Which places are important, and why? New approaches to Roman and Celtic 'towns'.

Ray Rivers, Physics, Imperial College, London.

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Report by John Mallinson

The speaker began by remarking that whilst on the face of it his principal discipline, astrophysics, might appear to be far removed from archaeology, in practice the two were very similar in that to model them mathematically and explain them required interpretation of data from experiments that could only be carried out once. Like an archaeological dig, the creation of the universe could not be repeated!

He first attempted to define what made a place 'important'. Using examples such as Rome and its empire, and the Minoan culture in the Aegean, where the archaeological and historical data were very strong, he discussed the various factors such as location, ease of communication, and 'interconnectedness' as demonstrated by cultural links that could be used by modellers to determine the relative importance of different nodes within a network. He was able to demonstrate that by correct selection and weighting of parameters, there was a very good correlation of modelling predictions with known history.

Turning to his current work, he described how these modelling techniques are being applied to Celtic 'towns', where the data is much more fragmentary. To date, he and his co-workers have been concentrating their studies on the situation in north east Gaul immediately before the Roman conquest. They have been able to develop models which reproduce with a high degree of accuracy the actual historic situation, in so far as it is known. It is intended to try to expand this research to cover all of the area of Celtic influence in northern Europe, and he expressed confidence that this was possible. He was less sure that the model could be extended to Celtic Britain, where the data is much more fragmentary, and where the culture was much less uniform.

It is not possible to present, within this short review of the talk, the many techniques and subtleties used in developing the modelling systems, but for those interested a copy of the lecture, together with several supplementary appendices, is available on request, in the first instance by contacting CAG through enquiries@caguk.net