How can we redefine Joseph Needham’s sense of a world community for the 21st century?

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Abstract
In the middle of World War II, my father, Kenneth Lo, accompanied Joseph Needham on a lecture tour to Colchester Co-operative Society dedicated to the support of China’s war effort and to boycotting Japanese goods. They were comrades-in-arms, soft-left socialists, inspired by the Spanish Civil War, George Orwell and WH Auden alike to take up the pen and the campaign circuit. This article is a reflection on the politics and aesthetics of research, on decentring the Eurocentric narrative of the history of science, but also on the role of poetry in the quest for a better world. Grounded in socialist, Christian and 20th-century scientific utopian belief, All under Heaven was to be One Community. Post Needham, but in the Needham spirit, I ask what shared vision drives our research?

Keywords
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And for me, in the face of things difficult to understand
You, the Explainer, the Antithesis
(whether or not in the flesh)
Were always there,
You, the outward and the tangible sign
Of the strength of all workers’ muscles under the hot sun
Intelligence of scholars attending to brush-strokes
Beauty of all Chinese women under the moon.
You, the manifestation of what Lucretius invokes:
QUAE QUONIAM RERUM NATURAM SOLA GUBERNAS
The assurance of a link

No separation can break.
As it is written in the Book of Rites
THIEN HSIA TA THUNG
All under Heaven shall be One Community.

– From ‘A Poem for a Chinese Friend’ by Joseph Needham, September 1946

It is really sad for me that I did not meet Joseph Needham in his younger years; he was very frail and wheelchair-bound by the time I came across him at
the Needham Research Institute (NRI). I have a borrowed memory of him though, through one of the interminable stories my father used to tell me about his own younger years – stories that I have grown to appreciate only in later years.

On 29 March 1942, my father addressed the Education Department of the Colchester Co-operative Society in Chinese. He spoke in Chinese despite being fluent in English, having just graduated from Fitzwilliam College. The other speaker happened to be Joseph Needham, whom he had known through the Cambridge Chinese Student Association during the 1930s. They were comrades-in-arms, soft-left socialists, inspired by the Spanish Civil War, George Orwell and WH Auden alike to take up the pen and the campaign circuit.

The Colchester event was a fund-raiser organised by the Save China Campaign Committee (1937–1949), which was dedicated to the support of China’s war effort and to boycotting Japanese goods. The documents of that meeting are kept in the public archives in Shanghai, where a colleague of mine, Zhou Xun, discovered them just before the Needham Workshop in July 2015. In 1942, Needham was just a few months away from departing for China, carrying his belief in the possibility of universal moral and intellectual solidarity, and the germ of what would grow into his magnum opus, Science and Civilisation in China, had already been planted.

My father had been born between revolutions. As a young teenager, he had seen the first Northern Expedition march past his front door in Fuzhou in 1926, before it arrived the following spring in Shanghai on that bitter day in April when all the left-wing elements of the Kuomintang were first violently purged. He was trained by Edgar and Helen Snow at Yanjing University, now Peking University, and as the North China tennis champion (1936) had been invited to join his friends in the Chinese Olympic team to go to Berlin. This was just before the Marco Polo Bridge Incident when the National Revolutionary Army and the Japanese Army clashed outside Beijing (7–9 July 1937) initiating the second Sino-Japanese War and, in the view of some scholars, World War II.

His experiences had prepared him to share Needham’s anxieties and his hope for China. Together, they also shared an appreciation of WH Auden, another traveller in war-torn China, and his reflections on love, politics and citizenship; Auden’s epistolary poem, ‘New Year Letter’ (1940), written after his return from the Sino-Japanese War, had spoken of the ‘free rejoicing energy’ – a phrase that captures the faith that revolution would transform society through love (Auden, 1965: 79; Auden and Isherwood, 1939). Also trained by Christians, in his case in the missionary school at Fuzhou, but not Christian himself, my father shared that optimistic spirit that the faith engendered and wrote for Kingsley Martin’s Eastern Eye.

For Needham, carrying with him an experience of the devastation of the civil war in China, All under Heaven was to be one Community (tianxia datong) in the service of a better world.

Needham’s better world drew on the meaning of a passage in Liji and its imagining of a community that would be drawn together by social structures that were perceived as different from and more humane and benevolent than any others in the geographical region where the classical Chinese texts were produced and disseminated.

But Lu Gwei-djen and Needham’s vision for world community in the mid-20th century was radically different – as remains so vividly illustrated in ‘A Poem for a Chinese Friend’, quoted above. The poem itself speaks of their conjoined project as a powerful aesthetic and cross-cultural practice, of a philosophy of world science and art (my father also left behind a lot of bad poetry), and is a very moving piece for what it reveals about his motivation and his success: a glorious concoction of republicanism, socialism and Christianity, and a passion for classical learning and music mobilised in the pursuit of the science that so characterised his and Lu Gwei-djen’s lives.

The full poem coasts from the pipa and the cello to Hu Sihui’s apparent differential diagnosis of beri-beri, to Peking opera and a Cantonese bishop. It embraces images of Lu Gwei-djen’s research:

> Year after weary year by the student of plague
> Dissecting endemic rats and fleas in a bamboo shed—
> Iron and steel to the help of the million families . . .
> (Needham, 1969: 161)
It also had a particularly potent reading of a love, which Needham found common to the Judaic, tantric and Chinese traditions, without possessiveness and jealousy.

Along with the reference to ideas grounded in the *Liji*, we are treated to an invocation to Venus, the goddess of love, that is the opening lines of Lucretius’ *De rerum natura* (On the Nature of Things): ‘QUAE QUONIAM RERUM NATURAM SOLA GUBERNAS’ (‘and since you alone govern the nature of things’).

Prescient of the 1960s celebration of liberated love, for Needham as for Lucretius, the goddess of love brought cohesion, solidarity, aggregation and reproduction and gave birth to the universe, joining, in Needham’s lyricism, the love and potency of a divine creator. The poem was written for Needham’s own love in 1946 and recycled as an address (for Whitsunday) in Caius Chapel in 1976, which also appears as a postscript to Jolan Chang’s (1977) *The Tao of Love and Sex*, and it ultimately framed his farewell to Lu Gwei-djen (1993) in 1991. His repeating references to Lucretius’ poem and to the *Liji* confirm the importance to him of a fusion of humanist philosophy and what he calls, on the final page of *The Tao of Love and Sex*, a ‘cosmic libido’, capable of powering and structuring creation.

And so this was his universal love that manifested simultaneously in a hope for mankind, in the potential for the aggregation of wisdom and in a belief in the virtue of ‘the achievements of Chinese science and technology before the time when, like all other ethnic cultural rivers, they flowed into the sea of modern science’ (Needham, 1964).

Lu and Needham shared this compelling vision for their work. It was so perfectly fitted to their time that it drew to them a large network of people enthused not only by decentring the Eurocentric narrative of the history of science but also by a quest for a better world. Their historical project remains a model for other Asian histories of science. Grounded in socialist, Christian and 20th-century scientific utopian belief, All under Heaven was to be One Community.

Another aspect of Needham’s legacy is his success in projecting the values and work of the community and creating institutional identity. Today this could become a corporate branding exercise, but from another perspective it would be a critical exercise in self-determination and effective communication – a rallying cry. For University College London (UCL), my employers, that has meant the Grand Challenges, which all staff are encouraged to respond to: improvements in global health, sustainable cities, intercultural interaction and human well-being.
For the history of science, there has been a greater concentration on conceiving All under Heaven as One Community: the connections, the transcultural, transnational networks which have linked and are linking the world, but with more investment in the value of local translations and multivocal conversations than ever there was before.

And what of the artistry, the poetry and the passion? It remains as it was here at the NRI – in the atmosphere, in the library, in the garden, in the practice of learning, in the cultivation of the modern scholar. More than ever, we should value and build on this aspect of the inheritance of Needham and his close associates: their marriage of ethics and aesthetics in research. Now that the harsh lines of disciplinarity no longer regulate and restrain the terms of our academic engagement, the creative potential is even greater.

I am ever impressed by this marriage of ethics and aesthetics and the power it has exerted to reorient the history of science. Perhaps in the following generation, we each can see only a small part of Needham’s sky, but we are moved and drawn together by what we have seen and remember. Mapping the future also requires a vision, but it is perhaps inevitable that that vision will be less grand and less universal in its ambition. I am reminded of Zhuangzi’s ‘frog in the well’ and the joy that can be found in knowing your well and the limited vision that it affords.4 Best not venture too far, lest we get hit by the ‘cosmic libido’! If the destinations of 21st-century science, politics and religion are less clear than they were in Needham’s time, what is needed is to determine a new and shared programme through just the kind of collective reflection and cultivation that we are engaged in today.

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Notes
1. The full poem is reprinted in Within the Four Seas, London: Allen & Unwin, 1969, pp. 160–162.
2. 天下大同.
3. This is a conflation of two terms found in the Liyun chapter of the Confucian Classic Liji (Book of Rites). Needham had already embraced the concept by 1938, as evidenced by an inscription by him on a plank of wood to be found at the home of his friend John Cornford in Ringstead, Norfolk.
4. The story of the frog in the well is from Zhuangzi waipian ‘qiushui’.

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