

Groningen Institute of Archaeology

Annual Report 2020

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Reflection

While the world changed dramatically in 2020 due to Covid 19, the tables in this annual report may suggest that for GIA 2020 was an ordinary year. It wasn't. The sustained closure of buildings and especially lab facilities, at GIA, the UG and in all laboratories across Europe, will have a lasting impact on our work and related management data. For tenured staff, 2020 implied a focus on research (publications) that did not require new data, and therefore did not need access to facilities (labs, storage, documentation).

For all GIA staff with temporary positions (PhD students and postdoctoral researchers), 2020 was a year with delays due to restricted access to collections or labs, and for some also anxieties due to loneliness and worries about loved ones, often far away. GIA has tried to ameliorate the circumstances by increased social support and redesigning projects to make them more Covid-proof. In the Autumn of 2020 the UG was able to financially compensate for some of the delays; this was much appreciated by those it concerned. Under the current continued restrictions, the 2020 and 2021 PhD positions have focused on big data archaeology, where digital analysis is less dependent on access. We expect the Covid-pandemic to have led to more projects based on online data, especially for PhD and postdoc project

The GIA support staff also suffered in the Spring of 2020, when closure of buildings made their work impossible. We appreciate that their position was prioritised when the UG reopened before the Summer. During the second lockdown, they were able to continue their work in the GIA buildings, while keeping to the distance and hygiene measures. We are grateful that they have been able to continue their work as much as possible.

2020 was also the year GIA celebrated its centennial. The Covid pandemic has mostly turned this into a digital event. In January we had a breakfast with all GIA employees and co-organised a course for amateur archaeologists from the region. Moreover, the exhibition *Dig it All* is still on display in the university museum – even more digital than anticipated. The 2020 issue of *Paleo-aktueel* focusses on the role of archaeology in the present-day society. It has become a substantial, varied and interesting volume which will be presented early in 2021, together with a photo booklet on 100 years of archaeology in Groningen.

Top 10 scientific publications

Attema, P.A.J., J. Bintliff, P.M. van Leusen et al., 2020. A Guide to Best Practice in Mediterranean Surface Survey Projects. *Journal of Greek Archaeology* 5, 1-62. (Journal Impact Factor unknown)

Attema, Peter & Remco Bronkhorst (eds.), 2020. *The People and the State, Material Culture, Social Structure and and political centralisation in central Italy (800 - 450 BC)*. Corollaria Crustumina 4. Groningen/Eelde, University of Groningen/Groningen Institute of Archaeology & Barkhuis.

Berthon, R., M. Mashkour, P. Burger & **C. Çakırlar**, 2020. Domestication, diffusion and hybridization of the Bactrian camel. In: D. Agut-Labordère & B. Redon (eds.), *Les vaisseaux du désert et des steppes: Les camélidés dans l'Antiquité (Camelus dromedarius et Camelus bactrianus)*. Lyon, MOM Editions, 21-26.

Çakırlar, C., B. Rianne, F. Koolstra, K. Cohen, & D.C.M. Raemaekers, 2020. Dealing with domestic animals in the fifth millennium cal BC Dutch wetlands: New insights from old Swifterbant assemblages. In: K.J. Gron, L. Sorensen & P. Rowley-Conwy, P. (eds.), *Farmers at the Frontier: A Pan-European Perspective on Neolithisation*. Oxford: Oxbow, 263-287.

Huisman, H., Niekus, M. J. L. T., Peeters, H., Geerts, R. C. A. & Müller, A., 2020, Arguments in favour of an anthropogenic origin of Mesolithic pit hearths. A reply to Crombé and Langohr (2020). *Journal of Archaeological Science* 119, 105144. (Journal Impact Factor 3.04)

Kamjan, S., R.E. Gillis, C. Çakırlar & D.C.M. Raemaekers, 2020. Specialized cattle farming in the Neolithic Rhine-Meuse Delta: Results from zooarchaeological and stable isotope ($\delta^{18}O$, $\delta^{13}C$, $\delta^{15}N$) analyses. *PLoS ONE* 15 (10), e240464. (Journal Impact Factor 2.74)

Krol, T., Nieuwhof, A. & Dee, M. W., 2020. The chronology of Anglo-Saxon style pottery in radiocarbon dates: Improving the typo-chronology. *Oxford journal of archaeology* 39(4), p. 410-441. (Journal Impact Factor 0.61)

Shoda, S., A. Lucquin, O. Yanshina, Y. Kuzmin, I. Shewkomud, V. Medvedev, E. Derevianko, Z. Lapshina, O. Craig, & **P. Jordan**, 2020. Late Glacial hunter-gatherer pottery in the Russian Far East: Indications of diversity in origins and use. *Quaternary Science Reviews* 229, 106124. (Journal Impact Factor 4.572)

Sinding, M-H. S., S. Gopalakrishnan, J. Ramos-Madrigal, M. de Manuel, V.V. Pitulko, L. Kuderna, T.R. Feuerborn, L.A.F. Frantz, F.G. Vieira, J. Niemann, J.A. Samaniego Castruita, C. Carøe, E.U. Andersen-Ranberg, **P.D. Jordan**, E.Y. Pavlova, P.A. Nikolskiy, A.K. Kasparov, V.V. Ivanova, E. Willerslev, P. Skoglund & 15 others, 2020. Arctic-adapted dogs emerged at the Pleistocene-Holocene transition. *Science* 368 (6498), 1495-1499. (Journal Impact Factor 41.845)

Wiersma, C.W., 2020. House (centric) societies on the prehistoric Greek mainland. *Oxford Journal of Archaeology* 39 (2), 141-158. (Journal Impact Factor 0.61)

Top 10 societal outreach activities

Attema, P., 2020. Documentary on the NWO Avellino Event Project realized by Karin Schagen of Sciencedoc with the AE project team, ingezonden naar InScience - Dutch International Science Film Festival 2021.

Attema, P. & P.M. van Leusen, 2020. Under the volcano and far away. Effects of the Bronze Age eruption of Monte Somma-Vesuvius on settlement and land use in the Campanian and Pontine coastal plains. *Tijdschrift voor Mediterrane Archeologie* 32 (64), 14-23.

Çakırlar, C., 2020. RUG nominatie voor de NPO Klokhuis Wetenschapsprijs.

Desjardins, S. P. A., T.M. Friesen & **P. Jordan**, 2020. Looking back while moving forward: How past responses to climate change can inform future adaptation and mitigation strategies in the Arctic. *Quaternary International* 549, 239-248.

Raaff, Y. de, S. Voutsaki, T. Verlaan & G. Nobles, 2020. Experimentele archeologie in een digitale wereld: Een Virtual Reality 3D-reconstructie van Tombe 21 van de noordelijke begraafplaats van Ayios Vasileios (Lakonië, Griekenland). *De Spijker* 41 (4), 24-27.

Raemaekers, D.C.M., 2020. Een eeuw speuren in de grond (A century of archaeological research). *Dagblad van het Noorden* 19 december 2020, 4 pp. (Overview of GIA history on behalf of its centennial, author F. von Hebel)

Raemaekers, D.C.M., 2020. Praktijkcursus Archeologie. Organisatie (co-organised with AWN Noord (foundation of amateur archaeologist) and Bachur (student association).

Rufolo, S. & **S. Desjardins**, 2020. Inuit origins: Thule to Inuit transition. Exploring the Inuit past in the Foxe Basin. *Above & Beyond: Canada's Arctic Journal* 36. <http://arcticjournal.ca/featured/inuit-origins-thule-to-inuit-transition/>

Steffens, B. & **S. Arnoldussen**, 2020. Overwachte offers. Twee bronstijdbijlen uit Emmerhout. *Het Drentse Landschap* 106, 20-21.

Voutsaki, S., 2020. Δέκα χρόνια μετά. Το Βόρειο Νεκροταφείο στον Άγιο Βασίλειο (Ten years later. Ayios Vasileios North Cemetery). *EPharis*, 1-6.

SWOT-analysis

The following is based on the self-study of the 2019 Midterm Review (MTR) and the Annual Report 2019.

Strengths

1. GIA has an excellent and increasing output level, both in terms of quantity and quality. These outputs confirms that GIA has high-quality staff that continues to perform well;
2. This output was supported by our world class collections in archaeobotany and archaeozoology and our support staff;
3. We built up and maintain good momentum with NWO and with EU H2020 – with ArchSci2020 and SeaChanges;
4. We have a large exposure to the general public and intensive collaboration with societal partners in many of our projects.

5. GIA is a close-knit research community in which undergraduate students, PhD students, postdocs and senior staff collaborate on specific initiatives.
6. GIA has developed into a research institute in which successful collaborations with academic partner institutes from other disciplines have taken shape in various NWO and EU-funded projects.
7. GIA has broadened its scientific scope by the appointment of professors of special appointment that have contributed to its grant capture, publications and standing.

Weaknesses

8. Our world-class collections are housed in out-dated facilities;
9. Many PhD students do not finish their work on time;
10. The number of tenured staff is relatively small making our continuity and improvement uncertain and vulnerable;

Opportunities

11. We can re-position our archaeobotanical and archaeozoological collections as UG assets because of their importance to research groups in other disciplines;
12. The retirement of staff in the coming years will allow us to build on existing strengths and develop new opportunities;
13. The refurbishing of the Harmoniebuilding is an opportunity to rethink the housing of our collections and lab facilities;
14. The renewed option of sandwich PhD's with international partners allows us to strengthen our collaboration with existing and new partners;
15. We will increase our visibility in and relevance for society by connecting our vision statement to relevant stakeholders and activities in our communication (website, LinkedIn).

Threats

16. NWO regulations restrict access to their schemes (new grant proposals cannot be sent in during the period a current NWO project is running). This will lead to a reduction in NWO-funded research and therefore a reduction in the number of PhD's and postdocs;
17. The retirement of staff in the coming years may lead to a smaller number of tenured staff. First of all, replacement is dependent on students numbers (and these may decrease). Furthermore Dutch national politics may generate substantial cuts in the budgets for all university disciplines outside natural sciences;
18. A potential outcome of the rehousing plans for the Harmoniebuilding is that GIA will remain its current locations, and the current issues with our collections and lab facilities will persist.

Open Science

Archaeology is a discipline in which Open Science is relatively well developed. In our discipline, there are two major aspects to distinguish. Foremost, OS is based on creating and maintaining access to (results of) archaeological research, for other researchers, but also for other groups in society. So-called primary documentation and finds, deriving from fieldwork projects are preserved thanks to long-standing legislative efforts in many countries and is common practice. Research in the Netherlands also requires digital data to be uploaded into data repositories. To this end GIA and the University Library have developed a repository, which will also be used to store data from other GIA projects. Moreover, many of our publications are accessible thanks to Open Access (OA). In the last few years we have digitised our two series (*Palaeohistoria* and *Paleo-aktueel*). Both are OA. Moreover, many of our publications are part of projects funded by NWO, the EU or similar bodies which require OA publications. On top of that, many journals have compulsory data regulations. There are also journals which focus on the publication of data sets. As a result of these developments, OA publications have grown from 45% (2015) to 59% (2020), based on data from the University Library. This diffusing of knowledge also takes places within GIA projects by means of cooperation with various societal

partners. These activities include contract research for the government and collaboration with museums, local volunteers and co-organised lecture series.

Progress since MTR

Scientific relevance

The peer-review committee in 2016 and the 2019 MTR committee both appreciated the grant capture, the impact of our scientific output and the size of our scientific output. This score is underlined by the strengths in the SWOT analysis). These have been continued at the same high level in 2020. We aim to improve our scientific impact with several strategies. These are:

1. Rehousing our lab facilities and collections. This issue has been addressed with the Faculty Board and is part of the GIA strategic plan 2020 and rehousing plans for the faculty. NB: A potential outcome of the rehousing plans is that GIA is not part of it. This is a worst-case scenario. GIA needs the Faculty Board to strive for rehousing GIA (one building, updated facilities), also if rehousing in the Harmoniebuilding cannot be realised.
2. With the restart of the UG bursary scheme in 2020, we intend to strengthen our collaboration with existing and new partners. We intend to use this scheme as platform for large new EU-funded grant schemes applications;
3. The PhD progression and completion rates can still be substantially improved. See below;
4. We can re-position our archaeobotanical and archaeozoological collections as UG assets because of their importance for other disciplines. This ambition (The Vault) has been discussed between Faculty Board and Board of the University. GIA is currently working on a more detailed plan;
5. The UG bursary scheme will stimulate interdisciplinary research. GIA sees many opportunities to turn existing collaborations with other faculty (and inter-faculty) research groups into stimulating co-supervised projects.

Viability

The peer-review committee expressed its concerns with the viability of our research due to the very detailed manner in which we presented ourselves in the self-study: five research groups comprising the four chairs and a group of bioarchaeology – with a tenured staff of only twelve. This issue is addressed with the following actions:

6. GIA's internal collaboration has increased in recent years through the collaboration in grant proposals (ITN ArcSci 2020, ITN SeaChanges, in which various GIA research groups and FSE groups collaborate), co-supervision of PhD students across chairs and the annual GIA PhD/post-doc day (since 2015). This point was also mentioned by the MTR committee. As a result GIA has become a tighter knit research community (SWOT 5);
7. In the GIA Strategic Plan 2020 we describe our research vision and ambitions for the next decade. This will help in making strategic use of the replacement of retiring staff;
8. Further increase collaboration at PhD and postdoc level. The collaboration between PhD's and Postdocs has already been strengthened by the annual GIA PhD/Postdoc Day. Furthermore a digital brochure is now available that contains relevant data on all current PhD projects and will allow new PhD's to identify potential partners throughout the year. This brochure has now been adapted by the GSH for faculty-wide purposes;
9. Most GIA associate professors have *ius promovendi* (PhD supervision rights) if and when possible, to counter NWO's regulations that restrict access to their schemes (new grant proposals cannot be sent in during the period a NWO project is running). This regulation remains a problem, especially for *NWO Promoties in de Geesteswetenschappen*;

Relevance to society

The peer-review committee concluded that GIA is very active in reaching out to society. Nevertheless it was unclear to them who our targeted audiences are and why these are targeted.

In contrast, the MTR committee considers this aspect one of GIA's strengths. GIA has developed a vision document for the MTR – the TOP 10 activities in this annual report testify that GIA holds shared ideas on the societal relevance of our work. On the basis of that, the following action is needed:

10. The upcoming self-study will make clear that the vision document describes our ambitions clearly and truly. We have identified our stakeholders (societal project partners, government, enthusiasts, farmers, children) and use a targeted outreach strategy for all of these. We intend to renew our website and create a LinkedIn account to communicate about our running projects and results/publications. These actions need to be undertaken with professional support of the faculty's communication department.

PhD supervision

In 2020 a total of 5 PhD students defended their thesis, a figure above the year-long average. This relative success cannot mask the fact that many PhD students defend their thesis late. There are many reasons for this delay, not all visible in the tables attached to this annual report. There are delays of a personal nature (illness, pregnancy), a professional nature (the unique chance to excavate a shipwreck), but GIA also has delays due to issues that can be influenced more. Over the last decade we have already taken important steps, in creating PhD projects on the basis of available datasets, rather than datasets that had to be produced by the PhD student by means of new fieldwork.

To further this end, we are now developing two strategies. First of all, GIA has taken the initiative to include a feasibility check as part of the Training and Supervision Plan. When this is in place, the GIA director will periodically monitor the progress and discuss strategies to complete the manuscript within the contract period with the PhD student and supervisors. Moreover, GIA now develops a *GIA default PhD set-up*, to make explicit what we expect of a PhD, in terms of the number of articles and the role of the primary supervisor in (at least) the first article.

Appendix. SEP tables

Research staff	2018	2019	2020
Scientific staff (1)	15 / 7,9	14 / 7,9	14 / 7,7
Assistant professor	6 / 3,2	5 / 2,6	5 / 2,5
Associate professor	5 / 2,4	5 / 3,0	5 / 3,0
Full professor	4 / 2,3	4 / 2,3	4 / 2,2
Postdocs (2)	10 / 5,2	10 / 5,2	11 / 6,3
PhD candidates (3)	30 / 19,7	26 / 18,9	22 / 17,8
Total research staff	55 / 32,8	50 / 32,0	47 / 31,8

Main categories of research output	2015	2016	2017	2018	2019	2020
Refereed articles	17	34	28	31	45	34
Non-refereed articles	3	13	9	7	7	4
Books	2	8	8	4	3	7
Book chapters	13	19	33	37	15	28
PhD theses	3	4	2	2	4	5
Conference papers	4	4	7	5	5	0
Professional publications	44	52	45	60	46	25
Publications aimed at the general public	9	16	3	8	8	5
Other	15	9	17	19	14	5
Total	112	159	152	173	147	113

NB: the 2020 issues of our series *Palaeohistoria* (refereed) and *Paleo-aktueel* (professional) have been delayed.

Funding	2016		2017		2018		2019		2020	
	fte	%	fte	%	fte	%	fte	%	fte	%
Direct funding	13	44%	16,4	52%	16,4	50%	16,8	53%	17,0	53%
Research Grants (NWO)	11,1	38%	9	28%	8,7	27%	7,0	22%	6,0	20%
Contract research	5,3	18%	6,4	20%	7,7	23%	8,2	26%	8,4	27%
Other										
Total funding (fte)	29,4		31,8		32,8		32,0		31,7	100%
Expenditure (k€)										
Personel	?		?		?		1.621	70%	1759	92%
Other	?		?		?		687	30%	160	8%
Total expenditure	?		?		?		2.308		1919	100%

Enrolment			Success rates						
Starting year	Enrolment (male / female)		Total	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	0	2	2	-	-	-	-	2 / 100%	-
2014	3	3	6	-	-	-	2 / 33%	3 / 50%	1 / 17%
2015	4	0	4	-	-	1 / 25%	-	3 / 75%	-
2016	5	3	8	-	4 / 50 %	-	-	4 / 50%	-
2017	4	0	4	-	-	-	-	4 / 100%	-
2018	3	2	5	-	-	-	-	5 / 100%	-
2019	4	0	4	-	-	-	-	4 / 100%	-
2020	2	2	4	-	-	-	-	4 / 100 %	-
Total	25	12	37	-	-	-	-		-

Functietype	2011				2012				2013				2014				2015				2016			
	○	⊗	●	μ	○	⊗	●	μ	○	⊗	●	μ	○	⊗	●	μ	○	⊗	●	μ	○	⊗	●	μ
1a. Werknemer-promovendus	4	1	2	37	3	1	2	37	2	2	0	0	6	3	2	26	4	3	1	15	4	3	1	13
1b. Promoverend medewerker	-																							
2a. Beurspromovendus eigen uni	-												1	1	0	0					1	1	0	0
2b. Beurspromovendus andere beursgever	-												1	1	0	0					3	0	3	17
3. Extern gefinancierde promovendus	-																							
4. Buitenpromovendus (eigen middelen)	2	0	2	-	3	0	1	-	1	1	0	-	2	2	0	-	2	1	0	-	1	0	0	-
Onbekend																								
Totaal	6	1	4	37	6	1	3	37	3	3	0	0	10	7	2	26	6	4	1	15	9	4	4	16

○ = intake ⊗ = active ● = graduated μ = average number of months +/- end date contract

Title	PI	Funding body	Amount in €
Belmont SVALUR	Maarten Loonen	NWO – Belmont Forum	€237.539,-
Uitwerking OL79 en OR49	Daan Raemaekers	Rijksdienst voor Cultureel Erfgoed	€15.000,-
MicroTRASH	Jos Kleijne	H2020 MSCA IF	€175.572,-
Trechtersbepalers Dalfsen	Bert Nijboer	Provincie Overijssel	€75.000,-
Sterren Eemshaven	Maarten Loonen	Provincie Groningen	€19.554,-
Dataverzameling Turkije (voor Digital Tombs project van Lidewijde de Jong)	Tamara Dijkstra	Catharina van Tussenbroek-fonds	€1.000,-
Halos Archaeological Project	Tamara Dijkstra	NIA	€2.500,-
Visiting Fellowship (postponed)	Sofia Voutsaki	Centre of Hellenic Studies, Harvard University	€16.600,- (\$20.000,-)
Foodways and Environmental Management in the Age of Global Encounters	Canan Çakırlar	Koç Research Centre for Mediterranean Civilizations	€1.150,-
Resurfacing Doggerland	Hans Peeters	NWO – Archeologie Telt, RCE and RWS	€675.398,-
Flying Plastic microplastic in freshwater	Maarten Loonen	Svalbard Environmental Protection Fund	€17.500,-
Digital Plant Atlas	René Cappers	Deutsches Archäologisches Institut (DAI) – Berlin	€10.000,-
Digital Plant Atlas	René Cappers	Stichting ERA	€32.500,-
Synthese vroege middeleeuwen	Johan Nicolay	Provincie Noord-Holland	€20.000,-
Total			€1.309.313,-