Society for Philosophy of Science in Practice

NEWSLETTER #17

From the editor

It has been a great pleasure to work on this newsletter in anticipation of the ninth biennial SPSP-meeting in Ghent at the beginning of July. The editorial team is very excited about the long-awaited reunion with the SPSP-family. We hope that many of you will join us for the SPSP newsletter meeting, announced in the SPSP program, and that you will remember to take some pictures to share in our next newsletter.

In this volume, we continue our exploration of how philosophers of science can be best trained to grasp the complexity of scientific practice. Martin Zach interviews *Lucie Laplane*, who combines philosophical and laboratory research in a fascinating study of stem cells and cancer. Next, Rose Trappes talks to *Fridolin Gross* about the development of a new international masters program in Philosophy in Biology and Medicine, aimed at giving philosophy students hands-on experience with a science lab.

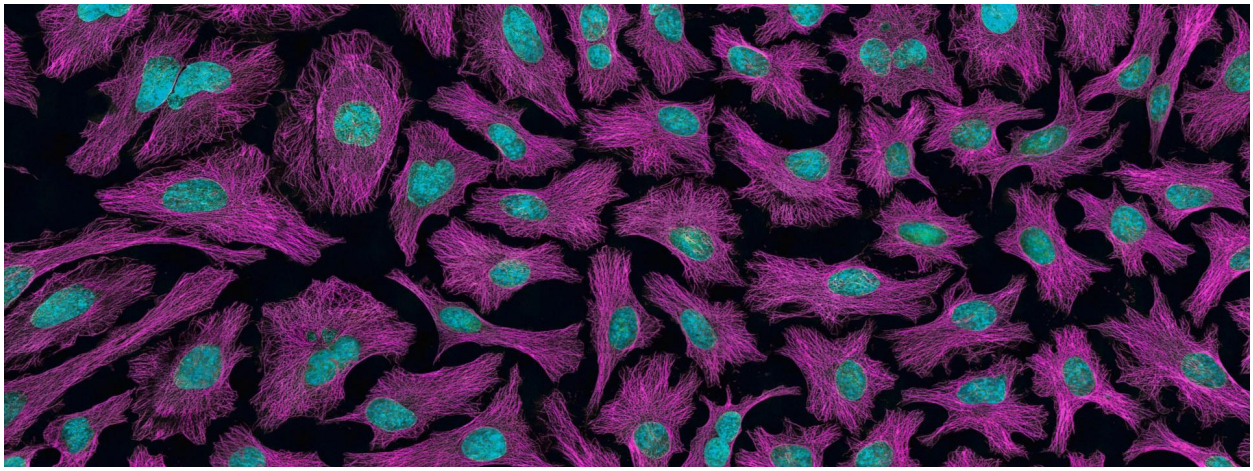
We then examine an approach that may be seen as complementary to zooming in on a specific laboratory practice. Ariel Roffé and Sara Green talk to *Charles Pence* and *Henrik Kragh Sørensen*, who are both frontrunners in the field of Digital Humanities. The interview explores how digital tools can provide us with new ways to get an overview of and find patterns in the vast number of scientific publications.

This time, *Maria Kronfeldner* takes the Proust questionnaire. We end by warming up to the SPSP-meeting with a welcome letter and introduction from the local organizing committee, by *Erik Weber* and *Maarten Van Dyck*.

We look forward to seeing you very soon in Ghent!

On behalf of the SPSP-newsletter team,
Sara Green

IN THIS NUMBER



Philosophy in a lab

Martin Zach talks to Lucie Laplane about combining philosophical and laboratory research on stem cells and cancer.

Lucie Laplane is a CNRS researcher at IHPST (University Paris 1). She works at the Gustave Roussy Cancer Campus where she focuses on the study of normal and cancer stem cells, clonal evolution, and the tumour microenvironment.

During your PhD in philosophy of science, you decided to do a master's degree in biology. What led you to this decision, and why do it during your PhD?

I started to attend some biology classes as soon as I decided to do a master's degree in philosophy of science. When I decided to do my PhD on cancer stem cells, it was natural to attend stem cell classes. In parallel, as with all philosophers, I read a lot of the scientific literature on stem cells and cancer stem cells. The combination of both quickly gave me theoretical knowledge of the field. But of course, published science, as well as classes (which are quite similar to what you find in papers), only give you a part of the story. Thus, I also did interviews to better grasp the context, and lab visits to better understand the most central techniques. But this wasn't fully satisfactory. Maybe it is because the functional identification of stem cells is always retrospective. You cannot directly observe "stem cells" (except maybe for embryonic stem cells and for induced pluripotent stem

cells). It felt necessary to go to the bench if I wanted my philosophy work to be well grounded and to the point.

You ended up working in a science lab where you do not only study science in practice. Instead, you directly engage in scientific practices, but as a philosopher of science. How did that happen?

Obtaining the master's degree was a turning point for me. The six months in the lab enmeshed the philosophy and the biology of stem cells. While at the bench, I changed the experimental work to reflect my philosophical interests, and my philosophical interests also shifted as a result of my lab work.

The project in the lab was to identify the stem cells of *Platynereis dumerilii*, a marine worm that can regenerate its tail, at early stages of development. But soon I observed heterogeneity in the putative pool of stem cells at later stages. Stem cell heterogeneity was a central conceptual concern for me. I was lucky to find a lab that was willing to engage with philosophy. So, I was given the freedom of investigating later stages instead. Ongoing discussions with my lab director, Michel Vervoort, on the philosophy of stem cells also ended-up being useful for the writing and revision of the scientific paper that resulted from this internship project. Conversely, while I was focusing on issues related to the definition of stem cells before my lab internship, these questions felt secondary once at the bench. What felt much more central was to understand how cells are stem cells, and how that differs in various tissues/species. The metaphysical question "what type of property is stemness?" became the central question of my PhD. This led me to hold the conviction that combining philosophy and experimentation is fruitful for both philosophy and science. I have repeatedly benefited from the (often unanticipated) fruitfulness of going to the bench (or getting involved with experimentation) since.

What do you do in the lab on a daily basis? How do you – as a philosopher of science – contribute to the lab research?

I am still trying things out. There are many ways to get involved with experimental biology and to bridge philosophy and biology. I have explored (i) going to the bench myself, (ii) supervising students on my own philosophy-driven projects, (iii) co-supervising students with a practicing scientist on a collaborative project, and (iv) pairing with a student on a project developed in the lab. They each have their benefits and limits. (i) is, for example, becoming out of reach for me because of time constraints. The problem is not that running experiments is time-consuming. The time is worth it. But either the experiments needed decide your schedule, or your schedule strongly limits what experiments you can do. Career advancement and my growing institutional responsibilities increasingly limits my possibilities. So, I am searching for alternatives. One of them has been to learn bioinformatics so that I can explore data myself, whenever my schedule allows.
What I do in the lab falls into three different categories:

1. Philosophy-driven: I need some experimental or computational work for my philosophical work. For this type of work I apply for grants that include a bench

component in collaboration with a biology team that has the tools and competence required. These collaborators are teams with which I collaborate a lot, attend their lab meetings, spend time in their lab, publish papers with them, etc.

2. Science-driven: since I have been in Gustave Roussy, I have successively paired with two PhD students, from the start to the end of their projects. I follow the experiments in detail, we discuss the project in all its aspects (analysis, interpretation of the data, methods, concepts, big picture, underlying assumptions, etc.). Science-driven projects tend to lead to philosophy-driven projects.
3. Team-spirit-driven: I am in a lab, working within a team. Sometimes people come to me for help. This can take all kinds of forms; conceptual problems, interpretation of data, representation of data, RNAsequence analysis, or basic bench work. This is of no direct use for me, but I think team-spirit is indispensable for the whole philosophy-biology integration program.

How would you describe your philosophical approach? Have you ever come across the objection that some of the questions regarding philosophy of cancer are "not philosophical enough"? What would be your response?

I have heard the objection several times that my work is not philosophy but science. I keep oscillating between very different, sometimes contradictory answers. The two extremes of these oscillations are:

Everything I do is philosophy, because I am a philosopher. Philosophy is what I learned to do. All of it is about questioning concepts, theories and their assumptions, consistency in the arguments and claims in a particular scientific domain. I take that to be philosophy. If people cannot see it, then it reflects a lack of open-mindedness with regard to what philosophy is.

Call it whatever, I don't care. I only care about doing good work. "Philosophy" and "Science" are just labels that get in my way.

What have been the most rewarding and most challenging aspects of working in a science lab?

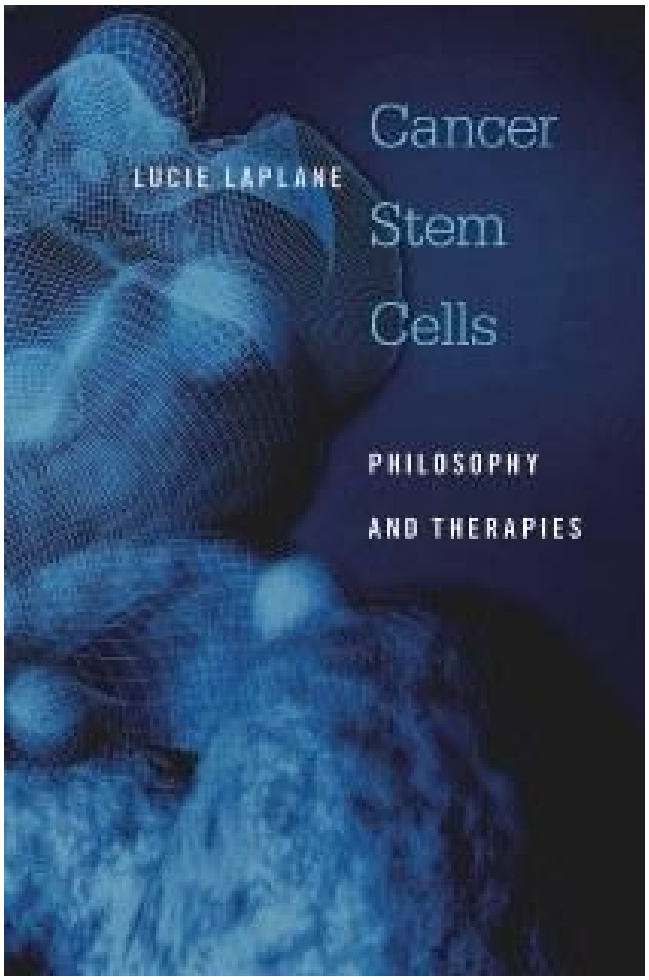
I don't think I have any original response to make here. Of course going to the bench, or learning to do bioinformatic analysis is challenging. It gets you far out of your comfort zone. Working in a lab is a bit challenging, in particular at the beginning. But not that much. The rewards are various, but I think I would emphasize two main points:

I believe that my work as a philosopher is better, richer, more accurate, and more useful to science thanks to the proximity to the lab.

The science performed in the lab can change under the influence of philosophy. I can see questions, projects, ideas, bending toward new directions through time under the influence of conceptual discussions.

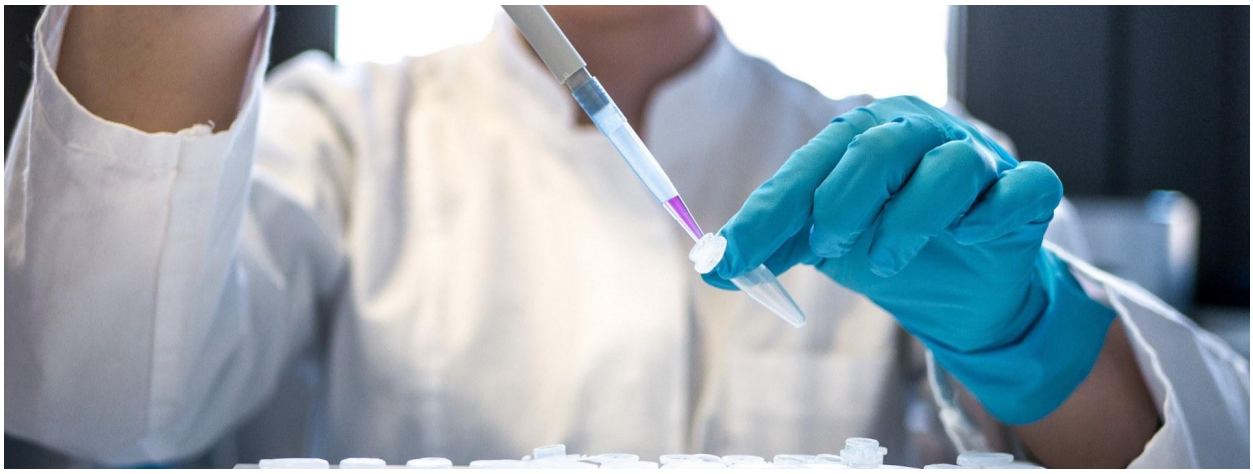
Is there any part of your philosophical work that could not have been written had it not been for your embeddedness in a lab? If so, what sort of difference has that made?

Among my philosophical work, the parts that I consider the most accomplished, original and/or interesting are the ones that could not have been done without the science and cannot be continued without working with or adjacent to the science. My work on stem cells would have been really different without the lab internship, and my two main current projects (on stem cells and clonal evolution) both partly derive from lab work and contain further lab work.



Which questions regarding cancer would you like to see philosophers tackle more?

Philosophy of cancer is a very small field of research at the moment, with very little work aimed at contributing to the understanding of what cancer is and how it works as a biological process. The scientific work in oncology is extremely heterogeneous, cancers being diseases that involve almost all, if not all, aspects of biology. There are many problems both internal to each subfield and related to the big picture (how these different pieces of knowledge work together or contradict each other). The amount of work that can be done by philosophers, and the potential benefits for both fundamental research and future clinical implications, is astonishing.



Training philosophers in the lab

Rose Trappes talks to Fridolin Gross about the new international master's program Philosophy in Biology and Medicine.

Fridolin Gross is an associate professor of philosophy of medical science at the University of Bordeaux.

You've been involved in setting up a new international master's program Philosophy in Biology and Medicine, which is starting at the University of Bordeaux in Autumn this year. Can you tell us a little bit about the program?

The program is aimed at philosophy students from all over the world and is conducted in English. The duration is two years, and it will be limited, at least for now, to five students per cohort. Students will find themselves in a very special environment: the ImmunoConcept laboratory in Bordeaux. This is primarily a scientific laboratory, but it also houses the Conceptual Biology and Medicine team. Members of this team, such as Maël Lemoine, Thomas Pradeu and myself, will be involved in the teaching. In addition, there will be courses on topics from the life sciences, offered by local scientists, and seminars by international guests. At the end of the program, instead of writing a master's thesis in the traditional sense, the students are asked to write an article in a form that can be submitted to a journal in philosophy and/or science.



Maël Lemoine Fridolin Gross Thomas Pradeu

What was the motivation behind creating the program? What do you think students will get out of it?

Our team in Bordeaux promotes the "philosophy in science" approach. This means that philosophers do not have to limit themselves to analyzing philosophical problems *about* science but try to contribute to problems *within* science. Contrary to popular belief, it has been shown that such contributions by philosophers actually exist! And it seems that the life sciences are particularly fertile ground for such contributions. The motivation behind the Master then was to develop a systematic way to teach this approach and to inspire a new generation of philosophers to apply their skills to concrete problems facing science today. In addition, the students will learn important interdisciplinary collaboration and networking skills. So we think that they will be able to develop a profile that makes them attractive to many different career paths.

The program will involve a select group of philosophy students working in an immunology lab. What sorts of things will students be doing on a day-to-day basis? Will they do lab work, or only more traditional philosophical activities like reading papers and attending lectures?

What's crucial about the program is that, apart from their training in philosophy and science, students will complete a local internship in one of the scientific teams and an international internship at a different scientific institution of their choice. So while reading and discussing papers – notably scientific papers – is an important part of the program, the students will also participate in the practical scientific activities in the lab with the aim to identify starting points for conceptual work and interdisciplinary collaboration. I have been through a similar interdisciplinary PhD program at a cancer research institute in Milan (the FOLSATEC program), and so I have witnessed myself that this kind of setting offers a very different way of understanding scientific practice than simply looking at the polished output of scientific activity. This kind of experience can be extremely rewarding even if, as in my case, you find that you are not particularly gifted for experimental work.

Students are required to have a background or strong interest in philosophy. Do you also expect them to know something about biology and biomedicine?

We do not expect the students to be scientific experts at all. We do think, however, that in order to apply for the master, candidates should be able to say why they are particularly interested in the life sciences, and we do expect them to be motivated and willing to quickly familiarize themselves with complex topics that are new to them. While the courses will touch on a wide range of themes, the students will have the opportunity to specialize in a field of their interest for their internships and master project. It is maybe important to also emphasize that even though the program is located at ImmunoConcept, the possible topics are not restricted to immunology. We also have existing collaborations with scientists who work on topics such as cancer, neuroscience or computational biology.

How do you envisage that students will learn to do "philosophy in science"? Of course there is the lab setting, but are there other ways in which you will facilitate students to think and work in an interdisciplinary way?

Aside from being embedded in a scientific laboratory, the students will learn the approach of "Philosophy in Science" by studying successful examples. The core course of the program is dedicated to going through a set of key articles authored or co-authored by philosophers that have made an impactful contribution to science in order to understand the way in which they have achieved this. And throughout the program there will be opportunities to meet and learn from philosophers who have managed to work with scientists and from scientists who have experience in working with philosophers.

Working in an interdisciplinary setting also has risks, especially as an early career researcher. How are you going to make sure that the students do philosophy and don't end up just doing science?

The question you raise is very important, and I know from my own experience that an interdisciplinary profile is not necessarily always seen as a great asset in job interviews. What we can say is that all of us who have worked at the interface between philosophy and science have eventually managed to make a career out of it (of course that's selection bias to some extent). That being said, aiming at interdisciplinarity doesn't prevent you from grounding your work in traditional philosophical questions. Lucie Laplane is a good example of someone whose work is considered very useful by scientists in the relevant fields, but who also discusses philosophically relevant questions about, for example, ontological aspects and dispositional properties of cancer stem cells. In any case, based on our own experience with the job market, we will do our best to help students build a CV that will make them competitive for the positions they seek, whether in philosophy, science or in between.

What sorts of challenges have you encountered in setting up this program?

Regarding the content, it has proved challenging to translate the quite diverse and disjointed corpus of “Philosophy in Science” into a relatively coherent teaching program. But it has also been very rewarding, and we are in the process of putting together a textbook so that our approach may be more easily adopted by others in the future. From a logistical point of view, all I can say is that we have been extremely lucky to have great support from the local institutions.

Do you have any advice for anyone wanting to create an interdisciplinary program at their own institution?

Interdisciplinarity comes in many flavours! And many of our colleagues in the PSP have already done great work in building interdisciplinary collaborations. Perhaps our approach is distinctive in that contribution to science is an explicit goal. We think this leads to a much tighter collaboration, but it is perhaps not a mode of interdisciplinarity that everybody would like to engage in. But in any case, I think a crucial requirement is to identify scientists in your local environment that are open to conceptual work and to build strong ties with them. In fact, most of the support we’ve received to set up our program has come from the department of health sciences.

Are there any final thoughts you’d like to share?

Just to encourage young and aspiring academics to think about what they hope to achieve as philosophers, beyond recognition in the field and a job to pay the rent. Ultimately, do they want to contribute to the “knowledge of science” or to scientific knowledge itself? Do they consider philosophical work as an end in itself or as a means to contribute to science?

EXTENDING OURSELVES? ON THE CONCEPT AND FUTURE OF DIGITAL HUMANITIES

Digital Humanities is increasingly featured in philosophical discussions and has potential to significantly impact philosophy of science in practice. But what is Digital Humanities, what problems and questions can it help us address, and what are the prospects for the future?

Ariel Roffé and Sara Green here talk to Charles Pence and Henrik Kragh Sørensen, who are both frontrunners in this field.

Charles Pence is a philosopher and historian of science and technology with a special interest in the life sciences. Charles works as Chargé de cours at the Institut supérieur de philosophie and the Faculté de philosophie, arts et lettres at the Université catholique de Louvain in Louvain-la-Neuve, Belgium.

Henrik Kragh Sørensen is a historian of science, focusing in particlar on the history and philosophy of mathematics after 1800. Henrik is Professor at the Section for History and Philosophy of Science, Department of Science Education, University of Copenhagen, Denmark.

What is the Digital Humanities, in your view?

CHARLES: If you ask ten digital humanists this, you'll get twenty-five answers to the question. But I think the basic idea can be captured by the idea of using computers to answer the same kinds of questions that we would have traditionally been concerned with in the humanities. That might be as simple as managing a large electronic bibliography, or as complex as an online museum exhibit or a digital analysis of a corpus of texts.

HENRIK: Another divide in the DH community is where to focus on the deeply interdependent issues: The compilation of high-quality corpora through digitalization and annotation and the use of computational tools in answering questions about the topic domain. Analysis without high-quality data is empty, data without purpose and interesting questions is blind. But my particular competence is more in the computational aspects - extracting and combining existing metadata and using tools from machine learning to add nuance to known philosophical questions or raise new possibilities.

What can we use DH-tools for? What questions can they help us answer? Do you have any examples of works (either your own or of others) that illustrate this?

CHARLES: There are almost too many to mention! I'll stick with my own work, which has largely surrounded questions in text analysis. For some time now, I've been working to approach the following question: how are changes in scientific concepts reflected in the scientific literature? To be sure, a massively difficult problem, not least for reasons that will be very familiar to readers of this newsletter: as we know after the development of the philosophy of science in practice, concepts are never clearly and exclusively reflected in journal articles, and so the interpretation required here is really significant! For now, we have a handful of analyses in process, around several different concepts – biodiversity, fitness, causal specificity – but getting from texts to answers to philosophically interesting questions is the work of years (after developing tools and corpora, which is *also* the work of years!).

HENRIK: The field of philosophy of mathematical practice deals with many of the same questions as SPSP, but focusing on mathematics, we often run into the additional challenge that parts of the key epistemic processes are private and mainly accessible *through* the mathematicians. Thus, we have been searching for ways to gain triangulation with empirically informed philosophizing. The field has been largely based on case studies and interviews, but about a decade ago, Inglis and Aberdein used Principal Component Analysis to analyze a questionnaire study in which they asked a medium size population of mathematicians about their perceived associations between adverbs describing mathematical results. Thus, their paper entitled 'beauty is not simplicity' showed that mathematicians were *not* associating the beauty of proofs mainly with simplicity as was the dominant philosophical analysis. Thereby, they added a quantitative calibration (they might even call it correction) to the philosophical analysis of aesthetics of mathematics which is (and was) an established topic in philosophy of mathematics.

HENRIK: In our group we have been working both in the direction inspired by 'beauty is not simplicity' of empirical triangulation about mathematical practice to try to avoid the small-N problem which is often raised as a criticism of other parts of PMP: 'exemplar philosophy' is a derogatory term we sometimes hear (see also Pitt's Dilemma about case studies). Thus, we have been active in broadening the case base, especially in the philosophical study of mathematical diagrams: As one of our first contributions, we trained a machine-learning agent to detect mathematical diagrams from (scanned) images of mathematical texts. That allowed us to gather far more diagrams whose epistemic roles we want to reason about and provided us with a historical overview that was difficult to get by other means. In fact, the strenuous efforts of my colleagues Mikkel and Josefine to scan 55.000+ pages of mathematical publications counting and classifying diagrams was the direct reason why I got involved: "I can do that faster with a computer!" And in the effort, we found that we could ask and answer so many additional interesting questions: Have the roles of diagrams changed over time? Do diagrams and their use vary between fields? What are good/typical/rare/… types of diagrams (in given contexts)? Trying to answer such questions will advance the study of mathematics *as it is practiced*, we believe, and are prerequisite to a practice-based epistemology of diagrams. And using computational techniques we have gone way beyond 55.000 pages and ventured into The Great Unread.

What motivated you to get started in this field?

CHARLES: I was looking (with my graduate advisor, Grant Ramsey) to better understand what exactly it is that scientists say about "fitness." We have a collection of a dozen or so papers that philosophers of biology always read, but it's hard to know on that basis whether we have really captured the "spirit" of the biological literature as a whole. This is exactly the sort of thing that DH tools should be able to help us with, and now a decade after we got started, I'm finally able to clearly frame that kind of question in our technical system.

HENRIK: As mentioned above, the particular challenge of automating the counting of diagrams got me interested in the first place. Since then I have been able to redefine my research focus, combining four expertises that sum up my focus: history and philosophy of mathematical and computational sciences. And getting to write code again, doing a bit of statistics, studying actual mathematics, and raising and addressing historical developments has made me feel like I have really found a home and a niche for myself.

CHARLES: I really agree with this. I've found it enormously mentally satisfying to be able to put down the world of prose and deep philosophical analysis and use a different part of my brain every once in a while – I think this kind of work could be really attractive if you're looking for a little more variety in your everyday philosophical work!

HENRIK: Another great thing I have found in my new niche is that it is very easy to form collaborations - with colleagues and students - because interesting and unanswered research questions can be 'parcelled out' quite easily. But that raises the greatest challenge: Time (see below).

How do you view the epistemology of Digital Humanities, compared to traditional philosophical analysis?

CHARLES: I could say *a lot* here, and have a few recent papers doing just that. But what I'll say briefly is that we often forget how complex and difficult the epistemology of old-fashioned close reading actually is, just because we've all been doing it for so long! So we have lots of catch-up work to play in thinking about how digital work can inform an empirically informed approach to the philosophy of science.

HENRIK: Again, I completely agree with Charles - and it is a question that occupies me (and most DH'ers, I guess): How are we adding? Whose norms are we trying to meet? Are we to be seen merely as a tool? Personally, I am most interested in doing DH *for* a practice-informed philosophy (of mathematics). That's why I called my agenda DH4PMP: Digital Humanities for Philosophy of Mathematical Practice. A successful project often arises when we can make three ends meet: An interested philosophical problem or field to add to (which provides relevance and 'hook'), a high-quality corpus to study (which provides validity), and a relevant computational tool to apply (which is typically the key to saying something *interesting* that goes beyond data itself, trying to avoid too much idiosyncrasy).

CHARLES: I really like Henrik's idea of framing our work in terms of audience. We don't want to create a sibling discipline, off doing its own work without any connection to the problems and debates that brought us to philosophy in the first place.

What kinds of reactions do you get to your work in this area? Have you encountered any resistance to the use of quantitative methods in HPS?

CHARLES: Of course. DH's loudest proponents sometimes talk as though we can "commit to the flames" anything that's not founded on large sample sizes. But that's silly. I think the way we build bridges is in saying that what we get from these tools are ways to supplement our traditional close readings with quantitative studies, giving us access to kinds of complementary knowledge that just weren't available before.

HENRIK: I agree that DH is not opposed to small-N studies - on the contrary. But adding the 'ordinary' (in history of literature often referred to as The Great Unread following Franco Moretti) to the corpora we can study, we actually get a fairer picture of the *practice*. Thus I find DH more relevant to the practice-based approaches which are also often more methodologically varied already. I would not consider myself a philosopher, but certainly a scholar in the study of mathematical practices and cultures and for that DH is my new telescope.

HENRIK: Within the philosophy of mathematical practice, I have thus far mainly (only) encountered great enthusiasm about the DH approach - and a wonderful curiosity about what it (and our group) can add to existing projects.

What do you see as the greatest challenges - in your own work and/or in the field of Digital Humanities in general?

CHARLES: This stuff just takes *time.* I have difficulty recommending to junior scholars to get started in it: I've been very lucky to have worked in contexts where people were happy to let me cultivate these projects with a very, very long view to corresponding results. It's taken us literally around ten years of coding to wind up with a really nice, clean system for analyzing texts and a corpus that's worth analyzing. I think we need to think very hard about how to build smaller projects and make this kind of work much more accessible to people new to the field!
HENRIK: I would also say that *time* is the critical bottleneck - but time here means many different things: The time to train the required computational competences, the time to developing operationalizations of philosophical questions in computational terms, the time to develop, revise and implement the pipelines and tools that we rely on, the time to manage collaborations and projects, the raw time required to download and process huge data sets, etc.

How do you view the future of Digital Humanities?

CHARLES: I think things are really bright. Whenever I see the kinds of work being done by colleagues here, I'm continually floored by what amazing stuff people are up to. I ran an online meeting in 2021 and a quick glance over the topics is, I think, extremely exciting for where this area might lead!
HENRIK: My personal ambition would be to make DH another possibility in our toolbox for doing philosophy of mathematical or scientific practices and integrated history and philosophy of science. That requires that we provide recognizable contributions using these tools and that we can collaborate both within a DH specialty and between DH and the larger domain. But DH is (and should, I think) be one among a number of ways of providing triangulation for the humanities. I have also found that studying highly normalized epistemic domains (such as mathematics) through computational tools make computer scientists interested in what we want to achieve.

How could one start using DH-tools? Is there any specific/technical knowledge required? (for instance, programming languages, statistics and/or bibliometric analysis terminology, etc.)

CHARLES: So for all that I mentioned this as a huge challenge, I think that more and more there *are* really nice ways to get started using existing tools and existing platforms. I'll plug our own system, Sciveyor, which is publicly accessible for anyone who wants to analyze our corpus of 1.9M scientific journal articles. But there's also a few other user-friendly systems that you can use to look at your own texts: Voyant Tools is a great example. There's also ways to get trained: I can't recommend strongly enough the Digital Humanities Summer Institute (DHSI), with training in everything from Python to project management.
HENRIK: I would only add that it might be fun to reach out to one of the groups already working with computational tools to explore possible ways of applying these tools to your research questions.

What kinds of collaboration would you be open to? Where should people contact you?

CHARLES: We are really at the moment where we have this system, we've done a lot of really great infrastructure work, but we haven't extracted enough results from it yet! So I'm always open to further collaborations, proposals of research topics that people think would be usefully answered by the corpus that we've put together. Send me a message at <charles@charlespence.net>!
HENRIK: I am also very open to collaborations and like Charles, we have different things to offer to researchers in philosophy of mathematical and scientific practices: We have pipelines for a number of relevant corpora such as the arXiv or bibliographic data sets, we have experience in various methods of (semantic) information extraction, we have a methodology (and ideology!) of operationalizing research questions for DH. To learn more, you can visit DH4PMP; and please send a message to henrik.kragh@ind.ku.dk if you are interested or have questions!

The Proust Questionnaire

Saana Jukola talks to Maria Kronfeldner

Who are your favourite heroes or heroines? In real life or in fiction.
The unnamed and underprivileged ones who do not give up working for something better than what they were offered by life and our unjust society. I once met a boy in Africa who lived on the streets. He was such a hero. I bought some peanuts from him, and we started to chat. He mentioned that he wants to become a physician. I wondered, “But you are not even going to school?” He replied, casually: “I find books on the dump.” That hope, that openness, despite everything speaking against it.

Which words or phrases do you overuse?
But**.**

What is your favourite book?
Currently, I am devouring the work of B. Traven (alias Ret Marut, alias Otto Feige – maybe, since the identity of this author is still mysterious). Brutal in its simple frankness of how social injustice and the dark sides of human nature unfold, across times, across oceans, across cultures, across whatever. Also a basic course in global capitalist economy.
The philosophy book that influenced me most, and is in that sense my favourite, is Kathleen Wilkes’ “Real people”. I read it as a student (by chance) and it taught me that ‘abstract’ and ‘analytic’ does not have to mean ‘detached’ from actual social reality. The book helped me to realize, luckily early in my career, that one can only do good philosophy of science if one brings in real life, via history and sociology of science and a keen eye on actual social problems.

What is the most critical academic or non-academic feedback you ever received?
The most helpful critical feedback was: 'What you say is only negative.' I realized: it is so easy to be critical (you simply state what's wrong or negative with what others argue) and so difficult to be constructive (to find a better argument). It changed my whole attitude towards philosophy.
In a nonhelpful sense, the most 'critical' feedback was: 'This must be from a dissertation.' That verdict was so discouraging, and as true as it was out of place.

Where do you write your best work?
Sitting at my desk, surrounded by books and notes. I have a weird system of 'Zettel' with handwritten notes that even I can often hardly decipher after a while. But I need them to think.

What is your favourite entertainment?
Watching people. Just observing them in a bar, a café, a conference, a movie, whatever.

What profession would you like to attempt besides your own?
Something as solitary as philosophy, but more hands-on, more concrete. Something absorbing and problem solving at the same time. Refurbishing motorbikes, old furniture, or something like that.

What is your greatest achievement?
That I am still passionate about philosophy, rather than continuing with it cynically.

What is your most treasured possession?
Independence.

Where were or are you happiest?
At the Würstelstand.

Welcome to SPSP2022

Society for Philosophy of Science in Practice (SPSP) Ninth Biennial Conference
2–4 July 2022 (pre-conference workshop on 1 July)
Ghent University, BELGIUM

A warm welcome to the SPSP meeting at Ghent University by Erik Weber & Maarten Van Dyck

The local organising team for SPSP2022 consists of Erik Weber (chair), Pieter Beck, Kristian Gonzalez Barman, Julie Mennes, Massimiliano Simons, Maarten Van Dyck, Qianru Wang & Karim Zahidi.

As this might be the first trip to Ghent for some of you, we provide some more information to this special and historical place, as well as to the Centre for Logic and Philosophy of Science.

The city of Ghent, capital of the province of Eastern-Flanders grew at the merging point of two important rivers, the Schelde and the Leie. Because of this, Ghent was a metropolis during the Middle Ages - the biggest in the world after Paris. Its economic importance was considerable and the expertise high. In particular, the production and export of luxury wool blankets was responsible for unprecedented growth from the 13th to the 15th century.

Currently, Ghent is a bustling, energetic spot where it is a pleasure to live, work and study. Its rich history is still omnipresent throughout the city center. The skyline is marked by Ghent's famous three towers: Belfort, Sint-Niklaaskerk and Sint-Baafs Cathedral. Other authentic monuments such as Gravensteen, Oude Vismijn, Duivelsteen, Sint-Pietersabdij and Graslei are all just a stone's throw away from one another and will instantly transport you back to the past. Ghent combines the old and the new – a perfect fit.

Ghent University was founded in 1817 as a Latin-speaking State University by William I, King of the Netherlands. After its independence in 1830, the Belgian State was in charge of the administration of Ghent University; French was the new official academic language. In 1930 Ghent University became the first Dutch-speaking university in Belgium. Ghent University is now one of the major universities in Belgium. Our 11 faculties offer a wide range of courses and conduct in-depth research within a wide range of scientific domains.

The Centre for Logic and Philosophy of Science, which organises SPSP2022, is part of the Department of Philosophy and Moral Science. Our department offers a bachelor and master programme in philosophy, and a bachelor and master programme in moral science. Our *philosophy program* covers the traditional topics: history of philosophy from ancient to contemporary philosophy, epistemology, logic, philosophy of science, metaphysics, philosophical anthropology as well as theoretical and applied ethics. The aim is to give our students an advanced knowledge and grasp of theories, methods and skills in these fields. Our program in *moral science* has a different focus: it contains less logic, epistemology, philosophy of science and history of philosophy. Students in moral science are trained in empirical research methods, which allow them to study moral phenomena in a descriptive way (as opposed to the normative approach in philosophical ethics) and get a substantial background in the social sciences and psychology.

The Centre for Logic and Philosophy of Science was founded in 1993. Most of the research that is done at the centre fits into the following three research lines:

Logical analysis of scientific reasoning processes

logical analyses of paraconsistent reasoning, reasoning under uncertainty, defeasible reasoning, abduction, causal reasoning, induction, analogical reasoning, belief revision, theory change, and conceptual change.

Methodological and epistemological analysis of scientific reasoning processes

methodological and epistemological analyses of causation and mechanisms, scientific discovery, experiments and thought experiments, scientific explanation, and evidence-based policy.

Integrated history and philosophy of science

includes work on scientists and philosophers such as Galileo, Stevin, Gassendi, Hooke, Euler, Van Musschenbroek, Lavoisier, etc.. and the history of philosophy of science in the twentieth century, with a focus on the tradition of historical epistemology (Koyré, Bachelard, Serres, Foucault, etc).

The editorial team

Rose Trappes (Bielefeld University), Ariel Raffe (University of Buenos Aires), Maria Serban (University of East Anglia), Martin Zach (Charles University and the Czech Academy of Sciences), Saana Jukola (University of Bonn), and Sara Green (University of Copenhagen).