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# Health Semiotics Week 2

Patients talking to clinicians: doctors and patients enacting and negotiating role relationships

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## OUTLINE FOR TODAY

- Recapping last week on register and medical interaction
- Doctor patient roles – what are the issues? (from Harvey inter alia)
- Doctor patient roles – how modelled in health care
- Some alternatives from linguistics and their challenges/ issues
  - Tenor: cross metafunctional realisation and phasal distribution
  - Multimodal analysis
  - Semantic networks
- What clarifications are health and social semiotics likely to bring each other?

1. Recapping/ finish off last week

We started discussing:

Is there a medical register? How do we characterise it and compare it with other registers?

# But remembering that

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- Registers are defined by formal (linguistic) not situational properties:

“if two samples of language activity from what, on non-linguistic grounds, could be considered different situation-types show no differences in grammar or lexis, they are assigned to one and the same register: for the purpose of the description of the language there is only one situation type here, not two”.  
(Halliday, et al. 2007[1964])



# Illustrating some of the issues for text analysis

## TEXT 1 (Hasan 1985:54, slightly adapted)

A: Can I have ten oranges and a kilo of bananas please?

B: Yes, anything else?

A: No thanks.

B: That'll be dollar forty.

A: Two dollars. [Hands over \$2 in cash]

B: Sixty, eighty, two dollars. Thank you.



# Illustrating some of the issues for text analysis

**TEXT 1 (Hasan 1985:54, slightly adapted)**

**How does Hasan describe the Contextual Configuration of Text 1 (p. 59)**

CC {  
Field:  
Tenor:  
Mode:



# Illustrating some of the issues for text analysis

**TEXT 1 (Hasan 1985:54, slightly adapted)**

**Table 1: Contextual Configuration of Text 1 (after Hasan 1985: 59)**

CC {	Field:	Economic transaction: purchase of retail goods: perishable food ...
	Tenor:	Agents of transaction: hierarchic: customer superordinate and vendor subordinate; social distance: near-maximum ...
	Mode:	Language role: ancillary; channel: phonic; medium: spoken with visual contact ...



Your turn: Discuss in pairs

Are you happy with this type of characterisation? What might be its limits?

## HASAN: NOT JUST INDIVIDUAL (L-G) PATTERNS (1973)

- It has been too readily assumed that the easiest and most valid form of describing the linguistic characteristics of registers is to state the frequency or likelihood of individual patterns or of their combinations. I would suggest that it might be advantageous to specify the characteristics of given registers by reference to some high-level semantic component. (1973, p.273)



# Illustrating some of the issues

## TEXT 2 (After Hasan 1985:54, adapted a bit more)

A: Good morning Mrs Reid.

B: Good morning Bob. Can I please have a couple of boxes of those raspberries you've got on special? But can I please have some on the ones just behind you there, not the ones out the front that have been in the sun?

A: Yeah, sure - is that all today?

B: Yes thanks.

A: Five dollars thanks.

B: Thanks. [Hands over 10 dollars]

A: Thanks. And five dollars change. See ya later.

B: Thanks. Bye.



# Illustrating some of the issues

## TEXT 3 (After Hasan 1985:54, adapted out of the shop)

A: Hello Bob.

B: Good morning Mrs Reid.

A: Can I have a prescription for Ritonavir and another one for Bactrim please?

B: Yes, anything else?

A: No thanks.

B: That'll be a hundred and forty dollars.

A: Two hundred dollars.

B: Sixty, eighty, two hundred dollars. Thank you.



# Illustrating some of the issues

## TEXT 4 (After Hasan 1985:54, adapted right out of the shop)

- A Yeah. What was it last time in percentages and so on? How are the percentages and so on changing, are you happy what they're doing at the moment?
- B Yeah. It's the same – 17 per[cent–
- A Yep].
- B ...previously, and 204, so...
- A The CD-8s are stabilised, 693.
- B And um 804, so that's down a little bit, nothing too–
- A No, I'm not too worried about that. Especially the viral load's stable.
- B Yeah, viral load is very pleasing.
- A So we'll just stay on these drugs, yeah?

See exercise on  
handout



# Context: Field, Tenor, Mode for Text 4

<b>FIELD</b> social activity	<b>TENOR</b> social roles	<b>MODE</b> language role
<ul style="list-style-type: none"><li>*context of care: medical</li><li>*decide treatment</li><li>*control virus</li><li>*maximise P health</li></ul>	<ul style="list-style-type: none"><li>*agents doctor/patient</li><li>*hierarchic?</li><li>*social distance low</li><li>WHY?</li><li>* appraisal from both</li></ul>	<ul style="list-style-type: none"><li>* constitutes activity</li><li>* channel phonic</li><li>* medium spoken</li><li>* process sharing ++</li><li>* evaluation</li></ul>



Contextual Configuration

- In **example 3** (a manipulated example), we have tensions in the field, tenor and mode - almost a non-context of situation for our context of culture. When we change the Field (ie the things being purchased from fruit to drug prescriptions, we notice that there are related changes in Tenor (Dr normally has higher power; social distance may change too (cf. Hasan 2014: you can hardly have 'exchanging goods for money' as functional tenor).
- In **example 4** we have a real Dr-Patient context (the Dr is B, the patient is A). Note the low social distance and the fairly equal social hierarchy - this is important for the Field (where one of the Dr's goals is to encourage shared decision making). Note in Mode for example 4, language is now Constitutive
- Concept of 'prehension' – In reflective fields, language *typically* plays a Constitutive role (in F or M) rather than an Ancillary role (Field or Mode?).

## REGISTER SHOULD BE ABLE TO EXPLAIN:

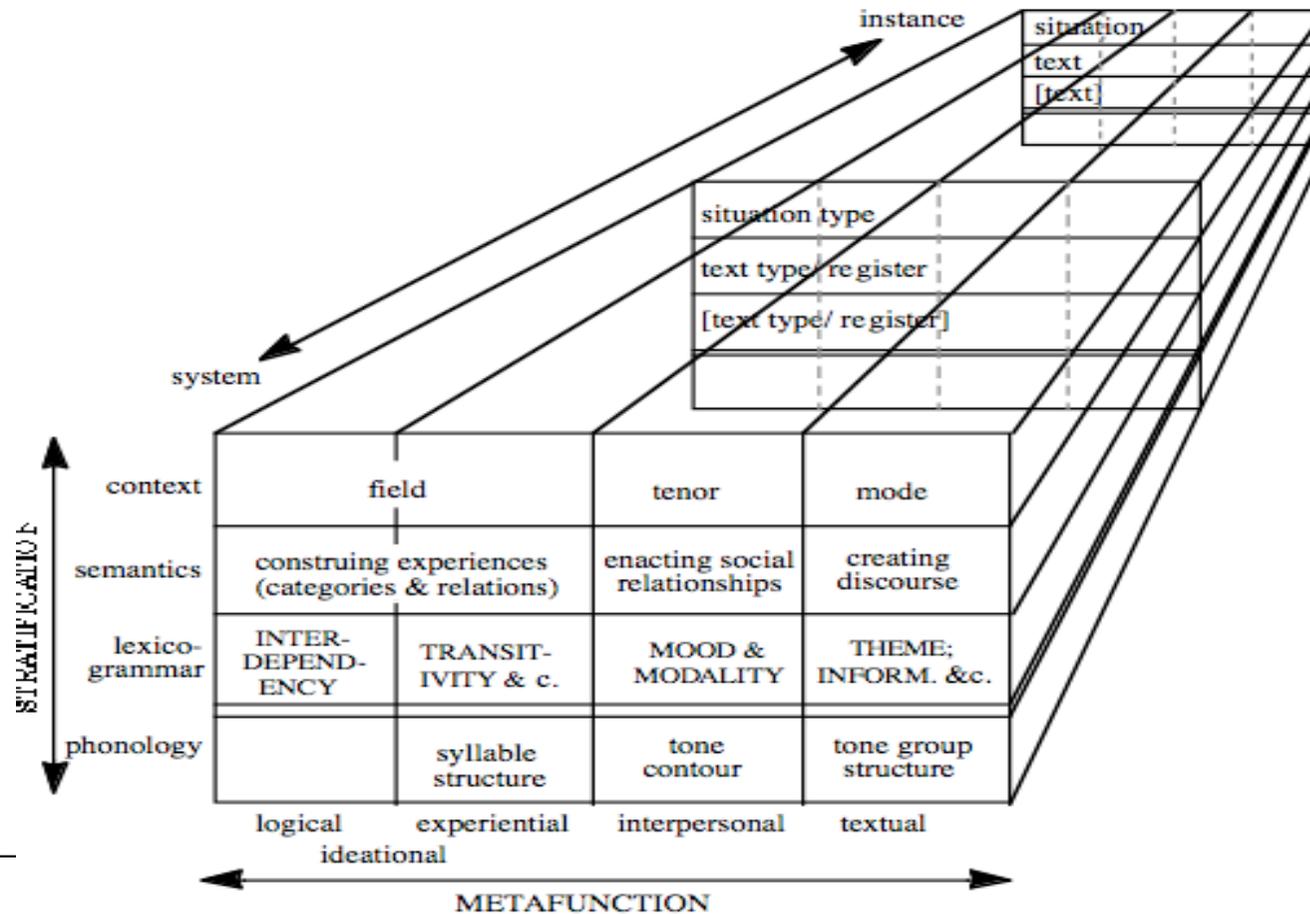
- real texts and authentic ‘non-texts’ (sic!)
- e.g. why roles in text 4 appear indistinct (and to whom)
- change and colonisation of empty space (and why HIV medicine in that space (e.g., Epstein 2000, Moore 2004))

In this course we will pursue approaches that lend themselves to characterising register and context from the point of view of the dimensions that systematise them.

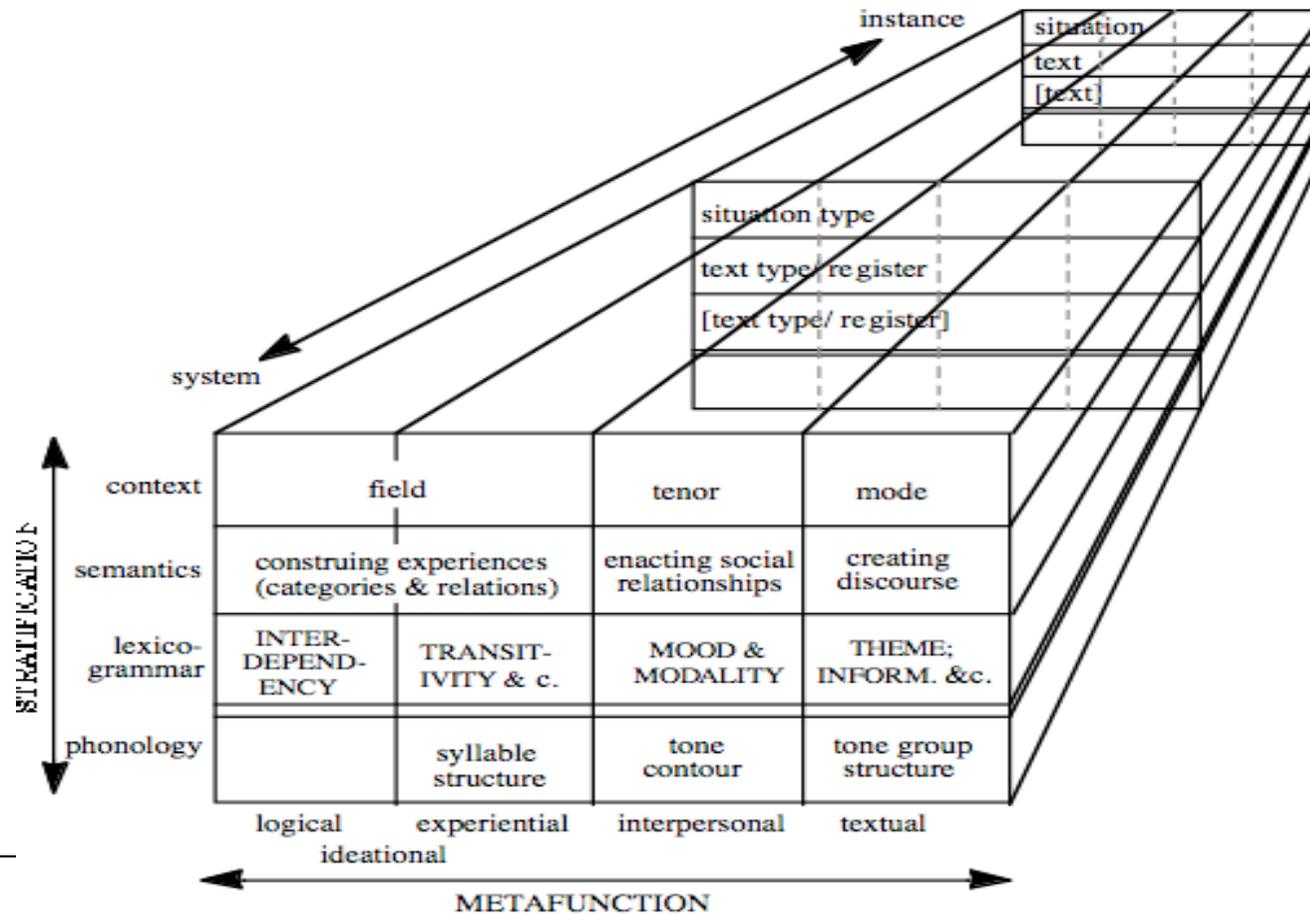


# Dimensions for modelling variation in language and context

HALLIDAY 1978, IFG3

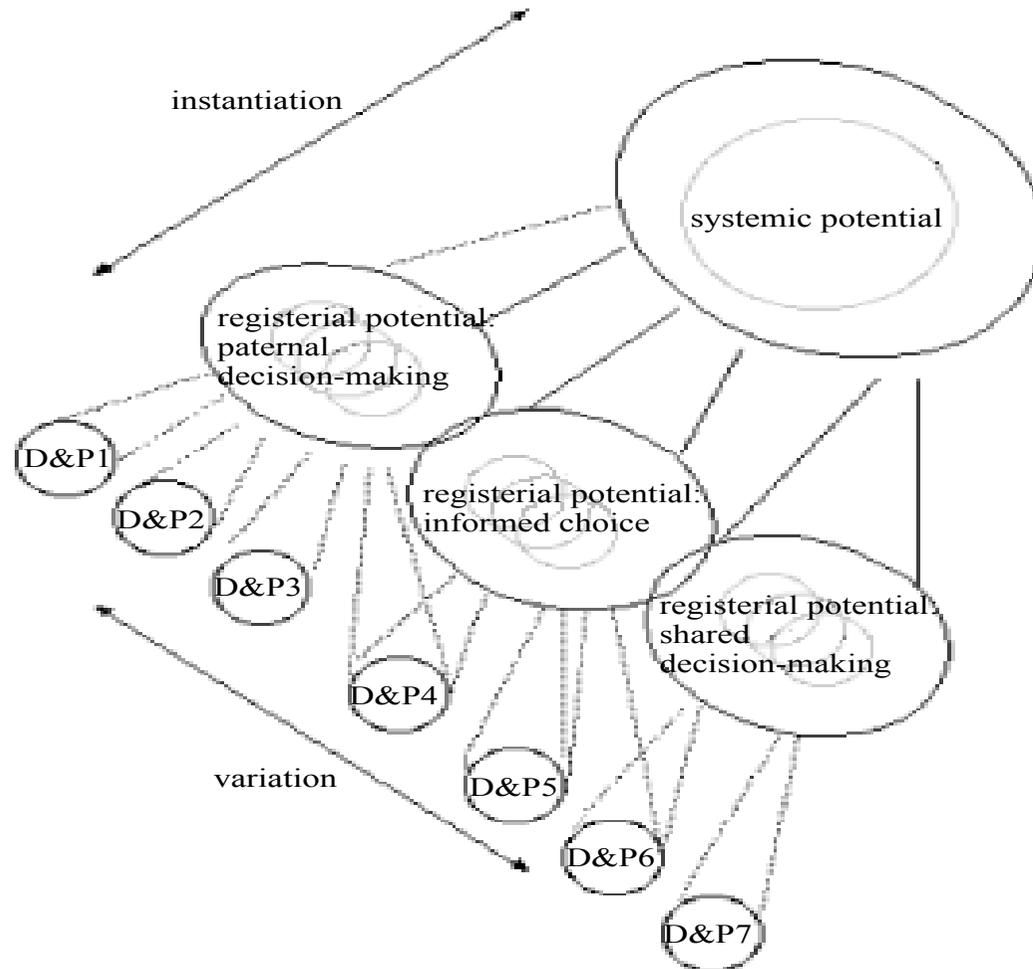


# A map of our 'semiotic address' in any linguistic investigation



# Cline of instantiation and clinical consultation: an example from HIV medicine

**AFTER MATTHIESSEN, REGISTER IN THE ROUND, 1993**



# HASAN'S LATER PROJECT

**WE WILL LOOK AT THESE IDEAS AND TOOLS IN COMING WEEKS**

- Models of context should not be taxonomising realized meanings (but systematizing context (2009))
- Precision and comparability crucial goals of the model/method (2014)
- Networks suit context and meaning modelling (1999, 2009, 2014)



2. Role relationships in doctor-patient consultations: what are the issues & how are they modelled in health care?

# Role relationships

- From your reading what are the main issues regarding role relationships in doctor-patient communication?
- What is the relationship between these issues and concerns and the structure of interactive sequence of doctor-patient consultations?



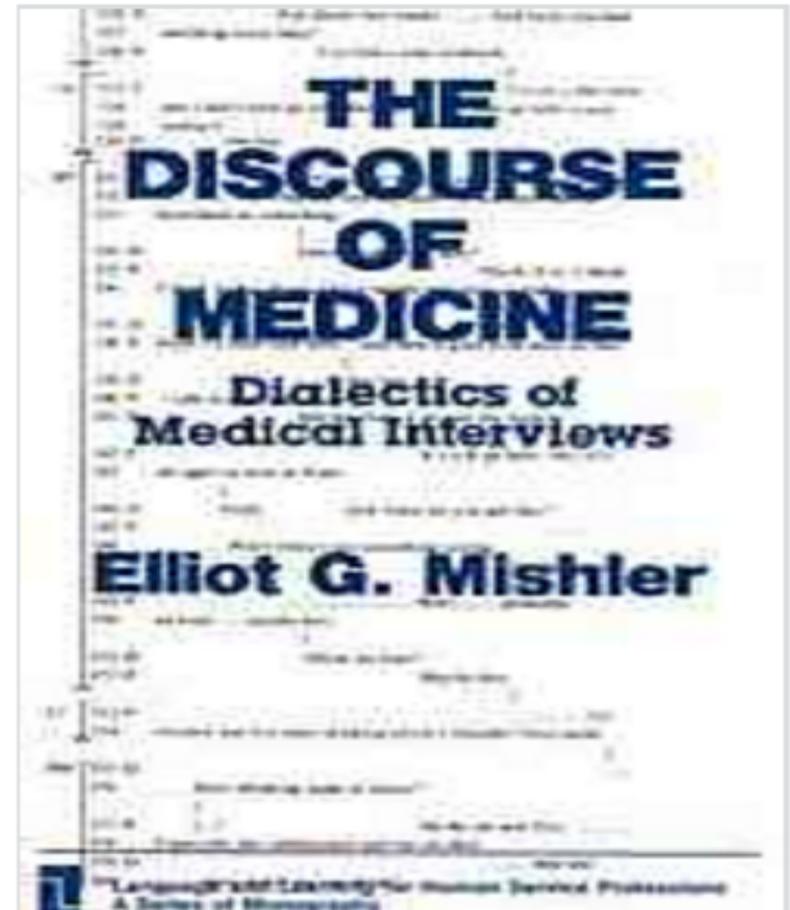
# Nottingham Clinical Communication skills video series

- <https://youtu.be/CgutWRNywo> Version 1 on verbal skills
- <https://www.youtube.com/watch?v=Cg4BbnkBavQ>  
Version 2 on verbal skills
- Based on Cambridge Calgary system

# SFL has already helped shape clinical communication: first SFL clinical interface?

## Mishler (1984)

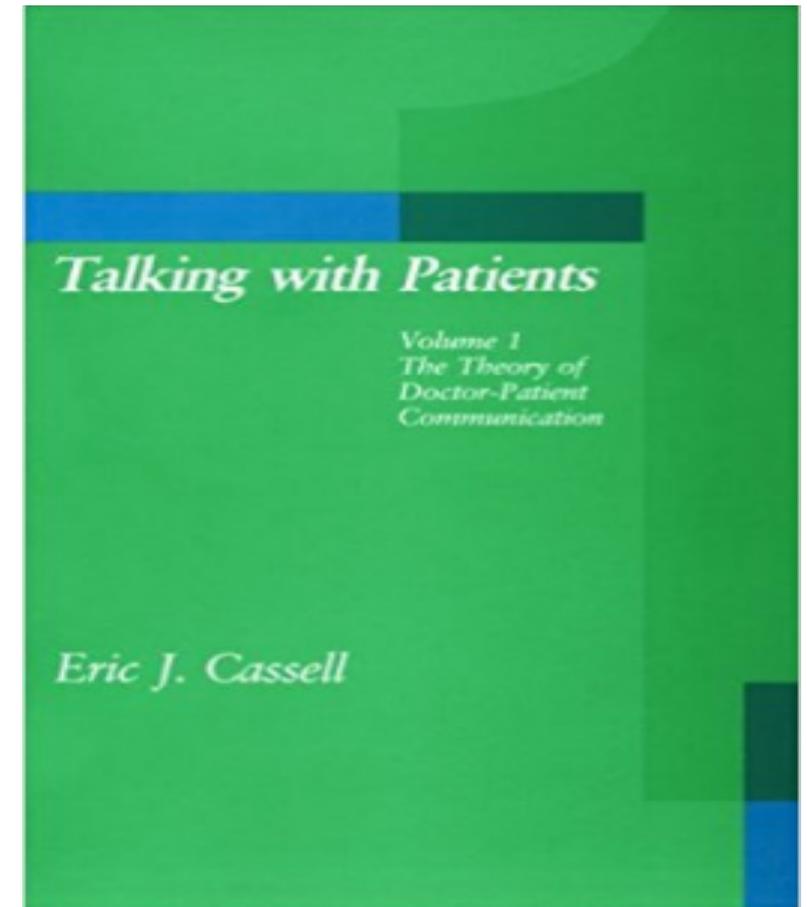
- clinicians should encourage not silence ‘the voice of the lifeworld’ with ‘the voice of medicine’
- influential (Harvard)



# Second SFL clinician-patient interface?

**Cassell (1985)** *Talking with patients* (2 vols)

- communication skills cf communication theory
- one would ‘never dream of teaching physical diagnosis to students lacking a background in anatomy and pathology’ (p.5).



3. One alternative model from SFL  
using Hasan's semantic networks

# Extended example from palliative care

- Patients and families have identified good communication as a critical aspect of medical care at the end of life (Steinhauser et al. 2000, Wenrich 2001).
- By enabling patients to ask questions that concern them, communication may be improved (Street 1991, Arora 2003)
- Clayton et al. tested a Question Prompt List (QPL)
- Medical Psychology framework, ROTER based analysis
- RCT of 147 patients across 15 Drs (QPL/no QPL)
- EOL Topics: Not raised/raised but not discussed/ Discussed
- In this model of care, roles remain somewhat traditional – Patient as information seeker, Doctor as Information provider.
- Question behaviour changed but satisfaction did not (Clayton et al 2007).



## Randomized Controlled Trial of a Prompt List to Help Advanced Cancer Patients and Their Caregivers to Ask Questions About Prognosis and End-of-Life Care

Josephine M. Clayton, Phyllis N. Butow, Martin H.N. Tattersall, Rhonda J. Devine, Judy M. Simpson, Ghauri Aggarwal, Katherine J. Clark, David C. Curoow, Louise M. Elliott, Judith Lacey, Philip G. Lee, and Michael A. Noel

### ABSTRACT

#### Purpose

To determine whether provision of a question prompt list (QPL) influences advanced cancer patients'/caregivers' questions and discussion of topics relevant to end-of-life care during consultations with a palliative care (PC) physician.

#### Patients and Methods

This randomized controlled trial included patients randomly assigned to standard consultation or provision of QPL before consultation, with endorsement of the QPL by the physician during the consultation. Consecutive eligible patients with advanced cancer referred to 15 PC physicians from nine Australian PC services were invited to participate. Consultations were audiotaped, transcribed, and analyzed by blinded coders; patients completed questionnaires before, within 24 hours, and 3 weeks after the consultation.

#### Results

A total of 174 patients participated (92 QPL, 82 control). Compared with controls, QPL patients and caregivers asked twice as many questions (for patients, ratio, 2.3; 95% CI, 1.7 to 3.2;  $P < .0001$ ), and patients discussed 23% more issues covered by the QPL (95% CI, 11% to 37%;  $P < .0001$ ).

From the Medical Psychology Research Department of Medicine and School of Psychology, and the School of Public Health, University of Sydney; Royal Prince Alfred Hospital, Concord, Royal Prince Alfred Hospital, Liverpool, Calvary, Westmead, Nepean Hospital Palliative Care Services, Sydney, New South Wales; Southern Adelaide Palliative Care Services, Adelaide, South Australia, Australia.

Submitted March 28, 2006; accepted November 18, 2006.

Supported by an Australian National Health and Medical Research Council Medical Postgraduate Scholarship and Career Development and Support Fellowship from the Cancer Institute, New South Wales, Australia (J.M.C.).

# Linguistic component study (Moore 2016)

- 45-transcript subset for linguistic analysis
- Agreement between linguists and psych team on whether raised or discussed not strong
- Notion of topical incipience: How do palliative care doctors (and patients) open up space to talk about end-of-life issues?
- One component of our analysis – look at Dr questions through message semantics
- Also looked at graduation

# My interest in message semantics

- Experimenting with layered discourse analysis using networks at context (Hasan, Butt) and at semantic level (Hasan's level of message – e.g. Hasan 1996; Hasa et al 2007; Hasan 2014)
- Mostly Register profiling not 'semantic variation' in the classic Hasanian sense



- My key findings so far
    - Field, Tenor and Mode analysis (identifying CCs) can distinguish between professionally valued styles of clinical communication (HIV medicine and joint decision making – own semantic network attempted but not very successful – for reasons I might get to later)
    - Using Message Semantics can help frame more nuanced discussion of ‘medical praxis’ or ‘voice’ orientation (Mishler) or ‘ideology of care’ (Jordens) in a robust and ‘defeasible’ way
    - ROLE ALLOCATION system helps explain phasing and handover of agency between participants
    - Patterns not seen or harder to see if we skip straight from Context level to L/G level
  - Challenges include: context-specific realizations of message types?
    - Cross metafunctional realizations of F,T,M?
    - Question of writing of networks for semantics for whole language – perhaps Firth was right and ‘grammars’ should only be written for specific dialects/registers/ etats de langue.
-

# Recap of MS and ROLE ALLOCATION



# Hasan's Semantic Networks

- context – open (non-specific)
- language-exhaustive
- the point of origin of the network (entry condition) must be a recognised **unit** at the semantic stratum;
  - 2 semantic units: **text** and **message**
- the semantic unit must be recognisable in terms of some lexicogrammatical unit capable of expressing it;
  - the realization of the primary terms in the semantic network is able to be stated in terms of options in lexicogrammatical systems



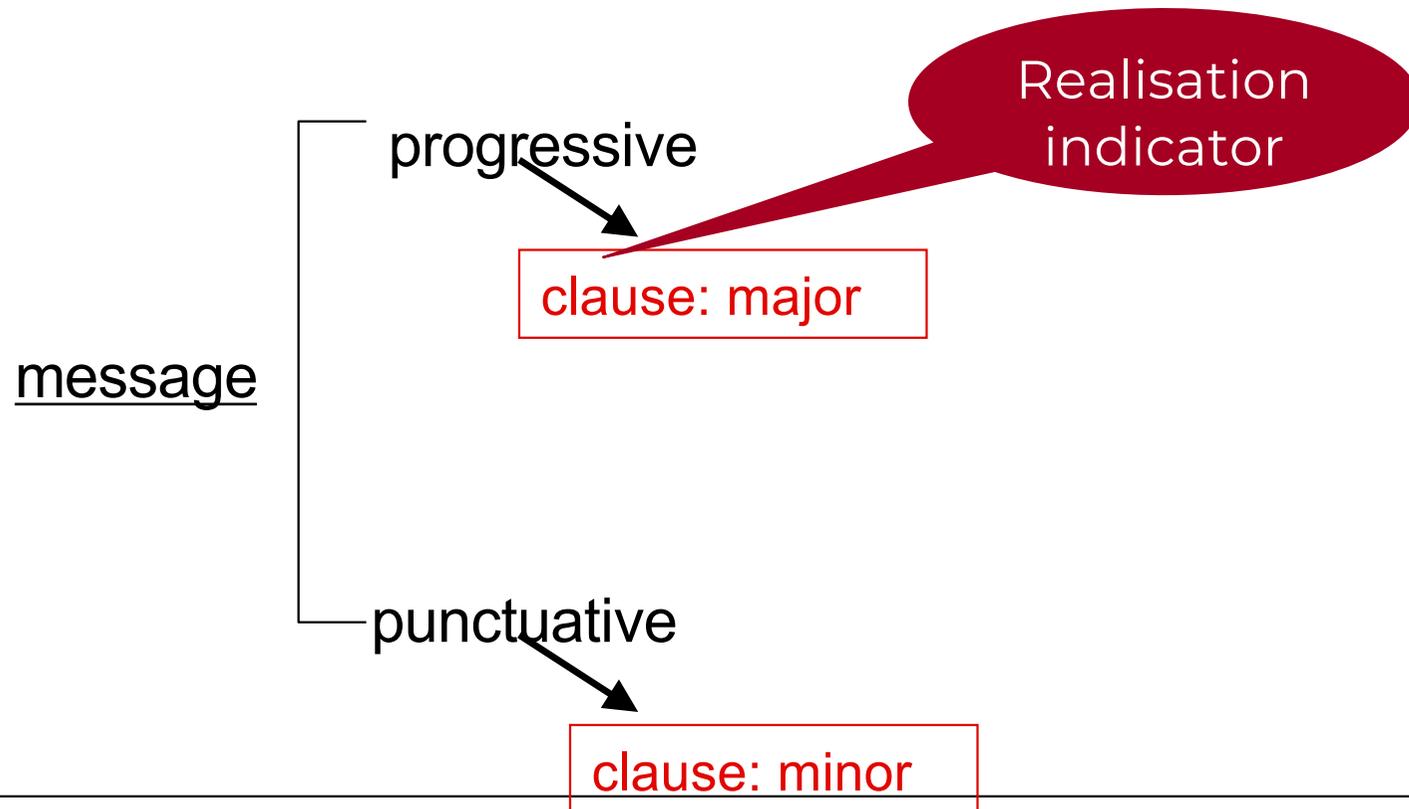
# Hasan: Kinds of messages

2 main kinds of message

- i) progressive messages – move the discourse forward;
- ii) punctuative messages – punctuate the discourse



# How do we recognise these kinds of messages?

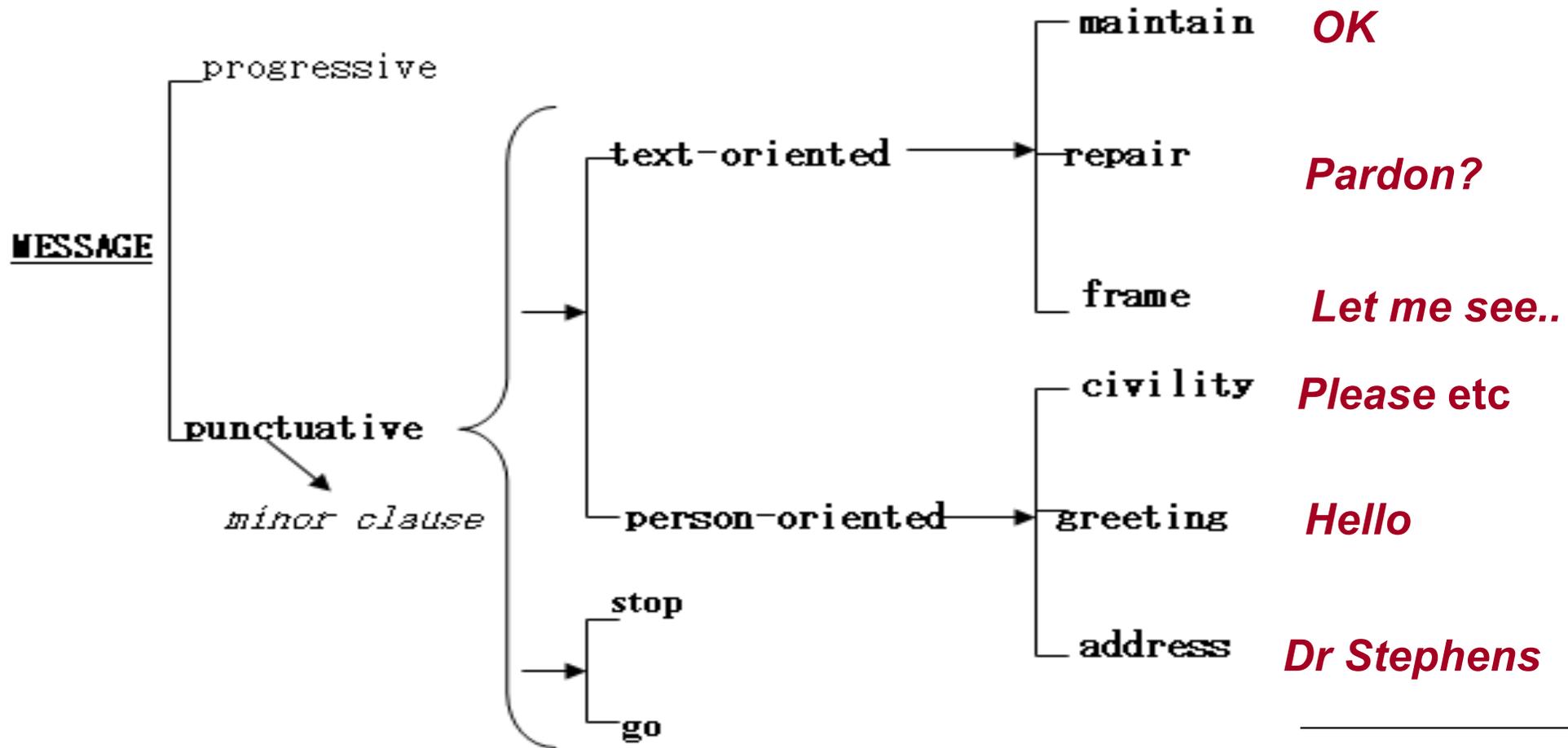


# What do these realisations mean?

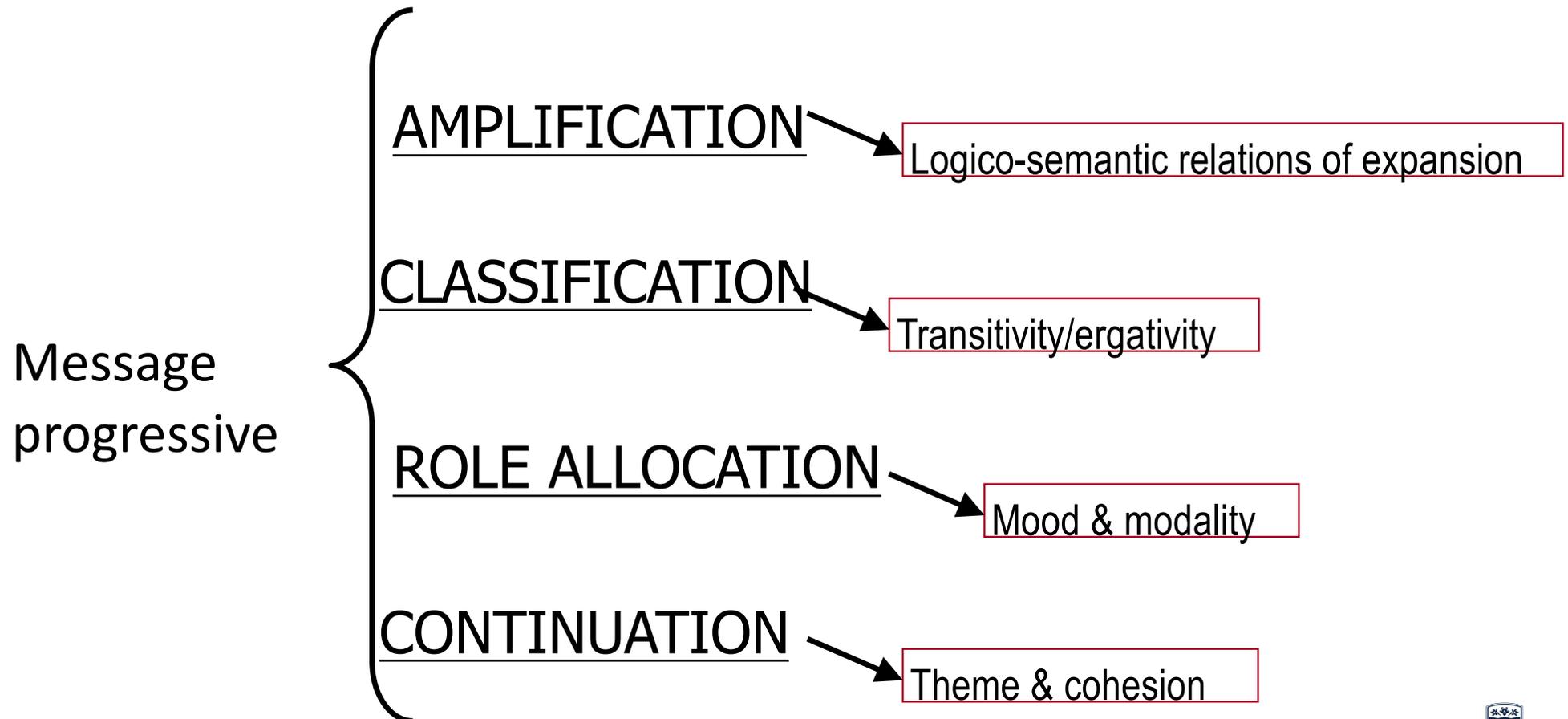
- clause: major – clause **has** a  
Predicator
- clause: minor – clause has **no**  
Predicator



# Punctuative messages

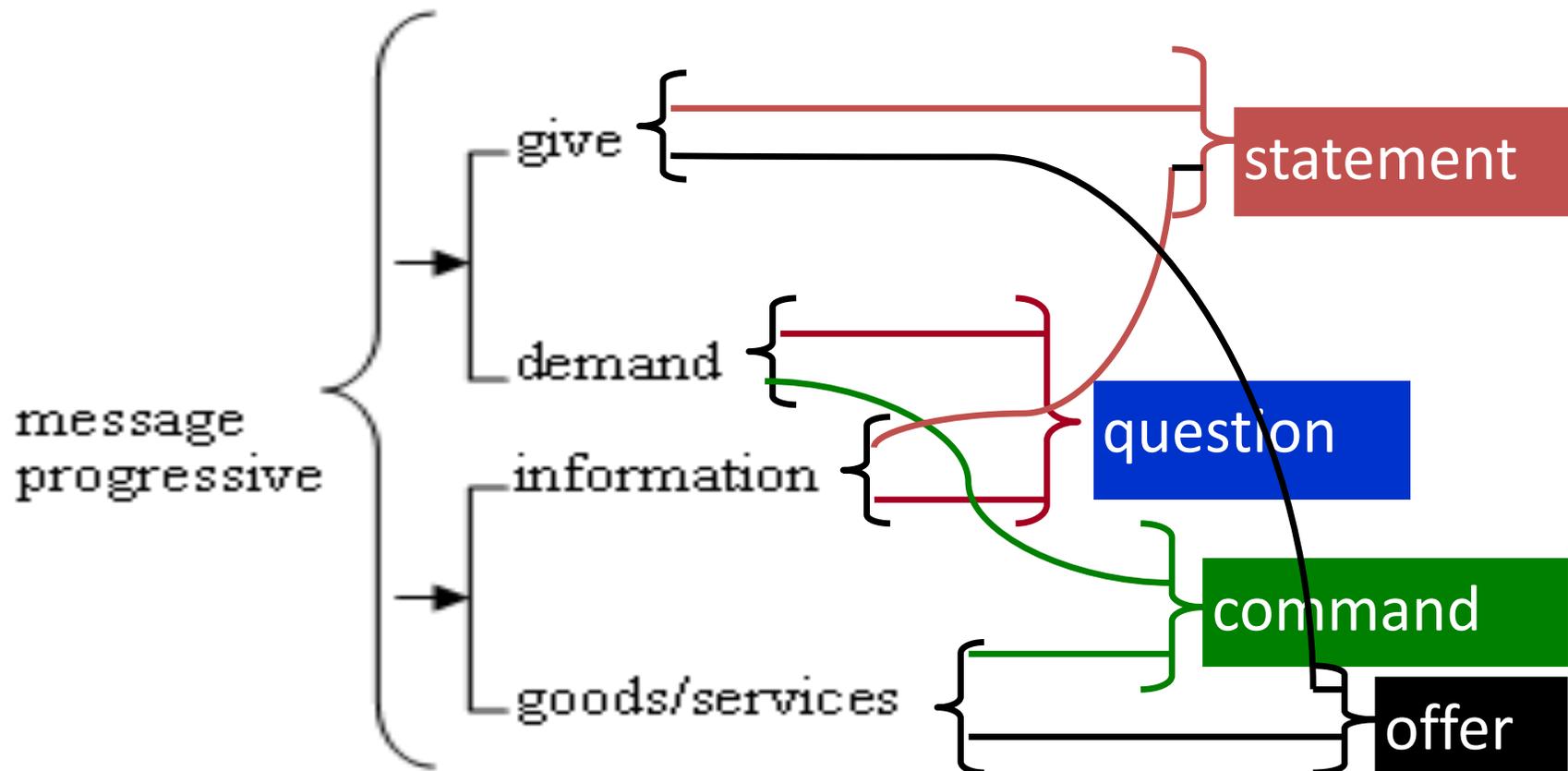


# Systems of message: progressive

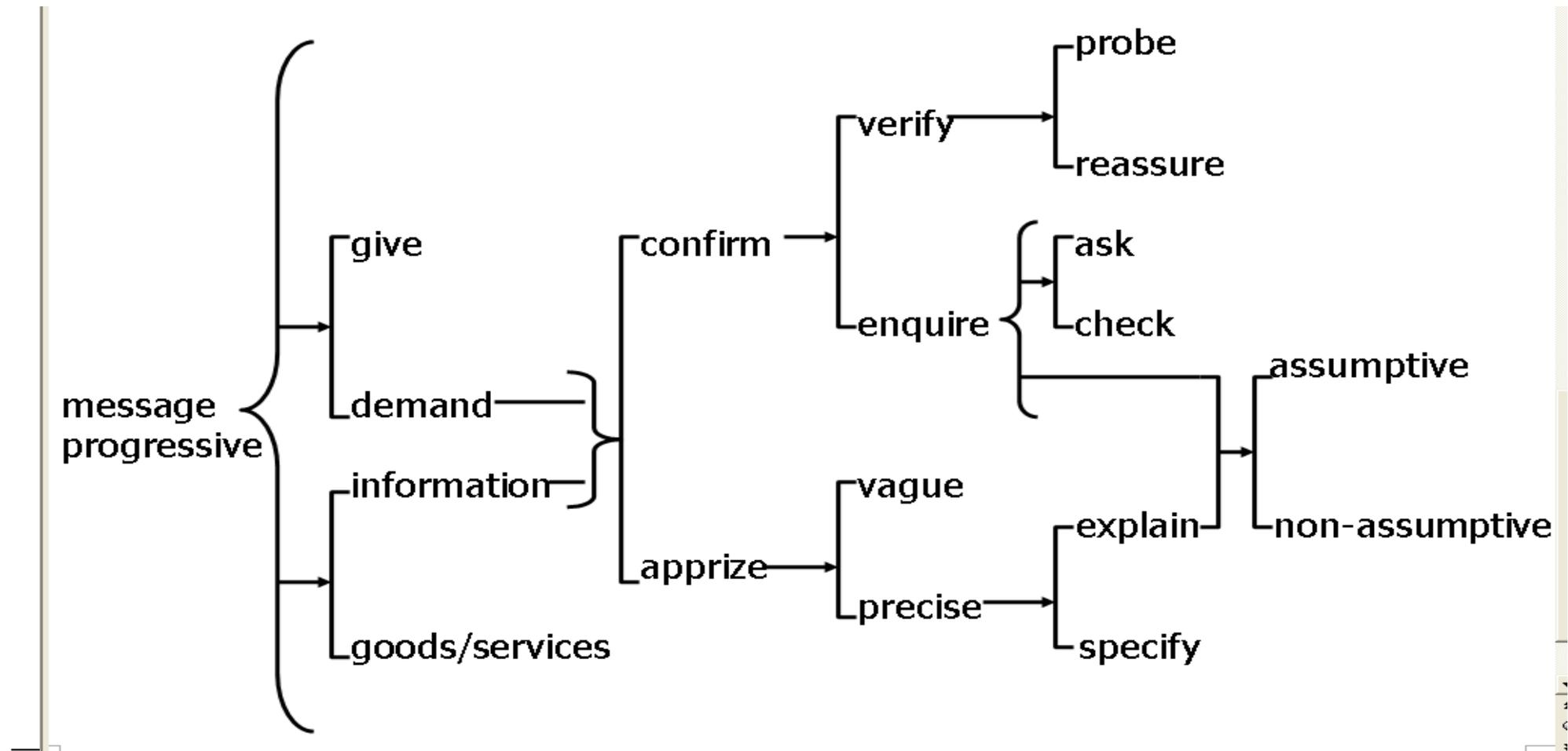


# Primary terms in the system of **ROLE ALLOCATION**





## Some semantic options in asking questions (Hasan 1989)



## Realisation statements for Options in Asking Questions

[confirm]	Preselect Mood clause = [major:indicative]
[verify]	Preselect Mood clause = [major:indicative: declarative:tagged]
[probe]	Preselect Mood clause = [major:indicative:declarative:tagged: constant] e.g. S^Fneg...Fneg^S or S^Fpos...Fpos^S
[reassure]	Preselect Mood clause = [major:indicative:declarative:tagged: reversed] e.g. S^Fneg...Fpos^S or S^Fpos...Fneg^S
[enquire]	Preselect Mood clause = [major:indicative] (Moodtag <b>not</b> allowed)
[ask]	Preselect Mood clause = [major:indicative:interrogative:polar] *
[check]	Preselect Mood clause = [major:indicative: declarative: untagged;Tone 2] *
[apprize]	Preselect Mood clause = [major:indicative:interrogative:nonpolar]
[vague]	Preselect Mood clause = [major:indicative:interrogative:non-polar: R-interrog] Mood and Predicator ellipsis; preselects as Theme Adjunct what about ^ NG.
	* = can combine with feature Assumptive

## Realisation statements for Options in Asking Questions (cont)

[precise]	Preselect Mood clause = [major:indicative:interrogative: nonpolar]
[explain]	Preselect Mood clause = [major:indicative:interrogative:non-polar]; *
	Conflate WH- with Adj. How / Why
[specify]	Preselect Mood clause = [major:indicative:interrogative:non-polar]
	Wh- <b>must not</b> conflate with How/Why
[assumptive]	Preselect polarity = [negative]
[non-assumptive]	Preselect polarity = [positive]

# So.....

- The options in the system are not just notional
- The lexico-grammatical realisations (realisation statements) of each of the semantic options in asking questions involves **pre-selecting** some feature from the Mood network

This is the same as saying the grammar of Mood expresses questions



# Selection expressions & examples

Inherited features: [demand;information:confirm.....]

Selection Expression	example
1. [verify:probe]	That's worrying you, is it?
2. [verify:reassure]	That's worrying you, isn't it? ? Is that worrying you, is it? (AusE – Moore not Hasan)
3. [enquire:ask;non-assumptive]	Does that worry you? Are you worried about that?
4. [enquire:ask;assumptive]	Doesn't that worry you?
5. [enquire:check;non-assumptive]	That worries you?
6. [enquire:check;assumptive]	That doesn't worry you?

## Selection expressions & examples

Assumed options: [demand;information:apprize.....]

7. [vague]	What about night time?
8. [precise:specify]	Where does it hurt the most?
	(If I had a magic wand,) what would make the biggest difference to your life?
	When did you go up to 140 mgs?
	What do you do (when you lie there at night)?
9. [precise: explain; non-assumptive]	How are you managing all this? (Manner/means?) Why did you come in today?
10.[precise: explain; assumptive]	Why don't you want to talk about it?

# Consult 1:

Extract 1 – Transcript 101, turns 135-175

- 135 D Are you finding any problems with nighttime?
- 136 P No I just ... lay there and wait for daytime to come.
- ==> 137 D Do you?
- A lot of patients tell me that nighttimes are sometimes very difficult especially if you' re not sleeping, like you said you' re only sleeping for 4-5 hours.
- 138 P Yes I can go to bed at 10 o' clock and wake up at 2 and then I just lay awake there.
- 139 D What are you thinking about?
- 140 K Listen to the radio most of the time.
- ==> 141 D Really?
- 142 P Just listen to talk back radio. What' s happening and think how much longer and all these normal questions – things go though your mind I guess.
- 143 D Yes sure and that is the quiet time when your mind thinks about these sorts of things. Do you ever get fearful?
- 144 P No I don' t get fearful I just worry about leaving the kids behind! That' s the thing that worries me the most.
- 145 D OK which is the natural feeling isn' t it? Shows that you' re very close.
- 146 P Oh we are.
- 147 D Do you ever think about the pain and the breathlessness and worry about that side of things?
- 148 P No because I think the main thing I think about is not waking up in the morning and having the kids – I call them kids but they come down and I' m no longer there. That sort of worries me a bit.
- 149 D OK have you spoken about that?
- 150 K Yes we all know.
- 151 D Is that something that worries you [K]?

165 K Yes well like dad said, if he could stay at home for as long as possible, we' ll do that. I' ve already told him, I' ve told the other nurses and that that I' m prepared to do everything at home and ... if he loses bodily functions well that' s part of life ...

166 D Sure

167 P And I' ve got no worries whatsoever doing that.

168 D Yes but that doesn' t necessarily always happen. People just assume that' s going to happen.

169 K Well we were told 6 months ago that' s what' s going to happen – he' s going to lose all his bodily functions and become a vegetable and just waste away.

170 D Yes, no no –

==> 171 K One of the ladies in here said a couple of weeks ago that he could be like he is now

172 D Absolutely!

173 K And could stay that way.

174 D Absolutely.

175 P That made me feel a lot better actually.

# Working with texts

- See network handout, data handout and questions handout

# Consult I cont: EOL discussed

165 K I've told the other nurses and that that I'm prepared to do everything at home and ... if **he loses bodily functions** well that's part of life ...

..

168 D Yes but that doesn't necessarily always happen. People just assume that's going to happen.

169 K Well we were told 6 months ago that's what's going to happen – he's going to lose all his bodily functions and become a vegetable and just waste away.

170 D Yes, no no –

==> 171 K ***One of the ladies in here said*** a couple of weeks ago that he could be like he is now

172 D Absolutely!

## Closed Q/ Confirm Q selected among other options to initiate

- 135 a      Are **you finding** any problems with nighttime? [ask; +pref]
- 135 b      Do you have any problems with nighttime? [ask;-pref]
- 135 c      What problems do you have at nighttime? [apprize: specify]
- 135 d      What are the most problematic things for you at nighttime? [apprize: specify]
- 135 e      What about nighttime - are there things that worry you? [vague] + [ask;+pref]

- [confirm: ask; prefaced] chosen.
- opens two conversational doors at once (“preconditional”)
- addressee can orient to 1 or 2 or both without giving a dispreferred response (Levinson 1983/CA)

## How to continue, choice and chain crucial

137 a      **Do you?** [confirm:verify; non-assumptive]

137 b      Don't **you think** laying in bed waiting for day to come is a problem?

[confirm: ask; assumptive; **prefaced**]

- [confirm: verify:probe] chosen (elliptically).
- works not exactly to verify the claim here, but seeks ?justification, elaboration?
- Is this a context issue?
- Possibly punctuative, in which case 'Do you?' = 'Go on.'

# Consult 2: EOL not discussed?

Extract 2 –Transcript 105, turns 90-95

- 90 D Do you worry about the future?
- 91 P No.
- 92 D OK.
- 93 K We can't discuss it. We never talk about it.
- 94 m1 D You never talk about it?
- 94 m2 And you're happy not to talk about it.
- 94 m3 You don't want to talk about it, [name of patient]?
- 95 P No I'm quite happy not to talk about it.

# Consult 2: EOL not discussed?

Extract 2 – Transcript 105, turns 90-95

90 D Do you worry about the future?

91 P No.

92 D OK.

93 K We can't discuss it. We never talk about it.

94 m1 D You never talk about it?

94 m2 And you're happy not to talk about it.

94 m3 You don't want to talk about it, [name of patient]?

95 P No I'm quite happy not to talk about it

96 D Right, are you happy not to talk about it as well or just you'd rather-

97 P No not really

98 D Right Ok. Just – wait and see what happens? Ok.

99 K When we saw Professor – he said everyone deals with shock, you know differently. And he said if you've got the attitude that you can take today today, you wake up in the morning and enjoy the day and wait and see what tomorrow's got. It's a good way if you can like it ...

[enquire:check;  
non-assumptive]

[enquire:check;  
assumptive]

non- assumptive]

# Consult 3: EOL raised, not discussed?

138 D How much is it, or an effort is it for to get in to come and see me here.

139 P Oh not a worry, no that's all right.

140 D You walk here.

141 P Yeah that's fine.

142 D You O.K.

143 K Yeah, yeah.

144 D Did you have any other [questions](#) at all.

145 P No not really.

146 D About [what's happening](#).

147 P No, nothing.

148 D [Cards that are to play](#). Do you have any [concerns](#).

149 P **Oh** with [what](#) happens.

150 D [What happens](#) from here.

151 P You mean.

152 D It's unpredictable.

153 P That's right.

154 D Um, you're breathing may get worse.

155 P Mmmm.

156 D And that's where it's really important to have the things like the sedatives

[[enquire:ask; non-assumptive](#)]  
[but prompt function?]

[[enquire:ask; non-](#)  
[assumptive](#)] [but prompt  
function?]

need to cross classify with the **classification** and **continuation** to get the 'drift' of general to particular plus meaningfully vague

# Interim findings for palliative care register:

1. **Prefacing** appears an important strategy
  - e.g. 101 'finding' – prefaces problems but laying awake waiting is not left unexplored.
  - Perspectival nature of EOL predictions (bodily functions) topicalised later
  - in 105, choices in +/- prefacing and +/- **assumptive** are sequenced in a very strategic way that foregrounds P+K shared perspective
2. **[ask]** is most frequent but **[probe]**, **[reassure]**, **[check]** **[specify]** and **[explain]** do important work. **[prompt]** does not behave as expected – realization spread?
3. Vague is not hopelessly vague

# Value of MS approach

- Can map out choices and chains in Dr (and P) question strategy
- Useful for considering which strategies -> patient takeup of EOL topics
- More importantly – useful for explaining how/why semantic space is negotiated by differently by different kinds of questions
- Key claim for linguistics: this method of proceeding directs attention to the ‘natural’ relationship between context and semantics, as well as the natural relationship between semantics and grammar (but this less of an issue here. In realization – some messages we want to call questions don’t occur in Hasan
- Key importance of features such as prefacing, assumptive, and others (show role in sequence in particular)
- These features are totally missed by an open/ closed or even a grammatical analysis

# Challenges with MS approach

- Realization – some messages we want to call questions don't occur in Hasan,
- Network wiring – some messages fall between apprise and confirm (polar + or )
- Delicacy – 'How are you coping with night times' – Manner: means or Manner:quality
- Multiple systems and workload – need to cross classify with other systems, AMPLIFICATION (If I had a magic wand what would make the greatest difference...); CLASSIFICATION & CONTINUATION (here we need to get quite delicate and look at sequence of transitivity not just choice or fcy + cohesion, since what seems to be a crucial feature of this context and of successful moves to EOL talk is a progression from very general to quite specific - any questions, concerns, worries... anything at all etc)

# Challenges with MS approach

- Multiple systems and research design problematicity – ie the impossibility of finding instances that display all contrasts independently and/or of controlling features independently and possibly the prehension between features..
- Sequencing and discourse unit (cf Linell et al 2003 MUQTs)
- But only 35 yrs of research cf with millenia on grammar and 70 years of SFG.

Next week: Guest Lecturer

Dr Neda Karimi

Ingham Institute for Applied Medical  
Research