Angular momentum (AM) currents in spintronics are carried by conduction electrons, quasiparticle magnons, as well as macroscopic order-parameters. Depending on materials, one or all of these carries contribute to the AM current. I will discuss these AMs in several structure and materials. As an example, we show how the AM propagates in antiferromagnetic insulators and how the different types of AMs convert at interfaces. The results will be compared with recent experiments.