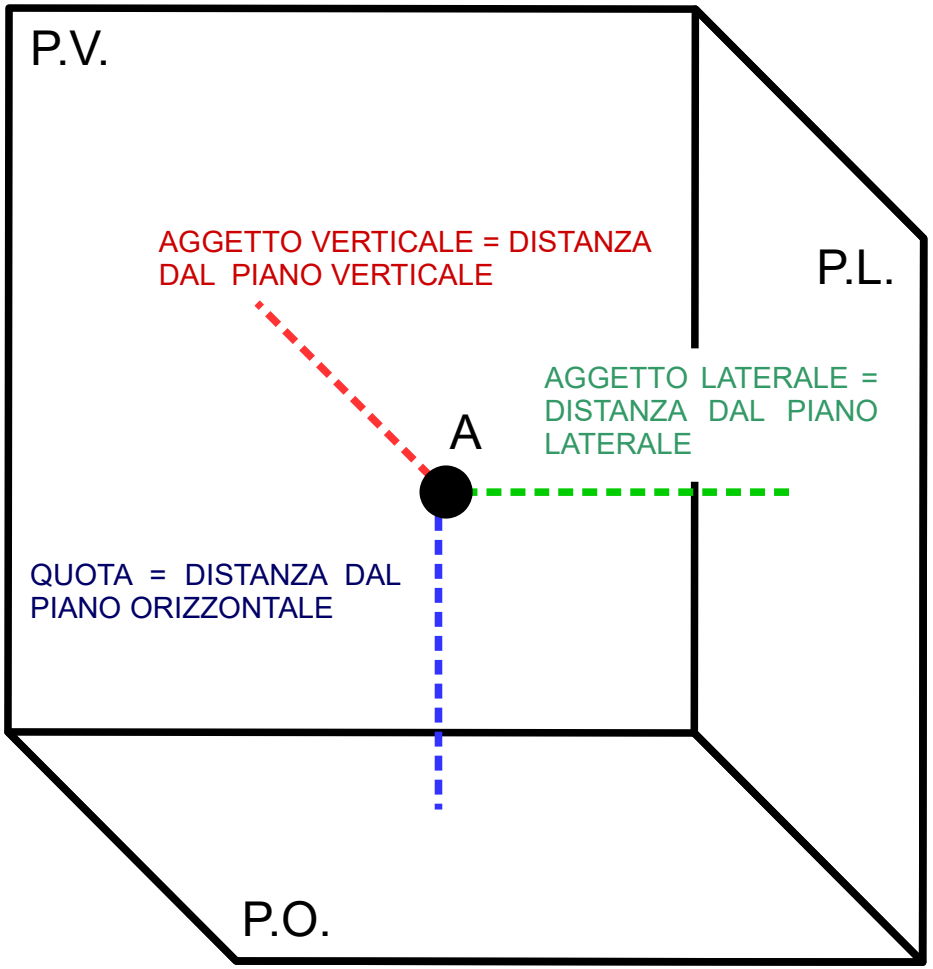
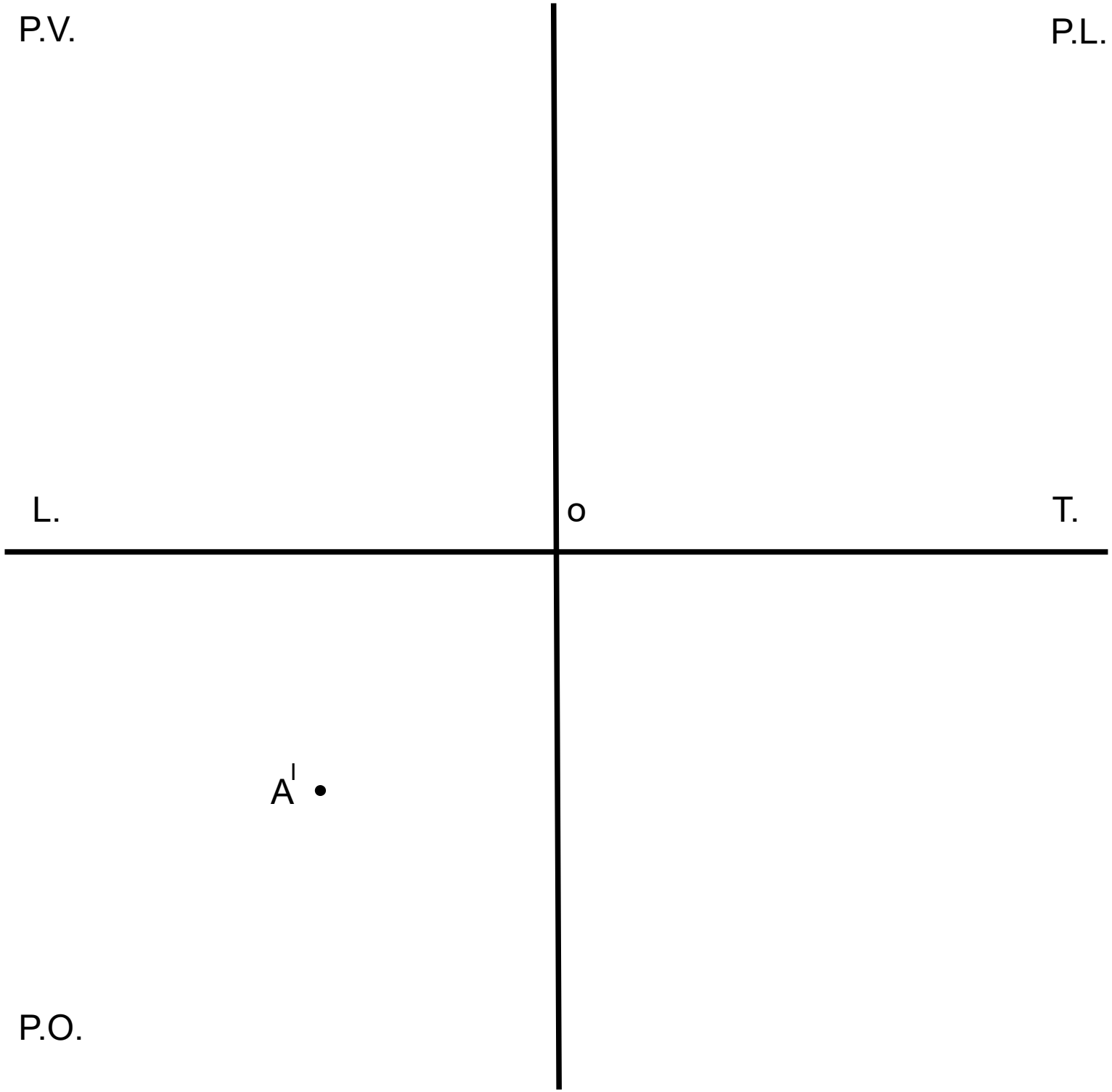
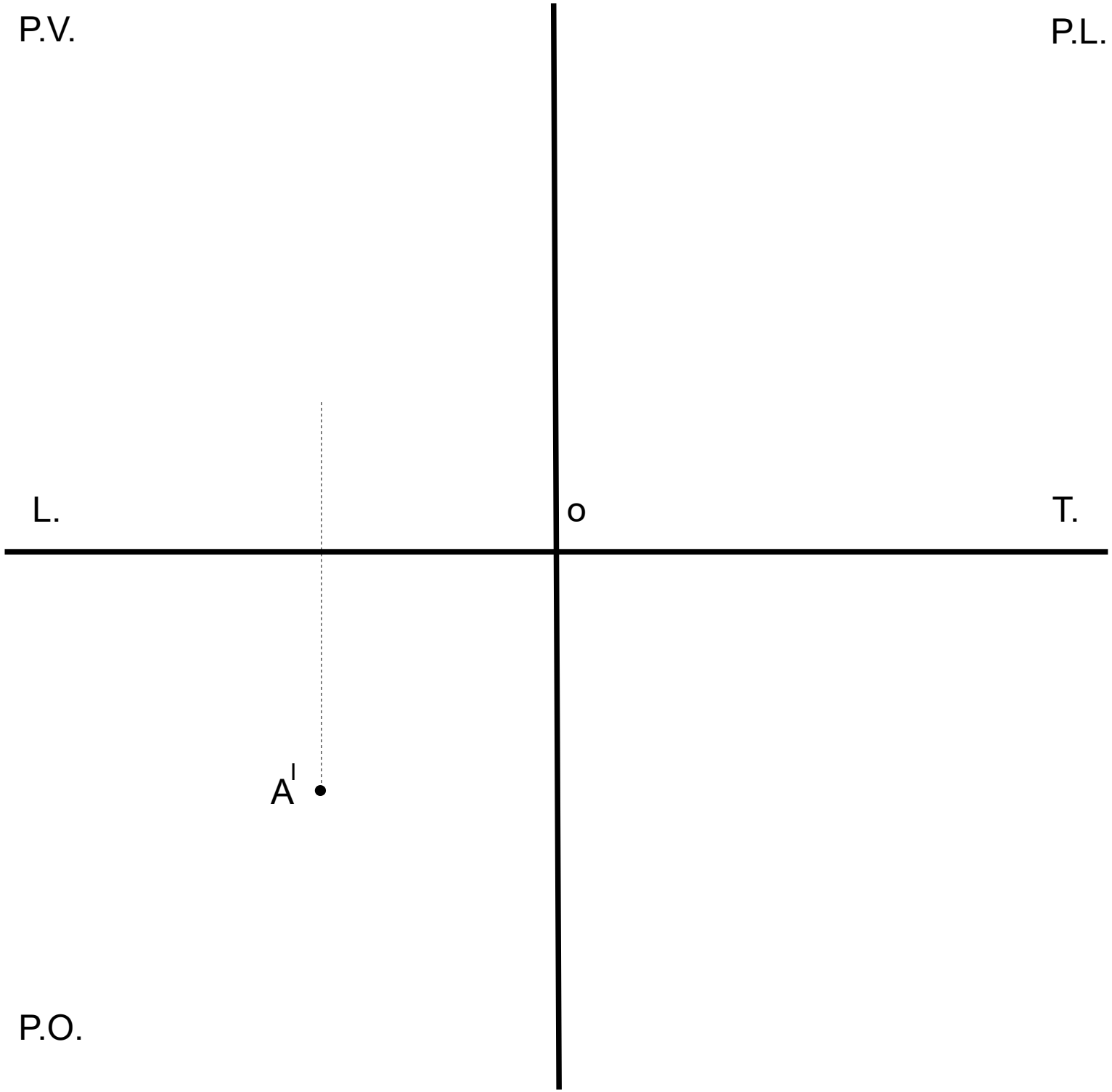
ESEMPI DI PROIEZIONI ORTOGONALI

IL PUNTO E' L'ENTITA' MINIMA, O ELEMENTO, DA CUI PARTIRE PER COSTRUIRE TUTTE LE ALTRE ENTITA' O FORME GEOMETRICHE, UTILI ALLA GEOMETRIA PROIETTIVA E DESCRITTIVA. PER LOCALIZZARE LA POSIZIONE DI UNO O PIU' PUNTI SI PROCEDE COL DARE, DI ESSO, TRE COORDINATE, RISPETTO AL PIANO ORIZZONTALE, AL PIANO VERTICALE E A QUELLO LATERALE. SE SI INDIVIDUANO DUE PUNTI NELLO SPAZIO, CONGIUNGENDOLI SI OTTERRA' UN SEGMENTO; UNENDO A DUE A DUE 3 PUNTI TROVEREMO UNA PORZIONE DI PIANO DI FORMA TRIANGOLARE; CON 4 PUNTI, UN QUADRILATERO; E COSI' VIA PER TUTTE LE FIGURE GEOMETRICHE PIANE. SE DOPO AVER TROVATO UNA FIGURA GEOMETRICA PIANA, INDIVIDUIAMO UN PUNTO V NON APPARTENENTE ALLO STESSO PIANO, DALLA CONGIUNZIONE DI QUEST'ULTIMO CON GLI ANGOLI DELLA FIGURA PIANA OTTERREMO UNA FIGURA SOLIDA, OVVERO UNA PIRAMIDE; E COSI' PER TUTTI I SOLIDI GEOMETRICI. DI SEGUITO SI RIPORTANO ALCUNI ESEMPI UTILI A CAPIRE, IN MODO SEMPLIFICATO E PROGRESSIVO QUANTO SINO AD ORA DETTO, AL FINE DI ACCOSTARE IL LETTORE AD UNA VISIONE BEN PRECISA DEI FENOMENI PROIETTIVI, NEL PARTICOLARE COLLEGATI ALLE PROIEZIONI ORTOGONALI, NON COME AZIONE TECNICA, MA COME APPLICAZIONE SCIENTIFICO-LOGICA.



TITOLO: proiezioni ortogonali di un punto A.


P.V.
P.L.
L.
o
T.
A'
P.O.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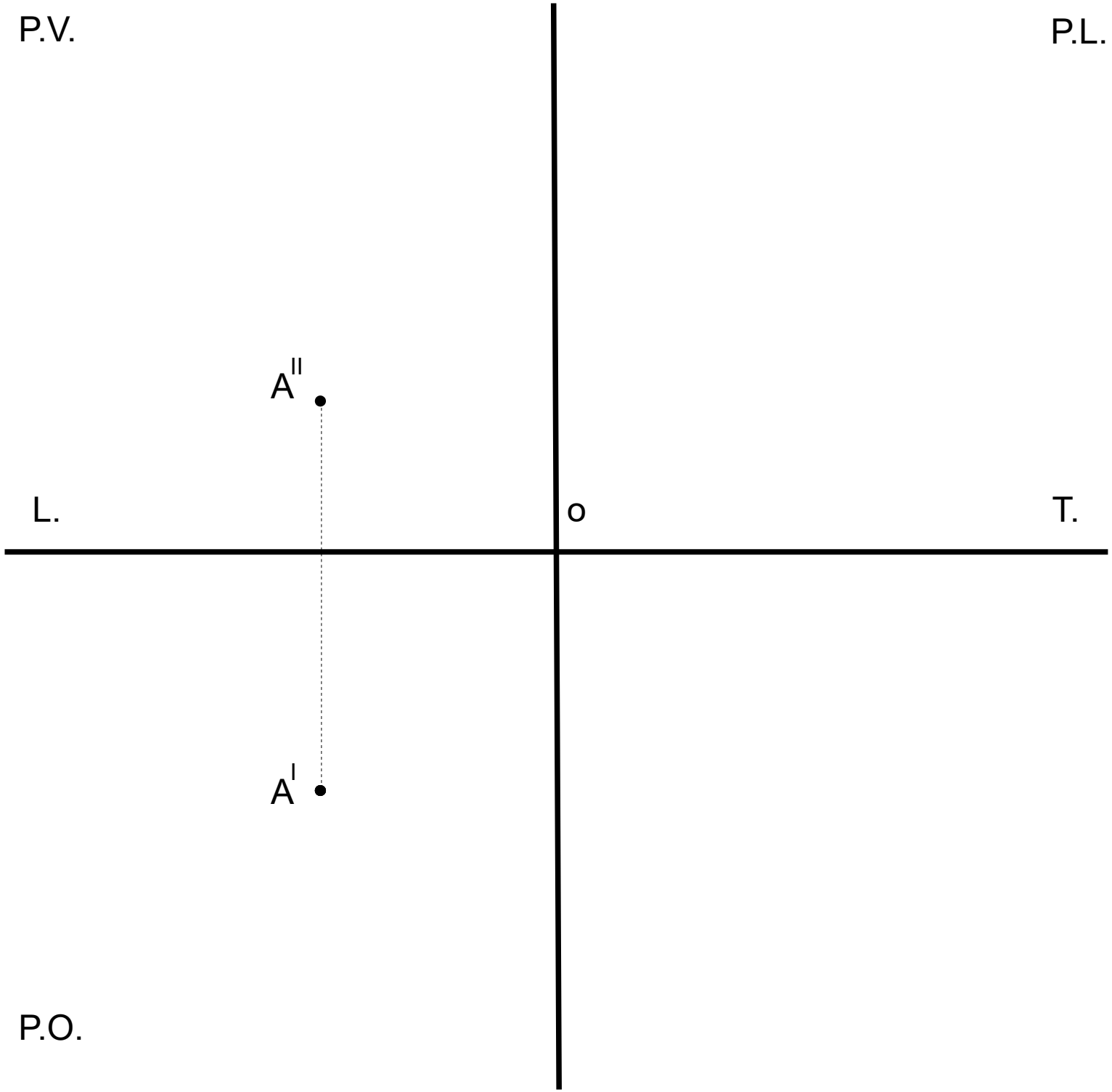
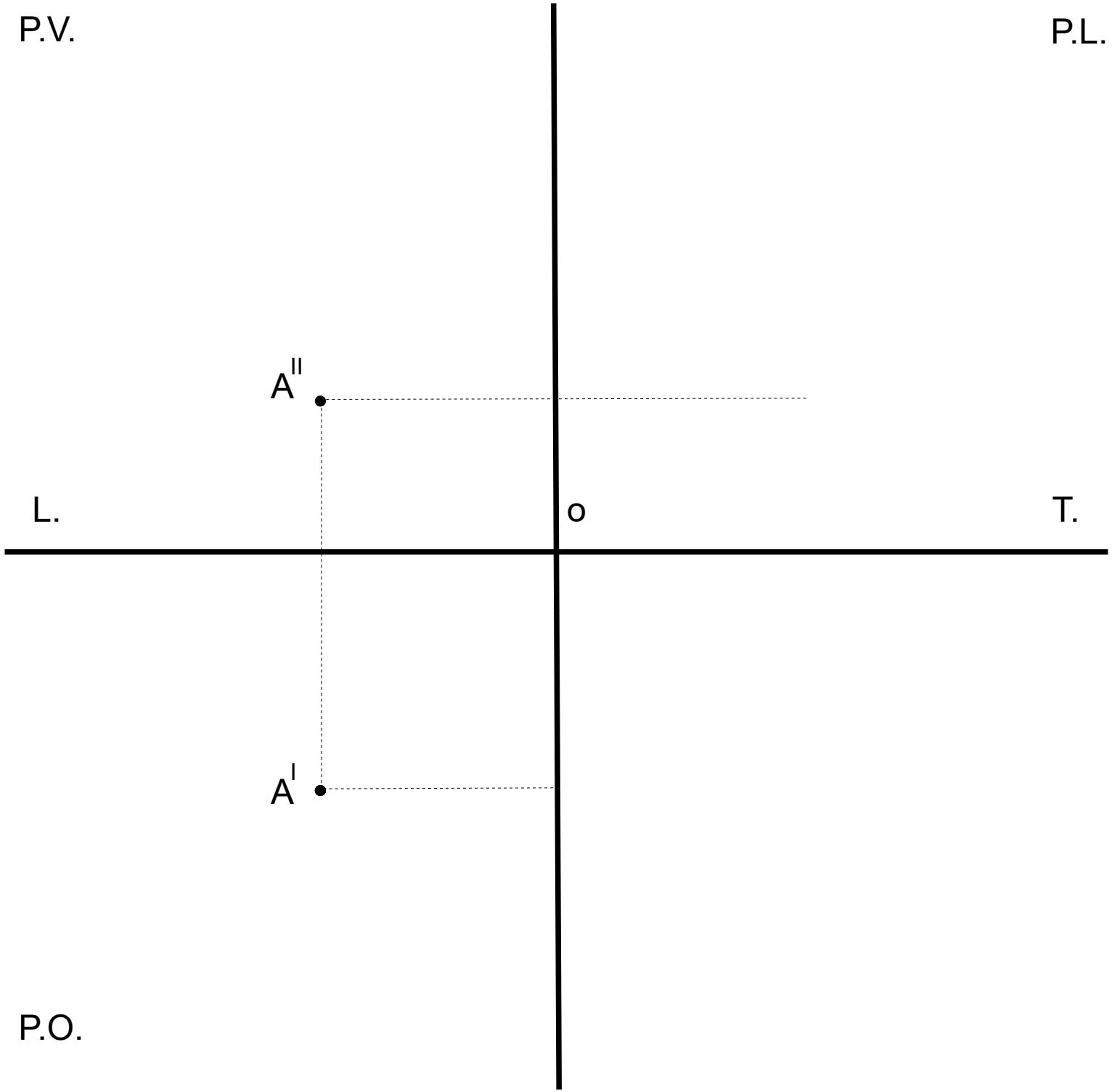
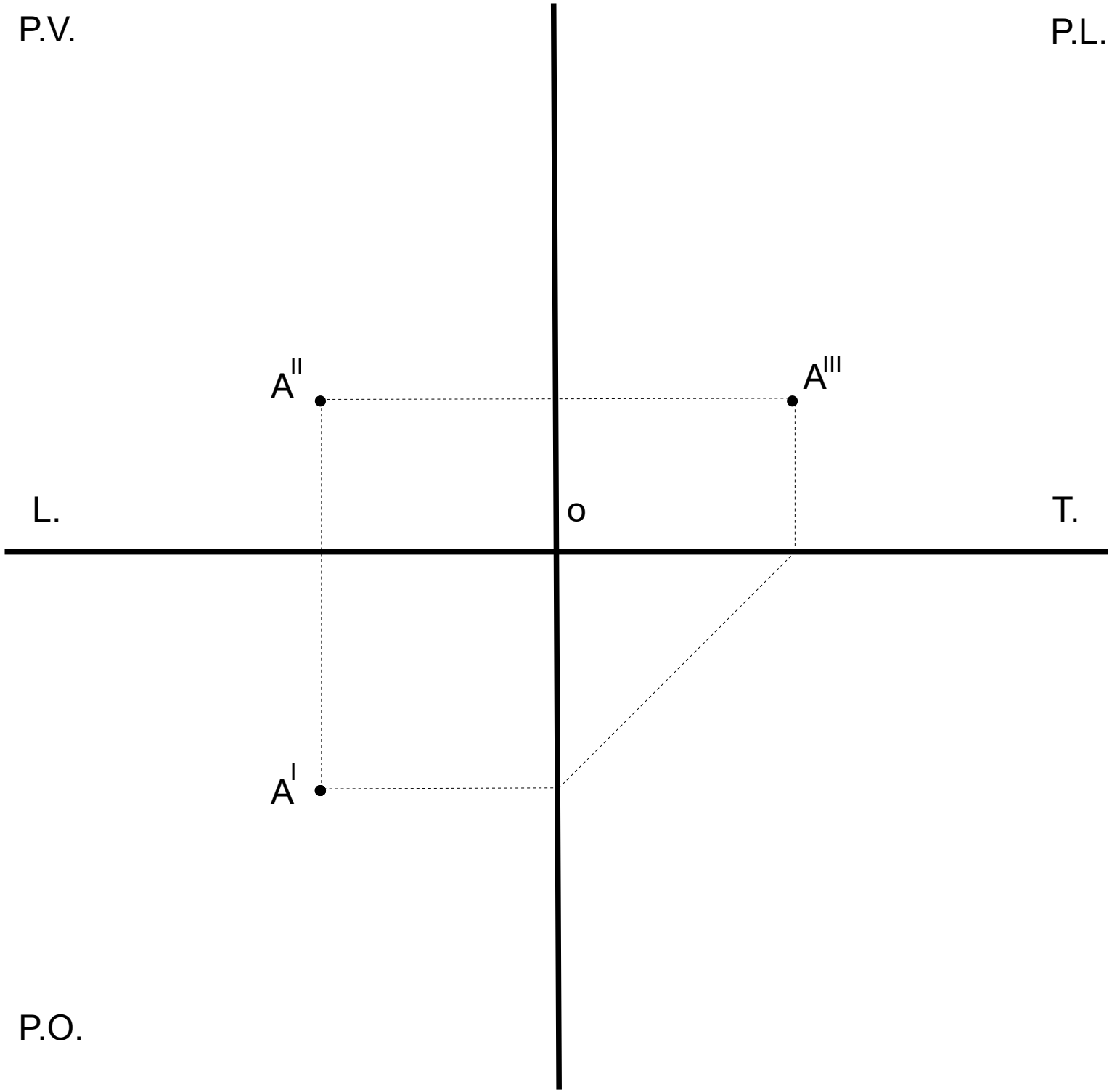
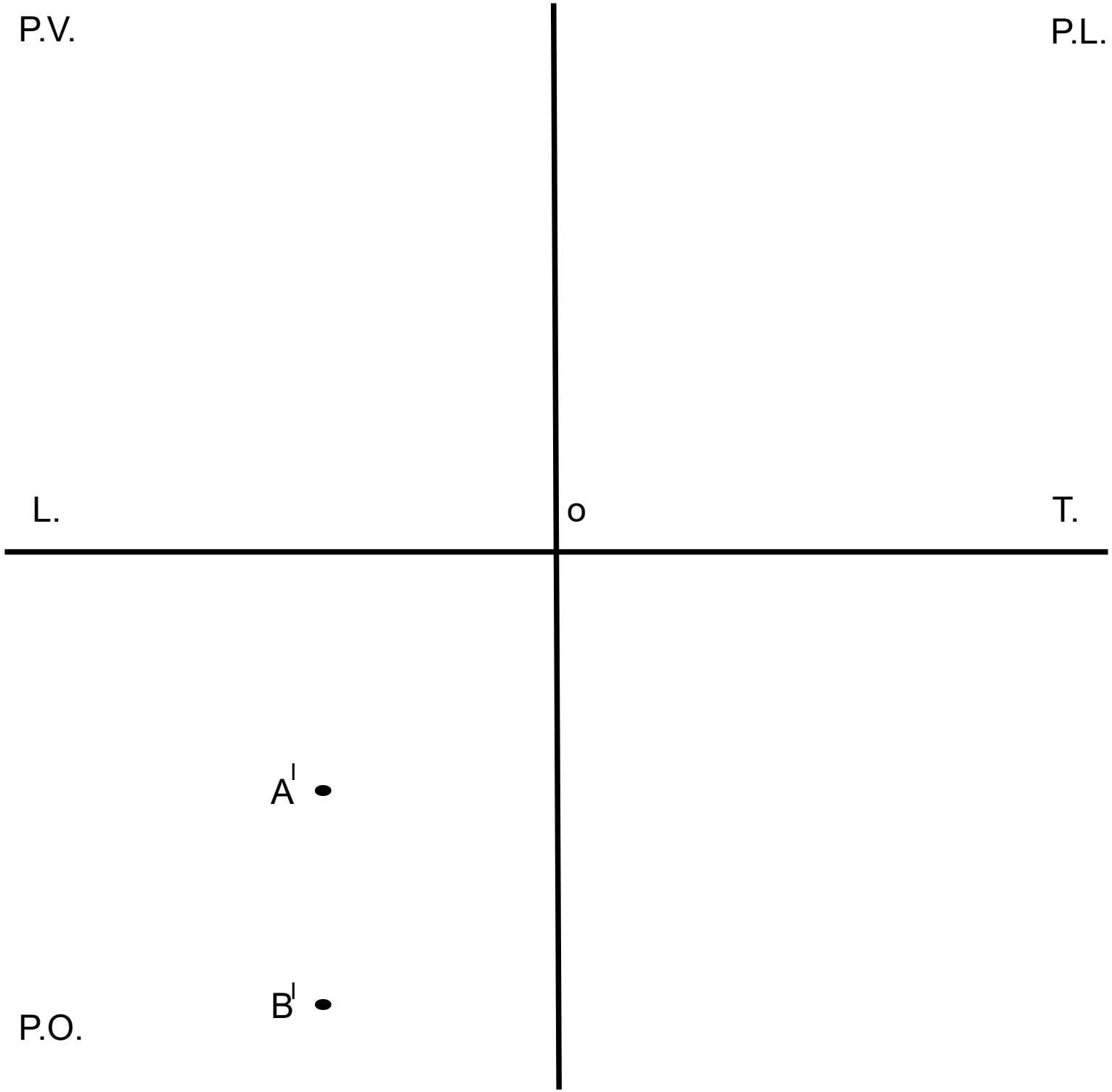
o
T.
A'
P.O.

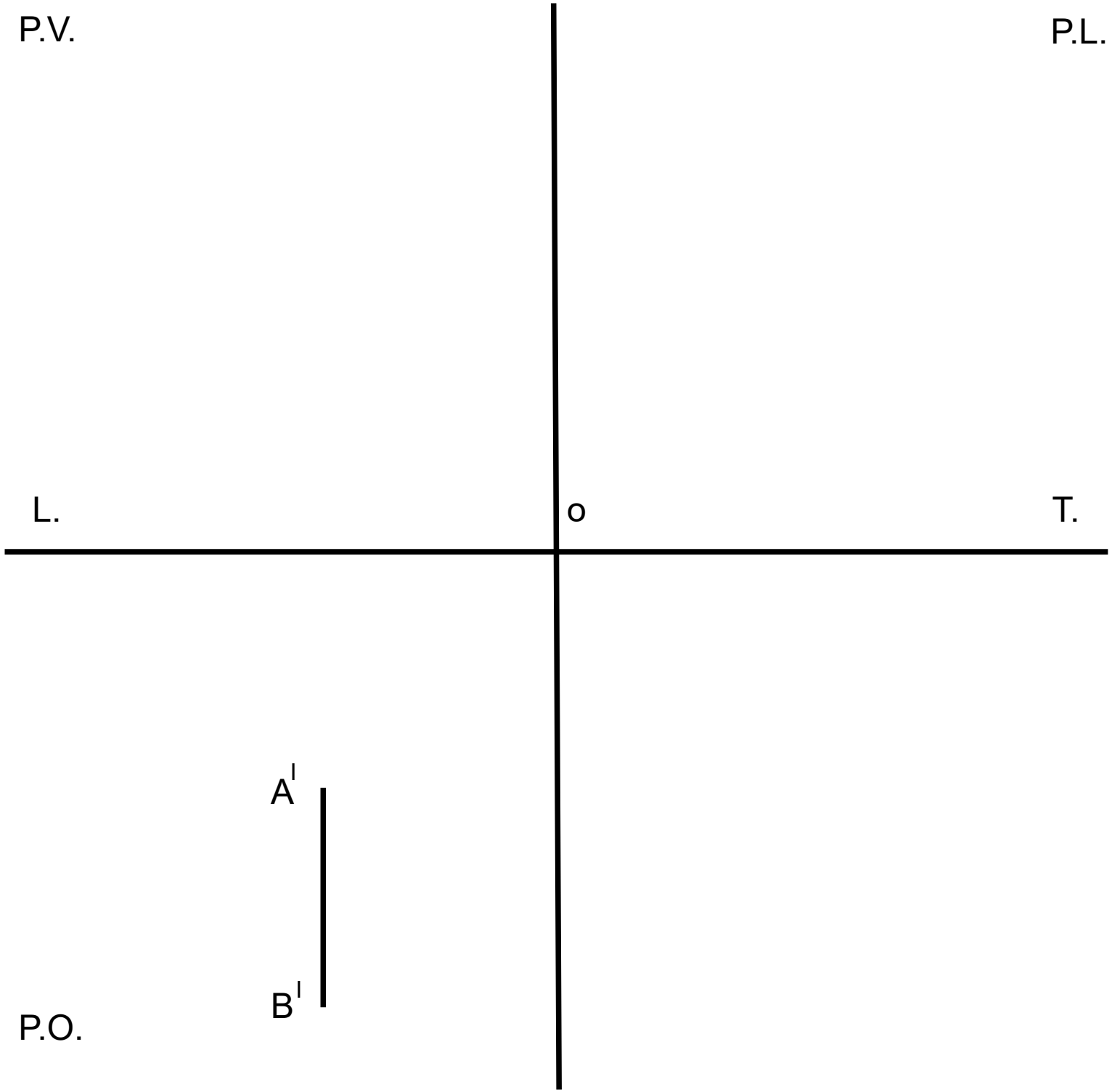

P.V.
P.L.
A^II
L.
o
T.
A^I
P.O.

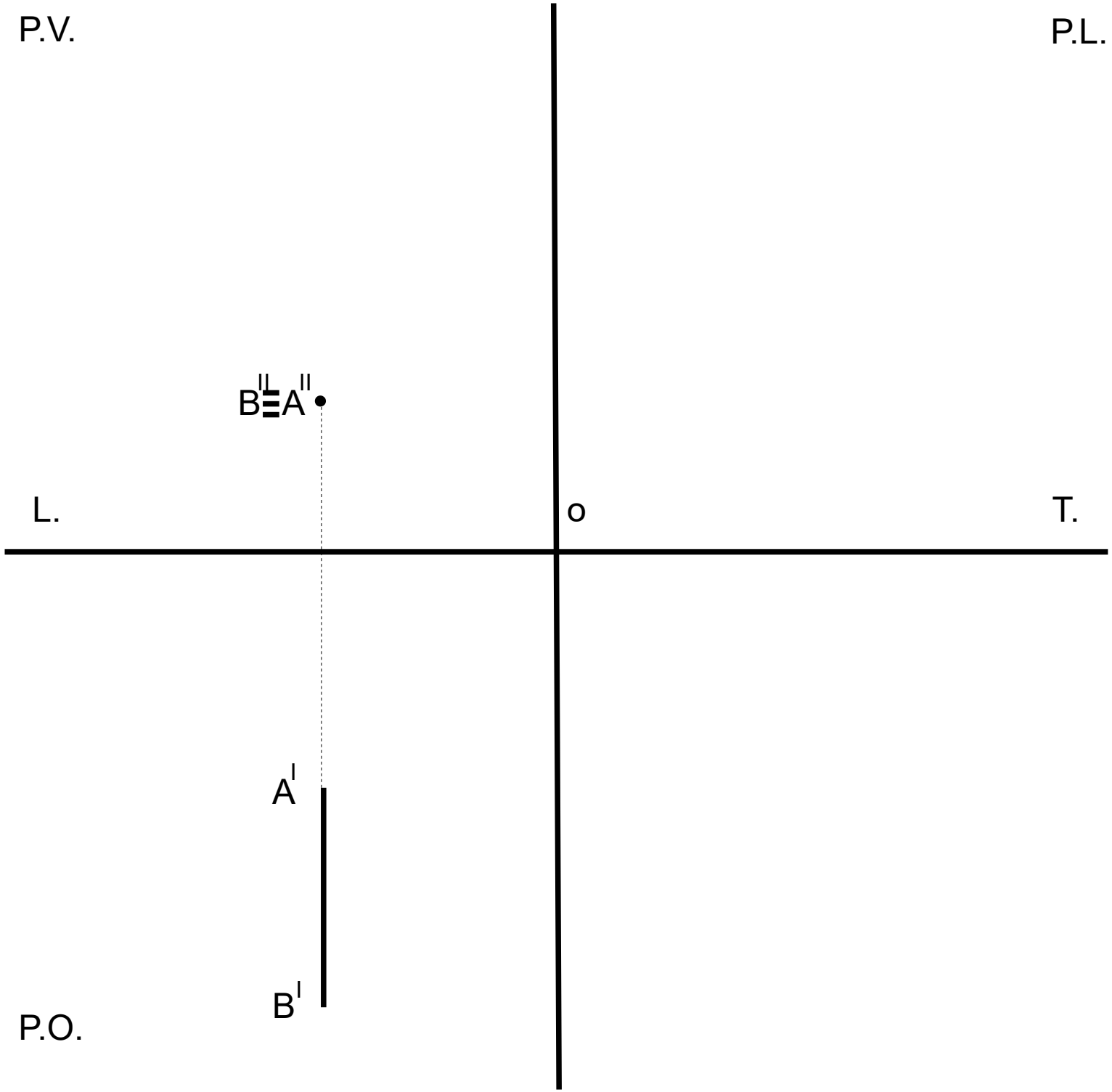

P.V.
P.L.
A II
L.
o
T.
A I
P.O.

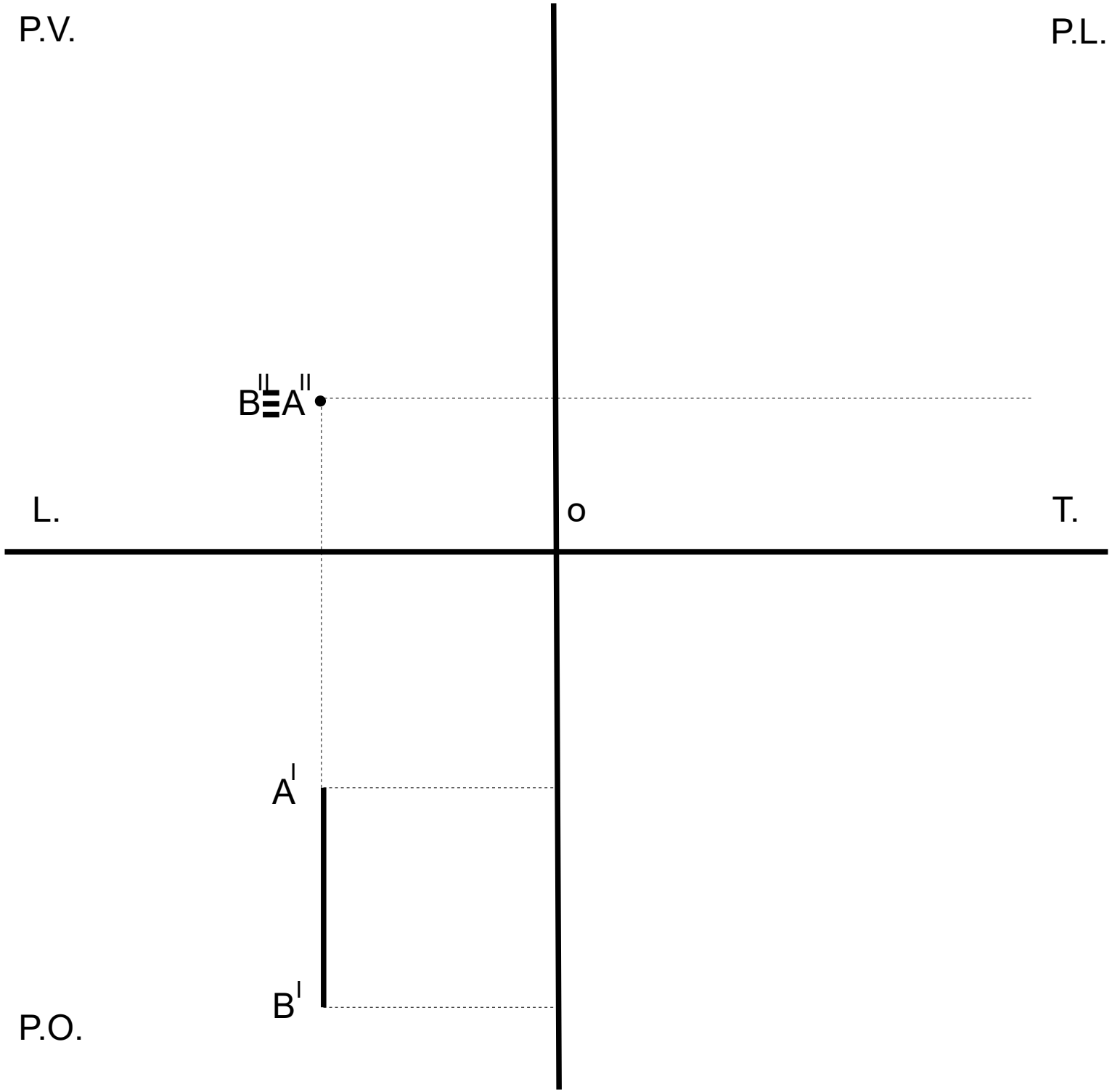

P.V.
P.L.
A^II
A^III
L.
o
T.
A^I
P.O.

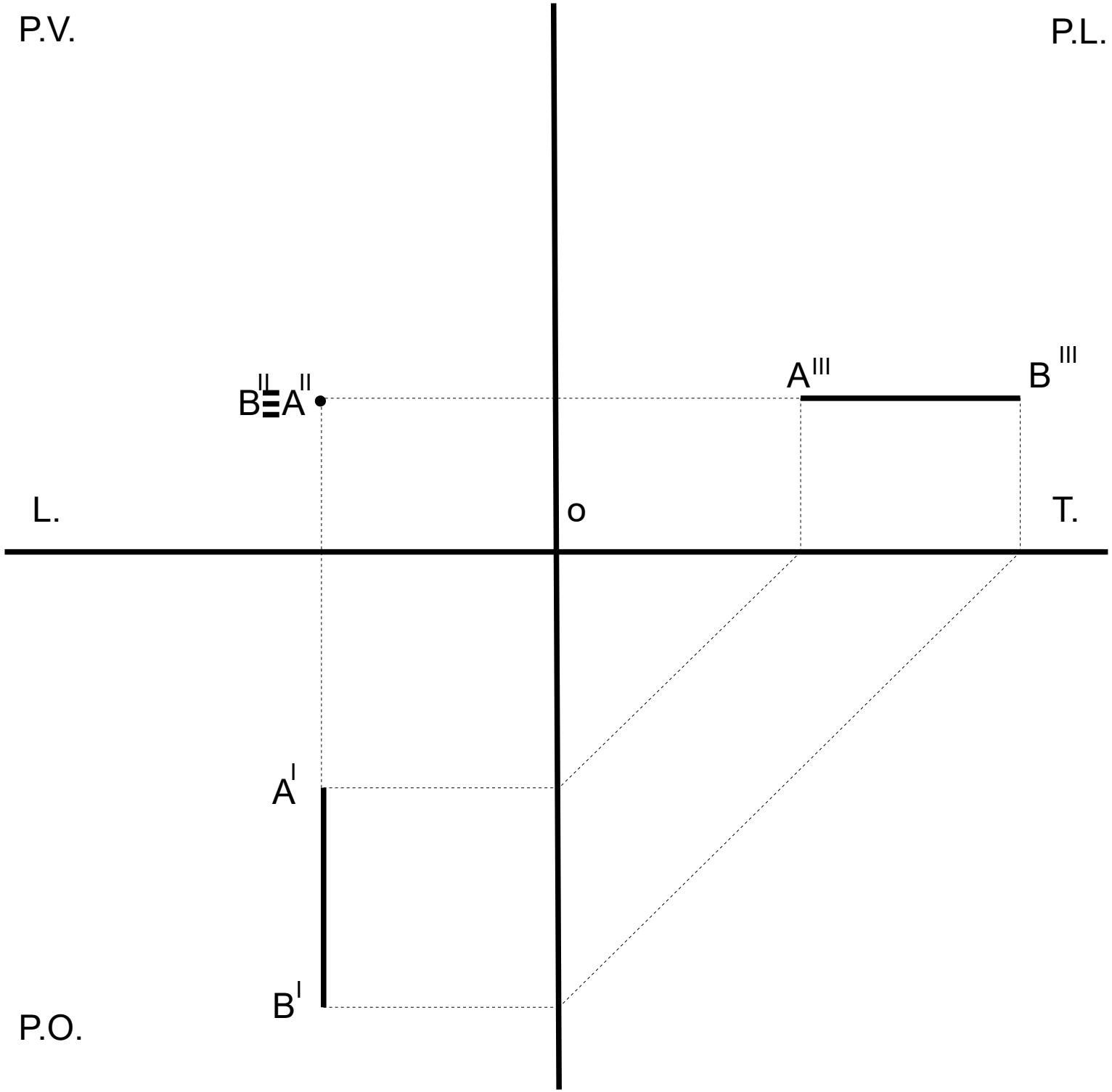
TITOLO: proiezioni ortogonali di un segmento $\overline{AB}$, parallelo al piano laterale.


P.V.
P.L.
L.
o
T.
A'
B'
P.O.

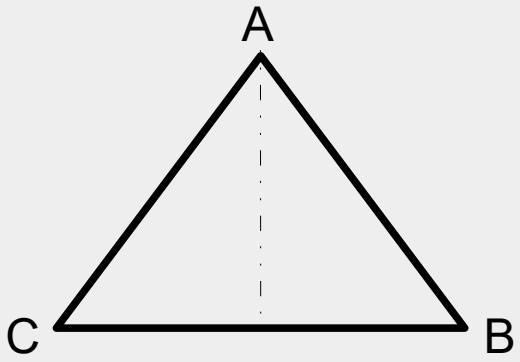

P.V.
P.L.
L.
o
T.
A'
B'
P.O.

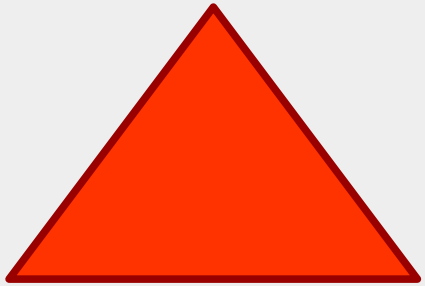

P.V.
P.L.
B^II ≡ A^II
L.
o
T.
A^I
B^I
P.O.

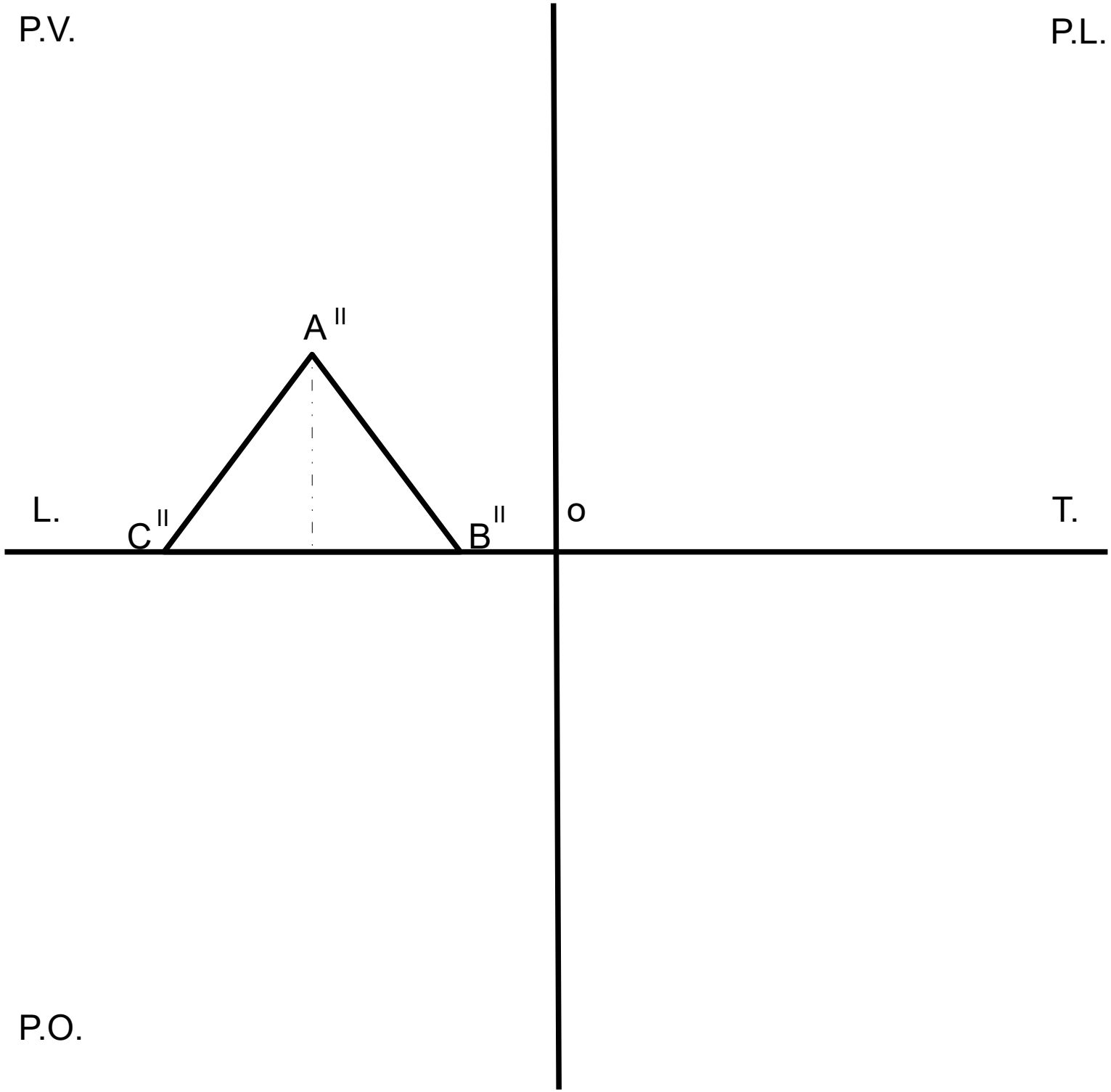

P.V.
P.L.
B^II ≡ A^II
L.
o
T.
A^I
B^I
P.O.

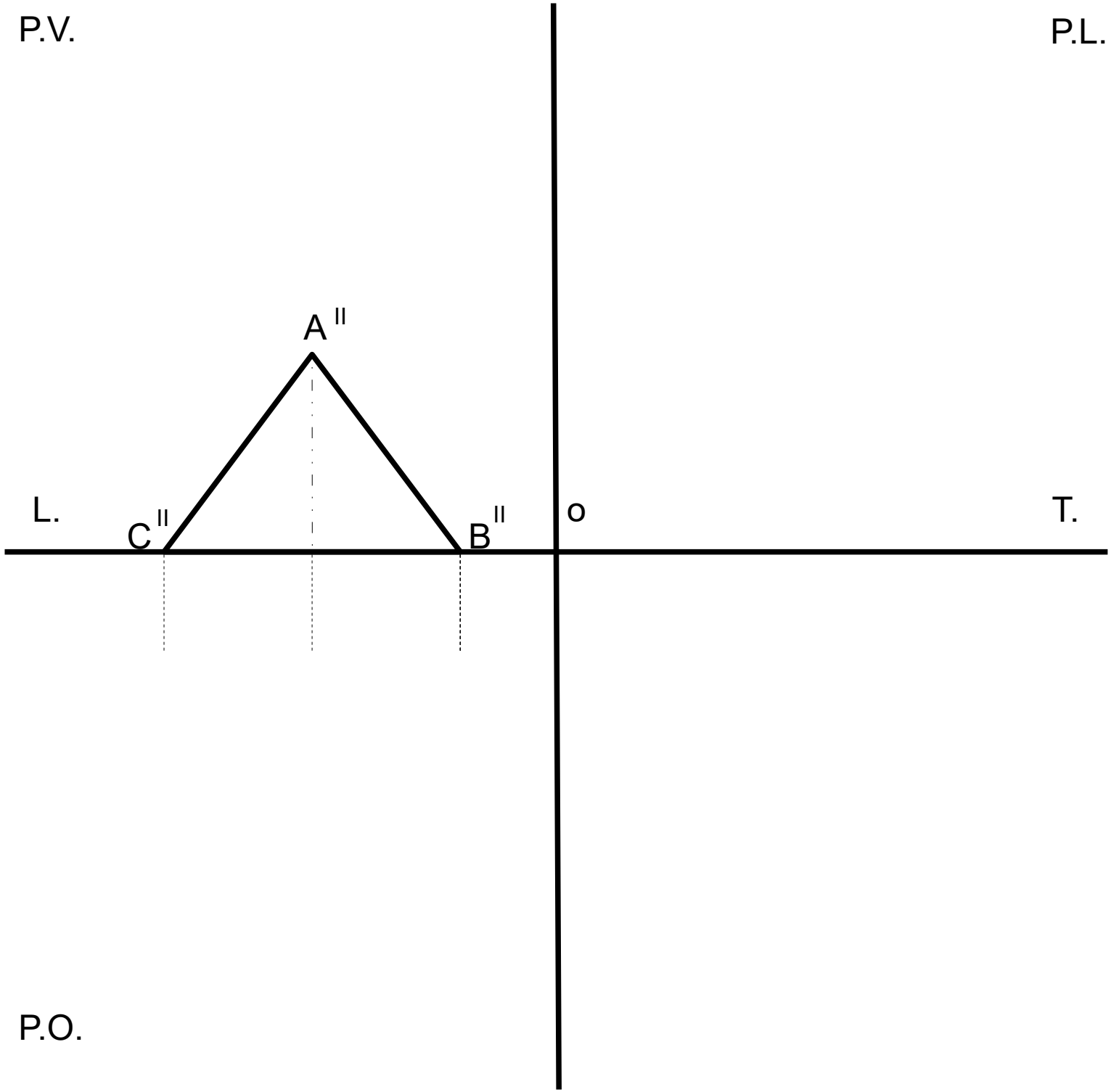

P.V.
P.L.
B^II ≡ A^II
A^III
B^III
L.
o
T.
A^I
B^I
P.O.

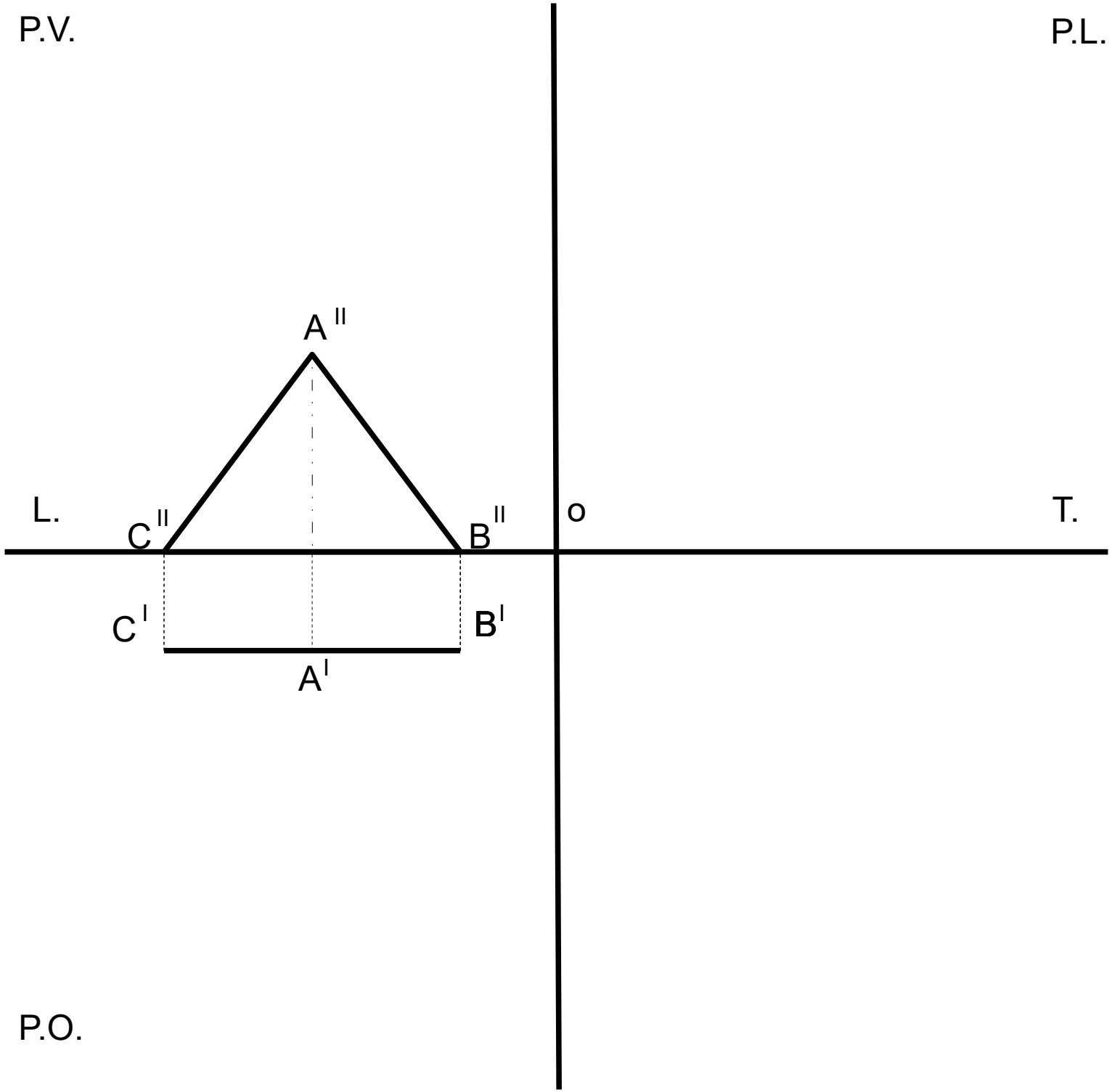
TITOLO: proiezioni ortogonali di un triangolo, con base rettangolare parallelo al piano verticale.

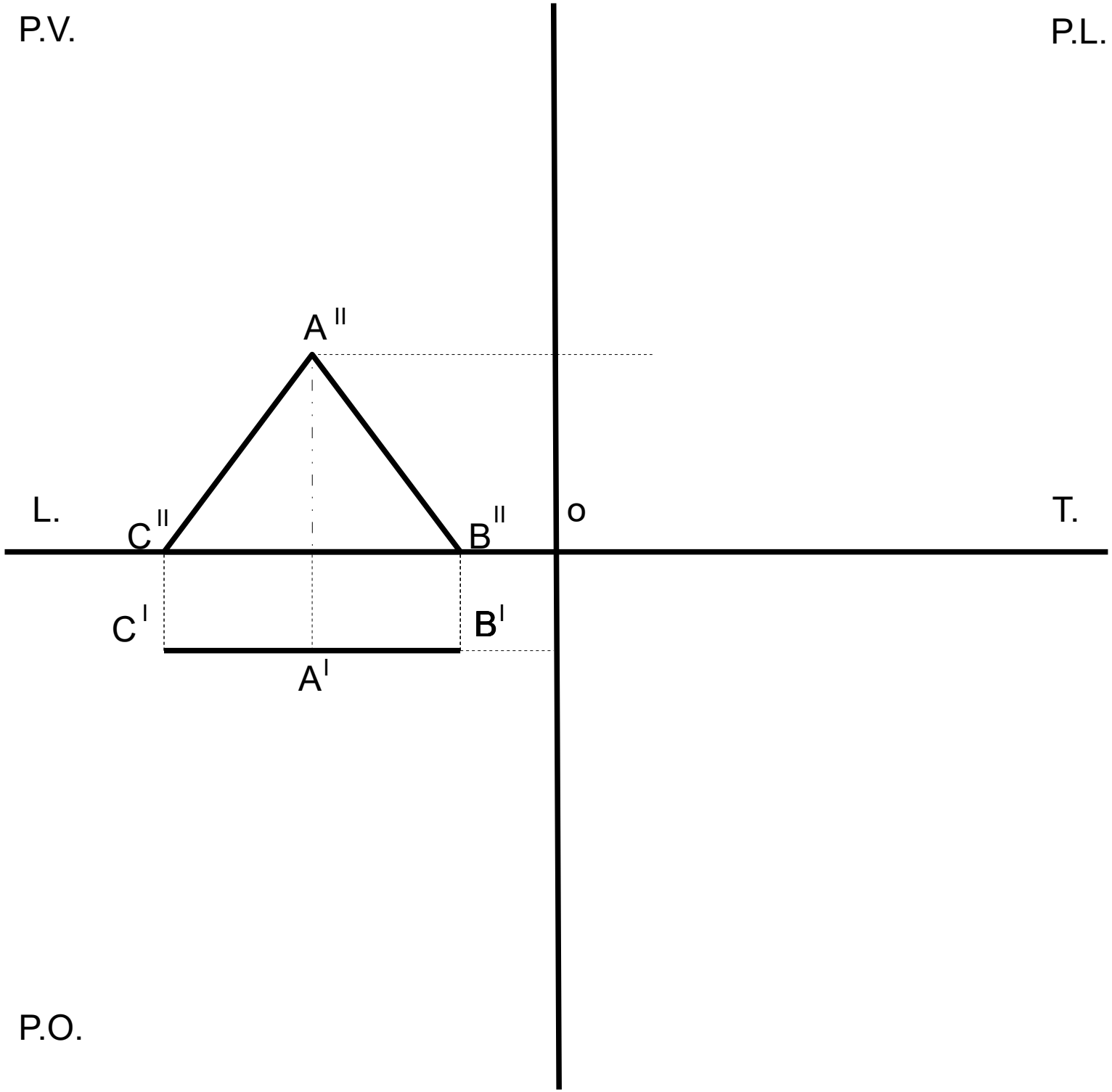


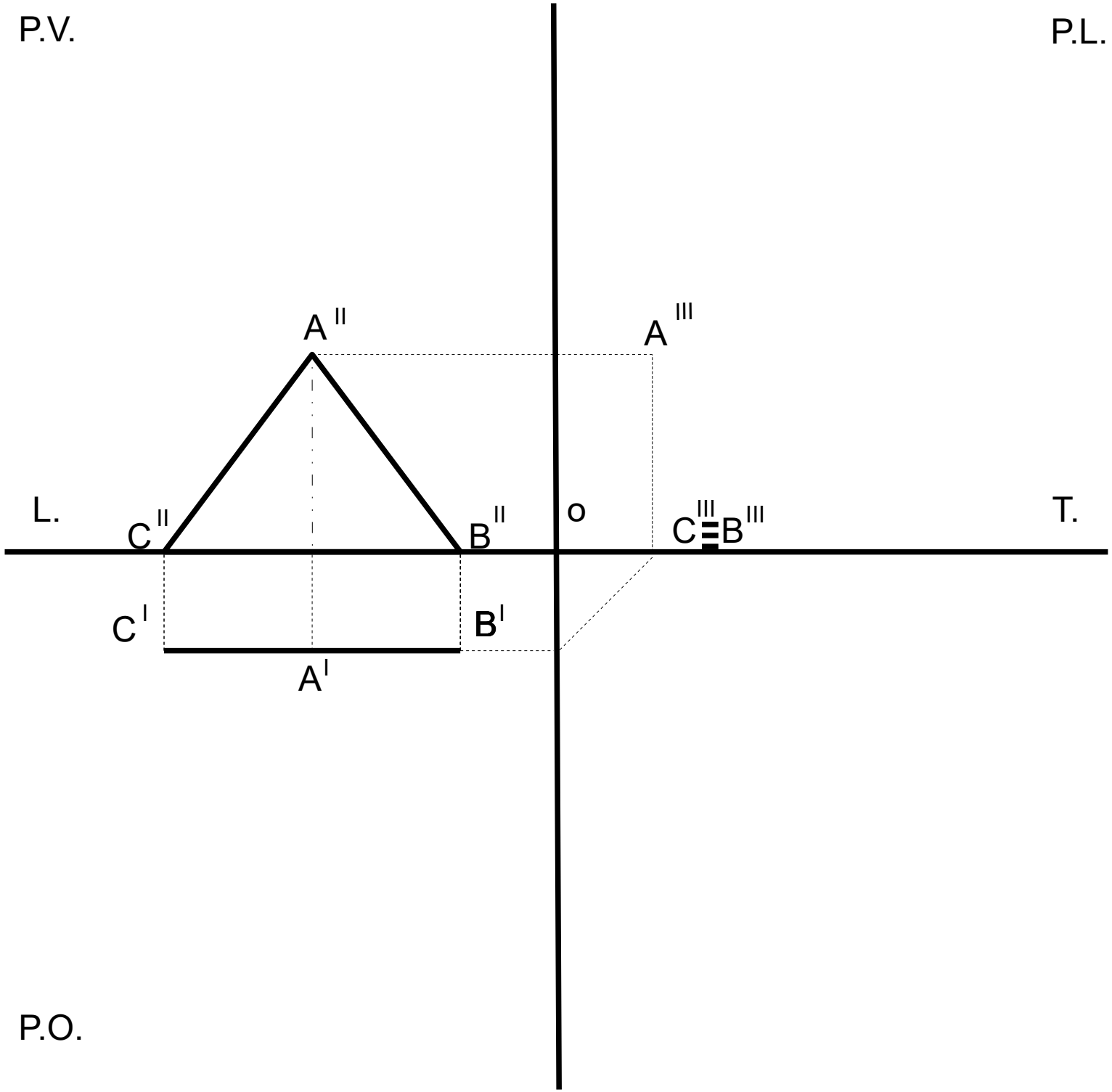


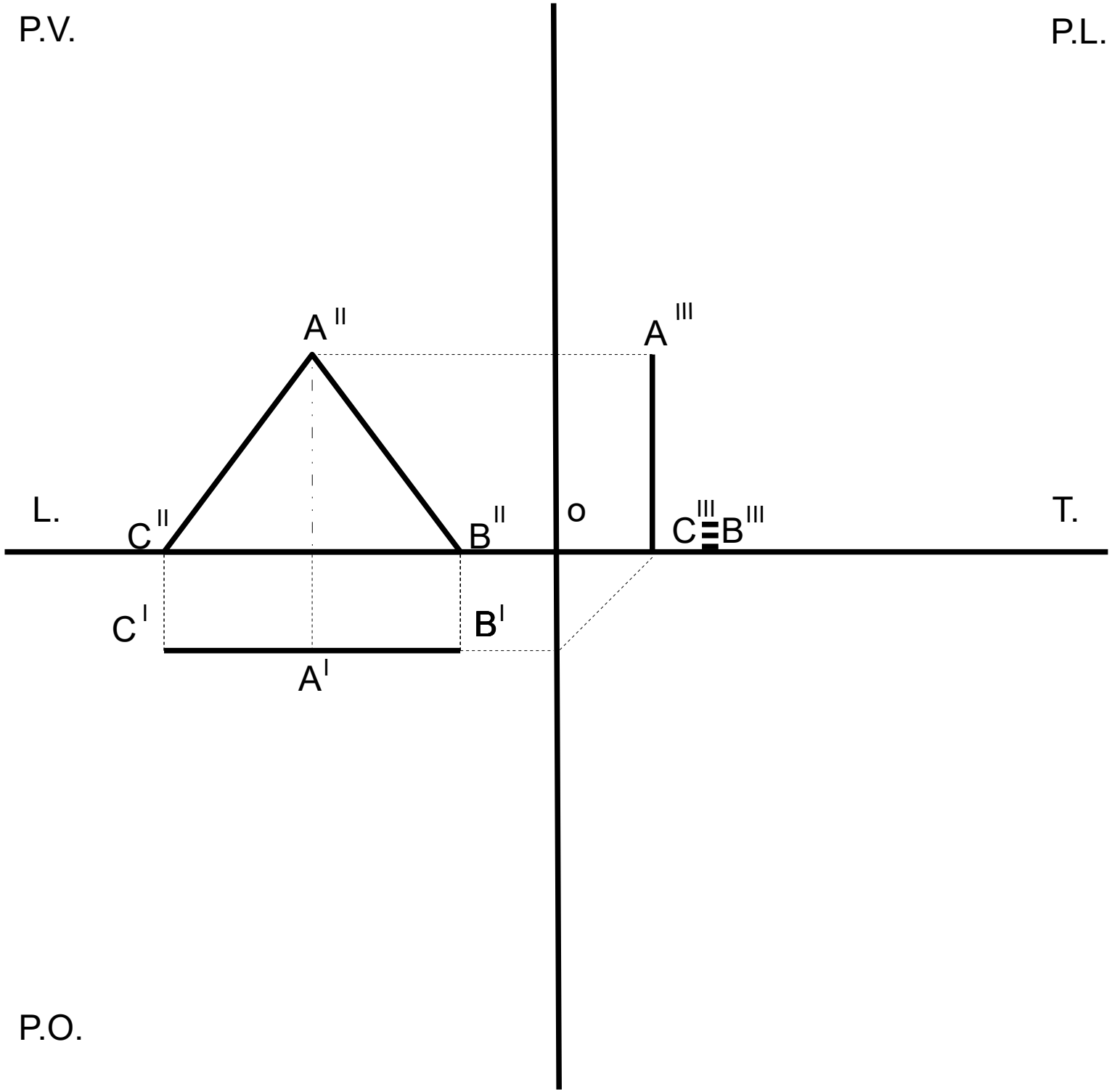

P.V.
P.L.
A II
L.
C II
B II
o
T.
P.O.

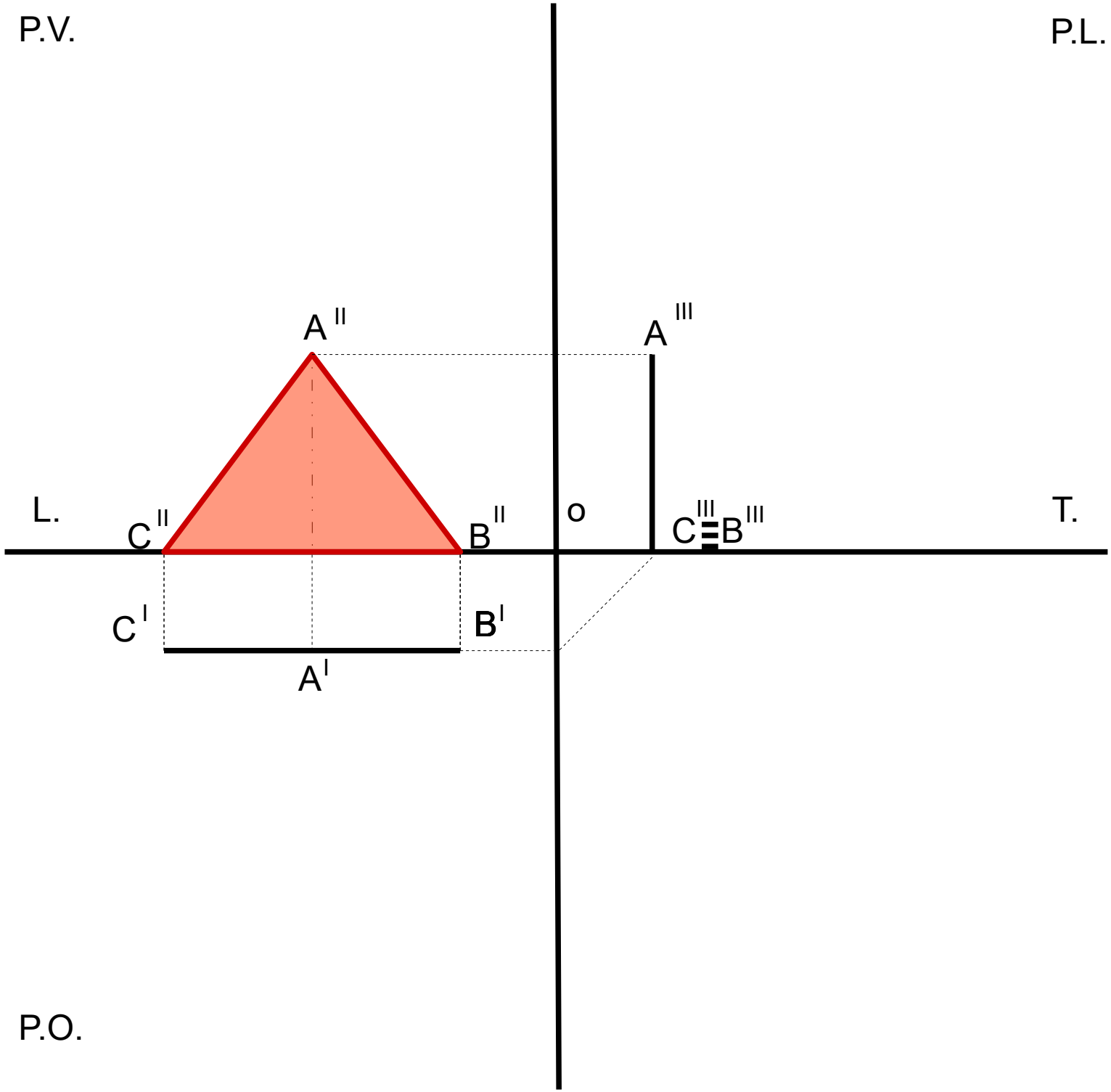

P.V.
P.L.
A II
L.
C II
B II
o
T.
P.O.


P.V.
P.L.
A II
L.
C II
B II
o
T.
C I
B I
A I
P.O.

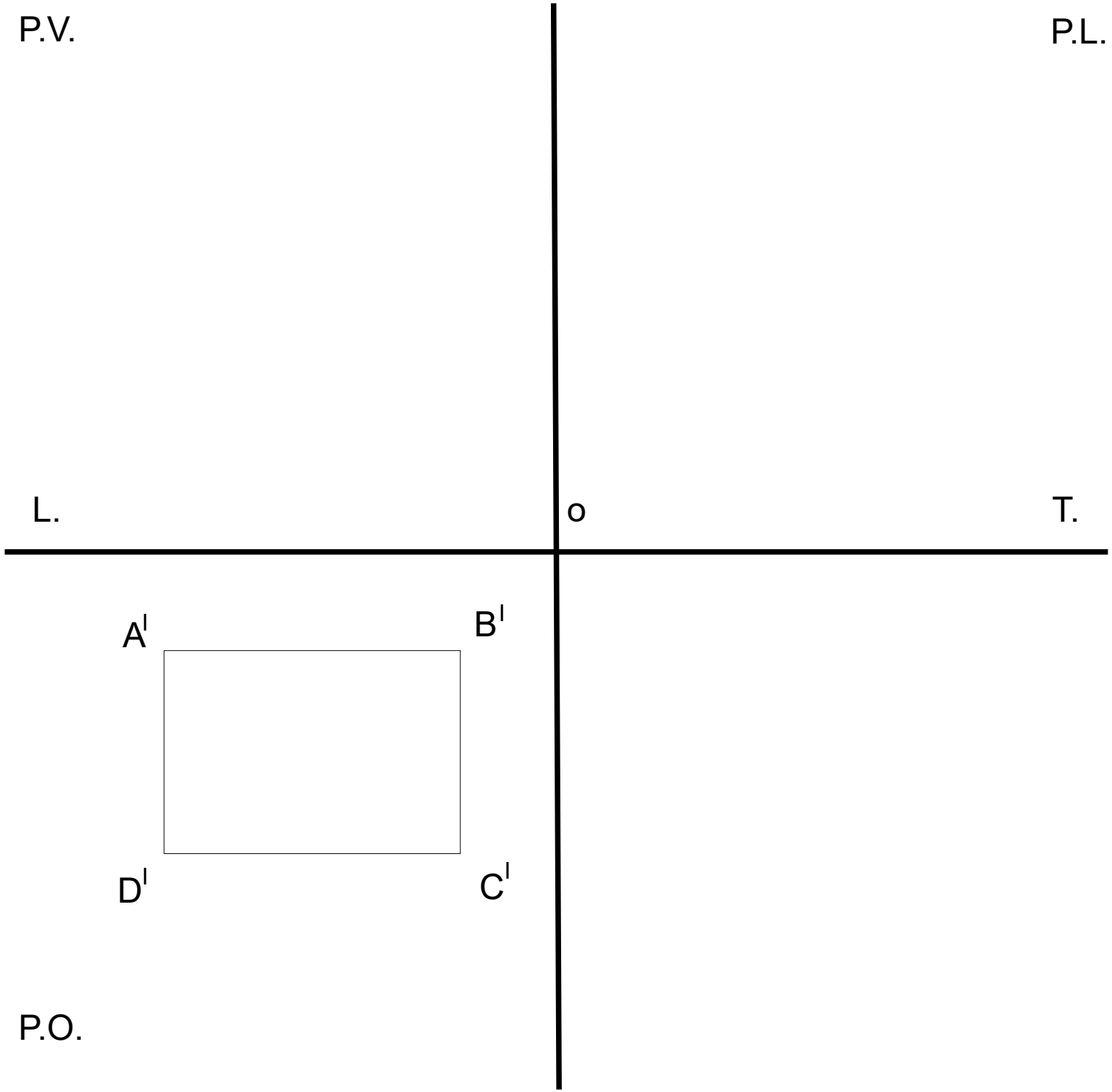

P.V.
P.L.
A II
L.
C II
B II
o
T.
C I
B I
A I
P.O.

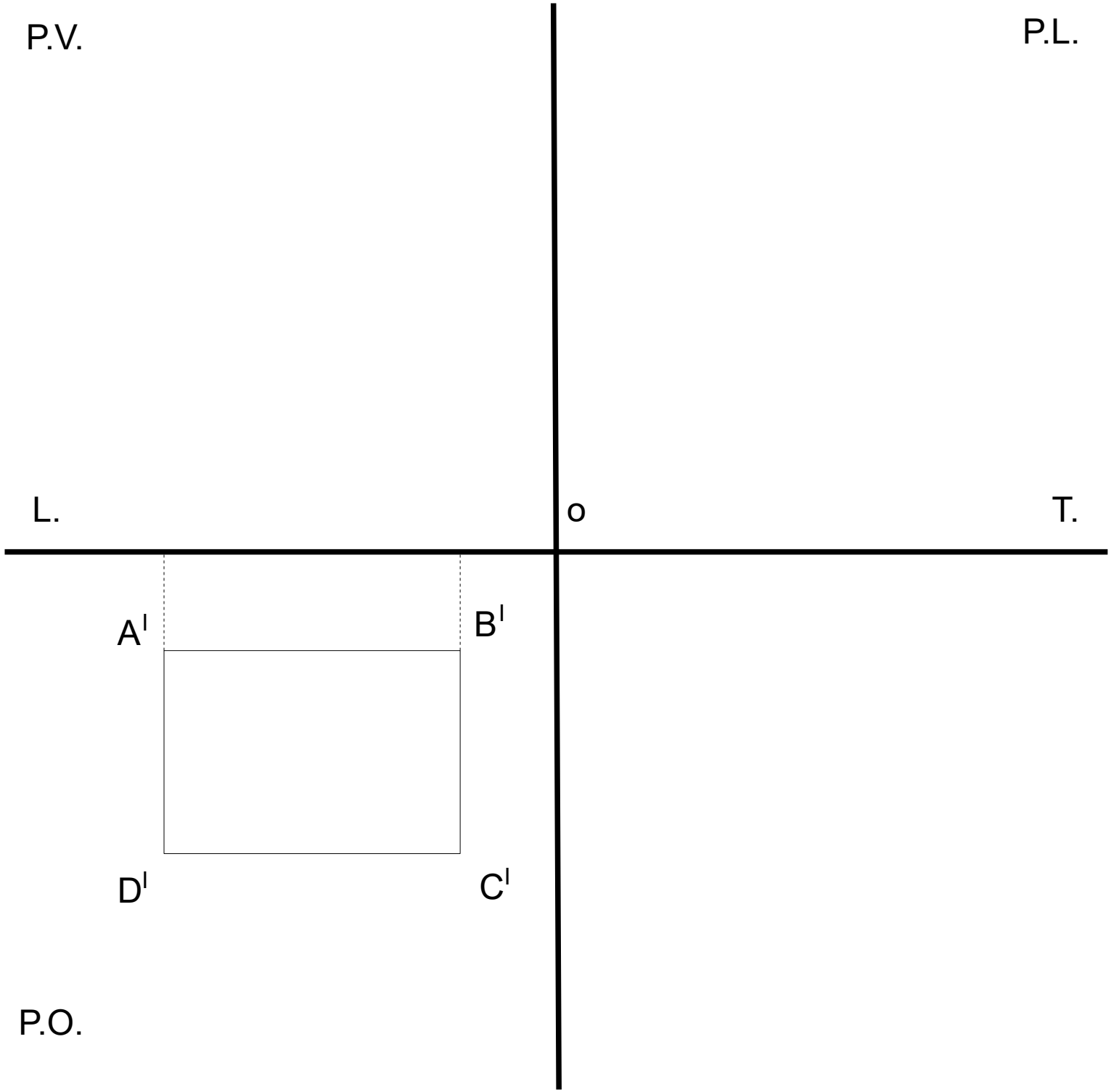

P.V.
P.L.
A II
A III
L.
C II
B II
o
C III ≡ B III
T.
C I
B I
A I
P.O.

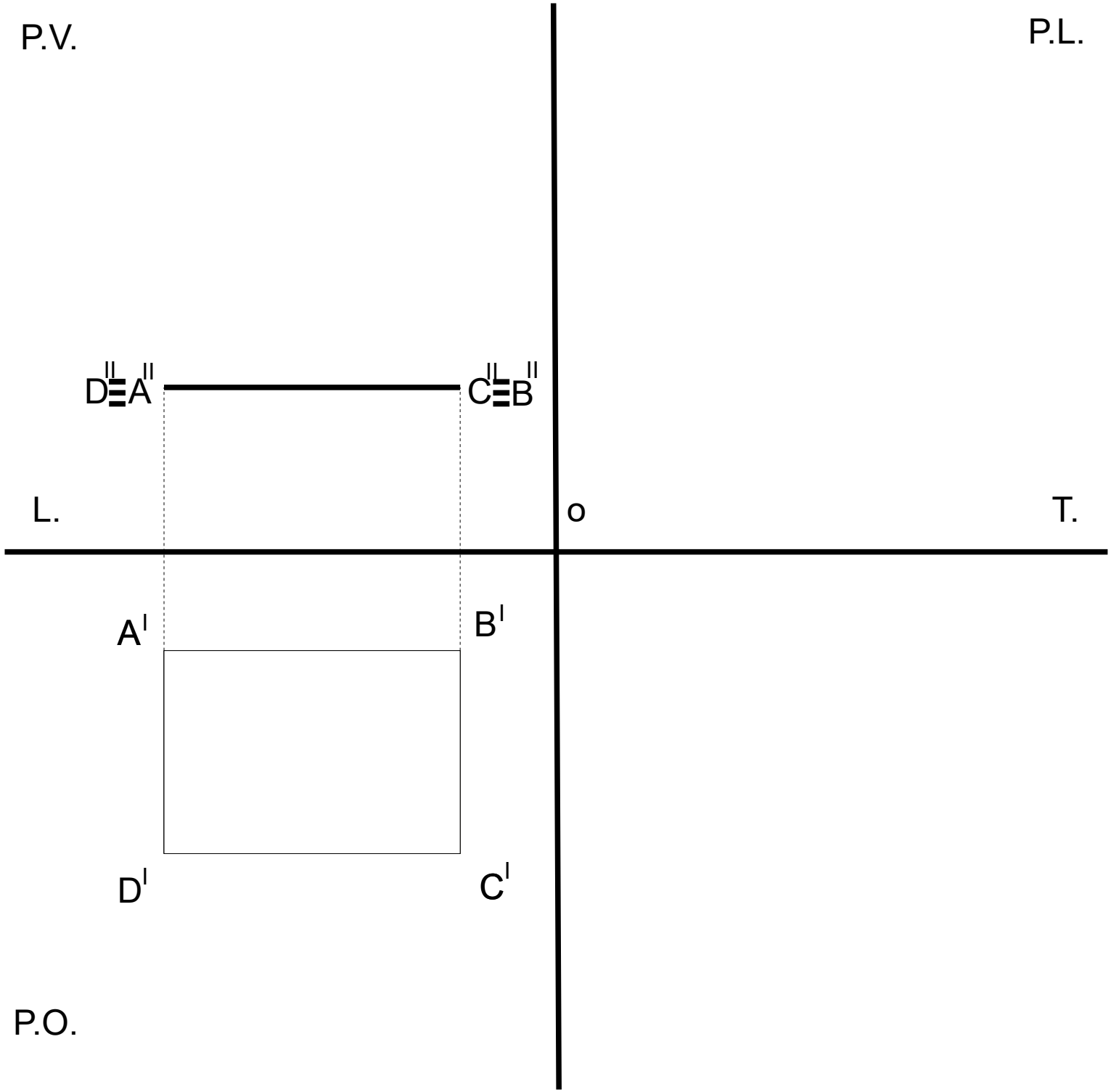

P.V.
P.L.
A II
A III
L.
C II
B II
o
C III ≡ B III
T.
C I
B I
A I
P.O.

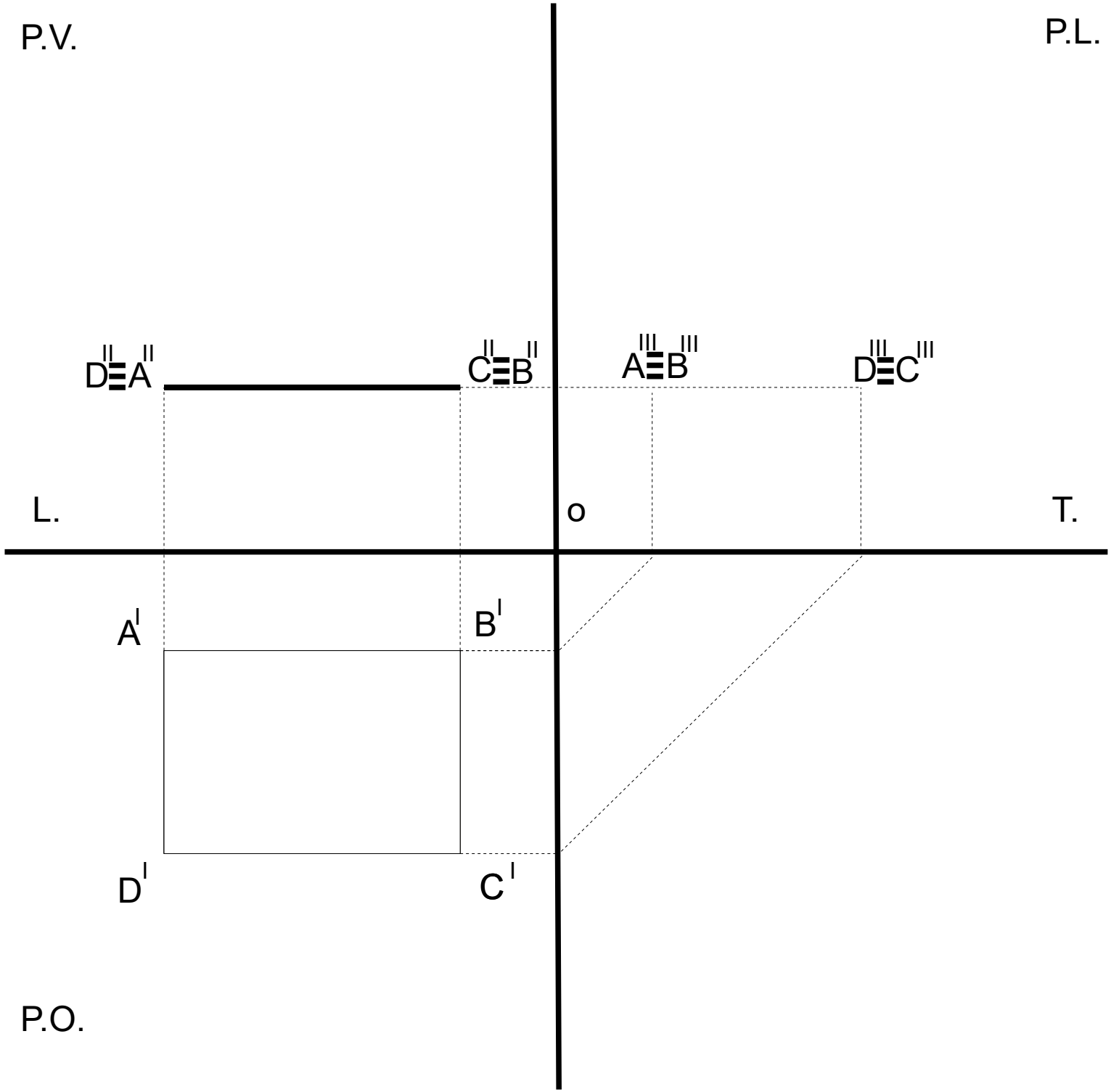

P.V.
P.L.
A II
A III
L.
C II
B II
o
C III ≡ B III
T.
C I
B I
A I
P.O.

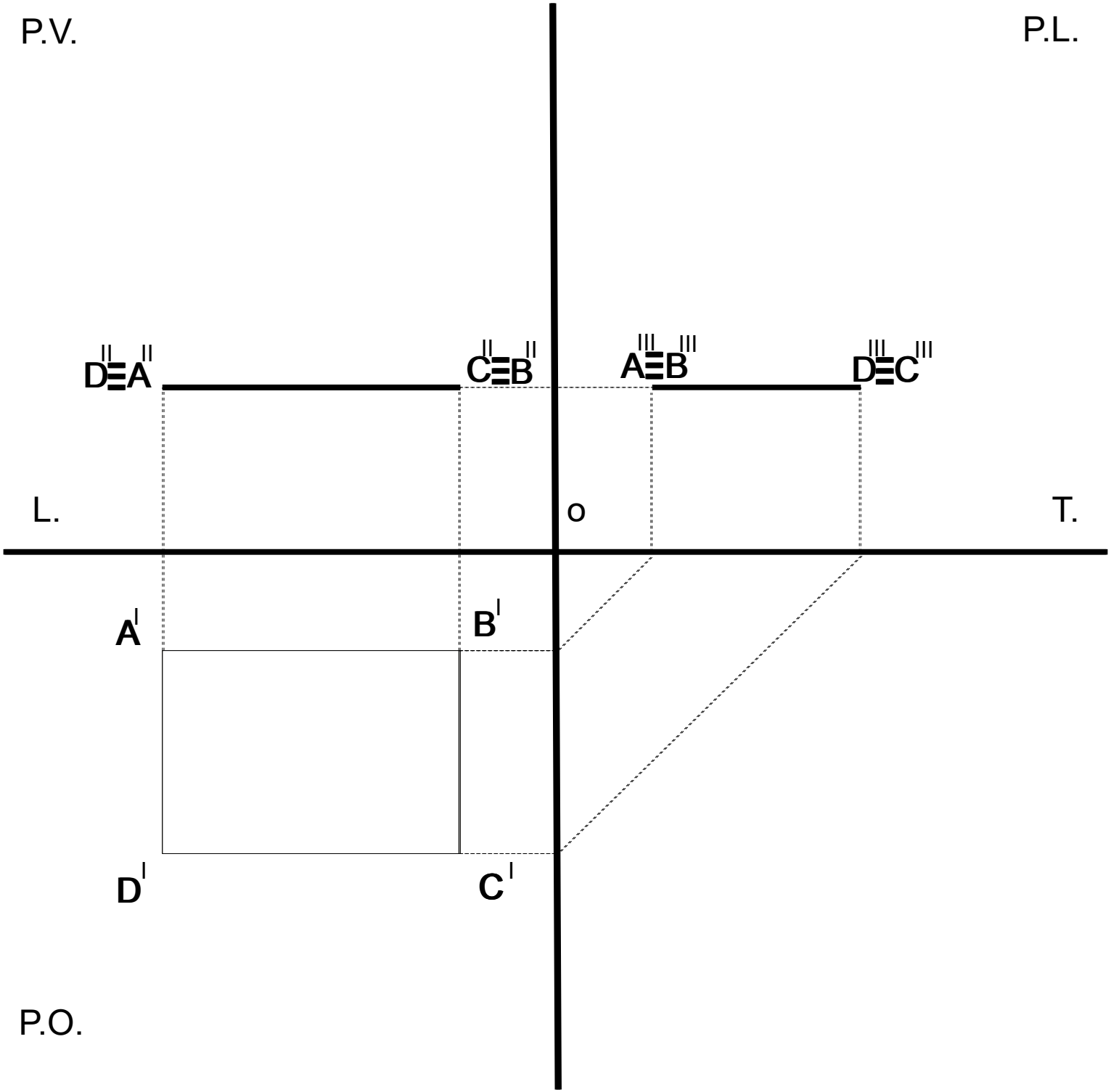
TITOLO: proiezioni ortogonali di un rettangolo parallelo al piano orizzontale.

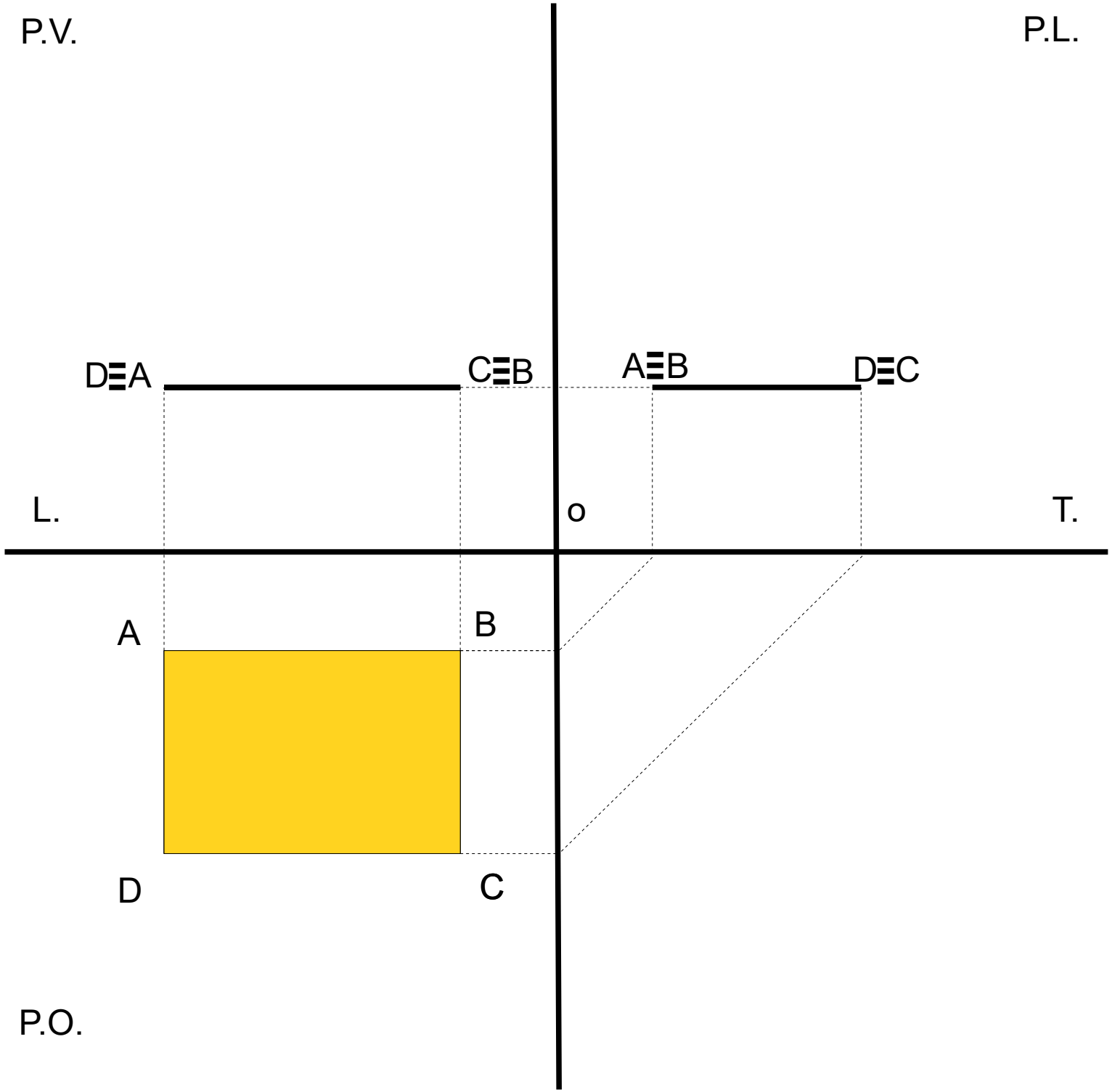

P.V.
P.L.
L.
o
T.
A'
B'
D'
C'
P.O.


P.V.
P.L.
L.
o
T.
A^I
B^I
D^I
C^I
P.O.

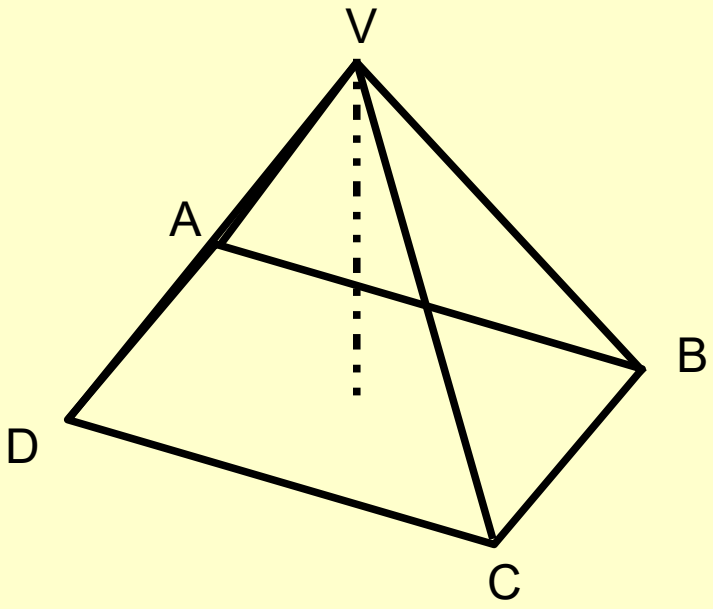

P.V.
P.L.
D
A
C
B
L.
o
T.
A
B
D
C
P.O.

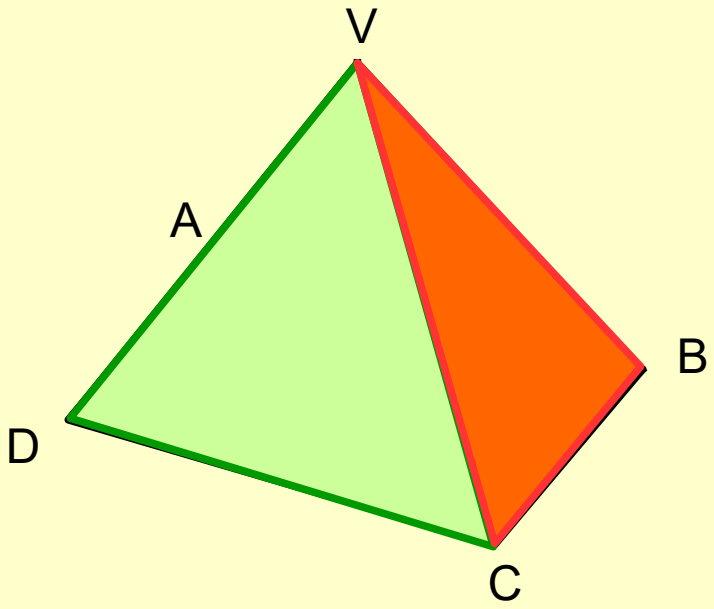

P.V.
P.L.
D''≡A''
C''≡B''
A'''≡B'''
D'''≡C'''
L.
o
T.
A'
B'
D'
C'
P.O.

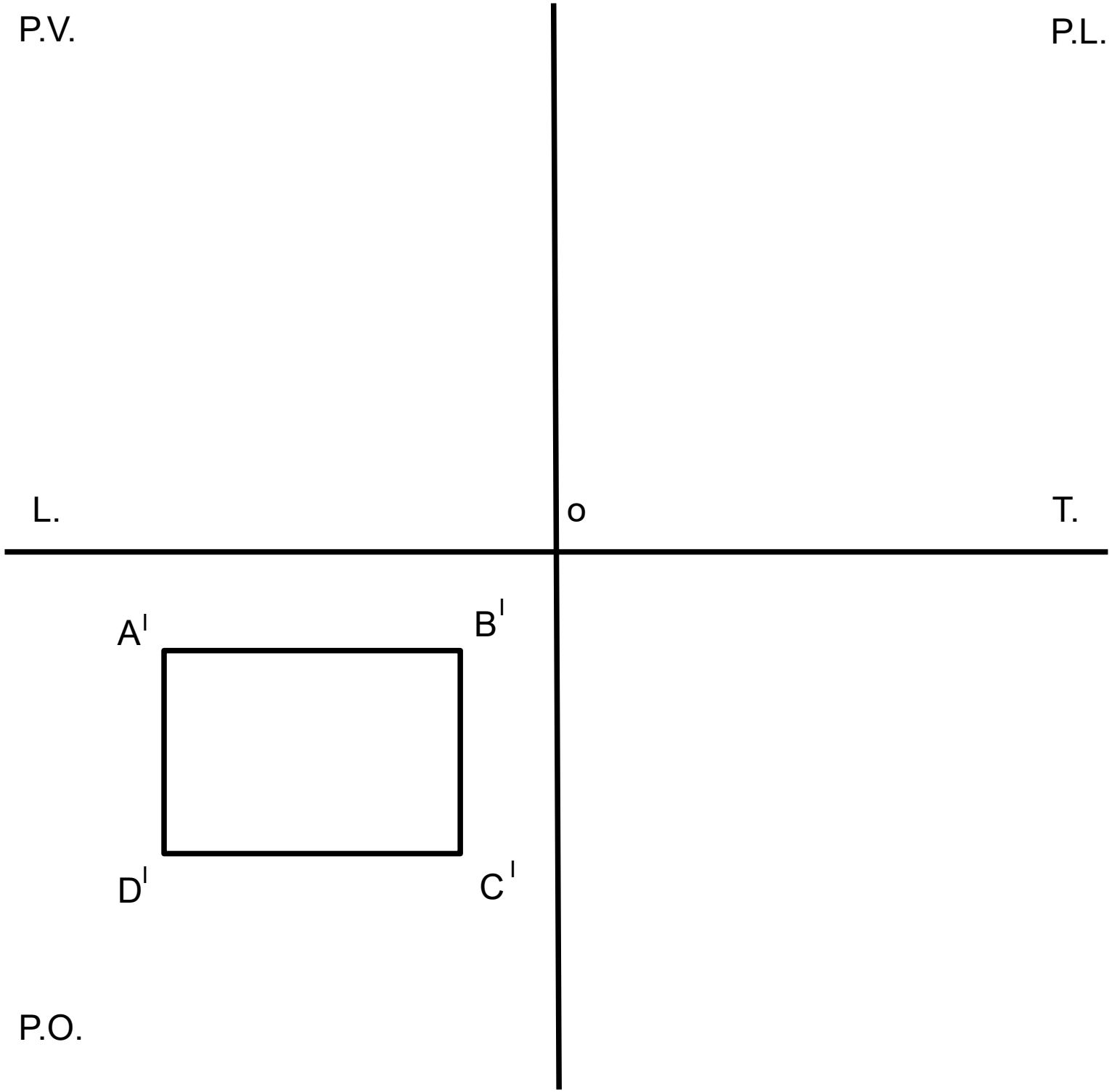

P.V.
P.L.
D''≡A''
C''≡B''
A'''≡B'''
D'''≡C'''
L.
o
T.
A'
B'
D'
C'
P.O.

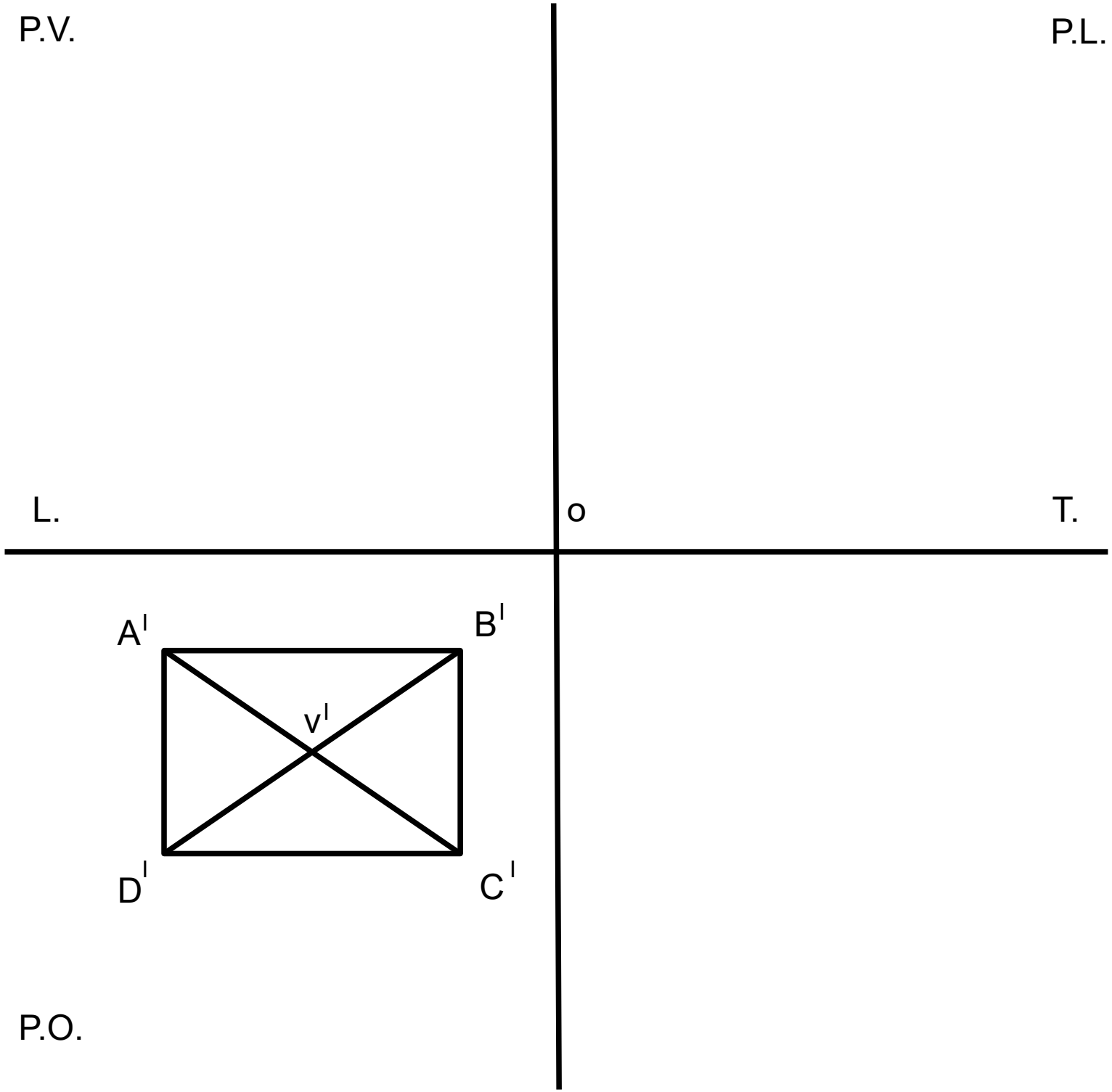

P.V.
P.L.
D≡A
C≡B
A≡B
D≡C
L.
o
T.
A
B
D
C
P.O.

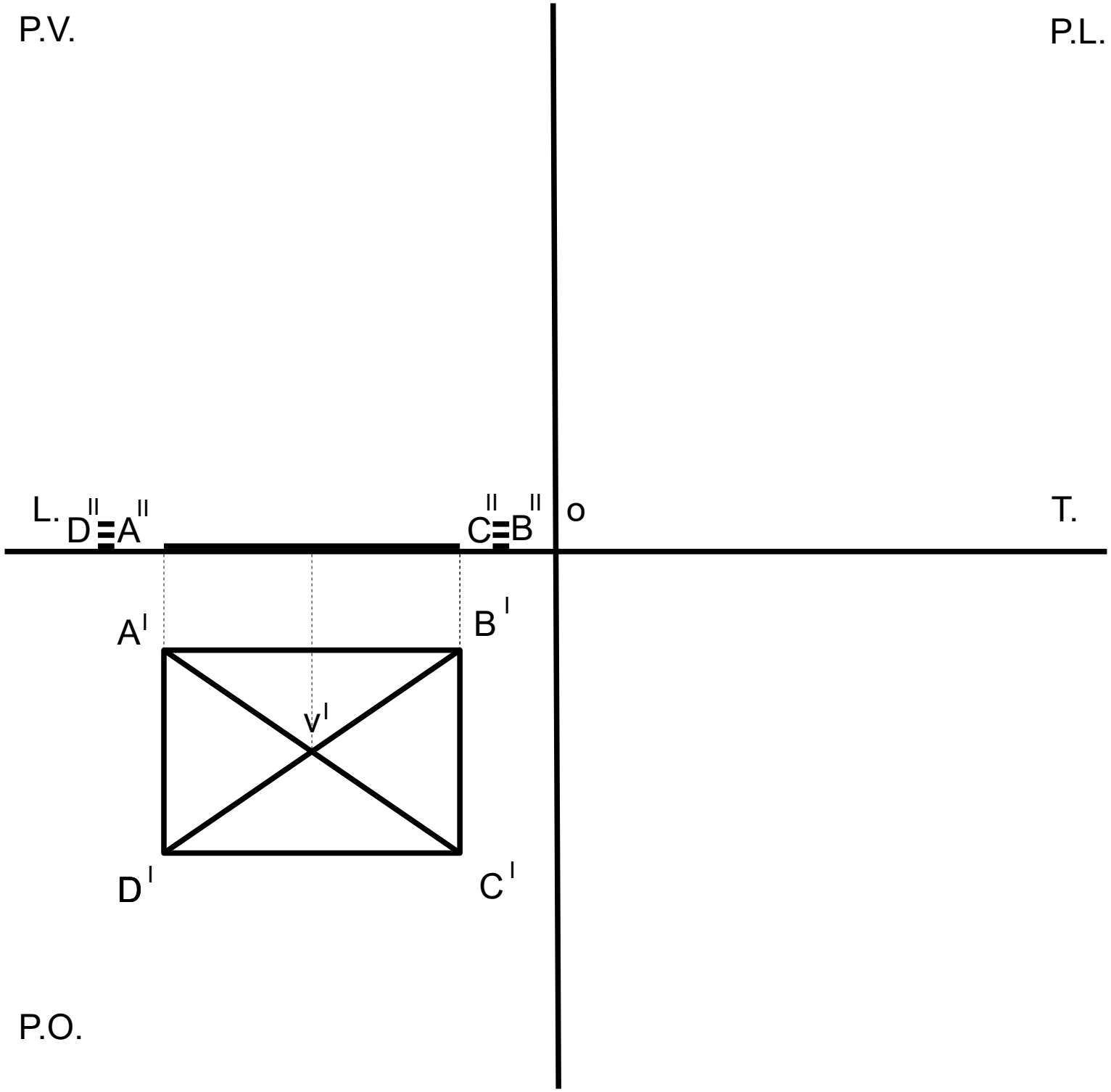
TITOLO: proiezioni ortogonali di una piramide, con base rettangolare parallela al piano orizzontale.

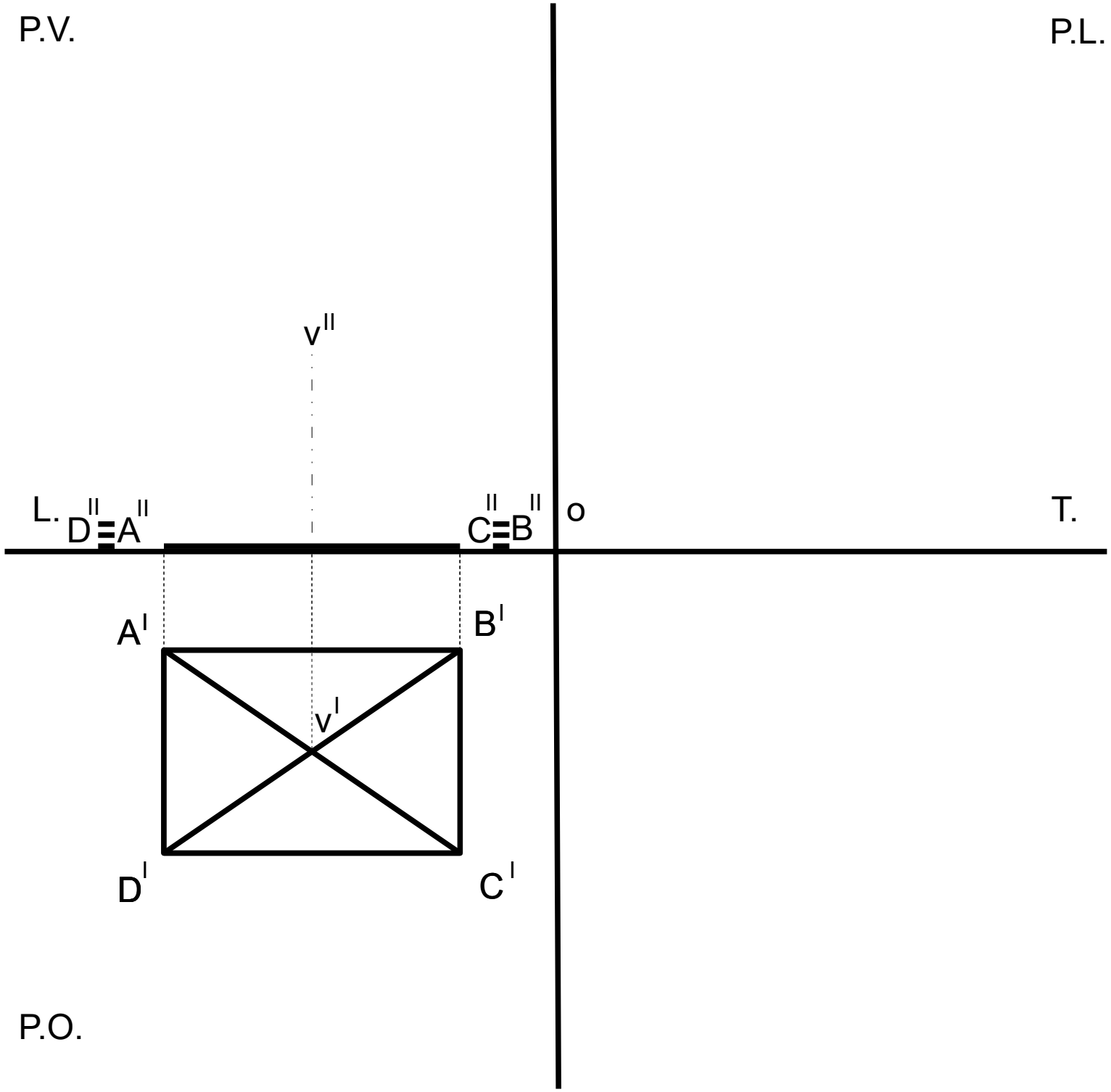


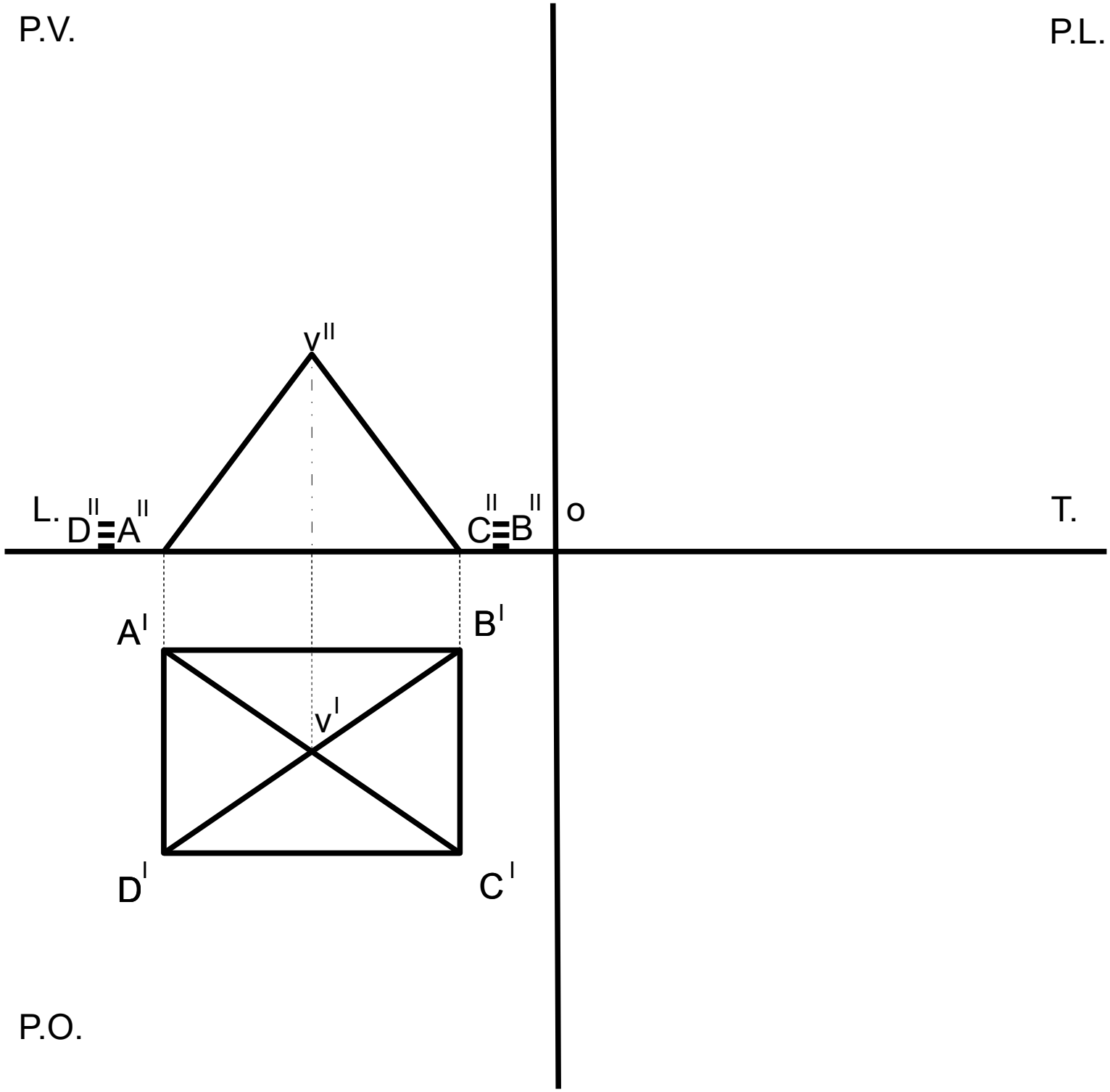


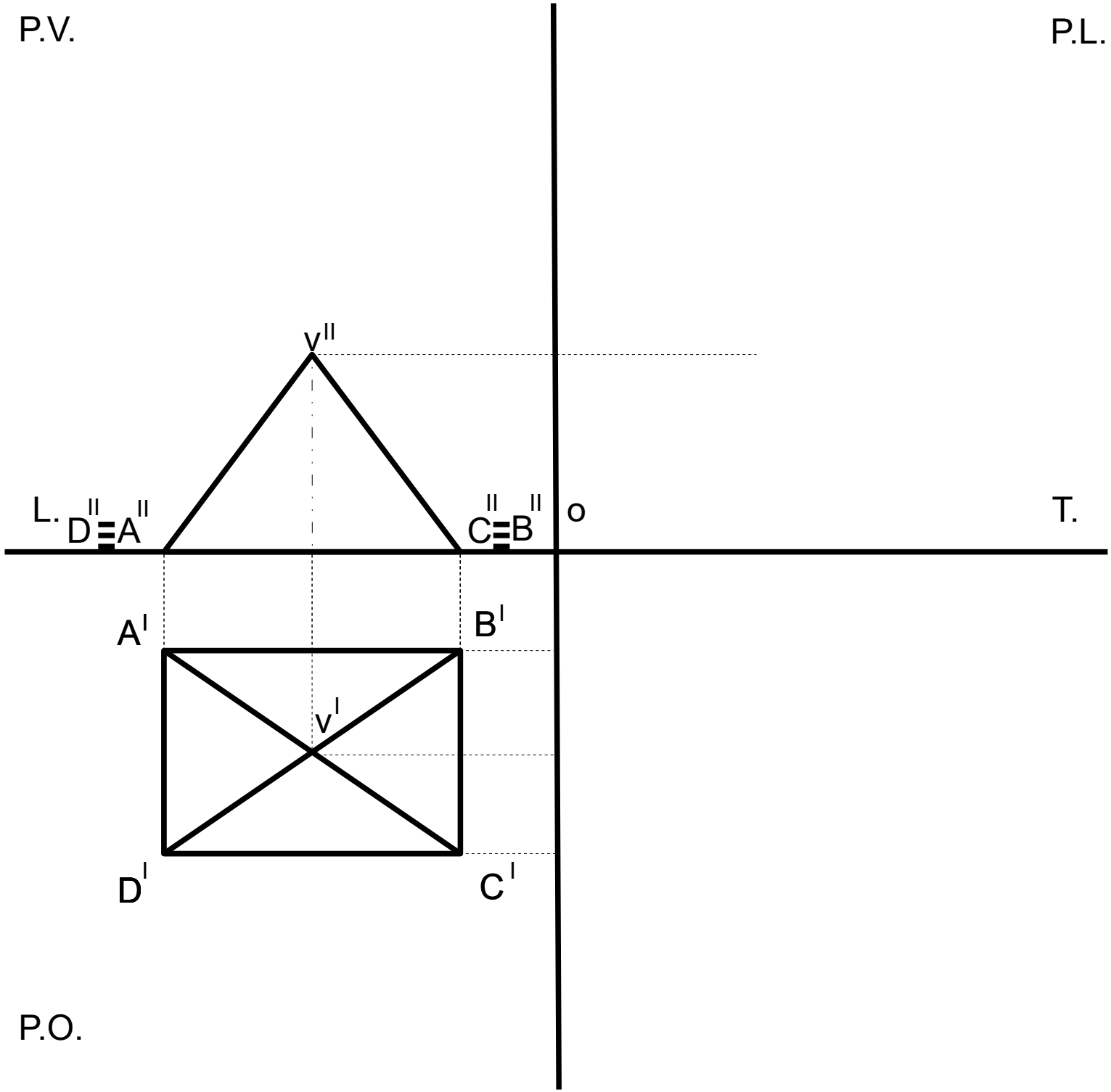

P.V.
P.L.
L.
o
T.
A'
B'
D'
C'
P.O.

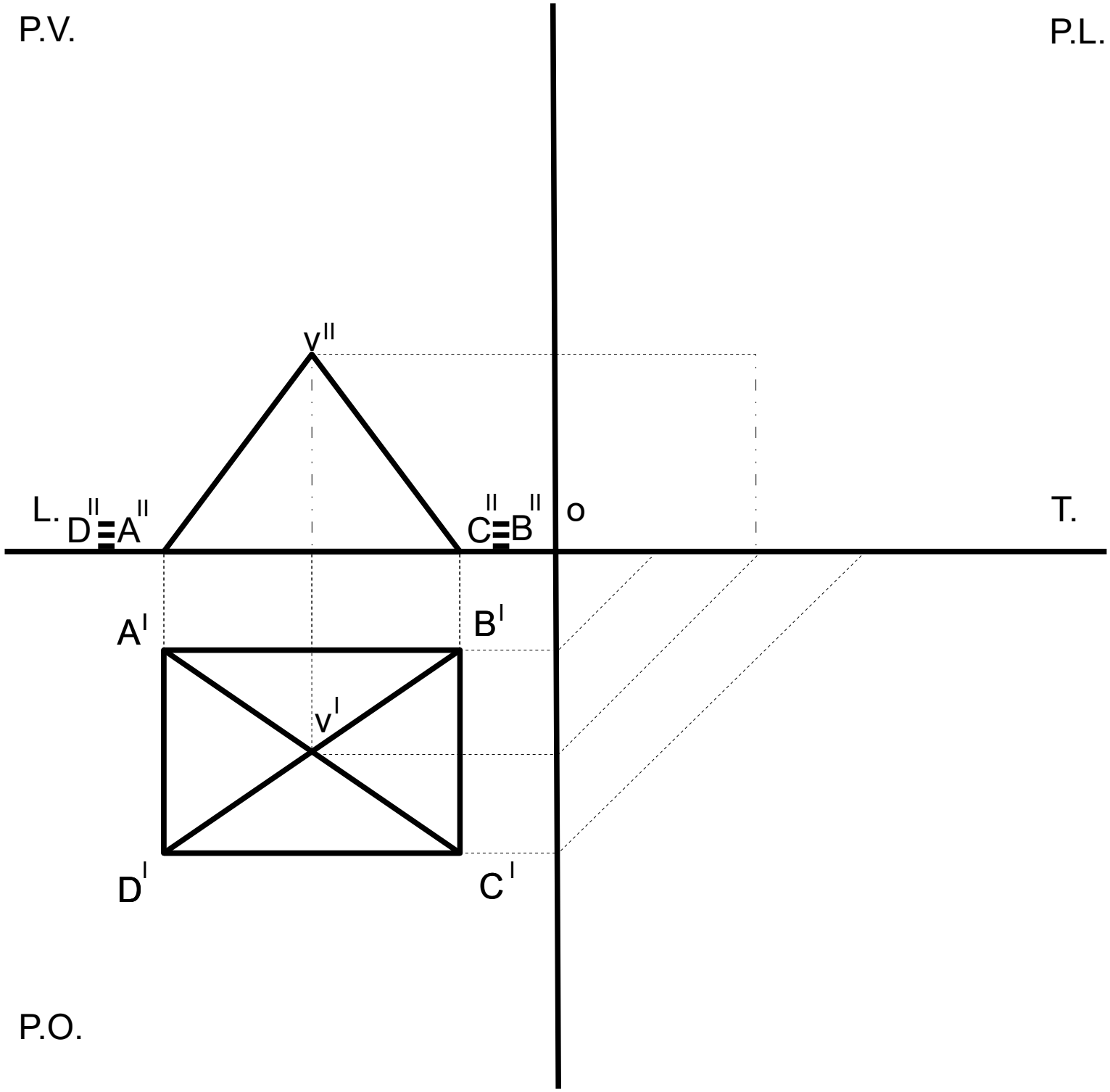


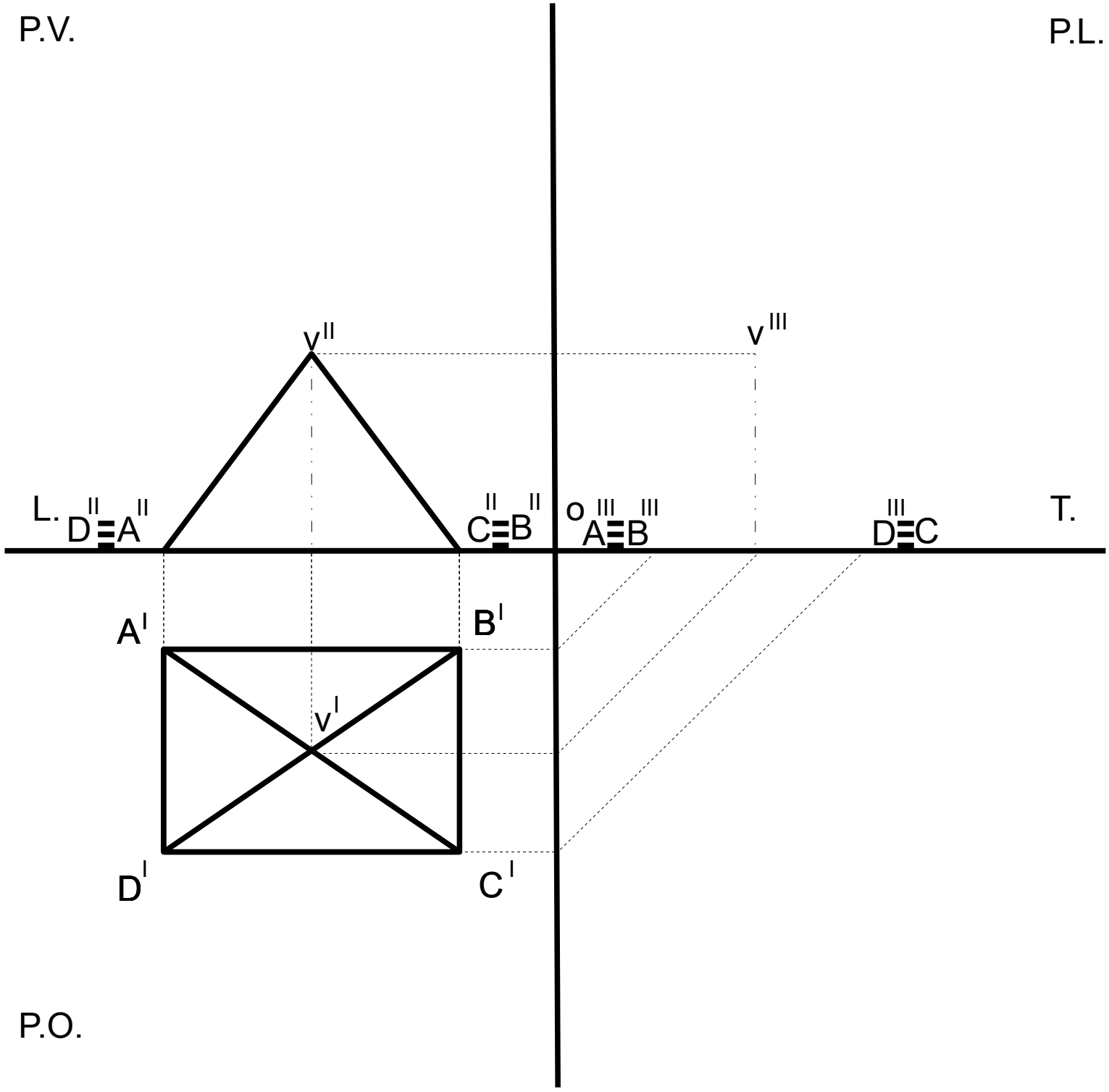

P.V.
P.L.
L.
D II ≡ A II
C II ≡ B II
o
T.
A I
B I
v I
D I
C I
P.O.

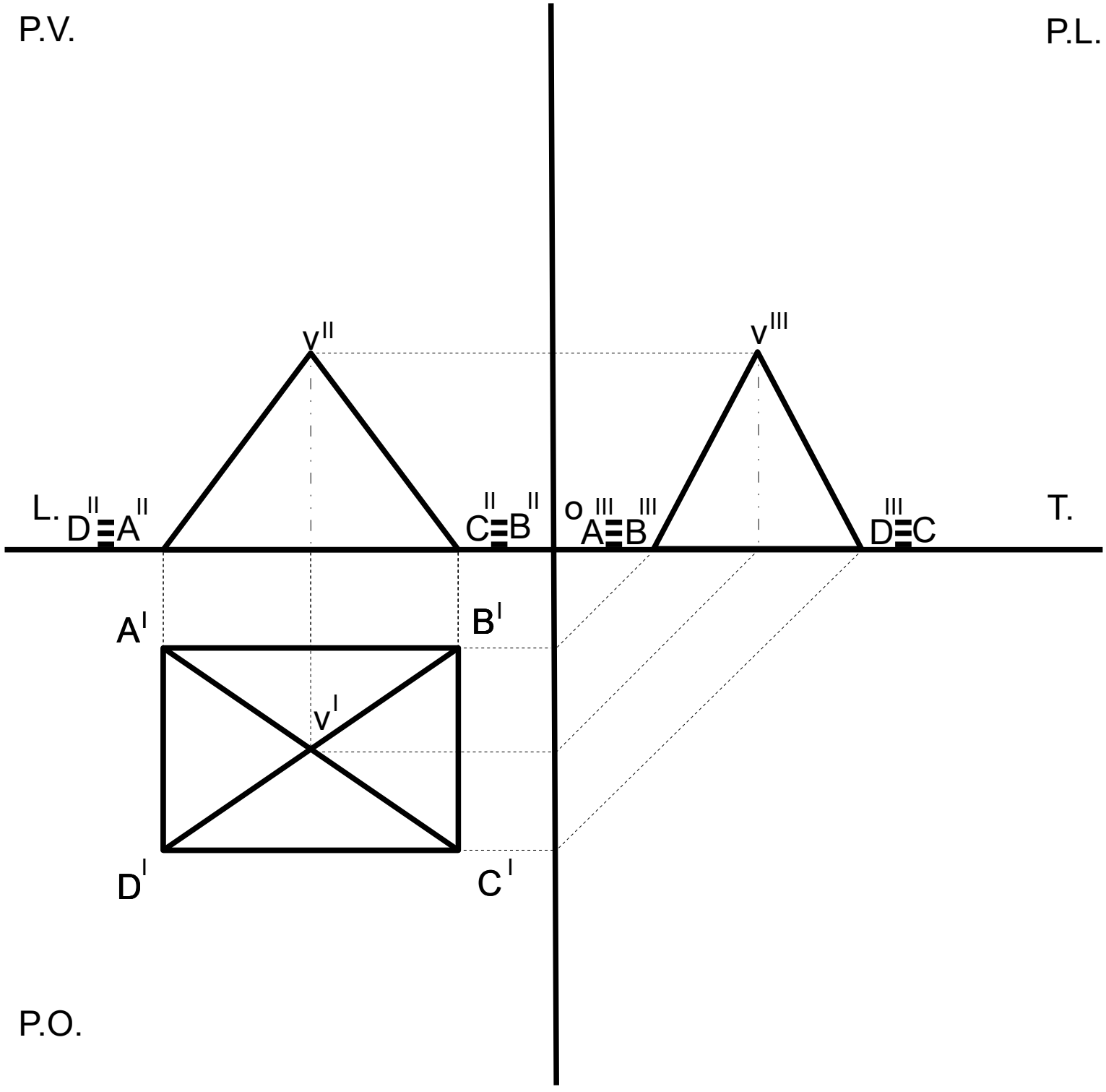

P.V.
P.L.
v II
L.
D II ≡ A II
C II ≡ B II
o
T.
A I
B I
v I
D I
C I
P.O.

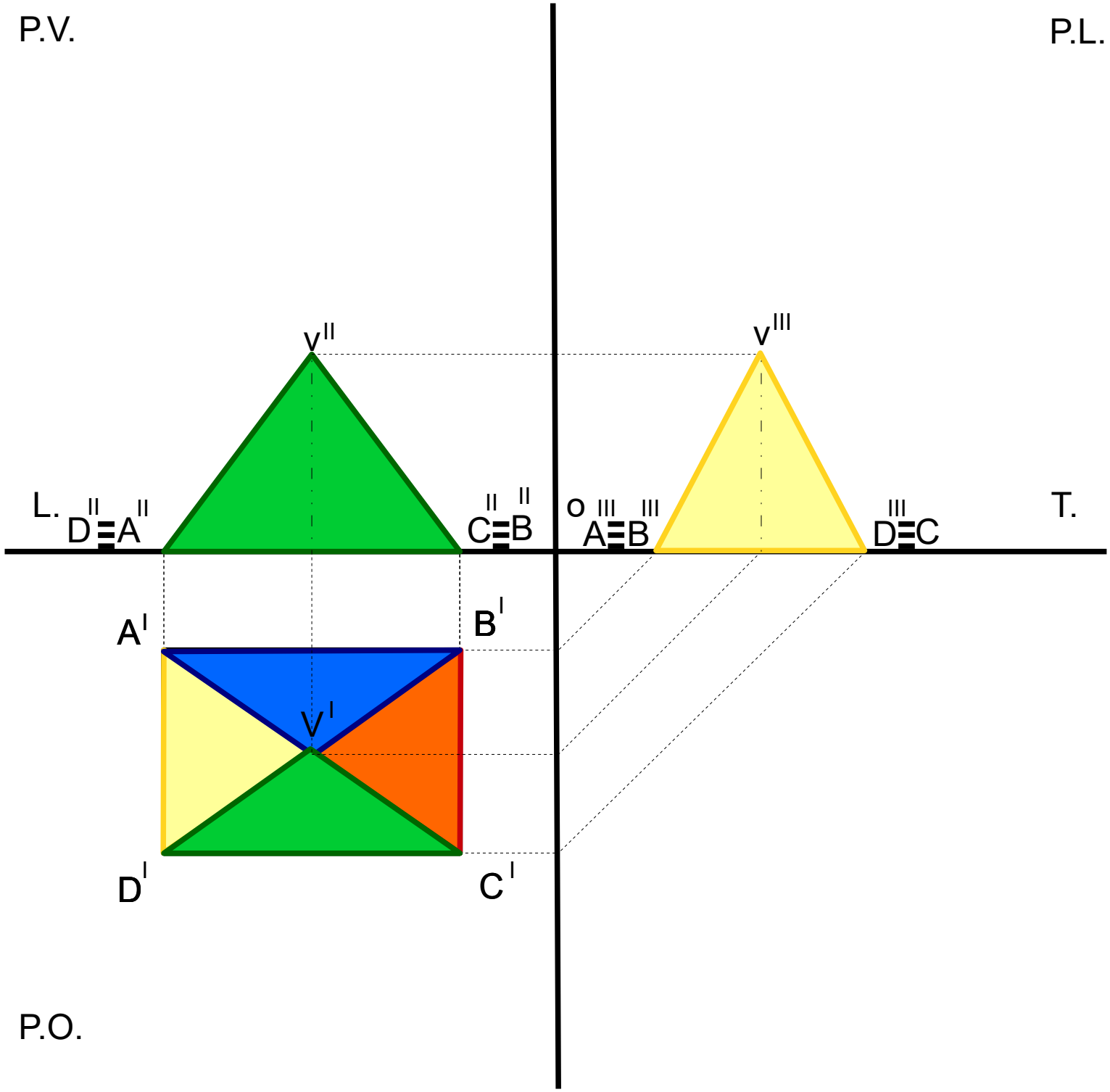

P.V.
P.L.
v II
L.
D II ≡ A II
C II ≡ B II
o
T.
A I
B I
v I
D I
C I
P.O.


P.V.
P.L.
v II
L.
D II ≡ A II
C II ≡ B II
o
T.
A I
B I
v I
D I
C I
P.O.

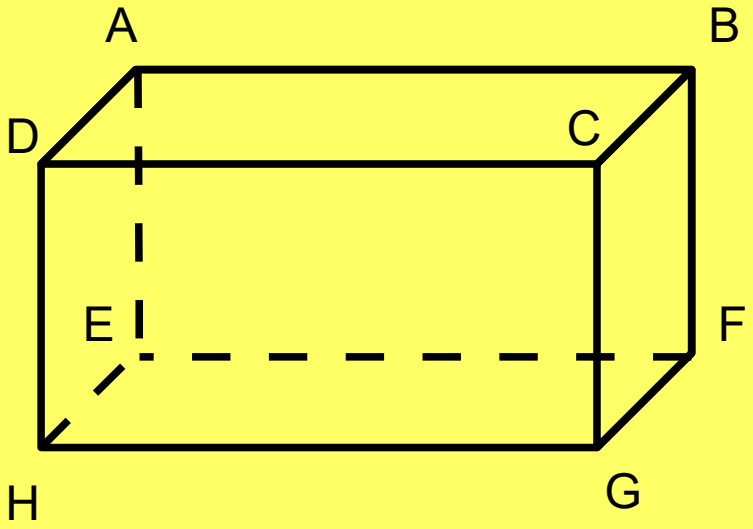

P.V.
P.L.
v II
L.
D II ≡ A II
C II ≡ B II
o
T.
A I
B I
v I
D I
C I
P.O.

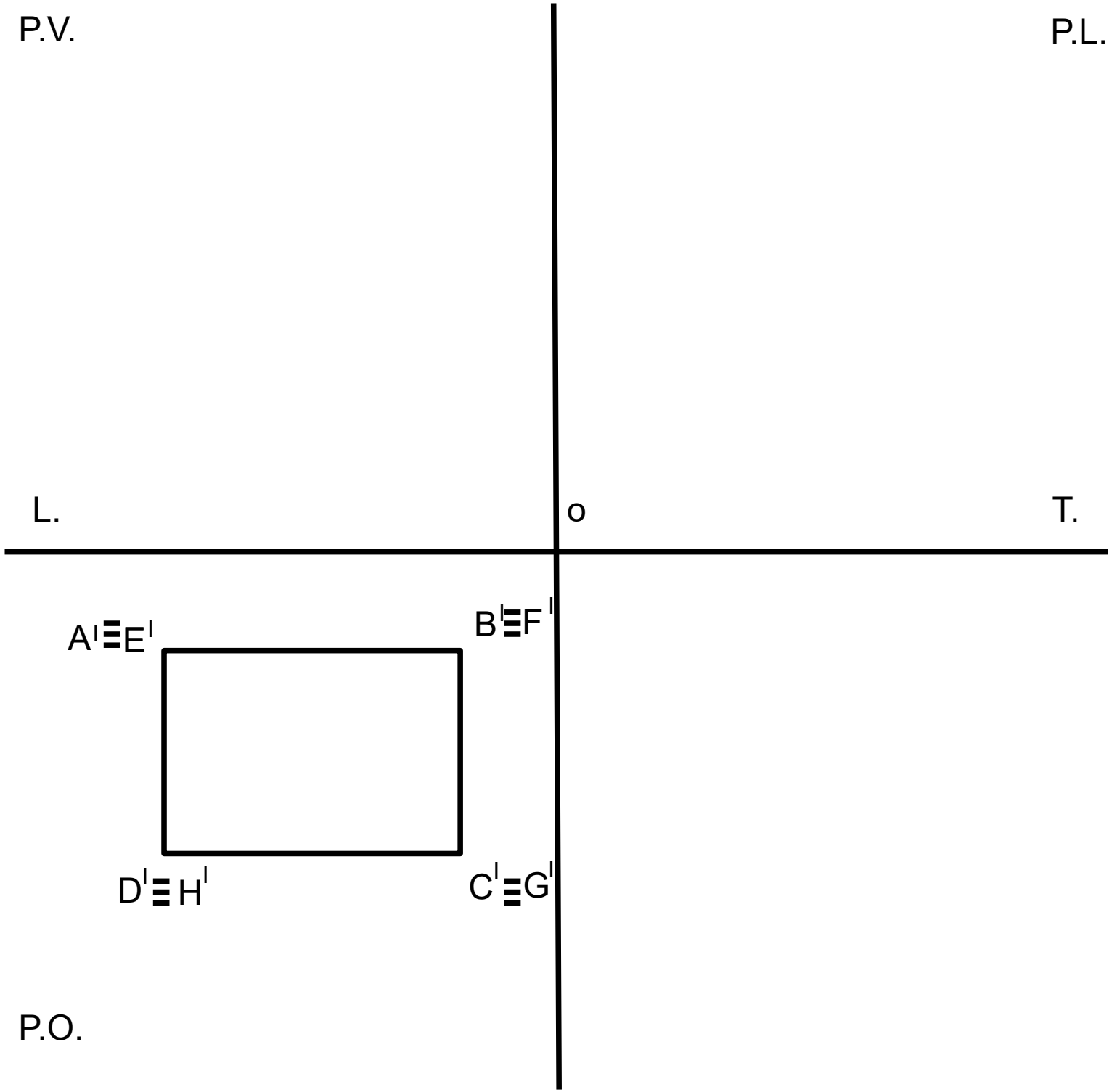

P.V.
P.L.
v II
v III
L.
D II ≡ A II
C II ≡ B II
o
A III ≡ B III
D III ≡ C
T.
A I
B I
v I
D I
C I
P.O.

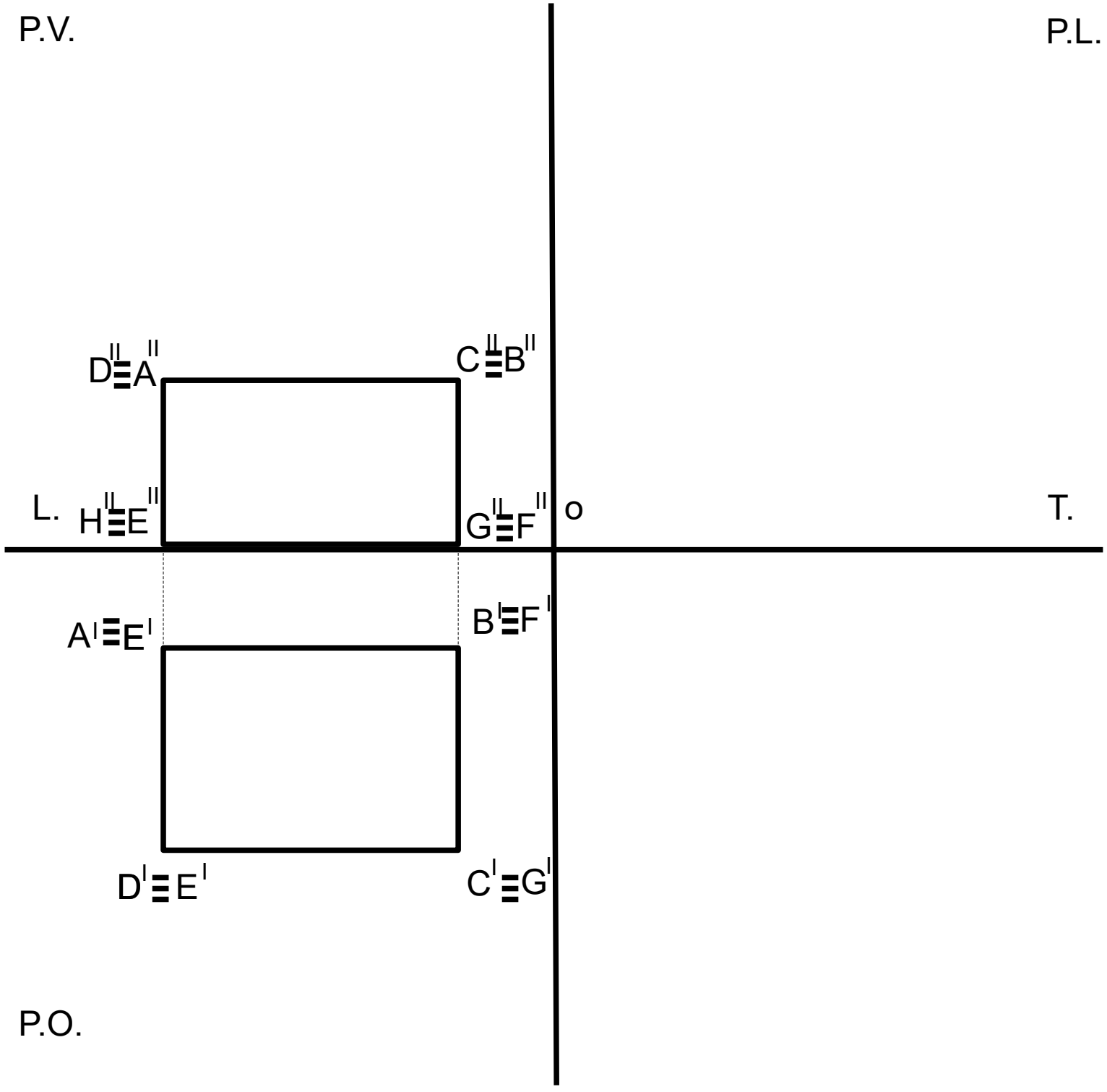

P.V.
P.L.
v II
v III
L.
D II ≡ A II
C II ≡ B II
o
A III ≡ B III
D III ≡ C
T.
A I
B I
v I
D I
C I
P.O.

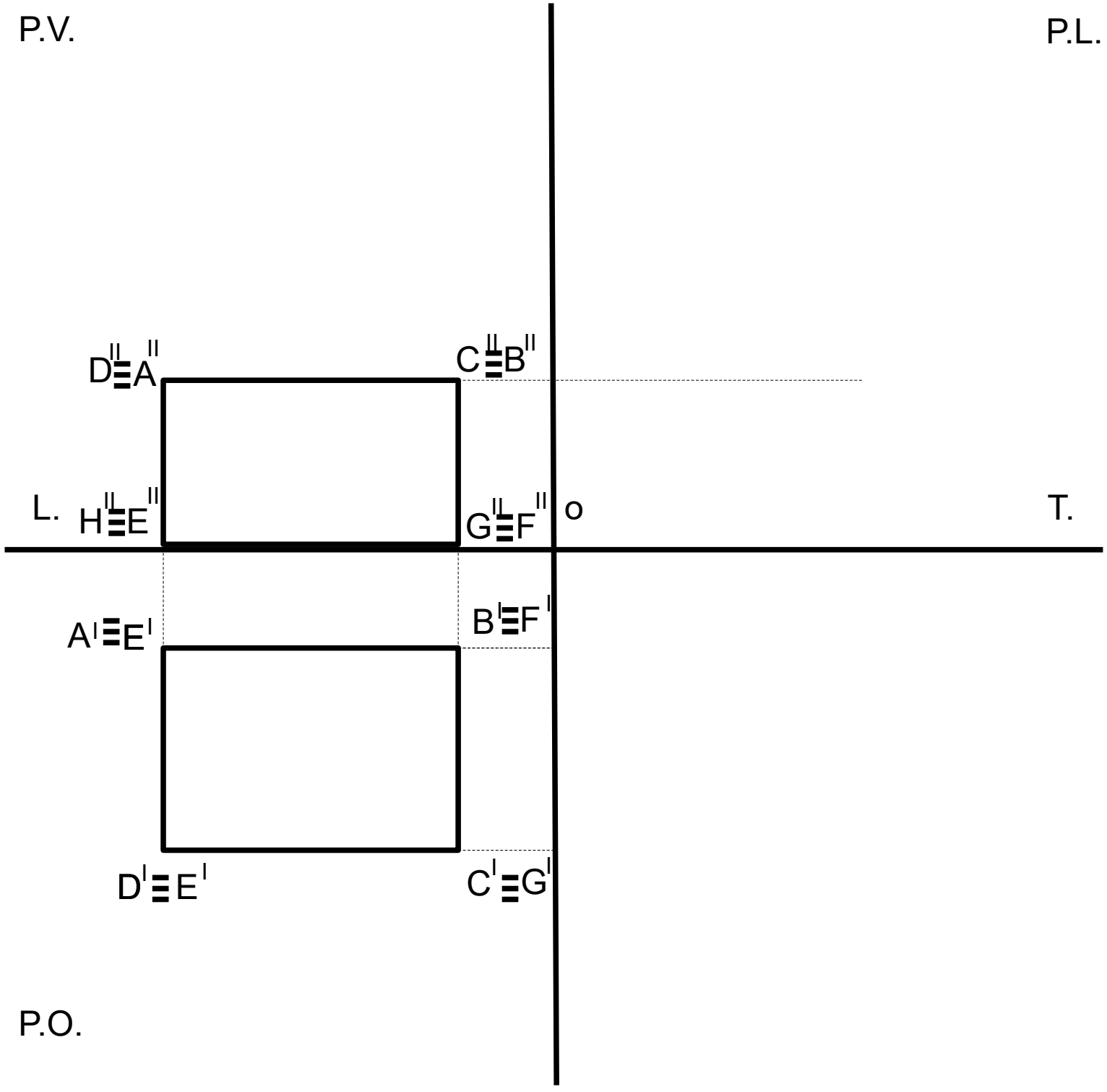

P.V.
P.L.
V II
V III
L.
D II ≡ A II
C II ≡ B II
o III A ≡ B III
D III ≡ C III
T.
A I
B I
V I
D I
C I
P.O.

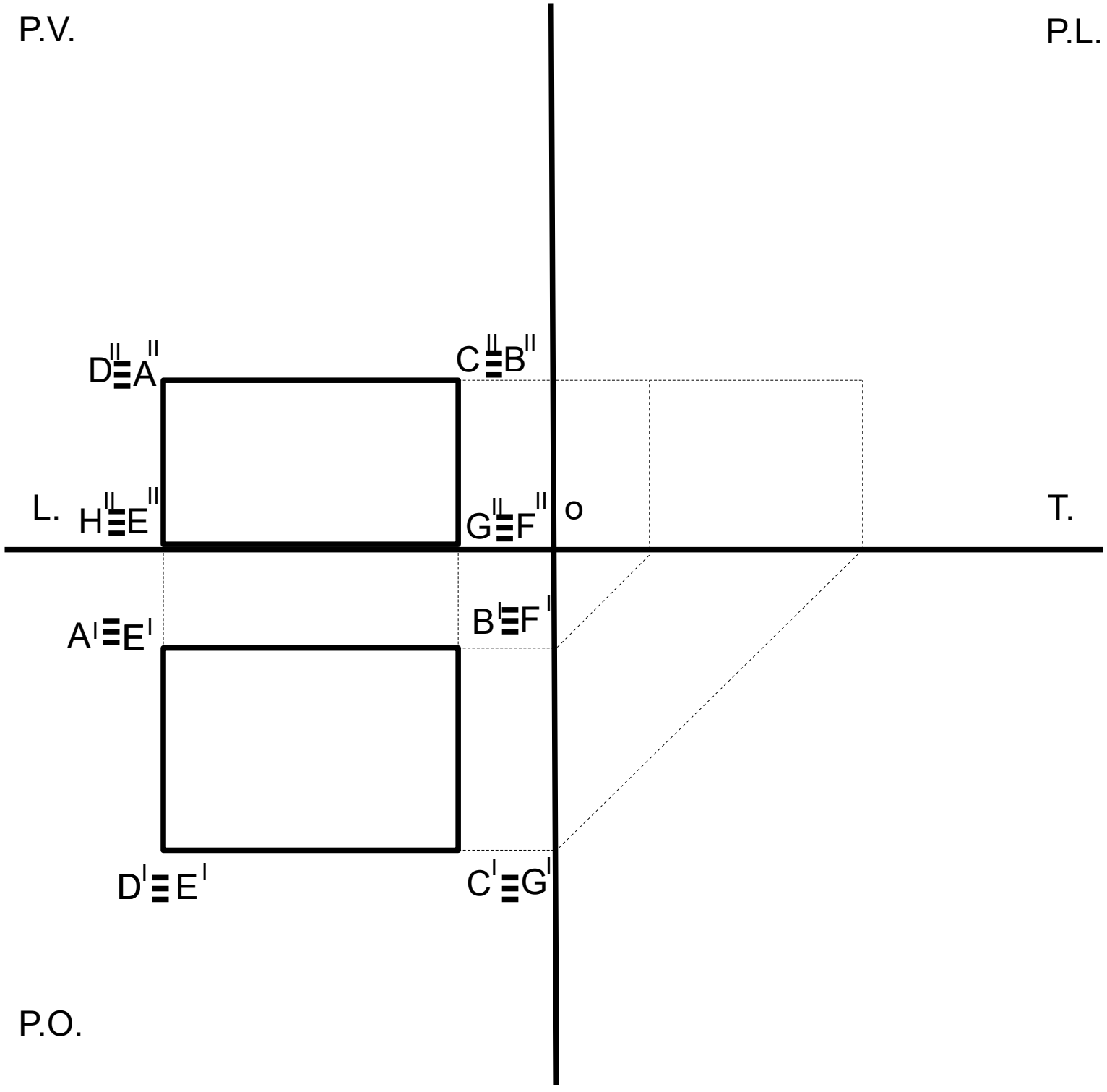
TITOLO: proiezioni ortogonali di un parallelepipedo, con base parallela al piano orizzontale e due facce parallele al piano verticale.

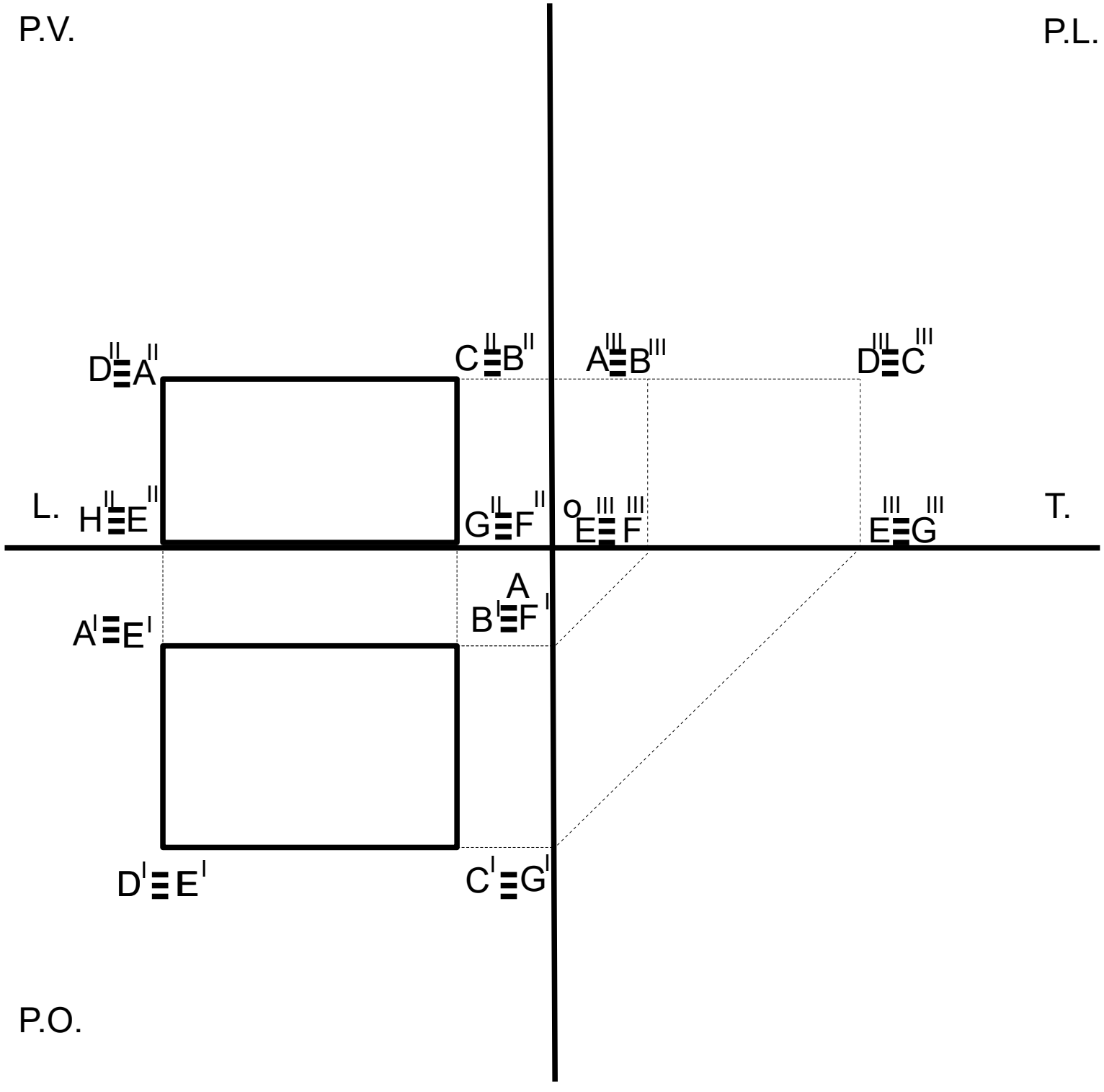


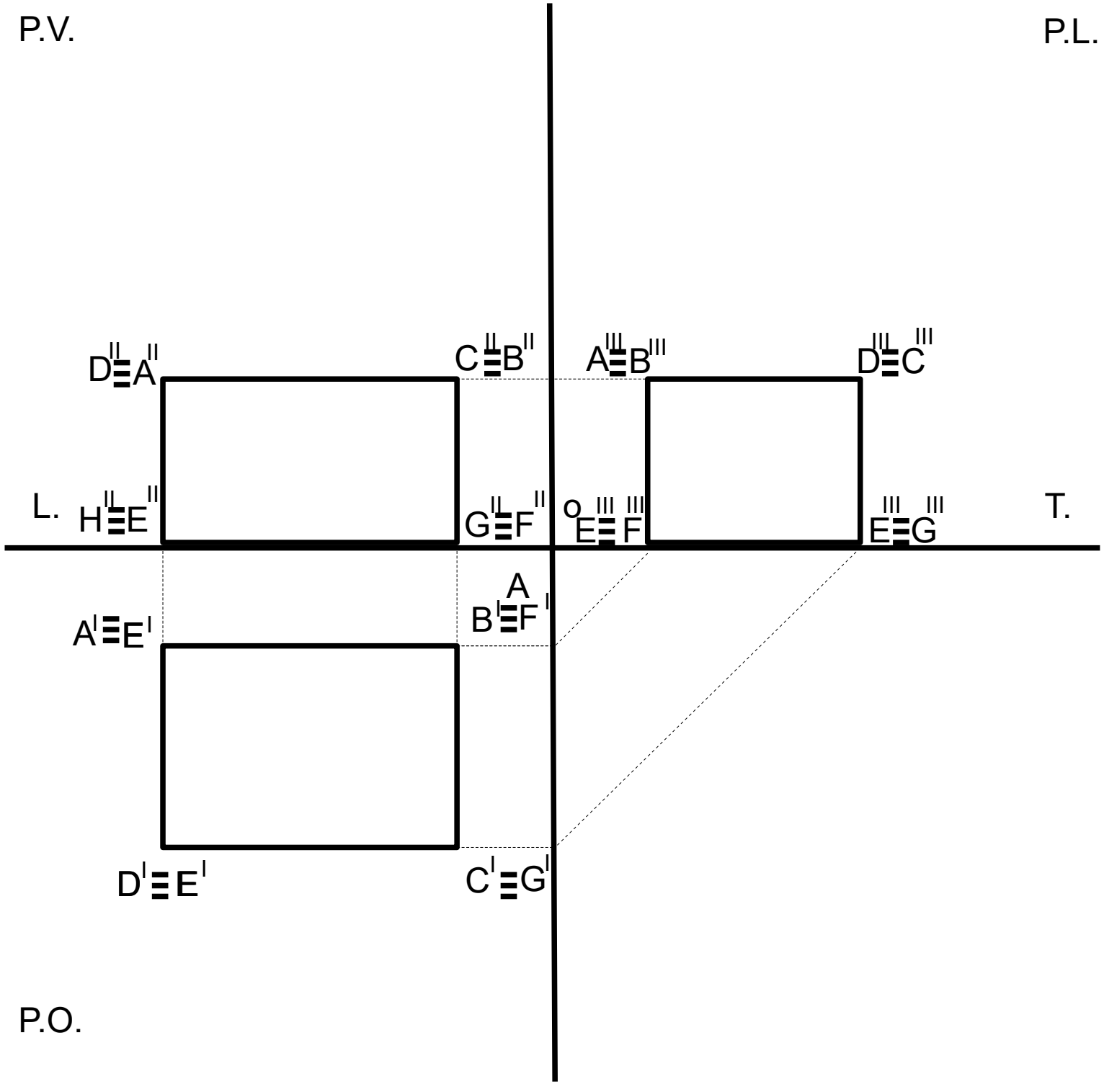

P.V.
P.L.
L.
o
T.
A' ≡ E'
B' ≡ F'
D' ≡ H'
C' ≡ G'
P.O.

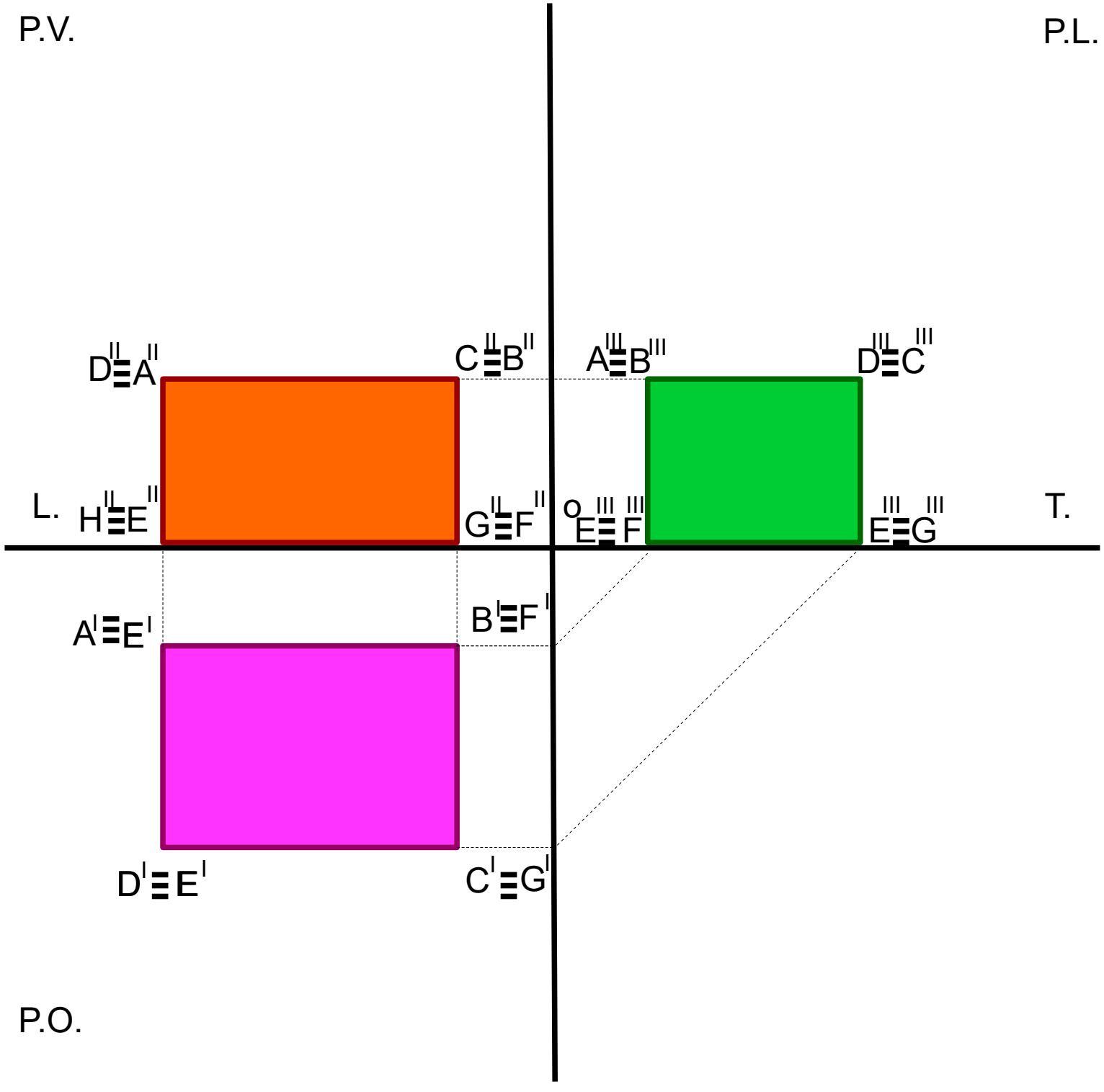



P.V.
P.L.
D''≡A''
C''≡B''
L.
H''≡E''
G''≡F''
o
T.
A'≡E'
B'≡F'
D'≡E'
C'≡G'
P.O.

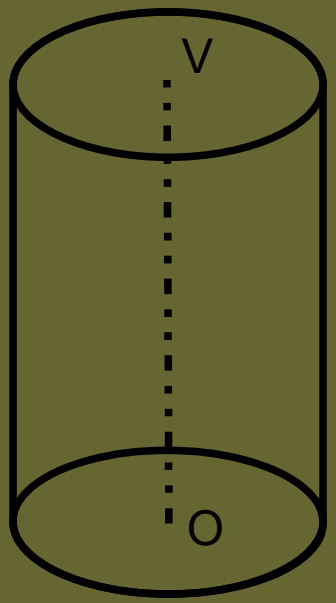

P.V.
P.L.
D''≡A''
C''≡B''
L.
H''≡E''
G''≡F''
o
T.
A'≡E'
B'≡F'
D'≡E'
C'≡G'
P.O.

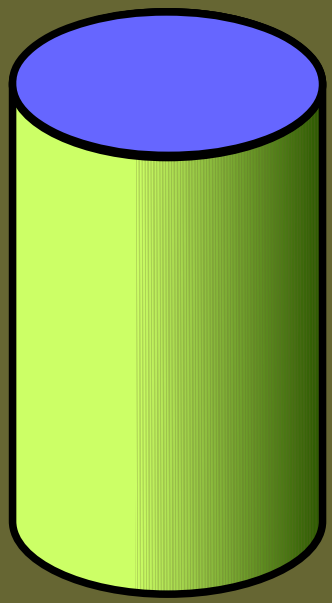

P.V.
P.L.
D II ≡ A II
C II ≡ B II
A III ≡ B III
D III ≡ C III
L.
H II ≡ E II
G II ≡ F II
o
E III ≡ F III
E III ≡ G III
T.
A
B I ≡ F I
A I ≡ E I
D I ≡ E I
C I ≡ G I
P.O.

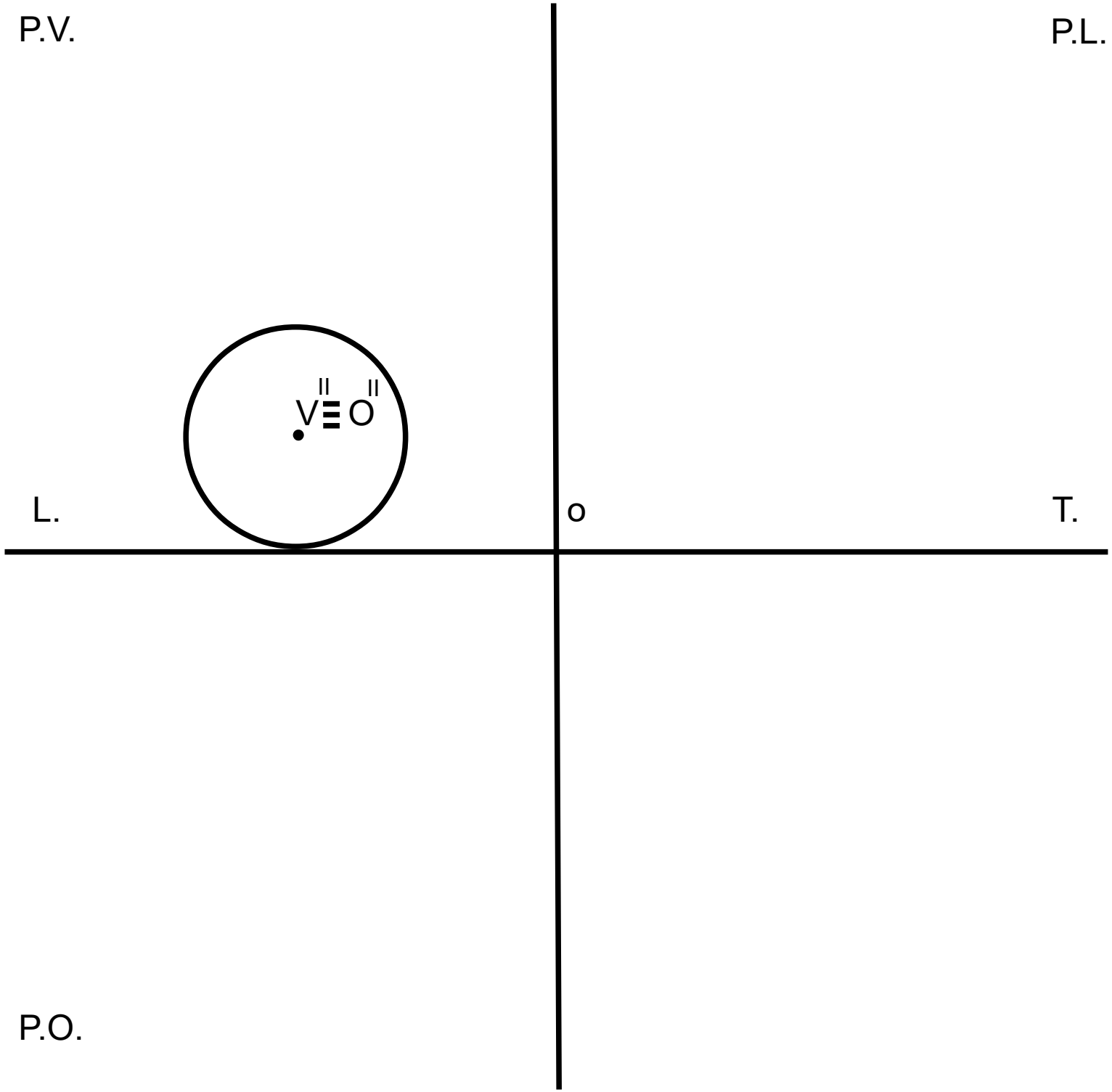


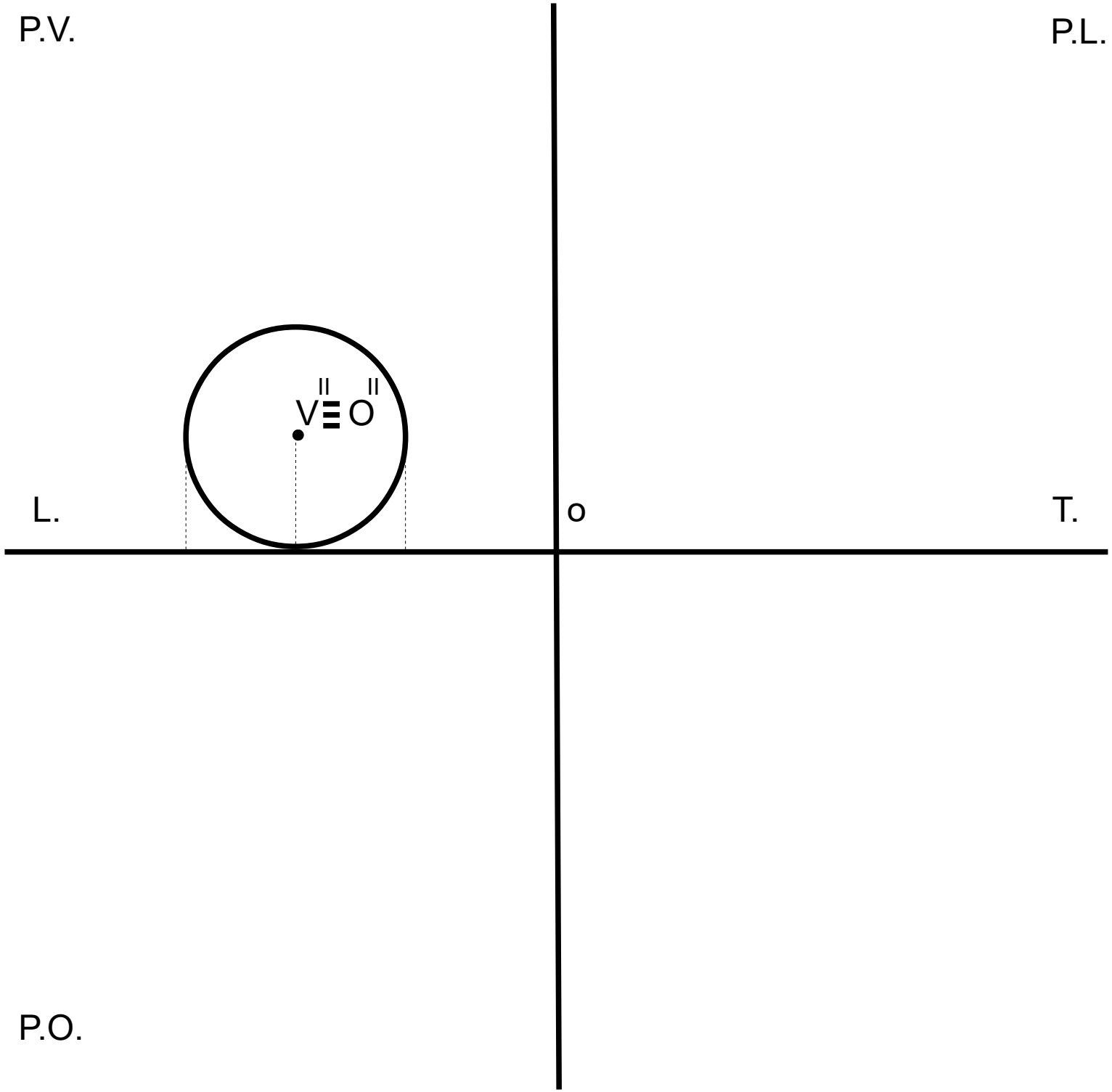

P.V.
P.L.
D^II ≡ A^II
C^II ≡ B^II
A^III ≡ B^III
D^III ≡ C^III
L.
H^II ≡ E^II
G^II ≡ F^II
o
E^III ≡ F^III
E^III ≡ G^III
T.
A^I ≡ E^I
B^I ≡ F^I
D^I ≡ E^I
C^I ≡ G^I
P.O.

TITOLO: proiezioni ortogonali di un cilindro, con base circolare parallela al piano verticale.






P.V.
P.L.
V
O
L.
o
T.
P.O.


P.V.
P.L.
V
O
L.
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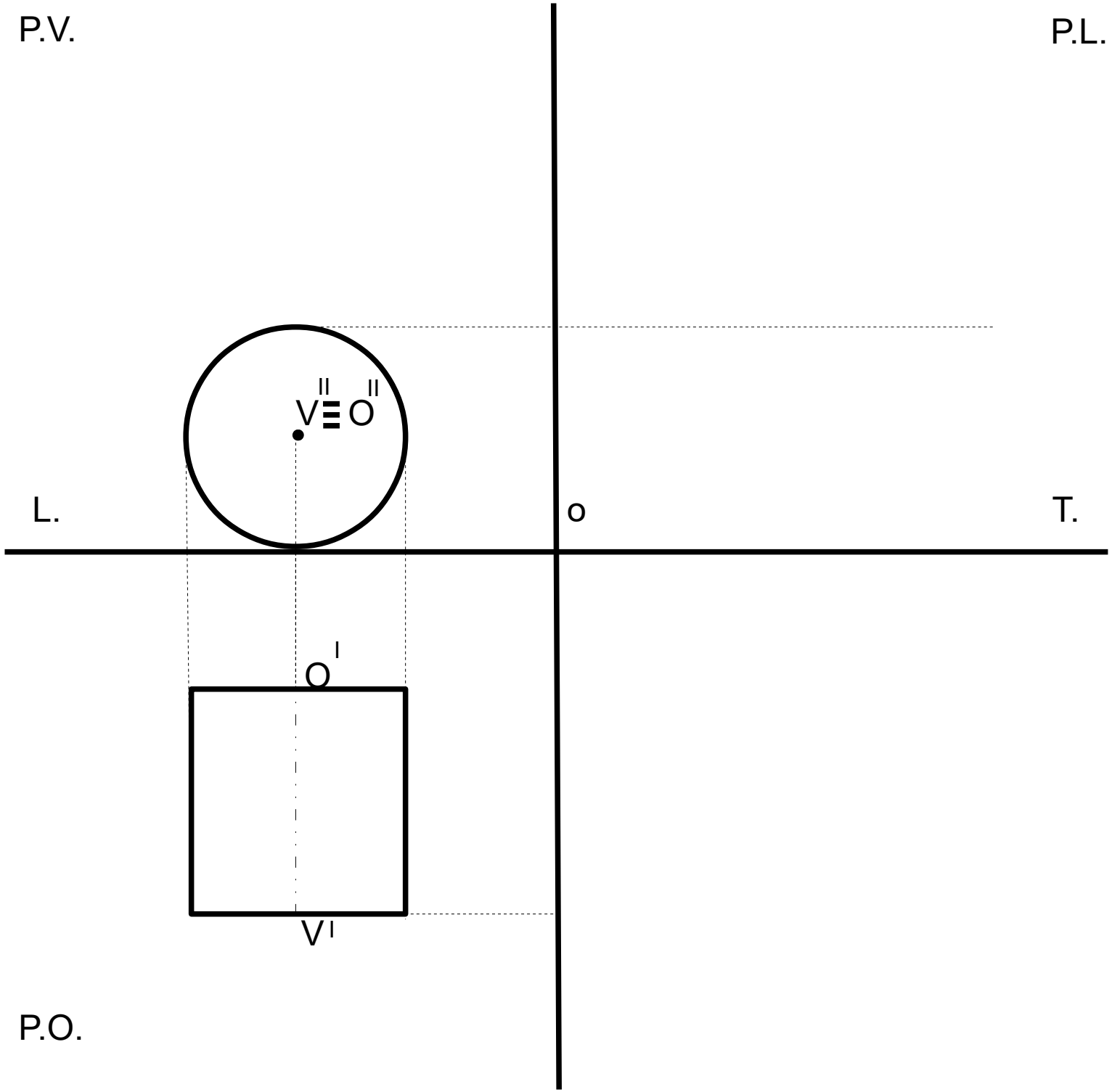
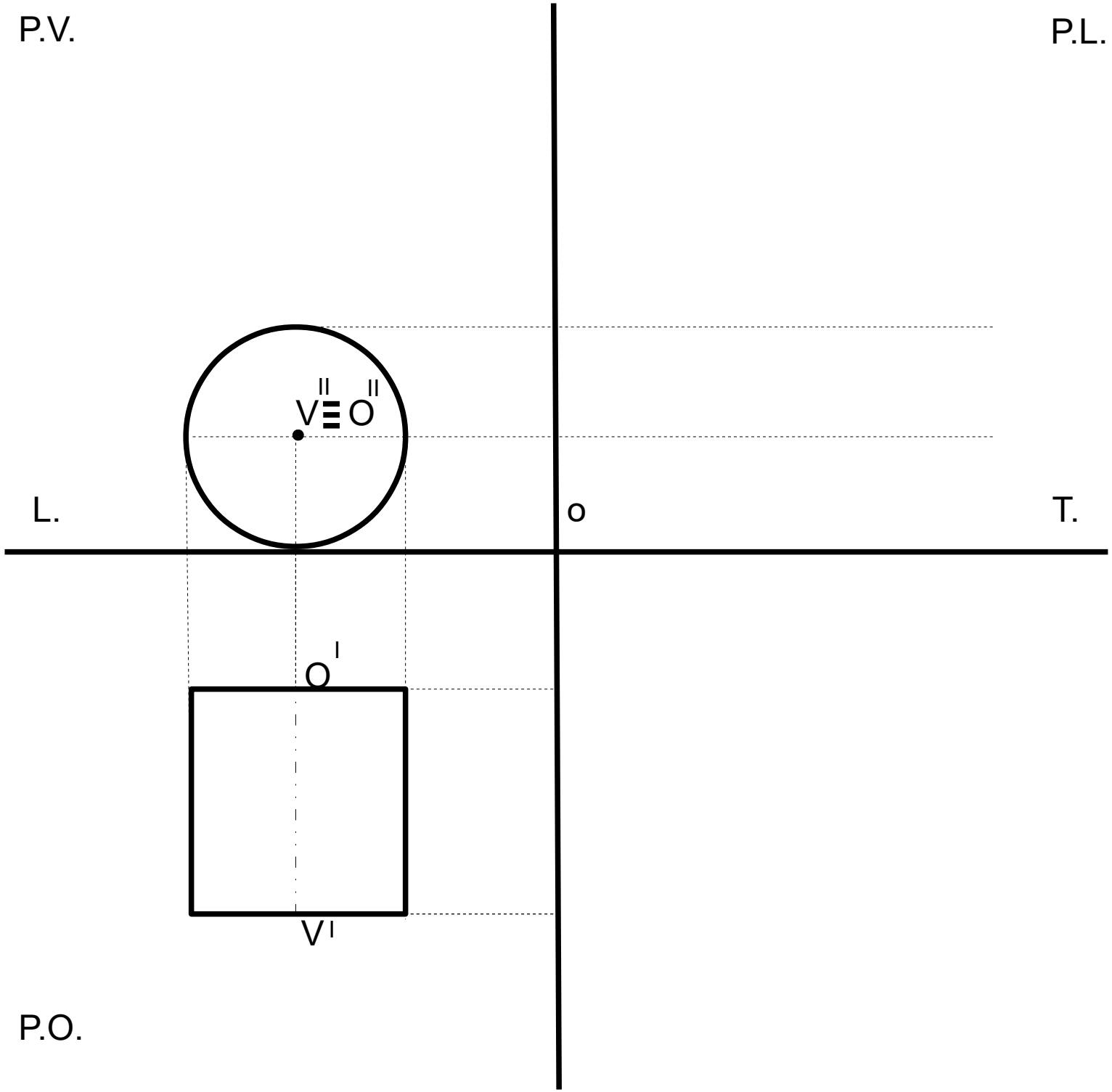
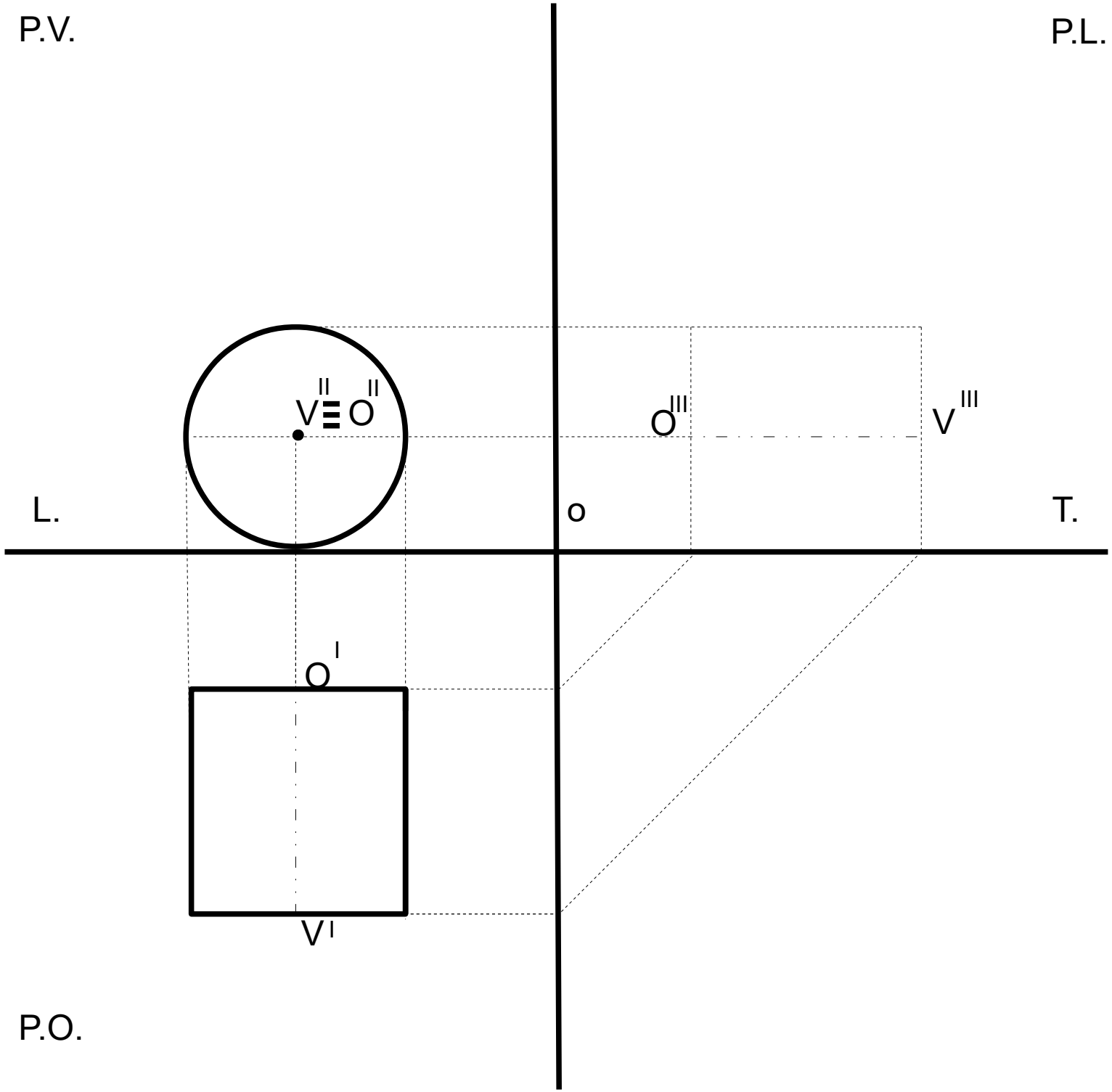
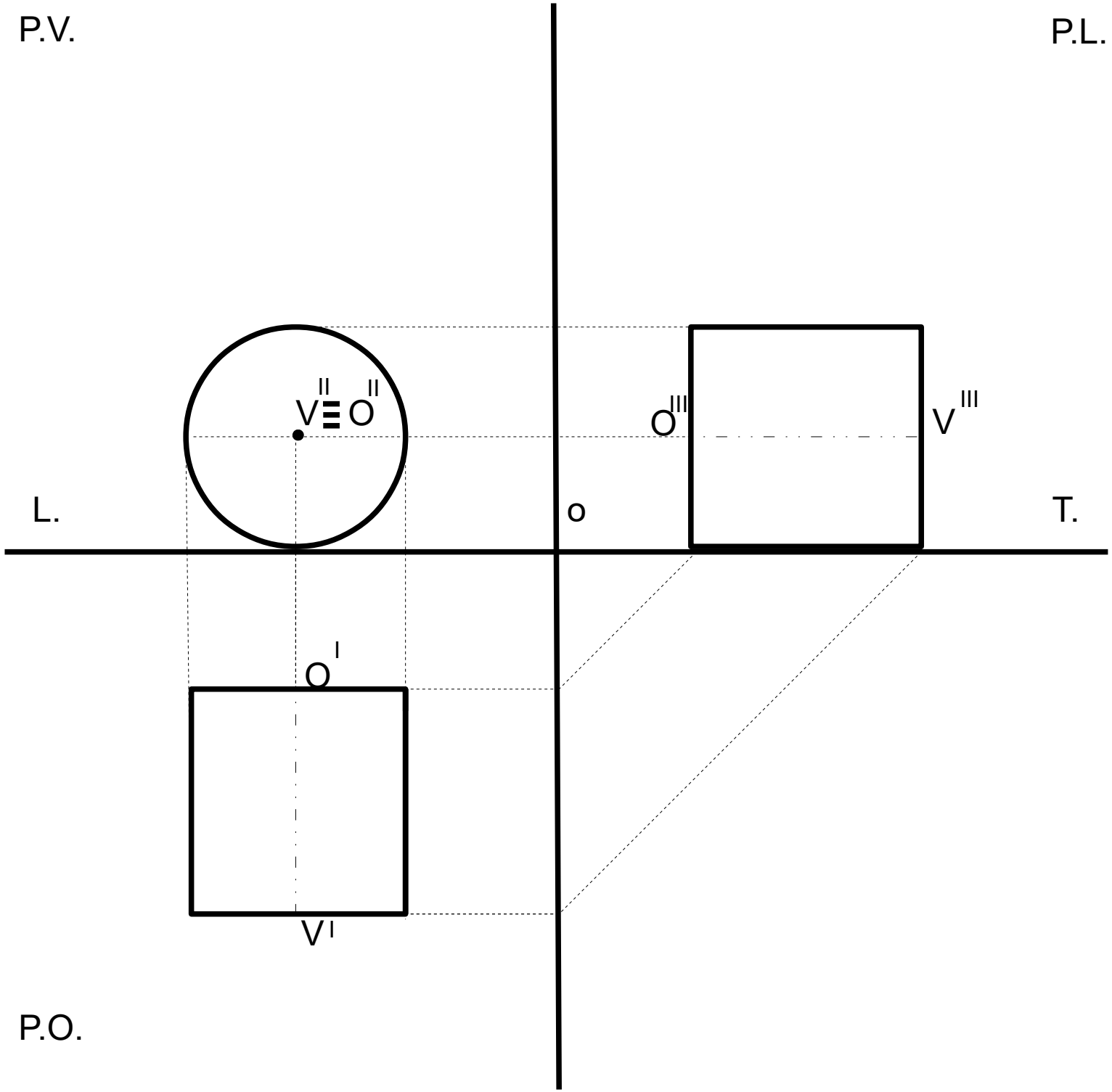
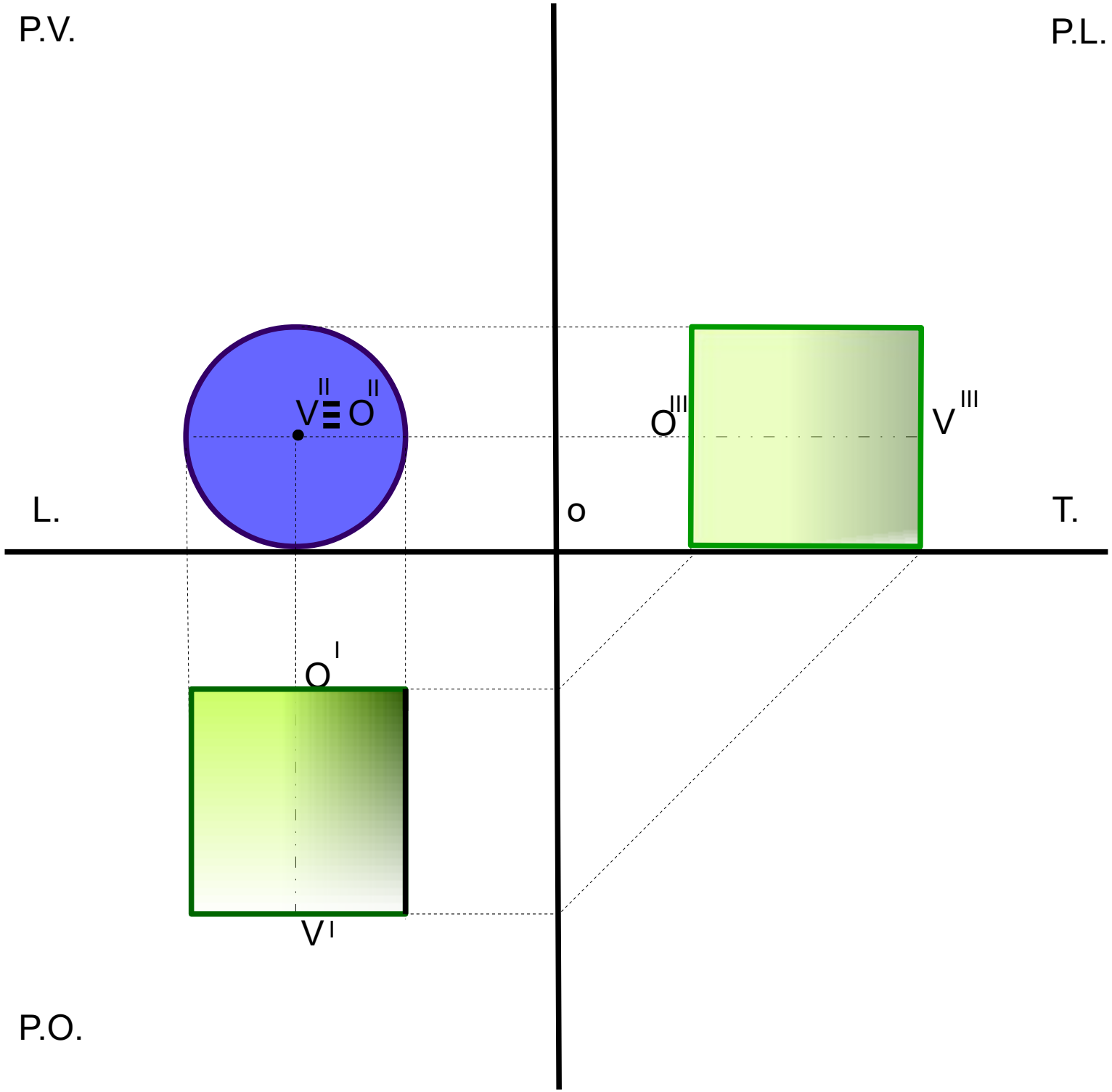
T.
P.O.

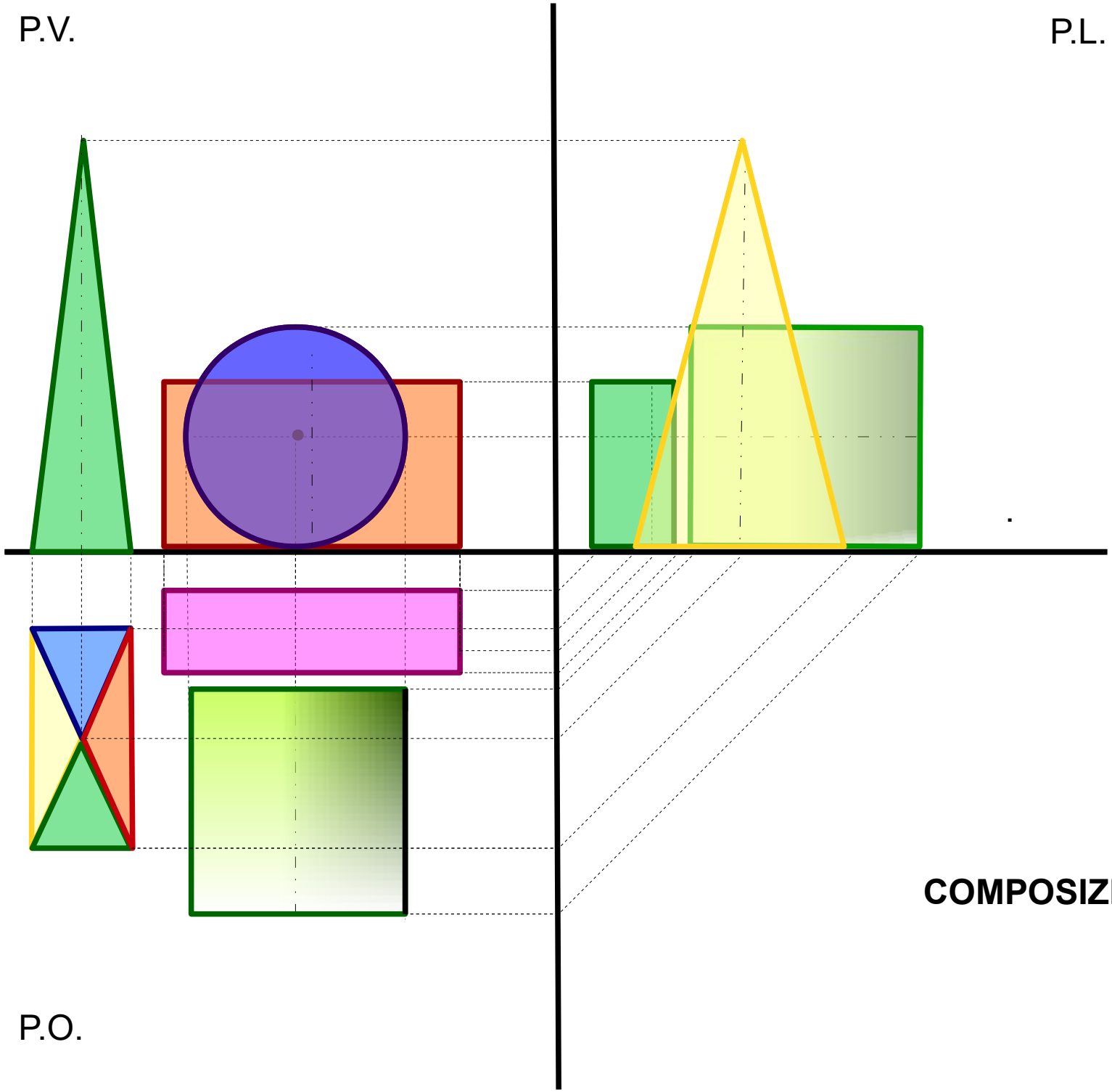

P.V.
P.L.
V II ≡ O II
L.
o
T.
O I
V I
P.O.


P.V.
P.L.
V II ≡ O II
L.
o
T.
O I
V I
P.O.


P.V.
P.L.
V II ≡ O II
O III
V III
L.
o
T.
O I
V I
P.O.


P.V.
P.L.
V II ≡ O II
O III
V III
L.
o
T.
O I
V I
P.O.


P.V.
P.L.
V II ≡ O II
O III
V III
L.
o
T.
O I
V I
P.O.



COMPOSIZIONE DI SOLIDI


CONTENUTI
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