This talk presents two experiments. Experiment 1 is a cross-linguistic assimilation study of English syllable-medial vowels and initial consonants to Danish and Finnish. Experiment 2 is a study on phoneme identification of these English vowels and consonants by Experienced and Inexperienced L1 Danish and L1 Finnish learners of English as well as degree of perceived global foreign accent in these learners. The assimilation patterns obtained in Experiment 1 are used to predict L2 identification in Experiment 2 on the basis of the Speech Learning Model and the Perceptual Assimilation Model for L2 Learning. Hypotheses regarding L2 phones that have a highly similar L1 counterpart or no L1 counterpart are generally supported while hypotheses regarding the assimilation of more L2 phones to the same L1 phone are only partly supported.