Hypertelorism is an abnormally increased distance between two organs or bodily parts, usually referring to an increased distance between the orbits (eyes), or orbital hypertelorism. In this condition the distance between the inner eye corners as well as the distance between the pupils is greater than normal.

Clinicians presented with patients whose eyes may appear asymmetrically sized must determine whether the irregular appearance is caused by proptosis, exophthalmos, or buphthalmos. The following guidelines can help differentiate these similar-appearing yet distinct conditions.

**Abnormal Protusion of the Eyeball**
Exophthalmos (also called indifferently exophthalmus, exophthalmia, proptosis, or exorbitism) is a bulging (protusion) of the eye anteriorly out of the orbit. However,  
- Exophthalmos is a protrusion of the eyeball due to
• an increase in orbital contents, a protrusion of the eyeball
• in a normal bony orbit.
• Exorbitism is
  • a protrusion of the eyeball
  • in an abnormal orbit. The orbits are shallow with resulting exorbitism, which is due to anterior positioning of the greater wing of the sphenoid.

Ocular Proptosis
With ocular proptosis, history often includes head trauma. Careful examination reveals that the globe’s equator is visible and positioned anterior to the lids, preventing blinking. Stumps of
• torn extraocular muscles,
• strabismus (a visual defect in which one eye cannot focus with the other on an objective because of imbalance of the eye muscles),
• and intraocular injury may also be evident.

Exophthalmos & Buphthalmos
Exophthalmos involves a
• normal-sized globe
• that is pushed forward
• by a space-occupying lesion in the orbit, most commonly
  • a retrobulbar abscess,
  • cellulitis,
  • or neoplasm.
Buphthalmos, on the other hand, involves
• a normally positioned globe
• that is enlarged because of glaucoma (any of a group of eye diseases characterized by abnormally high intraocular fluid pressure, damaged optic disk, hardening of the eyeball, and partial to complete loss of vision.)
Despite differences in globe size and causes, however, clinicians may find it difficult to differentiate the two syndromes, as both involve red, asymmetric irregularity of the globe. Some diagnostic procedures (eg, ultrasonography, tonometry) may provide a definitive diagnosis; although, exophthalmos and buphthalmos can often be differentiated during examination without additional instrumentation.

Clinicians should consider the following questions when differentiating between exophthalmos and buphthalmos (ie, glaucoma). Is the condition unilateral or bilateral?
• Glaucoma may be unilateral or bilateral,
• but exophthalmos is typically unilateral.
Therefore, bilateral presentation usually indicates glaucoma. Asymmetric presentation of one or both eyes requires careful examination to determine whether the presentation is caused by
• traumatic proptosis,
- glaucoma,
- or retrobulbar disease.

Non syndromic (non due to Grave’s disease, for example) exorbitism and myopia (a visual defect in which distant objects appear blurred because their images are focused in front of the retina rather than on it; nearsightedness.)

Exophthalmos is a protrusion of the eyeball due to an increase in orbital contents in a normal bony orbit. Exorbitism is a protrusion of the eyeball due to a decrease in capacity of the orbital container, with a normal orbital content volume such as seen in a congenital form termed nonsyndromic exorbitism. High myopia can enhance proptosis or exophthalmus. The purpose of this study was to provide values for orbital measurements from computed tomography and to suggest computed tomography criteria for nonsyndromic exorbitism.

In the Craniofacial Syndromes - Crouzon, Apert, Pfeiffer, Saethre-Chotzen ...- the orbits are shallow with resulting exorbitism, which is due to anterior positioning of the greater wing of the orbit. (emedicine.medscape.com/article/1280034-overview; Medscape; Feb 21, 2016)

Conclusions: The different mechanisms of globe protrusion have to be taken into account before an orbital expansion/decompression procedure is planned. Only a preoperative morphological analysis of the orbital shape permits a precise analysis of the relative position of the ocular globe and orbital structures, in addition to clinical examination.