Affine

A frame is a basis (coordinate System) and a "designated point" — the origin.

A frame is designated as

$\vec{f}t$

↗

bold in print

Translation is affine, not linear

All linear transformations are affine. The converse is <u>not true</u>.

Vectors and points are expressed as 4-tuples (pg. 22)

All transformations are expressed as 4×4 matrices (Sections 3.2 and 3.3)

The factorization of an Affine
transformation into linear (rotation)
and translational components :

$$A = TL$$

in Section 3-5 is <u>Key</u>.