Text

Description automatically generated

I only have a guess for the speed difference. Unshift adds to index 0, then has to add 1 to the rest of the indices which at first would be slower than push. Push adds the value to the last index which at the beginning isn’t much work to cycle to the end over pushing every value.

As this goes on though, it probably becomes easier to not cycle all the way to the end of the array and instead add at the start while adding 1 to the index of everything else.

Push would be exponential and unshift would be linear in this scenario.