```java
package player.playeragent;

import edu.neu.ccs.demeterf.demfgen.lib.List;
import edu.neu.ccs.evergreen.ir.Relation;
import gen.Constraint;
import gen.Literal;
import gen.RawMaterial;
import gen.RawMaterialInstance;
import gen.RelationNr;
import gen.Variable;
import gen.Weight;

public class ShannonFor
{
        public static RawMaterial shannon(RawMaterial c, Literal l)
        {
                List<Constraint> lc = c.instance.cs;
                List<Constraint> nc = List.create();

                for(int i = 0; i < lc.length(); i++)
                {
                        RelationNr r = lc.lookup(i).r;
                        Weight w = lc.lookup(i).w;

                        List<Variable> lv =  lc.lookup(i).vs;
                        if(lv.contains(l.var))
                        {
                                int index = lv.index(l.var);
                                Relation toReduce = new Relation(3, r.v);
                int relation = toReduce.reduce(index, l.value.sign());
                nc = nc.push(new Constraint(w, new RelationNr(relation), lv));
                }
                else
                {
                        nc = nc.push(new Constraint(w, r, lv));
                }
                }

                return new RawMaterial(new RawMaterialInstance(nc));
        }
}
```