**Automated text simplification as a reading aid**

**for low-vision individuals**

In developed countries, the majority of people with visual impairment are legally blind, but not *totally* blind. Instead, they have what is referred to as low vision, commonly caused by **Central visual Field Loss (CFL)**. This degenerative condition is caused by non-curable retinal diseases, such as **Age-related Macular Degeneration**(DMLA in French). Patients suffering from such pathologies will develop a blind region called **scotoma**, located at the center of their visual field and spanning about 20° or more. To better visualize the impact of such a large hole in your visual field, try stretching your index and little finger as far as possible from each other at arm’s length; the span is about 15°. Central vision cannot be restored and **difficulty with reading** becomes the primary complaint of patients seeking rehabilitation. To help CFL individuals improve their reading performance, it is necessary to investigate the underlying causes of their deficit, to then overcome them with **specific adjustments**.

In this presentation, I propose to address the issue of reading with CFL from a **linguistic perspective,** which takes into account the whole **complexity of texts**. I will present a series of experiments that investigate what makes a text especially complex when reading with CFL. I will conclude on the relevance of this work to design text simplification tools, customised to the specific needs of readers with CFL, to be used as efficient reading aids for this population.