O1 History of Mathematics
HT 2019 reading course: Nineteenth-Century British Symbolical Algebra

Essay 2: George Peacock and symbolical algebra

This is the topic for the classes in weeks 4 and 5 (and hence for reading in weeks 3 and 4). For Monday of week 4 please do enough research that you can discuss the topic in class and begin to focus the approach you propose to take for your written work. For week 5, please submit a 2000-word essay by email (to christopher.hollings@maths.ox.ac.uk as pdf) by 12 noon on Friday of week 4.

Here are some suggestions as to what points you might choose to focus on in your research and your essay. Every essay needs some background to set the context. Beyond that you should NOT expect to cover everything. There is much too much here. Choose one or two points to focus on.

- What was Peacock's motivation?
- How does this text fit into the rest of his corpus?
- Which writers did Peacock read and refer to?
- Summarise the material studied.
- What else (briefly) does the text contain?
- When and how were his ideas taken up?

Main text for weeks 3 and 4

George Peacock, *A Treatise of Algebra*, Cambridge, 1830; 2nd ed. in 2 vols., 1842, 1845.

Suggested reading (but do please browse more widely):
- all three prefaces;
- 1st ed., Chapter I;
- 1st ed., Chapter III (paragraphs 47–85 and 131–149);
- 1st ed., Chapter XII (paragraphs 420–443).

Other sources that might be useful

- J. M. Dubbey, Babbage, Peacock and modern algebra, *Historia Mathematica* **4** (1977) 295–302.
- Helena M. Pycior, George Peacock and the British origins of symbolical algebra, *Historia Mathematica* **8** (1981) 23–45.