Runtime Arrays

Function	Large	Extra-large	Medium	Small	tiny
insert	7.495167 ms	768.430167 ms	101.75 µs	9.292 µs	19.292 µs
append	308.792 µs	1.956458 ms	33.625 µs	11.875 µs	58.459 µs

Based on the data I’ve collected, it looks like doublerAppend and doublerInsert work differently depending on the size of the array. doublerAppend, which adds elements to the end of an array, is good at what it does and works well even for larger arrays. However, doublerInsert, which adds elements to the beginning of an array, isn't quite as fast and can be slower for larger arrays. The reason for this is that the unshift operation used in doublerInsert has a time complexity of O(n), while push in doublerAppend has a time complexity of O(1). This just means that doublerInsert takes a bit longer and doesn't work as well for larger arrays.

I came to this conclusion through visiting Wikipedia and StackOverflow.