Hierarchy of Needs Architectural Model

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While Running Method
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* Is terminating condition #1 reached? YES → do terminating action; e.g., erase agent
* Is terminating condition #2 reached? YES → do terminating action; e.g., erase agent
* ETC. for each terminating condition.
* Once every (periodically):
  ** increment attribute for need #1
  ** increment attribute for need #2
  ** etc. for each controlling attribute
  ** message to self: CHECK NEEDS

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CHECK NEEDS METHOD.
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* Is the threshold for need #1 reached? YES → MANAGE NEED #1 METHOD
* Is the threshold for need #2 reached? YES → MANAGE NEED #2 METHOD
* ETC. for each need with a threshold.
* If no threshold has been reached, do the routine thing, such as moving randomly.

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MANAGE NEED METHOD - GENERIC
(method for each need)
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* Already at location to satisfy need?
  ** YES → SATISFY NEED METHOD
  ** NO → METHOD TO FIND NEED SATISFYING LOCATION

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SATISFY NEED METHOD - GENERIC
(method for each need)
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* Reset need attribute
  * Is final action required to satisfy need (e.g., consume food)?
    ** YES → FINAL ACTION METHOD

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FIND NEED METHOD -- GENERIC
(method for each need)
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* E.G., Hill Climb to search for need satisfier

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FINAL ACTION METHOD -- GENERIC
(method for each need)
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* E.g., set of rules to look for nearby satisfier.