Additional Lecture and Reading Notes

Lecture 2c

(Before the definition of an orthogonal matrix)
The textbook proves that $P^T = P^{-1}$ by showing that $P^T P = I$, while I chose instead to go through the creation of our change of basis matrix Q and then get the result that $Q = P^T$ and so $P^T = Q = P^{-1}$.