Value of n greater than one (bigrams and trigrams) are certainly better than a unigram. This ensures that more information is carried through. On the flip side, if the n value gets too high, too much information is carried and causes the accuracy to decrease. This pattern occurs simply based on the amount of information getting carried through while deciphering. Greater the n, more the information.

For the most part, the textbook solver is still more superior than the hill-climbing substitution cipher. There are few exceptions where the length of the cipher text is too small to get proper accuracy number. But Hill-climbing substation certainly does provide equal or better accuracy than the regular frequency analysis.

Hill-Climbing	KA	DA	n
deer:	[0.2992307692307692,	0.31471001263867433]	3
forest:	[0.06,	0.18913618441006976]	4
pangram:	[0.040461538461538464,	0.04857142857142857]	2
tree:	[0.44615384615384615,	0.5207882047009518]	3
woodm:	[0.33727272727272727,	0.39839142091152814]	4
1984:	[0.0,	0.0]	3
finnegan:	[0.16,	0.19766423357664234]	3

Textbook	KA	DA
deer:	[0.6923076923076923,	0.8811964611711838]
forest:	[0.0,	0.0]
pangram:	[0.0,	0.0]
tree:	[0.9230769230769231,	0.9933096013532278]
woodm:	[0.45454545454545453,	0.5817694369973191]
1984:	[0.0,	0.0]
finnegan:	[0.08,	0.049051094890510946]