Graduate Symposium of SYSU and TUC students on
"Critical Discourse and Corpus Approaches to Systemic Functional **Grammar**"
30th November 2018 in Chemnitz

Functional Perspectives on New Discourses:
Academic Writing,
Social Media, and
Human-Humanoid Interaction

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1. Introduction
## 1.1 Perspectives and new discourses

functional perspectives

discourses

data compilation	
corpora	experiments

academic writing	social media	human - humanoid interaction

1. Introduction
1.1 Perspectives and new discourses

academic

Writer ⟶ **Reader**

social media

Writer ⟶ **Reader**

interaction

Human ⟷ Humanoid
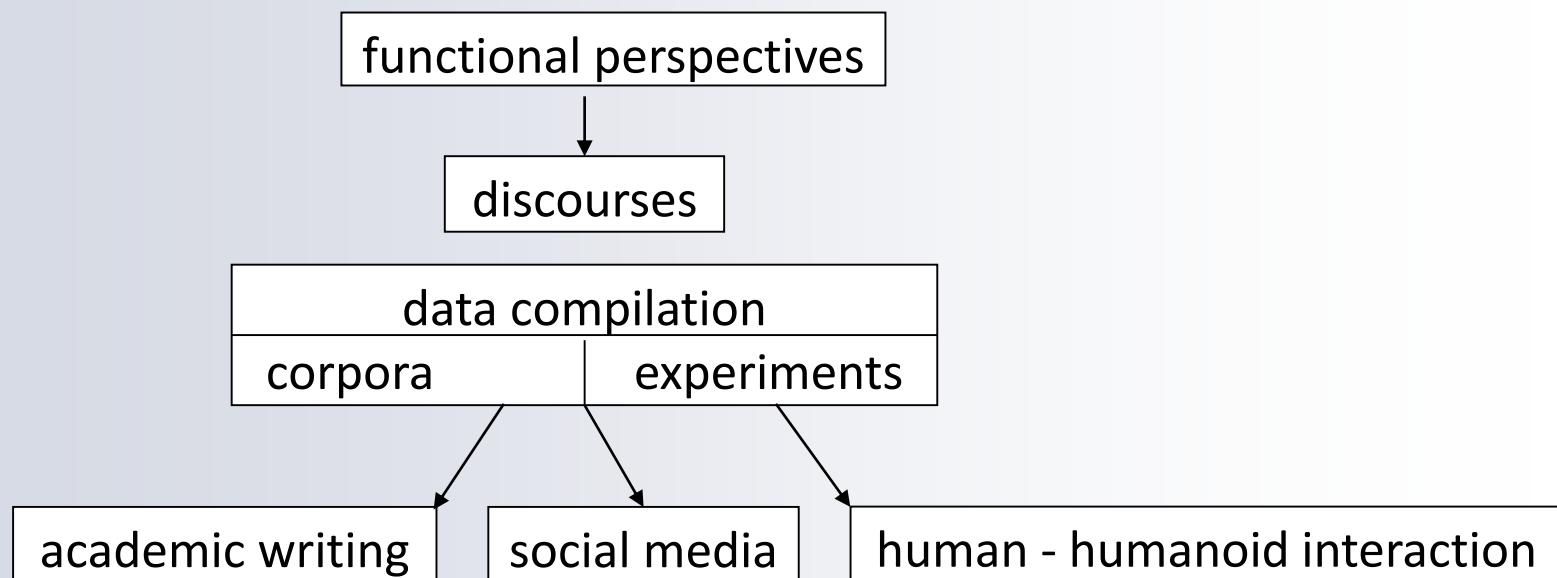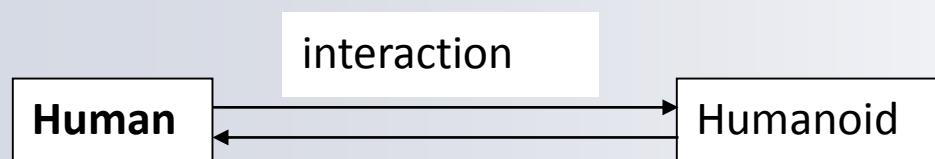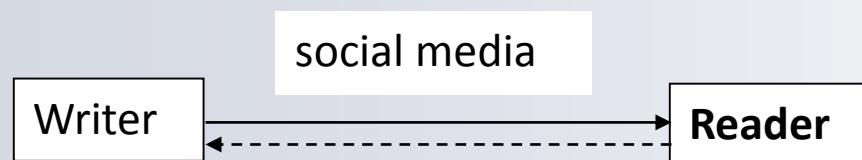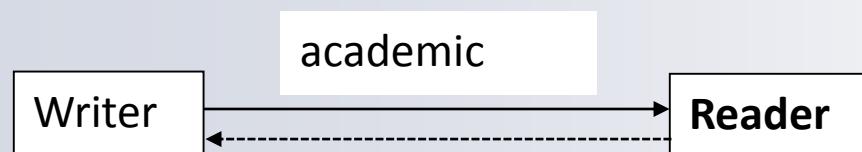
1.2 Functional Approaches
1.2.1 Halliday/Matthiessen 2014 (SFG)

Contents

1.2.2 Functional Approaches: SFG Expansions by Martin

field
tenor
mode

genre

register

discourse semantics

lexicogrammar

phonology
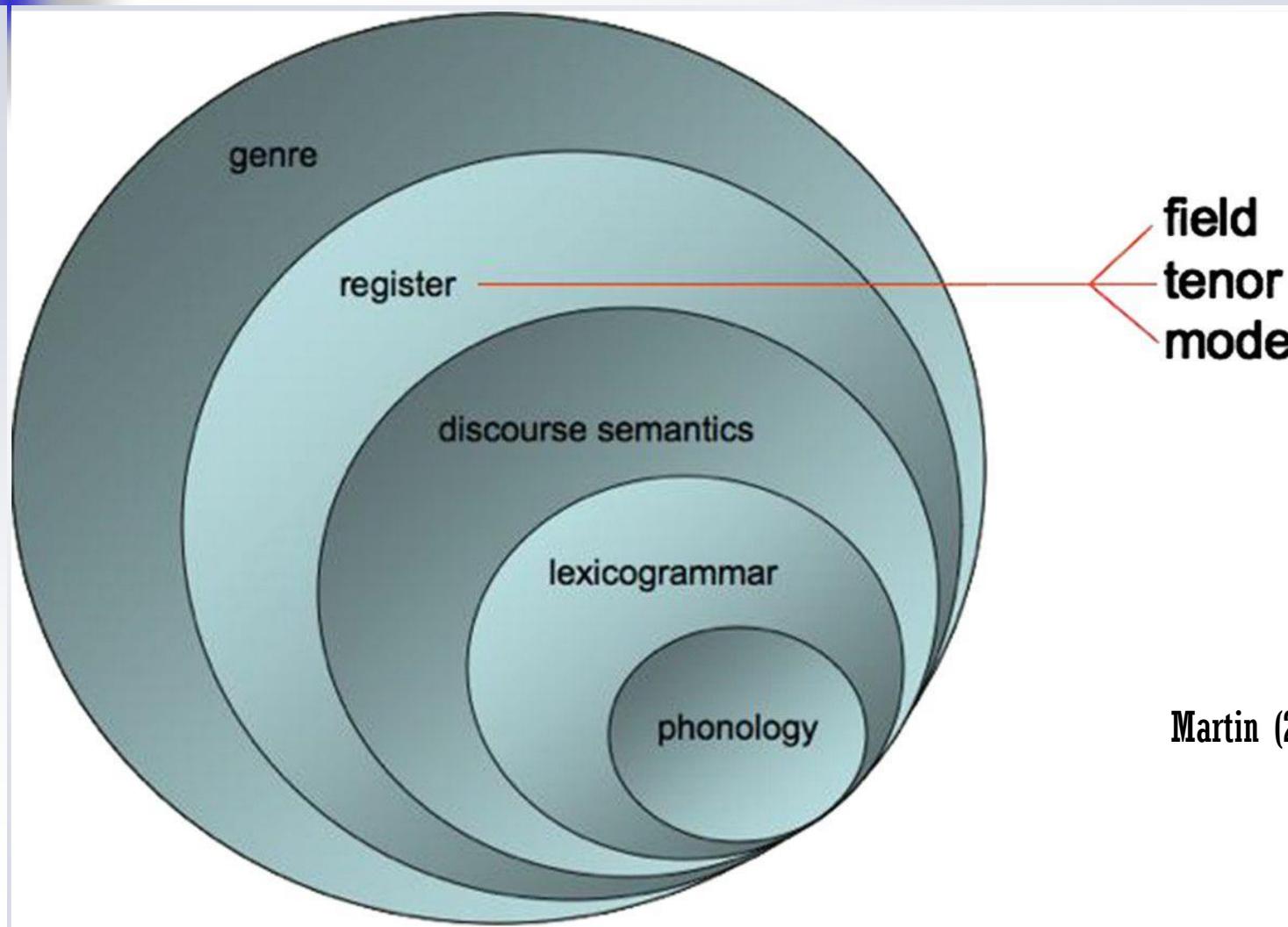
Martin (2011): 14

1.2.3 Functional Approaches: SFG Expansions by Rose
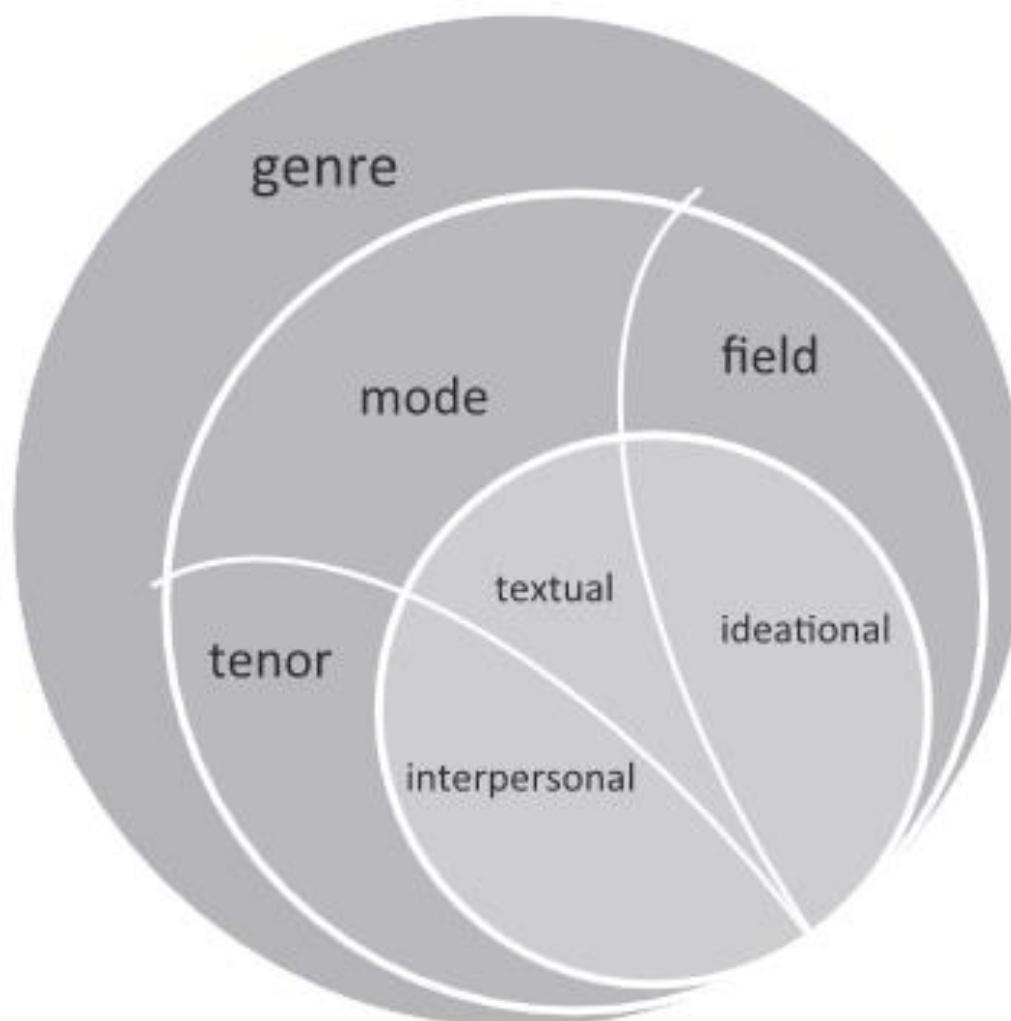
Rose (2014): 3

1.3 Changing media discourses and genres

general definition of discourse from an empirical perspective:

Media is the collective communication outlets or tools used to store and deliver information or data.

dynamic discourse developments over the last 25 years:

computer-mediated communication → all discourse is digital

convergence "new" > "social" > "digital" media

multiple categorisations in different communities of practise:

- new platforms for multi-purpose discourses (blogs)
- old discourse media replaced or transformed:
  - letters → email
  - print → on-line newspapers
- new discourses with different text functions / :
  - focus on knowledge construction & dissemination: Wikipedia
  - focus on community building/maintenance: Facebook
  - focus on affiliation: Twitter

hybrids and multi-channels/multimodal, etc.

2. Academic Writing
2.1 Discourses in science communication

discourse community approach (Hyland 2006, 2012; Schmied 2011) =
a writer/speaker appeals to shared knowledge to create a community of discourse
incl. general and specific linguistic clues: *of course*, *as we know from* …

| research discourse | → | instructional discourse |

| popularisation specialised -> popular discourse | | popular academic novice discourse |
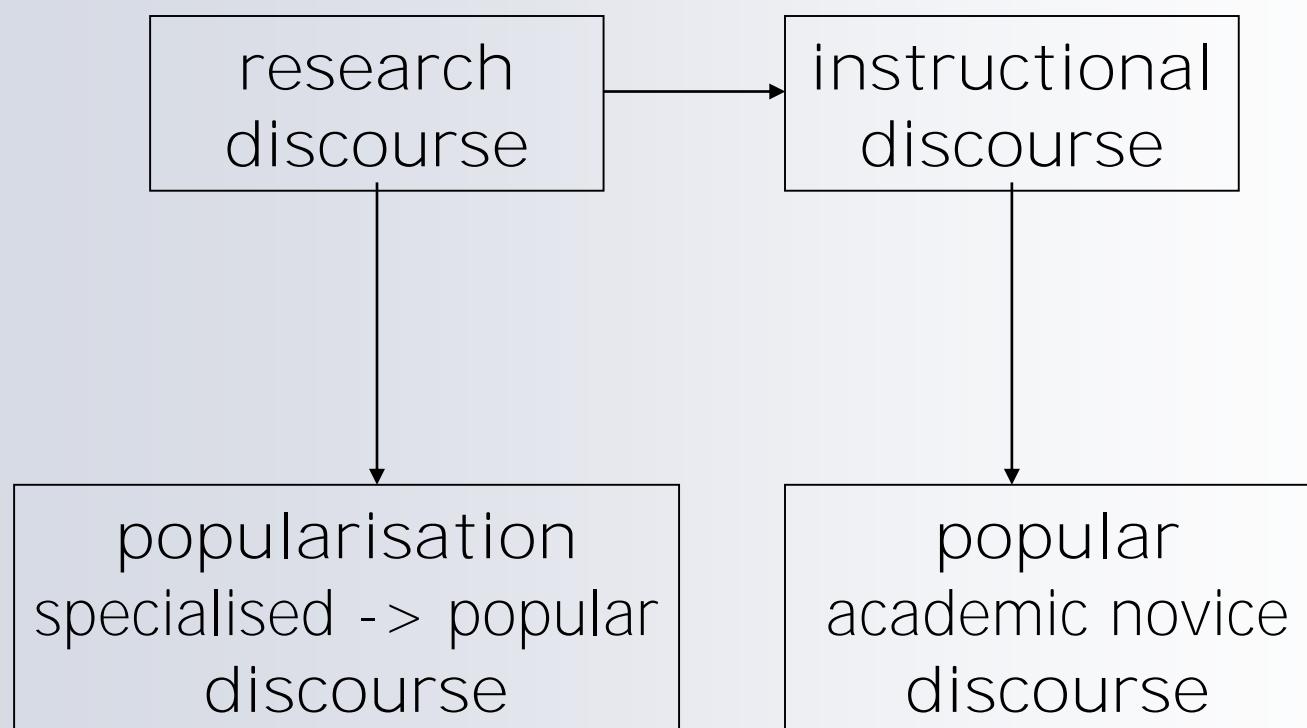
2.2 Cohesion

In addition to reference, ellipsis, and lexical organization, conjunctions are 1 of 4 major ways of explicit cohesion (Halliday/Matthiessen 2014: 604)

"conjunction is concerned with rhetorical transitions – transitions between whole 'messages', or even message complexes" (ibid: 608)

…"elaborating, extending and enhancing conjunctions mark relations between semantic domains, i.e. between text segments. These text segments are simultaneously ideational and interpersonal; they construe experience as meaning" (ibid: 611).

→ not the real "global perspective yet, but we can experiment …

2.1.1 Resultative *as a result* (in ChAcEMA)

Concordance Hits   708

Hit	KWIC

1   be and prejudice, he cannot improve the cultural learning effectively. As a result, it is sincerely hoped tha

2   , explain and comment on these behaviors based on their own culture. As a result, unconsciously, their own be

3   ntial power or ability in the learner that may be developed step by step as a result of internal change through l

4   who are strongly influenced by the English language tend to use it. As a result, whenever it is uttered it

5   cation of the basic verbs that indicate the desired action directly. As a result, Chinese finds imperative

6   of the major languages in the world, reflecting two main cultures. As a result of the reform and open doo

7   in apricot forest) to pay tribute to the distinguished doctors, and as a result, "杏林" (apricot forest) ha

8   taught to construct an inferential mode in listening comprehension. As a result, we propose that the theori

9   vide as an input to the hearer's inferential comprehension process. As a result, verbal communication car

10   the students lack inferential knowledge in their listening practice. As a result, we suggest that the theorie

11   nprehension but inferential questions were very difficult for them. As a result, we put forward an infer

12   y special -- but winning as a black American is a knockout." 36   As a result of her literary and artist

13   n who wrote The Pleasure of Enchantmen. 60   Moreover, perhaps as a result of the burgeoning field of At

14   ts presence within the narrative serves incessantly to disrupt authority. As a result, Beloved makes overt the o

15   d it hard to continue the topic, which would make the class mechanical as result. b) Teachers must be awa

16   experience, that they cannot be adequately taught in a classroom. As a result, little attention was direc

17   xperiment class they had in fact two more classes than control class. As a result data showed in the inve

18   : message or the iconic message can't avoid ambiguity and subjectivity as a result of over-emphasis on the co

19   ategy will be traced out in the direction of conversational implicature as a result of flouting the four conv

20   informative as is required". The deliberate withholding of information as a result of flouting of this sub-maxin

2.1.2 Frequency of semantic conjunct classes in ChAcEMA vs. ChemCorpBA/MA

conjunct type	ChAcEMA (total frequency)	ChAcEMA (per 1M)	ChemCorpBA (total frequency)	ChemCorpBA (per 1M)	ChemCorpMA (total frequency)	ChemCorpMA (per 1M)
Listing/enumerative	21090	4149	3275	4551	1772	3337
Listing/additive	17223	3388	3711	5157	2584	4867
Summative	797	156	268	372	233	438
Appositive	10508	2067	9580	13315	1275	2401
Resultative/inferential	27423	5395	3131	4351	2287	4307
Contrastive/concessive	16768	3299	4376	6082	2900	5462
Transitional	1516	298	216	300	152	286
TOTAL	95325	18756	24557	34132	11203	21101
AVERAGE	13617	2679	3508	4876	1600	3014

2.1.3 Resultative/inferential conjuncts in ChAcEMA vs. ChemCorp

conjunct	ChAcEMA (total frequency)	ChAcEMA (per 1M)	ChemCorpBA (total frequency)	ChemCorpBA (per 1M)	ChemCorpMA (total frequency)	ChemCorpMA (per 1M)
(and) so	10660	2097	646	897	439	826
accordingly	327	64	43	59	48	90
as a result	708	139	70	97	51	96
consequently	356	70	173	240	111	209
for this reason	75	14	24	33	9	16
hence	700	137	229	318	162	305
in this case	235	46	89	123	69	129
in this respect	47	9	58	80	10	18
in this way	659	129	19	26	19	35
of course	408	80	111	154	65	122
so that	1066	209	86	119	39	73
then	4685	921	282	391	206	388
therefore	4229	832	747	1038	397	747
thus	3268	643	554	770	662	1246
TOTAL	27423	5395	3131	4351	2287	4307

2.1.4 Conjuncts (enumerative) quantitative: ChemCorp vs. ChAcEMA
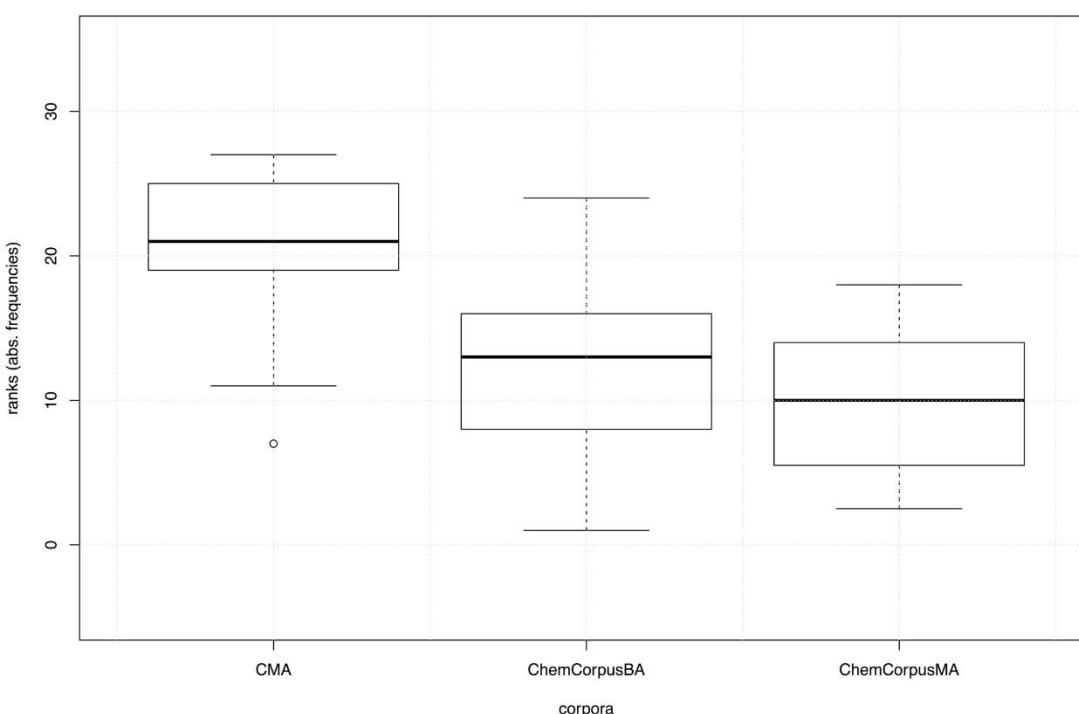
detailed data distribution not good for hard tests, so (courtesy M. Hofmann):

- frequencies transformed into ranks (Sheskin 2011)
- assumptions: gvlma (=Global Validation of Linear Models Assumptions; Peña & Slate 2006)
- Kruskal-Wallis test (non-parametric equivalent to ANOVA): $\chi^2 = 7.86$, df $= 2$, p $= 0.02$
- Dunn's posthoc test (incl. adjustment of p-values in multiple comparisons according to Holms (1979):

corpus	Z statistic	p value
ChemBA – ChemMA:	0.653504	(0.26)
ChemBA – ChAcEMA:	2.034776	(0.04)?
ChemMA – ChAcEMA:	-2.688280	(0.01)

## 2.1.5 Cohesive devices (linking, connectors, etc.)
e.g. clause adverbials, characterised by ","

coherence = extralinguistic factors contributing to the creation of texture (=implicit)
cohesion = linguistic means creating texture (=explicit)

1	It is **unfortunately** not the case that knowledge of the mechanical	0002AX
2	**Unfortunately**, an instantaneous comparison was not possible	0003AX1
3	**Unfortunately**, exact information on gas usage is unavailable	0003AX1
4	**Unfortunately**, one has no a priori way of predicting	0003AX1
5	**Unfortunately**, neither easily works.	0003AX1
6	**Unfortunately**, there are as yet no reliable calculations that	0004AX1
7	**Unfortunately** our experience is confined to an equilibrium ...	0004AX2
8	**Unfortunately**, the energy resolution of a neutrino telescope is ...	0015AX
9	... technique to obtain black hole masses which, **unfortunately**, is unfeasible	0018AX
10	**Unfortunately**, lack of information about the collective ...	0021AX
11	**Unfortunately**, the complexity of each subprocess also grows ...	0025AX
12	**Unfortunately** these theorems tell us practically nothing about ...	0032AX
13	**Unfortunately** there are very few analytic results available	0040AX
14	**Unfortunately**, all recent experiments are, in principle,	0043AX
15	**Unfortunately**, all those exciting recent experiments are	0043AX
16	**Unfortunately**, those prior art solutions require daunting experiments	0043AX
17	**Unfortunately**, the NID is uncomputable since the constituent ...	0045AX
18	**Unfortunately**, in many places such information is getting harder ...	0056**NS**
19	it's a good protective barrier," says Hildebrand, "**unfortunately**."	0069**NS**
20	**Unfortunately**, because of the rarity of plant data from this ...	0100PN

2.1.6 Conjunct *because* in 6 Cameroonian, Chemnitz/German, Chinese MA theses
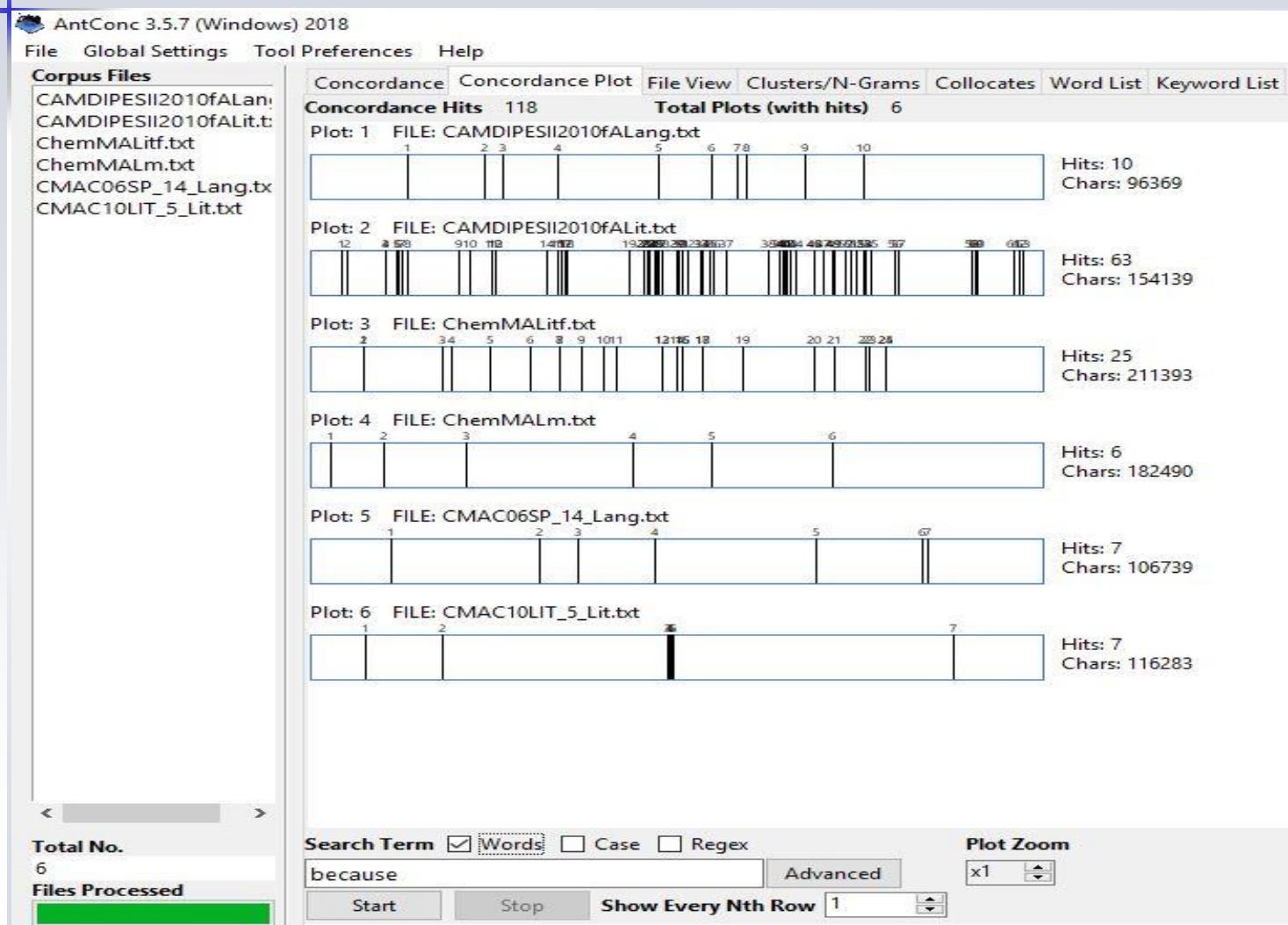
2.2 „flow of discourse" as rhetorical-relational organization

IMRAD structure in 20 lang./lit. MA samples from Cameroon, Germany, China

		Introduction					Methodology							Analysis				Conclusion					
disc.	Corpus	Abs	I	IN	IR	IF	M	ML	MC	MT	M RQ RH	MD	MT	A	AE	AT	AS	C	CS	CI	CC	CL	CO
Lang.	CamC	8	10	2	8	9	9	0	0	0	0	9	9	9	6	9	3	10	10	6	1	3	10
	ChemC	4	10	4	4	9	10	0	0	0	0	10	10	10	9	10	7	10	10	9	7	7	9
	ChinC	10	10	3	8	9	5	0	0	0	0	5	5	10	8	9	10	10	10	10	7	8	9
Lit./ Cult.	CamC	10	10	4	4	9	0	0	0	0	0	0	0	10	10	0	0	10	10	10	3	2	6
	ChemC	3	10	1	5	9	3	0	0	0	0	3	3	10	8	5	9	10	10	10	8	1	3
	ChinaC	10	10	0	1	1	1	0	1	1	0	0	0	10	10	0	0	10	9	10	0	1	0

I = **issue**
IN new
IR relevant
IF focussed

M = **methodology**
ML literature review
MC key concepts
MT theories
MRQ/MH research questions
MD data base
MT tests/procedure

A = **analysis**
AE examples as evidence
AT statistical tables
AS significance

C = **conclusion**
CS summary
CI interpretation
CC contextualisation
CL limitations
CO outlook

L2H: Establishing the Context and Scoring Validity of an English for Academic Purposes Test

Ling Hung
has a very explicit IMA structure and vocabulary focusses on Introduction/Context and Methodology

Main topic and issues: (IF?) The ... tasks in a C1 level English for Academi... evidence is needed in order to see wh... whether the results reflect reliable scores and unbiased marking. The aim of this research is to find evidence for the validity of the two proposed writing tasks (*formal transactional email* and *discussion essay*). The research covers (a) the development stage; (b) the completion of the specifications and the test items; (c) the piloting and pre-testing of test items; and it aims (d) to collect and analyse data to establish scoring validity. (IR) The research has relevant implications for the different stakeholders of the test: development teams of EAP tests, students pursuing university studies in English language higher education, and university admissions staff.

Methodology: (MT) The methodology of generating validity evidence follows Weir's (2005) proposed validation stages using a mixed-method approach. (MT) Literature review, expert judgement, student interviews and textual analysis are to be used for context validity. For scoring validity, apart from establishing validity for the rating procedure, a further objective is to design a checklist-based marking scheme for the writing tasks. (ML) The benefits of a checklist over a scale, and its suitability for level testing are present in the literature (Kim 2011; Struthers et al. 2013). (MT) The dissertation wishes to adapt the methods applied in Lukácsi (2018), and aims at developing two task specific writing checklists for the EAP exam.

Results obtained so far: (MT) As for context validity in the development stage, a small scale research was carried out in connection with the transactional writing task to complement expert judgement. (A/AE/AT) The research through semi-structured student interviews revealed evidence for target language use and tried to map the different topics and the writing demands of English language correspondence in a university context.

C1S: Representation of Society in Media Discourse: Media Discourse on Teachers and their Role in Society in Selected British Periodicals

Cult Slov
focusses on Methodology
has no Analysis, only a short Conclusion

(IR?) The study will look at the media coverage afforded selected British periodicals. It aims to explore the the attitudes of selected newspaper articles on the po public perception and construction of beliefs and attitudes to teachers and their community role in the face of social changes. **(IR)** The goal is to investigate the media coverage afforded to the notions of educational issues concerning teachers in UK and their role in society in politically opposed newspapers in order to elucidate the ideological representation of the teacher's profession and to examine the approach which reflects the nature of the selected newspapers representing opposite ends of the political spectrum as well as different qualitative content. **(MD)** The research focuses on articles published between 2015 and 2018 when the Conservative Party secured a surprise victory and a majority single-party government was formed. In order to do the analysis, a collection of newspaper articles selected from the primary sources will be chosen to create a corpus. The research is aimed at two quality newspapers — *The Guardian* with its centre-left orientation and *The Daily Telegraph* with a pro-Conservative position. In terms of the popular newspapers the research looks at the left-oriented *Daily Mirror* and the right-oriented *Daily Mail.* **(MT)** A combination of an interpretative approach to newspaper discourse with a comparative cross- analysis method supported by the corpus-driven methods of Critical Discourse Analysis will be used to detect particular language patterns of collocations and concordance lines which enable the researcher to choose a key word and see patterns in representation as well as view the context that the word falls in. **(MRQ/MH)** The use of the above-mentioned methods should prove the hypothesis that portrayals of teachers and teachers' issues are stereotyped and manifested with an explicit and implicit, predominantly negative connotation, regardless of the occurence in quality or tabloid, liberal or conservative press. **(CO)** The exploration of the image of the teacher via the press could provide another source for the thematic study of media culture, school culture, pedagogy, stereotyping in media, human rights and power relations.

IMRAD structure in 10 language and 10 literature MA samples from Yaoundé

Introduction Methodology

Cameroon
Lit/Cult theses have no methodology
Lang may have no abstract
all tend towards detailed conclusions

Field of Study	File Name	A	I	IN	IR	IF	M	ML	MC	MT	MRQ												
Language	CAMDIPESII2010fA_006																						
Langage	CAMDIPESII2010fA_009																						
Language	CAMDIPESII2010fA_016																						
Language	CAMDIPESII2010fA_017																						
Language	CAMDIPESII2010fA_031																						
Language	CAMDIPESII2010mA_013																						
Language	CAMDIPESII2010mA_015																						
Language	CAMDIPES2013mA_119																						
Language	CAMDIPESII2012mA_081																						
Language	CAMDIPESII2018mA_121																						
Total Language		8	10	2	8	9	9	0	0	0	0	9	9	9	6	9	3	10	10	6	1	3	10
Lit./Culture	CAMDIPESII2010fA_001																						
Lit./Culture	CAMDIPESII2010fA_002																						
Lit./Culture	CAMDIPESII2010fA_003																						
Lit./Culture	CAMDIPESII2010fA_004																						
Lit./Culture	CAMDIPESII2010fA_005																						
Lit./Culture	CAMDIPESII2011mA_044																						
Lit./Culture	CAMDIPESII2012mA_057																						
Lit./Culture	CAMDIPESII2012mA_068																						
Lit./Culture	CAMDIPESII2012mA_074																						
Lit./Culture	CAMDIPESII2012mA_082																						
Total Lit./Culture		10	10	4	4	9	0	0	0	0	0	0	0	10	10	0	0	10	10	10	3	2	6
TOTAL		18	20	6	12	18	9	0	0	0	0	9	9	19	16	9	3	20	20	16	4	5	16

IMRAD structure in 10 language and 10 literature MA samples from Chemnitz

Introduction   Methodolo

Chem
some Lit/Cult theses have little methodology
many have no abstract
all tend towards very detailed conclusions

Field of Study	File Name	A	I	IN	IR	IF	M	ML	MC													
Language	ChemMA2016f_001																				
Langage	ChemMA2016f_002																				
Language	ChemMA2013f_004																				
Language	ChemMA2012f_005																				
Language	ChemMA2013f_015																				
Language	ChemMA2016m_003																				
Language	ChemMA2012m_014																				
Language	ChemMA2012m_016																				
Language	ChemMA2016m_017																				
Language	ChemMA2009m_018																				
Total Language		4	10	4	4	9	10	0	0	0	0	10	10	10	9	10	7	10	10	9	7	7	9
Lit./Culture	ChemMA2014f_007																				
Lit./Culture	ChemMA2015f_009																				
Lit./Culture	ChemMA2013f_011																				
Lit./Culture	ChemMA2014f_012																				
Lit./Culture	ChemMA2010f_020																				
Lit./Culture	ChemMA2014m_006																				
Lit./Culture	ChemMA2014m_008																				
Lit./Culture	ChemMA2016m_010																				
Lit./Culture	ChemMA2014m_013																				
Lit./Culture	ChemMA2010m_019																				
Total Lit./Culture		3	10	1	5	9	3	0	0	0	0	3	3	10	8	5	9	10	10	10	8	1	3
TOTAL		7	20	5	9	18	13	0	0	0	0	13	13	20	17	15	16	20	20	19	15	8	12

IMRAD structure in 10 language and 10 literature MA samples from China

Introduction   Methodo...

Chinese
Lit/Cult theses have no methodology
all have an abstract
Lang tend towards more detailed conclusions

Field of Study	File Name	A	I	IN	IR	IF	M	ML	MC																
Language	CMAC05ME_23																							
Language	CMAC05PR_21																							
Language	CMAC05RE_18																							
Language	CMAC05SE_22																							
Language	CMAC05SY_18																							
Language	CMAC05WR_20																							
Language	CMAC06MO_18																							
Language	CMAC06PH_19																							
Language	CMAC06SP_14																							
Language	CMAC12PH_2						-																	
Total Language		10	10	3	8	9	5	0	0	0	0	5	5	10	8	9	10	10	10	10	7	8	9
Lit./Culture	CMAC05LIT_28																							
Lit./Culture	CMAC09LIT_32																							
Lit./Culture	CMAC10LIT_5																							
Lit./Culture	CMAC10LIT_7																							
Lit./Culture	CMAC10LIT_15																							
Lit./Culture	CMAC10LIT_21																							
Lit./Culture	CMAC11LIT_16																							
Lit./Culture	CMAC12LIT_10																							
Lit./Culture	CMAC12LIT_12																							
Lit./Culture	CMAC12LIT_17																							
Total Lit./Culture		10	10	0	1	1	1	0	1	1	0	0	0	10	10	0	0	10	9	10	0	1	0
TOTAL		20	20	3	9	10	6	0	1	1	0	5	5	10	18	9	10	20	19	20	7	9	9

3. Social Media
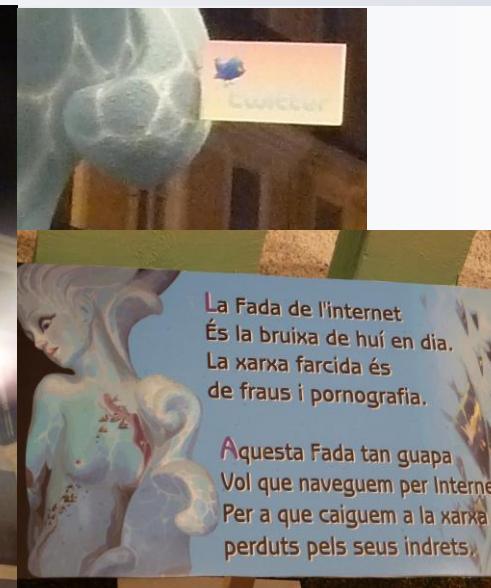
3.1 National discourses & norms from Twitter data

2.1 Data collection from Twitter in Nigeria (Lagos, Kano)
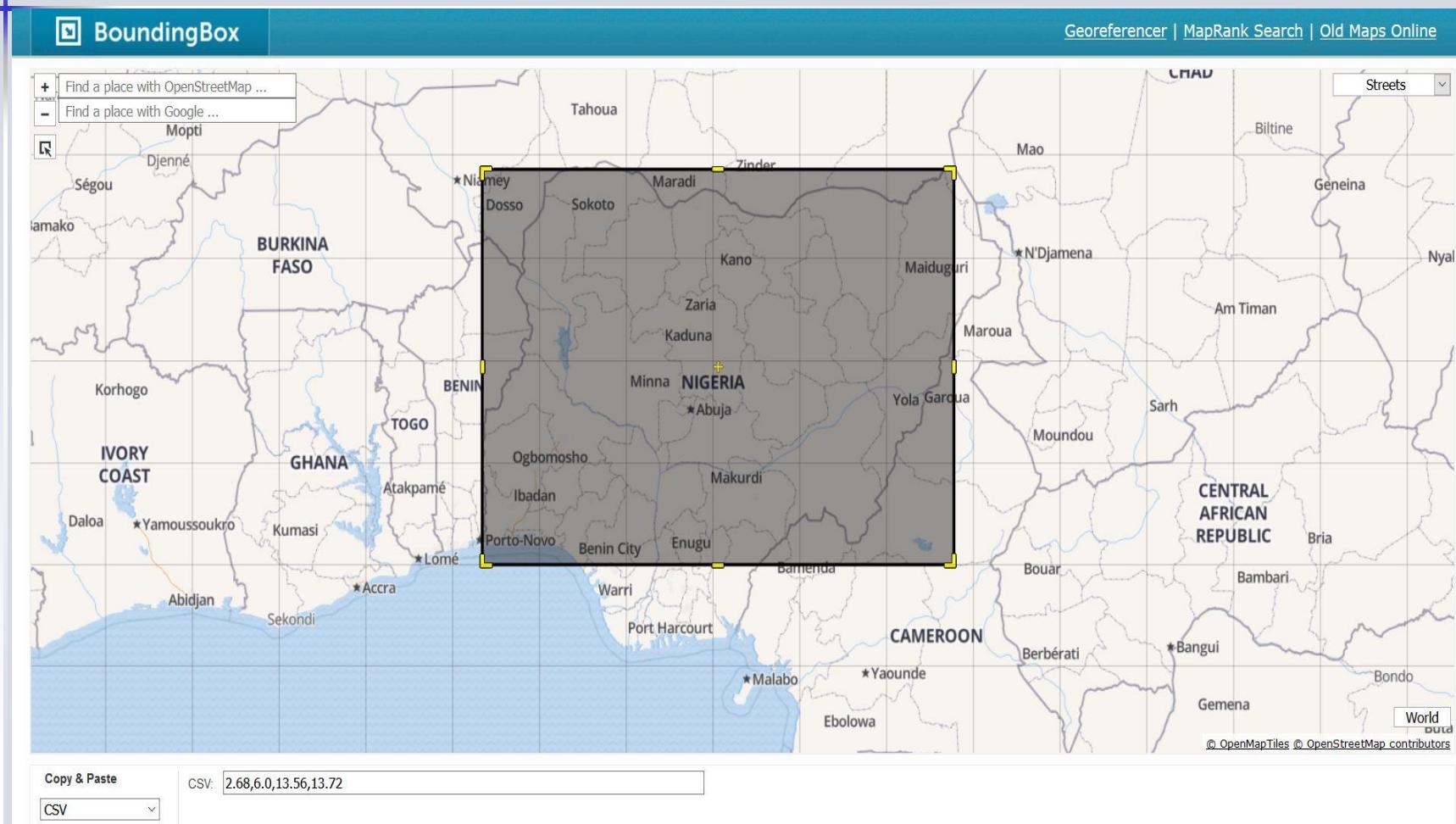
2.2 National discourses in Nigerian elections: "good governance"

4. Human-humanoid interaction
4.1 From Alexa to Sophia

Calling All Robot Bachelors: Sophia the Robot Might Want to Start a Family

4.2 Nov. 2018: New Humanoid reading the news in Chinese and English

English AI Anchor

I'm an English Artificial Intelligence Anchor

4.3 Humanoid Teachers Research questions and interface

1) Can success in human-machine and machine-human discoures be maximized by using deep artificial neural networks to generate and employ digital personae?

2) Can virtual conversational pedagogical agents gain credibility as discourse partners? Are they accepted by human learners as valuable discourse partners?

ro

4.4 Iteration of four research stages of the Humanoid teacher
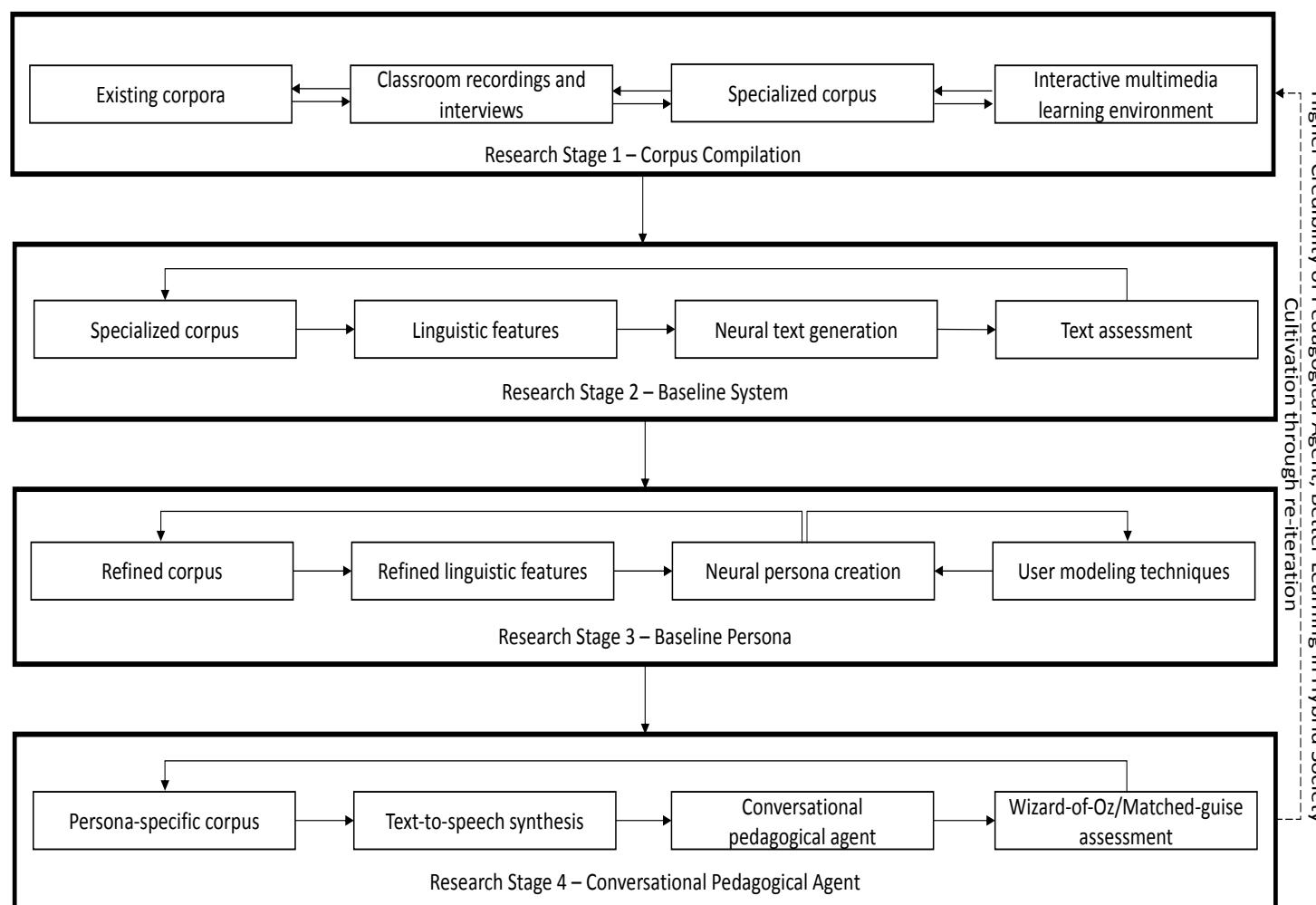
5. Conclusions

5.1 New discourse data from digital media

new discourse genres replace traditional ones (letters → emails)
easy digital access to difficult discourses, half-way to spoken

5.2 Old and new research

new digital discourses, tools and techniques offer new research opportunities
- to pick up old research questions and
- to raise new ones;
- to demonstrate that we can all make a contribution to DH and
- to "advertise" humanities' discourses as an important contribution to our universities and societies

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