Editor:

Q. How many AI people does it take to change a lightbulb?

A. At least 55:

*The problem space group (5):*
- One to define the goal state.
- One to define the operators.
- One to describe the universal problem solver.
- One to hack the production system.
- One to indicate about how it is a model of human lightbulb changing behavior.

*The logical formalism group (16):*
- One to figure out how to describe lightbulb changing in first order logic.
- One to figure out how to describe lightbulb changing in second order logic.
- One to show the adequacy of FOL.
- One to show the inadequacy of FOL.
- One to show that lightbulb logic is non-monotonic.
- One to show that it isn't non-monotonic.
- One to show how non-monotonic logic is incorporated in FOL.
- One to determine the bindings for the variables.
- One to show the completeness of the solution.
- One to show that the two just above are incoherent.
- One to hack a theorem prover for lightbulb resolution.
- One to suggest a parallel theory of lightbulb logic theorem proving.
- One to show that the parallel theory isn't complete. ... *ad infinitum* (or *absurdum*, as you will)....
- One to indicate how it is a description of human lightbulb changing behavior.
- One to call the electrician.

*The robotics group (10):*
- One to build a vision system to recognize the dead bulb.
- One to build a vision system to locate a new bulb.
- One to figure out how to grasp the lightbulb without breaking it.
- One to figure out how to make a universal joint that will permit the hand to rotate 360+ degrees.
- One to figure out how to make the universal joint go the other way.
- One to figure out the arm solutions that will get the arm to the socket.
- One to organize the construction teams.
- One to hack the planning system.
- One to get Westinghouse to sponsor the research.
- One to indicate about how the robot mimics human motor behavior in lightbulb changing.

*The knowledge engineering group (6):*
- One to study electricians’ changing lightbulbs.
- One to arrange for the purchase of the lisp machines.
- One to assure the customer that this is a hard problem and that great accomplishments in theory will come from his support of this effort. (The same one can arrange for the fleecing.)
- One to study related research.
- One to indicate about how it is a description of human lightbulb changing behavior.
- One to call the lisp hackers.

*The Lisp hackers (13):*
- One to bring up the chaos net.
- One to adjust the microcode to properly reflect the group’s political beliefs.
- One to fix the compiler.
- One to make incompatible changes to the primitives.
- One to provide the Coke.
- One to rehack the Lisp editor/debugger.
- One to rehack the window package.
- Another to fix the compiler.
- One to convert code to the non-upward compatible Lisp dialect.
- Another to rehack the window package properly.
- One to flame on BUG-LISPM.
- Another to fix the microcode.
- One to write the fifteen lines of code required to change the lightbulb.

*The Psychological group (5):*
- One to build an apparatus which will time lightbulb changing performance.
- One to gather and run subjects.
- One to mathematically model the behavior.
- One to call the expert systems group.
- One to adjust the resulting system so that it drops the right number of bulbs.

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