

VU Amsterdam objects and their stories

1945-1950 the EcoCirc and the early days of Economics



[Photo: 14-E005008-EcoCirc-DEL0251-RdE2018klein.jpg]

Caption: The EcoCirc, built by the instrument workshop in the Faculty of Chemistry on the instructions of *prof. dr.* Folkert de Roos, Amsterdam 1951-1953, VU Heritage and Collections, photo by René den Engelsman 2018]

The economics and business programmes are not known for the objects used by them for teaching, other than slide rules. However, the VU collection does include one very special object from the early days of the then called Faculty of Economic and Social Sciences at VU Amsterdam (social science became their own faculty in 1964). Former dean Harmen Verbruggen reflects on this object and the early days of the faculty

A turbulent start and an ideological battleground

by Harmen Verbruggen

The Faculty of Economic and Social Sciences at VU Amsterdam had a turbulent start back in 1948. Plans for the creation of an economics faculty, including the development of a substantive profile, had started several years prior to this date. However, the planning process quickly gained momentum after it was decided that a new faculty was to be launched before 1950, which would enable VU Amsterdam to meet the legal requirement for it to have five faculties and, by doing this, retain its university status. Unfortunately, there were neither any professors nor a curriculum at this stage; plans had not progressed beyond the profile envisaged for the new faculty, about which a serious difference of opinion arose.

VU board members had a Christian approach to economic science in mind. However, the professors hastily recruited for the new faculty had other ideas, despite being of Reformed denomination. They hailed from the Netherlands School of Economics in Rotterdam (*Nederlandse Economische Hogeschool*), where they had learned to see the economy as a value-free science. One of them, [Jelle Zijlstra](#), later a minister and prime-minister, stood his ground. A struggle to determine the direction to be taken arose within this value-free science after the war too. During the 1930s economic crisis, an English economist rejected existing economic practices. This great thinker was [J.M. Keynes](#). His answer to economic depression and rising unemployment was to vastly increase government spending. However, the greater involvement of government in economic life would have been an unwelcome development for board members at VU Amsterdam. No Christian economy and on top of that greater government involvement. What would really be left of a VU economist?

[Folkert de Roos](#), one of Zijlstra's colleagues from Rotterdam, was recruited as a new professor one year after the creation of the new faculty. It was he who wanted to use the EcoCirc to visualise the new Keynesian model: this machine represented the economic cycle via flowing water and a number of valves and pumps. It enabled students to see the economic consequences of an increase in government spending, amongst other things, and settled the ideological battle on two fronts.

The EcoCirc became obsolete in time - Keynes fell out of favour and the machine started to leak more and more - until the financial and economic crisis of 2008 and the pandemic of 2020. Central banks and governments pumped huge amounts of money into the economy in a bid to avert crises. Even Keynes would have been at a loss and the EcoCirc would not have been able to cope either. The end result would have been a serious water problem.

Harmen Verbruggen is an emeritus professor of International Environmental Economics and was the dean of the Faculty of Economic Sciences and Business from 2004 - 2013.

The Economic Flow Circulator Demonstrator

By Ab Flipse and Liselotte Neervoort

The Economic Flow Circulator Demonstrator (EcoCirc) is a unique machine that is made up of a number of plastic pipes around which coloured water is pumped. This hydraulic computer was designed to show how an economy works. Sliding plates represent economic variables and lead flows in and out of the economy. Money flows through the model literally, in the form of water. A little of it even leaks away via the black market.

The instrument workshop for the Faculty of Chemistry spent 1951 to 1953 building the EcoCirc, on the instructions of professor [Folkert de Roos](#) and based on design drawings for the MONIAC (Monetary National Income Analogue Computer). De Roos had seen the [MONIAC](#) in London and was very impressed. It was the invention of [William \(Bill\) Phillips](#), a student of the London School of Economics in 1949 who later became a world renowned economist.

For many years, the EcoCirc was used to teach students at the Faculty of Economic and Social Sciences and to give demonstrations to visitors. However, it lacked the precision necessary for research purposes and had also started to leak over the years. In 2018, the EcoCirc was cleaned and restored but was not possible to get up and running again. Since then, it has been on show in a special display case in the School of Business and Economics on the 8th floor of the main building.

Ab Flipse is the university historian for VU University, while Liselotte Neervoort is its Academic Heritage Curator.

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