We started this project with a provocation: that undergraduate research is not a propaedeutic practice that – necessarily – produces inferior research, but that it instead affords us a critical perspective on, and a basis for interventions into, structures that govern present-day research. From our perspective as students who are following academic research and consider pursuing a career in research, we identified some crises and prepared a list of questions as guidelines for academic gatekeepers, such as supervisors, course administrators, book and journal editors, peer-reviewers, conference convenors and those policy-makers and advisors responsible for the allocation of funds and research opportunities.

During the BLASTER workshop on undergraduate research in October 2016 at Leuphana University Lüneburg, which initiated the work on the contents of this special issue, one participant remarked something along the lines of:

It concerns me how most of what we discussed and prototyped at this workshop is so pragmatic. We think about undergraduate research in terms of institutional funding, implementation and impact measuring, and somehow don’t seem able to imagine research outside of the context of the institutions we are running right now, outside of the material and infrastructural constraints that the economically permeated university today imposes.

This lack of imagination was unsettling for us as we thought about larger questions and crises academic research both faces and (re)produces today, crises that we experience when imagining a professional future. If these crises are not addressed in the design of undergraduate research programmes, that is, at the earliest possible stage of an academic career, it might be too late to make up for any biases they may introduce at a later stage.

The above-quoted concern resonated with us impressively. Before turning to the crises of undergraduate research in academia’s gated communities in more detail, we therefore wanted to address it with an attempt to reimagine what research – and the university – could,
and perhaps should, be: Fundamentally, research has nothing to do with the pragmatics of setting up and running an institution. It has to do with us: People who are driven by curiosity, who relate to ideas and the many secrets and surprises of our world. The desire to understand and shape what concerns us naturally exceeds the institution, crosses expertise, geography and capabilities. People doing research also orient themselves towards the future, by trying to build on the past, imagining and creating what they believe to be hospitable worlds. The sustained work on a research project requires us to develop special relationships with other people and with all kinds of objects: be it research instruments, formulas, (programming) languages, century old ideas, or political realities unfolding in the present. These imagined futures and desires, these people and objects, we like to think, are the university - and not accidental funding applications, impact measurements and algorithmic rankings.

By seeing research not from a disciplinary or from a financial perspective but rather as a human practice motivated by the wish to understand and shape, to explain and discuss, it becomes apparent that the most important infrastructure of research might be people – human beings with desires, needs, and ambitions. With this understanding, we gain a new access to and perspective upon academic establishments: When talking about undergraduate research initiatives, instead of creating new databases, journals, technologies, and methodologies specifically for undergraduate research, and instead of reifying the distinction between ‘serious-senior’ and ‘amateur-junior’ research, we can focus on what is already there: the desire to understand, to discuss and to cooperate, and the fruitful and potentially inclusive space of the university as a community of curiosity.

It is, in this sense, not without irony that our appeal comes as part of a Companion to Undergraduate Research in the Liberal Arts and Sciences. But approaching research from the lens of undergraduates offers a framework that can help reflect and intervene into research an und für sich (in and for itself). It shows that the university is, for students, more than a working place; it is a place that can resist market imperatives and affords freedom from immediate societal instrumentalisation. It is a space that can provide liberty and leisure to question and reflect. It also illustrates and makes available the material experience that truth is not located within one mind or the other, and that truth can rather be understood as a communicative practice – as arising in emergent and contingent discussions. Finally, as an undergraduate, figuring out what one wants to pursue, it becomes evident that research does not solely take place within a certain field, but rather within the researcher: it is in the desires, hopes, and fears - in short, the concerns, that we can locate the driving force of research which guides through the process, or in Karl Jasper’s words: “So long as [...] people are content to state and discuss their particular beliefs and authorities within the university, so long as they allow their beliefs to be an impulse for their research, they are useful to the university.”

---

The EHEA’s Pledge to Undergraduate Research through Liberal Arts Education

We are not the first ones to realise all of this, and we are not the first ones to draw conclusions from what research essentially is and is about to what it should be understood as at the undergraduate level. Since the last three ministerial conferences of the Bologna Process, the European Higher Education Area (EHEA) has continuously increased its commitment to student-centred learning and the involvement of students in all activities and organisations of the academic community. In addition to widening access to higher education, the EHEA’s dedication to innovation and the educational ideals of lifelong and student-centred learning have thereby merged into a list of novel demands and pragmatic visions for European higher education. These include, *inter alia*, curricular reforms towards learning outcomes and the empowerment of, and curricula focused on, individual students as active participants in their own learning. In line with these reforms, higher educational learning environments, instead of offering ready-made lectures to passively receiving students, or qualifications to paying customers, primarily ought to promote and intensify activities for the acquisition of knowledge and skills, and for the development of creativity, innovation, entrepreneurship, intellectual independence, personal self-assuredness, confident assessments of situations, and for actions and decisions grounded in critical thought. One vital strategy that EHEA policy-makers and education experts are promoting in order to realise this educational philosophy is to foster the identity of students as junior researchers. As student-centered part of and preparation for independent lifelong learning, and as essential civic and professional training such a higher education should at all levels be based on state of the art research, strengthen links between teaching, learning and research, and, perhaps most importantly, be organised as an open process for students to pursue academic learning and research.²

“Taking students seriously, by viewing them as co-producers of knowledge and a part of the academic community also means challenging the growing perception of students as customers to be provided ‘customer service’ that threatens the shift towards student-centred learning. Taking students seriously also means giving them real choices, autonomy and responsibility in their learning process…”³

“We recognise the potential of higher education programmes, including those based on applied science, to foster innovation. Consequently, the number of people with research
This means that, in fact, educational experts and policy-makers of higher education have since long recognised the many values of fostering curiosity and students as researchers from as early as undergraduate education. Since we are ourselves students and alumni of a Liberal Arts undergraduate programme, we wrote this article from a lifelong learning, student-centredness, and full participation perspective in line with the educational philosophy of the Bologna Process. Notably, if we follow the idea to include students as autonomous and self-responsible, full members of the academic community at all stages of higher education, European Liberal Arts programmes, as they share a great deal of the educational philosophy with Bologna, are among the institutions most promising for its implementation. This is especially so because they stress these qualities of their students at the earliest possible point of higher education, namely within a first cycle degree. Of course, the realisation of Bologna’s democratic and academically progressive ideals should not be limited to a small number of small-size Liberal Arts undergraduate programmes. But undergraduate programmes, both because they set the initial momentum for a student’s initiation into the academic community, and because they - other than second and third cycle research-focused degrees - are often times still stuck in rather school-like structures of teaching and interaction, are perhaps the most important stage at which students’ inclusion as members of academia, as co-producers of knowledge and drivers of innovation ought to be fostered. In order to achieve these goals, as well as fostering student-centred and lifelong learning then, developing formats for, and including undergraduate students in, research should be among the priorities of academic reforms - not least because the academic community itself will benefit from a new generation of scholars that have been trained in research from early on.

Mind the Gap - Reflecting on Implementation

As of yet, however, the inclusion of students into the gated communities of academia as full members as early as in their first cycle degree is still in an experimental phase, not least because policy and scholars of higher education are ahead of mainstream practitioners. At such an early stage, it is of crucial importance to set agendas right and to identify both best practices and challenges, counterproductive initiatives or dead-ends that others can learn from for the future. Many academic institutions now do indeed offer students to participate in research projects from the very start of their academic careers. This can be part of compulsory or elective curricula, internships or assistantships in research groups, labs, or think tanks or the publication of first, second, and third cycle dissertations. In line with the educational philosophy behind lifelong and student-centred learning, such initiatives are laudable for their democratising and inclusive approaches and for their promotion of academic youth development. It draws from the benefit that young talents bring in form of fresh ways of thinking, problem-solving, and of

---

their contribution to innovation that may be beneficial to their company, research group, the academic community, or even entire political economies and societies. While there are many initiatives to promote students as scholars in some way, there are at least as many unfortunate aspects to and ways of implementing such benevolent ambitions.

Student research, just as any research, will of course not always contribute valuably to the current proceeding and debates in the respective academic community, or towards innovative solutions to any kind of problem. Yet, even less than professional research student research must not only be judged from the immediate output that it produces, but also from the long-term learning effects and benefits that professional researching will have over school-like teaching and proxy-scholarship via assignments for students as aspiring professional scholars, or as professionals in other fields, and as citizens and as humans who will learn for their lives how to approach a question and deal with intellectual challenges academically.

As a tool to help improving the opportunities for students to become engaged as junior researchers, and in order to help making existing institutional settings even more inclusive for students as researchers, we have prepared a catalogue of crises and questions that will assist to assess a project’s’ or institutions’ inclusivity and openness for student research, and that can serve as a guide for further development where appropriate. Considering this catalogue of crises and questions regarding undergraduate research in academia’s gated communities should be helpful to all ‘gatekeepers’, in achieving what they can do in order to open academia for students as a scholarly youth, engaged citizens and future changemakers.

A Catalogue of Crises, and How to Face Them

All of the following crises have to do with the question of authority to admit or deny young researchers’ voice and influence on academic debates, and into the gated communities of academia. None of the crises addressed here should be thought of in the artificial isolation that we introduce in our clustering below for the sake of structure and readability. They coincide, condition and trigger each other. These potential crises of undergraduate research are also all part of a more general crisis which prevents equal consideration of research on various arbitrary grounds and seems to threaten valuable aspects of student research. For instance, such a crisis may take the form of unnecessarily difficult conditions for the next generation of academics, worse conditions for students in general to gain relevant research experiences, or to pursue lifelong learning as an ideal of humanistic Bildung and as preparation for civic engagement and professional life. It can also mean the loss of promising sources for innovation in the academy and an instance for control, critique, and collaborative improvement that may be brought from less experienced to other, more established forms of research. The next paragraphs will introduce some crises in more detail, accompanied by some good examples, and followed by the list of questions (p. 10), both of which can help academic gatekeepers avoiding the crises.
The Intergenerational Crisis

The first crisis we want to address here is a crisis of authority as a crisis of intergenerational understanding, exchange, and congeniality. Oftentimes, though there will certainly be exceptions, student research is - willingly or not - brushed aside as second class research due to its lack of cultural, symbolic, and social capital that comes with successful acculturation and year-long experiences in academia. The senior authority has the power to silence junior researchers with their reputation and speaker positions. By denying a reasonable share of voices in mainstream discourses to those who are new, academic communities may risk reproducing, perpetuating, and increasing generational gaps as well as cultural conservatism. Giving more validity to novel methodologies, to novel perspectives and new generations is a promising opportunity to bridge these generational differences, and to foster intergenerational dialogue and collaboration.

The Quality & Innovation Crisis

This immediately leads us to a next overarching crisis, which we call the quality and innovation crisis. The reason that all of the following crises should be of general concern to those who are committed to an ideal of authentic research out of curiosity and the pursuit and production of novel knowledge and truths also is that they all share the feature of culminating in their counter-productiveness for research quality and innovation. Also, the innovative capacities of the less conditioned, young minds and the innovative potential of non-standardised research may be lost through gatekeeping practices that exclude student contributions to enter the discourse. Where research is promoted predominantly because it follows the established rules or because it is linked to well-established positions within the relevant communities, important chances to test and falsify, and that also is - at least for a time and a group of researchers - to progress, might be lost. For academia, this means paradoxical effects through exclusivity and gridlock.

By being overly restrictive with student research for the wrong reasons, we might, moreover, risk losing an immensely valuable control mechanism through which senior scientists - who might already have agreed upon some paradigm in their intragenerational academic circles or methodologies - need to defend their results against critiques brought forward from students as younger colleagues in debates within academic communities, e.g. at conferences, in journals, books, or in research groups.
The Power Crisis

Uneven power relations between students and established academic authorities can lead to situations in which the latter take advantage and abuse their power. Academic superiors might, not always knowingly or willingly, exploit students’ existential vulnerabilities, and their weaker negotiation positions that result from one-sided dependencies and future ambitions or anxieties.

The Value Crisis

Student research is sometimes treated as a merely qualification-oriented enterprise that is thought to add to a student’s future competitiveness in the job market via a notable CV entry. We call this a value crisis of student research because what it eventually amounts to is an estrangement of the value that is being ascribed to academic practices. This is especially strong where the student is not actually involved as a team member to conduct research, but solely assigned with organisational, communications, and administrative tasks. A second value crisis is observable where research practices do primarily serve the profiling of a student as a young researcher or otherwise employable workforce rather than serving the genuine learning process and collaborative knowledge production by the student as human, citizen, and junior researcher. Such value crises do not least occur in the attitudes of students themselves, who are nudged to follow profiling demands of labour markets rather than research in and for itself. Gatekeepers of academic communities in all positions, most importantly those involving young researchers in joint ventures can counteract these crises by stressing the full responsibilities as junior researchers which students both as learners and as contributors to knowledge-production have in the respective collaborative research projects. Relevant job offers could be advertised accordingly and contribute to exempting the profiling imperatives for future academics.

The Center & Periphery Crises

Some students will have better access and better starting positions to participate in knowledge production and outreach than others. The one who will have good connections to centres of the academic community, such as prestigious universities and established researchers will herself be part of a central network, and the one who lacks these connections of symbolic and social capital will herself be part of the periphery. This is not to say that the reference to an academic authority will not be a credible indicator of qualification, but such networks should not result in the arbitrary discrimination of those who lack access to the academic centre already. Such a conduct would counteract the minimal egalitarian commitments that academic institutions subscribe to, and it would counteract that what we address as the crises of deterrence, and of quality and innovation below.
Between different positions on the academic map of center-and-periphery, but also within any given network on this map, having better or worse chances as a researcher and student will be, *inter alia*, though significantly, due to specific epistemic biases of linguistic inequality. Academics often use a certain vocabulary trained by years of academic writing and reading of relevant papers. They adapt a jargon and citing logic that typically cannot be known by “newbies” i.e. undergraduates. What we refer to with this is a second exclusivity constraint given through the obstacles of jargon and the prescriptivity of language and vocabulary which is fashionable and ‘allowed’ to use within academic discursive communities at a given time. Those whose language does not fit into the gusto of editors and established researchers as authorities might be denied access, and might for the very same reason lack well connections. Therefore, the writing style of undergraduate research can be an obstacle to the inclusion of students as junior scholars. This obstacle could, however, be overcome for example by editing the text over and over again. Or students could seek advice at an academic writing center. In addition, the supervisor (*if there is one*) could also guide and revise throughout the process. Many center-periphery inequalities of access to both knowledge production and sovereignty of interpretation nowadays occur South vs North and East vs West. Complementary and inseparable from reasons of colonial history and educational culture, these structures of center-and-periphery can coincide with, and are explained through, prevalent epistemic imbalances, such as non-compliance with the English *lingua franca* in academia or with epistemic standards that deviate from standard methodologies of the respective disciplines. The whole presentation of ideas here serves a marker for the validity of an idea. It’s truth-value is not taken from its content but from the rhetorics of its presentation.

All this might be reason for an academic journal to reject the student-led submissions. So, the output may never appear within the academic community and thus not create any academic impact. Hence, one’s research and one’s status as undergraduate researcher might be depreciated simply for preferring a style of writing rejected by academic authorities, or by adhering to unorthodox methodologies and research methods that do not find the relevant support.

The Deterrence Crisis

What this means is that, whether actual mechanisms of exclusion are in place, the prevailing of a prima facie pretense of such in itself performs an exclusionary function at large. To use an analogy: Even if there was no physical hurdle to overcome, the creation of the image of such a hurdle will do the job of deterring aspirants to attempt the seemingly impossible or (close-to impossible) unlikely overcoming of the hurdle. This is why it is important to make the criteria of access transparent, and to mention explicitly who is invited and also which criteria will *not* be relevant.5

---

5 For a good example of how to avoid deterrence (in the art field), see the open calls of apexart at:
Checklist of Questions

Now, how can these crises be faced and how can they be overcome - how can we even know if our everyday practices of research apply to/fall under these crises? We have prepared the following list of questions that should guide ‘gatekeepers’ at the entrance of academia to reflect on the crises – whether they believe to be contributing to or counteracting them. We do not believe that there is a general recipe for counteracting these crises. What this list of questions intends to do is to raise awareness to the problems that come with them. And it can give direction for how to correct current practices - how this is best-done remains at the discretion of the respective gatekeepers.  

- Are Calls for Papers open for young researchers?
- Do we actively encourage submissions coming from undergraduate students?
- Do we reserve places for young and emerging scholars at the academic conferences and workshops that we organise?
- Do we invite students to academic events?
- Do we ask for institutional affiliations and CVs in calls for contributions?
- Do we have students in the admission and invitation committee for conferences, journals and other academic selection procedures?
- Do we integrate student research into larger research projects, e.g. work on research projects together with students in the context of curricular research exercises?
- Does our institution encourage the participation of students in collaborative research projects, e.g. by regularly offering research assistantships?
- Does our institution encourage the inclusion of junior researchers (students) into some or all of its research projects?
- Do we include participating students in all steps of the research, or only in administrative, organisational, and bureaucratic tasks? (PR, layouting, scheduling, logistics, communications)
- Do we integrate students into the research design, giving them a say in the design of research questions, research objectives, the definition of milestones and the form of output?
- Do we integrate students into the organisation of a research project such as the distribution of responsibilities, the allocation of funds for activities, events and salaries?
- Is students input valued as academic input and does it influence the research project as such?
- Do we allow for presentation of results in forms other than written: oral presentations and conversations or interviews? (recording a conversation and transcribing it, video

http://apexart.org/opencalls.php

6 Complementary, helpful guidance to evaluate one’s own research fairness in collaborative endeavours and inclusiveness, for at least some of the above mentioned crises, can be, for instance, be found via the Research Fairness Initiative of the Council on Health Research for Development, see http://rfi.cohred.org/; the Global Colleagues programme, see http://gc.academicsstand.org, and AuthorAid, see http://www.authoraid.info/en/.
essays, documentaries, radio features, artistic objects, website projects, blogs, vlogs)?
- How can we ensure fairness in collaborative research between senior and junior scholars (students)?
- Do we prevent to take advantage of students’ dependence on salary, good grades, recommendation letters, social capital?
- Do we provide voluntary research courses for students, e.g. workshops on how to publish an article, how to design a research project, how to go about funding? Can undergraduate research be increased or included into existing curricular activities?
- Do we exhibit and showcase any research projects from undergraduates i.e. their thesis or final project at conferences or journals?
- Do we attribute work to those who have done it/contributed?
- Do we publicly distinguish between undergraduate research and research and why (not)?
- Do we provide funds for student led projects with clear selection criteria and transparent decision making processes?

Concluding Remark

We have started this project with a provocation, we want to end it with an encouragement to all of academia’s gatekeepers, or perhaps rather with a reminder of what is already known, but sometimes forgotten in between the day-in-day-out activities of academic life and work: Live up to the commitments of contemporary liberal education. Take your students seriously. All of them are humans and citizens, they are smart and caring people, they have their own opinions, interests and commitments. They want to and they should be treated as such. Some of them might have more challenging starting positions than others, but they all deserve equal opportunity. Support their unconstrained curiosity if they have any left and be good political liberals. Don’t only approach them as their teachers, there is something to learn from everyone for anyone. Foster their potential, challenge them and allow them to grow personally and academically. And handle with care, they might one day pay your pension, help you cross the street, be the next academia superstar, or president - or even better, they might become your friends.