What should the runtime be for finding a new extreme in a Binomial Heap during the `extractBinomial` function. The pseudo code is vague about how to do this.

Update:
Wait missed this line of text in the pseudo code. Quote: To find the new extreme value, one searches the root list from degree 0 to degree $\log(\text{size of } b) / \log(2)$, inclusive.

Leaving this up in case anyone else gets confused.

I cache a pointer to the extreme value which I update whenever I add to the rootlist.