



# DISPLAYING HERALDIC BLAZONS

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## *Acknowledgements*

## *Declaration*

I declare that this thesis was composed by myself, that the work contained herein is my own except where explicitly stated otherwise in the text, and that this work has not been submitted for any other degree or professional qualification except as specified.

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# 1

## INTRODUCTION

### 1.1 *Motivation*

In 1874 — 4 years after his death — John Papworth's *Ordinary of British Armorial* was published.<sup>1</sup> In this work, he recorded approximately 50,000 entries of descriptions of families' coats of arms, none annotated.

<sup>1</sup> S. M. Collins. 'Papworth and his Ordinary'. In: *The Antiquaries Journal* 22.1 (1942). Accessed: January 2018, pp. 6–7. DOI: 10.1017/S0003581500003668.

This honours project would make it possible to have these descriptions, or *blazons* as they are termed in heraldry (see 2.1), drawn freely for people to view. This has potential application for ancestry companies that build family trees for people. Given the blazon, they would be able to construct the shields visually.

### 1.2 *Contributions*

In this honours project, my contributions included:

- Drawing many of the charges used in the coats of arms
- Writing the base web server
- Writing the charge drawing algorithm





## 2

# BACKGROUND

### 2.1 Heraldry

Many families, countries and organisations — primarily in Europe — have coats of arms. At the centre of a coat of arms is a shield known as an *escutcheon*. The language used to describe how the escutcheon is to be drawn is known as a *blazon*. Blazons have been used since the Norman conquest and have been refined to a regular language in the process,<sup>1</sup> although, as John Brooke-Little said, “many of the supposedly hard and fast rules laid down in heraldic manuals [including those by heralds] are often ignored.”<sup>2</sup> This flagrant disregard for the rules introduces difficulty in parsing the blazons as the language loses some of its regularity.

Blazons have a few key attributes:

- The *field*, which is the background of the shield;
- *Variations*, which describe how the field or charge are patterned. Variations can indicate patterns such as chequered or coloured lines (an example can be seen in Figure 2.1);
- *Ordinaries*, which are geometric shapes (an example of which can be seen in Figure 2.2);
- *Charges*, which are small emblems, such as fleur-de-lis and lions; and
- *Tinctures*, which are the colours and patterns for charges, ordinaries and fields.

The tinctures are derived from Norman French and are divided into 3 groups, typically known as *metals*, *colours* and *furs*. In British heraldry, the colours are derived from Norman French and so the names can look archaic. In heraldry, blue is *azure* and red is *gules* for instance. The metals are *or* and *argent* for gold and silver respectively. Whilst the tinctures are named explicitly, the College of Arms does

<sup>1</sup> Charles Boutell. *Heraldry, historical and popular*. Third edition. Accessed: January 2018. London, Bentley, 1864, pp. 8–9.

<sup>2</sup> J. P. Brooke-Little. *An Heraldic Alphabet*. New and revised edition. Accessed: January 2018. London, Robson Books, 1985.

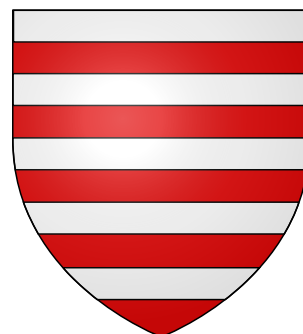


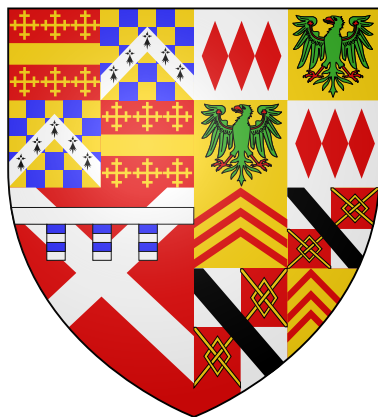
Figure 2.1: The shield of the town of Albert, France. *Barry of ten argent and gules*. Source: [https://en.wikipedia.org/wiki/File:Blason\\_Albert.svg](https://en.wikipedia.org/wiki/File:Blason_Albert.svg)

not define fixed colours for the tinctures, leaving it to the artist to decide.<sup>3</sup>

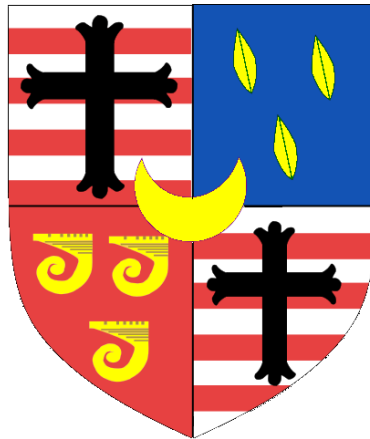
Blazons conventionally follow a form of starting with the *tincture* or *variation* of the field. After the description of the field, *ordinaries* (geometric shapes as seen in Figure 2.2) and *charges* (small emblems, such as fleur-de-lis and lions) are named with their tinctures.

A simple — but notable — blazon is that of the Scrope family. In the 14th century, the Baron Scrope brought a case action against Sir Roberts Grosvenor when he noticed that they both had the same coat of arms. Many witnesses gave evidence in the case, including Geoffrey Chaucer.<sup>4</sup> The case was ultimately decided in Scrope's favour. The Scrope coat of arms has a blazon of *Azure, a bend Or*; a depiction of this as drawn by the web app written for this project can be seen in Figure 2.2.

Whilst the Scrope arms are prominent in heraldry, they are simplistic and indicative of mediæval arms. Coats of arms became more complex as they developed through the centuries, with instances of quarterly shields, grand-quarterlies — quarterlies within quarterlies — and *differenced* arms. Examples of more complex shields can be seen in Figure 2.3.



(a) Neville, 16th Earl of Warwick's coat of arms. An example of grand-quarterlies and differenced arms. Source: [https://en.wikipedia.org/wiki/File:Neville\\_Warwick\\_Arms.svg](https://en.wikipedia.org/wiki/File:Neville_Warwick_Arms.svg).



(b) Arms of Leveson-Gower, Earl Granville. An example of quarterlies with differenced arms. Source: <https://en.wikipedia.org/wiki/File:LevesonGowerEarlGranvilleArms.png>.

For a time, it was considered bad form to repeat a *tincture* in a blazon, and use a reference to the tincture's previous use. The Heraldic Society gives an example as such: "'Azure on a fess argent three billets azure' [would have been written as] 'Azure on a fess argent three billets of the first'". The 'of the first' refers to the field's tincture of azure. This blazon describes a blue shield, with a white bar horizontally across the middle with 3 white rectangles arranged along the bar. The Heraldic Society advocates in favour of repeating tinctures to reduce ambiguity.<sup>5</sup>

<sup>3</sup> FAQs: heraldry - College of Arms. Accessed: January 2018. College of Arms. URL: <http://www.college-of-arms.gov.uk/resources/faqs>.

<sup>4</sup> Sir N. Harris Nicolas. *The Controversy between Sir Richard Scrope and Sir Robert Grosvenor in the Court of Chivalry*. Accessed: January 2018. London, Bentley, 1832, p. 404.

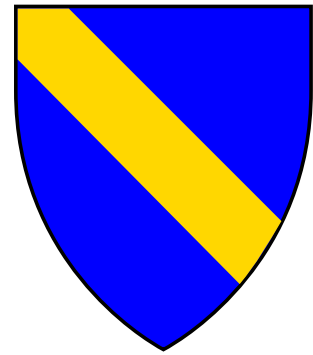


Figure 2.2: The Scrope escutcheon; *Azure, a bend Or*.

Figure 2.3: Some examples of more complex coats of arms.

<sup>5</sup> Blazon in CoA | The Coat of Arms. Accessed: January 2018. The Heraldic Society. URL: <http://www.the-coat-of-arms.co.uk/blazon-in-coa/>.

# BIBLIOGRAPHY

- Blazon in CoA | The Coat of Arms*. Accessed: January 2018. The Heraldic Society. URL: <http://www.the-coat-of-arms.co.uk/blazon-in-coa/>.
- Boutell, Charles. *Heraldry, historical and popular*. Third edition. Accessed: January 2018. London, Bentley, 1864, pp. 8–9.
- Brooke-Little, J. P. *An Heraldic Alphabet*. New and revised edition. Accessed: January 2018. London, Robson Books, 1985.
- Collins, S. M. 'Papworth and his Ordinary'. In: *The Antiquaries Journal* 22.1 (1942). Accessed: January 2018, pp. 6–7. DOI: 10.1017/S0003581500003668.
- FAQs: heraldry - College of Arms*. Accessed: January 2018. College of Arms. URL: <http://www.college-of-arms.gov.uk/resources/faqs>.
- Nicolas, Sir N. Harris. *The Controversy between Sir Richard Scrope and Sir Robert Grosvenor in the Court of Chivalry*. Accessed: January 2018. London, Bentley, 1832, p. 404.