Towards the Ecological University

- A Concept Note from Ronald Barnett

Introduction

Two questions have been posed of us and I shall take them in reverse order:

- (i) How might higher education contribute to better futures for all in 2050?
- (ii) How should higher education be in 2050?

I take them in this order since we need some sense as to how higher education might contribute to better futures in order to think about how higher education should be in order for it to achieve the hopes that we have of it.

(i) How might higher education contribute to better futures for all in 2050?

- On the year 2050: In setting out their 'corporate strategies', many universities are precisely adopting a thirty-year horizon. But this timeframe is surely inadequate. It is both too long and too short! It is too long because matters are urgent, even desperately so. And it is too short because we need to situate our thinking against the timeframe of eons of time, of the birth of this planet Earth, of humanity's evolution on it and of its disrepair that humanity has brought about.
- 2 **Better futures for all**: Against the horizon just sighted, the idea of better futures for all has to be understood as better futures for all the entities on this Earth, human and non-human; organic and non-organic.
- Interconnectedness: The current pandemic is instructive in a particular way. It teaches us of the interconnectedness of all of the Earth. Pangolins, cultures, medical science, virology, social systems, transport systems, bats, geo-political relationships, flows of academics and students in higher education, state-people relationships, belief systems, adult literacy, communication systems, mass media, psychology, schooling, digital systems, mathematical modelling, economies, agricultural systems, science policies, viruses, anatomical structures, health systems, air transport, the public sphere, self-understandings, airports, care of and attitudes towards the elderly, the political sphere, decision-making and many more entities and elements are colliding in this situation.
- 4 **Knowledge and the world**: Crucially this list includes not only entities in the natural world (both organic and inorganic) and the human world (both individuals and collectives) but also knowledges (plural) of those worlds. Moreover, in this pandemic, knowledge is not just a spectator but is a highly active agent, affecting the very world that it is espying. These relationships between knowledge and the world are not well understood. What is evident is that universities are central, again both in relation to individuals and to peoples as collectives, as societies.

- *Complexity*: Over recent decades, a vocabulary has emerged that reflects a new sense of the interconnectedness of the world, with terms such as complexity, emergence, contingency, motion, entanglement, indeterminacy, instability, with large literatures attaching to these concepts. The story here is that of humankind being faced with a 'runaway world', now barely beyond rational control.
- Supercomplexity: To complexity, we have to add supercomplexity.

 Supercomplexity is that state of affairs in which we are faced not just with proliferating and contending accounts of the situation in question but even with proliferating and contending frameworks. Our very categories by which we might seek to comprehend the world, or any event in it or segment in it, are contentious. One upshot is that we can never know who or what we are. For instance, what is it to be a doctor in the twenty-first century? There is no agreed answer and nor can there be for (a) we cannot even agree on the terms with which to approach the question and (b) the more we collectively address the matter, so the more will our concepts, theories, values, and framework in responding to the issue proliferate.
- As an institution, the university, and higher education, as sets of educational processes has responsibilities arising from both complexity and supercomplexity.
- An impoverished situation: The world is not merely interconnected, complex and supercomplex but it is also impoverished; and in a particular sense. The sense of impoverishment in question is that state of affairs in which systems, entities, individuals and particulars in the world are falling short of their possibilities.
- 9 **The culpability of humankind**: Much, but by no means all, of the world's impoverishment is due to humankind's actions, both in bespoiling the earth and in producing social systems that are demonstrably injurious to people, both across and within nations. (In the UK, life expectancy now varies by 10 years as between socio-economic classes and is worsening.)

(ii) How should higher education be in 2050?

- 10 **The dual aspect of knowledge**: Though its growth over the last two hundred years, knowledge has demonstrated its capacities both for impoverishing the world both the natural world and the human world AND for improving the world, in all its forms. It follows that higher education has a fundamental role to play in improving the world.
- The theme of connectivity: It follows from these considerations that the theme of connectivity has to be central to future development, but it needs to be understood as playing out on different levels those of the university as an institution in connecting with the world, of its knowledge activities in connecting with the world and with each other, and of its educational processes, in the students forming connections with the world and with each other.
- 12 **The aspect of improvement**: The aspect of improvement has to be held in front of each of the university's forms of interconnectivity; otherwise, this whole project

- will be self-defeating. It will become yet another form of the instrumentalism into which the university has been enfolded since the mid-twentieth century.
- 13 The problems of improvement: There are two problems of improvement, of (i) question-begging and of (ii) undue limitation. Improvement begs the questions: what counts as and who is to decide what counts as improvement? Undue limitation can be suspected here since a university is a space for the asking of questions and to speak of improvement could suggest that the two questions just identified have already and completely been resolved; but those two questions have always to be on the table. The matter of improvement is controversial.
- Connecting critically: It follows that any efforts at making connections on the part of the university have to be undertaken eyes-wide, not in any facile way, but reflectively, openly, always subject to debate and critique.
- A fundamental distinction: A fundamental distinction, that between 'university' and 'higher education', is crucial. The university is a particular kind of institution, at once academic and educational, occupying difficult spaces in the world; (and with a two-hundred year-long literature on the idea of the university). Higher education is a set of educational processes, typically conducted in universities.
- 16 **Two questions**: Critical questions can be asked about both the university and higher education: 'Does this institution fulfil the criteria as to what it is to be a university?' AND 'Does this set of educational processes really deserve the title of a *higher* education?' Although linked, these are different questions. And they bear differently on the question as to what higher education should be in 2050. In short, we have to consider both the university and higher education.
- A *reminder*: Let us hold in mind our earlier observations that the whole world is inter-connected, animal and human, organic and inorganic, matter and mind, and knowledge and the world; and that these inter-connections exhibit power structures, and that humanity is implicated in some of those hierarchies.
- Curricula: If the world is a unity, then curricula must be constructed so as to allow students to glimpse its interconnectedness, whatever the main focus of their studies and activities. They must be able to place their new knowledge and actions in the widest possible contexts and to glimpse conflicts in those contexts.
- 19 **Pedagogy**: If the world is turbulent, exhibits contingency, and entangles, then students should be given space so as to eke out their own autonomy. Their learning should be characterised by their being placed on the spot, where they are required to come to their own judgements; moreover, their own judgements in situations that are understood to be contentious. This is burdensome.
- Learning is also problematic here. Against the horizon of a turbulent and interconnected world, one comes to know more and more the limits of one's learning. In learning at the level of higher education, the student her/himself has to be able to stand back and critique their own understandings and actions; and becoming self-critical. (see (22).) Learning has to be displaced.

- 21 **Role of professors**: It is the role of professors NOT to teach as such but to so set up pedagogical situations such that students come to take on wide perspectives and generate their own will to go on. This is a pedagogy of planned and safe anxiety; of troublesomeness. (It is nothing other than living in the world today.)
- *Critical thinking*: Critical thinking has, first, to be reinstated as lying at the heart of higher education but it has to be totally rethought. A role model is the whistle-blower in organizational life. Students have to be given the wherewithal spontaneously to form *and* pursue their own judgements, in thought *and* action.
- 23 **Knowledge** retains importance but only (a) when set in contexts, (b) when interconnected with other frameworks, (c) when it is open to critique (both within and from beyond the immediate framework) and (d) epistemic conflicts recognized.
- 24 **The university as such**: the university has to become, in the broadest sense of the idea, an *ecological university*. The university has to become more connected, externally and internally, with the ecosystems with which it is entangled.
- 25 **Externally**, the ecological university seeks deliberately to connect with its (eight) main ecosystems of knowledge, social institutions, Nature, the economy, culture, persons, learning and the polity. It does this intentionally. Each university will have its own ecological footprint and its own ecological possibilities. Its mission and corporate strategy should be built around this eight-fold set of entanglements.
- *Internally*, the ecologically university seeks to unite its disciplines and departments in its ecological quest, and so develop its own *trans-disciplinarity*.
- 27 Technical notes: The programme set out here unites ontology and epistemology. Ontologically, it sees all of the entities in the world as united but recognises that they sit in hierarchical structures. The university is entangled in these structures of the natural and human worlds but has pools of agency that it has yet to realise. Epistemologically, it recognizes that the university is a space of many and proliferating knowledge forms that have powers in the world. Moreover, we can know the world and know that we know and critique our powers of knowing.
- The role of the imagination: This programme posits the university as real and as ideas (plural). To speak of ideas is to say that the university's development is in part dependent on the imagination. The ecological options for any university have to be discerned and imagined; they do not simply present themselves.
- 29 The programme set out here is an attack on the instrumentalism that has crept over the world over the past two hundred years and in which the university has since the mid-twentieth century played such a strong part. This programme has values written into it, within the university in research, scholarship and teaching and in the university's relationships with the wider world.
- 30 Lastly, this programme starts from the position that most entities in the world natural and human are falling beneath their optimum condition, and that the university bears a heavy responsibility in bringing about this state of disrepair and has responsibilities in ameliorating the situation; and that it has powers to do so.