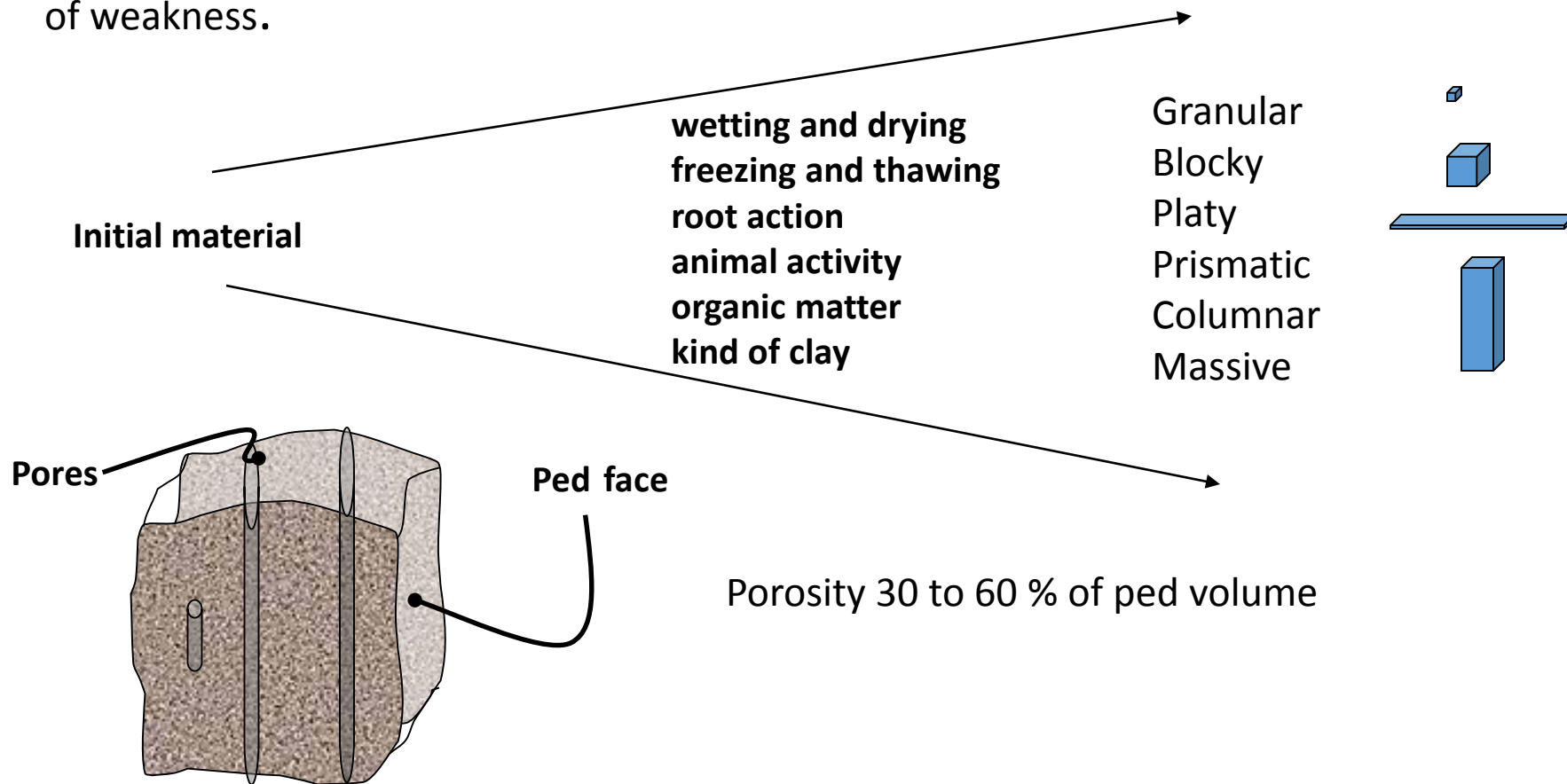


Soil Structure



Soil Structure - a definition

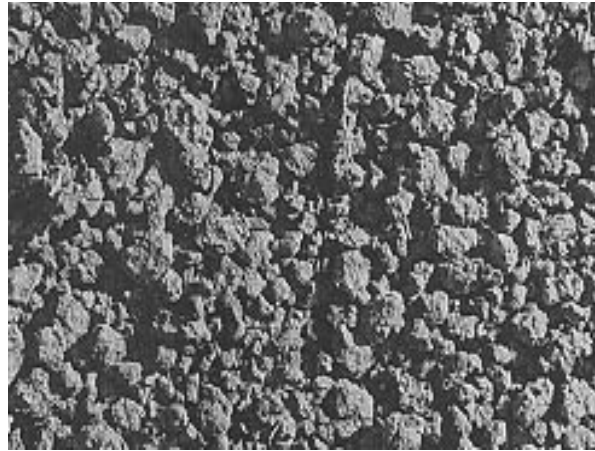
The aggregation of primary particles into secondary units surrounded by planes of weakness.



Soil Structure - Shapes

- Granular - peds are approximately spherical or polyhedral and are bounded by curved or irregular faces (A horizons)
- Platy - the peds are flat and “platelike”; they are usually oriented horizontally (E horizons)
- Blocky - somewhat “blocklike”; bounded by flat or slightly rounded surfaces; nearly equidimensional (Upper B horizons)
- Prismatic - peds are longer than they are wide (Lower B horizons)
- Massive – no structural units; material is a coherent mass (C horizons)
- Single grain – no structural units; entirely noncoherent; example is loose sand (C horizons)

Soil Structure - Shapes



- Granular - peds are approximately spherical or polyhedral and are bounded by curved or irregular faces (A horizons)



- Platy - the peds are flat and “platelike”; They are usually oriented horizontally (E horizons)

Soil Structure - Shapes



- Blocky - Somewhat “block like”. Bounded by flat or slightly rounded surfaces; Nearly equidimensional (Upper B horizons)



Angular Blocky



Subangular blocky

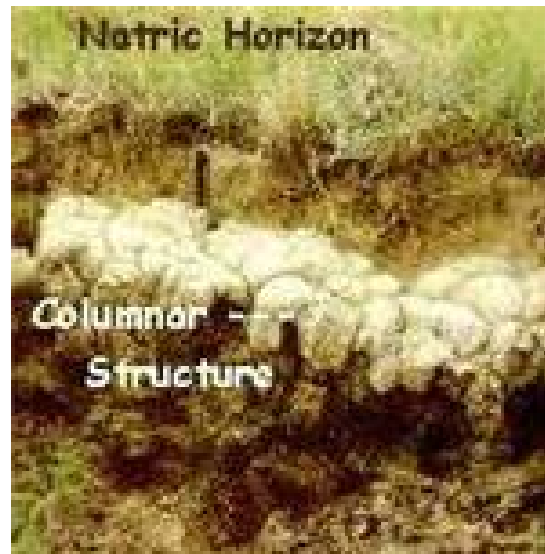


- Prismatic - Peds are longer than they are wide (Lower B horizons)

Soil Structure - Shapes



- Columnar – Similar to prismatic; vertically elongated units with rounded tops; found in natric horizons



Soil Structure

- Affects:

Pore space

Liquid and gas movement

Permeability

Structure is strongly correlated to many properties, particularly soil hydrology

