Observations:

Table-1 (Arc-Standard Transition)

Classifier	All features		w/o Morphological features		w/o Word feature		w/o Lemma feature		w/o PoS-tag feature	
	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS
SVC	0.8609	0.7702	0.8443	0.7589	0.8556	0.7642	0.8594	0.7664	0.8095	0.7105
Logistic Regression	0.8035	0.6893	0.7967	0.6901	0.8073	0.7029	0.8133	0.7007	0.7702	0.6682
MLP	0.8065	0.6999	0.8080	0.6939	0.8156	0.7052	0.8201	0.7113	0.7543	0.6402

Table-2 (Arc-Eager Transition)

Classifier	All features		w/o Morphological features		w/o Word feature		w/o Lemma feature		w/o PoS-tag feature	
	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS
SVC	0.8828	0.7929	0.8813	0.7831	0.8737	0.7876	0.8828	0.7861	0.8382	0.7286
Logistic Regression	0.8617	0.7513	0.8443	0.7271	0.8549	0.7475	0.8556	0.7407	0.8178	0.7082
MLP	0.8405	0.7354	0.8443	0.7264	0.8602	0.7475	0.8503	0.7392	0.7853	0.6788

Analysis:
1. For any classifier, feature-set and transition combination, Labeled Attachment Score (LAS) beats the Unlabeled Attachment Score (UAS), i.e. LAS > UAS
2. For most parts, Arc-eager in general outperforms Arc-standard transition system
3. PoS tag is the most important feature based on decrement in score
4. Lemma is the least important feature based on decrement in score
5. In general the performance of the 3 classifiers follows the order:
    SVC > Logistic Regression > Multilayer Perceptron

Conclusion:
1. Part-of-speech is pivotal in determining dependency. Mostly, a **NOUN** preceding a **VERB** depends on it via **nsubj** relation.
2. Lemma is kind of a redundant feature since we are already using word as a feature. Therefore, excluding lemma doesn't cause much decrease in score.
3. Arc-standard transition system can't produce non-projective trees. Arc-eager is more powerful in this respect and hence performs better.