

Evaluation Report - Language, Logic and Cognition Center (LLCC)

Final Report 11.2.2019

Introduction

This report evaluates the past achievements and future prospects of the Language, Logic and Cognition Center (LLCC) at the Hebrew University (HUJI). Following the invitation by the HUJI vice-rector, dating 23 Oct. 2018, the evaluation committee consisted of the following members:

- Prof. N. Friedmann (Tel Aviv University)
- Prof. S. Rothstein (Bar Ilan University)
- Prof. G. Sher (University of California)
- Prof. S. Wintner (University of Haifa)
- Prof. Y. Winter (Utrecht University, chairperson)

The committee received a comprehensive report of the LLCC (December 2018), detailing the aims of the center and its past activities. During a site visit on 3 January 2019, the committee had a chance to converse extensively with the dean of Humanities at HUJI, with senior researchers at the center, and with a big group of postdocs, PhDs and master's students who are affiliated with the institute. The committee also had the opportunity to discuss its mission with the president of the university and representatives of the rector's office, including Prof. Berta Levavi-Sivan.

Based on these meetings and the material presented to us, the committee believes that the LLCC is an exemplary model for the way a research center in the humanities should function in the 21st century. Over a short period, and building on a close collaboration between the Linguistics, Philosophy and Hebrew Language departments, the strong core of language researchers at HUJI have been able to establish a solid research center that is truly interdisciplinary, with important outreaches to the Computer Science, Cognitive Science, Psychology, and Education departments. Relying on this outstanding scientific alliance, the LLCC has gained impressive international visibility at an institutional level. The members of the LLCC have shown a constant and impressive flow of research output, especially since the last MALAG evaluation in 2013. This has significantly contributed to research activities at HUJI that would otherwise not have been possible. As such, LLCC is a potential game-changer in language research, both at HUJI and nationally in Israel.

The committee believes that with a relatively modest financial investment, HUJI can make sure that the LLCC continues to thrive. This leads to the following recommendations:

- Ensuring the replacement of retiring staff (especially Prof. E. Doron and Prof. C. Posy).
- Securing funds for administrative support and technical infrastructure.
- Guaranteeing one Lady Davis fellowship per academic year.
- Encouraging relevant departments outside the humanities, especially Cognitive Science, Psychology and Computer Science, to hire new excellent staff working on language research and promote their collaboration with the LLCC.

Such measures would considerably strengthen both the Humanities Faculty and the inter-faculty collaboration at HUJI, thus promoting its excellence.

LLCC position holders are advised to resume their efforts towards established connections with interested parties outside the Humanities. They are advised to adhere to consistent documentation practices with respect to (i) achievements and (ii) financial contribution of university sources and individual members (e.g., student support from individual grants). This will help the faculty of Humanities and the HUJI management to clarify returns on investment

as well as the degree to which the LLCC is succeeding in fund raising, and to reach optimal decisions on the center's future, including which areas of funding that the University is prepared to guarantee.

The report is made of the following sections, supporting these assessments and recommendations:

1. Scientific agenda of the LLCC
2. Scientific achievements, with a focus on the period 2013-2018
3. Notes on the financial model of the LLCC
4. SWOT analysis
5. Conclusions and recommendations

1. Scientific agenda of the LLCC

The LLCC focuses on the study of language as a multidisciplinary enterprise. The current activities of the LLCC focus on theoretical linguistics, Hebrew, and philosophy of language, with important outreaches to computer science and cognitive science. The rationale behind this approach has both scientific and organizational motivations.

Scientific rationale: As a research center focusing on language, it is natural and appropriate that an institute like the LLCC will have theoretical linguistics at its core. It is important to stress that by “theoretical linguistics” we do not refer to a particular school of grammar, even less so to an academic administrative unit. Rather, when using the term “theoretical linguistics” we refer to a wide array of sub-disciplines, enabling analysis of the structure and use of language. In leading international linguistics departments around the world, the term “theoretical linguistics” covers specific theories of language like Generative theories, Saussurean perspectives, structuralist theories, Fregean theoretical semantics, Shannon Information-theoretic approaches, Bar-Hillel-Lambek categorial grammar, and many other approaches. In general, a university chooses to focus on a subset of these theoretical approaches which may be distributed over different administrative units. HUJI is no exception. The focus is on Hebrew philology (the Department of Hebrew Languages), Structuralist linguistics (Linguistics Department, structuralist stream), Generative Linguistics (Linguistics Department, generative stream), Philosophical Logic and analytic philosophy (Department of Philosophy). The achievement of the LLCC is to provide a meeting place for these varied approaches to interface without any single theoretical bias.

Under the inclusive use of the term “theoretical linguistics”, this large interdisciplinary field is not “owned” by linguists, but has important – indeed irreplaceable – exponents in other academic disciplines, especially Math and Computer Science (computational linguistics and formal language theory) and Cognitive Psychology (language acquisition, language processing, and neurolinguistics). The focal group that has been created at the LLCC has enabled a cohesive outreach to these other academic disciplines, resulting in successful cooperative projects.

Organizational rationale: As in most other universities, the only department at HUJI that exclusively contains researchers who focus on natural language as their main research topic is the Linguistics department. Given that, it is natural that the HUJI Linguistics department, with its two strands of theoretical linguistics, has taken the lead in the formation of the LLCC and its leadership. Given the intellectual, spatial, and administrative proximity between the Linguistics department and the Hebrew and Philosophy departments, it is again natural that the core of the LLCC is within the Humanities faculty. This has enabled the construction of a highly interactive focal group. However, a pivotal and overtly-pronounced goal of the LLCC is to extend its scientific outreach beyond the humanities proper, and promote active

interaction between the focal group and other academic disciplines. Indeed, the LLCC has been able to involve outstanding language researchers from Cognitive Psychology and Computer Science as major players in its daily activities: Abend and Rappoport (Computer Science), Deutsch (Education/Psychology), and Arnon (Psychology). This fact on its own is a major organizational achievement.

As will be seen, the committee fully endorses the choices that the LLCC has made for its scientific agenda, and the concrete steps that it has taken in order to promote it.

2. Scientific achievements, with a focus on the period 2013-18

Major quantifiable scientific achievements of the LLCC include the following:

1. ***Internationally funded projects and important publications*** where the interdisciplinary environment of LLCC has been vital for the conception of projects, and the visibility of the Center has encouraged international funding committees to award grants. In this respect we should mention Prof. Doron's ERC-AdG project, the Niedersachsen-Israel project by Dr. Crnić and Prof. Sichel, and another Niedersachsen-Israel project by Prof. E. Bar-Asher and Prof. Boneh. The publications of LLCC fellows are too numerous to review here. However, among the publications which would not appear without the LLCC we can surely include papers by students in top-tier journals and conferences, including: *Journal of Child Language*, *North East Linguistics Society*, *Boston University Conference on Language Development*, *Morphology*, *Sinn und Bedeutung*, *Semantics and Linguistic Theory*, *Association of Computational Linguistics*, and others.
2. ***PhD and postdoc projects*** that involve truly interdisciplinary collaborations that were made possible due to the LLCC. This includes all postdoc projects of the LLCC, and many PhD projects where collaboration between theoretical linguistics and another discipline was made possible thanks to the LLCC. For instance, we would like to name the projects by David Kashtan (Philosophy), Elijah Sulem (Computer Science), Itai Bassi (Philosophy), Shira Tal (Psychology), Henry Brice (Psychology), Yaara Lador (Education/Psychology), and Yair Itzhaki (Philosophy). In addition, most master projects of the LLCC involve interdisciplinary collaborations that would not be possible otherwise.
3. ***An attraction point for top-tier international researchers:*** Throughout the years of its existence, the LLCC has been an important meeting point for leading international researchers. Many of these researchers gave invited mini-courses at the LLCC or contributed to one of the many workshops that are organized by the center. This include leading scholars like Stephan Crain, Regine Eckardt, Stewart Shapiro, Jonathan Bobaljik, Kit Fine, Angelika Kratzer, Paul Egré, Gennaro Chierchia, Philippe Schlenker and many others. Furthermore, open faculty positions at LLCC affiliated departments attract applications from international researchers who are not otherwise associated with Israel, a very unusual outcome that testifies to the great international visibility and esteem of the Center.

Less quantifiable but not less important is the achievement of forming an active research community. While this achievement is hard to quantify, we believe that it is one of the greatest achievements of the LLCC – the creation of a unique space where young students and junior researchers exchange ideas freely, and are able to form new collaborations. One of the means that the LLCC has developed to achieve that is the extremely active **reading groups**

on specific topics of interest. These reading groups are heavily attended, and they have already led to new collaborations between linguists, philosophers, psychologists and computer scientists, which would not have been possible without the LLCC. In this respect we should mention the many active collaborations between linguists (E. Doron, M. Rappaport Hovav, N. Boneh, E. Bar-Asher Siegal) and computer scientists (O. Abend, A. Rappoport), philosophers (A. Levy, C. Posy), and cognitive psychologists (A. Deutsch, Y. Grodzinsky, I. Arnon). As an outcome of these efforts, it appears that graduate students and postdocs simply love being part of the Center, and look forward to being physically present there, engaging with peers as much as possible. This achievement is again quite intangible, but it was unmistakably present in all conversations that the committee had with young researchers at the LLCC. The great intellectual impetus that this energy leads to cannot be overemphasized.

This achievement of the LLCC makes it **one of the only genuine graduate schools among the humanities faculties in Israel**. In this unique setting, PhD students are fully part of an interactive and productive research environment, which contributes enormously to the development of their research and academic career.

Contribution to increased competitiveness of HUJI: In addition to the intrinsic scientific value of its achievements, we understand that since 2013, the LLCC has already shown important contribution to the competitiveness of HUJI in hiring new staff. The number of international postdocs soliciting to research positions at the LLCC in 2016/2018 stood at 26 and 21, respectively. These are extremely high numbers for any international institute in the relevant domains. In addition, we understand that the number of **international candidates** (without Israeli background) for research positions at the Linguistics department has increased substantially between 2012 to 2019 (from 1 to 11). The LLCC was also used to attract highly-ranked candidates for a position in Philosophy whose expertise is in philosophy of language.

3. Notes on the financial model of the LLCC

Much of the resources for the research activities at the LLCC are required from external funds. In addition, the HUJI administration has invested in the following items, through various channels:

- A. University matching through various channels (Mandel fellowships, TAU-HUJI Linguistics program, etc.)
- B. Administrative support from the Faculty of Humanities
- C. Until 2016: one dedicated postdoc fellowship a year
- D. Seed budget (drying out)

The support from the Humanities faculty is needed in order to cover physical and administrative costs that are not covered from external grants: salaries for director, secretary and standard equipment.

The seed budget has mainly been used in exceptional circumstances. However, due to many cases where it was vitally necessary for the operation of the center, it is now drying out. Faculty members of the LLCC are aware of their responsibility for proactive fundraising in particular through applications for grants, and have been successful in applications for both smaller and large grant applications. However, given most common grant regulations and the natural fluctuations in income based on grants, it is unrealistic to expect them to provide for administrative support, or basic running costs

4. SWOT analysis

Strengths:

- outstanding graduate school
- outstanding and unique interdisciplinary community
- dedication of fellows
- unique working space

Weaknesses:

- no administrative guarantee for sustainability or funding
- no long-term financial and academic planning agreement between the LLCC and the University administration.
- distance between two campuses makes interdisciplinary collaboration harder
- little influence on hiring of new faculty
- no guarantee of a constant flow of post-doc researchers

Opportunities:

- extremely promising potential for added value for a true interdisciplinary collaboration between humanities and nearing disciplines
- young (non-tenured) researchers with high earning capacity
- possibility to engage more senior staff from different departments in interdisciplinary research with LLCC

Threats:

- financial prospects look grim without sustained administrative support and strategic commitment of HUJI to sustainability and fostering of proved excellence
- retiring senior faculty (Posy, Doron) lead to increased work load and exhaustion of current energies with major academic leaders

5. Conclusions and recommendations

The LLCC is a potential game-changer in language research, both at HUJI and nationally in Israel. With a relatively modest financial investment, HUJI can make sure that this center continues to thrive.

Recommendations for LLCC position holders:

The committee is much impressed by the achievements of the LLCC so far. However, in some points we hope that the LLCC could make more directed efforts. Especially:

1. Resume the scientific efforts done so far to achieve as much involvement as possible of Cognitive Psychologists and Computer Scientists in the daily life of the LLCC.
2. Clarification of the LLCC's financial position, including documentation of grant contribution to the center (e.g., list of members financed by external projects), year-by-year analysis of student population and support, as well as a clear statement of financial outputs which cannot be covered by individual grant-writing.
3. Such financial documents, together with documented records of achievements and added values will help the HUJI administration to make decisions on the center's future.
4. Negotiate, if possible, via the Dean and individual departments, the possibility to become pro-actively involved in hiring procedures of relevant departments. Seek a management model that might allow the LLCC to have influence on hiring decisions.

Recommendations for faculty and university administration:

The committee values very much the efforts and resources that the Hebrew University has invested so far in the LLCC. To ensure sustainability, the faculty and the university administration are strongly advised to take the following measures:

1. Make the necessary investments in order to replace retiring staff (especially Prof. E. Doron and Prof. C. Posy).
2. Commit to finance administrative support and technical infrastructure of the LLCC, in particular a permanent half-time administrative position + technical infrastructure, which will allow collaboration between the campuses.
3. In relation to recommendation 1 to the LLCC, we believe that the HUJI administration could encourage other faculties to engage proactively in the activity of the LLCC, thus helping to extend it to new domains beyond the Humanities faculty. One way to achieve that could be financial encouragement of joint inter-faculty projects with the LLCC.
4. Guaranteeing one Lady Davis fellowship per academic year is necessary in order to maintain minimal activity of the institute independently of external grants.
5. Relevant departments outside the humanities, especially Psychology, Cognitive Science and Computer Science, could be proactively encouraged to hire new excellent staff working on language research and promote their collaboration with the LLCC on relevant projects.

The committee is of the opinion that such measures would guarantee the continued high-quality activity at the LLCC and considerably strengthen both the Humanities Faculty and the inter-faculty collaboration at HUJI, thus promoting its excellence.