
```

01 a(visitor, X) ::
02     null  $\leftarrow$  chooseHost(Y, ListOfHosts)
03     then
04     whereabout  $\Rightarrow$  a(host, Y)
05     then
06     (
07         in(HabitatHost)  $\Leftarrow$  a(host, Y)
08         then
09             ((
10                 null  $\leftarrow$  sameHabitat(HabitatHost)
11                 then
12                     whichtrait  $\Rightarrow$  a(host, Y))
13                 or
14                 (
15                     null  $\leftarrow$  metaCommunity( )
16                     then
17                         whichtrait  $\Rightarrow$  a(host, Y))))
18             then
19                 availabletrait(Trait)  $\Leftarrow$  a(host, Y)
20                 then
21                     null  $\leftarrow$  haveTrait(Trait)
22                     then
23                         whichsize  $\Rightarrow$  a(host, Y)
24                         then
25                             size(TraitSize)  $\Leftarrow$  a(host, Y)
26                             then
27                                 (
28                                     null  $\leftarrow$  complementary(TraitSize)
29                                     then
30                                         null  $\leftarrow$  need(Amount, Reward)
31                                         then
32                                             exchange(Amount, Reward)  $\Rightarrow$  a(host, Y)
33                                             then
34                                                 offer(Offered)  $\Leftarrow$  a(host, Y)
35                                                 then
36                                                     null  $\leftarrow$  consumeResource(Offered, Reward)))
37                                 or
38                                 (
39                                     quit  $\Rightarrow$  a(host, Y))))
40             then
41     a(visitor, X)

```
