised perfect construction found as a replacement for 'possession' *have*, obligation *have to* (*I have got to leave by 6pm at the latest*) and certain 'causative' uses (*I have got Tom painting the house at the moment*). It does not appear as a substitute for *have* in its dynamic uses. Notice that the *have* which appears in *have got* has the status of an auxiliary (just as in any instance of the perfect construction) and thus can be negated directly (*We haven't got much time*) and moved to C⁰ in inversion structures (*Have you got enough time?*).

- c) *Modify the following sentences so that temporal reference changes from **the present to the past**.*

This exercise concerns the relation between modal verbs and past time. Many of these verbs have what might be thought of as Past Tense forms (*might, could, would, should*) or are themselves historically derived from past forms (*ought, must*). But it is a well known fact that these forms are not generally available for past time reference (the clear exceptions being *would* and *could* in certain of their uses). Thus *Tom might arrive late* contrasts with *Tom may arrive late* not in terms of time reference (both are interpreted as referring to present time) but in terms of a modal value: [+ remote] vs. [- remote].

In the case of verbs (*need, dare*) which manifest 'lexical splitting' (i.e. there are two versions of the verb, one with the status of auxiliary and one with the status of lexical verb) we find that the auxiliary version cannot bear the Past Tense morpheme and cannot be used for past time reference, while the lexical verb version can. This is illustrated in the first item of this exercise (which concerns the lexical splitting verb *need*).

- (1) [I doubt whether] Tom need come tomorrow.

>> I doubt whether Tom need have come yesterday

>> I doubt whether Tom needed to come yesterday

The verb *need* (a lexical splitting verb which consequently exists in two versions, an auxiliary version and a lexical verb version) offers two ways of achieving past time reference: (i) starting from auxiliary *need*: this has no Past Tense form (**needed*) and so the only option is to choose the perfect construction (which indicates anteriority - not quite the same as deictic past time reference) for the lexical verb that follows (*have come*); starting from lexical verb *need*, this has a morphological past form (*needed*), which is allowed to have past time reference directly. The lexical verb follows in the infinitive form.

(2) [The more I think about it, the more I am convinced]: there must be a better solution.

>> [The more I thought about it, the more I was convinced]: there must be a better solution.

The original sentence consists of two clauses separated by a colon. The second clause is interpreted as the content of the writer's 'conviction' mentioned in the first clause. In other words, the second clause is indirect discourse (equivalent to: *I am convinced that there must be a better solution*). The point is to see what effect there is in the second clause when *I am convinced* in the first clause becomes *I was convinced*. Normally in indirect discourse a change in the tense of the governing verb results in a change in the tense of the verb in the indirect discourse. Thus starting from *I am convinced that he has found a better solution* (present in the higher clause, present perfect in the lower clause), a change to past tense in the higher clause produces a change to past perfect in the lower one: *I was convinced that he had found a better solution*. The same thing happens when the lower clause has a modal verb (of those which have distinct present & past forms): *I am convinced that he may find a better solution* becomes *I was convinced that he might find a better solution*¹. It is worth underlining that it is only in such indirect discourse contexts that *might* is interpreted as having past time reference (compare its use in sentences such as *Tom might arrive late tomorrow*, where time reference is clearly to the future and where the choice of *might* as opposed to *may* expresses a mood value, something like 'more remote possibility' as against 'less remote possibility'). But what happens in our original example where the modal is *must*, a verb with no distinct past tense form? The answer is that *must* appears even after a past tense governing verb. What this suggests is that *must* is either a homonym (i.e. it represents both Present & Past Tense values) or (more likely) that modals simply do not select for tense.

(3) Before leaving, you should check that the gas is off.

>> Before leaving yesterday, you should have checked that the gas was off.

The original sentence shows *should* used deontically (i.e. to present some action as necessary or obligatory in the speaker's evaluation). Normally deontic uses of modal verbs concern the

¹It is worth observing that the change to past tense in the higher clause verb does not trigger the appearance of *have* + participle following *might* in the lower clause; the verb *find* remains in the infinitive. Compare Italian: *Ero convinto che avrebbe trovato una soluzione migliore*. The reason for this difference is arguably that the English verb *might* can - in the special case of indirect discourse - combine the two features [+ Mood] and [+ Past] in one word, while the Italian 'conditional' morpheme expresses only [+ Mood], leaving the past time reference to be expressed through the choice of *avere* and the participle.

future (the whole point of uttering a sentence such as *You should be there at 6 pm at the latest* is arguably to influence future behaviour). What happens when we shift the whole thing back into the past (as the exercise prompt obliges us to do)? The answer is that a verb like *should* allows us to look back into past time and evoke actions situated there as necessary. But crucially the past time we are looking back into is not the real past and the actions we are evoking are not the ones that actually occurred. In other words what we are doing when we use *should* in relation to the past is imagining (an alternative past), not describing (the actual past). It is of course possible to present deontic necessity in the past and represent it as part of the described situation (for this we need forms such as *Tom had to turn off the gas* or *Tom needed to read the document three times in order to understand it fully*). But this is not the function of *should*, which along with *would*, *could*, *might* & *ought* allows us to access a hypothetical world and evoke actions that belong to that hypothetical world. Notice that when *should* is used in this way, it is followed by *have* and the participle form of the lexical verb, the function of this formulation being to signal the ‘anteriority’ of the imagined actions/events. These imagined actions/events are situated in the past, but the modal evaluation represented by *should* is not: it is linked to the enunciator and consequently to the present.

The important assumption behind the above explanation is that ‘deontic necessity’ (i.e. the necessity of some course of action) can be presented in two ways: either as part of the described situation (i.e. as if it is part of reality) or as the speaker’s (more properly, the enunciator’s) evaluation. Of course, in absolute terms, situations of actions/events being necessary are not like situations of walls being made out of bricks (for instance): the latter is an observable fact, while the former is always a matter of evaluation (necessity is inherently an evaluative concept). But what we are concerned with when comparing the uses of linguistic expressions such as *should* and *have to* is not the intrinsic nature of deontic necessity but how these expressions allow the speaker to present it.

(4) You might let us see the draft document before the next meeting.

>> You might have let us see the draft document before the meeting last

Monday.

As is observed above, *might* (in theory the Past Tense form of *may*) does not normally have past time reference (this is only possible in indirect discourse, following a governing verb in the past). *Might* differs from *may* in the modal value it expresses: ‘remote possibility’ as opposed to ‘possibility’.

Since *might* does not itself establish reference to past time, this must be achieved (where required) by selecting *have* and the participle form of the lexical verb (in this case: *let*). The ‘remote possibility’ sense associated with *might* can be exploited to express a speaker/enunciator evaluation regarding present, future or past. This is normally epistemic (*Tom might be in the library/Tom might arrive before 6pm/Tom might have been at the meeting last night*), but it can also be deontic (‘deontic possibility’) - this type of interpretation is exemplified in our original example, which is understood as a ‘polite request’ and which (like most requests, polite or otherwise) concerns the future. But *might* (in common with the other ‘Past Tense’ modals: *would*, *should*, *could*, *ought*, *need*) has a property that *may* does not have: it allows us to access an alternative world and thus evoke an imaginary past with actions/events different from the ones that really occurred. This is the sense of our past time reference example: it retains the ‘deontic possibility’ sense of the future-referenced original, but this time the enunciator evaluation is directed to the past (i.e. it

is a sort of ‘request after the event’). Notice that in this use *might* also carries a counterfactual implication (that they did not in fact let them see the draft document before the meeting).

- (5) [The doctors are absolutely sure]: the patient needs to remain in hospital for at least another week.
>> [The doctors were absolutely sure]: the patient needed to remain in hospital for at least another week.

This examples feature the verb *need* in its variant as a lexical verb. In this use, *need* can express tense and agreement and is followed by an infinitive clause introduced by *to*. Modal *need*, by contrast, shows no agreement, does not allow the Past Tense morpheme (for reference to past time it uses the *need have* + participle form) and is followed by an infinitival structure without *to*. In addition, modal *need* occurs only in non-affirmative contexts, basically negative, interrogative and comparative clauses (*I don't think that you need come tomorrow/Need they come so early tomorrow?/He works far harder than he need do*). The fact that our original example fits none of these categories (i.e. it is not a negative, interrogative or comparative clause) means that modal *need* cannot appear in it.

The value of lexical verb *need* is ‘descriptive’; this means that it presents the ‘deontic necessity’ (its basic meaning) as part of the described situation rather than using it to make an enunciator-referenced evaluation. The difference is a very fine one, especially as ‘deontic necessity’ is in any case an inherently evaluative concept (see short discussion above - item 3). Our example shows the clause built around *need* appearing as indirect discourse (i.e. it is understood as the opinion of the doctors).

- (6) [There is considerable anxiety at the airport]: the plane could have been hijacked.
>> [There was considerable anxiety at the airport]: the plane could have been hijacked

Both these sentences begin with a clause that establishes an indirect discourse context; the second clause then gives us the ‘content’ of the anxiety described in the first clause. In each case this content is an epistemic evaluation (‘epistemic possibility’) regarding an event (the hijacking of the plane). Given that we are in an indirect discourse context, the ‘source’ of the evaluation is not the writer/enunciator (as it would be if I wrote now: *Their plane could have been hijacked*) but rather the enunciator implicit in the indirect discourse. In either case the event which is the object of the epistemic evaluation is situated earlier in time (i.e. it is anterior to the evaluation concerning it). This anteriority is expressed by the choice of *have* followed by the participle form of the lexical verb. Notice that in the original sentence *could* has the Past Tense morpheme but it is not interpreted as referring to past time. Its value is ‘remote possibility’ (in this respect it is similar to *might*) but it is worth pointing out that in this sense (remote vs. non-remote possibility) it does not enter into an opposition with *can* (which is not used to express epistemic possibility in English, except when this is used negatively: **The person you saw can have been Richard* vs. *The person you saw can't have been Richard: he is in the United States at the moment*) but with *may* (*The person you saw may have been Richard*). In the second sentence, referenced to past time, the value of *could* is indeed past, but only insofar as it expresses an epistemic evaluation connected with an (implicit) enunciator-source that is itself situated in the past. In no sense is the *could* in this case like the descriptive Past Tense we find in cases such as *When he was young Tom could play the violin very well*.

d) **Exercise on modal verbs - interpretations of modal clauses**

1a. That hotel has hundreds of rooms: you **shouldn't** have any problem finding one, even in the middle of August.

1b. That hotel is always full: you **should** book as early as possible.

This pair of examples illustrates two different ways of interpreting the modal *should*. The two types of interpretation are generally available for the modal verbs, so this item has an importance that goes beyond the case of *should*. In both sentences the modal expresses an evaluation by the speaker/writer. In both cases the event/situation which is evoked is located from the temporal point of view in the future. In both cases the modal expresses an evaluation in terms of 'necessity'. The difference lies in how that necessity is 'put to use'. In (1a) the speaker/writer is interested in predicting the future: he expresses his evaluation of an event as (considering the relevant factors) a necessary future outcome. In (1b) by contrast he is interested in influencing future actions: he evaluates a given course of action as necessary. This amounts to giving advice or imposing this course of action (indeed, in appropriate circumstances it might be heard as an order). The first use (predicting what is going to happen when we don't know) is called EPISTEMIC, while the second use (evaluating an action as necessary as a way of influencing someone to undertake it) is termed DEONTIC. The same types of interpretation are available with *must*:

[I have heard it hasn't stopped raining for the last two weeks up there in Scotland.]

You **must** be having a terrible time! EPISTEMIC

You **must** return this book to the library no later than 30 November. DEONTIC

2a. Tom **has to** see an eye specialist next week.

2b. Tom **should** see an eye specialist next week.

Here the contrast is between 'semi-modal' *have to* and modal *should*. Both these verbs express 'necessity/obligation', but they differ in the way they present this. With *have to* the speaker/writer is understood to be describing an independently existing situation of necessity or obligation (for instance Tom has made an appointment to see an eye specialist, and so there is a objective obligation). With *should*, by contrast, the 'necessity/obligation' is understood to derive from the evaluation of the speaker/writer (for instance I evaluate it as necessary for Tom to see an eye specialist next week).

3a. In the end, Tom **didn't need** to buy a new television. The old one turned out to be repairable.

3b. In the end, Tom **needn't have bought** a new television. The old one turned out to be repairable.

Similar to item (4) following, except that instead of *have to* (descriptive presentation of necessity/ obligation) and *should* (necessity/obligation presented as a speaker evaluation) we have *need*₁ (= semi-modal *need*) and *need*₂ (= modal *need*). Not by chance, we find modal *need* used for the retrospective evaluation, and semi-modal *need* for the descriptive sentence.

4a. Before going to Bali, Jane **had to have** a number of injections.

4b. Before going to Bali, Jane **should have had** a number of injections.

These sentences take the contrast outlined in item (2) - objective necessity presented descriptively vs necessity presented subjectively as a speaker evaluation - a stage further. Both concern events located in past time (in both cases we understand that Jane's journey to Bali

has taken place). The first sentence tells us about an objective necessity/obligation in past time. The second gives us the speaker/writer's evaluation (in the present) about the past (thus retrospective). So, the first sentence (4a) simply describes the past, while the second sentence is not understood as describing anything real at all; rather the whole point here is that the speaker/writer wants to reason (in terms of necessity) at a degree of abstraction from what actually happened (either because he does not know what happened or because he knows that what happened in reality was something different). Thus (4b) is understood as presenting a past time event that exists only as part of the speaker/writer's evocation of an imaginary past that is the fruit of his retrospective evaluation (in terms of 'necessity').

As was mentioned, very often sentences like the (4b) are produced in situations where the speaker/writer knows that the event did not in reality take place (for instance Jane did not have the injections) and is interested in evoking an alternative course of events (such uses are referred to as COUNTERFACTUAL).

Not by chance the descriptive verb actually appears in the past tense (*had to*); the evaluative verb (*should*) is not itself past (this is appropriate: the speaker is evaluating in the present - retrospectively); here it is the 'perfect construct' (*have + participle*) that indicates that the speaker's evaluation concerns an event located in past time.

Regarding the first sentence, when *have to* is used in the past tense, the interpretation will frequently be not just that the event/action was necessary but that it actually took place. In fact this is the case above: we understand not only that it was necessary for Jane to have certain injections, but also that she did in fact have them.

- 5a. Fortunately, they found a spare part. Otherwise, Tom **would have had to buy** a new television.
- 5b. In the end, Tom **should have bought** a new television: it would have been much cheaper than having the old one repaired.

Here we have a contrast between two different formulations: on the one hand a combination of a verb expressing an evaluative prediction (*would*) and a verb expressing descriptive necessity/obligation (*have to*); on the other an evaluative verb of necessity (*should*). So the first says something like '(in the hypothetical past situation which we are imagining) I (the speaker/enunciator) predict an objective necessity for action *x* [*x* = Tom/buy a new television]'. The sense is: 'there would have been no choice'. The second says something like '(in the hypothetical past situation which we are imagining) I evaluate *x* as necessary [*x* = Tom/buy a new television]'. The crucial difference lies in how the necessity is presented: as somehow deriving objectively from the situation (5a), or as emanating from the speaker's evaluation of the situation (5b).

- 6a. **Yesterday**, as he entered the building where his ex-wife worked, Tom was apprehensive: she **might**, at this very moment, be coming down the main stairs to go for her coffee break.
- 6b. We can't say for certain whether we will be there **tomorrow**: it **might** be raining, in which case we are unlikely to come.

This pair of sentences presents two contrasting uses of *might* (historically the past tense form of *may*). Sentence (6b) shows *might* in its commonest use in contemporary English: presenting a (remote) possibility - in this case of an event located in future time. Sentence (6a) by contrast provides an example of *might* used with past tense value, something that is only

possible in the sort of case illustrated here. Note that in this example *might* is followed by the infinitive of the lexical verb, NOT by the perfect construct (as it normally is when it is used to express the possibility of an event located in past time²). What type of use, then, is exemplified in (6a)? The crucial point here is to understand that the clause with *might* presents the content of Tom's 'apprehension' (as mentioned in the first clause). In other words, it tells us what Tom was thinking (an event that he evaluated as possible), and so it is an instance of indirect discourse. What it is doing, then, is to express an evaluation (in terms of possibility) of an event which - from the time point of view - is located either at the same time as the evaluation itself or after it (in this case it is verifiable only after it). Thus the evaluation is prospective (i.e. it looks forward) but is itself anchored in past time (Tom's fears yesterday). This is different from something like *Tom might have written the wrong address on the envelope*, where the evaluation is retrospective (i.e. it looks back to the past from the present).

Thus (6a) shows us the 'past tense' form of a modal being used with past time reference to express an evaluation in the past relating to some event in the present/future in relation to the evaluation time. This is possible in an indirect discourse context.

- 7a. The boys **should have had** a medical examination: this is clearly among the stated requirements for those taking part in the expedition.
- 7b. The boys **would have had to have** a medical examination: this is clearly among the stated requirements for those taking part in the expedition.

Same as (5): the first sentence (*should have..*) gives the speaker's evaluation, directly formulated in terms of necessity and interpreted deontically. From the time point of view, the putative medical examination is located in the past, so the perfect auxiliary *have* is also chosen. The interpretation is COUNTERFACTUAL, i.e. the sentence is understood to imply that the boys did not in fact have the medical examination. The meaning is roughly: 'I (the speaker/enunciator - now in the present) evaluate as **necessary** - in unreal, past-time world *x* - that the boys have a medical examination'. In the second sentence we find *would have had to*. Here the 'necessity/obligation' meaning is realised by the semi-modal *have to*, while the speaker's evaluation is expressed by *would* (once again the putative event, the medical examination, is located temporally in the past). With this modal the speaker expresses a prediction. In other words he expresses his subjective certainty regarding the necessity - in an unreal world - of the boys having a medical examination. We can paraphrase this as follows: 'I (the speaker/enunciator - now in the present) evaluate as **certain** - in unreal, past-time world *x* - that the boys have to have a medical examination'. Thus the necessity is part of the situation evaluated as 'certain', not the modal concept in terms of which the evaluation is expressed. Strictly speaking, then, (7b) is epistemic, not deontic (though it, too, is counterfactual). In the context of modality 'certain' should be thought of as *subjective* certainty (i.e. the mental state that derives from having clear evidence for proposition *x* or very strong reasons for believing it); it is not the certainty that derives from direct knowledge.

e) *Some interesting examples involving I⁰ verbs.*

²As in *Tom might have arrived on the earlier train and gone straight home.*

- a. **In retrospect**, historians are likely to conclude that the biggest environmental failure of the Bush administration was not that it did nothing to reduce the use of fossil fuels in America, but that it did nothing to help or pressure China to transform its own economy at a time when such intervention **might have been** decisive. NYRB
Epistemic judgement (in the present) about a hypothetical event situated in past time (anteriority expressed by *have* followed by the participle form of the verb *be*).
- b. The physicists at Los Alamos, however, were driven by the fear that the Germans under Hitler **would make** atomic bombs first. NYRB
Indirect Discourse use of *would*. The clause in question appears complement of the noun *fear*, and this fear is understood as the mental state of the people (physicists working on the Manhattan Project at Los Alamos in the early 1940s). Thus the time reference is past, and in this use *would* has a past interpretation ('future in the past, prediction in the past), which it normally does not (compare: *I would go to the cinema tomorrow evening but I don't have any money*). It expresses the epistemic evaluation corresponding to the fear of the physicists at Los Alamos.
- c. Molotov and Gromyko arrived [= at the San Francisco conference leading to the founding of the United Nations] with briefs unchanged from Dumbarton Oaks. The veto powers of the permanent members of the Security Council **must encompass** matters not only of substance but of procedure, since—as Gromyko pointed out—nothing was easier than for the second to slide rapidly towards the first. NLR
Deontic judgement in indirect discourse context (giving 'content' of Molotov and Gromyko's negotiating position). The indirect discourse is itself past-referenced, so *must* is interpreted as having past time reference - despite the absence of Past Tense morphology. Thus the clause is interpreted as giving us Molotov and Gromyko's deontic evaluation at that time. This use of *must* as a past is only possible in Indirect Discourse (deontic or epistemic evaluations from a past time source).
- d. A. The joke I refer to is that Maazel [= conductor Lorin Maazel] has given up teaching and thinks his mere presence on the podium guarantees a great performance. [.....]
B. **Did** Maazel **used** to teach? WWW
This bears witness to the uncertainty that native speakers have regarding the status of *used to*. Here the writer (in a web forum) needs to use the negative form and decides (as often happens in informal contexts) to treat *used to* as a lexical verb. He accordingly introduces 'do support'. The problem that then arises for the writer is how to write the form of lexical *used to* that follows the auxiliary (pronunciation is no help because a /d/ is in any case elided before a /t/). Normally following finite *do* in *I⁰* we expect the base form of the verb (*Tom doesn't see the point*) but *used to* never occurs in this form (there is no Present Tense use and for most speakers no infinitive). The writer faces a choice between writing a form that otherwise doesn't exist (**use to*) or using one (*used to*) that can't be correct for the simple reason that it has the Past Tense morpheme, a finite morpheme in a non-finite context.
- e. A few weeks back, I was lucky enough to pick up a classical collection from a retired Lawyer. There **has to** be 400 to 600 records, mostly in very good shape. The old guy **obviously** took care of his records. WWW

This involves ‘semi-modal’ *have to* in a use (‘epistemic necessity’ - the writer is expressing his estimate of the size of a record collection in absence of knowledge) that is normally associated with modal *must* (the normal realisation would be: *There must be 400-600 records*). This use of *have to* for epistemic judgements is rare and quite emphatic; often *have to* is preceded by a focusing adverb such as *just* or *simply* (*That just has to be the largest refrigerator ever built*). This suggests that the rationale behind this use is different from that behind normal epistemic *must*. Here it seems we have an attempt to present an epistemic judgement and at the same time indicate that it is based on objective reality. The sense is that the visible bulk of the collection makes it impossible that the total number of records is inferior to what is stated. Of course, one might say that this would also be the sense if *must* were used, and this is probably correct. The difference is not in what the underlying reason for the modal judgement is (in both cases it is the visible bulk of the record collection) but rather is what is highlighted by the linguistic form chosen. Choice of *have to* (normally associated with necessity/obligation presented descriptively) points to this objective basis, while use of *must* simply presents a (subjective) estimate on the part of the writer/enunciator.

- f. [1] Now, in the midst of this meaningless and increasingly disagreeable assignment, the Serbs had suddenly turned their artillery on them [= members of the Dutch peace-keeping force stationed in the Muslim enclave of Srebrenica]. [2] The two Dutch soldiers knew full well that a direct hit, which **had to** come sooner or later, would kill everyone in the observation post. NYRB

The surprising thing here is the use of *have to* (semi-modal) for what appears to be an epistemic evaluation. The obvious way of reading the clause in question is as presenting the (epistemic) evaluation of the Dutch soldiers (what they were thinking at the time) - in other words this is a case of Indirect Discourse. It would perhaps have been more normal to find *must* in this use (compare Example (c) above), but if one thinks more carefully about the situation described, it becomes clear that the clause in question is not intended to give us the Dutch soldiers’ epistemic evaluation (cf. ‘A direct hit must come sooner or later’), but rather to suggest the objective necessity (read ‘statistical probability’) of such an outcome. It appears to be for this reason that the objective/descriptive semi-modal has been chosen in preference to the subjective/evaluative modal.

- g. Socrates **did not need** to die. He conceded that a fine **might be** appropriate punishment for the charges against him, but his “supercilious and enraging” manner seems to have provoked the jury to vote for capital punishment. Once judgment was passed, he **might have escaped** into exile, but he chose to remain and obey the laws of the state, demonstrating once again the foolishness of the citizenry and his own wisdom in thus curtailing the debilities of old age. TLS

Here the writer has chosen the objective/descriptive *did not need to die* rather than the subjective/evaluative *need not have died*. Why? Maybe because his aim is not to be understood by the reader as presenting his evaluation of the situation after the event, but rather to be seen to be describing the situation as it was (‘there was no objective need at that time for Socrates to die’).

- h1. [1] The first substantial study of Hitler was that of Konrad Heiden, which appeared in Zürich in 1936. [2] As its date indicates, it **could have** nothing to say about the greater

part of the Hitler dictatorship.

- h2. [1] The first substantial study of Hitler was that of Konrad Heiden, which appeared in Zürich in 1936. [2] As its date indicates, it **can have** nothing to say about the greater part of the Hitler dictatorship.

The first example (the original) has *could* used as a descriptive past tense form (*can* is the only modal verb that normally allows this type of use). This can be compared with the epistemic (non-past) use in the second example.

- i. [1] I had just got the hand of a friend of mine, saying 'farewell', and was descending nineteen stone steps from the pier into the vessel, with a heavy heart, when crack went the foremast, and broke off close to the deck. [2] The act of hauling up the foresail had finished this rickety mast. [3] But for this providentially happening in the harbour, the vessel **must have gone to sea**, and the consequences, if not fatal, **would at all events have been misery**.

1852 - Thomas Baines *History of the Commerce and Town of Liverpool* (p. 588)

This example is from 1852, and its interest lies in the fact that *must* is used in a counterfactual (this is not possible in contemporary English, where the formulation would be: *The vessel would certainly have gone to sea*). Two things show that *must* is being used as a counterfactual in this case: (i) the clause *but for this providentially happening in the harbour*, which is read as an unreal conditional protasis (cf. 'if this had not happened providentially in the harbour'); (ii) the coordination of the *must have* clause with a another clause where *would have* appears in a clearly counterfactual use.

- j1. For him, the Soviet Union was not an existential evil that **needed to** be vanquished but a legitimate nation-state with defined interests. LRB
- j2. If radio-telephony had been developed ten years earlier, the holocausts on the Western Front **need never have occurred**. TLS

These two examples serve to contrast a past tense, descriptive use of *need* (semi-modal version) in (j1) with a counterfactual, evaluative use of modal *need* in (j2). This is an evaluation in the present about events located temporally in past time.

- k. [1] Runaways [= runaway slaves] seldom headed north towards freedom, because the odds against making it were too great. [2] Most of them stayed in the South, often in the immediate neighbourhood, where they were assisted with some provisions by fellow slaves and sometimes gathered in gangs until caught. [3] The occasion or opportunity for running [= escaping] **might come** at any season of the year, but the only season when the recorded numbers dropped was during the autumn harvest. NYRB

This presents a (very rare) descriptive past-time use of *might*. A more normal formulation would feature *could* (*The occasion or opportunity for running could come at any season*).