CONTENTS

1. FOREWORD BY COMMITTEE CHAIR ................................................................. 5
2. THE REVIEW COMMITTEE AND THE PROCEDURES........................................... 7
   2.1. Scope of the review ..................................................................................... 7
   2.2. Composition of the committee ................................................................. 7
   2.3. Independence ............................................................................................ 7
   2.4. Data provided to the committee ............................................................... 7
   2.5. Procedures followed by the committee ...................................................... 7
3. DESCRIPTION OF THE AMSTERDAM CENTER FOR LANGUAGE AND COMMUNICATION ................................................. 9
   3.1. Organisational context and governance .................................................... 11
   3.2. Mission and strategy ............................................................................... 11
   3.3. Funding, talent management and support .................................................. 11
4. ASSESSMENT OF THE AMSTERDAM CENTER FOR LANGUAGE AND COMMUNICATION ............... 12
   4.1. Research quality ......................................................................................... 12
   4.2. Relevance to society ................................................................................. 12
   4.3. Viability ..................................................................................................... 14
   4.4. PhD programme ........................................................................................ 15
   4.5. Research integrity ...................................................................................... 16
   4.6. Diversity .................................................................................................... 17
   4.7. Conclusion .................................................................................................. 17
   4.8. Overview of the quantitative assessment of the research unit .................. 17
5. RECOMMENDATIONS ...................................................................................... 18
APPENDICES ........................................................................................................... 19
APPENDIX 1: THE SEP CRITERIA AND CATEGORIES .................................................. 21
APPENDIX 2: PROGRAMME OF THE SITE VISIT ....................................................... 22
APPENDIX 3: QUANTITATIVE DATA ..................................................................... 23

This report was finalized on 12 February 2019
REPORT ON THE RESEARCH REVIEW OF AMSTERDAM CENTER FOR LANGUAGE AND COMMUNICATION OF UNIVERSITY OF AMSTERDAM

1. FOREWORD BY COMMITTEE CHAIR

The evaluation committee that authored this report was assembled by QANU (Quality Assurance Netherlands Universities) at the request of the participating universities (including the University of Amsterdam), and it included expertise from a broad spectrum of linguistic sub-disciplines, consisting, as it did of Prof. Dr. B. (Balthasar) Bickel, Zurich; Prof. Dr. A. (Ann) Bradlow, Northwestern (Evanston, Illinois); Prof. Dr. S. (Seana) Coulson, University of California at San Diego; Prof. Dr. J. (Jane) Grimshaw, Rutgers (New Jersey); Prof. Dr. A. (Alison) Mackey, Georgetown (Washington, D.C.); Prof. Dr. Ir. J. (John) Nerbonne [chair], em. Groningen and Freiburg, and Prof. Dr. W. (Wendy) Sandler, Haifa (Israel). Beyond their specialist expertise, the members were remarkable and valuable for their broad view of linguistics and their willingness to examine scientific areas well outside their research foci proper and for their energy in considering practical issues of organization, financing and management that often seemed foreign. These topics were also included in the evaluation. The committee also enjoyed its collaboration and I am grateful to all of them for their professional attitudes and pleasant interaction.

Jetje De Groof served as secretary to the committee, and she was essential to the process at all stages, suggesting a division of labour, providing more concrete instructions to committee members on how to follow the Standard Evaluation Protocol (SEP), as well as on how to keep the “Terms of Reference” (ToR) of our particular evaluation in mind, and sitting at my right hand during meetings and keeping notes to ensure that the committee was addressing all the crucial points of the SEP and the ToR. She also received the rough drafts of all the various parts of the report, which she edited with me, and I was very grateful not only for her close attention to the report’s expected topics, but also for her efficient and clear style of writing. One committee member – confusing the various specialized meanings of the word ‘secretary’ – objected that she be referred to at all in this way: “She was so much more!”. I am grateful for all the very competent work that she invested in this report.

The researchers of the Amsterdam Center for Language and Communication (ACLC) at the University of Amsterdam (UvA) were assiduous in providing us with a great deal of information on their work in the six year review period, 2012-2017, not only with respect to matters that are normally catalogued carefully, such as publications and grants, but also with respect to their record in matters that often fall outside academic reporting, such as work on scientific popularization or marks of recognition from outside academia. We received a twenty-four page report plus several appendices on the research programmes, most of them informationally dense. All of this material facilitated the committee in obtaining as complete a picture of the work at the UvA as possible. On the occasion of our visit on Oct. 5, 2018 we spoke with over 30 ACLC members about their scientific work; their aspirations, and how well they found themselves able to work and advance professionally at the UvA; how well their various research lines dovetailed with the institute’s strategic emphases – both scientifically and with respect to extra-scientific interests and applications; and, perhaps most extensively, about their frustrations in seeking to realize serious scientific and applied-science ambitions at the ACLS. I am certain that I speak for all committee members when I acknowledge how much we profited from the very cooperative atmosphere we encountered during our visit to the ACLC.

A chair who is currently an emeritus professor may be forgiven a personal note, even in the foreword to a very official document. Science, I believe, profits a great deal from its younger practitioners. They see correctly that they can contribute and be recognized if they are tenacious enough to
continue to insist on their insights, to search for new evidence, and to keep developing new demonstrations, even while ignoring some criticism. The stereotyped self-opinionated researcher isn’t without problems, but lots of advances are due to the tenacity and energy of young researchers working hard to prove that they’re right. If indeed we profit a lot from the energy and tenacity of young researchers, then it behoves us as a profession to see that they get a fair chance to prove themselves. We therefore include in the report below a suggestion to pay special attention to younger scholars when developing plans to protect research time.

Our visit was well organized and our reception at ACLC by prof. Paul Boersma and by Marten Hidma was cordial.

John Nerbonne
Chair of the committee
2. THE REVIEW COMMITTEE AND THE PROCEDURES

2.1. Scope of the review
The review committee has been asked to perform a review of the research in Linguistics at four research institutes (at the universities of Amsterdam, Leiden, Utrecht and Nijmegen), and the Netherlands Graduate School of Linguistics (LOT). This report includes the committee’s findings on the Amsterdam Center for Language and Communication (ACLC) at University of Amsterdam.

In accordance with the Standard Evaluation Protocol 2015 – 2021 (SEP) for research reviews in the Netherlands, the committee was asked to assess, both in quantitative and qualitative terms, the quality, the relevance to society and the viability of the scientific research at ACLC as well as the strategic targets and the extent to which the unit is equipped to achieve these targets. Furthermore, a qualitative review of the PhD programme, research integrity and diversity was part of the committee’s assignment.

2.2. Composition of the committee
The composition of the committee was as follows:
- Prof. Dr. Ir. J. (John) Nerbonne [chair]
- Prof. Dr. B. (Balthasar) Bickel
- Prof. Dr. N. (Ann) Bradlow
- Prof. Dr. S. (Seana) Coulson
- Prof. Dr. J. (Jane) Grimshaw
- Prof. Dr. A. (Alison) Mackey
- Prof. Dr. W. (Wendy) Sandler

The committee was supported by Dr. Jetje de Groof, who acted as secretary on behalf of QANU.

2.3. Independence
All members of the committee signed a statement of independence to guarantee an unbiased and independent assessment of the quality of ACLC at University of Amsterdam. Personal or professional relationships between committee members and the research unit under review were reported and discussed at the start of the site visit amongst committee members. The committee concluded that no specific risk in terms of bias or undue influence existed and that all members were sufficiently independent.

2.4. Data provided to the committee
The committee received the self-evaluation report from the units under review, including all the information required by the SEP.

The committee also received the following documents:
- the Terms of Reference;
- the SEP 2015-2021;
- lists of publications, consisting of five key publications per research unit.

The panel also received a list of ways in which the Dutch academic system differs from others, especially the American. The committee discussed these prior to the site visit in order to avoid misunderstandings.

2.5. Procedures followed by the committee
The committee proceeded according to the SEP. Prior to the first meeting, all committee members independently formulated a preliminary assessment of the units under review based on the written information that was provided prior to the site visit.
The final review is based on both the documentation provided by the institute and the information gathered during the interviews with management and representatives of the research unit during the site visit. The site visits of all institutes mentioned in 2.1. all took place in one week (30 September-5 October 2018). The site visit of ACLC took place on 5 October 2018 in Amsterdam (see the schedule in Appendix 2).

Preceding the interviews, the committee was briefed by QANU about research reviews according to the SEP. It also discussed the preliminary assessments and decided upon a number of comments and questions. The committee also agreed upon procedural matters and aspects of the review. After the interviews the committee discussed its findings and comments in order to allow the chair to present the preliminary findings and to provide the secretary with argumentation to draft a first version of the review report.

The draft report by committee and secretary was presented to the ACLC for factual corrections and comments. In close consultation with the chair and other committee members, the comments were reviewed to draft the final report. The final report was presented to the Board of the University and to the management of the research unit.

The committee used the criteria and categories of the Standard Evaluation Protocol 2015-2021 (SEP). For more information see Appendix 1.
3. LINGUISTICS: GENERAL THEMES AND FINDINGS AT THE NATIONAL LEVEL

Before turning to the Amsterdam Center for Language and Communication and the evaluation of its research, the committee wishes to make some general remarks based not only on all four research institutes that were visited and evaluated but also on the national research school LOT. This subsection appears in all of the evaluation reports of the institutes that were part of this review.

Dutch linguistics has a sterling reputation internationally. The work is respected and cited, its senior researchers are sought after for important international appointments, and its graduate students can compete throughout the world. We are very impressed by the state of the discipline of linguistics in the Netherlands. We note that high quality sign language research is being conducted at three of the institutes we visited and this widespread recognition of the relevance of this field in the Netherlands is noteworthy.

Against the background of this genuine respect, we note some aspects of the context within which linguistic research is conducted in the Netherlands which may depress its excellent quality over the long term. We discuss only general issues in this section since we attend to the individual institutions in the separate institute sections.

The fundamental reliance on student numbers in funding university study programmes means that distribution of staff tends to follow the decisions of students entering the university. In other words, since universities are motivated to staff programmes that are popular among students, and since staffing decisions inevitably influence not only what is taught but also what is researched, the reliance on student numbers as an indicator of required academic staffing has an impact on research. Entering students are unaware of the frontiers of research, so they will tend to choose subjects based on their experience in secondary schools. Subjects not taught in secondary schools, such as linguistics, are at a distinct disadvantage in this sort of system. While all institutes insisted that once openings in the staff have been approved (due to the needs of instruction), hiring committees always seek excellent researchers, it is still rare that a research institute can initiate a hiring procedure based on the need to strengthen specific research areas or the opportunity to take advantage of new developments. Research institutes in other countries enjoy more autonomy. We note that the new NWO requirement that Vidi proposals be accompanied by a guarantee of employment (or participation in a tenure track program) is likely to increase the influence of instructional needs on research recruitment.

Three of the four institutes we visited noted heavy instructional demands as a weakness or a threat in their SWOT self-analyses, and concerns about this were spontaneously expressed at every institute the committee visited. Whenever we asked about factors limiting research productivity, the first one mentioned was always the amount of instruction. One researcher sent a copy of the academic calendar at her institute that ran continuously from early Sept. until late in July, with the exception of two weeks off at Christmas. Sabbaticals are rare at all universities and not regular as they are elsewhere (e.g., in Germany or the US). Several people complained of being in the classroom more than ten hours/week, some even more, and many people (N.B. not those in management, however) said that they did not understand how teaching responsibilities were determined. Without attaching great importance to the anecdotal reports, our impression is that Dutch researchers may be at a disadvantage in comparison to researchers internationally in being required to devote a large part of their time to instruction and in having little chance to devote concentrated periods to research. We would therefore suggest that research institute directors take this very general dissatisfaction seriously. First, they could decide to be proactive in explicitly accepting the task of protecting the research time of institute members, and second, it is advisable for all faculty members to be aware of how instructional demands on individuals are determined.
The committee also learned of the consequences of the so-called ‘Flexwet’ for early career researchers, such as postdocs, who are limited to a small number of non-permanent positions before their contracts must become permanent. Various researchers informed us that the usual decisions in such cases do not result in permanent contracts, but rather discontinuation of the researchers’ contracts. In the case of postdocs 3-5 years after the PhD, discontinuation could threaten their careers. The apparent motivation is to force the universities to make a decision about the permanent employment of a researcher earlier rather than later, but in the case of postdocs 3-5 years after their PhDs, there has already been a clear commitment on the part of the postdoc to a career involving research. Forbidding permanent contracts for such individuals is harsh on them and may depress research quality.

While university researchers could once aim to pursue long-term research lines, this has become less attractive as the universities rely more and more on NWO and other funding agencies for financing PhD candidates and postdocs. This change, which was triggered by a deliberate policy shift toward competitive procedures for a larger share of research monies, was justified originally as a way to channel more research energy to the best scientists, but it has also had the perhaps unintended effect of making a lot of research more project driven and less compatible with longer-term strategies. This impacts the better institutes and programmes more than others, and it indirectly influences hiring practices, collaborations, and the training of young researchers. The committee suggests that research institutes and university administrators monitor this development lest the tendencies we already see be aggravated.

Finally, the committee was initially apprehensive when it learned about the increasing importance attached to the societal relevance of research. Concerns were expressed about theoretical work being crowded out, about the danger of commercial influence, and about how successful societal outreach was likely to be. However, during the course of our evaluation visits, we encountered a number of projects and research lines with clearly applied goals where the scientific content was eminent and where those conducting the research were enthusiastic about the applied, societally relevant aspects of the work. We also reviewed a large number of projects dedicated to public outreach, usually popularizations of research, which the scientists involved were excited about, and which we, too, are positive about. We understand that public understanding and appreciation of scientific research contribute in important ways to its support, and to attracting good students. We therefore voice our remaining apprehension even more cautiously, noting only that not all scientific work lends itself to short-term application or to popularization efforts. The demand for societal relevance should therefore not be aimed at each project, but strategically, at the institute as a whole.
4. DESCRIPTION OF THE CENTER FOR LANGUAGE AND COMMUNICATION

Through the preparatory documents and the site visit, the committee received a clear view of the governance, mission, strategy and management of the Amsterdam Center for Language and Communication (ACLC). The section below, which provides a description of ACLC, is based on the information provided in the self-evaluation report. The assessment of ACLC by the committee follows in section 5 of this report.

4.1. Organisational context and governance
The ACLC (14.4 FTE scientific staff in 2017) is one of the five research schools participating in the Amsterdam Institute for Humanities Research (AIHR) of the Faculty of Humanities (FGw). The Center is run by a director, a manager and an advisory board that consists of representatives of each research group and of the post-doctoral researchers and PhD candidates. The ACLC also has an external committee, the Scientific Council. Research within the ACLC is organized in a dynamically varying number of active research groups (18 groups as of Autumn 2017). The groups are subject-oriented and exist only for the duration of the programme they carry out. Proposals for new research groups can be submitted at any time and are evaluated by the ACLC director and the Advisory Board.

4.2. Mission and strategy
The ACLC’s focus is ‘Constraints on Variation’: languages and communication systems exhibit variation, which is constrained by biological, psychological, social and language-specific considerations, for which the institute’s researchers seek multiple sources of evidence and submit to modelling. ACLC takes a broad interdisciplinary perspective, combining and integrating systematic historical and field observations with evidence from behavioural experiments, explicit abstract modelling and computer simulations. The Center collaborates with professionals, policy makers and others in various fields to improve the successful acquisition and use of language, to improve communication abilities in the population, and to develop better language and communication technologies.

4.3. Funding, talent management and support
In 2017, more than half of the support for the institute came from direct funding, 10% came from contract research and the remainder through scientific grants. The percentage of income that comes from indirect funding sources (i.e. research grants and contract research) has risen from 32% in 2012 to 46% in 2017.

Full, associate and assistant professors can spend 40 percent of their time on their own research, plus some time on research-related administrative duties (9 percent for full professors, 5 percent for associate professors, and 2 percent for assistant professors). Supervisors receive 300 hours of research time for every PhD student that graduates.

ACLC researchers are supported in different ways. Linguistic experiments with human participants are performed in the ACLC speech lab, which is managed by an electronic and speech engineer, who guides the researchers and supervises the lab manager, the web experiment designer and the research assistants. ACLC cooperate with researchers from Developmental Psychology and Child Development in the UvA baby lab. The speech lab is financed by external grant money whenever possible, but enjoys a guarantee by the Faculty that ensures continuity otherwise.

The academic director is supported by a managing coordinator, an office manager, and a dedicated member of the Faculty’s grant team.
5. ASSESSMENT OF THE AMSTERDAM CENTER FOR LANGUAGE AND COMMUNICATION

In this section, the committee evaluates, both quantitatively and qualitatively, the performance of ACLC on the three criteria of research quality, relevance to society and viability. In addition, the committee gives its qualitative evaluation of the PhD programme, research integrity, and diversity at ACLC, as stipulated in the Terms of Reference (see section 2.1.). An overview of the committee’s recommendations is given in section 6 of this report.

5.1. Research quality
ACLC’s research mission is to seek converging evidence for systematicity in human communication, verbal and non-verbal, spoken and signed. ACLC researchers seek to discover how biological, psychological, social and language-specific constraints influence variation in languages and other communication systems. Their questions cross sub-disciplinary boundaries within the field of linguistics and connect directly with other disciplines. This explicit focus is quite unusual and very promising.

The ACLC’s guiding vision is that these multiple theoretical and methodological perspectives offer a rich and multi-faceted source of evidence on variation and its limits. This ambitious and clearly-articulated vision lends a sense of coherence and common purpose to the diverse group of ACLC researchers, which currently encompasses 18 research groups, each with a coordinator. The groups are defined not by methodology (theoretical, historical, social, psychological, pedagogical, computational etc.), but by issue, and thus bring researchers together in rather unusual combinations, creating an exciting environment for both academic research and applications of the research results. The committee appreciates that the flexibility of this conceptual model allows the ACLC to adapt as researchers and research interests develop. Both the leaders of the ACLC and its members value the ‘bottom-up’ character of research development, which allows new groups to form as new projects emerge from interactions among groups and between the Center and its societal context.

The quality of the research produced within the ACLC is very high. The primary venues for research products of the ACLC are refereed articles in high-impact international journals, monograph and book series, and important conference proceedings, particularly for computational work. Journal articles are (appropriately) promoted by the institute over chapters in edited books as a means of ensuring both visibility and accountability. ACLC researchers are highly productive. ACLC published 483 refereed articles in the review period, averaging 4 refereed articles per year per research staff member FTE\(^1\) (see also Appendix 3, Table 2 of this report). In addition the institute has published on average 3.3 book chapters and 0.8 books per year. The 12 keynote addresses listed in the self-evaluation report are a further measure of the stature of the faculty. Moreover, the institute has produced 51 PhDs over the reporting period, an average of 3.2 PhDs per FTE scientific staff over the review period.\(^2\) This is the research profile of a top-level group vigorously pursuing important academic projects.

The five works cited in the self-evaluation report (key publications) verify the breadth, social importance and intellectual quality of ACLC research. Ranging from the analysis of communication/argumentation through key issues in language contact, to PRAAT (see below), they represent a very high level of academic achievement and major contributions to the international research community. Research reported by ACLC members is widely cited, as is illustrated by the

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\(^1\) The committee included tenured and non-tenured staff in the research staff totals, but no PhD candidates (see table A, Appendix 3).

\(^2\) For the calculation of PhDs per FTE the committee only took into account tenured staff, not non-tenured staff (see table A, Appendix 3).
fact that over 40% of the senior scientific staff members have been cited more than 1000 times according to Google Scholar.

Software tools are also important contributions for peers. A particularly noteworthy contribution of the ACLC is the PRAAT computer program, developed and maintained by ACLC researchers since 1992. It is no exaggeration to say that, by making instrumental analysis of speech widely available at no cost to the user, the introduction of this open-access tool transformed phonetics teaching and research world-wide. The ‘official’ count of 17000 citations is probably a low estimate because PRAAT is now so deeply entrenched in the global practice of speech science that many users simply do not cite it. PRAAT has also served as an important leading model of open access science. The ACLC website lists one other tool as well as two three data collections for use by peers (http://aclc.uva.nl/research/tools/tools.html), but nothing is said about the extent of their use.

Other measures of academic achievement include grant funding. The ACLC research staff members are quite successful in obtaining grant support for their research: they list a total of 41 grant awards totaling approximately 7.2 million Euro over the period from 2012 to 2017. These include personal grants like NWO Veni, Vidi, and Free Competition and PhD grants, as well as non-personal grants like the Horizon 2020 Consortium Grant. However, the self-evaluation report admits that although the ACLC has been successful in receiving Veni and PhD grants from NWO, top personal grants like Vidi and Vici (NWO) and ERC personal grants have been more scarce (see also viability).

Recognition for ACLC researchers is further illustrated by the fact that research staff are well represented in journal editorships (approximately 40 editorships across 22 center members in 2012-2017). Two ACLC scientists are members of the KNAW.

In summary, ACLC is a highly regarded and internationally prominent center of research. It conducts very good, internationally recognized research that is regularly accepted in the very best linguistics journals. ACLC's quality is also recognized by national and international funding agencies, where its members have demonstrated moderate success. ACLC researchers are contributing to important products for peers, and are active professionally. All indicators point to a research environment that is consistently producing research products of a very high caliber with a high degree of international recognition and at a steady rate. Within the institute, the committee notes a number of areas of particular distinction. These include speech science, communications, signed language, the study of medically based communications disorders, and language pedagogy. PRAAT again deserves special mention here: it has made the instrumental analysis of speech widely and freely available, and transformed phonetics research and teaching worldwide.

5.2. Relevance to society
The ACLC has an exceptional record of connecting its research activities to the needs and interests of the community in which it is situated, as well as that of professionals within the broader community. The Center places a high value on ‘hybrid’ products, those which are useful to professionals as well as other researchers. ACLC researchers have amassed an extremely impressive collection of 124 publications aimed at the general public and 82 professional publications aimed at professionals such as teachers and language pathologists. The institute’s website lists ten categories of activity under the societal relevance heading, each of which includes links to various resources that may be accessed by the general public. These links offer resources with significant relevance for education (e.g. the Endangered Languages e-learning module), ‘public intellectual’ outreach (e.g. the various commentaries under the heading of ‘Improving communication’), healthcare, language learning, bilingualism, and dialect variation. These resources are accessible and far-reaching in terms of the topics they address and in their format. These products come in a variety of forms: online courses, websites and research materials of various types plus papers, books and innovative classroom teaching tools. The five examples provided in the self-evaluation report illustrate the variety of ways in which research findings can yield valuable assets for society. This all points to a high degree of engagement with the goal of producing research with societal relevance.
The ACLC has a particularly strong connection with the public education system (see case-study presented in the self-evaluation report). The principal goal of these projects is the successful education of learners for whom language is a barrier, many from families that have migrated into Dutch speaking areas. These collaborations are striking examples of the benefits of long-term cooperation between research and education. As a result of this work, the city of Amsterdam is able to provide sophisticated evidence-based language instruction and researchers are able to develop and test hypotheses generated by the results. Another excellent example of the societal relevance of the ACLC is the Oncology-related Communication Disorders group of the ACLC, which is involved with hospitals in the application of speech science for oncology patients whose vocal tract has been compromised. These projects illustrate the commitment of the ACLC to creative and scientifically well-founded evidence-based applications of basic science to societal needs. The projects are outstanding instances of the fruits of collaboration.

In addition, the self-evaluation report gives several examples of media appearances of CLS staff as marks of recognition for ACLC’s research in the societal domain. The fact that one of ACLC’s full professors is largely paid by the City Council of Amsterdam further illustrates ACLC’s societal relevance.

In conclusion, the ACLC makes an outstanding contribution to society, as is evidenced by its contribution to a wide range of high-quality research products for societal target groups, the use of these products by these target groups, and the marks of recognition by societal groups. As with use of research products by peers, more systematic reports on actual use and impact of the institute’s societally relevant activities would be useful.

5.3. Viability

The organizational structure of the ACLC (see also sections 4.1. and 5.1) revolves around eighteen research groups each of which addresses a particular research topic with multiple research approaches. The committee sees this dynamic and nimble configuration which is constantly under evaluation and revision since each group’s life-cycle ends upon completion of the research programme as a particular strength. Moreover, overall governance structure reported on in section 4.1. seems to strike an appropriate balance of efficiency and distribution of responsibility and control. These organizational elements, taken together with the institute’s strong leadership, bode positively on the institute’s viability.

The ACLC’s academic director is a researcher with a solid international reputation who follows developments in the institute carefully and reflectively. He is fully responsible for the assignment of research time, which is excellent. He is supported by an executive director who was on top of all the issues the panel discussed with him. The institute clearly enjoys the support of the Faculty of Humanities, as the dean personally testified.

The committee is of the opinion that the resources in general seem to be adequate to support the research mission of the Center. The ACLC has a respectable track record in attracting grant money (see also section 5.1.). Moreover the institute’s lab facilities are well maintained and supported by a dedicated electronic and speech engineer, who also supports ACLC staff in building software, which the committee commends. The lab is primarily funded by grants, but it has guaranteed funding from the Faculty, which ensures continuity in the case of an interruption of grant support.

The institute’s research strategy appropriately emphasizes attracting research staff with proven or potential success in securing major grant support. To this end, it has established a good system of peer mentoring and training for grant application development. The committee agrees that this is a necessary measure taking into account the slowing rate of acquiring grants. The institute also recognizes the importance of cooperating with the departments on the hiring of tenured positions.
that match the ACLC profile as a means of attracting more major grant recipients to the Center, especially new (younger) researchers to complement the long-standing, senior researchers.

New strategic research opportunities already being pursued by the ACLC within the context of the Amsterdam Brain & Cognition Center (ABC) will be increasingly important and offer new opportunities for connecting linguistics research with the brain and cognitive sciences. In general, with its established excellence and reputation, the institute seems very well-positioned to take advantage of new opportunities and research directions that intersect with linguistics ranging from the brain/cognitive sciences to speech/language technology (computational linguistics and natural language processing) and to bi/multilingualism on a society/community level. A strategy of connecting to other disciplines and research themes (e.g. at the European level) will be vital for the continued relevance and success of the institute (and of the field of linguistics in general).

However, there are a few concerns that need careful monitoring in view of the institute’s viability. The first one is the negative impact of the current ‘full-cost financing’ policy, which has led researchers to turn down grants, or to operate projects through other institutions. Secondly, the panel feels that a world-class institute should also dispose of means to initiate hiring, at least opportunistically so that it does not rely too heavily on the needs of the teaching program. This was discussed with the ACLC, but the current hiring freeze dominated the discussion. The research leaders emphasized the role of the research director but conceded that hiring procedures often need to be adjudicated with the instructional organization and, sometimes with another institute. The research leaders seemed to regard this as inevitable, but research and training agendas could be enhanced by more freedom in appointing new staff primarily on the basis of research excellence.

A third point is the high teaching load of the faculty, which we discussed in the section with general remarks (section 3). ACLC members complained more than most about this, and in particular some researchers here were not aware of how teaching and research time is calculated. The dean and research directors satisfied the committee that the admittedly complex system is explained to all staff members at least in principle. The committee sees the reduction of the current teaching load (from 6.9 hours per week on average) to 5.7 in 2022 as an important improvement. Nevertheless, the committee urges more reflection is needed on this issue.

In sum, ACLC is very well equipped for the future. Its organisational model is flexible so that it allows to adapt to upcoming fields of interests. It has a strong leadership, an efficient governance structure and adequate resources to support the implementation of its strategy. There are, however, some challenges that require careful monitoring in future years. These include the slowing acquisition of external grants, the hiring situation, and the high teaching load of faculty.

5.4. PhD programme

The ACLC recognizes three different kinds of PhD candidates: (1) externally funded and employed at the Faculty, (2) self-funded and not employed by the Faculty, and (3) funded directly and employed by the Faculty. This third category had dwindled to 10.53 FTE by 2017, significantly lower than in previous years.

The doctoral programme is thoughtfully structured. Each PhD candidate has an individual Training and Supervision Plan (‘Opleidings- en begeleidingsplan’ or OBP) that is agreed upon within a month after the appointment starts. Frequent contact between candidate and supervisors is required. Students carry out a pilot study nine months into the program, and meet to discuss it in a meeting with their advisor, the ACLC director and a further senior researcher. The ACLC director monitors the progress of the doctoral research, intervening if necessary. The director of the Graduate School of Humanities (GSH) is responsible for the training part of the PhD programme.

This overall plan for the PhD programme seems like an effective structure for ensuring adequate supervision and individualized research training, and students seemed to agree with this perspective.
Students confirmed their appreciation of how advising is guided by an individual OBP which is agreed upon very early in the programme (in the first month) by all involved. They felt this process was helpful, along with other milestones along the way to the PhD, including the required pilot study at the nine-month point, followed by annual formal meetings to assess progress.

At the site visit, the committee heard confirmation of what we had read in the self-evaluation report, that doctoral students in the ACLC benefit from access to training and professional development resources and infrastructures offered by the GSH at the University and also by the national linguistics research school, LOT for specific linguistic training. The GSH offers skills development courses in four categories: organization, co-operation & networking, communication & presentation, and preparation for a future within or outside academia. They reported to be happy with the courses offered. PhD students have elected representation on the governing bodies at both the Center and the Faculty levels, allowing them to ensure course offerings are tailored to their needs.

Nevertheless, committee members were concerned that some critical training might have to be strengthened in the doctoral program, e.g. on research methods, statistics and core areas of language structure. ACLC PhD candidates and supervisors noted that ad hoc counselling, prior training, or external training such as LOT courses, often provide the essential background. But this can leave doctoral students lacking the specialized technical expertise required for their research.

In terms of time-to-degree, a little over half (58% or 15/26) of all graduates who entered the PhD programme in the period of 2009-2013 (excluding pending students) defended in year 5. Only 4/26 (15%) defended beyond year 6. While this is probably not out of line with other comparable PhD programmes, a goal of a shorter time-to-degree would be reasonable. We should bear in mind, though, that these numbers are relatively small and also that the students themselves, at the site visit, felt that their time to degree wasn’t overly long, and was tied to the types of projects that they did. We heard from students who were both teaching in classroom contexts, and using their teaching for their PhD data, as part of a large grant, and while they weren’t all on time, it was clear that they had realistic end goals and were happy with their monitoring and supervision.

In general the students seemed very happy, reporting no issues with things like the source of their funding or the amount of travel that was funded, or the amount or type of courses and classes they had access to. They expressed no concerns about the job market, or about the time taken to degree, seeming confident they would remain funded one way or the other.

5.5. Research integrity
Research integrity and ethics is managed within the broader university and faculty policies, which are obliged to adhere to and enforce the Netherlands Code of Conduct for Academic Practice. The Faculty of Humanities has an Ethics Committee which oversees all research conducted at the ACLC with human participants. This committee appears to be quite strict and many proposals must go through at least one round of revision. The committee is of the opinion that these features support a research culture with high ethical standards.

Thinking about the future, the committee was concerned that the current set-up for integrity monitoring may not be specialized enough. Linguistic research comes with very specific challenges when doing experiments with adults and children, when doing fieldwork with for example illiterate speakers, or when working with highly sensitive data (e.g. village gossip data or data from privileged conversations, such as police interrogations or patient-caretaker interactions). Internationally, the field of linguistics, as other social sciences, is constantly evolving in respect to ethics monitoring. The committee encourages the department to address these challenges in the near future.
For responsible data management and sharing, the Center has access to the university’s Figshare system, and the Faculty has an appointed ‘data steward’ to help keep all researchers informed and actively involved in using this resource. The committee notes moreover that, with PRAAT, the ACLC has been a pioneer when it comes to open access in software. During the site visit, the institute management explained that the protocols and services are used increasingly by the institute’s staff and ‘research data management’ (RDM) is a required section on the PhD students’ yearly progress report.

The institute recognizes that they have been slightly late in their attention to issues of data management, nevertheless accepting that these matters should be incorporated into the broader effort towards adherence to high standards of research integrity, which appears to be quickly gaining traction. The committee urges increased vigilance with respect to these matters.

5.6. Diversity
It is noteworthy that the ACLC has a substantially higher proportion of female full professors (42%) than the rest of the university (22%). Yet, there is clearly still quite a way to go before there is gender equity across the ranks as the ACLC researchers are predominantly female at the level of PhD students. It is encouraging to know that steps have been taken to actively support the hiring of outstanding female researchers into full professor positions, as has recently been achieved for at least one high caliber female researcher at the ACLC. The committee values highly that the institute’s director is a driving force behind these initiatives.

5.7. Conclusion
Overall, all indicators point to a research environment that is consistently producing high quality research products with a high degree of international recognition. The ACLC’s mission is ambitious and clearly articulated and its organizational structure allows it to adapt as researchers and research interests develop. A broad range of activities is being developed in order to optimize the societal relevance of the institute’s research, with remarkably strong connections to major institutions in the city. Finally, the management and leadership of the institute is efficient and effective, allowing the ACLC to pursue its strategic goals.

5.8. Overview of the quantitative assessment of the research unit
After having assessed the research quality, relevance to society and viability, and comparing that to the developments and standard in the field of linguistics, the committee comes to the following quantitative assessments:

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research quality</td>
<td>very good</td>
</tr>
<tr>
<td>Relevance to society</td>
<td>excellent</td>
</tr>
<tr>
<td>Viability</td>
<td>very good</td>
</tr>
</tbody>
</table>
6. RECOMMENDATIONS FOR THE AMSTERDAM CENTER FOR LANGUAGE AND COMMUNICATION

The committee strongly support the management, structure, and achievements of ACLC. Nevertheless, it has the following recommendations:

- Proactively develop strategies for research funding that can also serve student instructional needs, so that research and teaching can support rather than compete with each other. This should involve flexibility on the part of the instructional programmes, too.
- Seek ways to protect the ACLC from the effects of the current hiring freeze.
- Seek ways to provide tenured positions for Vidi laureates who might complement ACLC research strengths.
- Seek ways to mitigate the effects of the full-cost financing policy.
- Continue to enhance and protect the research time of all staff members, but in particular that of junior staff members.
- Continue to explain the assignment of research time to the staff so that they are well informed and can support faculty and institutes policies better.
- Track whether and how products intended for use by peers or by the general public are used and how popular they are. The range of uses is too diverse to do this in a uniform way, which means different metrics would need to be developed and used to gauge the products’ use and impact over time.
- Closely monitor the time to degree of PhD students and further improve the monitoring system of PhD students, as planned.
- Track PhD candidates’ career trajectory for a longer time and more systematically after they have finished their PhD.
- Review the current system of training and support in data management, statistics, research methods and formal linguistics.
- Determine whether the existing general training in research integrity and ethics for PhD students (and all others) is meeting the needs of linguists, or whether more specialized training is needed that is more clearly tailored to the language sciences and covering both experiments and fieldwork.
- Continue to strive for a diverse faculty of excellent quality.
APPENDIX 1: THE SEP CRITERIA AND CATEGORIES

There are three criteria that have to be assessed:

- **Research quality:**
  - Level of excellence in the international field;
  - Quality and scientific relevance of research;
  - Contribution to body of scientific knowledge;
  - Academic reputation;
  - Scale of the unit’s research results (scientific publications, instruments and infrastructure developed and other contributions).

- **Relevance to society:**
  - Quality, scale and relevance of contributions targeting specific economic, social or cultural target groups;
  - Advisory reports for policy;
  - Contributions to public debates.

The point is to assess contributions in areas that the research unit has itself designated as target areas.

- **Viability:**
  - The strategy that the research unit intends to pursue in the years ahead and the extent to which it is capable of meeting its targets in research and society during this period;
  - The governance and leadership skills of the research unit’s management.

<table>
<thead>
<tr>
<th>Category</th>
<th>Meaning</th>
<th>Research quality</th>
<th>Relevance to society</th>
<th>Viability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>World leading/excellent</td>
<td>The unit has been shown to be one of the most influential research groups in the world in its particular field.</td>
<td>The unit makes an outstanding contribution to society</td>
<td>The unit is excellently equipped for the future</td>
</tr>
<tr>
<td>2</td>
<td>Very good</td>
<td>The unit conducts very good, internationally recognised research</td>
<td>The unit makes a very good contribution to society</td>
<td>The unit is very well equipped for the future</td>
</tr>
<tr>
<td>3</td>
<td>Good</td>
<td>The unit conducts good research</td>
<td>The unit makes a good contribution to society</td>
<td>The unit makes responsible strategic decisions and is therefore well equipped for the future</td>
</tr>
<tr>
<td>4</td>
<td>Unsatisfactory</td>
<td>The unit does not achieve satisfactory results in its field</td>
<td>The unit does not make a satisfactory contribution to society</td>
<td>The unit is not adequately equipped for the future</td>
</tr>
</tbody>
</table>
APPENDIX 2: PROGRAMME OF THE SITE VISIT

08.30-09.30  Closed session Committee
09.30-10.30  Interview with Institute management
10.30-10.45  Break
10.45-11.30  Interview with one half of the research group coordinators
11.30-12.15  Interview with the other half of the research group coordinators
12.15-12.30  Break
12.30-13.15  Informal working lunch with representatives of the Institute
13.15-14.00  Interview with (selection of) PhD students (1st 15 mins incl Phd coordinator)
14.00-14.15  Break
14.15-14.45  Tour Lab facilities
14.45-15.15  Meeting with societal partners
15.15-15.30  Break
15.30-17.15  Closed session Committee
17.15-17:45  Presentation of preliminary findings
APPENDIX 3: QUANTITATIVE DATA

Table A – Research staff

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific staff</td>
<td>35</td>
<td>14.1</td>
<td>36</td>
<td>15.1</td>
<td>44</td>
<td>18.2</td>
</tr>
<tr>
<td>Post-docs</td>
<td>7</td>
<td>5.2</td>
<td>4</td>
<td>3.2</td>
<td>5</td>
<td>4.3</td>
</tr>
<tr>
<td>PhD students (employed only)</td>
<td>33</td>
<td>25.1</td>
<td>37</td>
<td>27.0</td>
<td>36</td>
<td>26.6</td>
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<tr>
<td>Research staff</td>
<td>75</td>
<td>44.4</td>
<td>77</td>
<td>45.3</td>
<td>85</td>
<td>49.1</td>
</tr>
<tr>
<td>Support staff</td>
<td>0.9</td>
<td>1.0</td>
<td>1.3</td>
<td>1.2</td>
<td>1.2</td>
<td>1.0</td>
</tr>
<tr>
<td>Total staff</td>
<td>45.3</td>
<td>46.3</td>
<td>50.4</td>
<td>52.3</td>
<td>53.8</td>
<td>45.0</td>
</tr>
</tbody>
</table>

Causes of major changes:
- End of 2014: movement of three communication research groups from ASCA to ACLC
- 2017: Faculty-wide budget cuts led to non-replacement of several retiring and moving researchers

Table B – Main categories of research output

<table>
<thead>
<tr>
<th>Category</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refereed articles</td>
<td>65</td>
<td>67</td>
<td>73</td>
<td>105</td>
<td>87</td>
<td>86</td>
<td>483</td>
</tr>
<tr>
<td>Non-refereed journal articles</td>
<td>29</td>
<td>17</td>
<td>20</td>
<td>18</td>
<td>22</td>
<td>14</td>
<td>120</td>
</tr>
<tr>
<td>Books</td>
<td>20</td>
<td>14</td>
<td>15</td>
<td>18</td>
<td>16</td>
<td>11</td>
<td>94</td>
</tr>
<tr>
<td>Book chapters</td>
<td>68</td>
<td>68</td>
<td>53</td>
<td>79</td>
<td>68</td>
<td>68</td>
<td>404</td>
</tr>
<tr>
<td>PhD theses</td>
<td>4</td>
<td>8</td>
<td>5</td>
<td>9</td>
<td>16</td>
<td>9</td>
<td>51</td>
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<tr>
<td>Conference papers</td>
<td>19</td>
<td>15</td>
<td>16</td>
<td>35</td>
<td>34</td>
<td>8</td>
<td>127</td>
</tr>
<tr>
<td>Professional publications</td>
<td>7</td>
<td>20</td>
<td>16</td>
<td>13</td>
<td>15</td>
<td>11</td>
<td>82</td>
</tr>
<tr>
<td>Publications aimed at general public</td>
<td>33</td>
<td>35</td>
<td>19</td>
<td>11</td>
<td>13</td>
<td>13</td>
<td>124</td>
</tr>
<tr>
<td>Other research output</td>
<td>68</td>
<td>34</td>
<td>43</td>
<td>32</td>
<td>16</td>
<td>20</td>
<td>213</td>
</tr>
<tr>
<td>Total</td>
<td>313</td>
<td>278</td>
<td>260</td>
<td>320</td>
<td>287</td>
<td>240</td>
<td>1698</td>
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</table>
Table C – Research funding

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>fte</td>
<td>fte</td>
<td>fte</td>
<td>fte</td>
<td>fte</td>
<td>fte</td>
</tr>
<tr>
<td>Scientific staff</td>
<td>11.18</td>
<td>12.69</td>
<td>15.53</td>
<td>15.12</td>
<td>15.60</td>
<td>12.76</td>
</tr>
<tr>
<td>Post-docs</td>
<td>2.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PhD</td>
<td>13.53</td>
<td>14.43</td>
<td>19.98</td>
<td>19.00</td>
<td>17.82</td>
<td>10.53</td>
</tr>
<tr>
<td>Direct funding</td>
<td>26.71</td>
<td>27.12</td>
<td>35.51</td>
<td>34.12</td>
<td>33.42</td>
<td>23.29</td>
</tr>
<tr>
<td>Scientific staff</td>
<td>2.09</td>
<td>1.26</td>
<td>1.89</td>
<td>1.38</td>
<td>0.63</td>
<td>0.88</td>
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<tr>
<td>Post-docs</td>
<td>1.55</td>
<td>3.20</td>
<td>4.27</td>
<td>4.70</td>
<td>2.19</td>
<td>2.62</td>
</tr>
<tr>
<td>PhD</td>
<td>8.60</td>
<td>11.40</td>
<td>6.66</td>
<td>9.12</td>
<td>12.15</td>
<td>12.96</td>
</tr>
<tr>
<td>Research grants</td>
<td>12.24</td>
<td>15.86</td>
<td>12.82</td>
<td>15.20</td>
<td>14.97</td>
<td>16.46</td>
</tr>
<tr>
<td>Scientific staff</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
</tr>
<tr>
<td>Post-docs</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>2.43</td>
<td>2.43</td>
</tr>
<tr>
<td>PhD</td>
<td>2.43</td>
<td>2.43</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract research</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
<td>1.80</td>
<td>4.23</td>
<td>4.23</td>
</tr>
<tr>
<td>Total funding</td>
<td>39.75</td>
<td>43.78</td>
<td>49.13</td>
<td>51.12</td>
<td>52.62</td>
<td>43.97</td>
</tr>
<tr>
<td>Percentage indirect</td>
<td>32%</td>
<td>38%</td>
<td>28%</td>
<td>33%</td>
<td>36%</td>
<td>46%</td>
</tr>
</tbody>
</table>

**Expenditure:**

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct personnel costs</td>
<td>2,537,831</td>
<td>2,654,756</td>
<td>2,618,179</td>
<td>2,527,447</td>
<td>2,429,442</td>
<td>2,257,992</td>
</tr>
<tr>
<td>Indirect personnel costs</td>
<td>1,980,216</td>
<td>1,993,941</td>
<td>1,999,676</td>
<td>1,842,743</td>
<td>1,630,069</td>
<td>1,525,029</td>
</tr>
<tr>
<td>Other costs</td>
<td>256,690</td>
<td>249,040</td>
<td>151,091</td>
<td>101,116</td>
<td>144,857</td>
<td>358,144</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>4,774,737</td>
<td>4,897,737</td>
<td>4,768,946</td>
<td>4,471,306</td>
<td>4,204,368</td>
<td>4,141,165</td>
</tr>
</tbody>
</table>
Table D – PhD candidates

<table>
<thead>
<tr>
<th>Starting year</th>
<th>Total (F+M)</th>
<th>Defended in year 5</th>
<th>Defended in year 6</th>
<th>Defended in year 7</th>
<th>Defended after 7 years</th>
<th>Pending</th>
<th>Discontinued</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>4+2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>2010</td>
<td>5+2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>2011</td>
<td>9+1</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>2012</td>
<td>8+5</td>
<td>5</td>
<td>1</td>
<td></td>
<td></td>
<td>5</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>2013</td>
<td>6+2</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32+12</strong></td>
<td><strong>15</strong></td>
<td><strong>7</strong></td>
<td><strong>3</strong></td>
<td><strong>1</strong></td>
<td><strong>11</strong></td>
<td><strong>6</strong></td>
<td><strong>44</strong></td>
</tr>
</tbody>
</table>

Main causes of defending in year 6 or later:
- illness (3)
- pregnancies (2)
- part-time PhD employment (1)
- delays