

# NONCOMPREHENSIVE AND CONDITIONAL RATIONALITY

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Rationality's evaluations of beliefs, desires, and acts are variable in at least two ways. First, its evaluations have variable scope. For example, an act's evaluation may assess the world that would be realized if the act were performed, or, less comprehensively, the act's causal consequences. Second, rationality's evaluations may be conditional. For example, an act's evaluation may assess the act granting the agent's beliefs and desires, however irrational they may be. This essay characterizes noncomprehensive and conditional evaluations. Then it uses distinctions in types of evaluation to resolve puzzles about rationality's evaluations. The puzzles concern the principle that "ought" implies "can," Newcomb's problem, and the conflict between actualism and possibilism. The essay's final section formulates a principle of detachment for a type of conditional rationality that grants mistakes the condition includes.

## I. Noncomprehensive Rationality

Rationality's evaluations have variable scope. Some evaluate a decision taking for granted the agent's beliefs and desires, whereas others evaluate it taking account of the agent's beliefs and desires, in particular, those on which the decision rests. Taking beliefs and desires for granted yields an instrumental evaluation of the decision. Appraising the beliefs and desires grounding the decision, in the course of evaluating the decision, increases the evaluation's comprehensiveness. It makes the evaluation more demanding than is a merely instrumental evaluation. A person who forgoes air travel because of an irrational fear of flying decides in accordance with preferences but has defective preferences. Despite his decision's instrumental rationality, his decision is irrational overall. It does not follow his preferences after their hypothetical correction for inexcusable, corrigible errors, and so revised to accord with reasonable beliefs and desires. The person's choice is rational taking his preferences for granted, yet irrational all things considered. A comprehensively rational decision is not only instrumentally rational but also is rationally grounded in beliefs and desires. It either rests on rational beliefs and desires or is equivalent to a decision that rests on rational beliefs and desires.

An act's evaluation may separate the act and the reasons that prompt it. A noncomprehensive evaluation may evaluate an act without evaluating the reasons for it. It may conclude that an act is rational although its origin is defective. Evaluation of an act is more or less comprehensive depending on whether it includes an evaluation of the act's grounds. Comprehensive rationality has wide scope. Standards of comprehensive rationality for an act consider the act and its origin in beliefs, desires, motives, intentions, and character. A comprehensive evaluation does not take goals for granted and may declare an act irrational because it serves irrational goals. Noncomprehensive rationality has narrower scope. Its standards take for granted some features of the act's context. An evaluation's scope may affect its verdict, of course. An act not comprehensively rational because of flaws in its origin may be noncomprehensively rational putting aside those flaws.

An act's evaluation considering the agent's circumstances may be more comprehensive than its evaluation for instrumental rationality only, that is, as a means of attaining the agent's goals. The evaluation may not take for granted the act's circumstances. It may consider whether the agent took advantage of opportunities to improve prospects of attaining her goals. A goal motivates strategic acts such as putting oneself in position to reach the goal. An act's evaluation may examine the agent's control over circumstances as well as the act's responsiveness to circumstances. An act may be irrational because it issues from the agent's bad character and missed opportunities to improve it. A comprehensive decision principle evaluates preparations for a decision as well as the decision itself.

Comprehensive rationality does not ensure full rationality because it forgives inconsequential irrational components. For example, suppose that a shopper irrationally forms a preference for overpriced cherries instead of bananas. Then he rationally forms a preference for bargain apples instead of cherries and also instead of bananas. Finally, he rationally buys apples. The irrational initial step is inconsequential and so forgiven. The sequence is comprehensively rational although not fully rational. A sequence of steps may have a few irrational components and yet be comprehensively rational. The sequence's comprehensive rationality entails the rationality of significant steps only.

In ideal cases with fully rational agents, changing evaluative scope does not alter evaluations. If a decision is rational taking for granted an ideal agent's beliefs and desires, it is also rational not taking for granted those beliefs and desires. Noncomprehensive and comprehensive evaluations agree in ideal cases.

## 2. Conditional Rationality

Some evaluations for rationality are conditional. For example, a decision may be rational given time pressure although not rational in the absence of time pressure. Many common standards of rationality make assumptions that put aside cognitive limits and obstacles to goals of rationality. They apply to ideal agents in ideal circumstances.

Conditional rationality is similar to but distinct from noncomprehensive rationality. Conditional rationality is rationality with respect to an assumption, whereas noncomprehensive rationality is rationality given limited evaluative scope. The two types of evaluation agree in some cases. A conditional evaluation that assumes an agent's probability and utility assignments is equivalent to a noncomprehensive evaluation that does not assess those assignments. However, the two types of evaluation may diverge. A lottery-ticket holder may fancifully entertain acts that are comprehensively rational given the counterfactual supposition that she has won the lottery. Assuming a winning ticket is not equivalent to narrowing evaluative scope. Comprehensive rationality may be conditional. It may introduce hypothetical conditions without ignoring any mistakes.

Conditional rationality comes in two forms. One grants mistakes that an assumption covers. Another does not grant those mistakes. The first arises in evaluation of an agent's options granting his preferences as they are. The second arises in evaluation of an agent's options if his preference ranking of options were reversed, or if his set of options were larger. Conditional rationality not granting mistakes obeys the law of detachment. If an act is rational given some hypothetical circumstances, then if the circumstances were to obtain, the act would be rational. Conditional rationality granting mistakes has an evaluative, noninferential purpose. It does not obey the rule of detachment. An agent may choose rationally given the options he considers but may also inexcusably fail to consider a top option and so choose irrationally. An option rational granting past mistakes may not be rational nonconditionally because past mistakes may influence current options. If one paints oneself into a corner, one's subsequent act, although the best of a bad lot, may be irrational overall because one should have avoided the predicament.

Conditional rationality granting mistakes restricts evaluative scope. It puts aside mistakes in background conditions when it assumes those background conditions. The conditions it entertains may simultaneously introduce hypothetical circumstances and also put aside evaluation of circumstances. For example, it may evaluate an option given the agent's consideration of a set of

options larger than those actually considered but still omitting the best option. It puts aside considerations, but not as noncomprehensive rationality does. Noncomprehensive rationality puts aside some areas of evaluation and does not let their evaluation affect its evaluation. Conditional rationality granting mistakes puts aside all and only mistakes in the circumstances it assumes. For instance, take the comprehensive rationality of an option given the options the agent considers. The evaluation assesses the rationality of preferences among options considered but not the rationality of the agent's consideration of options. It is as comprehensive as the condition allows because on its own it does not put aside any area of evaluation.

Rationality's sensitivity to circumstances does not make it invariably conditional. Permissible goals an agent adopts ground the nonconditional rationality of acts that serve those goals. Even if rationality does not require those goals, the acts are nonconditionally rational and not merely rational given the goals. Conditional rationality and noncomprehensive rationality use the same concept of rationality with respect to different conditions and with varying evaluative scope to obtain a variety of standards of evaluation.

### 3. Applications

Distinctions concerning rationality's evaluations resolve puzzles concerning its evaluations. This section treats a dilemma about obligation and ability, Newcomb's problem, and the conflict between actualism and possibilism.

The word "ought" has comprehensive and noncomprehensive senses corresponding to an evaluation's comprehensive and noncomprehensive scope. An agent ought, in the comprehensive sense, to adopt an option that is comprehensively rational. An agent ought, in a noncomprehensive sense that takes some circumstances for granted, to adopt an option that is noncomprehensively rational, taking those circumstances for granted.

Suppose that a person puts herself out of position to perform an obligatory act. For example, she may spend her rent money on a party so that she cannot give the landlord the amount she promised. The payment may still be obligatory in a comprehensive sense, although she cannot make it. However, it is not obligatory in the noncomprehensive sense that grants current conditions as they are. The principle that "ought" implies "can" assumes the noncomprehensive sense of "ought." It grants current conditions as they are, even if they are the result of mistakes. Hence, willful incapacitation to fulfill an obligation

does not refute the principle that “ought” implies “can.” Limiting obligation’s scope preserves the principle.

The distinction between comprehensive and noncomprehensive rationality also aids analysis of Newcomb’s problem. In this problem an agent may take an opaque box, or that box together with a transparent box that contains a thousand dollars. The opaque box contains one million dollars if a reliable predictor said the agent would take only it. Otherwise, it is empty. The common wisdom holds that two-boxing is rational because it dominates one-boxing. However, an agent is not fully rational if he takes two boxes. Although a two-boxer acts rationally given his circumstances, his act springs from a mistake. His act shows that he has missed an opportunity to prepare for Newcomb’s problem. Before the problem arose, he could have made himself a one-boxer so that he would likely be rich when he exits the problem. Acquiring the disposition to one-box is rational even if the disposition yields an irrational act. A maximally rational agent acquires that disposition.

Although two-boxing indicates incomplete rationality, it does not indicate a lack of comprehensive rationality. A two-boxer’s mistaken preparation is inconsequential for rationality’s evaluation of his choice. Given any choice-disposition, two-boxing is the rational choice. Hence, two-boxing is rational both granting and not granting a two-boxer’s choice disposition. Proponents of one-boxing rightly note that two-boxing manifests some irrationality. However, not attending to the difference between full and comprehensive rationality, they wrongly conclude that two-boxing is not comprehensively rational.

Jackson and Pargetter (1986) present another puzzle concerning evaluation. When an agent will make a mistake, does the act he ought to perform now compensate for his future mistake? According to actualism it does, whereas according to possibilism it does not. Attending to distinctions between types of evaluation resolves this conflict.

Consider a sick person contemplating treatments. Taking medicine *A* today and tomorrow is better than taking medicine *B* today and tomorrow. Because mixing medicines is bad, if she will take medicine *B* tomorrow, she should take medicine *B* today. Suppose that she will take medicine *B* tomorrow. Nonetheless, she should not take medicine *B* today. She should take medicine *A* tomorrow and should take it today as well. In this case the conditional obligation to take *B* today does not detach because the condition, taking *B* tomorrow, involves a mistake. Possibilism characterizes nonconditional obligation, whereas actualism characterizes only conditional obligation.

Jackson and Pargetter entertain a type of conditional obligation that does not grant mistakes and obeys the rule of detachment. Accordingly, if the sick

person has the conditional obligation to take medicine *B* today given that she will take it tomorrow, then given the facts of the case, she has the nonconditional obligation to take medicine *B* today. They conclude that recognizing conditional obligation does not resolve the conflict between actualism and possibilism. However, a second type of conditional obligation that Section 2 introduces does not obey the law of detachment. It grants mistakes in the condition and agrees with an act's noncomprehensive evaluation putting aside those mistakes. In the case of the medicines, the sick person has a conditional obligation, in the nondetachable sense, to take medicine *B* today given that she will take it tomorrow. Conflict between actualism and possibilism subsides given that actualism describes nondetachable conditional obligations.

#### 4. Detachment

The previous sections distinguish two types of conditional rationality. One type grants mistakes in the condition and does not generally furnish detachable evaluations. This section formulates a restricted principle of detachment for it.

Broome (2000: 203–204; 2002: 92–95) examines requirements of rationality concerning intentions. Suppose that one has an obligation to intend the means if one intends the end. One may meet this obligation by either not intending the end or by intending the means. Consequently, if one intends the end, one may not be obligated to intend the means. Intending the end may be bad. Then instead of intending the means, one should cease intending the end. When one intention rationally requires another and a person has the first intention, the second intention, nonetheless, may not be a requirement because the first intention is not a requirement.

To present Broome's views, Kolodny (2005: Sec. 1) distinguishes wide and narrow scope of obligation. An obligation of wide scope, covering a conditional, does not imply an obligation of narrow scope, covering the conditional's consequent, when the conditional's antecedent obtains. Granting that it ought to be that if *A* then *C*, *A*'s realization does not entail that it ought to be that *C*. The requirements of rationality that Broome examines have wide scope and do not imply requirements of narrow scope. They are not subject to a law of detachment.

The type of conditional rationality that grants mistakes resists detachment but does not issue requirements of wide scope. It is similar in structure to conditional probability. Just as conditional probability is neither the probability of a conditional nor the probability of a conditional's consequent if the ante-

cedent is true, this type of conditional rationality is neither the rationality of a conditional nor the rationality of a conditional's consequent if the antecedent is true. A requirement of conditional rationality has neither wide nor narrow scope as Kolodny distinguishes these types of scope.

For fully rational agents, who have no mistakes to grant, conditional requirements granting mistakes are equivalent to conditional requirements not granting mistakes, and so are subject to detachment. For such ideal agents, conditional requirements, when their conditions are met, entail nonconditional requirements. Suppose, for example, that a fully rational agent has a conditional requirement to intend the means if she intends the end. Then if she intends the end, she should also intend the means. No irrationality in intending the end undercuts the nonconditional requirement.

May detachment sometimes fail even for fully rational agents? Take the following conditional requirement: If one prefers vanilla to chocolate, then one should pick vanilla instead of chocolate. Detachment seems to fail despite the preference's full rationality. A fully rational agent with the preference has no obligation to pick vanilla. Rationality does not require that he prefer vanilla to chocolate, so he may reverse his preference without departing from full rationality. The agent may either reverse his preference, or pick vanilla instead of chocolate. He has an option besides picking vanilla. Full rationality under  $A$ 's realization seems not to suffice for detaching an obligation that  $C$  from the conditional obligation that  $C$  if  $A$ . In cases where  $A$  arises arbitrarily,  $A$ 's realization seems not to rest on reasons, and so not to require  $C$ 's realization.

A principle of conservatism rebuts this counterexample to detachment given full rationality. Suppose that a basic preference is formed rationally in light of experience. Then if following it requires an act, the act is required. Having rationally formed the preference itself provides a reason for maintaining the preference. So the preference's removal requires a reason. Unless a reason arises to rescind the preference, it should persist. New reasons may come from many sources. For example, an aversion to performing an act the preference requires is a reason for abandoning the preference. Absent a reason to remove the preference, however, an agent's act ought to respond to the preference. This conservatism grounds detachment of the conditional requirement to perform the act.

If one prefers vanilla to chocolate but is about to choose chocolate, one should not reverse the preference just so that one's preference coheres with one's choosing chocolate. One should instead change one's choice. Having a preference, one should choose in accord with it unless one has a reason to remove the preference. Although rationality does not require a preference for either vanilla or chocolate, after forming a preference, rationality requires choice in

conformity with the preference. Because of the principle of conservatism, for a fully rational agent a conditional requirement that ( $C$  if  $A$ ) supports a requirement that  $C$  when  $A$  is realized.

Principles of detachment for requirements of conditional rationality make those requirements useful for calculating acts that are nonconditionally rational, at least in ideal cases. Also, as the previous section shows, attending to noncomprehensive and conditional rationality resolves several puzzles about rationality's evaluations. Noncomprehensive and conditional rationality are therefore valuable components of a theory of rationality.

## References

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