

Center for Language and Cognition

Annual Report 2023 01 June 2024

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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 national and 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. Research takes place within these four theme groups, but also between members of those four research groups. 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 language and Dutch dialects, especially those spoken in the northern part of the Netherlands (Dutch, Frisian, and Lower Saxon, including Grunnings).

In addition, the CLCG focuses on several of the themes of the Sector Plan Social Sciences and Humanities, in particular on the themes Humane AI and Languages & Cultures.

Reflection

2023 has been an eventful year for CLCG, with a relatively large number of new staff members (including both new members financed by the Sector Plan as well as new members filling regular vacancies). Furthermore, several research grants have been obtained (highlights: ERC Consolidator for Ana Guerberof, and NWO VIDI for Arianna Bisazza), earning a total of 3.7 million euros (much more than in the two previous years).

A further development is the rapid growth of CSC sponsored PhD students, in particular in the Computational Linguistics group. 2023 also is the first year in which the "startersbeurzen" were available, and first steps have been taken to come up with plans for these positions and recruit candidates. These positions hopefully compensate for the unfortunate loss of the regular PhD positions financed by the Faculty.

In the tables below we observe a substantial increase in the number of research outputs (only partly explained by the increase in staff). Infrastructure for research is mostly of good quality, and there are plans to improve the location of these facilities. An important improvement has been the new position of a Lab Manager (Irene Mognon) which has already been shown to be extremely important for using the lab facilities (very important for CLCG), and the quality of the research based on that. We emphasize that the state of the infrastructure (lab facilities) and lab support is extremely and increasingly important for CLCG research.

CLCG was also very active in disseminating information to the general public. Members of the Computational Linguistics group were explaining the pros and cons of ChatGPT (which appeared at the end of 2022) at a large number of different venues, as well as in a very successful information event about ChatGPT in January 2023 which had to be relocated due to a much larger audience than originally expected.

Finally, we organized a potentially annual social event, the CLCG party, in January 2023. In the meantime, the second CLCG party has been held in January 2024, and there are plans for a future party in 2025.

Staff

The organizational structure of CLCG did not change much in comparison to the previous year. A new CLCG coordinator, Merel Lobo, started in the summer of 2023.

A new regulations document for research institutes was adopted by the Faculty Board at the end of 2023. The institute is in the process of implementing the required changes.

In the tables below, we document the development of the membership of the institute over the last three years. We added an additional line "Staff", summing up the Assistent professor, Associate professor and the Full professor rows, since this number constitutes the size of the institute and research groups in terms of permanent positions. In this "Staff" row, the growth of the institute (mostly caused by the Sector Plan) is clearly visible.

The number of PhD students is somewhat confusing caused by different ways of reporting in different years, but we note two tendencies: the number is going down since we no longer have bursary PhD students, but on the other hand the number is going up because of an increase in externally funded positions (e.g. CSC) and sandwich positions. Given the introduction of the "startersbeurzen", we are not entirely pessimistic about the number of PhD students for the next few years.

For the individual groups, it is interesting to note that the group sizes are now very comparable, in terms of permanent research staff fte. However, this is rather different for the number of PhD positions. In the Computational Linguistics group there are many more students now than in any of the other groups (caused by several funded research projects as well as an increasing number of CSC students).

A problematic case is the Discourse and Communication group where several full professors retired over the last few years for which we were not successful in replacing them at the same level. The low number of PhD students in this research group may be attributed to this. The recently (2024) awarded NRO project to Ninke Stukker (for a new post-doc) may help in improving the situation in this group.

Table 1. Research Staff CLCG Total

	2021	2022	2023
Research unit			•
Scientific staff (1)	# / FTE	# / FTE	# / FTE
Assistant professor	36 / 12	35 / 12,6	41,7 / 14,7
Associate professor	11 / 3,7	10 / 3,7	10,8 / 4,0
Full professor	14 / 5	13 / 4,9	12,8 / 5,0
Staff	61/20,7	58/21,2	65,3/23,7
Postdocs (2)	5 / 3,5	3/2	5,3 / 3,5
PhD candidates (3)	41 / 42,6	30 / 29,7	18,9
Total research staff	107 / 66,8	91 / 52,9	89,5 / 45,0
Support staff	-	2 / 0,8	1,7 / 1,0
Visiting fellows	-	-	-
Total staff	107 / 66,8	93 / 53,7	91,2 / 46,0

Table 1a. Research Staff Computational Linguistics

	2021	2022	2023
Research unit	1		
Scientific staff (1)	# / FTE	# / FTE	# / FTE
Assistant professor	8 / 2,8	8 / 3,2	8,8 / 3,5
Associate professor	4 / 0,9	2 / 0,8	3,6 / 1,4
Full professor	4 / 1,2	3 / 1,2	3,0 / 1,2
Staff	16/4,9	13/5,2	15,4/6,1
Postdocs (2)	1 / 1,0	1 / 1,0	1,1 / 1,1
PhD candidates (3)	7 / 5,9	6 / 5,3	9,3 / 8,4
Total research staff	24 / 11,9	19 / 10,5	25,8 / 15,5
Support staff	-	-	0,7 / 0,1
Visiting fellows	-	-	-
Total staff	24 / 11,9	27 / 18,2	26,5 / 15,6

Table 1b. Research Staff Discourse & Communication

	2021	2022	2023
Research unit		L	L
Scientific staff (1)	# / FTE	# / FTE	# / FTE
Assistant professor	9 / 3,1	9 / 3,4	9,1 / 3,4
Associate professor	1 / 0,4	1 / 0,4	1,0 / 0,4
Full professor	3 / 0,7	2 / 0,6	1,3 / 0,4
Staff	13/4,2	12/4,4	11,4/4,2
Postdocs (2)	-	1 / 1,0	1,0 / 1,0
PhD candidates (3)	1 / 0,8	1 / 0,8	1,0 / 0,8
Total research staff	14 / 4,9	13 / 5,4	13,3 / 6,0
Support staff	-	-	-
Visiting fellows	-	-	-
Total staff	14 / 4,9	13 / 5,4	13,3 / 6,0

Table 1c. Research Staff Neurolinguistics & Language Development

	2021	2022	2023
Research unit	l	L	
Scientific staff (1)	# / FTE	# / FTE	# / FTE
Assistant professor	11 / 3,6	11 / 3,8	13,2 / 4,3
Associate professor	4 / 1,3	3 / 1,0	2,3 / 0,7
Full professor	5 / 1,9	4 / 1,6	5,0 / 2,0
Staff	20/6,8	18/6,4	20,5/7,0
Postdocs (2)	2 / 1,8	1 / 1,0	1,1 / 0,3
PhD candidates (3)	7 / 5,4	3 / 3,4	5,3 / 5,3
Total research staff	29 / 14,0	24 / 13,9	26,8 / 13,0
Support staff	-	-	1 / 0,8
Visiting fellows	-	-	-
Total staff	29 / 14,0	24 / 13,9	27,8 / 13,8

Table 1d. Research Staff Theoretical & Empirical Linguistics

	2021	2022	2023
Research unit	l	I .	I
Scientific staff (1)	# / FTE	# / FTE	# / FTE
Assistant professor	9 / 2,5	8 / 2,5	10,6 / 3,1
Associate professor	6 / 1,5	4 / 1,4	4,0 / 1,5
Full professor	4 / 1,5	4 / 1,5	3,6 / 1,4
Staff	19/5,5	16/5,4	18,2/6,0
Postdocs (2)	2 / 0,7	3 / 1,9	2,1 / 1,1
PhD candidates (3)	-	1 / 0,8	3,3 / 3,3
Total research staff	21 / 6,2	21 / 7,6	23,6 / 10,4
Support staff	-	-	-
Visiting fellows	-	-	-
Total staff	21 / 6,2	21 / 7,6	23,6 / 10,4

Funding

This year, the CLCG attracted €3.724.107 in research grants (Table 3). That is more than one million more than in 2022 and 2021.

Table 2. Research Funding

	2021	2022	2023
Research unit	FTE / %	FTE / %	FTE / %
Funding:			
Direct funding (1)	52.9 / 81%	44.8 / 83%	66.1 / 84%
Research grants (2)	9.2 / 14%	7.7 / 14%	10.0/ 13%
Contract research (3)	3.2 / 5%	1.3 / 2%	3.0 / 4%
Other (4)	o / o%	0 /0 %	0 / 0 %
Total funding	65.3 / 100%	53.8 / 100%	79.1 / 100%
Expenditure:			
Personnel costs	3,041,892 / 79%	3,188,996 / 80%	4,016,996 / 81%
Material costs	464,295 / 12%	514,800 / 13%	673,933 / 14%
Other costs	365,137 / 9%	263,426 / 7%	272,472 / 5%
Total expenditure	3,871,324 / 100%	3,967,222 / 100%	4,963,401 / 100%

Table 3. Research Grants

Tido	Cmove	Principal Investigator	Ctowt	End	Funding	V.C.
Title	Group	Investigator Ana Guerberof Arenas	Start	End 8/28	body	K€
INCREC	CL	Ana Guerberoi Arenas	9/23	8/28	EU	1993
VIDI - Polyglot Machines:						
Human-like Learning of						
Morphologically Rich	OT.	Arianna Bisazza	2/24	1/00	NWO	800
Languages	CL	Arianna bisazza	2/24	1/29	NWO	800
(De)Polarizing discourse:						
developing an intervention						
that targets trigger points					Ubbo	
for polarization in demodratic conversation.	DICCO	Milro Huislas	0/04	1/00	- 10 10 0	000
	DISCO	Mike Huiskes	2/24	1/28	Emmius	290
The Impact of Aging,						
Cognition, and Sensory	CL	Katharina Polsterer	0/00	0 /0=	NIMO	006
Function on Speech	CL	Katharina Poisterer	9/23	8/2/	NWO	226
Language assessment during						
Deep Brain Stimulation surgery_NWO-XS	NLD	Adrià Rofes	8/23	7/94	NWO	50
Educational success and	NLD	Adria Roics	0/23	// 24	NWO	30
language impairments in children with paediatric						
posterior fossa tumours	NLD	Vânia de Aguiar	2/24	1/05	NWO	
OC XS project "Exploring	NLD	vallia de Agular	2/24	1/25	NWO	50
the link between speech						
sound perception and						
production at the level of the						
individual"	TEL	Alexander Martin	10/23	0/24	NWO	45
	CL	Antonio Toral	$\frac{10/23}{1/23}$	11/26	FII	43
E+ LT-LiDER	CL	THICOID TOTAL	1/23	11/20	10	43
Imminent 2023 Language					Translated	
Technology Innovators grant	CL	Gabriele Sarti	0/00	5/24		
		Massih Zekavat	$\frac{3/23}{5/23}$	$\frac{5/24}{10/23}$	OCM	20
VIS Massih Zekavat	DISCO	Massiii Zekavat	5/23	10/23	OCW	15
Using eye-tracking as an	, , ,	Marije Michel	9/00	1/05	UC London	,
educational tool	NLD	marije michei	8/23	1/25	oc London	13

Transnational Spaces for	TEL	In als Dans de	0/00	-/04	DAAD	
Spanish Teacher Education	IEL	Josh Prada	9/23	5/24	DAAD	10
Incorporating cognition into						
models of speech motor						
control	CL	Defne Abur	5/23	-	YAG-SER	6
English Language Learning						
and Wellbeing in Refugees	NLD	Marije Michel	9/23	12/24		6
Inseq: An Interpretability					Netherlands	
Toolkit for Sequence					eScience	
Generation Models	CL	Gabriele Sarti	6/23	5/24	Center	2
Humanities Engage with			, ,	3, .		
Local Level Organizations						
(HELLO) Project	NLD	Anastasia Pattemore	9/23	19/94	YARN	1
Science communication at	TULL	Audrey	9/23	12/24	111111	1
the faculty of Arts	TEL	Rousse-Malpat	1/23	10/04	YARN	1
	IEL	Rousse-Marpat	1/23	12/24	IAKN	1
Investigating the Association between Speech						
and Model-Based						
I .	OI	Defe a Albert	(100	10/01	MA DAT	_
Estimations of Forgetting	CL	Defne Abur	6/23		YARN	1
E+ Rocket		Sake Jager¹	12/23			90
VIS Alsu Buiting - Russisch		Alsu Buiting	2/23		OCW	15
VIS Fabio Galati - Italiaans		Fabio Galati	2/23	12/23	OCW	15
VIS Fildokic		Mirjana Fildokic	9/23	6/24	OCW	15
VIS Cabrera Fernández		Beatriz Cabrera				
		Fernández	9/23	2/24	OCW	15
Total						3724

Output

We happily note a steady increase in the research output in the table below, in particular for the categories "Refereed articles" and "Conference papers" (the latter papers are usually refereed as well), at the cost of a decrease of Book chapters. The small numbers in the other categories make it hard to recognize any patterns.

The growth appears to be larger than the small increase in permanent staff appears to account for. Possibly, the numbers in previous years were negatively impacted by the pandemic. Another potential factor is the relatively large number of newly hired younger researchers who have succeeded retired colleagues.

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¹ All investigators that are listed without Research Group are linguists who work as language teachers at the University of Groningen. It is not clear whether these employees have a contract containing research hours, and thus, whether or not they are CLCG members.

Table 4. Research Output

Research unit	2021	2022	2023
Refereed articles	99	115	134
Non-refereed articles	4	4	6
Books	6	3	6
Book chapters	17	34	22
PhD theses	15	8	12
Conference papers	35	31	40
Professional publications	4	16	6
Publications aimed at the general public	1	1	1
Other research output	-	-	28
Total publications	181	212	255

Academic publications

Top 3 Academic publications/events CL:

- WikiBio: a Semantic Resource for the Intersectional Analysis of Biographical Events. Stranisci, M. A., Damiano, R., Mensa, E., Patti, V., Radicioni, D. P. & Caselli, T., 2023, Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics: Long Papers. Rogers, A., Boyd-Graber, J. & Okazaki, N. (eds.). Association for Computational Linguistics, ACL Anthology, p. 12370-12384 15 p. (Proceedings of the Annual Meeting of the Association for Computational Linguistics; vol. 1). [Outstanding Paper Award]
- 2. Making more of little data: Improving low-resource automatic speech recognition using data augmentation. Bartelds, M., San, N., McDonnell, B., Jurafsky, D. & Wieling, M., 2023, Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers). Rogers, A., Boyd-Graber, J. & Okazaki, N. (eds.). Association for Computational Linguistics (ACL), Vol. 1. p. 715-729 15 p.
- 3. Communication Drives the Emergence of Language Universals in Neural Agents: Evidence from the Word-order/Case-marking Trade-off. Lian, Y., Bisazza, A. & Verhoef, T., 2023, In: Transactions of the Association for Computational Linguistics. 11, p. 1033-1047 15 p.

Top 3 Academic publications/events DISCO:

- 1. How to enable healthier and more sustainable food practices in collective meal contexts: A scoping review. Graça, J., Campos, L., Guedes, D., Roque, L., Brazão, V., Truninger, M. & Godinho, C., 1-Aug-2023, In: Appetite. 187, 14 p., 106597.
- 2. Coding Metaphors in Interaction: A Study Protocol and Reflection on Validity and Reliability Challenges. Declercq, J. & van Poppel, L., 1-Jan-2023, In: International journal of qualitative methods. 22, 9 p.
- 3. Engaging the public: English local government organisations' social media communications during the COVID-19 pandemic. Love, R., Darics, E. & Palmieri, R., Dec-2023, In: Applied Corpus Linguistics. 3, 3, 13 p., 100060.

Top 3 Academic publications/events NLD:

- 1. Al-Hoorie, A. H., Hiver, P., Larsen-Freeman, D., & Samp; Lowie, W. (2023). From replication to substantiation: A complexity theory perspective. Language Teaching, 56(2), 276-291.
- 2. Nijmeijer, S., van Tol., M.J., Aleman, A., & Keijzer, M, (2023). Musical and multilingual experience are related to healthy aging: better some than none but even better together. The Journals of Gerontology: Series B(gbac185) https://pubmed.ncbi.nlm.nih.gov/36454717/
- 3. Svaldi, C., Ntemou, E., Jonkers, R., Kohnen, S., & Emp; de Aguiar, V. (2023). Language outcomes in children who underwent surgery for the removal of a posterior fossa tumor: A systematic review. European Journal of Paediatric Neurology.

Top 3 Academic publications/events TEL:

1. Knooihuizen, R. (2023). The linguistics of the history of English. Palgrave MacMillan. https://doi.org/10.1007/978-3-031-41692-7

- 2. Jan-Wouter Zwart. (2023). Verb positions and basic clause structure in Germanic. Oxford Research Encyclopedia of Linguistics. Oxford: Oxford University Press. https://doi.org/10.1093/acrefore/9780199384655.013.971
- 3. De Vries, M. (2023). Are there different kinds of appositive relative clauses? Linguistics in the Netherlands, 40(1), 230-247. https://doi.org/10.1075/avt.00089.dev

Societal impact

Top 3 Societal impact publications/events CL:

- 1. National coverage of Streektaalstrijd, Raoul Buurke interviewed on NPO Radio 1 https://www.nporadio1.nl/fragmenten/de-taalstaat/cf67d736-b57c-4737-818a-7e541d26b669/2024-01-20-raoul-buurke-over-het-bordspel-streektaalstrijd
- 2. Hedwig Sekeres. Podcast Oog op Wetenschap. https://research.rug.nl/en/clippings/wat-verandert-er-aan-het-gronings
- 3. Many different events related to ChatGPT, among others:
 January 18 2023: An Evening with ChatGPT; September 29th 2023: European Researchers'
 Night, at the Forum Groningen. We organized a ChatGPT demo (several members) and an LM
 interpretability demo (several members); September 30th 2023: Zpannend Zernike, at the
 Forum Groningen. We organized a ChatGPT demo for children (several members); Rik van
 Noord gave an invited talk at "Kenniscafe Assen": evening lecture to the general public about
 ChatGPT (link); Rik van Noord was interviewed for "De staat van Drenthe" briefly explaining
 ChatGPT (link).

Top 3 Societal impact publications/events DISCO:

- 1. Communicating Trends in Sustainability Transitions: Minority Beliefs and Dynamic Norms about Plant-Based Food Consumption. Malta, I., Hoeks, J. & Graça, J., 20-Nov-2023, (E-pub ahead of print) In: Environmental Communication. 17
- De effecten van het werken met een toolbox op de kennis, self-efficacy en vaardigheden van leerlingen die alinea's schrijven. van Winden, A., van Haaften, T., Stukker, N., Janssen, F. J. J. M., de Glopper, K. & van Schooten, E., 2023, (Accepted/In press) In: Tijdschrift voor taalbeheersing.
- 3. Technieken van de therapeut: een conversatieanalytisch perspectief op taal in therapie Knol, L. & Huiskes, M., 9-Mar-2023, In: Tijdschrift voor Psychiatrie. 65, 3, p. 146-150 5 p.

Top 3 Societal impact publications/events NLD:

- An Open access repository for later life language learning researchers, by the BALAB group of Merel Keijzer. 4L-CARE (later life language learning: Considerations for Research and Education). Developed together with Simone Pfenninger: https://4lcare.nl/tiki-index.php
- 2. Multilingual newsletter and workshops related to the NRO-Comenius project Spreek je Talen(ten) aan! by Audrey Rousse-Malpat.

 https://www.rug.nl/research/clcg/research/nld2017/spreek-je-talenten-aan
- 3. Discuit-tool, published at the end of the eSciencecenter Fellowship of Dörte de Kok: De Kok, D. (2023). Discuit [Software]. https://doi.org/10.5281/ZENODO.7671856

Top 3 Societal impact publications/events TEL:

- Veerman, E., Danbury, E., Duarte, J., & Gaikhorst, L. (2023). Meertaligheid in het basisonderwijs: Handboek voor onderwijsprofessionals: Hoe benut je meertalige achtergronden van kinderen op school en in de klas? Amsterdams Universiteitsfonds. https://openresearch.amsterdam/nl/page/98893/meertaligheid-in-het-basisonderwijs
- 2. Schüppert, A. (2023). Interskandinavische Kommunikation. In B. Henningsen (Ed.), Nordeuropa: Handbuch für Wissenschaft und Studium Rombach Verlag.

PhD projects

As discussed earlier in the DOZI meetings, the table below is hard to interpret. Thanks to GSH, we now also can inspect a further table (the second table below) which is perhaps more useful for

understanding the trend with respect to the length of PhD promotion trajectories. Even if the numbers per year are perhaps too small to make any firm conclusions, it appears that the average number of months that students finish their PhD after the end of their contract tends to become slightly smaller (but of course for the years in which some students are still working on their PhD the averages will still change - this table therefore also has its limitations).

In any case, our impression is that the large majority of PhD students in CLCG finish within a reasonable amount of time after the end of their contract. The go/no-go meetings after a year are always chaired by the CLCG director, and the impression is that essentially in all cases supervisors are well aware of their responsibilities for supervising their students. Finally, the delay causes by the pandemic in earlier years is now no longer a concern in practice.

Table 5a. Graduation rate

Enrolme	ent			Success rates	Success rates										
Starting year	Enrolment (male / (M+F) female)			(male / (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	Discon- tinued			
2016	2	10	12	2 / 17%	10 / 83%	11 / 92%	11 / 92%	0 / 0%	o / o%						
2017	3	10	13	2 / 15%	7 / 54%	9 / 69%	11 / 85%	1 / 8%	1 / 8%						
2018	3	9	12	3 / 25%	6 / 50%	7 / 58%	7 / 58%	5 / 42%	o / o%						
2019	6	6	12	1 / 8%	5 / 42%	5 / 42%	-	7 / 58%	o / o%						
2020	3	11	14	2 / 14%	2 / 14%	-	-	10 / 71%	2 / 14%						
2021	3	3	6	0 / 0%	-	-	-	6 / 100%	0 / 0%						
2022	6	9	15	0 / 0%	-	-	-	14 / 93%	1 / 7%						
2023	4	15	19	0 / 0%	-	-	-	18 / 95%	1/5%						
Total	30	73	103	10 / 10%	-	-	-	61 / 60%	5 / 5%						

Table 5b. Outflow PhD-cohorts per UNL-type

functietype	201	4			201	5			201	6			201	7			2018				2019			
CLCG	0		•	μ	0		•	μ	0		•	μ	0		•	μ	0		•	μ	0		•	μ
1a. Werknemer-promovendus	7	0	6	+4	6	0	5	+12	4	0	4	+15	2	0	1	+28	0	0	0	-	9	6	3	+ 3
1b. Promoverend medewerker	1	0	1	+29	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
2a. Beurspromovendus eigen uni / umc	0	0	0	-	0	0	0	-	3	0	3	+10	10	1	9	+13	11	5	6	+10	1	1	0	- 2
2b. Beurspromovendus andere beursgever	2	0	2	+33	1	0	0	-	5	0	5	+14	1	0	1	+0	1	0	1	+5	2	2	0	+7
3. Extern gefinancierde promovendus	3	0	3	+19	3	0	2	+19	1	1	0	+19	4	2	1	+10	2	2	0	+17	1	1	0	+7
4. Buitenpromovendus (eigen middelen)	2	0	2	-	4	0	3	-	3	0	2	-	2	0	1	-	5	3	2	-	0	0	0	i
Onbekend	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
totaal	15	0	14	+15	14	0	10	+14	16	1	14	+14	19	3	13	+13	19	10	9	+11	13	1 0	3	+3

∘ = intake

 \Box = active

• = graduated

 μ = average number of months +/- end date contract

Open Science

Table 6. Open Access Publishing

OA status	Count of	% of OA status
	OA status	
closed	38	16%
gold	29	12%
green/unspecified	70	30%
hybrid	67	29%
n/a	29	12%
Grand Total	233	100%

The large majority of publications are open access, and CLCG is a firm supporter to make all publications available by open access. The fact that the total number of publications in this table is somewhat different from the table above is probably due to the timing of when the publications for 2023 were extracted from the Pure database.

SWOT analysis

SWOT analysis of the institute

Strengths

- CLCG comprises a large group of talented, dedicated researchers covering various branches of linguistics, who 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 positive and lively with many collaborations between researchers of different backgrounds and with other faculties.
- CLCG research is societally relevant, and several CLCG researchers actively make their research visible and accessible to the general public.
- Some of the required infrastructure for research is excellent: in particular computational resources (HPC facilities) and some of the resources for speech research (the mobile speech lab).
- Good contacts with regional, national and international researchers for collaborations in (multidisciplinary) research are in place.
- Good contacts with regional and national organizations (schools, hospitals, companies) for more applied and societally relevant research are in place.

Weaknesses

- Research facilities (the various labs) continue to be partly unsatisfactory, even though the situation has substantially improved over the last few years;
- Most researchers struggle to varying degrees with the relatively heavy teaching load
- Funds available for research (conference visits, open access publications, ..) are very limited, in particular for junior researchers.
- Support for research is not of sufficient quality (even if the Faculty has invested considerably in this over the last few years)

Opportunities

- The availability of more space in the Harmony building after the Law Faculty has moved out makes it possible to reorganize the spaces for Lab facilities. Concrete plans for this have been worked out and are now being realized.
- Various new (young, enthusiastic) staff members have been hired (Sector Plan) and are now actively supporting and improving CLCG research
- The new interdisciplinary schools have begun to facilitate interdisciplinary research, and have started to organize meetings and workshops which already leads to new promising initiatives.

Threats

- Given the expected decrease of student numbers, and the current political developments, there is uncertainty about finances for the next few years. This may lead to an undesirable situation in which we cannot afford to appoint successors if staff members or support staff members leave.
- In particular, it is a threat for CLCG if the current Lab Manager is not replaced, or not replaced at the required level of expertise
- Research in language, linguistics and communication is rapidly evolving. Empirical methods require more intricate statistical and computational models. The lack of sufficient expertise on advanced statistical and computational techniques may become a limiting factor.

SWOT analysis of Computational Linguistics

Strengths

The 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. The CL group has grown considerably in the last years and has now over 40 members. This 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. 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 programs, 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. The recent new hires have helped, but prospects are still somewhat problematic (a recent vacancy of assistant professor could not be filled, and we recently were informed that another assistant professor is leaving after the summer).
- 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). That said, the situation has improved recently, 29% of the faculty members in our group are women and gender is roughly balanced in our PhD cohort.
- Computing: it can happen that we do not have access to enough computation power to run our experiments, which could get delayed. In addition, the current computing nodes in the university's supercomputer do not have enough memory to work properly with the state-of-the-art models in our field: large language models.

Opportunities

- Industrial collaboration and knowledge transfer
- Young field with increasing interest worldwide, both academic and commercial
- 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. Since, 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

Threats

Industry jobs currently represent a serious competition to academia in terms of recruitment at all levels (from PhDs to professors). Similarly, there is competition from universities that offer better conditions to staff in the CL research area (e.g. lower teaching load).

Lack of adequate computing resources might make the research of the group less competitive.

SWOT analysis of Neurolinguistics & Language Development

Strengths

- Active chair groups providing world-class research in all the different areas of NLD as
 evidenced by performance indices such as top-tier publications, grant successes,
 invited (keynote) talks, organization of acknowledged conferences, board
 memberships in associations a.s.o..
- Staff use a wide range of advanced experimental methods (EEG, fMRI, fNIRS, RT measurement, eye tracking and pupillometry, language assessment protocols, observation tools, and a variety of cognitive tasks) and cutting-edge statistical methods for analysis (e.g., Baysian statistics)
- Staff are engaged in a lot of international collaborations, also due to joint PhD projects (cotutelles, joint/Sandwich degrees)
- Interdisciplinary research projects in collaborations with Medical Sciences, Philosophy, Science & Engineering;
- Expertise is acknowledged by societal partners by asking staff into their advisory boards and/or expertise teams (e.g., Meesterschapsteam Moderne Vreemde Talen)
- Highly diverse staff in terms of gender, geography, language and cultural background

Weaknesses

- Within NLD there is not a strong feeling of cohesion. Given that we teach in different programmes and are based in different clusters, it is not always easy to find each other, in particular, there are relatively few opportunities to meet informally. To date, there are no research meetings organized for the entire NLD group.
- Staff does not always affiliate themselves as CLCG (NLD) members, that is, the CLCG is not always mentioned in publications, which means that not all CLCG research is as visible as it could be.
- Collaboration with other partners (e.g, UMCG) can be challenging;
- Growing difficulty to find participants for experimental/empirical research projects. Given that the faculty does not have its own participant pool and does not (yet) participate in SONA system of GMW. This includes participant groups within the university, secondary and primary schools, as well as infants.

Opportunities

- The establishment of the new CLCG lab spaces in the Harmonie building are going to make a big difference. It will also make sharing of expertise and experimental materials easier.
- Research support provided by lab manager (Irene Mognon) and CLCG office (Merel Lobo), GSH (Rachael Fletcher) and others is greatly appreciated as it alleviates administrative and organizational workload.
- Sectoral plan theme of languages and cultures is closely related to some NLD research and can put it more prominently on the agenda. In particular, new collaborations within the faculty (but outside the CLCG subgroup) can be established.

- With a close link to strategic goals of the university (e.g., healthy aging, sustainable societies), where our research is engaged in (incl. education) a lot of the NLD research is at the forefront of societally relevant research.
- AI applications building on Large Language Models opens many new opportunities for researching, collecting and analyzing language data.

Threats

- Now that the two standardly available annual PhD positions have been budgeted out, PhD scholarships (instead of contracts) are no longer available, and CSC scholarships are soon to be phased out, it will be more difficult to attract high level PhD candidates. This also has consequences for our early career staff that needs PhD supervision experience to advance on the career ladder.
- Decreasing student numbers in the teaching programmes, in which NLD researchers teach, may result in fewer opportunities to attract new staff.
- Generally, workload (teaching, administration, service) remains high which means that staff finds it difficult to secure research time

SWOT analysis of Discourse & Communication

Strengths

DISCO staff members have extensive national and international networks, and publish in Q1 international journals. There has been a relatively high number of research proposals submitted for (external) funding, of which several were awarded. Their research is multidisciplinary and societally relevant and there are strong ties with societal partners. They specialize in fundamental research in applied contexts such as Health care, Sustainability Developments, and Education. There are regular research meetings, both general (DISCO meetings) and specific (e.g., Data Sessions, Communication and Cognition meetings on sustainability, Responsus).

Weaknesses

In general, though a number of measures have been taken, work pressure from teaching and admin is still quite high, leading to problems finding enough time for research. Added to that, management capacity at CIW/CIS is at present dangerously low, with only one full professor and one associate professor for twenty-two staff members, leading to limited time for supervising research proposals and the like. Another point is that with multidisciplinarity also comes the risk of fragmentation, and some researchers may find themselves rather isolated in terms of research interest and collaboration. A more specific point is that there is as yet no system in place to deal with the increase in costs associated with the new demands for relatively large and diverse groups of participants in survey research (e.g., as conducted by members of the Communication and Cognition group).

Opportunities

Quite a number of applications for external research funds were submitted in 2023 (e.g., NWO VIDI, ERC, Ubbo Emmius PhD projects, NRO), which, if granted, may lead to a (small) increase in externally funded staff in the years to come.

More time for research is also expected from the application of the 'Sectorgelden', which allows for a reduction of teaching hours. In general, there is a very good fit of the research with the 'Sector' themes, and also with the UG Research Schools (especially Aletta Jacobs and Rudolf Agricola) which may help acquire future funding.

Finally, there was an increase in the number of PhD projects supervised by DISCO members, leading to more research activities and research output.

Threats

Due to the pending coming into law of the Wet Internationalisering in Balans (Wiib), there will probably be much fewer international students coming to Groningen to take part in the CIS / Master CIW programs that DISCO members teach in. In addition, it has been predicted there will be fewer students from the Netherlands as well, which may make a vacancy stop inevitable, meaning that internal funding must decrease, so some vacancies may not be filled in for a longer period of time. This will lead to a reduction in group size, research activities and research output.

As to internal threats, the educational reforms envisaged by the Faculty Board for the coming years (i.e., '10 ECTS' operation) may take more time than expected, which could lead, in practice, to a reduction of research time.

SWOT analysis of Theoretical and Empirical Linguistics

Strengths

Internationally leading researchers in theoretical linguistics.

Weaknesses

Few opportunities for interdisciplinary and/or societally relevant research.

Opportunities

We are experiencing an uptick in students' engagement with theoretical linguistics, thanks to the new master track of Theoretical Linguistics.

Threats

Opportunities for attracting PhD-candidates have almost completely disappeared, because students from our 1-year master track of Theoretical Linguistics are perceived to be lesser candidates compared to students who have obtained a Research Master diploma, and because of the earmarking of positions for interdisciplinary or theme driven research.