

The Janus Moment BALEAP 2013

*Investigating student-centred
academic discourse
Problem-based learning sessions in
medical genetics*

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The Janus Moment

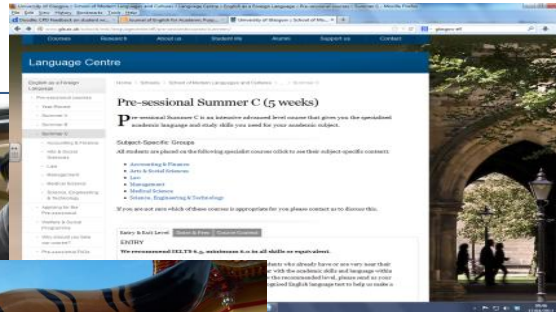
Spoken academic English (SAE)

- Looking back & looking forward
- My PBL corpus
- The story so far
 - genre stages
 - corpus search – 1st/2nd personal pronouns

A little bit of context



YRPS
Speaking
component



PS
Bridging for
medical/life science
students



Kaohsiung medical
lecturers & PBLs

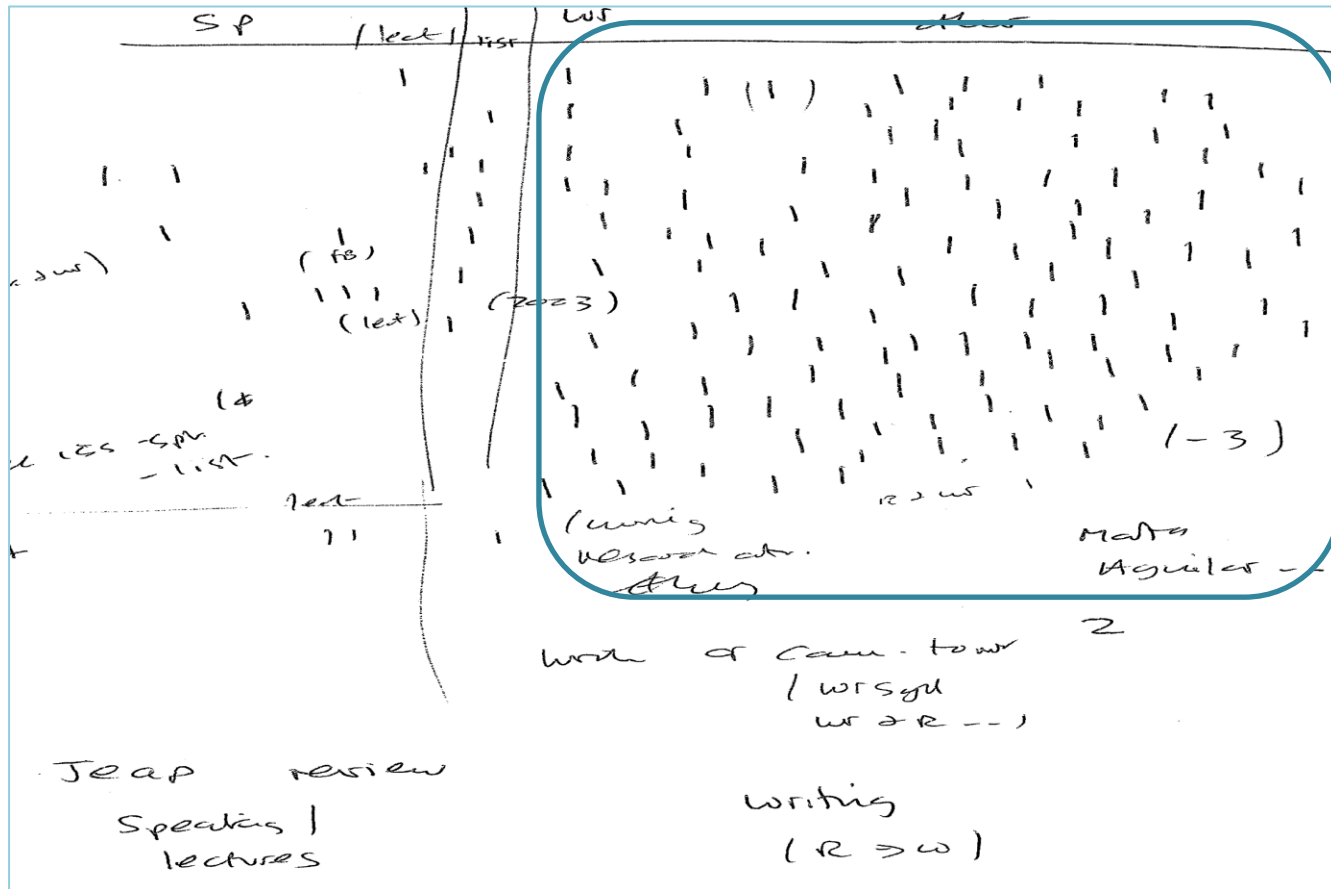
Spoken academic English

The Janus moment... looking back

What do we know or think we know?

- Course & source books
- In-house course components & materials (our PS & Bridging)
- The literature...
 - on seminars (e.g. Basturkmen,1999 & 2002)
 - SAE corpora (e.g. MICASE; BASE; T2KSWAL)

Articles on academic speaking and writing in JEAP (2002-2013)



Spoken academic English

The Janus moment.. looking forward

- Investigating disciplinary specific SAE
- Student-centred learning events
 - PBLs

PBLs in medical education

- PBLs in medical education
 - Practise ‘being a scientist’
- PBLs: a recognised genre with specific aims
- PBLs: a collaborative learning event
- A PBL cycle
 - scenario → clarification → main issues → brainstorming → learning objectives → independent study → report back → discuss

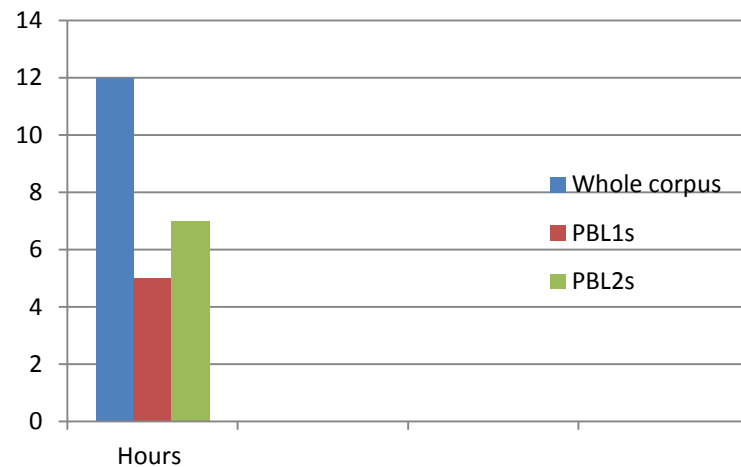
PBLs...previous studies

On PBLs

- stages & register analysis (e.g. Legg, 2007)
- stages, register analysis and participation
Woodward-Kron & Remedios (2007)
- exchange patterns (IRF) (e.g. Imafuku, 2006)
- vocabulary (Da Silva and Dennick, 2010)

Me and my corpus

a small, specialised, disciplinary specific corpus



- 10 sessions, c12 hours; 5 topics/ 2 stage cycle
- 34 students, 6 facilitators (7-8 ss + 1 F)

PBL extracts

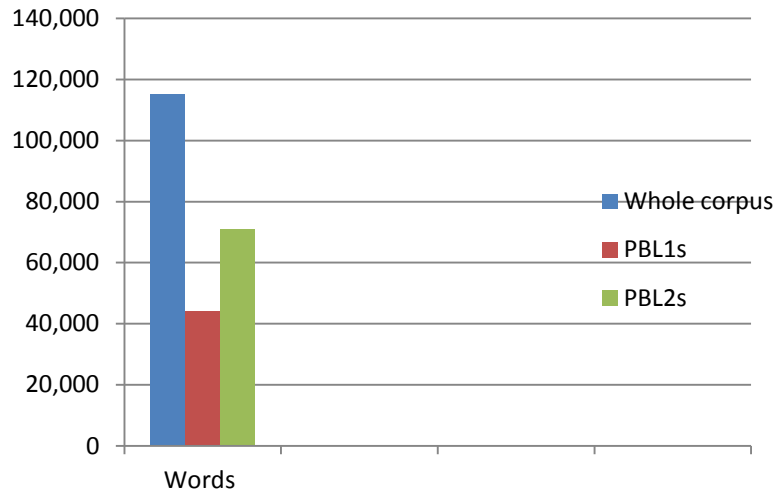
Transcribing

- Group discussions
- [extract PBL1] 
- Presentations + follow up
- [extract PBL2] 

...It took a long time...

Me and my corpus


a small, specialised, disciplinary specific corpus



- c115,000 words (44, 000 + 71,000)

PBL as a genre: stage 1

Stages in PBL1s

- Opening
 - (read scenario) (any questions)
 - Share knowledge
 - Students questions
 - Identify LOs
 - Assign LOs
 - Closing chat
- 

() indicates an optional stage

- All quite fuzzy in the middle

PBL stage 1

Extended complex exchanges

- long, complex exchanges
- multiple contributors possible
- clarifying (or asking for clarification); questioning (repeatedly); confirming

Complex exchanges

<p>→ Initial and responses;</p>	<p>Sp12 I → y so let's start with the main issue</p> <p>what do you think the main issues here?</p>	<p>→S5 R1 (I) ↓ spina bifida or maybe (?) screening () she's</p>	<p>→S15 R2 (I) ↓ risk of populations</p>	<p>→S5 R3 (I) ↓ maybe age of the mother?</p>	<p>→S5 R4 (I) and eh the gestational age</p>	<p>→ S10 R5 (I) ↓ is there a maternal age associated spina bifida as well?</p>
<p>↓ 'Embedded exchanges'</p>		<p>S10 R1/I ↓ population screening</p>	<p>R1/I ↓ um?</p>	<p>S10 R1 ↓ yep</p>		<p>S13 R1 I don't know ↓</p>
	<p>S5 R2 ↓ Is it population or pre-natal?</p>	<p>S15 Ib ↓ the risk- the risk of this spina bifida in population</p>	<p>S13 R 2 ↓ yes she's risk of down syndrome cos she's over thirty]</p>			<p>S14 R2 i don't know either ↓</p>
	<p>S5 R3 (or F) Yeah S13 R4 (or F) Yeah</p>	<p>S13 R don't think they're S16 [?]</p>	<p>S5 R3/I ↓ excuse me?</p>			
			<p>S13 Ib the age as well the down syndrome</p>			<p>R3 I don't know</p>
			<p>S14 R yeah (?) gestational age which is suitable with</p>			

Complex exchanges

→S5 R3 (I) ↓

maybe age of the mother?

S10 R1 ↓

yep

S13 R 2 ↓ yes she's risk of down syndrome cos she's over thirty

S5 R1/I ↓

excuse me?

S13 R2 Ib

the age as well the down syndrome

S14 R3 yeah

gestational age which is suitable with

PBL as a genre: stage 2

Stages in PBL2s

- preliminary talk → <student report> → <follow up discussion > → closing talk

< > indicates a recursive stage

PBL stage 2: the student report

- Signal start
- Introducing topic
- Report on findings [describe process or procedure; causes and effects; describes and elaborates terms/ conditions]

(interim comments: adding information, agreement, or questions)

(refer to visuals)

(refer to reading or lectures)

(signals ending)

(refers to references)

(invites questions)

() indicates not always present

PBL stage 2 points of interest

- Brief openings

PBL 9 S14 *'I'm going to talk about numbers'*

S 8 [*'talking about diagnosis*] *I'll start off with ultrasound'*

S10 [*'can I start? No more questions?*] Ok, *so I did em, Spina Bifida'*

PBL 11 S 7: ok *so we'll just talk a little bit about eh familial adenomous polyposis em,*

- 'Chunks' of talk

'Chunks' of talk

Examples of 'cause and effect'

- PBL 9 S16: so it's it's the most common out the three, and em, there is er it is it *is caused by* like a small gap between the two, vertebrae. vertebrae ? er but, because they they are so small and they do not have any symptom at all like you *don't get any symptom* at all so they're are not that , dangerous ehm they also are like, (2) like i said they're quite common. er second one is called uhm, Spina Bifida Men i i can't yeah Melancae? er it's a this one is ehm , it's the the gaps a lot bigger , and the membranes *are pushed, outside*, but em, but the nervous is still in side , and they do not ca- like, but you can actually remove it surgically, and normally *they don't have any, long term effects* or anything. and the the most dangerous and, (2) and like well known is er Myelo Meningocele

'Chunks' of talk

Processes (& effects of)

- PBL 11 S 28 ok er what causes MAP? er a mutation in this gene, and the oxidation, in the er proof reading er process, er which leads the change from GC to TA. and this diagram here will explain little bit the, (2) idea of this inheritance here in the middle, in the central pathway, you can see in general the change from GC, to TA, happen because the oxidation here change the G to O, *and in the er* repairing system using using the MU er YH, it's associated in the er repair, with er the DNA repair,

- More chunks e.g.
 - Procedures
 - Defining and elaborating
 - Reporting results
- Extended complex exchanges

Orientation to the audience

Referring to visuals & shared knowledge

- PBL 11 S25 and yeah about i've went and stole this drawing from M's lecture i forgot to reference it so i will go back to do that when i *send it to you* er and it's the same as what *we were talking about this morning* what, [? name] went over , ehm so FAP a- an instance of one in five ten thousand,
- PBL 12 S 32 *the right hand of the slide* *you can* see the DNA binding domain
- PBL 7 S6: and, *as you see in the figure* uhm, on the right side of the figure there's a ah target DNA , and on the left those are the two actually there are three over here but mainly there we're going to use the two of them,

Referring to background reading

- PBL 11 S5: *but i found a an interesting paper whi- which analysed* the ehm , both comparing , ah we have the sensitivity of Amsterdam two was, ah seventy eight percent and specificity sixty seven. whereas Bethesda criteria

Short closings

- PBL 7 S6: *ok? thank you (2) any questions?*
- S 16 : *er it's about it. [?] any questions?*
- PBL 10 S22 : *that's it any questions?*

Corpus search: personal pronouns

- 1st & 2nd person personal pronouns
- Interpersonal: orientation to the group/ audience; interaction & engagement
- *We* (e.g. Rounds, 1987) or ..
I or *you* (e.g. Fortanet 2005)



I, you, we

'no no no *i* know what *you*'re saying but shall *we* see if, *we* can get two questions if can't then *we*'ll split that into two ..'

- You #5, I #6, we # 17
- Frequency
- Uses

Frequency

Pronouns	PBL 1s (c44,000wds)		PBL 2s (c71,000 wds)		Whole PBL corpus (c115,000wds)		Pron- ouns	MICASE (Fortanet 2004 sub corpus;)		Rounds' corpus (c27,000) (from Fortanet 2004:51)	
	Occur- ences	Frequen- cy (per 1000 words)	Occurre- nces	Frequen- cy (per 1000 words)	Occurre- nces	Frequen- cy (per 1000 words)		Occurre- nces	Frequen- cy (per 1000 words)	Occurre- nces	Frequen- cy (per 1000 words)
First person singular all	1237.0	28.0	1486.0	20.8	2723.0	23.7	First person Total	16251.0	21.03	329.0	12.6
First person Plural all	814.0	18.4	578.0	8.1	1392.0	12.1		9489.0	12.30	1052.0	39.1
Second person all (total)	1126.0	25.5	1458.0	20.5	2581	22.4	Second person	17664.0	22.80	338.0	12.6

Frequency & use

How are they used?

- I think (603) e.g. opinion/stance

S26: *i think* though if you look it up you're going to end up, oh
what bowel cancers PBL 11.1

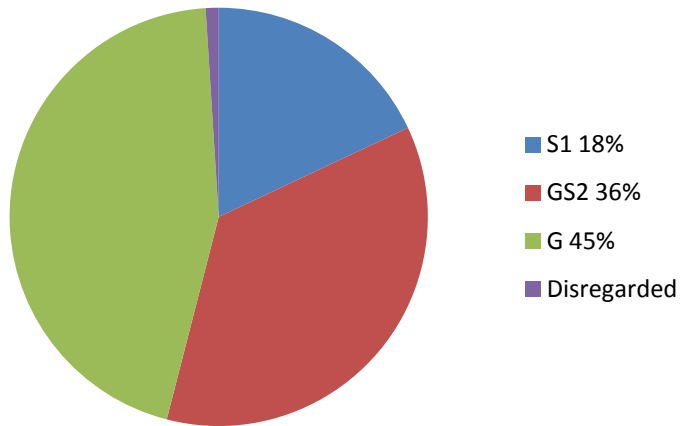
S1: *i suppose i'm thinking* about it in PBL 7.1

- I mean (152) for e.g. clarification

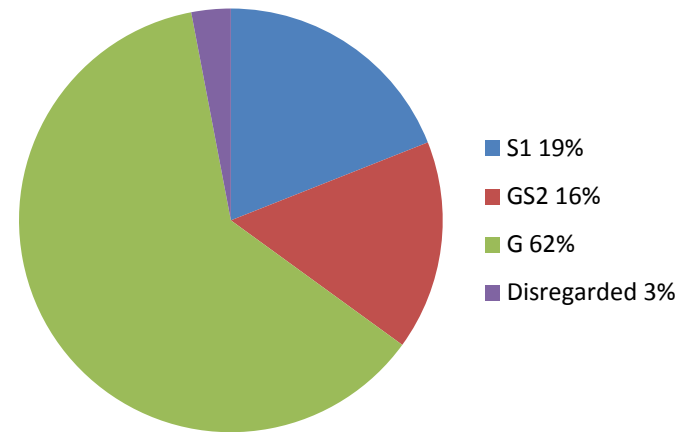
S5: so. no *i mean* that you know the pedigree for example is
autosomal recessive you expect, PBL 11.1

Semantic reference: you

PBL 1 you + related forms



PBL 2 you + related forms



Semantic reference: you

PBL1s more 'talking to each other'

so *do you think* it might be, quite rare maybe what the, the wee boy had then? PBL 7.1 (S1)

S22: *do you think* we should include erm incidence carrier incidence in assessment of the PBL 10.1 (GS2)

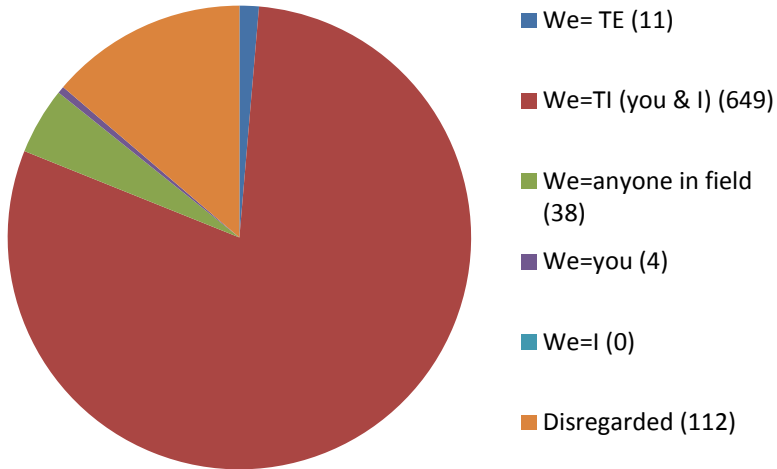
PBL2s more 'talking about genetics' & making it more personal

you could repair both with surgery, but it's PBL 9.2 (G)(hidden referent)

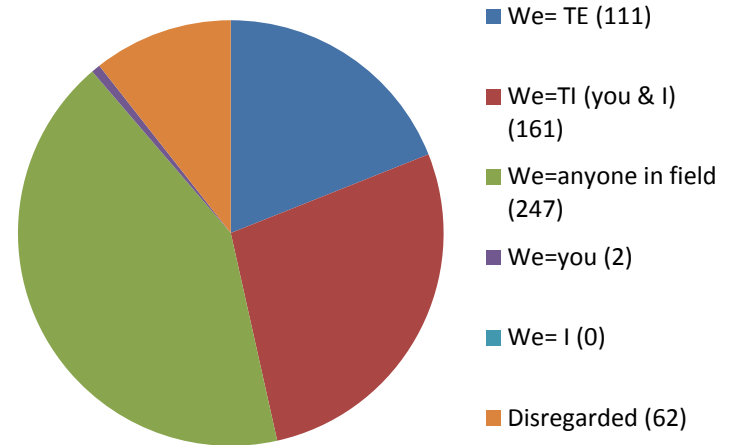
caucasian population. so that's why *if you* have no mutation in one caucasian PBL 10.2 (G)(describing a condition/state)

Semantic reference: we

We and related forms PBL1



We and related forms PBL2



Semantic reference: we

PBL1s more talking to each other: group work & solidarity

...didn't we didn't kind of, decide

S25: yeah

S26: shall we see what other questions we have and then

S29: yeah genetic counselling

PBL 11.1

PBL2s more talking about genetics & making it more personal

is mutated , in seven to ten percent is MSH six , and in less than five percent we find that PMS two is er mutated (3) it's not [?fully] saying there is eighty
PBL 11.2

and any chromo- chromosomal rearrangements as well, em , give rise to NTDs.
so we know they must be lying in there somewhere, in some of the genetic material
PBL 9.2

Personal pronouns & PBLs

- Reflecting the nature of PBLs (involvement and engagement)
- Reflecting purpose of PBLs
- Reflecting identity & group solidarity

What does it amount to..?

So far...

- A clearer understanding of identity & interpersonal aspects; nature of exchanges and types of talk

For EAP teaching...

- Models & tasks?
 - e.g. extended exchanges; opportunities to negotiate; types of talk
- Expectations of presentations
 - e.g. brief openings and closings; linking; informality ...

And next..

- More on lexical bundles
- Academic vocabulary
- More on aspects of metadiscourse- how orient to audience
- More on how discuss content- process
- And the written corpus (and other corpora) ?
- Laughter...
- ...

Selected references

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- For an extended list contact Carole.MacDiarmid@Glasgow.ac.uk

Thank you.

- Questions , comments, & suggestions?