# Three Dimensional Brillouin Zones

While the construction of Brillouin zones is simple, the results are not.

- Constructing Brillouin zones is a good example for the evolution of complex systems from the repeated application of simple rules to simple starting conditions - any **12**-year old can do it in two dimensions.
- Below the results for the first, second and third Brillouin zone (taken from the "Ashcroft/Mermin" and originating from the **1965** thesis of R. **Lück** (no computer graphics then!))
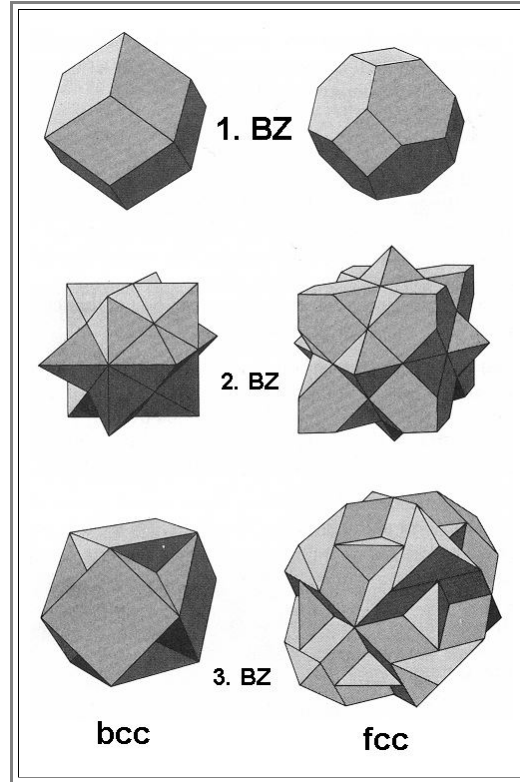
These pictures can be found in many text books, which shows that (in physics) you need not improve upon a good thing.