Abstract

During a conversation, human brains perceive the speech jointly through both audio and visual channels. When these channels convey conflicting information, the perception may be inaccurate. This is widely known as the McGurk Effect. In the modern era, people are able to capture the facial expression with cameras and create a new model of a human face that follows the same motions. Such technology is widely used during the production of 3D animations. In this thesis, we are interested in how the McGurk Effect affects the perception of information if the visual information is not a human speaker, but some animated characters like the Animoji. Among the two different Animoji characters we study, we find that the human Animoji presents the McGurk Effect more significantly than a real human video, whereas the alien Animoji has a weaker effect than human Animoji. This result indicates that the exaggeration of mouth and eyes in human Animoji to some extent strengthens the McGurk Effect, and that people fail to perceive the alien face as a normal human face.

Introduction

During face-to-face conversations, people can receive verbal information from other parties through both auditory and visual channels. This generally helps them interpret the verbal information more precisely than hearing alone. However, one of the most well-known artifact of this way of information perception is the McGurk Effect. In the seminal paper (McGurk & MaCdonald, 1976), the authors find that when the video and the sound are from conflicting sources, the visual information can