Il metodo delle Proiezioni Ortogonali
Egitto - 1200 a.C
Val Camonica Naquane - VI-IV secolo a.C
Convento di San Gallo - IX secolo
Giovanbattista da Sangallo
Arco di Traiano - 1500ca
Gaspard Monge – inizio 800 (Forma canonica - vista spaziale)
Gaspard Monge – inizio 800 (Forma canonica - ribaltamento)
Progetto di poltrona
Danilo Guerri
Disegni in P.O.
Residenze a Castelferretti (Ancona) 1990.
Metodo delle Proiezioni ortogonali
The horizontal plan plane is always parallel to the level ground.

The profile elevation plane is always at right angles (perpendicular—90°) to the other two planes.

Ortho literally means "right angle." Orthographic projection refers to the transfer of images created by perpendicular projector rays striking a transparent glass plane. The rays are always parallel to each other.

The frontal elevation plane is always vertical and 90° to the level ground.

The principal planes along with three additional adjoining planes (back or rear, left profile, and bottom) form a closed glass box.

All three planes are perpendicular to each other. Each two-dimensional principal plane can be classified as a picture plane because it records a picture image of the object.

All lines of sight and projection lines are perpendicular to the principal planes. They see an image of the object projected.
The folding plane line is the intersection of any two principal planes. If a transparent glass box is opened on its folding plane or “hinge” lines, it will become a two-dimensional surface. The plan and profile elevation planes are rotated to become a part of the frontal elevation plane’s extension.

The graphic line symbol for a folding plane line or “hinge” line is ________ ________

The above example shows two true-size profile views (elevation and section). Orthographic drawings are true-size and true-shape views that are linked and related on a two-dimensional surface.

Remember that when two planes are perpendicular to a third plane, any point in space (such as a) will be seen twice an equal distance (K) behind the third plane. K can be any distance.
Proiezioni ortogonali  (Forma canonica)

P.O. - Ribaltamento di un piano generico $\alpha$ sul piano orizzontale $\pi_1$ - (Tav. 1)

Prospetto
2° proiezione

Pianta
1° proiezione

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Ribaltamento piano proiettante (Forma canonica)
Cubo su un piano generico obliquo (Forma tecnica)