10th INTREPID REPORT

UNIVER(C)ITY

The future space and place of knowledge

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Contents

OVERVIEW

Across the span of two days, academics, professionals and students from different institutions and with various disciplinary backgrounds gathered in Newcastle in order to discuss the current state-of-the-art concerning academia, knowledge production, as well as the physical, digital and mental spaces where these operate. Additionally, the group explored possible scenarios for envisaging the future of universities, a future where academia plays an active role in responding to tomorrow's challenges and in bringing about positive and sustainable transformation within the cities and regions where they function. Throughout the three days, a series of insightful and provocative talks introduced a range of diverse and multi-faceted issues currently concerning academic institutions, calling for a critical reappraisal of the ways in which we teach, learn, think and produce knowledge, as well as the ways in which we build, manage, conceive and situate universities in light of rapid socio-economic, cultural and political change. The symposium concluded with participants dividing into three working groups which explored three different scenarios for the future of universities, tackling some of the provocations put forward during the presentations.

INTREPID and the Future of Universities Initiative

Olivia Bina and Prue Chiles

Over the past three years a series of events within INTREPID *the european Interdisciplinary network* have enabled us to explore a range of questions on the future of Universities. What will be the driving ethos of the future university be, the character and values of its educational project? How will inter and trans-disciplinarity shape universities? How will Universities relate to, and engage with, the world around them - the idea of the civic university, locally, regionally and globally and the big challenges that face us.? Finally what space and place for knowledge in the Future University? As a result of these explorations, we identified this physicality and spatiality of knowledge as another key aspect of the *Future of Universities initiative* we wished to contribute to. We therefore planned a symposium in Newcastle in January 2019 to explore these issues.

A chance meeting with Veronica Baraldi, a member of *non architecture,* allowed us to suggest the next theme of the competitions series: *learning* - the future space and place of Universities. That is how this extraordinary set of 50 shortlisted proposals came to be and how they have been exhibited in Newcastle and will be again in Lisbon. The winners were judged and announced at the Newcastle symposium in a live feed. We also exhibited work from final year architecture students at Newcastle University who have been exploring the future university in their thesis projects, to provoke further discussion and debate during the workshops.

Taking ideas from a variety of sources (architectural projects, academic analyses and policy documents) and ideas arising from INTREPID's earlier events, the *non-architecture* competition and the Newcastle Symposium called Univer(c)ity aimed to **understand** and **visualise** the changes needed, both the **ideas** and the **physicality** and **spatiality** of the *future university*The symposium was an

exercise in imagination appealing to multiple senses and ways of knowing, which could deepen our understanding of the challenge(s) and potential solution(s). Enriching the *'abstract'* with the *'tangible'* may set in motion that virtuous circle of wider and deeper understanding that many claim is a key aspect of interdisciplinarity. The necessary starting point becomes the human scale and the human body itself, and its infinite potential for skills and dispositions that can be enhanced or defeated by the nature of space and place. Then comes the institution of academia and higher education with its buildings and campuses, followed by a necessary redefinition of the civic and porous university, the place of reference and thriving dialogue in the city; Finally, the inescapable leap into the digital world beyond place into infinite space, where the ways of knowing can be multiplied with no boundaries. Making and the design process will become part of this process of discovery, a reflection of new modes of knowledge production and learning, inside and outside the university.

Within INTREPID we have felt increasingly uneasy with the challenges arising from the quintessentially *abstract* nature of inter and transdisciplinary (ID and TD) practices. Their nature, strengths, shortcomings and the many obstacles to their effective practice keep being discussed in academic papers (Wehrden *et al.* 2018), policy reports and practice recommendations, yet falls short of hopes and expectations (Bina *et al.* 2017a ; Bina *et al.* 2017b). Thus the desire to embark on an exploration of the space and place of this knowledge within the university of the future arose as a need to somehow make tangible.

DAY 1 AND DAY 2 TALKS

1. John Goddard (Newcastle University, UK)
An Introduction to Newcastle – The civic university and place making, past present and future

- Drawing on a series of UK case studies and various conceptual models, Prof. Goddard's talk explored how the world of thought and action can come together and how this is expressed at various scales (regional, urban, institutional etc.). This was materialized through unpacking the ways in which the role of universities as 'urban anchor institutions'

(*institutions that are of the city and not just in the city*) can be enhanced through: strong relationships with other urban institutions and civic engagement, the need for academic practice to be of relevance to the places in which practitioners live, contribution to regional development beyond economic growth and competitiveness. In this sense, Goddard proposes a normative model for the 'Civic University' where 'engagement' becomes the third mission of the institution alongside teaching and research, in order to result in transformative, responsive and demand-led solutions and action.

2. Roger Burrows (Newcastle University, UK)
School X – Inter-disciplinarity and the future of University in today's political climate – Academic values changing

- After providing a comprehensive overview of the institutional changes undergone by UK higher education in the post-war era, Prof. Burrows' talk critically engaged with some of the impacts incurred by a *change towards quantified control* materialized through the *'metricisation' of the academy.* He drew on examples such as the UK's REF (*Research Excellence Framework*), devised as a system for evaluating academic research outputs through measurements and rankings. In this sense, Prof. Burrows argued that the introduction of such metrics represented a critical shift within academia, marking the beginnings of its commercialization and transformation into an institution where quantity takes precedence over quality, where collegiality is replaced by unhealthy competition and where research has become instrumentalized as a means to an end rather than an end in itself. As a response to the abovementioned challenges, Prof. Burrows proposed an experimental alternative model titled 'School X', where a different culture of what it means to be an academic can be generated: a space which encourages inter-disciplinarity, discussions about not only ideas but also values & ethics, as well a space which promotes qualitative and 'slow' research processes.

Discussion:

- Important to remember that the 'past' times echoed in Prof. Burrows' presentation were unfortunately elitist (important to keep a critical stance).

- Issues of mobility, portability, fixed space and digitization when it comes to education: does the 'de-placing' of a university present an opportunity or a challenge? – Digitization: indeed bonds with the physical space decrease, but the space and place become even more important in terms of atmosphere, socializing etc.

- How to engage students who are finding it difficult to do so within the classroom? Example from Turin, Italy: when prof. identified that students were finding it hard to engage in a class about SDGs for decision making, she decided to organize for them to start working in different organizations, mainly NGOs, in the region; this created a different space for discussion.

3. Martyn Dade-Robertson (Newcastle University, UK)
"The Invisible University". Making and maker communities as a way of learning – ideas from MIT on the inside and outside of the university.

- Dr. Dade-Robertson's presentation started by questioning whether or not it was possible to create a movement which democratized access to knowledge, skills etc., by bringing into discussion counter-cultural moves in US where fields such as bio sciences were shifted from labs into people's garages. He went on to discuss a case study involving a woman who, despite having learned clothes-making and engaged with research into innovating new materials, was unable to pursue higher education due encountering institutional barriers surrounding her previous lack of qualifications. She therefore started collaborating with a 'Maker Community' (which was equipped for learning and experimenting) and ended up setting up her own Maker Space where she has become an expert in bio tech materials for textiles. Nowadays, despite being invited to hold lectures and workshops in various universities, due to her lack of formal education she is unable to access labs, equipment, funding sources etc. In this sense, Dr. Dade-Robertson's talk called for a reassessment of academic systems which fail to engage with informal types of education and with a greater diversity of backgrounds.

Discussion:

- Co-production of knowledge is key. There is a substantial body of knowledge that addresses these issues, but the key now is being reflective and effective about really addressing these issues beyond the literature – is systemic change required for this?

- Important to first identify barriers: not knowing what they are will just broaden the barriers, eventually.

4. Ali Madanipour (Newcastle University, UK)
Knowledge, economy and university. The nature of knowledge, its use in the economy, the implications of technological change and its spatial expressions for the future university

- Prof. Ali Madanipour's presentation was divided into six sub-themes in order to critically explore broader links between knowledge, the university, and the economy. The first section, on 'the nature of knowledge', presented the division between social sciences/humanities/arts etc. and the natural sciences, wherein the latter have been given priority, a phenomenon also reflected in the knowledge economy. The second section on the 'knowledge and technology relationship' drew a distinction between information and knowledge (divided into 'codifiable' knowledge and tacit knowledge, which cannot be codified) in order to address the debate about whether or not AI might one day replace people. The third section discussed the knowledge economy, and presented the importance of the creative economy beyond science and technology and including the middle/service classes as well; it highlighted that inter-dependent structures and not elite arrangements must be prioritized. In the next two sections Prof. Madanipour discussed about 'innovation' as a form of knowledge production, and questioned how innovation can happen when one

exits the frameworks of they silos. In this sense, he discussed the importance of dialogue, particularly immediate, and went on to present the advantages and disadvantages behind the concept of 'clustering' for innovation (e.g. cultural quarters, science parks, educational districts etc,). The final section explored the idea of universities as engines of the knowledge-based economy, the phenomenon of knowledge commodification, and questions about whether or not universities generate public good.

Discussion:

- What happens when failure of institutional reform translates into an unsuccessful project (example with the Life Sciences Centre)? However, micro-change is also crucial!

- Being in a discipline gives you the legitimacy to question it and be inter-disciplinary.

- How can we envisage the future of universities and the spatial future of universities if we don't involve the people working there, like even the scientists for example, who consider the university and academia as their world?

- The importance of creativity, which distinguishes us from machines.

- Importance of teaching disciplines with a bit more humility, without assuming that what is produced are universal truths.

- What happens when universities remove themselves to produce knowledge in an incubator-style way?

- Universities must play a role in the co-production of cities, beyond dynamics of speculative investment.

- Important to also invest in a skillset of people who are able to facilitate dialogue and interaction.

-Are 'centres for inter-disciplinarity' useful or useless without a change of paradigm?

5. James Ayers (Blekinge Institute of Technology, Karlskrona Sweden)
The Language of the University Becoming: Processes of knowledge production from 'otherwhere'

- James Ayers' presentation centered on education in the age of 'wicked problems', by looking at paradigm shifts in worldviews and the ways in which this has affected educational systems. He questioned the ways in which it would be possible to shift from the Western, patriarchal rigid lines of pedagogy influenced by mechanical worldviews – which arguably fail to address the complexity of problems that we are currently faced with – towards more holistic models influenced by systems thinking; models that work across cultures, ideologies, religions, languages, tackling the colonialization of knowledge and injustices in practice. Towards this goal, Ayers proposed looking towards what he conceptualized as the 'otherwhere', a space of inclusion and collaboration with the 'other', where things are not universalized. He went on to explain the ways in which the above-mentioned concepts are

reflected into his own teaching practices, which have previously involved taking students to live, work and learn alongside local traditional communities- experiences which drastically changed their perspectives and worldviews.

6. Henrietta Palmer (Chalmers University, Gothenburg Sweden)
City-making and knowledge production as new institutionalities: examples from Rio de Janeiro

- By drawing upon a project carried out in Rio de Janeiro, Prof. Henrietta Palmer explored the ways in which the convergence of knowledge production, identity making and spatial production processes can result in a new language which can be applicable in the future university. The project in Rio de Janeiro was centered on integrating a variety of 'knowledge cultures' in order to lead to a different way of producing space. It followed a series of sites in and around the Brazilian capital, where grassroots initiatives steered by local actors led to the development of a series of urban interventions: amongst these, one involved the cultural mapping of a *favela* leading to a series of community development and urban acupuncture initiatives, another involved the hybridization of a university curricula, whilst another involved the construction of 500 edifices to serve not only as schools but also as civic centers for a deprived area, marking the emergence of a new educational philosophy. In this sense, the talk argued that looking at processes of transformation for social justice in local contexts could help us to contextualize scenarios for knowledge production in the future university.

7. Iain Low (University of Cape Town, South Africa)
Space and Transformation – Decoloniality and the project -of architecture at University of Cape Town

- Prof. Iain Low's presentation centered on processes of de-colonialization by drawing on a series of case studies from South Africa. He explored the pre-requisites of change and the role of architects and planners as enablers during fragile times, the importance of acknowledging the language of critical difference, and the importance of understanding and developing new organizational relations. The talk initially questioned whether or not prospects of transformation exist in the absence of revolution, as it happened in the case of UCT: here, a 2015 student uprising challenged the university status quo and the legacies of apartheid and colonialism left by the institutions' colonial founders – legacies which included spatial injustice, the perpetuation of singular knowledge systems, racial and gender inequality etc. Not only did the student-led protests lead to a series of institutional reforms, but they influenced a series of campus architecture and planning adaptations which have managed to change university culture. The presentation additionally carried on with introducing the Nelson Mandela museum complex, where new 'spatialities' were produced in dialogue with pre-existing ones, in the effort to de-colonialize place-making practices.

Discussion:

- Important to think about the pre-conditions of change, which eventually lead to the creations of spaces where everyone decides to head in the same direction: is the pre-requisite of change often conflict? Nevertheless, this has to be intentional, purposeful, informed.

- Important to remember that problems are relative and each different place has its own individual priorities and crises.

8. Roger Hawkins (Hawkins Brown Architects, UK):
Conceptualizing and realizing new university buildings

- Roger Hawkins' talk retrospectively reflected upon his architecture firm's work on over 60 different university campuses and buildings throughout the UK. By recently carrying out an extended post-occupancy evaluation of previous projects, six key concepts for conceptualizing and realizing university buildings were developed:

1. Grown-Up Spaces: the importance of respecting the users of the space (students) through quality materials, finishes and furniture, attempting to blur the boundaries between institution and the real world (university campus blending with environment), home hybrids etc.

2. Selected Flexibility: as none of the buildings were found to be fully utilized as intended, it is crucial to: find a balance between creating spaces with flexible use and efforts to attain specificity in order to attract different intended types of use; find a balance between shared and individual space. Experimented with use of software apps which tell students which areas are free.

3. Spatial Choice: ensuring that space is likeable and students will choose to use it- this is also attained through creating spaces which are open, porous, and adaptable (they offer choices for different kinds of use, for formal/informal learning environments etc.).

4. Realistic Efficiency: ensuring that buildings are more and more cost-effective, to build and to run; importance of creating spaces which facilitate cross-disciplinary research.

5. Cautious with Technology: being weary of the fact that expensive tech may eventually become obsolete, so the use of natural materials and simplicity are often to be preferred.

6. Soft Design: importance of good interior design, which is not to be divorced from the building architecture and is one of the key components of a successful project.

Discussion:

- Traditional boundaries are being merged: co-living, co-working etc. Mixed use is the future of most projects.

- What will happen in a post-Brexit world when thinking about the spending capacity of universities?

- What about sustainability in design? Is that something which is considered from the incipient phases of the project?

- Are people in architecture schools exposed enough to other disciplines?

- Provocation: dystopian future, imagine that in 20 years the world is in a terrible position in terms of environmental and socio-economic sustainability, and universities would be a space where knowledge is much more free-flowing and disciplines are abolished: what would this university look like, how would it have to be designed?

FUTURE OF UNIVERSITY SCENARIOS: ISSUES EMERGING FROM TALKS

Scenario 1: The Civic University
Emerging Issues:

- 'The Civic University Model' should imply a soft boundary between the university and the outside world: both local and global. The importance of universities' engagement & collaboration with the civic sector, with external institutions and organizations etc.

- How do universities impact on and contribute to the development, regeneration and revitalization of the cities they are in?

- A radical reappraisal of universities is required, including thinking about their role within the city and within society as a whole. Is systemic change required?

- What are the tensions deriving from universities' need to be competitive at local and global level? At individual level, what are the implications of academics trying to projects themselves as being 'useful' and 'impactful'?

- What are the human and institutional implications of the transfer towards a system where academic performance is quantified in metrics (a system of quantified control)?

- End of collegiality, collaboration, human exchange, exchange of ideas, debate, informal discussions.

- Transfer to competitiveness: amongst institutions, amongst students, staff members, etc.

- What can we learn from looking at former processes (a lost world)?

- How are current institutional arrangements changing cognitive processes of 'doing academia'?

- Commercialization of universities: students seen as consumers, academics as service providers. Can this be changed?

- The importance of time and patience for transferring from quantity to quality.

- Frictions between: 1. The need to translate abstract ideas about the future of universities into spatial solutions; 2. Digitization blurring the bonds with the physical space.

- Creating space where people meet physically, space which encourages discussion, interaction, exchange.

- How can universities create individuals who are good citizens, ethical, cosmopolitan?

- How can we generate a new culture about what it means to be an academic? How can we go back to engaging with ideas, text etc. in a 'slow' and in-depth way?

- How do we project ourselves as being useful for society? But moreover how can this aspiration be eventually transferred into spatial solutions?

- How can we get reluctant students to re-engage, to interact, to share ideas, values etc.?

- Does digitalization represent a challenge or an opportunity? What impacts will this have on the future university?

Scenario 2: The Knowledge Economy
Emerging Issues –

- University as an engine of the knowledge-based economy.

- How are universities impacted by the challenges and opportunities brought by technology? If used constructively and knowledgeably tech tools can be very helpful (as demonstrated by the *Non-architecture* competition, for example).

    -> The importance to distinguish between 'tacit' and 'codifiable' knowledge.

    -> The importance to distinguish between information and knowledge.

    -> The importance of using digital environments in the service of future knowledge production.

- How can universities transcend bureaucratic and institutional barriers to start engaging with informal types of education and with a greater diversity of backgrounds? Informal education and 'learning by making' can provide the breadth and depth of knowledge identical to that of someone coming from higher education.

- How can universities facilitate the democratization of access to knowledge, skills, opportunities etc.?

- The importance of setting up inter-dependent structures rather than elite arrangements.

- We need to facilitate research which is outside our usual modes and methods.

- The importance of being realistic, pragmatic and reflective about the ways in which issues can be addressed effectively.

- Crucial importance of identifying and acknowledging barriers.

- Should the divisions (reflected in the knowledge economy) between the social sciences and the natural sciences be addressed?

- One of the bases of the knowledge economy: innovation, which happens when different minds meet and when people exit their disciplines, their silos. Is systemic change required to address the thinking frameworks defined by disciplines?

- Does situating yourself within a discipline legitimize claims to inter-disciplinarity?

- What are the implications of 'clustering' for knowledge production? Creation of branded districts and elitist enclaves or incubators for knowledge. Which is the best model to be followed?

- One of the foundations of the knowledge economy is constituted by the creative industries (from which cannot be excluded creative classes such as hairdressers, retailers etc.): how does this correlate with universities?

- What happens when knowledge becomes a commodity?

- Is the university a place generating public good, or does it merely produce private wealth which eventually trickles into the economy?

- How can we envisage the future of universities and the spatial future of universities if we don't involve the people working there, like even the scientists for example, who consider the university and academia as their world?

- Artificial systems are liberating people for what? For using their imagination to create new things.

- How can we address the bifurcation and gap between 'thinkers' and 'makers'?

- Centres for inter-disciplinarity: are they useful or useless without a change of paradigm?

Scenario 3: De-Colonising the University

Emerging Issues –

- A shift in paradigms and practices is required in order to transition from a 'mechanical worldview' to a 'systems thinking' worldview: how can this be correlated with education, which is set up using mechanical worldview (western, patriarchal system which fails to address a complexity of solutions to a complexity of problems).

- How can learn to work across culture, ideology, religion, language etc.?

- How can we create an environment where knowledge is no longer colonized, where we stop universalizing, when we acknowledge the role of the other?

- How can we more from centralized to decentralized learning, from telling to listening?

- The importance of taking students into the field and confronting them with different kinds of realities.

- How can we integrate different knowledge cultures?

- Can processes of knowledge production, identity making and spatial production come together and eventually form a language which could be applicable in the 'future university'?

- The importance of 'conflict' and debate as a pre-requisite to change and to opening spaces of negotiation and difference. Is there a prospect of transformation in the absence of revolution? - Which are the forums through which we manage to provoke difference?

- Important to remember that knowledge production is always situated in the context which it is aimed for. Similarly, problems must be seen are relative and context-specific.

- What does it mean to 'de-colonize the university'? – breaking down a range of institutional and spatial dimensions where the legacies of colonialism and imperialism are evident.

- How do we manage change? What are the ethical implications of what we are doing? What is non-negotiable?

- How can we look at solutions locally, and move away from replication and self-referencing?

- In thinking about the future we want for universities, we can also think about the future that we imagine to live in; what is the role of universities in there? Which kind of spaces would enable that?

FUTURE OF UNIVERSITY SCENARIOS: WORKSHOP OUTCOMES

Group 1: The Civic University
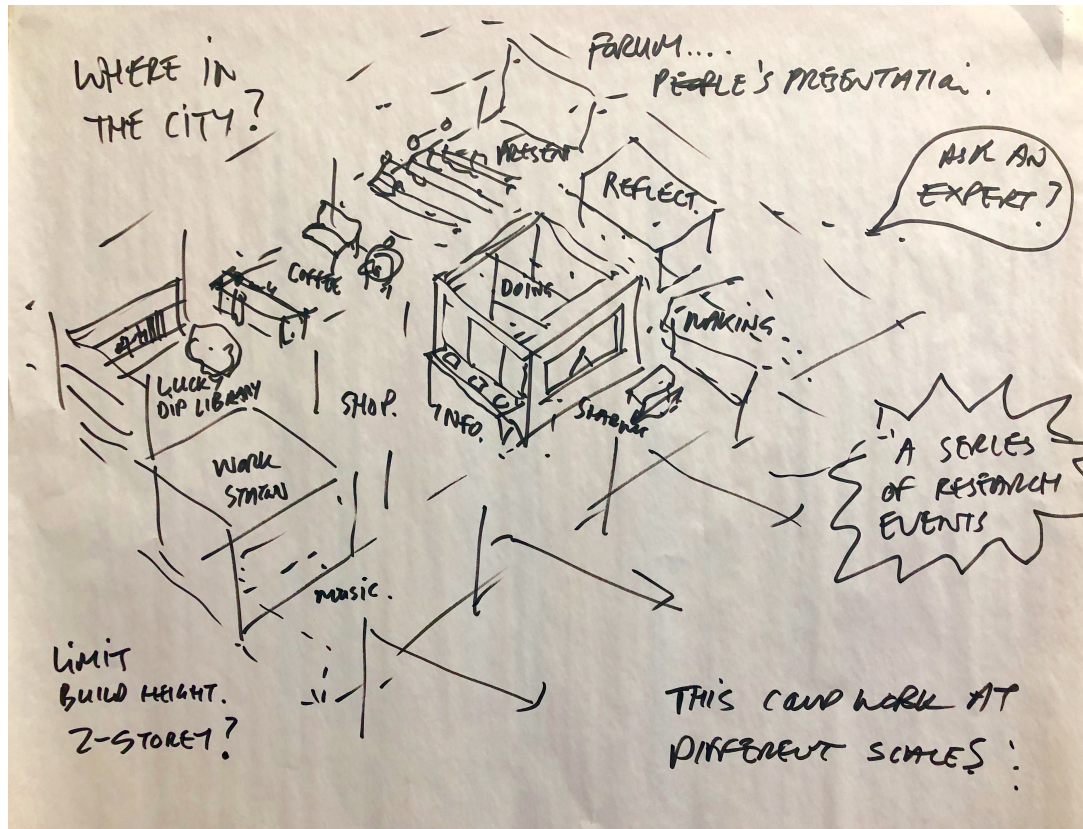
Group explored a series of elements which aggregated would constitute the 'civic university': one where outreach and civic engagement are primary missions of the institution; these included:

- University day pass for community

- 'Community shadow': shadowing members of the university

- 'Problem shop': bringing problems in with the hope that they can solves in a collaborative manner.

- 'Collaboratarium' and 'experimentarium'

- Civic ambassadors from universities

- 'Mini university', 'neighborhood university': permanent or semi-permanent structure

The group also envisioned possibilities for translating the ideas into the built environment:

- Traditional market model: overarching roof, series of access point and a series of kiosks where people can wonder through and engage at different levels; would also include work stations, on any kinds of subjects, where people can find information, exchange information etc.

- Reflexion points: open presentation forums, ubiquitous coffee model

- 'Lucky dip library': books are without covers in order to encourage reading more broadly.

- Where would that sit within the city: city library, box park model, container park model, high-street, city parks, satellite sites?

Group 2: The Knowledge Economy

Group's discussion centered around the accessibility and importance of the front door of the university. Can the university be a good neighbor? And if so, what would that mean?

Additionally, group explored the importance of how the university diversifies links to knowledge: sharing, collaborating with industry and with community. What are different models of collaboration, and the different types of 'sociality' (social connections)?

The group also highlighted the importance of distinguishing between introvert and extrovert models of studying knowledge: a space that deals with knowledge economy needs to provide provides access to both types.

Their conceptual model included either polycentric network for learning and knowledge sharing: physical and digital. The model would including a central agora for discussion (space to come together and discuss ideas). Different types of agoras would be spread across the city. Their key functions: access to knowledge at any time, any where.

Group also highlighted the importance of creating spaces where we learn how to learn, how to listen. Focus on learnability and not employability, and on lifelong learning.

The idea of campuses becoming a bit more messy was welcomed by the group as bringing a richness of diversity and potentially breaking down the division between university and city.

What about the role of technology, though?

Group 3: The De-Colonial University
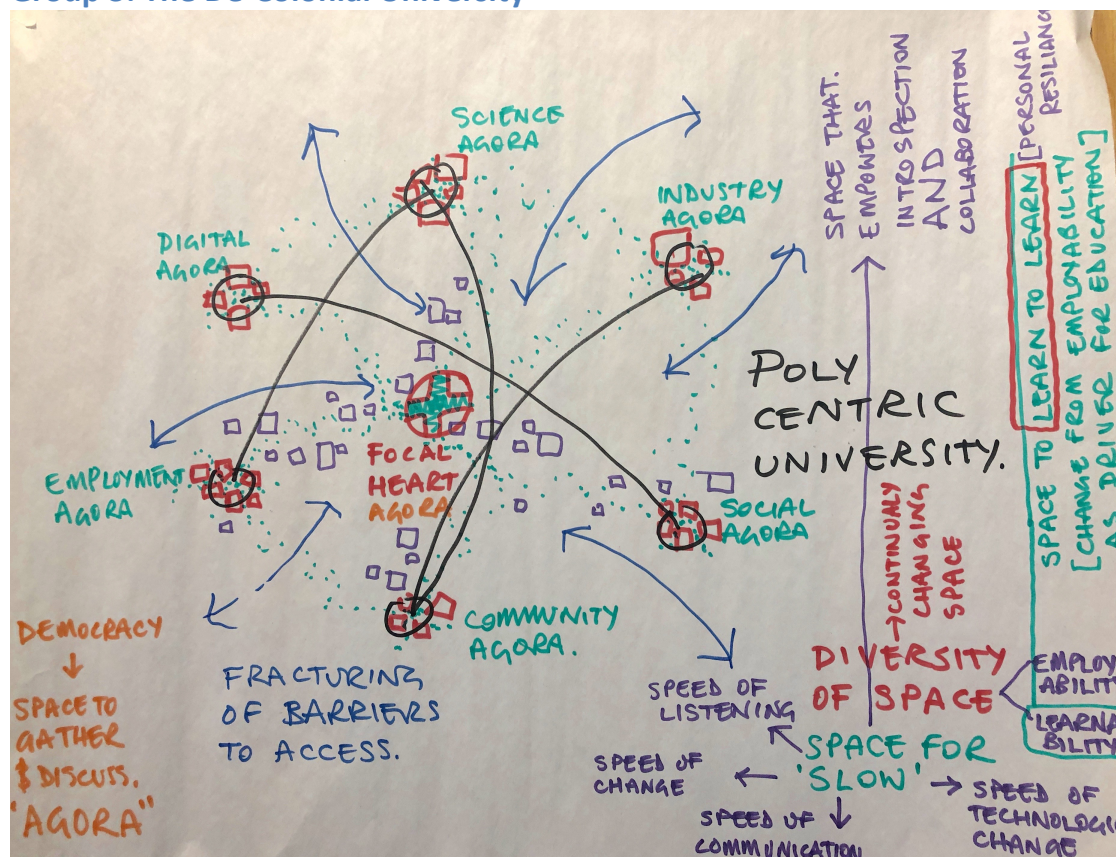
The final group explored two different conceptual expressions of the 'de-colonial university':

1. The first was conceptualized as 'the institute of difference', where 'performative' a platform is created where different disciplines come together. The ultimate goal would be setting up a new set of knowledge commons through the staging of conflict. This would also include stuff beyond the university which is usually ignored (eg. Indigenous knowledge systems).

The group produced a relational diagram where a Stepped well was used as a metaphor for the 'staging of conflict' platform. Arts and sciences on each side; movement towards knowledge downwards; temporary platforms to arrive to new knowledge commons and to new comfortable co-existences.

2. The second group conceptualized the idea of a space for embracing difference and diversity by calling it the third space: a space for dialogue, empowerment, facilitation.

University as a third space: not detached and not as a third function, but as a liaising body.

This would entail two dimensions: a. Decolonizing the practices of the institution, that is the university, starting from the way in which we teach to even the way in which university buildings are designed; b. Role of university to decolonize the minds of the students and educators. This can lead to them going out into the world and becoming actors for change, after they have learned how to be civic, responsible, ethic. They would have responsible practices embedded in their thinking, their practices, whatever job they pursue.

The group also discussed learning through making (things which are actually very linked to indigenous knowledge practices, for example). This could be materialized through fluid, mixed-use spaces: spaces which are accessible to all, and are flexible in terms of use – they can be spaces equipped for things like exhibitions, spaces for co-producing, for making, for learning from each other etc.

Group emphasized the idea of breaking down institutional barriers which make it difficult for civil society to enter the university ('bringing the university down from the hill', metaphorically and physically).

The INTREPID exploration of the "Future of Universities (FoU)"

INTREPID events aimed at exploring the "Future of Universities (FoU) as if inter and transdisciplinarity mattered":

- **EXPLORING THE TERRAIN: CHALLENGES, QUESTIONS, APPROACHES**: London's workshop (March 2017): *Universities and Knowledge for Sustainable Urban Futures: as if ID and TD mattered* http://www.intrepid-cost.eu/london-workshop/
- **GATHERING VIEWS AND PERSPECTIVES:** Lüneburg's conference session (September 2017): *Thinking about the Future of Universities* http://www.intrepid-cost.eu/intrepid-tdnet-conference-luneburg/
- **APPLYING THEORY U TO THE QUESTION OF ACADEMIC FUTURES**: Barcelona's training school (March 2018): *The future of university as if sustainability mattered: A co-creation experience through Theory U journey* http://www.intrepid-cost.eu/the-future-of-university-as-if-sustainability-mattered/
- **EXPLORING TENTATIVE PATHWAYS:** San Sebastian's training school (September 2018): *Shaping the future of universities* http://www.intrepid-cost.eu/donostia-training-school/

- Keynote 'Universities: can we re-imagine ourselves' addressed at the Mistra Urban Futures Annual International Conference, Cape Town (7 November 2018) Universities must 'reframe' goals and agendas (also: https://www.mistraurbanfutures.org/en/news/realising-just-cities-successful-3rd-annual-conference-cape-town)

- **RE-THINKING CURRICULA:** Ljubljana Workshop (Dec 2018) *Re-imagine Urban Curricula (a needs assessment)* http://www.intrepid-cost.eu/ljubljana-workshop-re-imagine-urban-curricula-a-needs-assessment/

- **GLOBAL COMPETITION ON FUTURE SPACES AND PLACES OF LEARNING:** NonArchitecture global digital competition (Oct 2018-Jan 2019) *Learning: Alternative designs for universities* https://www.nonarchitecture.eu/competitions/#1 and pdf of top 50 entries: http://www.intrepid-cost.eu/wp-content/uploads/2019/01/Non-Architecture-Competition-Compiled-edited-1.pdf

- **EXPLORING SPACES AND PLACES OF FUTURE UNIVERSITIES:** Newcastle's workshop (January 2019): *Univer-city: the future space and place of knowledge*, http://www.intrepid-cost.eu/newcastle-school-on-space-and-place-for-the-practice-of-inter-and-transdisciplinarity-within-universities/

- **WRAPPING UP AND MOVING FORWARD**: Lisbon, Final Conference (27-29 March 2019) *INTREPID Knowledge* and the Future of Universities, forthcoming http://www.intrepid-cost.eu/wp-content/uploads/2019/03/INTREPID-Programme-Participants_final.pdf