──────────── MODULE *CJupiter* ────────────

VARIABLES *css*   *css*[*r*]: the *n*-ary digraph maintained at replica *r*

$NextEdge(r, u, g) \triangleq$ CHOOSE $e \in g.edge : \wedge e.from = u$
$\wedge \forall ue \in g.edge \setminus \{e\} :$
$(ue.from = u) \Rightarrow so(e.cop.oid, ue.cop.oid, serial[r])$

$Perform(r, cop) \triangleq$ LET $xform \triangleq xForm(NextEdge, r, cop, css[r])$
IN $\wedge css' = [css$ EXCEPT $![r] = @ \oplus xform.xg]$
$\wedge$ apply $xform.xcop.op$ to $list[r]$

$Do(c, op) \triangleq$ LET $cop \triangleq [op \mapsto op, oid \mapsto [c \mapsto c, seq \mapsto cseq[c]], ctx \mapsto ds[c]]$
$u \triangleq ds[c]$ $v \triangleq u \cup \{cop.oid\}$
IN $\wedge css' = [css$ EXCEPT $![c] =$
$@ \oplus [node \mapsto \{v\},$
$edge \mapsto \{[from \mapsto u, to \mapsto v, cop \mapsto cop]\}]]$
$\wedge$ apply op to $list[c]$; send cop to the *Server*

$Rev(c, cop) \triangleq Perform(c, cop)$

$SRev(cop) \triangleq \wedge Perform(Server, cop)$
$\wedge$ broadcast cop to clients other than $ClientOf(cop)$