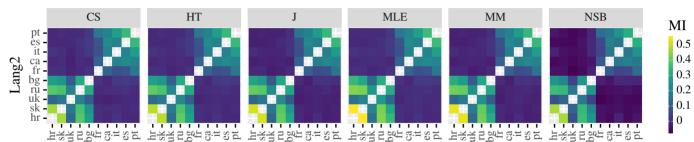Mutual information of gender partitions