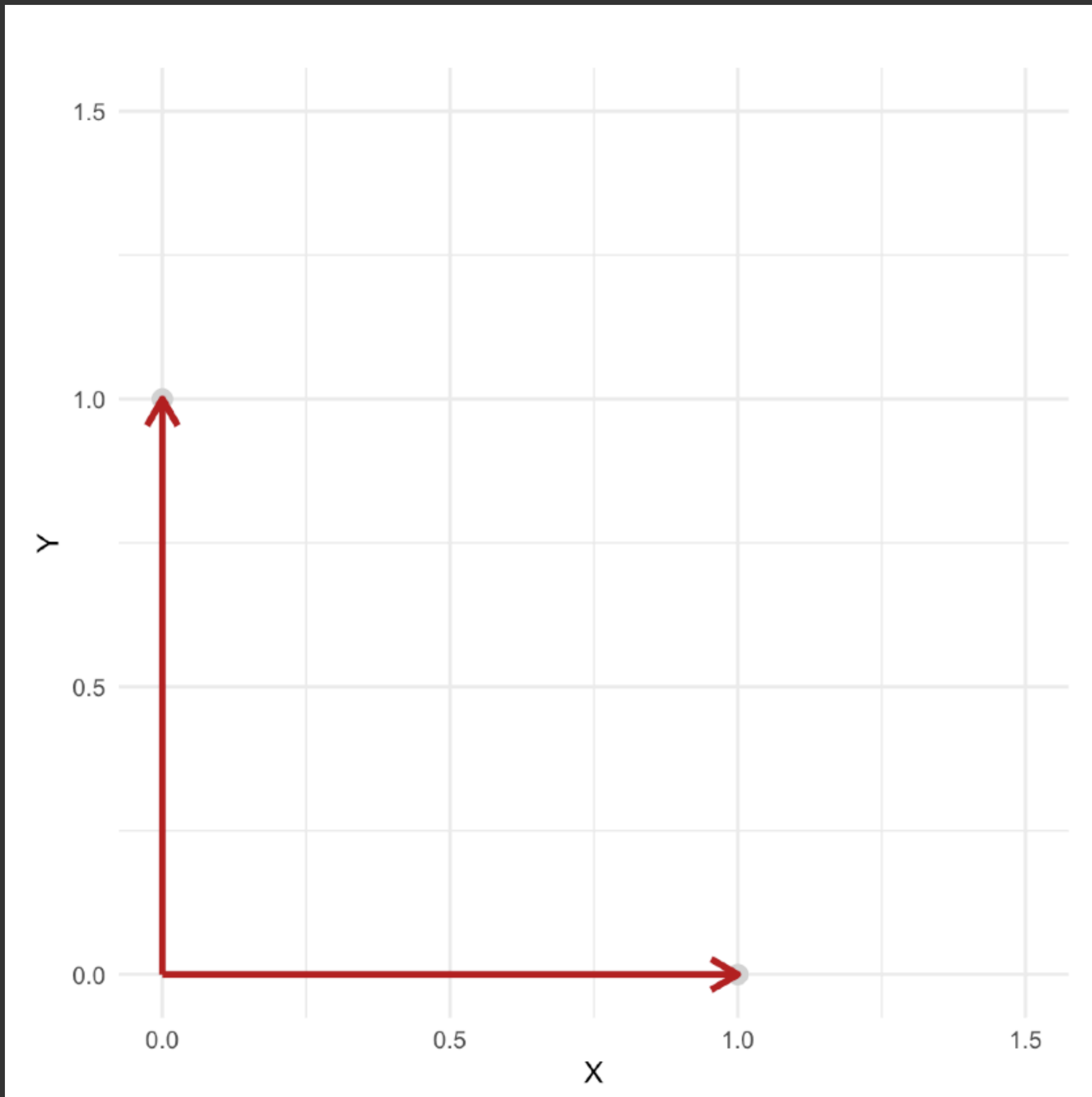
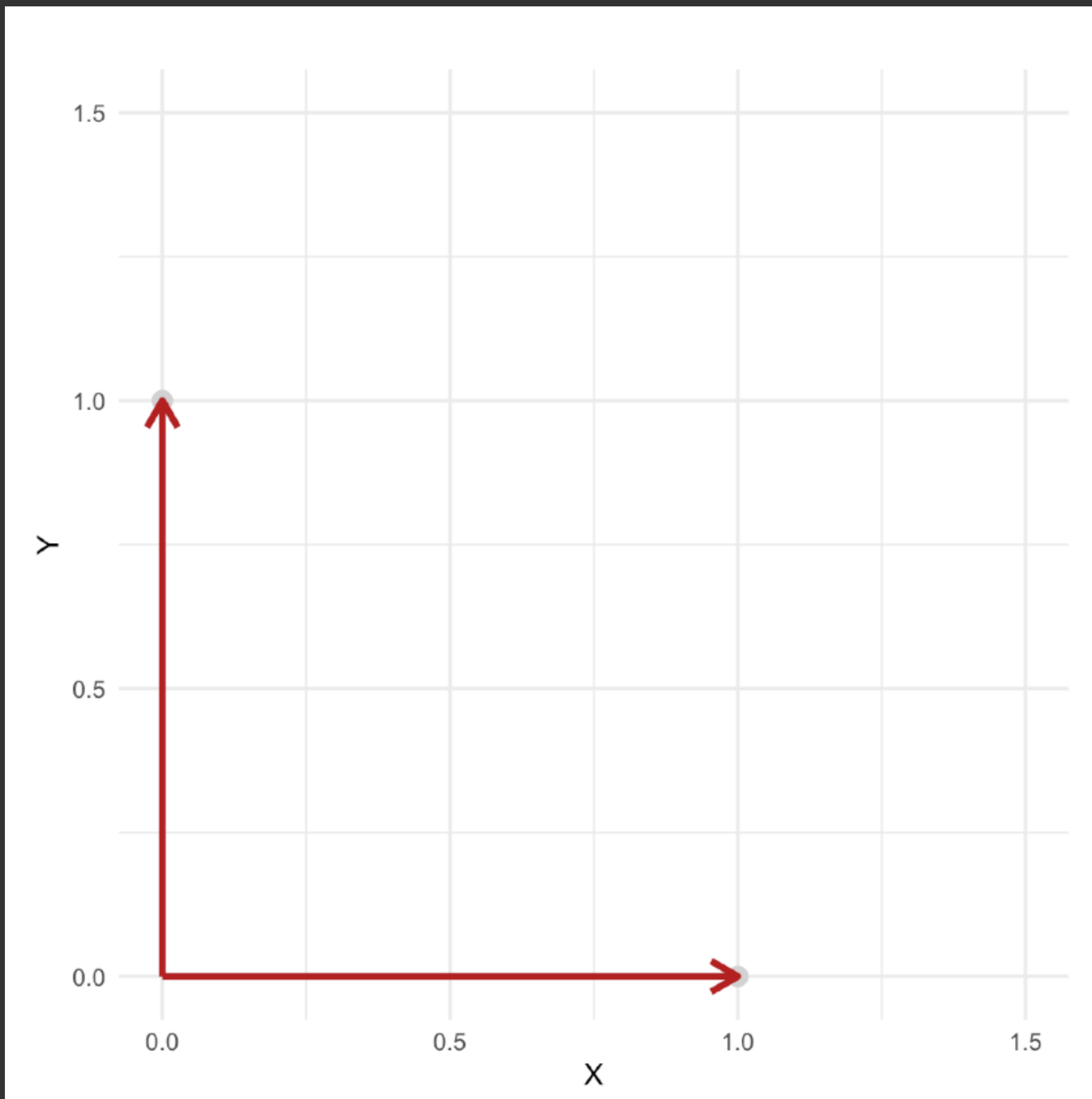


example



- \vec{x} and \vec{y} are unit vectors in the direction of the coordinate axes
- We are used to representing all vectors in \mathbb{R}^2 as linear combinations of these vectors
- We can actually choose any 2 linearly independent vectors in \mathbb{R}^2 as basis vectors
- However, an orthogonal basis is the most convenient basis that one can hope for.

example



- \vec{x} and \vec{y} are unit vectors in the direction of the coordinate axes
- We are used to representing all vectors in \mathbb{R}^2 as linear combinations of these vectors
- We can actually choose any 2 linearly independent vectors in \mathbb{R}^2 as basis vectors
- However, an orthogonal basis is the most convenient basis that one can hope for.

what has all this got to do with eigenvectors?