New eye tracking technologies offer the possibility to study with great precision the gaze movements of people while they are looking at paintings. Among the different factors presumed to guide the attention of art beholders there is one very obvious element that has never been studied in-depth, neither theoretically nor empirically: the pointing gestures. It is a well-known fact that, during the Early Modern period, painters depicted multiple pointed forefingers in all kind of pictorial topics and genres, in order to facilitate the understanding of the content. Usually, the pointing chirograms (a graphically represented hand sign) have major roles: highlighting key elements of the story, revealing important connections between the characters, showing directions to take, indicating less visible details, etc. Some compositions are simple – with only one pointed finger – while others contain multiples gestures, pointing in different directions and carrying different meanings.

In this project we will make for the first time a large statistical survey of pointing gestures in Early Modern painting and establish relevant typological categories according to their functions. This will allow us to know exactly how often do painters use these signs and why. Are pointing gestures in painting similar to pointing gestures in real life or in Sign Language? Or do they have some unique linguistic properties?

In a second step we will proceed to the eye tracking experiments, by selecting some of the most interesting examples of paintings with pointing chirograms and showing them to different groups of beholders. We want to know not only whether and how the pointing fingers will influence the art perception but also whether the personal background of the beholders will interfere somehow. This is why we will constitute three different groups of participants: 1) art experts; 2) lay people and 3) Deaf native speakers of Austrian Sign Language. Each one of these three groups could have a particular sensibility to the pictorial gestures. Are pointed forefingers universally understood or does their perception depend on the knowledge and culture of the viewer?

The pictorial gestures constitute a remarkable but understudied language. By researching the understanding of this language we could significantly enlarge our knowledge about art perception, both in cognitive and cultural terms.