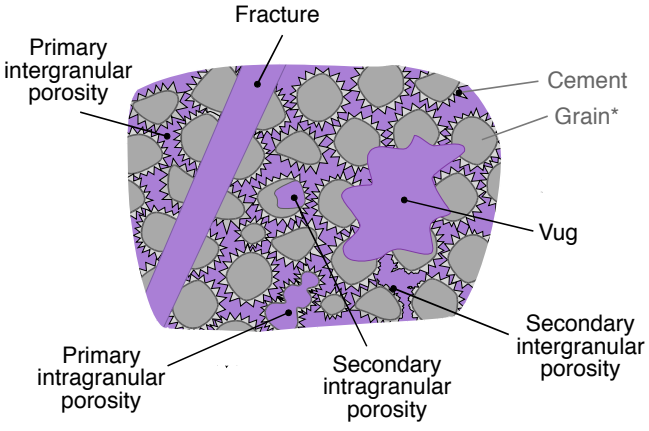
Categorization of pores in sedimentary rocks II

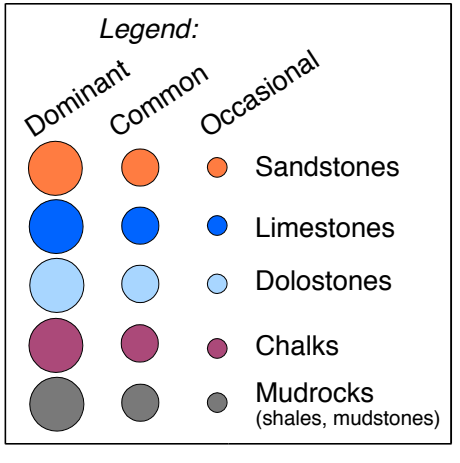
Categorization by time

Categorization by petrographic context	*Primary*	*Secondary*
Trans-rock	Conceptually impossible/ contradiction in terms	Fractures
Whole-rock	Conceptually impossible/ contradiction in terms	Porosity left by wholesale dissolution: vugs and caverns
*Intergranular**	Original pore space between grains (e.g. between siliciclastic sand grains, or between ooids or bioclasts)	Porosity left by dissolution of intergranular cement
*Intragranular**	Original pore space within grains, as in snail shells, foram tests, etc.	Porosity left by dissolution of grains (feldspars, aragonitic fossils) ("moldic" when complete)
*Intercrystalline**	Conceptually impossible/ contradiction in terms	Pores between secondary crystals, as in dolostones
Micro, as in microporosity	Original pore space in detrital clay or in microfossils.	Pore space in diagenetic clay (space may be primary, but pore is secondary)

Larger ↑ ↓ *Smaller*

Note that this field in effect rolls around to the secondary trans-rock field at upper right: the abundant fine pores of mudrocks and chalks become significant when the rock is fractured.





*In the discussion of sedimentary rocks, "grains" include siliciclastic grains, fossils, ooids, and pellets, and they are effectively any sedimentary depositional material distinguishable with a handlens. (Note that igneous and perhaps metamorphic petrologists use "grain" to be nearly synonymous with "crystal". In sedimentary petrology, a grain can consist of one or many crystals, and crystals of cement are definitely not grains).