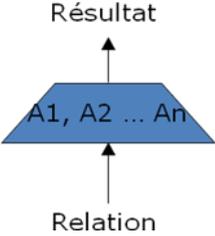
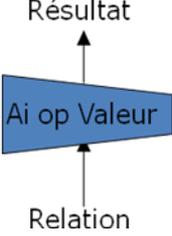
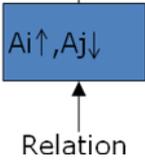
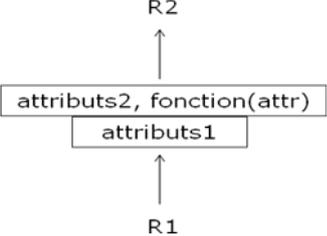
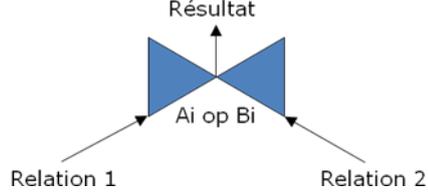
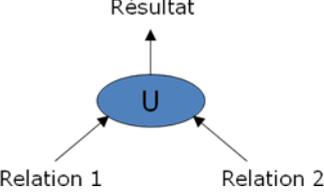
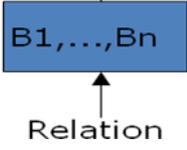


# Annexe : algèbre relationnelle et arbre algébrique

<p><b>Projection</b></p>  <p><math>\Pi_{A1, A2 \dots An}(\text{Relation})</math></p>	<p><b>Restriction</b></p>  <p><math>\sigma_{Ai \text{ op Valeur}}(\text{Relation})</math></p>	<p><b>Tri</b></p>  <p><math>\text{Tri}(\text{Relation}, Ai\uparrow, Aj\downarrow)</math></p>	<p><b>Agrégat</b></p>  <p><math>\text{attributs1}F_{\text{attributs2, fonction(attr)}}(R1)</math></p>
<p><b>Jointures</b></p>  <p>Relation1 <math>\bowtie_{Ai \text{ op } Bi}</math> Relation2</p> <p><math>\bowtie</math> : jointure à droite</p> <p><math>\bowtie</math> : jointure à gauche</p> <p><math>\bowtie</math> : jointure complète</p>	<p><b>Opérations ensemblistes</b></p>  <p>Relation1 U Relation2</p> <p>Autres opérateurs :</p> <p><math>\cap, -, \div, \times</math></p>	<p><b>Renommage (*)</b></p>  <p><math>\rho_{E(B1, \dots, Bn)}(\text{Relation})</math></p> <p><math>\rho_{(B1, \dots, Bn)}(\text{Relation})</math></p> <p><math>\rho_E(\text{Relation})</math></p>	

(\*) NB : pas de représentation sur un arbre du renommage du nom d'une relation)