## The British Academic Spoken English Corpus Manual

## **Transcription and Mark up**

### 1. Transcription

Spellings have been taken from Online Oxford Reference or the OED Online or have been noted below for consistency.

#### 1.1 General:

- Oxford Online Reference was used as a first step to finding the orthographic spelling of a word.
- Where the spelling does not appear in the reference books, Google was used for suggestions and the most popular occurrence taken, adding it to the list below to maintain consistency.
- Entity references have been used for transcribing characters outside the set of characters available, using entity names rather than decimal codes i.e. é, ö and so on.

• The list of words that are always –ise rather than –ize are:

advertise	dis(en)franchise	merchandise
advise	disguise	prise (open)
apprise	enfranchise	revise
chastise	enterprise	supervise
circumcise	excise	surmise
comprise	exercise	surprise
demise	franchise	televise
despise	improvise	
devise	incise	

- Gonna, wanna, kinda etc. are transcribed in their full forms: going to, want to, kind of.
- The spelling from the above references has been used even if a spelling has been used differently by a lecturer e.g. a lecturer has *Perikles* on a handout consistently, but *Pericles* was used as the spelling as it occurs in this form in the dictionary.
- Other variable spelling and words not found in the dictionary:

aagh	mega market	
adviser	minijoke	
analyse	ml	
biggie	monoline	
blebs	naive	
bleurgh	nineteen-o-five	
chock-a	no-no	
combating	oedema	
e-commerce	oi	
egg cup	okey-dokey	
e-mail	oof	
encyclopedia	per cent	
et cetera	piccies	
fetus	scubaing	
filestore	secondborn	
filmmaker filmmaking	shh	
flak	so-called	
focused	straight away	
frusemide	swap	
geektastic	technobabble	
grottoes	thingy	
haemorrhage	ticklist	
Habsburg	ton rather than tonne, if it is not clear	
hand-wavy	trade-off	
huh	T-test	
hurray - not hooray	weblog	
immunosuppression	web page	
infrared	web site	
in so far - not insofar	whisky	
judgement	whoops and whoop	
linchpin	woo-hoo	
leukocyte	yeah	
mangoes	yep – not yup	
medieval	J.T J.T	

### 1.2 Capitalization

• Book/film titles have been capitalised by capitalising the first word and all other content words in the title:

```
The Faerie Queene
The Adventures of Huckleberry Finn
```

- All units have lower case letters even if they are the names of scientists: newtons, daltons
- Names of departments are capitalized:

```
Department of History but History department
```

• Directions are only capitalized if they form part of a proper name:

```
south Cheshire
South Yorkshire
```

### 1.3 Hyphenation

#### **1.3.1** General

In general, hyphens are used sparingly. Conventions from Oxford Online Reference and OED Online are taken, and unless they appear explicitly, follow the conventions noted below.

• Hyphens for formulae, using the grouping for disambiguation:

the output is K over alpha-squared-plus-beta-squared the one-over-S there it is again and two terms # exponential-minus-alpha-T multiplied by the cosine of beta-T square-root of alpha-squared-plus-beta-squared on the top divided by beta that's that which again is just a gain component just a number and then we've got the two terms exponential-minus-alpha-T multiplied by sine-beta-T

• For truncation within a formulae or other hyphenated section:

```
<trunc>M-V-s</trunc> squared-over-six
```

• For web addresses:

```
W-W-W-dot-NATO-dot-org
```

• For connecting non-word spoken noise components:

```
dah-di-dah-di-dah
ba-de-bum
```

#### 1.3.2 Hyphenated

- non-something words
- pre-something is only hyphenated if the word that is pre-begins with e or i or if the formation could be ambiguous e.g. preposition/preposition
- post-something words
- something-like words
- something-related words
- something-specific words
- mid-something words
- something-shaped words
- counter-something words
- anti-something words
- quasi-something words
- socio-something words
- semi-something words
- pro-something words
- pseudo-something words

#### 1.3.3 Not hyphenated

- cosomething e.g. coworker
- resomething e.g. reread
- somethingish e.g. yellowish
- subsomething e.g. subgroup
- somethingwise e.g. personalitywise
- protosomething e.g. prototype
- missomething e.g. misemphasizing

#### 1.3.4 Other:

middle-sized
one-sided
south-east
T-cell

T-helper cell
P-value
twelve-pounds-ninety-nine
first-hand
un-Roman
oft-cited
okey-dokey
wire-free
arch-example
one-legged
touchy-feely
two-hundred-and-something
fifty-odd

## 1.4 Anonymization

- The <gap/> element is used for anonymization.
- <gap reason="ethics" extent="N secs"/> is used for any portion of an event that is to be removed for ethical reasons or that is requested by the participants to be removed.

### 2. Mark up

Occurrences are marked up following the definitions below

### 2.1 <u>

Element	Attributes	Values	Examples
<u></u>	who (currently n)	6 character code unless there are	<pre><u who="ss"> transcribed text </u></pre>
An utterance is a discrete	Supplies identifier for the speaker	multiple speakers in unison or	
sequence of speech produced by	or group of speakers. Speaker ID	saying the same thing not	<pre><u who="om0095"> transcribed text</u></pre>
one participant, or group of	supplied at beginning of every new	necessarily in unison if	
participants, in a speech event.	turn.	individual speakers cannot be	
The tag contains transcription		distinguished:	<pre><u who="nf1336"> transcribed text</u></pre>
of lexical items. $A < u > lasts$		ss audience members, not	
until another speaker begins,		necessarily students	
there is a break in the recording		sl audience members and current	<pre><u who="sm0574"> transcribed text</u></pre>
or there is another stimulus		speaker	
which takes over e.g. video		-	
plays.		<u>1<sup>st</sup> character</u> :	
		characterises speaker	
		0, <b>n</b> or <b>s</b>	
		o observer i.e. cameraperson	
		<b>n</b> non-student	
		s student	
		and a	
		2 <sup>nd</sup> character:	
		sex of speaker	
		m, f or u	
		m male	
		<b>f</b> female	
		<b>u</b> unknown	

	3rd-6th character: 4 digit number individual to each speaker 0000-9999 [The ID numbers (last 4 characters) consist of 0001 onwards in the lectures, and 5001 onwards in the	
	seminars]	
trans	latching the utterance begins	<pre><u trans="latching" who="nf1336"> transcribed text </u></pre>
Used when change of speaker occurs	with a pause shorter than 0.2 second	transcribed text
	overlap the utterance begins	<pre><u trans="overlap" who="om0095"></u></pre>
	before the previous one has	transcribed text
	finished	
	pause the utterance begins after	<u trans="pause" who="sm0574"></u>
	a pause of 0.2 second or longer	transcribed text

#### Further examples:

#### • Addressing non-responsive audience

If a speaker addresses an audience with a question and there is no response, there is no break in the utterance tag, it remains the same utterance until a break in the recording, or another speaker speaks or there is a change in primary stimulus.

### • Break in recording

Where there is a break in recording, the utterance ends, followed by the <gap> tag, see below. A new <u> will begin, with the trans attribute assigning a pause value.

#### lslct026

that's actually doubling your urine output so although per minute that doesn't seem much you take that into account over a day that's a huge volume change </u><gap reason="break in recording" extent="uncertain"/> <u n="nf0368" trans="pause"> so moving on now to renal clearance and that's simply the ability of your kidneys to clear whatever you're talking about from the blood

#### Interaction

Where another person speaks, a new <u> is assigned. If the transition value between utterances is pause, where the definition of pause is the same as that for the <pause/> tag, the tag goes between </u> and <u> and the trans attribute is assigned a pause value:

pslct016

what would the demand curve have to look like <pause dur="0.7"/> for the elasticity not to be a negative number <pause dur="2.5"/><kinesic desc="indicates member of audience" iterated="n"/> point here </u><u n="m0776" trans="latching"> when the demand is constant </u>quse dur="0.4"/> <u n="m0775" trans="pause"> when demand is constant so let's look at that in the diagram

#### • Other stimulus

Where another stimulus takes over, the <u> ends. It begins again when a speaker begins. ahlct014

okay so this is The Nation's Health it's from nineteen-eighty-two </u><pause dur="42.4"/> <event desc="starts video" iterated="n" n="nm0063"/><kinesic desc="video plays" iterated="y" dur="40"/> <u n="nm0063" trans="pause"> okay <pause dur="0.9"/><event desc="stops video" iterated="n"/> that scene actually comes after <pause dur="0.5"/> # <pause dur="1.4"/> an earlier consultation that he has with a woman

### 2.2 <pause/>

Element	Attributes	Values	Examples
<pre><pause></pause></pre>	dur	measurement of 0.2 second or	the whole environment around <b>you</b>
Indicates a pause, either	duration of pause	above, correct to 1 decimal place	<pre><pause dur="0.3"></pause> matches <pause< pre=""></pause<></pre>
between or within utterances. A			dur="0.2"/> your mood <pause< td=""></pause<>
pause is a silence in speech and			dur="2.0"/> now
vocality of the speaker for 0.2			
second or above.			

• Pauses are breaks in speech or any vocal noise made by the speaker. Laughter, coughs, clearings of throat etc. are not contained within the pause measurement if they are made by the speaker or the speaker with other participants where the who attribute contains "1". Where there are vocals from other participants in the event, these are included in the pause measurement while it occurs within the <u> of the current speaker.

sslct009

i'll be in my room during <pause dur="0.2"/> <trunc>s</trunc> so-called <pause dur="0.4"/> surgery hours <pause dur="0.4"/><vocal desc="laugh" iterated="n"/><pause dur="1.4"/> right let's get this thing moving

The <vocal/> here is not contained within the pause measurement, as it is made by the current speaker. The measurements would be the same if the who/n attribute contained "l", e.g. "sl".

#### ahlct016

the little bit from Grisbi which you did not see this morning thanks to the British censor of the fifties <pause dur="0.5"/> <vocal desc="laughter" iterated="y" n="ss" dur="1"/> and <pause dur="0.3"/> that is when # <pause dur="0.2"/> Max takes his friend Riton to # <pause dur="0.6"/> his new flat

The <vocal/> in this instance is contained within the pause measurement as it is made by "ss", other participants in the lecture.

- Wavesurfer was used to measure pauses from the waveform of the audio.
- Pause measurements do not contain filled pauses which are transcribed as #. lslct024

it'll fill a little gap in the agenda <pause dur="0.6"/> # <pause dur="0.2"/> just to give you some history

- <pause/> tags can occur within a word.
- Where there is overlapping speech, pauses are measured within the <u> of one speaker to their own next utterance.

#### 2.3 < vocal/>

Element	Attributes	Values	Examples
Element <vocal></vocal> A non-lexical vocal event such as laughter, coughing. Speaker ID not marked if produced by current speaker, marked if not current speaker.	Attributes  desc  Description of vocal event.	Values  audible inbreath belch blows nose buzzing noise car stalling noise cough clears throat exclamation exploding noise gasp	<pre>Examples  <vocal desc="clears throat" iterated="n"></vocal>  <vocal desc="laughter" dur="1" iterated="y" n="ss"></vocal></pre>
		hum kiss noise laugh laughter shudder noise sigh	

	sneeze sniff stretch noise throat - creakiness in throat whistle whooshing noise wrong answer noise
iterated	n if not continuous/iterated y if continuous/iterated
who	as defined above. Speaker ID not marked if produced by current speaker, marked if not current speaker.
duration of <vocal></vocal> to nearest second. Only measure if iterated = "y"	measurement of <vocal></vocal> to nearest second.

• All vocals are shown to the nearest word. Words are not split by <vocal/> tags.

## 2.4 <kinesic/>

Element	Attributes	Values	Examples
<kinesic></kinesic>	desc	changes (transparency   slide)	<pre><kinesic <="" desc="changes slide" pre=""></kinesic></pre>
A non-vocal communicative	Description of kinesic.	indicates (board on wall   discs	iterated="n"/>
event such as put hand up,		line on transparency   member of	
frown, act of writing on board		audience   point on screen   point	<pre><kinesic desc="indicates point on&lt;/pre&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;etc. Speaker ID not marked if&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;on flip chart   point on slide   point&lt;/td&gt;&lt;td&gt;slide" iterated="n"></kinesic></pre>
produced by current speaker,		on transparency   pole   screen	
marked if not current speaker.		transparency   section of board	<pre><kinesic <="" desc="changes" pre=""></kinesic></pre>
		upwards   point on stomach	transparency" iterated="y"
		camera   centre of book   indicator	dur="10"/>
		basket   fire exit   kidneys   and	
		counts students   size with hands	<pre><kinesic <="" desc="reveals covered part" pre=""></kinesic></pre>
		point on arm)	of transparency" iterated="n"/>
		<b>puts</b> (petri dish on overhead	
		projector   on transparency   hand	<pre><kinesic <="" desc="writes on board" pre=""></kinesic></pre>
		over mouth   hand to ear   hands on	iterated="y" dur="14"/>
		head   hand round throat	deimonia dona Merrona en considerad
		transparency on top of current	<pre><kinesic <="" desc="turns on overhead" pre=""></kinesic></pre>
		transparency   finger up)	<pre>projector showing transparency" iterated="n"/&gt;</pre>
		reveals covered (part of	iterated="n"/>
		transparency   phrase on board)	<pre><kinesic desc="demonstrates giraffe&lt;/pre&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;b&gt;moves&lt;/b&gt; (chess pieces to memorized&lt;/td&gt;&lt;td&gt;bending down" iterated="n"></kinesic></pre>
		positions   discs   disc   hands to	bending down related in />
		side of face demonstrating blinkers	<pre><kinesic <="" desc="applause" pre=""></kinesic></pre>
		hands round head demonstrating	iterated="y" n="ss" dur="6"/>
		mortar board)	Iterated y n- ss dur- 0 />
		overhead projector is on showing	
		( transparency   covered	
		transparency)	
		projector is on showing slide	
		turns on overhead projector	
		showing transparency	
		turns on projector showing slide	
		starts stopwatch	
		writes on (board   transparency	
		flip chart)	

**holds up** (reel of cotton thread | report | sheet | sheet music | bar code | prop | fist | biscuits | book | magazine | poster | ten pound note | strip of paper with weight attached |metal chain | metal chain with weight attached) demonstrates (motion on transparency | motion with arms | beam with pen | giraffe bending down | big eyes with hands | head length | tube lengthening | carrying heavy object | Belousov-Zhabotinsky reaction | rejection of face | pretend breathalyser) adjusts (transparency | projector) makes (questioning gesture | quotation mark gesture) put hands up nod heads raises eyebrows shrugs shoulders waves to member of audience crosses arms across body applause clicks fingers gestures stop with hands memorizes board position mixes up pieces on transparency presses finger into arm sits back in chair brings out prop removes discs from poles adds disc to pole sticks bar code on sheet turns strip of paper with weight attached the other way up throws away ten pound note waves arms and shakes body starts video

	video plays pulls apart piece of Velcro hold both hands and lean back displays models mimics falling asleep tilts book hits book drops book knocks on table	
iterated	n if not continuous/iterated y if continuous/iterated	
who	as defined above. Speaker ID not marked if produced by current speaker, marked if not current speaker.	
dur duration of <kinesic></kinesic> to nearest second. Only measure if iterated = "y"	measurement of <kinesic></kinesic> to nearest second. If it is over a minute, the notation minute:seconds e.g. dur="3:20" unknown is used if duration is not known.	

## 2.5 <event/>

Element	Attributes	Values	Examples
<event></event>	desc	walks (to front of class   to	is there # something
An occurrence, not necessarily	Description of event	position   to seat)	i'm not seeing <pause dur="0.4"></pause>
communicative, usually non-		takes (off transparency   off	<pre><event <="" desc="opens drawer" pre=""></event></pre>
verbal, noted because it affects		jumper   off glasses   handout from	iterated="n"/> aha
comprehension of the		member of audience   off	
surrounding discourse.		transparency backing paper)	right i should get these lights out
		looks through (transparencies	<pre><pause dur="3.6"></pause><event< pre=""></event<></pre>
		notes)	desc="turns off lights"
		<b>puts</b> (on blank transparency   on	iterated="n"/> okay
		transparency   video into video	
		player   pen in bin   sheets on board	the focus isn't right is it <pause< td=""></pause<>
		away screen   away projector   on	dur="2.2"/> <event desc="adjusts&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;glasses   on transparency backing&lt;/td&gt;&lt;td&gt;overhead projector" iterated="n"></event>
		paper)	that's better
		covers part of transparency	course dogg-Wlooks through
		knock on door, student enters	<pre><event <="" desc="looks through transparencies" iterated="y" pre=""></event></pre>
		students enter room	dur="11"/> right when i <pause< td=""></pause<>
		<b>moves</b> (board   television   blinds)	dur="1.0"/> finally find <pause< td=""></pause<>
		wipes board	dur="1.8"/> the relevant slides
		<b>phone</b> (beeps   rings)	dur- 1.6 /> the relevant sindes
		<b>noise from</b> (computer   audience)	
		prepares video	
		rewinds video	
		fast-forwards video	
		stops video	
		turns (on/off overhead projector	
		on/off television	
		turns on overhead projector, bulb	
		blows   on/off lights)	
		adjusts overhead projector	
		claps hands	
		passes out (handouts	
		attendance sheet   handout to	
		observer)	
		pulls down screen	

presses light switches changes (lights | pen | tape | pointer) **drops** (pen | pencil case | radio microphone transmitter | board rubber) shuts curtains removes jacket woman enters room, gives the lecturer an attendance sheet closes computer program replaces transmitter on belt picks up piece of radio microphone from the floor knocks microphone off **tries to** (reattach microphone | show slides) moves (microphone closer to mouth | to slide room | away from the overhead projector light) returns to position discussing questions hits surface hands prop to student looks for board rubber stands on equipment accelerating beeps played tries to change slide holds up hands demonstrating tentacles in front of face gets equipment attempts task set doing task set drinks stops notes from falling off table finds pointer takes (handout from member of audience | off transparency backing attaches weight to metal chain

	music plays shakes liquid taps microphone opens drawer looks at timetable overhead projector is on showing blank transparency beep from stopwatch
iterated	n if not continuous/iterated v if continuous/iterated
who	as defined above. Speaker ID not marked if produced by current speaker, marked if not current speaker.
dur duration of <event></event> to nearest second. Only measure if iterated ="y"	measurement of <event></event> to nearest second. If it is over a minute, use the notation minute:seconds e.g. dur="3:20" unknown if duration is not known.

## 2.6 <shift/>

Element	Attributes	Values	Examples
<shift></shift> A marked change in voice quality for any one speaker	feature the paralinguistic feature	tempo speed of utterance loud loudness pitch pitch range tension tension or stress pattern rhythm rhythmic qualities voice voice quality	<pre>many of the ancient myths that you should be coming across in your classical reading <pause dur="0.3"></pause> <shift feature="voice" new="laugh"></shift>show that no such thing<shift <="" feature="voice" pre=""></shift></pre>
	new new state of paralinguistic feature	for "voice" laugh laughing whisp whispering husk husky growl growling voice mimicking French accent mimicking Jamaican accent mimicking northern English	new="normal"/> <pause dur="0.3"></pause> is the case  Sainsbury's goes down threepence <pause dur="0.4"></pause> on # baked beans <shift feature="voice" new="mimicking an angry voice"></shift> you bastard <pause dur="0.2"></pause>

accent mimicking American accent mimicking Essex accent mimicking Australian accent mimicking an other's voice mimicking an angry voice mimicking an orgasmic voice normal for "pitch" high normal see http://www.tei- c.org/P4X/TS.html#TSSASH	fourpence on ravioli you swine <shift feature="voice" new="normal"></shift> frozen peas down <pause dur="0.4"></pause> <vocal desc="laughter" dur="1" iterated="y" n="ss"></vocal> and who the hell wins  swing it around the crowd and <shift feature="pitch" new="high"></shift> ding <shift feature="pitch" new="normal"></shift> <pause dur="0.4"></pause> <kinesic desc="indicates member of audience" iterated="n"></kinesic> it picks you out
---	--

- The shift tag is used sparingly as it is imprecise and difficult to maintain consistency. It is not used for marking prosody generally, only when it is a section of speech that can be classified easily as it is produced differently by speaker.
- See <a href="http://www.tei-c.org/P4X/TS.html#TSSASH">http://www.tei-c.org/P4X/TS.html#TSSASH</a> for more coding for <shift/> tag

## 2.7 <distinct>

Element	Attributes	Values	Examples
cdistinct/> Used for words or phrases in languages other than present-day British English. This includes earlier forms of English but does not include proper names. Foreign words are spelled as in the original language when it uses a roman alphabet; otherwise, a standard form of romanization is used	type type type is used when the transcription changes, for example, when it is the pronunciation of the word that affects the comprehension of the discourse.	2/3 letter code as defined in Library of Congress http://www.loc.gov/standards/iso639- 2/langcodes.html  cel Celtic fr French de German grc Ancient Greek el Modern Greek it Italian is Icelandic ja Japanese la Latin no Norwegian oe Old English po Polish ru Russian sa Sanskrit sco Scots es Spanish sw Swahili/Kiswahili sampa	a kind of <pause dur="0.4"></pause> civil service <trunc>fonc</trunc> the <distinct n="fr">fonction publique</distinct> translation of true and fair view <pause dur="0.5"></pause> <distinct n="el">distinct n="el"&gt;distinct n="el"&gt;une image fidèle</distinct> la <pause dur="0.4"></pause> <distinct n="es">une image fidèle</distinct> lalalala imagen fiella imagen fiel <pause dur="0.5"></pause> <distinct n="es">la imagen fiel</distinct> <pause dur="0.8"></pause> the you don't remember this i talked about it last time  is like this <pause dur="3.9"></pause> # <pause dur="0.2"></pause> <distinct n="sa">janasas</distinct> i don't know how you pronounce it <distinct n="sa" type="sampa">[dZ{n{s{s}</distinct> or something like that  there's a <distinct type="sampa">[s]</distinct> and there's a <distinct type="sampa">[s]</distinct> <pause dur="0.6"></pause> but in Greek there is

#### 2.8 <sic>

Element	Attributes	Values	Examples
<sic></sic>	corr	•••	there are <trunc>th</trunc> <sic< td=""></sic<>
Used when a speaker makes a	correction		<pre>corr="really"&gt;beally three</pre>
mistake without self-correcting,			<pause dur="0.2"></pause> parts to <pause< td=""></pause<>
and the error might otherwise			dur="0.4"/> the poster
appear to be a transcribing			
error.			

- Used sparingly for uncorrected slips of the tongue and only if it could be seen as a transcribing error.
- Not used to correct grammar as with written text.
- Used for a truncated word followed by correction if not all of the word is said: the environment opposed <sic corr="imposed">impo-, posed-,</sic> upon them

#### 2.9 <trunc>

Element	Attributes	Values	Examples
<trunc></trunc>			is that i think <trunc>w</trunc>
Used when a word is truncated			<pre><pause dur="0.5"></pause> today's session</pre>
			is going to be <pause dur="0.3"></pause>
			the last
			with other <pause dur="0.2"></pause>
			<pre><trunc>poin</trunc> other <pause< pre=""></pause<></pre>
			dur="0.2"/> bodies

• Truncation tags are used when there is a truncation at the beginning of the word as well as if there is a truncation at the end of the word.

## 2.10 <gap/>

Element	Attributes	Values	Examples
<pre>Sequence</pre>	reason	inaudible inaudible due to noise from audience - includes coughs, etc inaudible due to equipment difficulties inaudible due to hand over mouth inaudible, multiple speakers inaudible due to overlap ethics e.g. "i hope this will be removed" name	C-D-four cells undergo a <pause dur="0.6"></pause> diurnal rhythm <pause dur="0.2"></pause> that is to say they're there's a <pre>cording" extent="uncertain"/&gt; <u n="nm0239" trans="pause"> if you measure them <pause dur="0.4"></pause> at different times of the day you get different numbers</u></pre> i think we'd better get started <pause dur="1.0"></pause> i'm <gap< th=""></gap<>
	extent	N words N secs uncertain	reason="name" extent="2 words"/> and i'm just giving a lecture # <pause dur="0.4"></pause> today on <pause dur="0.2"></pause> Max Weber  it can pick up electrons <pause dur="0.2"></pause> to give this <pause dur="0.3"></pause> <kinesic desc="indicates point on transparency" iterated="n"></kinesic> <gap extent="1 sec" reason="inaudible"></gap>
			that's E-minus of the proton is equivalent of H atom

## 2.11 <unclear>

Element	Attributes	Values	Examples
<unclear></unclear>			and you've also got the stirrer
Used when transcriber is			<pre><unclear>wheel</unclear> <pause< pre=""></pause<></pre>
uncertain of exact word(s)			dur="0.5"/> okay so that that would
			be a typical batch thing

## 2.12 <reading>

Element	Attributes	Values	Examples
<reading></reading>			though how far it was the norm <pause< td=""></pause<>
text which can be attributed to			dur="1.2"/> # <pause dur="1.6"></pause> leaves
an identifiable source when it is			certain questions in our minds <pause< td=""></pause<>
being read and not referenced			dur="0.3"/> he says that # <pause< td=""></pause<>
where the whole text being read			dur="1.1"/> <reading>Agricola was no</reading>
is at the non-finite clause and			loose young <unclear>subbleton</unclear>
above level.			<pre><pause dur="0.4"></pause> to turn his military</pre>
			career into a life of gaiety he wouldn't
			make his self-captaincy <pause< td=""></pause<>
			dur="0.3"/> <trunc>as</trunc> and his
			inexperience an excuse for idly enjoying
			himself <pause dur="0.3"></pause> and
			continually going on leave
			<pre><pause dur="0.3"></pause> giving us <pause< pre=""></pause<></pre>
			dur="0.3"/> the impression that the norm
			<pre><pause dur="0.4"></pause> for <pause< pre=""></pause<></pre>
			dur="0.2"/> senior tribunes <pause< td=""></pause<>
			dur="0.6"/> was basically to use <pause< td=""></pause<>
			dur="0.4"/> their period <pause< td=""></pause<>
			dur="0.3"/> of supposed military service
			<pre><pause dur="0.2"></pause> as a long <pause< pre=""></pause<></pre>
			dur="0.2"/> and extended holiday

### 2.13 Further examples

#### • Using audio

which can be placed either outside <u> tags or within them. The <u> tags are used for coding the speakers and the placement of the tags marking the events also mark the temporal placement of the actions. The n/who attribute marks who is doing the action if the tag is outside a <u>.

#### pslct024

```
you can recognize the word every single time </u> <pause dur="19.6"/><event desc="starts audio" n="nm0858" iterated="n"/><kinesic desc="audio plays" iterated="y" dur="13"/> <event desc="stops audio" n="nm0858" iterated="n"/> <u n="nm0858" trans="pause"> it goes on for hours
```

### • Using video

```
Marking video uses three tags: <event desc="starts video" n="nf0058" iterated="n"/> <kinesic desc="video plays" iterated="y" dur="3:01"/> <event desc="stops video" iterated="n"/>
```

which can be placed either outside <u> tags or within them. The <u> tags are used for coding the speakers and the placement of the tags marking the events also mark the temporal placement of the actions. The n/who attribute marks who is doing the action if the tag is outside a <u>.

# • Demonstrating Towers of Hanoi puzzle pslct010

this is my <pause dur="1.3"/><kinesic desc="brings out prop" iterated="n"/> i i <pause dur="0.7"/> cheated earlier today <pause dur="0.5"/> because i # <pause dur="0.8"/> i pretended to be a student <pause dur="0.6"/> in the # <pause dur="0.6"/> writing course that that <pause dur="0.6"/> C-S take <pause dur="1.0"/> # and there were lots of exciting things happening in <pause dur="0.6"/> in that there was music being played and <pause dur="1.0"/> tenners being thrown up scrunched into balls and thrown <pause dur="0.6"/> into the corner <pause dur="1.1"/> and it continues <pause dur="0.2"/> the excitement of the day <pause dur="0.8"/> 'cause we have a <pause dur="2.6"/> a prop <pause dur="1.8"/> which is my <pause dur="2.0"/> Towers of Hanoi <pause dur="1.4"/> okay <pause dur="0.4"/> Towers of Hanoi <pause dur="0.5"/> three poles <pause dur="0.6"/> with <pause dur="0.4"/> a number of discs <pause dur="0.9"/> on one end <pause dur="0.3"/> and the idea is to take <kinesic desc="indicates discs" iterated="n"/> these three discs <pause dur="0.2"/> and to move them all <pause dur="0.5"/> to the other end <pause dur="1.7"/> kinesic desc="indicates pole" iterated="n"/> okay <pause dur="0.6"/> third pole <pause dur="2.6"/> by placing taking one at a time <pause dur="0.5"/> kinesic desc="moves disc" iterated="n"/> moving them across <pause dur="0.3"/> but not putting a smaller disc <pause dur="2.4"/> a

larger disc onto a smaller disc <pause dur="0.4"/> okay so <pause dur="0.4"/><kinesic desc="moves disc" iterated="n"/> that would be an illegal move in the Towers of Hanoi problem <pause dur="0.2"/> okay we can't do that <pause dur="0.2"/> we can only move <kinesic desc="moves discs" iterated="y" dur="5"/> smaller discs onto <pause dur="0.5"/> larger discs <pause dur="1.7"/> okay so we could solve it in various ways it could be <pause dur="0.5"/> quite tricky could be difficult

•••

how many people can do it with three discs <pause dur="2.2"/><kinesic desc="put hands up" iterated="n" n="ss"/> so <pause dur="0.7"/><kinesic desc="adds disc to pole" iterated="n"/><event desc="hands prop to your hand up </u><pause dur="0.4"/> <u n="sm0719" trans="pause"> yeah </u><pause dur="0.3"/> <u n="nm0718" trans="pause"> go for it <pause dur="1.0"/> they're they're not in the right order by the way </u><u n="sm0719" trans="overlap"> yeah </u><u n="nm0718" trans="overlap"> so you can sort them out first <pause dur="4.4"/><kinesic desc="moves discs" iterated="y" n="sm0719" dur="30"/> okay so </u>>reason="inaudible, multiple speakers" extent="15" sec"/></u><u n="nm0718" trans="overlap"> <trunc>st</trunc> <pause dur="2.6"/> you need to <trunc>st</trunc> <pause dur="0.6"/> right <vocal desc="laughter" iterated="y" n="sm0719" dur="1"/> <pause dur="0.3"/> you need to start with <trunc>st</trunc> <trunc>st</trunc> <pause dur="0.3"/><kinesic</pre> desc="moves discs" iterated="y" dur="5"/> shall we start again </u><u n="sm0719" trans="latching"> yeah <pause dur="0.2"/> go on </u><u n="nm0718" trans="overlap"> i dare you </u><u n="sm0719"</pre> trans="latching"> let's go try again </u><pause dur="1.1"/> <u n="nm0718" trans="pause"> start with them at one end <pause dur="0.8"/><kinesic desc="moves discs" iterated="y" n="sm0719" dur="29"/> that might be easier </u><pause dur="1.2"/> <u n="ss" trans="pause"> <qap reason="inaudible, multiple speakers" extent="23 sec"/><kinesic desc="applause" iterated="y" n="ss" dur="4"/></u><u n="nm0718" trans="overlap"> well done <pause dur="2.5"/> thank you <pause dur="0.8"/> # <pause dur="1.3"/> it it's <pause dur="0.6"/> that that was i'm i'm <pause dur="0.2"/> dead impressed with that actually <pause</pre> dur="0.2"/> because it's very difficult doing it when there are lots of people watching

- The first extract shows a general way to tackle this particular problem. The difference between iterated="y" and iterated="n" is that where the action is not iterated, one disc is being moved to another pole and where the action is iterated, more than one disc is being moved and the duration of seconds is noted.
- The second extract is further on in the lecture where the lecturer hands the prop to a student to attempt the puzzle.