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The Analysis of Stress Transmission in Skulls Using Photoelastic Coatings

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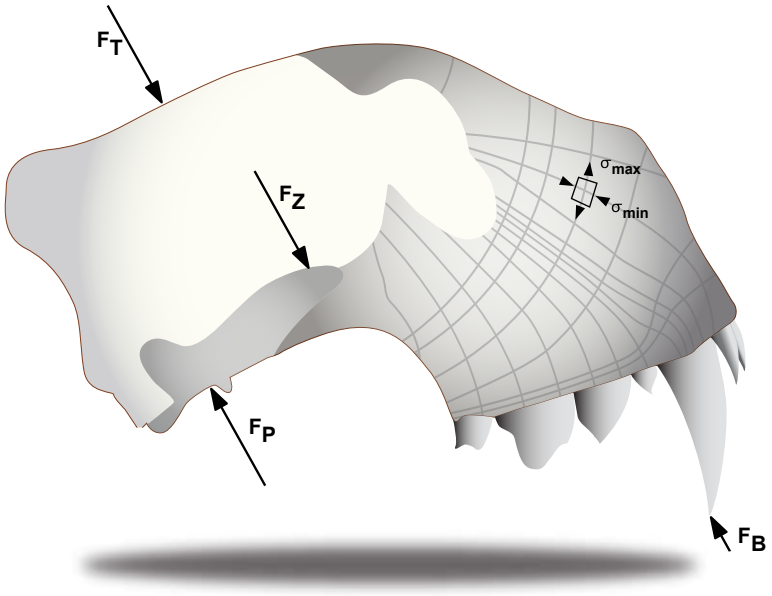

Stress Trajectories of Lion Skull for Simulated Biting Forces

This is an excerpt from a published paper for the **Society of Expirimental Stress Analysis**, March 1984.

Biomechanical analysis of the vertebral skeleton is extremely complex because, unlike the components of most man-made structures, they tend to serve many functions -- not all of them mechanical. The purpose of the study, presented in part here, was to analyze force transmission in lion and wolf skulls under static loading, and to demonstrate the application of photoelastic coatings in biomechanics where the material is usually non uniform, heterogeneous and anisotropic. This paper was published by A.T. Andonian and Andrew Tudor in the Experimental Techniques Journal of the Society of Experimental Stress Analysis (currently known as the Society of Experimental Mechanics). The journal's cover features our original illustration.

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