Tsinghua University Higher Education Forum, 28-29 October 2023

**Higher education, the nation-state and global sustainability**

Simon Marginson, University of Oxford

**[Higher education, the nation-state and global sustainability]**

President Wang Xiqin, Provost Yang Bin, Dean Shi Zhongying, my good colleague Professor Wen Wen, other valued colleagues and also students, who are our future. I thank you for the invitation to speak at the Tsinghua Higher Education Forum in 2023. I am awed by this tremendous honour. I wish the Forum and its hosts the greatest success for the event!

**[contents slide]**

Today I want to discuss the challenge posed for higher education by ‘global sustainability’. It is better described not as ‘sustainability’ but as the ‘climate-nature emergency’. In the face of this awesome and terrible problem my poor words are not sufficient, but I will do my best. First I will discuss the climate-nature emergency, then the role of the state, then the role of higher education.

First then, the climate-nature emergency. This is political as well as ecological. It is a shared problem and it shrinks every other issue and challenge that we face. It is existential. Consider these signs:

**[Global September temperature 0.5C above previous record]**

September’s average global temperature of 16.4 centigrade was recorded at the beginning, not the peak, of a warming El Nino cycle. It was 1.4 degrees above the 20th century average for September, and *0.5 degrees* above the previous record level. July 2023 was the hottest month on record. 2024 will be hotter than 2023.

**[West Antarctic ice melt will raise global sea levels 5 metres by 2100]**

Ice melting in West Antarctica, Greenland and mountain glaciers is happening at an quickening rate. The latest report states that the melting of the West Antarctic ice sheet is now locked in, regardless of what happens with greenhouse gas emissions. That is, it cannot be stopped, whatever actions are taken in future. The melting may be largely completed by 2100 and will raise global seal levels by 5 metres. This directly affects cities such as Cairo, Lagos, Maputo, Bangkok, Dhaka, Jakarta, Mumbai, Shanghai, Copenhagen, London, Los Angeles, New York and Buenos Aires.

**[Wildlife populations have been reduced by 69% since 1970]**

Wildlife populations have fallen by 69 per cent since 1970, with a loss of 94 per cent in Latin America and the Caribbean, including the Amazon. More than 19 out of every 20 mammals on the earth are human, their pets or their livestock.

**[Desertification is spreading]**

More than a quarter of the world’s population is trapped in zones threatened by desertification, which limits food and water, triggering conflict, and rising sea levels that destroy habitat. Large populations are moving northward out of Africa.

**[Global food system near tipping point?]**

The proportion of people that face daily hunger on a daily basis has grown since 2015. The global food system may not be far from its tipping point, when extreme weather disrupts several major growing zones simultaneously.

**[Fossil fuels and agribusiness increasingly shape climate-nature politics in the West]**

The two industries that drive the climate-nature emergency are fossil fuels and agribusiness. Fossil fuels control the policy of many Western and other governments and fund disinformation that is destabilising climate science, especially in the US. At least the fossil fuel sector is under scrutiny. The devastating impact of agribusiness on land use, habitat and the production of greenhouse gas, the dangers in the massive shift to meat consumption and single crop production, are almost never discussed.

**[UK government backtrack on net zero pledges]**

Some governments are backtracking on past environmental commitments. The UK, which was an early leader in commitments to renewable energy, has effectively blocked new wind farms and radically reduced the land for solar power installations.

**[Cop15 biodiversity summit will be chaired by UAE state oil company]**

Each multilateral conference on the climate-nature emergency is less effective. The Cop15 biodiversity summit late next month will be hosted by the United Arab Emirates and chaired by the CEO of Adnoc, the state oil company. The UAE has the third largest list of net-zero busting plans for oil and gas expansion.

**[Driving us over the cliff]**

Extreme weather, desertification and ice melting are blatantly obvious but the remedies are failing. They are blocked by the Anglophone model of capitalist development, adopted by economic ministries in many nations. In this model, the state steps back while creating favourable conditions for the free accumulation of capital driven by economic self-interest. Capital accumulation is not reconciled by the state with social and ecological imperatives, for example as in policies that give priority to the rapid evolution of renewable energy and the manufacture of electronic vehicles. Rather, the Anglophone state defers to the powerful economic actors. This is not political freedom, or freedom from hunger, or freedom of nature. It is economic freedom for capital accumulation. This model protects the ecologically destructive activities of fossil fuels and global food companies, and their political and ideological manipulation of climate-nature debate, keeping the money rolling in. This model fosters widespread denial of the scale and urgency of change needed. It is rapidly driving us all over the cliff.

**[Listen to the science]**

The science about the climate-nature emergency is compelling, for states and for higher education. As Sharon Stein and colleagues state in *Educational Philosophy and Theory*, the question is not ‘education for sustainable development’, but ‘education the end of the world as we know it’. That does not mean we endorse the dystopian futures in post-apocalypse fiction, and prepare to teach algebra in the ruins. It means that to meet the challenge of the climate-nature emergency, we must stop what we are doing now and make a different world. And we will need to do so under conditions that are constantly changing.

**[Volatile and unpredictable ]**

The existential challenge will play out in settings new to us. People, energy, food and water, land, cities and regions will be increasingly destabilised, on the move. The effects will be highly uneven within countries and on the world scale. Not every nation will survive. We have to keep our feet, stay balanced while the landscape is shifting underneath us; and work with a temporality that is medium term, rather than short or long term. We are often good in dealing with disasters when they hit us in the face but we need to become good with disasters that are five, ten, twenty years ahead. We have to become better at anticipating and predicting, though the predictions will be often wrong and continuously revised.

In responding to the climate-nature emergency two agents are key. The first is the state. The second is the research-intensive university, which produces science and people formation.

**[State coordination]**

*The state* is the only place where the collective human will can be effectively drawn together and expressed. Without a global authority which can mobilise people, the nation-state is especially crucial. Coordination by economic markets, civil society and communications corporations offers useful tools but cannot substitute for political coordination by the state. The climate-nature emergency is forcing states across the world to confront the limits of modernity, with its focus on short-term, localised, incremental accumulation and consumption, and indifference to the long-term and system maintenance of the whole. More fundamentally, the climate-nature emergency is an ethical and moral challenge.

The climate-nature emergency is about knowledge, values, and human/nature and human/human relations. States must become more effective in coordinating and mobilising people on the basis of understanding, consent and the will to act. The climate-nature emergency goes to the heart of human conduct, how we live, and the moral order of society.

**[Grass roots agency]**

The two indispensable elements of a functioning moral order are individuals with free agency who take social responsibility for their actions, and the state as the expression of common values and the pivot of shared action. If we are to have the human resources we need to deal with the climate-nature emergency, people must be led by the state not through top-down coercion, but as thinking persons committed to self-criticism and self-improvement, taking the necessary actions at grass-roots level. In future political systems will need to be better at both society-wide organisation and deep devolution.

**[East and West contributions to moral order]**

To summarise a complex problem in one sentence, to meet the climate-nature emergency we will need to combine Chinese statecraft, social awareness and social organisation, and self-forming Confucian agency, with the Western Enlightenment’s valuation of individuals. There are some signs that modern Chinese society, now shaped partly by mass higher education, is evolving as a hybrid which combines features of Chinese collectivity and self-cultivation with Western self-determination. Time will tell if this evolution is successful.

This task of rebuilding a consensual moral order of society to meet the climate-nature challenge is a challenge for every political system. Every political culture is different and there is no single formula for government but there is a widespread problem that must be solved. Many countries are experiencing not the strengthening but the fragmentation of trust and consensus, political cooperation, and openness to others. All that has to be turned around. The costs of failure are too terrible. In developing the capacity of states to draw on consent while fashioning a new moral order, the role of higher education will be crucial.

Let’s turn then to the role of *higher education*.

**[Higher education]**

Because states are touched by the climate-nature emergency continuously at many points, so are universities. Where nation-states go, education and science also go. Our contributions and our fates are joined together. This is especially clear in China, with its three thousand year history of higher education for the state, but there is a nexus between state, society and higher education everywhere, even in societies that downplay the role of the state for ideological reasons. In the German model of university, Wilhelm von Humboldt placed the freedom to teach, learn and research at the service of the state. In the Nordic model, the state and the society are seen as one and the university is the servant of both.

What then are the implications of the climate-nature emergency for higher education? Universities have ongoing contributions through education and research. They serve the climate-nature emergency *state* on the basis of autonomy. What does this mean in practice?

**[UN SDGs]**

When looking for ideas, many turn to the UN SDGs. The SDGs have been a good starting point. They foreground a shared commitment to sustainability and equitable global development. They acknowledge and facilitate plural power in less Western world, and place education and science at the centre. But they are just a starting point. They do not guide the hard decisions on energy transition, sustainable agriculture, reining in consumption and restoring biodiversity, let alone global governance. The multilateral framework does not compel nations that puts their own interests first, and leaves untouched the freedom of companies to wreck havoc. Fossil fuels, plastics and meat producing giants can sign up to the SDGs. Interpretation of the SDGs is beyond flexibility. They are *primarily* ambiguous.

So what do we do *beyond* the SDGs? I see four contributions of higher education.

**[Moral order and student learning]**

First, a new moral order based on collective action by responsible citizens, coordinated by the state, begins in education. Crucial to this moral order are the ethical values that animate people. We need a new relationship between humans and nature based on co-existence and mutual nurturing, rather controlling nature by limiting and displacing it. This means taking full responsibility for the biosphere, including all the other humans in the biosphere. To achieve this the curriculum of all students will have to be remade. In formal learning, student self-formation through immersion in knowledge, we want students to develop themselves through integration with the world, not develop themselves through the modernist self-transformation of the world. Traditional and modern philosophy are essential to the moral order and in shaping social action and must be elevated within universities and the state.

**[Political community]**

Second, political community. I have argued that states will need to better at fostering and facilitating the thinking agency of grass roots persons and communities within the framework of the common collective good. Mass higher education provides political education and builds human capabilities for expression within devolved structures.

**[Science as truth telling]**

Third, science. The role of science in truth telling is absolutely essential and world-class universities have a profound responsibility to support and advance science and technology, including health sciences and social sciences, to communicate science effectively and to defend science from attacks and disinformation.

**[A global tianxia?]**

The ultimate problem is global action. It is indispensable but a tremendous leap from where we are at now. Multilateral action is too weak and easily derailed by national interest. In abstract what we need is a world-centred form of *tianxia*, where all nations give voluntary authority to a central agency (like the ideal state of the Western Zhou dynasty), that sees the world not through the lens of one tribe, nation, or tradition but in the round, in the whole. How can that agency be achieved in practice? This is primarily a problem for states, but universities such as Tsinghua are very good at cross-border relations and seeing the world as a whole, and are laboratories for developing ideas about global governance.

So in addition to its ongoing work in science and education, higher education is key to fostering a new moral order in society and in forging global cooperation. Taken together, these four contributions of higher education require a multidisciplinary and inter-disciplinary approach – not just mathematics and science, including environmental sciences, and many technologies, but also moral education and philosophy, political science, sociology, health, international relations and global studies.

If you can extend your kind patience with me a little longer I have two final remarks.

**[We should not underestimate the change that is needed]**

First, we must not underestimate the change needed. It is easy to do, because universities are already good at altering themselves reflexively. Our mission is the continuous improvement of learning, research and our social contributions: the never finished remaking of ourselves, our students, facilities, institutions and countries. We shape out work with self-criticism and targeted effort. We combine intellectual humility, openness and always learning, with the powers of reason and imagination, to build capacity and performance. Self-criticism, focused activity, continuous improvement are Confucian techniques, and also classic modernism. Everything is always moving forward, though much remains the same.

As reflexive modernists we seek to control the future, to design our trajectory and direct our achievements. Some universities are very good at this, especially in China. But in the last half decade the future has become more uncertain, more in disequilibrium, harder to control. These chaotic motions will accelerate. In the face of the climate-nature emergency the old modernist ontology, perpetual predictable change with more of the same, no longer serves us. We need a larger self-transformation, in the nation, the world, and higher education.

**[China’s higher education has a great contribution to make]**

Second, in the domains I have discussed - especially moral order, humans and nature, the role of the state, and global cooperation – China and higher education in China have an especially important contribution to make. China already has much of the cultural and political tool box that is needed by the world. Daoism and Confucianism foreground relations with nature. Confucianism fashions reflexive individual self-making within collective social relations. In Sinic tradition, human society is coordinated by politics and government, not by the economic marketplace, the military or religion as in some other societiess. At its best the state in China functions on the basis of active and widespread social consent. At its best. Constructive relations between the state and society are more typical of East Asia and parts of the European world, including the Nordic and German speaking countries, than in the Anglophone world with its chronic autarkic individualism and anti-statism.

The state in China has a long history of fostering grass-roots capability through deep devolution within a centrally determined system. At times devolution is overborne by top down control, but China’s capacity to devolve agency to local government, business, science and education is a crucial heritage, key to national development since 1978, and to the successful evolution of autonomous universities within the framework of the state.

China’s tool-box in governance and education provides essential resources for all of humanity. The contributions of China’s world-class universities will be crucial not just in China but for the world as a whole. As I see it Tsinghua has a great leadership role to play in future, in partnership with China’s state and with all states and all universities.

Thank you very much for listening to my poor words.