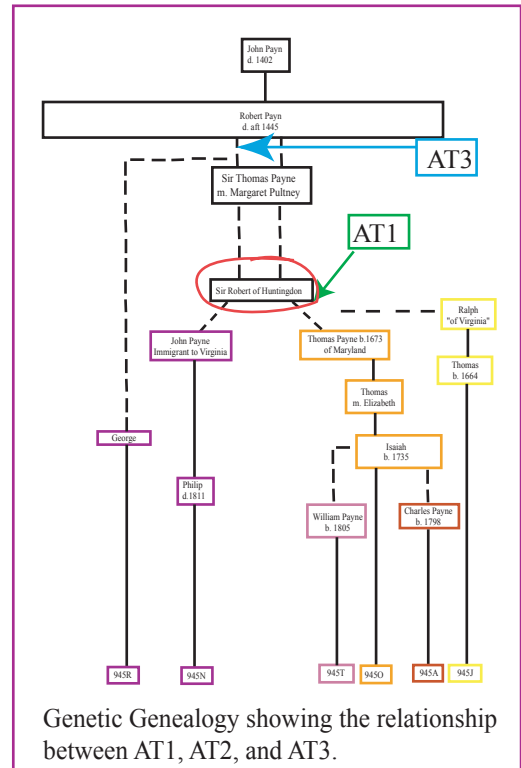
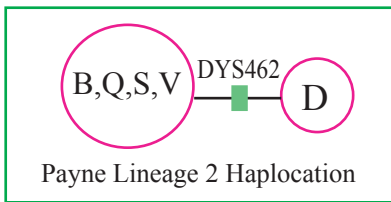


**Relationship of AT1, AT2, and AT3:**

The genetic evidence shows there is a relationship between the Ancestral Types in Payne Lineage 1. It is likely that their common ancestor is John Payn d. 1402 or Robert Payn d. aft 1445. However, genealogical evidence shows that the individuals descended from AT1 and AT3 should have a common ancestor in Sir Robert Payne of Huntingdon. It is genetically unlikely that these two lines share a common ancestor at that early generation. Therefore only one of the genealogies is correct. From the genetic evidence, it is impossible to tell which genealogy is more correct.

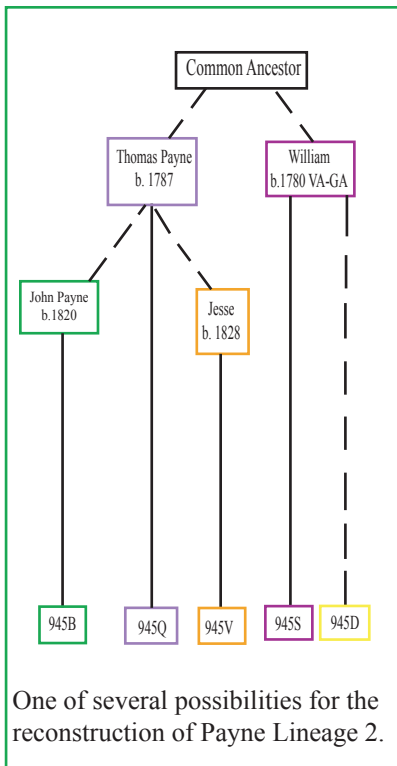


**Payne Lineage 2:**



Payne Lineage 2 is defined by 945B, 945D, 945Q, 945S, and 945V. 945B, 945Q, 945S, and 945V share 23 of 23 alleles and therefore descend from the same common

paternal ancestor. 945S has the earliest documented ancestor of the four in William Payne b. 1780, followed by 945Q whose ancestor is Thomas Payne b. 1787. 945B and 945V document their earliest ancestor as John Payne b. 1820 and Jesse Payne b. 1828, respectively. The genetic evidence would support the pairs of William and Thomas, John and Jesse as being brothers or first cousins to each other. Likewise the two pairs have a very close relationship.



	MRCA	95% Confidence Interval		Est. YOY for Common Ancestor
		Lower Limit	Upper Limit	
945D with 945B, 945Q, 945S, 945V	10	1	28	1815

**Table 1e:** Please see Table 1a and the text for an explanation.

945D is also part of Payne Lineage 2 as he shares a common ancestor with the other individuals in 10 generations. From this genetic evidence there are several possible reconstructions of the genealogies for the individuals in Payne Lineage 2. More individuals would need to be tested in order to accurately reconstruct the genealogy.