Transitions between configurations

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In this talk we briefly review (without aiming at completeness) various procedures by means of which new configurations can be obtained from old configurations. Among them, there are binary operations, like e.g. the *Cartesian product* and the *incidence sum*. Several other operations are collectively called the *Grünbaum calculus*. The *incidence switch* operation can be defined on the level of incidence graphs (also called Levi graphs) of configurations, and in some cases it is in close connection with realization problems of configurations as well as with incidence theorems. Considering point-line, point-circle and point-conic configurations, there are interesting ad hoc constructions by which from a configuration of one of these geometric types another one can be derived, thus realizing *transitions* between configurations in a very general sense. We also present interesting examples and applications. The most recent results mentioned in this talk are based on joint work with Tomaž Pisanski and Leah Wrenn Berman.