Seachange in Research: Collaboration next to Competition (an OAI11 CERN-UniGe 2019 workshop)

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Today, the success in research is defined by the ability to win competitions: for grants, for positions, for finding new knowledge. The ability to compete has always been a great way to advance human quests. All good, but remember: when you compete, you measure your success by someone else's definition of it. The Maker of Rules sets for you and your competitors the guiding lines that say how to act and who will be declared successful (the winner). It's fine, but it's unfair to remain our only way of measuring success. That's particularly unfair in fields that require a high level of creativity, pioneering, curiosity.

Research means exploring the bizarre. It means acting at the frontier of knowledge and stepping beyond it more often than not! It means launching loonshots and daring for blue-sky thinking. How do you achieve that if you only push an agenda of competitions and don’t encourage collaboration?

There's no doubt, the principles of competition (Competition) are great for finding new knowledge. But does Competition remain sufficient to find broad meanings to those new findings? I doubt that! My view is that we need a more collaborative environment to find the non-obvious meanings of the world's knowledge. Think deep about this: use Competition to develop Artificial Intelligence; use Collaboration to create Collective Intelligence! Do you see the major difference?

Competition made possible the creation of well oiled Research Machines. But if we aspire for Research Communities, we need to add something more: we need to raise the principle of collaboration (Collaboration), to meet eye level the Competition. Then we have a chance to create research communities across all walks of life: people, careers, sectors, disciplines, ambitions.

Through research communities, we will be able to attract talents, build characters and encourage great ideas that don't need to be chopped-and-twisted for the purpose of a call for projects.
The workshop that I facilitated within OAI11 CERN-UniGe (2019) aimed to create stepping stones for building a path of raising Collaboration at the same level with Competition, in the new definition of success in research. Thanks go to Danny Kingsley (of Cambridge University Library) for inviting me to create a workshop and to Paul Ayris (of UCL), Linda Andersson (of TU Wien), Miro Pusnik (of CTK Ljubljana) and Charlie Rapple (of Kudos) for helping me to facilitate it. The workshop brought 15 people from about 8 countries, with various professions: researchers, research administrators, publishers, librarians and representatives of tech companies.

Short presentations

We started with 2 short presentations, one from myself and the second one from Dr Paul Ayris (Pro-Vice-Provost (UCL Library Services) and Fellow of the Royal Historical Society UK).

The main message of my presentation was that without a high level of Collaboration, Open Science is less vibrant, disadvantaged and a reversible (!) movement.

I also presented my view regarding the Hazards of Open Science. In my view, those are:
• The FAILURE itself (not delivering a radical and positive change, not attracting world biggest talents and nurture diverse communities of explorers).
• To become an EXCLUSIVE movement of public research that continues to enlarge the disconnection with Society.
• To associate ”Open” with ”IGNORE” when it comes to resources that are needed to perform ’open’ methods.
• Lack of RECIPROCITY; to build blocks of ’net beneficiaries’ that rarely move to ’contributors’ side.

Next, I brought the perspective of a misdirection: that Open Science is about changing the ownership. We became used to hear Science should be taken back by public institutions with a certain tolerance to non-for profit organisations. THAT'S AN ILLUSION! Limiting the ownership of research activities to just a part of society (the public and non-for profit) is creating unnecessary isolations and it's increasing the gap between public research and the broader society:
1) great research exists at non-public and non-for profit organisations,
2) research should no longer be perceived as an elite activity and 
3) a distributed ownership gives far more public control than a concentration of 
it!
Instead of looking to limit the ownership, we should look to increase on 
participation and distribution of the governance. That could make a much bigger 
difference in the process of opening the research activities to obtain 
transparency, integrity, long-term support and agile steering.

On his presentation, the takeaway message that Dr Paul Ayris proposed to the 
participants was:

- Academically, competition is against yourself, not against each other
- No university can be self-sufficient
- Emphasis is on multi-disciplinary and inter-disciplinary research
- Universities need to partner with Society to show their value
- All these principles are underpinned by collaboration

Dr Paul Ayris' presentation showed shat does collaboration look like in practice, 
at a research-intensive institution. He presented an analysis of the 2019 UCL 
Strategy which shows 3 references to Competition and 19 equivalents to
Collaboration. Among the six principal directions of UCL 2034: a new 20-year strategy for UCL, the Principal Theme No.6 (Delivering global impact) is described as "Delivering global impact through our international activities, collaborations and partnerships".

As an example of European engagement, UCL triple track European strategy has involved consolidating existing partnerships with European universities, launching a new initiative called the Cities partnerships Programme (starting in Rome and Paris), and stepping up university's support for EU research collaboration.

In terms of national partnerships, UCL was selected in December 2016 to host the research hub and operational headquarters of the UK DRI (UK Dementia Research Institute), forming the focal point for activity across the six university partners of the UK DRI; the other centers are at the University of Cambridge, Cardiff University, the University of Edinburgh, Imperial College London and King’s College London.

**Breakout groups**

The workshop continued with 2 breakout groups where we split into teams to try identifying how new goals and how new principles could look for researchers and research organizations if we want indeed the Collaboration to be brought at the current level of Competition.

Here are what we distilled:

- Principle: share knowledge to the broader society
- Funding systems that encourage young talents to become researchers. Embed collaboration from early stages. Long term strategy
- Public engagement as part of research proposals and a criteria for funding
- Find new resources (extend existing) to support research ambitions, outside of current templates (channels)
- Funding through projects shouldn't be the only channel for supporting research activities
● Support more obviously research programmes and not research projects
● Disseminate broader

Debate, brainstorming and speed-talk tables

The last part of the workshop included a debate (Statement: Based on Competition only, research organizations become research machines. Add Collaboration to obtain research communities), a brainstorming session and 3 speed-talk tables, in an effort to find the first stepping stones toward a path of more collaborations in research activities
Here are the ideas that we shaped:

● Collaboration might build more reproducibility in the system and avoid creating a single point of failure
● Collaboration is a sign of research integrity and should be built in institutions and in careers
● Measure the performance of research funders which should include their policies and actions towards more collaborations in science and between science and society
Leadership is a necessary element of redesigning the research frameworks, with particular importance in uplifting the roles of Collaboration.

Create more stability for research careers. Collaborations could be the liaison element of such stability.

Project competitions have the potential of leaving behind great ideas that simply don't fit in calls for projects. Continue to launch project competitions, but find complementary routes for funding great research ambitions.

A DORA-type Declaration on how Research funders should align policies on how they evaluate research and how collaboration plays a role in that evaluation.

Encourage pioneering for bringing Collaboration eye level with Competition.

Action: define the constitutive elements of Collaboration.

Bring reward for collaboration.

The governing bodies should be multidisciplinary and multi-sector.

The new landscape should encourage Registered Reports (that give equal attention to negative results).

Storytelling is important.

Conclusion

This workshop showed that against all difficulties, we should reconsider the position of the principle of collaboration (Collaboration) in relationship with the principle of competition (Competition) and the role they play together in advancing science.