Build a list $L_x$ containing all $x$-events;
Sort $L_x$;
Build adjacency matrix $adj$;
Build empty list $Q$;

foreach event $e : L_x$ do
  if $e$ is birth of semi-square $X$ then
    foreach Clique $C$ in $Q$ do
      if $X$ can be added to $C$ then
        $C$.add($X$);
      else
        if $X$ splits $C$ then
          Build candidate clique $C'$;
        end
    end
  end
  foreach Candidate clique $C'$ do
    if $C'$ is unique $\land$ not extendable then
      $Q$.add($C'$);
    end
  end
  if $X$ has not been added to any clique of $Q$ then
    $Q$.add($X$);
  end
else
  foreach Clique $C$ in $Q$ do
    if $X$ is $\in C$ then
      if $C$ has been extended since last deletion then
        print $C$;
      end
      delete $X$ from $C$; if $C$ is not unique $\lor$ $C$ is extendable then
        delete $C$ from $Q$;
      end
    end
  end
end