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Center for Language and Cognition Groningen (CLCG) Annual Report 2020

FACT SHEET

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Factsheet CLCG Annual Report 2020

Content

1. Mission, strategy & policy	1
2. Organisation	1
2.1 Composition staff CLCG	1
2.2 Size of the CLCG research groups	2
2.2.1 Computational Linguistics staff	2
2.2.2 Discourse and Communication staff	2
2.2.3 Neurolinguistics and Language Development staff	3
2.2.4 Theoretical and Empirical Linguistics staff	3
3. Funding	3
3.1 Research grants	4
4. Academic research output	4
5. PhD projects	6
5.1 Graduation rate (vgl. SEP Table E4: PhD candidates)	6
6. Top 16 CLCG key publications	7
7. Top 10 most societally relevant publications and public engagement activities	8
9. SWOT analysis	11
9.1 SWOT analysis of CLCG	11
9.2 SWOT analysis of the Computational Linguistics research group	12
9.3 SWOT analysis of the Discourse and Communication research group	13
9.4 SWOT analysis of the Neurolinguistics and Language Development research group	13
9.5 SWOT analysis of the Theoretical and Empirical Linguistics research group	16
10. Response to Midterm recommendations and future steps	17
10.1 CLCG Response to Midterm recommendations and future steps	17
10.2 Computational Linguistics Response to Midterm recommendations and future steps	18
10.3 Discourse and Communication Response to Midterm recommendations and future steps	19
10.4 Neurolinguistics and Language Development Response to Midterm recommendations and future steps	21
10.5 Theoretical and Descriptive Linguistics: Response to Midterm recommendations and future steps	22

1. Mission, strategy & policy

The mission of CLCG is to conduct and support high-quality linguistic research and disseminate the results of this research to the international scientific community and to society at large. From a variety of monodisciplinary and multidisciplinary perspectives, CLCG focuses on computational linguistics, discourse and communication, neurolinguistics and language development, and theoretical and empirical linguistics. CLCG sets the following priorities, contributing to the University of Groningen's societal research themes Healthy Ageing and Sustainable Society:

- CLCG contributes to the theme Healthy Ageing with its research on health communication, and with its research on typical and atypical language development and use across the lifespan.
- CLCG contributes to the theme Sustainable Society with its research on multilingualism, mutual understandability between languages, literacy development and language teaching.
- CLCG has a natural interest and special responsibility for the Dutch languages and dialects, especially those spoken in the northern Netherlands (Dutch, Frisian and Lower Saxon, including Grunnings).

2. Organisation

The organisational structure of CLCG did not change in comparison with the previous year.

2.1 Composition staff CLCG

The table below gives an overview of the number and fte's of staff members and PhD's of CLCG for the period 2018-2020.

Year	2018	2019	2020
	<i># / FTE</i>	<i># / FTE</i>	<i># / FTE</i>
Assistant professor	32 / 10,1	35 / 10,5	36 / 12,0
Associate professor	10 / 3,7	13 / 4,5	11 / 3,91
Full professor	18 / 6,0	15 / 5,3	15 / 5,3
Postdocs	8 / 3,0	5 / 3,0	7 / 4,7
PhD candidates	48 / 35,4	63 / 51,8	69 / 47,2
Total research staff	116 / 58,2	131 / 75,0	138 / 73,1
Support staff	1 / 0,5	1 / 0,5	1 / 0,5
Visiting fellows	-	-	-
Total staff	117 / 58,7	132 / 75,5	139 / 73,6

Table 1. Research Staff (vgl. SEP Table E2: Input of research staff)

2.2 Size of the CLCG research groups

The tables below show the number and fte's of staff members and PhD's including the type of funding per CLCG research group in 2020. Abbreviations:

WP 1: Direct funding

WP 2: NWO, KNAW, Fryske Akademie

WP 3 excl. ERC: Government ministries, charitable organizations or industry

ERC: European research Council

2.2.1 Computational Linguistics staff

Source of funding (# / fte)	WP1	WP2	WP3	ERC	Total
1. Professor	3 / 1,2	-	-	-	3 / 1,2
2. Associate professor	2 / 0,8	-	-	-	2 / 0,8
3. Assistant professor	5 / 1,9	1 / 0,3	-	-	6 / 2,2
4. Researcher	-	2 / 1,4	1 / 1,0	-	3 / 2,4
Total staff (ex. PhD's)	10 / 3,9	3 / 1,7	1 / 1,0	0 / 0	14 / 6,6
5. PhD candidates					
a. Faculty appointed PhD	3 / 3,0	3 / 2,6	-	-	6 / 5,6
b. Contract PhD	5 / 3,8	-	1 / 0,3	-	6 / 4,1
Total 1 t/m 5a (ex. contract PhD)	13 / 6,9	6 / 4,3	1 / 1,0	-	20 / 12,2
Total staff (incl. contract PhD's)	18 / 10,8	6 / 4,3	2 / 1,3	0 / 0	26 / 16,3

Table 2. Research Staff (Computational Linguistics)

2.2.2 Discourse and Communication staff

Source of funding (# / fte)	WP1	WP2	WP3	ERC	Total
1. Professor	4 / 1,2	-	-	-	4 / 1,2
2. Associate professor	1 / 0,4	-	-	-	1 / 0,4
3. Assistant professor	9 / 3,0	-	-	-	9 / 3,0
4. Researcher	-	2 / 0,5	-	-	2 / 0,5
Total staff (ex. PhD's)	14 / 4,6	2 / 0,5	0 / 0	0 / 0	16 / 5,1
5. PhD candidates					
a. Faculty appointed PhD	1 / 0,3	1 / 1,0	-	-	2 / 1,3
b. Contract PhD	2 / 2,0	1 / 0,6	3 / 1,7	-	6 / 4,3
Total 1 t/m 5a (ex. contract PhD)	15 / 4,9	3 / 1,5	3 / 1,7	-	18 / 6,4
Total staff (incl. contract PhD's)	17 / 6,9	4 / 2,1	3 / 1,7	0 / 0	24 / 10,6

Table 3. Research Staff (Discourse and Communication)

2.2.3 Neurolinguistics and Language Development staff

Source of funding (# / fte)	WP1	WP2	WP3	ERC	Total
1. Professor	4 / 1,4	-	-	-	4 / 1,4
2. Associate professor	3 / 1,2	-	-	-	3 / 1,2
3. Assistant professor	10 / 3,8	1 / 0,2	-	-	11 / 4,0
4. Researcher	-	1 / 0,8	1 / 1,0	-	2 / 1,8
Total staff (ex. PhD's)	17 / 6,4	2 / 1,0	1 / 1,0	0 / 0	20 / 8,4
5. PhD candidates					
a. Faculty appointed PhD	5 / 4,0	6 / 5,4	1 / 1,0	-	12 / 10,4
b. Contract PhD	19 / 11,5	1 / 0,1	6 / 3,3	-	26 / 14,9
Total 1 t/m 5a (ex. contract PhD)	22 / 10,4	8 / 6,4	2 / 2,0	-	32 / 18,8
Total staff (incl. contract PhD's)	41 / 21,9	9 / 6,5	8 / 5,3	0 / 0	58 / 33,7

Table 4. Research Staff (Neurolinguistics and Language Development)

2.2.4 Theoretical and Empirical Linguistics staff

Source of funding (# / fte)	WP1	WP2	WP3	ERC	Total
1. Professor	4 / 1,5	-	-	-	4 / 1,5
2. Associate professor	4 / 1,5	-	1 / 0,2	-	5 / 1,5
3. Assistant professor	7 / 2,2	2 / 0,4	1 / 0,2	-	10 / 2,8
4. Researcher	-	-	-	-	0 / 0
Total staff (ex. PhD's)	15 / 5,2	2 / 0,4	2 / 0,4	0 / 0	19 / 5,8
5. PhD candidates					
a. Faculty appointed PhD	1 / 1,0	-	1 / 1,0	-	2 / 2,0
b. Contract PhD	6 / 3,6	-	3 / 1,0	-	9 / 4,6
Total 1 t/m 5a (ex. contract PhD)	16 / 6,1	2 / 0,4	3 / 1,4	-	21 / 7,9
Total staff (incl. contract PhD's)	22 / 9,7	2 / 0,4	6 / 2,4	-	30 / 12,5

Table 5. Research Staff (Theoretical and Empirical Linguistics)

3. Funding

Direct funding of CLCG research in 2020 contributed 67% of the total CLCG funding.

This is a higher contribution than in earlier years (ranging from 55% to 61% in the previous years).

It is not immediately clear if this is a trend or natural variation. External funding (both research grants and contract research) usually depends on a small number of relatively large projects. The amount of external funding therefore will vary somewhat. Another factor may be the growing student population which leads to hiring new staff members. It will typically take a few years before these new staff members will be successful in obtaining external funding.

In any case, CLCG (together with the new Funding Officer of the faculty) continues to stimulate and support staff members in securing external funding. Currently, a number of promising initiatives are underway.

Year	2019		2020	
	FTE	%	FTE	%
<i>Funding:</i>				
Direct funding (1)	45,7	61%	49,2	67%
Research grants (2)	14,1	19%	13,2	18%
Contract research (3)	15,3	20%	10,6	15%
Other (4)		0%		0%
Total funding	75,1	100%	73,1	100%
<i>Expenditure:</i>				
Personnel costs	2.392.467	66%	3.282.086	89%
Material costs		0%		0%
Other costs	1.245.465	34%	396.911	11%
Total expenditure	3.637.932	100%	3.678.996	100%

Table 6. Research Funding (vgl. SEP Table E3: Funding)

3.1 Research grants

Title	Principal Investigator	Start date	End date	Funding body	Amount in €
CREAMT	Antonio Toral / Ana Guerberof Arenas (CL)	1-9-2020	31-8-2022	H2020 MSCA IF	175.572
Aspasia	Malvina Nissim (CL)	1-9-2020	31-8-2024	NWO - Aspasia	150.000
Nothing but the truth	John Hoeks (DISCO)	1-10-2020	30-9-2025	NWO Promoties in de geesteswetenschappen	209.678
InDeep	Ariana Bisazza (CL)	1-6-2021	31-5-2026	NWO - ORC	249.970
Talking about chronic pain	Jana Declercq (DISCO)	1-9-2021	31-5-2025	NWO - VENI	250.000
Total					1.035.220

Table 7. Research Grants

4. Academic research output

The research output of CLCG shows an overall increase in 2020. The summed output of 181 is higher in comparison to earlier years (ranging from 163 to 155 from 2018 to 2019). This increase is striking in the context of the COVID-19 crisis. A number of conferences and related research activities were initially canceled or postponed. Furthermore, staff members had to invest time and energy in adapting their teaching from on-site to on-line. It might be that the effects of this crisis will be visible next year, since there often is quite some delay between the actual work that goes into a research article and its publication.

The large NLD group has been very productive, thanks also to the large number of PhD students. A further striking number is the very large number of conference publications of the CL group. The output of the DISCO group is satisfactory, given the very small number of PhD students that are currently participating in that group. The output of the TEL group is not satisfactory: 21 publications by 30 group members is clearly below par. CLCG will investigate if this is a structural problem.

Research output CLCG	2018	2019	2020
Refereed articles	81	90	96
Non-refereed articles	8	0	3
Books	5	6	4
Book chapters	26	15	27
PhD theses	10	9	9
Conference papers	30	30	22
Professional publications	4	5	9
Publications aimed at the general public	1	0	1
Total publications	163	155	181

Table 8. Research Output (vgl. SEP 2015-2021 Table D3b)

Academic research output 2020	Computational Linguistics	Discourse & Communication	Neurolinguistics and Language Development	Theoretical and Empirical Linguistics
Refereed articles	12	25	51	11
Books	1	1	1	1
Book chapters	2	5	13	7
PhD theses	2	2	5	-
Conference papers	37	1	7	1
Total publications	54	34	77	21

Table 9. Research Output per CLCG research group

Academic research output	Computational Linguistics	Discourse & Communication	Neurolinguistics and Language Development	Theoretical and Empirical Linguistics
2018	63	36	57	25
2019	21	33	71	32
2020	54	34	77	21
Total publications (2018-2020)	138	103	205	78

Table 10. Research Output per CLCG research group 2018-2020

The most striking aspect of these numbers (see Table 10) is the large amount of variation between years, in particular for the CL group. A further observation is that the groups which have a relatively large number of PhD students produce a large number of publications (CL and NLD). In these research groups, publications often are the result of team work. The DISCO group appears to be moving in the same direction, even if the number of PhD

students in the group is lower than desired. For TEL, the lower number of PhD students may be related to the disappointing research output (but of course it is not completely trivial to determine in which direction the causal connections flow).

5 PhD projects

5.1 Graduation rate (vgl. SEP Table E4: PhD candidates)

Enrolment			Success rates						
Starting year	Enrolment (male/female)		Total (M+F)	Graduated in year 4 or earlier	Graduated in year 5 or earlier	Graduated in year 6 or earlier	Graduated in year 7 or earlier	Not yet finished	Discontinued
2013	6	3	9	5 / 56 %	6 / 67%	7 / 78%	-	-	1 / 11%
2014	4	5	9	-	6 / 67%	-	8 / 89%	-	1 / 11%
2015	5	2	7		3 / 43%	4 / 57%	-	1 / 14%	2 / 29%
2016	9	3	12	3 / 25%	4 / 33%	-	-	8 / 67%	-
2017	10	3	13	-	1 / 8%	-	-	12 / 92%	-
2018	9	3	12	-	-	-	-	12 / 100%	-
2019	5	5	10	-	-	-	-	10 / 100%	-
2020	10	5	15	-	-	-	-	15 / 100%	-
Total	58	29	87	-	-	-	-	58 / 67%	-

Table 11. Graduation rate (vgl. SEP Table E4: PhD candidates)

For information about the outflow of PhD-cohorts per VSNU-type we refer to Table 11 in attachment 1.

An important responsibility of the CLCG staff members concerns the timely completion of the PhD trajectories for which they are responsible. Most daily supervisors and promotors are aware of this responsibility. The CLCG director and CLCG coordinator are directly involved at a few important moments. The CLCG coordinator ensures new PhD students are aware of the CLCG infrastructure and CLCG organization by organizing personal meetings right at the beginning of their contract. Another important moment concerns the Go/NoGo meeting after one year. In those meetings, the CLCG director evaluates with the supervisors and the PhD student progress in the first year and the plans for the coming years.

Regular meetings of the PhD students with their supervisors are important. CLCG stimulates that such meetings be held at fixed moments, at least once in every two weeks, but ideally once a week. In the previous months in which we all had to work from home, CLCG has advocated that PhD students have more frequent regular meetings – to make up for the lack of informal meetings during coffee and lunch breaks. Yet, this long period of lock down may be expected to lead to a negative influence on the number of finished projects for the next few years, despite our efforts.

6. Top 16 CLCG key publications

Computational Linguistics

- Bartelds, M., Richter, C., Liberman, M., Wieling, M. (2020). A New Acoustic-Based Pronunciation Distance Measure. In: *Frontiers in Artificial Intelligence*. Vol. 3. [2 citations]
- Üstün, A., Bisazza, A., Bouma, G., Noord, van, G. (2020). UDapter: Language Adaptation for Truly Universal Dependency Parsing. Paper presented at The 2020 Conference on Empirical Methods in Natural Language Processing, .14 p. [top-tier conference. Work was also mentioned in a popular academic blog as one of the interesting novelties of 2020 in the NLP world: <https://ruder.io/research-highlights-2020/>] [8 citations]
- Nissim, M., van Noord, R., van der Goot, R. (2020). Fair Is Better than Sensational: Man Is to Doctor as Woman Is to Doctor. *Computational Linguistics*. Vol. 46, No. 2. pp. 487-497. [main journal in our field, 44 citations]
- Läubli, S., Castilho, S., Neubig, G., Sennrich, R., Shen, Q., Toral, A. (2020). A Set of Recommendations for Assessing Human--Machine Parity in Language Translation. In: *Journal of Artificial Intelligence Research*. Vol. 67. pp. 653-672. [international collab, important journal, 28 citations]

Discourse and Communication

- Dijkstra, B. E., Coler, M., Redeker, G. (2020). The multilingual workplace realities of Polish truckers: A case study in the Netherlands. *Multilingua - Journal of cross-cultural and interlanguage communication*. <https://doi.org/10.1515/multi-2020-0038>
- Herder, A., Berenst, J., de Glopper, K., Koole, T. (2020). Conversational functions of 'I know', 'you know' and 'we know' in collaborative writing of primary school children. *Classroom Discourse*. <https://doi.org/10.1080/19463014.2020.1814368>
- Knol, A. S. L., Koole, T., Desmet, M., Vanheule, S., Huiskes, M. (2020). How Speakers Orient to the Notable Absence of Talk: A Conversation Analytic Perspective on Silence in Psychodynamic Therapy. *Frontiers in Psychology*. Vol. 11.
- Poppel, van, L. (2020). The study of metaphor in argumentation theory. *Journal of Argumentation*. <https://link.springer.com/article/10.1007/s10503-020-09523-1>

Neurolinguistics and Language Development

- Brouwer, J., van den Berg, F., Knooihuizen R., Loerts, H., & Keijzer, M. (2020). Exploring Language Learning as a Potential Tool against Cognitive Impairment in Late-Life Depression: Two meta-analysis and suggestions for future research. *Behavioral Sciences*, 10(9). <https://doi.org/10.3390/bs10090132>.
- Everhardt, M.K., Sarampalis, A., Coler, M., Başkent, D., & Lowie, .W (2020). Meta-Analysis on the Identification of Linguistic and Emotional Prosody in Cochlear Implant Users and Vocoder Simulations. *Ear and hearing*, 41(5), 1092-1102.

- la Roi, A, Sprenger, S., & Hendriks, P. (2020). Event-Related Potentials reveal increased dependency on linguistic context due to cognitive aging. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 46(7), 1226-1257. <https://doi.org/10.1037/xlm0000777>.
- Ossewaarde, R., Jonkers, R., Jalvingh, F., Bastiaanse, R. (2020). Quantifying the Uncertainty of Parameters Measured in Spontaneous Speech of Speakers with Dementia. *Journal of Speech, Language, and Hearing Research*, 63(7), 2255-2270.

Theoretical and Empirical Linguistics

- Zwart, J.-W. (2020). Head movement and morphological strength. *Oxford Research Encyclopedia of Linguistics*, (pp. 1-28) (Oxford Research Encyclopedias). Oxford: Oxford University Press.
- Sauerland, U., Hollebrandse, B., Kratochvil, F. (2020). When hypotaxis looks like parataxis: Embedding and complementizer agreement in Teiwa. *Glossa: a journal of general linguistics*. Vol. 5, No. 1. pp. 1-30.
- Hoeksema, J. (2020). Licht en recht. In: *Nederlandse Taalkunde*. Vol. 25, No. 2/3. pp. 305-317.
- Gooskens, C. (2020). The North Germanic dialect continuum. In: M. T. Putnam, R. Page (Eds.), *Cambridge Handbook of Germanic Linguistics* (pp. 761-782). Cambridge University Press.

7. Top 10 most societally relevant publications and public engagement activities

Collectively, the ten output sources listed below have made an impact that spans beyond research due to its wide reach and has greatly increased the visibility of CLCG researchers. Talks and publications by CLCG scientists reach a broad audience. A typical example is a public outreach talk about language and aging aimed at retired UMCG staff with approximately 100 people in attendance [item 9] and a piece about truth in science aimed at the general public [item 10].

Items [1], [2], [3], [4] and [5] on the list below are research-based publications aimed at professionals. The very popular skills-based course book on statistics [item 8] has greatly increased the visibility of CLCG researchers. Wildfeuer's publication [item 6] mirrors the increasing cooperation that has been taking place between the Humanities and Technical Sciences within the scope of the digitalization of the Humanities.

Researchers from the NLD group developed the [RuG Token Test](#) – a multilingual app for aphasia diagnostics on a tablet [item 7]. The Token Test (de Renzi & Vignolo) is a classic test for aphasia assessment after stroke and is widely used in research and clinical practice. The pilot project showed that the app is compatible with the paper-and-pencil version and reliably identifies patients with aphasia (Akinina et al., 2017). There are about 40 different language versions in the app.

Computational Linguistics

1. Minnema, G., Remijnse, L. (2020). Framing, betekenis en pragmatiek. DIXIT, 17, 14-15.
2. Toral, A., Oliver, A., Ribas Ballestín, P. (2020). Machine Translation of Novels in the Age of Transformer. In: J. Porsiel (Ed.), Maschinelle Übersetzung für Übersetzungsprofis (pp. 276-295). BDÜ Fachverlag.

Discourse and Communication

3. Declercq, J. (2020). Writing about health in a women's magazine: Journalists' discursive constructions of health, agency and science. *The Journal of Applied Journalism & Media Studies*.
4. Ooms, J. A., Jansen, C. J. M., Hoeks, J. C. J. (2020). The story against smoking: An exploratory study into the processing and perceived effectiveness of narrative visual smoking warnings. In: *Health Education Journal*. 2020 ; Vol. 79, No. 2. pp. 166-179.
5. Ritzema, E.S., Pander Maat, H., Stukker, N., Hemker, B.T., Naayer, H.M., Lampe, T., Van Gelderen, A., De Boer, H. (2020). Peiling Schrijfvaardigheid einde (speciaal) Basisonderwijs 2019. Technische rapportage in opdracht van de Inspectie van het Onderwijs. Groningen: GION Onderwijs/Onderzoek.
6. Wildfeuer, J., Drummond, T. (2020). The Multimodal Annotation of Gender Differences in Contemporary TV Series. In: J. Nantk, F. Schlupkothen (ed.), *Annotations in Scholarly Editions and Research: Functions, Differentiation, Systematization* (pp. 35-58). Berlin: De Gruyter.

Neurolinguistics and Language Development

7. Bastiaanse, R., Akinina, Y., Satoer, D., Kok, de, D. (2020) *The Token Test App*, Second Edition.
8. Loerts, H., Lowie, W., Seton, B. (2020). *Essential Statistics for Applied Linguistics: Using R and JASP*. 2 ed. Red Globe Press. 250 p.
9. Van den Berg, F., & Brouwer, J. (2020). *Langer Cognitief en Mentaal Gezond*. UMCG Groningen, 3 March.
10. Maier, E. (2020). Making up stuff. <https://aeon.co/essays/how-to-tell-fact-from-fiction-in-fiction-and-other-forms-of-lies>

8. Open Science

The analysis of the publications in Pure suggest a steady increase of open publications, where in 2020, 60% of publications fall in the open category, and only 20% fall in the closed category (see figure 1). CLCG advocates and supports open publications, even if no system is in place to cover potential costs for publishing in open access journals. In some areas (CL for instance) almost all relevant journals and conferences are open access without publication fee, but this is not the case for all relevant research areas. In 2020, due to COVID, some researchers have redirected their travel money to pay for open access publication fees.

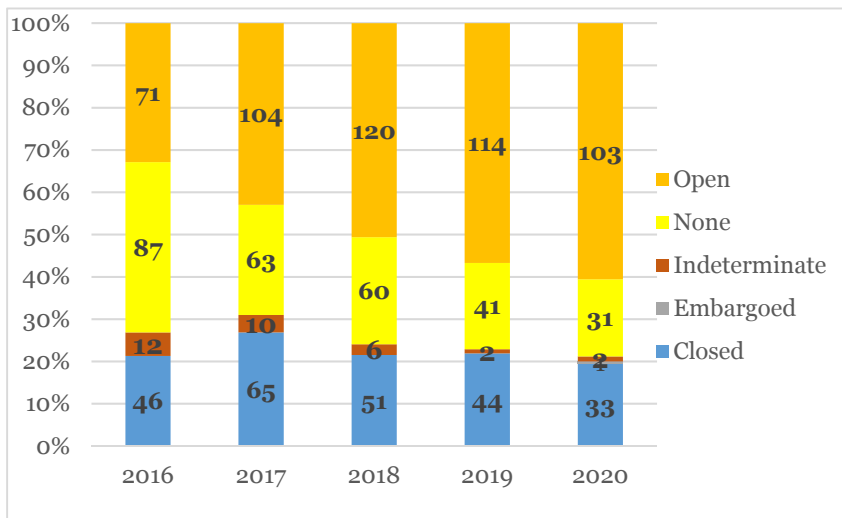


Figure 1: Pure analysis Open Access Publication

9. SWOT analysis

The SWOT analysis crucially depends on what is seen as the *goals* of the CLCG as a whole and of the research groups individually.

9.1 SWOT analysis of CLCG

Strengths:

CLCG consists of a large group of very good, dedicated researchers in various branches of linguistics. CLCG researchers publish in top journals, are successful in obtaining external funding, and successfully coach a large number of PhD students. The atmosphere in the institute is very positive and lively with many cooperations between researchers of different backgrounds. There are monthly “linguistics lunch” meetings, regular “Linguistics colloquium” invited speakers, and there is the very popular annual TaBu conference. In addition, new activities are organized for PhD students. Research is societally relevant, and several CLCG researchers are very active in making our research visible to the general public.

Weaknesses:

Most researchers struggle somewhat with heavy teaching load. Although there have been initiatives to reduce this load recently, the COVID situation has led, obviously, to an increased burden. Research facilities (the various labs) are still clearly unsatisfactory, but this has been taken up and there are very good plans for research lab facilities included in the plans for the renovation of the Harmony building. Research with human participants has obviously been very difficult in the previous year, leading to additional efforts for researchers to adapt their plans. This includes working with human participants in an on-line setting. Angeliek van Hout has set up a series of meetings for interested researchers to better understand the pros and cons of various relevant software platforms for that.

Opportunities:

Renovation of the Harmony building will give rise to the realization of much improved research lab facilities. The construction of the research laboratories is well underway. The Faculty Board is aware of the teaching and management burden for staff members and there may be further teaching load reductions.

Threats:

It is still unclear what the effects will be for the Faculty of Arts if the government would adopt some version of the conclusions of the Van Rijn Committee. It is also unclear how NWO funding for humanities research will develop.

Research in language, linguistics and communication evolves rapidly. Empirical methods include more and more intricate statistical and computational models. Several research groups mention the need for advice on advanced statistical and computational techniques. If this need is not addressed, this will have consequences for the progress of research of the institute.

9.2 SWOT analysis of the Computational Linguistics research group

Strengths:

CL group covers an increasing number of subfields in CL and NLP, and we attract good interest from international students, with requests for PhD supervision and exchange visits and internships.

CL group is the reference group for Dutch language processing.

We publish in the top-tier venues of our field, and are therefore visible to the international community. We currently have a good group of PhD students.

There is a very good atmosphere in the group, strong peer-support, and strong curiosity-driven attitude.

Weaknesses:

Understaffing. Staff is involved in various teaching programmes, and especially for the Digital Humanities track of the master we are the only referents for the “digital” side; this prompts requests for teaching and supervision that (might) outnumber our possibilities. Also, we teach intensive, contemporary courses and it’s hard to keep up with current developments in the field due to lack of time.

Diversity: we do very well in geographical terms with a very mixed group, and also in terms of age, but we are still behind in terms of gender, as women are under-represented in the group (this is a general problem in the field).

Computing: it can happen that we do not have access to enough computation power to run our experiments, which could get delayed.

Opportunities:

Industrial collaboration and knowledge transfer.

Young field with increasing interest worldwide.

Societal relevance, both in terms of data (increasing amount of spontaneously generated data), and in terms of impact.

International exposure and collaboration: COVID has made it possible to interact more often and more closely with scientists around the globe. We have managed to invite many more international people to our research seminar, and we hope to continue so. The same holds for members of our group being more easily invited and involved in international events.

We are in the process of hiring a number of UD who will do their research in CL.

Threats:

The field is evolving incredibly rapidly, and it takes an incredible effort to stay up to date especially given the volume of teaching duties. This is true both in terms of research as well as in terms of teaching, in terms to be able to teach state-of-the-art content and techniques.

Industry jobs currently represent a serious competition to academia in terms of recruitment at all levels (from PhDs to professors).

COVID restrictions have made it much harder for group members to keep motivation high, and the daily interaction and exchanges of ideas that have been so fruitful and common in the past are sorely lacking. Also, the online setting has increased work pressure and it's easy to feel tired. Should this situation continue, it might have an impact on overall motivation and stamina of the group.

9.3 SWOT analysis of the Discourse and Communication research group

Strengths

Staff members are visible nationally and internationally, with publications in Q1 international journals.

Staff has recently been strengthened by new hires with strong records regarding publication and grant application.

We have a relatively large number of projects for and promotions of external PhD students

Research is societally relevant. We investigate theoretical issues in applied contexts such as health care, sustainability and education (cf. the university's central research themes "Healthy Ageing" and "Sustainable Society").

Weaknesses

Research fte's are not yet used to the full: some staff members have been ill and are still recovering.

Currently we have few regular PhD students.

Opportunities

We are in the process of hiring a number of Assistant Professors who will do their research in the context of DISCO.

Threats

Increase in student numbers in 2021-2022 may lead to peak in teaching load (=reduction in research time) if additional staff is not available in time

9.4 SWOT analysis of the Neurolinguistics and Language Development research group

The Neurolinguistics and Language Development research group is a strongly interdisciplinary group that investigates the organization of language in the brain, language processing, and language learning, combining fundamental and applied research. A central focus of the research in this group is the understanding of language use, language interaction and language development through a variety of methods and analyses. Fundamental aspects of this research focus on the organization of language in the brain, on patterns of meaning and interpretation in language, on the interaction of language and cognition, and on processes underlying language development.

In addition to answering fundamental research questions, many of these studies have important clinical and practical implications for language impairments like aphasia, dyslexia, dysarthria and disfluency, as well as for language issues associated with autism, Alzheimer's disease, Parkinson's disease, audiological disorders, and developmental disorders. With research spanning the entire lifespan, the research group's findings pertain to child language development as well as how language learning may benefit aging processes. Research into

second language development has important implications for language pedagogy at all levels of education. Empirical studies in the group make extensive use of EEG, fMRI, RT measurement, eye tracking and pupillometry, language assessment protocols, observation tools, and cognitive tasks. The interdisciplinary perspective that is inherently present in the NLD group is thus also reflected in its research designs and (analysis) methods and extends to designs such as randomized controlled trials commonly used in the medical sciences and GAMM analyses.

On the basis of these group characteristics, the SWOT analysis below details strong suits and improvement areas for our research group.

Strengths

The dissemination of research in the group aims at publications in high ranked international journals (Q1); presentations at national and international conferences, among which keynote addresses; guidelines and tools for professionals (e.g., the software tool of the token test app);

The group's output is substantial due to the lively PhD community within the NLD group;

Members of the group are frequently involved in the organization of international conferences (AILA2021 in August of 2021 as a world conference being a prime example among many others);

Several members gave keynote lectures at a wide range of conferences, symposia and workshops in 2020, increasing CLCG's prominence;

Group members were also actively involved in local, national and international Research Networks and boards (including at the policy level: Petra Hendriks as KNAW member and Merel Keijzer as DJA board member), organizational boards, (grant) panels and editorial boards. This presence already starts at the PhD level (Amelie la Roi having delegated her presidency of the Aletta Jacobs Talent Network to Jelle Brouwer this year, both of whom are NLD PhD candidates);

NLD group members work in highly interdisciplinary teams, collaborating in cross-faculty projects, where the UMCG especially plays an important role. Many PIs and PhD candidates are affiliated with the Research School of Behavioral and Cognitive Neurosciences (BCN);

The NLD group members frequently engage in public outreach events such as public lectures, science fairs and citizen science projects;

Weaknesses

Despite being joined in one research group, the members of the NLD group appear to belong to one of two research traditions (neurolinguistics and language pathology OR applied (psycho)linguistics, as noted above). The group may thus appear fragmented. Having said that, the interdisciplinary perspective and research theme of healthy aging is what brings both traditions together as one overarching theme;

Research and teaching present an ongoing tension between inspiration and time pressure. Research in our group feeds the up-to-date research perspectives in the MA programs in the MA Linguistics and the Research Master Language and Cognition. Student research projects frequently contribute to research of staff members, including in the form of research

internship with individual (RAP) projects. At the same time, the general teaching load in our faculty is extremely high, which interferes with staff members' time for research, time for dissemination and time for research development. What adds to complexity is that NLD members belong to both cluster 2 and cluster 3. Practically, this sometimes hampers research-led teaching;

The many PhD candidates who make up the NLD community reflect that NLD members are able to attract external and CLCG internal funding and they add to the productivity of the group. The dynamicity of this vibrant PhD community is not being optimally used at the moment. This is further complicated by PhD office spaces being cramped and far removed from supervisors and more senior colleagues.

Much of the work that is being done within the NLD research group is experimental in nature and uses methods ranging from EEG, fMRI, fNIRS, RT measurement, eye tracking and pupillometry, language assessment protocols, observation tools, and cognitive tasks. Although the Harmonie building does have its own psycholinguistic lab, IdeaLab and Eyelab that are used by some NLD members, many use the testing facilities at the Cognitive Neurosciences Center (CNC, former NIC). As a result, the lab spaces are crowded and the coordination of PhD students and REMA students who need to receive ethical and practical training in order to use the lab facilities at the CNC is poor. The CNC support staff has indicated that they do not always know who is testing in their labs, which can be a safety hazard. This issue was already raised last year and is being addressed but we are still eagerly awaiting the lab space to be realized within the Harmonie building;

Several NLD members have had experiences with CETO ethical approval of their projects taking a long time in 2020. This is detrimental to their research progress;

With research (analysis) methods of CLCG becoming more advanced and not part of standard training of our PhD candidates (GAMM analyses being but one example), the need arises for a dedicated statistics consultant. As it is, most NLD members now use their own network but a consultant that PhD students could also turn to would be much preferred and can benefit NLD research.

Opportunities

The new housing situation of the Harmonie and the remodeling work planned for the next years will create an opportunity to invest in new lab spaces for the experimental work that is done by NLD group members. Compared to last years, the plans have now been presented and look excellent, with details such as waiting rooms and child language lab facilities as well as EEG chambers;

Last year the Faculty Board funded a new portable eyetracker. It is unfortunate that, due to the COVID-19 situation, new research opportunities that this new device can generate have not yet fully developed and materialized. In 2020, the Faculty Board also co-financed a speech and language lab on wheels (van). Although this presents an excellent opportunity for NLD research as well, the van is currently being used primarily by another CLCG research group and Martijn Wieling's speech lab in particular. We would greatly appreciate the CLCG board to take the initiative in mediating negotiations as to the availability of this mobile language sciences lab for other CLCG research groups including the NLD group;

Also pertaining to PhDs, the Graduate School is currently developing a new trajectory for PhD supervision. With the NLD group being the institutional home of many of the faculty's PhD students, we greatly appreciate this initiative.

The VSNU position paper published in 2019 on how to reward and recognize scientists and scholars without research quantity being a decisive factor presents an ideal opportunity to engage in a renewed discussion within our group and the younger generation of scientists (the many PhD students within our group) about how the work within our group and the CLCG at large should be evaluated. Compared to last year's SWOT analysis, many individual labs and research PIs that belong to the NLD group have started this discussion within their groups. The NLD group's coordinator, Merel Keijzer, is also part of the UG wide reward and recognition (R&R) committee and Nynke Bosma as HR advisor has created an R&R initiative group structure within our faculty too so steps continue to be taken.

Threats

The most important current threat to the NLD group is the COVID-19 pandemic that started in 2019 and the effects of which are substantial, with lab facilities closing and severe delays in projects, perhaps most notably PhD projects, being expected. Reviewing the situation in 2020, the delays continue to form a major threat to especially temporary (PhD) projects. Many PhD students have – together with their supervisors – come up with alternative plans for their projects, typically involving online testing and interventions. We want to applaud all of this flexibility but at the same time do want to signal that the CLCG can be more proactive in securing contract extensions for PhD students;

The lack of facilities such as lab space and statistics consultancy opportunities continuously form a threat to NLD research. Especially at a time where many projects now have datasets that were partly collected online and partly through in-person testing, analyses need to be able to take this into account and for that reason statistics consults are more needed than ever before;

9.5 SWOT analysis of the Theoretical and Empirical Linguistics research group

This text has not been updated since last year.

Strengths:

Quality of individual researchers

Weaknesses:

The group is too diverse

Opportunities:

There are plans for a new MA in linguistics

Threats:

Current MA programs do not provide for new research talents for TEL

10. Response to Midterm recommendations and future steps

10.1 CLCG Response to Midterm recommendations and future steps

The MTRC had the following recommendations and suggestions for improvement for CLCG in general. The recommendations and suggestions specific for the research groups are discussed below.

Viability: The MTRC is positive about CLCG's viability, but observes that some groups do very well in terms of funding (NWO) and a few groups are less successful. Impending retirements call for a research hiring strategy. Research on the Dutch language and dialects is one of CLCG's strengths and this should be highlighted more.

- We continue to highlight that research on the Dutch language and dialects is one of our strengths. Research hiring strategy has been developed in close cooperation with the cluster ensuring that the Strategic Plans of the cluster include the viewpoint of the research center.

Organization: CLCG's coherence has not increased in the past three years. Choosing a number of spearheads may help to create more focus. Thematic research groups are a good way to respond to developments in the field. CLCG should come up with additional initiatives to facilitate exchange between research centres and groups. The number of UD, UHD and professors is not well balanced. Gender imbalance is a concern as well.

- The balance between the number of UD, UHD and professors have improved considerably after several promotions to UHD have become possible. Issues of gender imbalance are taken up together with HR. CLCG organizes several activities to facilitate exchanges between research centres and groups. The COVID-19 pandemic has slowed down this development, but the realization of the research laboratories should be a further stimulating development.

Coherence within the research groups is unproblematic for the DISCO and CL groups. The NLD group essentially consists of two somewhat distinct groups (psycholinguistics/neurolinguistics on the one hand, and applied linguistics on the other hand). Lack of coherence is mostly problematic for parts of the TEL group. It has proven difficult to change this.

Facilities: The housing and infrastructure for the labs are inadequate. The planned rehousing of the Faculty of Arts is an opportunity to create better and more centralized lab facilities.

- CLCG has been involved in the plans for the renovation of the Harmony building. In these plans, research lab facilities play an important role. If these plans can be implemented, the lab facilities will become state of the art.

Vision/strategy: Apart from societal relevance, CLCG should also emphasize the theoretical framework underpinning its research. CLCG should devise a vision, stating research spearheads, and developments in the disciplines. A plan for new hires is needed.

- The CLCG strategic plan (attached) was completed at the end of 2020 and addresses these issues.

Funding: A strategy for research funding should be devised, beyond the NWO (and ERC) schemes, looking for partnerships with the industry and funding bodies outside the Netherlands.

- Together with the new Funding Officer of the faculty we systematically search for international academic and non-academic funding opportunities. CLCG has a subscription to [ResearchConnect](#), an international research database that researchers can consult to be informed about a very large number of funding possibilities.

Visibility: CLCG could benefit from the expert advice of a research communication specialist.

- The Faculty is in the process of hiring a research communication specialist. CLCG is looking forward to working with this new specialist.

PhD supervision and completion rates: The PhD completion rates at CLCG are high. The PhD candidates would appreciate an overarching PhD community, to discuss PhD-related problems. PhD students like to be placed with members of their research group.

- Some initiatives have been taken to organize further meetings between PhD students of the CLCG, after the PhD students had sent out a questionnaire. This resulted in very mixed ideas about the goals of dedicated CLCG PhD student meetings. COVID-19 has delayed some of the options, but there are now planned regular on-line meetings using the Gathertown platform, until it is possible to organize such meetings in the collaboratories. In informal contacts, it became clear that such onsite meetings are preferred by most PhD students.
- After this advice of the MTRC, the CLCG director has put more emphasis on this issue in the go/no-go meetings. A tentative conclusion is that the need to organize such a community feeling is felt mostly for PhD students in chair groups that are relatively isolated from other groups and have few other PhD students. It appears to be much less of a concern for members of the DISCO and the CL group, and parts of the NLD group.
- As for the housing of PhD students within their research group: CLCG has always advocated this, but it has not always been easy to realize this given the limited options in the Harmony building. CLCG continues to argue against the policy that PhD students are expected to move out of the Harmony building after the first year of their appointment.

10.2 Computational Linguistics Response to Midterm recommendations and future steps

Response to recommendations Midterm Review Committee:

The Committee had two recommendations:

- 1. better communication of its value to ‘real-world applications’, with both fellow CLCG researchers and the outside world.*
- 2. to develop a strategy to cope with fast development in the field by listing the key areas CL wishes to concentrate on and a vision on desired partnerships with other groups/departments within and outside the Faculty of Arts.*

Regarding (1), the group has substantially worked towards a stronger visibility strategy, especially in the area of contribution to Society, with ‘real-world problems’ in mind. Through various discussions in the group on how to make our research useful during the pandemic, we have acted concretely in this sense, with the following outcomes:

Project 1: Annotation of twitter messages in Dutch on misinformation about COVID-19. This activity has seen the participation of research staff, bachelor IK students, and DH Master students. The outcomes are: a) a manually annotated corpus of more than 2,000 tweets in Dutch on misinformation. The annotation of the data has been conducted in coordination with prof. Preslav Nakov, Qatar Computing Research Institute of the Hamad Bin Khalifa University; b) a manually annotated collection of more than 600 tweets concerning misconceptions about COVID-19 by Dutch politicians and institutions; these can be directly used to train models which will better understand the narratives around the pandemic.

Project 2: Development of a system aimed at fighting misinformation regarding the pandemic. This resulted in the participation in the shared task on Fighting the COVID-19 Infodemic organized as part of the Fourth NLP for Internet Freedom Workshop, co-located with NAACL 2021. The task consists in automatically predicting several binary properties of a tweet about COVID-19 (e.g., whether it contains a verifiable claim, whether it contains misinformation, whether it appears to be of interest to the general public, among others). The RuG Team obtained the best score on English, ranking #1 among 8 participating systems; the system is available to the community, and developments in Dutch are underway.

Regarding (2), we will make more explicit and reinforce existing links with other groups and Faculties (for instance the collaboration with media studies within Arts, and with the Faculty of Social and Behavioral Sciences), and also establish new ones, according to pressing developments in our and related fields. As an example of the latter, CL is represented in a university-wide executive group tasked with setting up the new forthcoming School on Digital Society, Technology, and AI. This ensures being at the forefront of developments and close collaborations with relevant groups from all other Faculties. Other key areas will be highlighted so that both fundamental and more applied research are covered. Another example of concrete collaborations with entities also outside the RuG is the current detachment of Andreas van Cranenburgh at the Royal Library, as their researcher in-residence.

10.3 Discourse and Communication Response to Midterm recommendations and future steps

Response to recommendations Midterm Review Committee:

“MTRC advises DISCO to also stress the theoretical underpinnings next time.” (Midterm Report, p. 9:)

- We address theoretical research questions in applied contexts, which may suggest that we are predominantly doing ‘applied research’. Applied research is about answering a practical question or societal problem with scientific methods, without necessarily trying to find out *why* something is the case, or why “A” is better than “B”. This is of course valuable in its own right, but this is not what we do. We use state of the art theoretical and methodological insights from our home research disciplines (in our multidisciplinary staff ranging from discourse theory, cognitive and social psychology, linguistics, conversation analysis to semiotics, literacy development, metaphor and argumentation theory) to analyze, explain, and in a number of cases also: optimize communication. It is important to note that, additionally, the results of our applied research feed back in journal and book publications by DISCO staff members addressing more fundamental research questions. We agree with the MTRC that we should communicate this specific point more clearly.

“The MTRC further advises DISCO to collaborate more with members from other research groups.” (Midterm Report, p. 9:)

- We encourage all of our staff to collaborate with members from other groups. It is also important to note that a number of our staff members have partnerships with staff from national and international universities resulting in journal and book publications and in externally funded research projects. At the same time, we plan to develop more collaboration within the DISCO research group by looking for large-scale interdisciplinary projects where all can take part

“Since a large number of CLCG staff will retire in the near future, a strategic plan for new hires and their preparation is urgently needed.” (Midterm Report, p. 9:)

- This concerns DISCO too, as two of our four full professors will retire in 2021 (and a third one in 2023). Only two of the three will be replaced, following the ‘chair program’ drawn up by the faculty. We think it is worthwhile to consider replacing *all three of them*, also given the steadily increasing number of students. In addition, one of our university teachers, responsible for Corporate and Marketing Communication will retire within four years. We are currently recruiting an assistant professor in this field to strengthen the position of CMC and the broader field of strategic and institutional communication. We have formulated strategic plans for research and personnel on the level of the individual chair groups as well as on cluster-board level. Furthermore, the Faculty has developed its own strategic plan partly based on the plans from the chair groups and clusters.

“The MTRC feels that CLCG should devise a strategy for research funding, looking beyond the highly competitive NWO (and ERC) schemes. It advises CLCG to look at partnerships with the industry and funding bodies outside the Netherlands, which might offer numerous opportunities for their type of research.” (Midterm Report, p. 9:)

- We will take this suggestion to heart and systematically search for international academic and non-academic funding opportunities. During the past years we were successful in acquiring PhD projects in public-private partnerships, for example in collaboration with UMCG (health communication) and within the Dudoc Alfa and NWO lerarenbeurs programs (education). In addition, one of our members (Declercq) also succeeded in landing a VENI-grant from NWO.

Policy direction & Strategic goals

DISCO aims to produce high quality research on theoretical issues in societally relevant domains: health, education and sustainability. We want to acquire grants, attract excellent PhD candidates and other colleagues, publish high quality research articles in international journals and have a positive impact on society. To this end, we are considering setting up interdisciplinary collaborative projects within our research group in which other researchers are welcome to participate. We will also continue and expand our partnerships with other research groups and institutions both within the UG and outside (nationally and internationally).

Importantly, a crucial prerequisite for these aims is that staff have enough time, resources and energy to do this kind of high-quality research. That is why the first step should be to create a safe and open working environment, where at least 40% of working hours of each staff member can be spent on doing research. Both the Faculty board and the Cluster Board are taking measures to ensure that staff can do research in 40% of their working hours. Nevertheless, it will remain crucial to monitor to what extent this goal is realized.

10.4 Neurolinguistics and Language Development Response to Midterm recommendations and future steps

Response to the Midterm review committee's recommendation

“The MTRC clearly noted that there are two main streams within NLD; one is concerned with neurolinguistics and language pathology, the other with applied linguistics and psycholinguistics. The MTRC recommends that these two streams be made explicit, also in their communication with the outside world” (Midterm report, p. 9).

- 2019: We recognize these two streams but do not necessarily view this as problematic, as both strands are strong pillars with internationally recognized research. We do feel that more cross-fertilization could be instantiated between the two subgroups with the NLD community. To this end, after the COVID-19 measures are lifted, regular lunch meetings and/or speed dates among NLD members can be organized. This will be organized by the NLD coordinator, Merel Keijzer.

Update 2020: In-person gatherings continue to be impossible due the COVID-19 restrictions that continue to be in place. At the same time, we do witness interdisciplinarity, among which the theme of healthy aging, as a commonality that has emerged between the two research groups, clearly justifying the merge of these two seemingly different research lines.

“The MTRC further advises NLD to invest (more) in joint teaching with members from the Behavioural and Cognitive Neurosciences (BCN) network” (Midterm report, p. 9).

- Many, if not most, NLD members (including many PhD students) are in one form or another affiliated with BCN. Wander Lowie is on BCN's educational advisory board and Merel Keijzer is on the BCN Board and have been for the whole of 2020. NLD group members are or have been involved in BCN courses as well, but the compensation for these courses is not coordinated well enough, essentially meaning that staff members teach these courses for free. This issue is currently being tackled by the BCN board.

“The MTRC concluded that the housing and infrastructure for the labs are inadequate and agrees with the previous PRC that a structural solution should be found for the management of the labs. The planned rehousing of the Faculty of Arts should be regarded as an opportunity to ameliorate CLCG's research facilities” (...) (Midterm report, p. 9).

- Although this comment concerned the CLCG as a whole, it does particularly pertain to the NLD group because of the experimental work of most of the research that is conducted within the group. This issue has already been amply discussed in the SWOT analysis above and suggestions as to the remodeling of the Harmonie building have been presented under 'opportunities. These plans have materialized and we are eagerly looking forward to moving forward with these plans, giving the CLCG an infrastructure that is at the forefront internationally.

“The PhD candidates were generally very pleased with their supervision and with CLCG as a whole. However, they would appreciate it if CLCG could create an overarching PhD community, which could also serve as a platform to discuss PhD-related problems” (Midterm report, p. 10).

- PhD students make up an important portion of the NLD group. The students meet at BCN and Graduate School Humanities (GSH) events as well as being part of a mentor system that the GSH implemented last year. We feel that these measures are sufficient and they are now being complemented by a new program aimed at successful PhD

supervision that can greatly strengthen and improve the PhD community and trajectory.

Policy directions and future goals

In the coming year, 2020, three policy-related facets are taken up by the NLD research group, initiated by Merel Keijzer as NLD coordinator. Most of these were already formulated last year but could only be partly realized because of COVID-19. As such, they continue to be prominent policy directions for the NLD group.

1. We continue to recognize the two streams of research within the NLD group, but at the same time will organize joint research meetings, for instance a speed date event where members from both subgroups will get a chance to interact. This is in line with our observation that interdisciplinarity, (clinical) implications and perhaps also the theme of healthy aging are overarching themes that tie the two research streams together;
2. The NLD coordinator has initiated an inventory of delays in NLD projects due to the COVID-19 measures and will continue to monitor this situation. We would in collaboration with the GSH and CLCG like to propose to move forward in granting project extensions where needed;
3. The PhD cohort will be given a survey before the summer of 2020 (to be fully analyzed in the fall) to chart any experienced hardships by this important group of NLD members at a time where they are now asked to take up teaching tasks. This can also complement the newly set up PhD supervision trajectory and aid its design.

10.5 Theoretical and Descriptive Linguistics: Response to Midterm recommendations and future steps

Nothing received.

Attachment 1: Outflow PhD-cohorts per VSNU-type

CLCG Functiotype	2011 (Year -10)				2012 (Year -9)				2013 (Year -8)				2014 (Year -7)				2015 (Year -6)				2016 (Year -5)			
	○	□	●	μ	○	□	●	μ	○	□	●	μ	○	□	●	μ	○	□	●	μ	○	□	●	μ
1a. Werknemer-promovendus	21	5	16	7	4	0	4	13	3	0	3	9	7	0	6	4	6	1	4	7	4	4	0	0
1b. Promoverend medewerker	-																							
2a. Beurspromovendus eigen uni / umc	-								1	0	1	-5									3	3	0	0
2b. Beurspromovendus andere beursgever	2	0	2	7	4	0	4	1	6	0	5	11	2	0	2	33	1	0	0	0	5	2	3	7
3. Extern gefinancierde promovendus	1	0	1	-10	2	1	0	0	2	0	2	23	3	0	3	19	2	2	0	0	1	1	0	0
4. Buitenpromovendus (eigen middelen)	5	1	4	-	2	0	2	-	1	0	0	-	2	0	2	-	5	3	1	-	3	0	2	-
Onbekend																								
Totaal	29	6	23	6	12	1	10	7	13	0	11	11	15	0	14	14	14	6	5	7	16	10	5	7

Table 12: Outflow PhD-cohorts per VSNU-type