

## STRUCTURAL ARGUMENTS AGAINST ASYMMETRIC AGING

A. F. KRACKLAUER

Although Einstein thought he saw reason for length-contraction and time-dilation within the structure of Special Relativity (SR), a conviction which has also become orthodox dogma, criticism of these notions has never ceased. The basic issue has always been: are these “effects” real or just artifacts of observation? The common view nowadays is, that while they arise in connection with the relationship between two inertial frames, they also leave a net outcome that is to be experienced within a single frame. The most notorious example is the renowned “twin paradox.”

In my presentation, I wish to review the main criticisms and represent my own variation of them. I shall discuss the three main lines of critical analysis: philosophical (essentially linguistic syntactical), analytical (based on the laws of calculus) and geometrical.

The last category one way or other exploits the fact that the whole of the Minkowski hyperbolic structure and the Lorentz group structure arises from projective geometry on Galilean 3+1-space. This can be interpreted to mean that the whole of SR is a consequence of the geometry of observation; and, its effects are artifacts of this geometry, not physical processes. This seems to provide an astoundingly coherent view of the structure of SR, with the one remaining complexity for the mechanics of interacting particles, namely that all charges are “observers” of all other charged particles.