The calculation requires taking each pair of goals and situations, multiplying the probability of the situation times the product of the weight of the goals and the degree to which it is estimated the goal will be satisfied by doing A if the situation arises, then taking the sum of all these calculations. The action which gets the highest V(A) is then the best means.

There are numerous problems with this proposal as a model for how decisions ought to be made, but it will serve to highlight the typical mistakes or fallacies committed by decision makers. Fallacies can readily be seen on the above model as falling under three general headings:

A. Neglect of relevant alternative actions.
B. Neglect of relevant goals.
C. Miscalculation of best means.

I shall consider these in turn. The concern of the classification is not to present a highly analytical and exhaustive list of errors in practical reasoning, but to provide a useful and intuitive selection of typical errors. I hope that the readers will have the same response as many of my students, who spontaneously offered examples from their own experience of commission of these fallacies.

Under the heading of neglect of alternative actions, I include the following:

F1. Decidophobia. Many people put off making decisions to the point when a decision is implicitly made, since the alternative actions have narrowed to one. In contrast to theoretical inference, in practical inference not making a decision can be tantamount to making one. The opposite of decidophobia is hyperdecisiveness, the compulsion to make decisions as quickly as possible, which can lead in a different way to neglect of alternative actions and goals.

F2. Conservatism. This is choosing an action primarily because you have always done things that way, rather than considering new possible actions.

F3. Novelty. This is choosing an action primarily because you have not tried before.

F4. Flip flop. This is choosing an action primarily because it is very different from what failed to work last time. It is commonly committed by economic advisors and people on the emotional rebound.

F5. Sunk costs. This consists in sticking with a given course of actions just because you have invested so much in it in the past, despite its having poorer future prospects than alternative actions you do not consider. Fallacies F1–5 have in common that they lead people to violate the normative standards of decision making by unduly restricting the range of alternative actions to be considered seriously.

People also frequently fall short in their decision making by neglecting relevant goals. Under this general heading, I offer two very informal fallacies:

F6. Monomania. This fallacy is committed when a decision is made on the basis of only one goal or a very
narrow set of goals. For example, students today are often making career decisions exclusively base on monetary considerations, neglecting social and emotional goals.

F7. Individualism. Here I am making the audacious suggestion that it can be illogical to be unethical. Ethically, and I think logically, the goals which a decision maker takes into account should include the interests of others.

Besides taking into account a good range of actions of goals, decision makers need to integrate considerations about probabilities and expected satisfaction of goals in possible situations. People sometimes go wrong in the following ways.

F8. Excessive rationality. This tongue-in-cheek name refers to applying the whole complicated apparatus of decision making when the situation is not important enough to bother.

F9. Sour grapes. This consists in lowering your estimate of the desirability of an outcome just because it has low probability, i.e. undervaluing \( D(G_j, A & S) \) just because of low \( P(S_j) \).

F10. Wishful thinking. In contrast to F9, this consists of raising your estimate of the desirability of an outcome just because it has high probability. For example, job candidates often find a job more and more attractive as the probability increases that they will be hired. After a job interview at Podunk U., a candidate will often start thinking about all the positive attributes of Podunk.

F11. Sure thing. This frequently-committed fallacy consists in choosing an action just because it gives a very high probability of some modest payoff, when another action has higher expected value. This might not be fallacious if the decision maker has a highly weighted goal of avoiding the stress associated with uncertainty. Commission of any of F8–11 can lead to a miscalculation of the best means and a less than optimal practical inference.

The above list of fallacies of practical reasoning is by no means exhaustive, and its analytical limitations are obvious. As with any discussion of fallacies, there is a need for detailed specification of when an argument pattern is fallacious, and when it is instead an approximation to another, more valid pattern. But I hope that this preliminary list will be useful to those interested in constructing a richer logic of decision and in teaching the rudiments of decision making to their students.

Notes


Professor Paul Thagard, Department of Humanities, University of Michigan—Dearborn, Dearborn, MI 48128, U.S.A.

announcement

Second International Symposium
On Informal Logic
June 20-23, 1983
University of Windsor

Chairpersons
J. Anthony Blair & Ralph H. Johnson

The program planning for SISIL is well underway. A number of speakers have been lined up, and several additional submissions have been received so far. The deadline for submitted papers is January 6, 1983. If you have a paper in preparation and will have trouble meeting that deadline, please contact one of the Symposium co-chairpersons. Offers to run workshops are still invited.

On the program to date:

Robert Ennis
Richard Paul
Robert Fogelin
Robert Pinto
Trudy Govier
Perry Weddle
Jaakko Hintikka
Barrie Wilson
Merrill Hintikka
John Woods
David Hitchcock
George Yoos
John McPeck

The Symposium will begin after lunch on Monday, June 20th, and proceed through a program of morning, afternoon and evening sessions until Wednesday evening, June 22nd. Papers will be a half-hour read, followed by discussion. Ample time is planned for breaks and conversation between talks, as well as for leisurely meals. Thursday morning, June 23rd, will be devoted to workshops, and the Symposium will end at midday.

Slated so far are workshops on teaching reasoning skills in elementary and in high school. We would like to have other workshops on teaching methods used at college and university level courses. These could vary from outlining curricula to more specific topics such as: testing, the use of A/V tools, the use of the media, course segments such as teaching problem-solving or decision-making, tie-ins with rhetoric or politics, use of computers, how to increase enrolments, infiltrating other academic disciplines. . . . The list is as unlimited as your imagination. Space and time restrictions may force us to be selective, but all suggestions are welcome at this point.

For accommodations, as many air-conditioned rooms (with openable windows) as will be needed will be reserved in the University residences at modest rates. Inexpensive meals will be available as a package from the University cafeteria, and a barbecue, a banquet and a reception are being planned. Baby-sitting can be provided. Private motels, hotels and restaurants are also plentiful in Windsor, a city of 200,000. Details about housing and meals, with a reservation form and travel information will be sent to all Newsletter subscribers, as well as to others.