

University 1.0 to 3.0: Towards creative interfaces between the university and the knowledge economy

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Abstract (150 words)

In these Universities, many of us have become in-betweeners. Interconnectors. Third culture practitioners. We now live, breathe and work between arts and technology, between practice and theory, between research and enterprise. But how we do this has shifted substantially over the last 20 years. In this presentation, I will explore a new conceptualisation of an evolutionary journey from University 1.0 (largely owners of knowledge), to University 2.0 (largely curators of knowledge in an expanding and increasingly fragmented set of multi- and interdisciplinary knowledge fields), to University 3.0 (being curators of learner interfaces to knowledge domains all around us). My focus will be on the creative aspects of this journey, and in this paper I connect the subject of some of my past talks (Culture 3.0, Innovation 2.0) to some newer concepts that make sense of current debates around the industry strategy and governmental agendas for the UK Higher Education sector.

Short Paper (1000 words)

We live in a time of some of the biggest conceptual shifts in the Higher Education sector since the Higher Education Act of 1992. Many of our universities are on their own journey of understanding how they provide relevant provision in the new knowledge society, be it through initiatives such as the Connected Curriculum (Fung, 2017); the concepts around being Connected University (Staffordshire University, 2017) or other new conceptual models of structuring learning environments, such as Cathy Davidson's Book about The New Education (Davidson, 2017) . Simultaneously, the UK government seems to be struggling to understand the role of universities in this new context, and at the heart of the issue is the simple and basic question of how can we make our universities more impactful in the future whilst not breaking the bank.

To understand this trajectory of the last 2 to 3 decades, I have started to use a conceptualisation of University 1.0 – 3.0, mirroring Luigi Sacco's conceptualisation of Culture 1.0 – 3.0 (Sacco, 2011, Boehm, 2009). In this conceptualisation, University 1.0 represents more predominantly those periods and institutions associated with an inherent perception of "knowledge ownership", characterised by medieval period originating universities. But they also include aspects of our 20th century universities that brought forward IP and copyright in relation to the learning content they felt they 'owned'. Thus, both mediaeval and the Humboldt'sche university models are able to fall under this conceptualisation and this notion of "knowledge ownership" influences how content was managed, taught and produced. Typical teaching practices include large lectures that represented a knowledge exchange process from those hired within the institution to those who don't, as well as sophisticated IP models to protect learning content. This model is more predominant in- and certainly started during the pre-internet era, as knowledge exchange and delivery was more easily managed when "institutionalised".

University 2.0 moved into the era of massification of Higher Education, characterised by a steep increase in learners; expanding and fragmentation knowledge domains (Boehm, 2014); and the use of metrics to personalise mass produced and marketed learner products. Introduced were concepts of quality assurance products (validations); standardisation of content (QAA benchmark statements); concepts around students as consumers and university as businesses. In research, the more

predominate form of methodology still conform to linear process routes from research to commercialisation (Boehm, 2015, Gibbons, 1994). A classic political cartoon depicting this type of education is one by Hans Traxler from 1976, showing a monkey, penguin, elephant, a fish in a fish bowl and a seal; with a teacher behind a teacherly desk suggesting “Everybody has to take the same exam: Please climb that tree”.

Universities 2.0 have become sophisticated with advanced metric systems. Similar to a box of assorted chocolates, they are able to personalise the products to the extent that learners feel they received what they need, whilst experiencing a mass-produced service. But key aspects here remain, that knowledge is central. Academics are curating the knowledge for their learners, as they navigate these fragmented fields of content, resulting out of expanding knowledge fields. (Sperber, 2005). Knowledge has become expanded, so that deep knowledge domains increasingly appear as unconnected fragments within larger subject areas. This fragmentation is what Sperber re-conceptualised as ‘brittleness’. (Boehm, 2014) and consideration of how to connect these domains takes on a new momentum with an increase of scholarly work into interdisciplinarity in Higher Education (Boehm, 2007, Moran, 2002).

We are now entering an era of University 3.0. University education is becoming more a process of curation of interfaces between knowledge and society. Considerations on how to support learning and knowledge production focusses more on how we devise this interface, this learning environment, in which learners are supported by drawing from knowledges that are ever-present and all around us. In 3.0 Universities, we are trying to understand how to connect to a rapidly changing world outside of our premises, and how to connect this with learning within. We do this by attending to considerations of how to connect the curriculum between different domains, including research and teaching, arts and technology, science and art, innovation and production.

There is a different role here for universities within society. They are increasingly not the sole holder, owner or even curator of knowledge anymore, but curator of the (creative) interfaces in which learning happens. They are more permeable and learners and researcher more often co-own, co-produce and co-create. Creativity and Arts is here important for more than just the Arts subjects, as it supports the development of environments where learning happens.

In this talk I will draw from my 20 year experience in Higher Education. Over two decades of experiencing European Higher Education, it has been a journey of connecting various domains. Connecting arts, science and technology, but also the world of research, enterprise and teaching, I have increasingly considered what makes what we do within the institution more impactful outside of the institution and how we can become more engaged, more permeable and more effective as institutions. From these two decades I can pull examples for learning, teaching and research and demonstrate the validity of this evolutionary process of moving from University 1.0 right through to University 3.0 and why this conceptualisation matters for building the future of our creative society and our creative economy.

(878 words)

Bibliography

BOEHM, C. 2007. The discipline that never was. *Journal for Music, Technology and Education*, Vol 1, 2007.

- BOEHM, C. 2009. 2084-Brave Creative World: Creativity in the Computer Music Curriculum. *Proceedings of the International Computer Music Conference*. Montreal: ICMA.
- BOEHM, C. 2014. A brittle discipline: Music Technology and Third Culture Thinking. In: HIMOINOIDES, E. & KING, A. (eds.) *Researching Music, Education, Technology: Critical Insights. Proceedings of the Sempre MET2014*. London: University of London.
- BOEHM, C. 2015. Engaged Universities, Mode 3 Knowledge Production and the Impact Agendas of the REF. In: RADFORD, S. (ed.) *The Next Steps for the Research Excellence Framework*. London: Westminster Forum Projects.
- DAVIDSON, C. N. 2017. *The new education : how to revolutionize the university to prepare students for a world in flux*, New York, Basic Books.
- FUNG, D. 2017. *A Connected Curriculum for Higher Education*, London, UCL Press.
- GIBBONS, M. 1994. *The new production of knowledge : the dynamics of science and research in contemporary societies*, London ; Thousand Oaks, Calif., SAGE Publications.
- MORAN, J. 2002. *Interdisciplinarity*, London ; New York, Routledge.
- SACCO, P. L. 2011. Culture 3.0: A new perspective for the EU 2014 – 2020 structural funding programming.
- SPERBER, D. 2005. Why Rethink Interdisciplinarity? *Rethinking Interdisciplinarity*,, interdisciplines.
- STAFFORDSHIRE UNIVERSITY. 2017. *Strategic plan - Staffordshire University* [Online]. Available: <https://www.staffs.ac.uk/about/strategic-plan> [Accessed].