Circumstantial Attitudes and Benevolent Cognition

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Introduction

An agent's beliefs, desires, and other cognitive attitudes depend not only on the agent's mental states and various necessary (or at least universal) facts connecting mental states with the rest of the world, but also on contingent circumstances that vary from individual to individual.

This circumstantial nature of the attitudes is a more or less direct consequence of the circumstantial nature of reference. If the object an idea is about depends on such circumstances as the causal paths leading to its occurrence, the identity of the agent, and the time and place of cognition, then what the agent believes or desires in virtue of the cognitions of which that idea is a component will vary with these contingent facts too.

The circumstantial nature of the attitudes strikes many philosophers as puzzling, inappropriate, or even unacceptable. Sometimes it is thought that there must be a layer of noncircumstantial attitudes underlying the circumstantial ones; this is one thought behind the *de dicto* vs. *de re* distinction. Sometimes it is supposed that the whole line of reasoning that leads to the circumstantial nature of the attitudes must be confused.

A central cause of puzzlement is the idea that the circumstantial nature of the attitudes would render inexplicable the regular nomic links between what we believe and desire and what we do. But these nomic links are a central part of commonsense psychology, our conception of how we work.

In this paper, I claim that the circumstantial nature of the attitudes does not threaten, but rather renders intelligible, this insight of commonsense psychology. I do this by showing how an appreciation of the circumstantial nature of the attitudes allows us

to state a central principle of the commonsense view. The basic idea is that it is a complement to the long-recognized circumstantial nature of action.

Benevolent Cognition

Fairly often, what we do helps us get what we need. This fact is the result of two others. First, our beliefs often correspond to the facts fairly well, and our desires often correspond to our needs fairly well. Second, the actions that we perform because we have certain desires and beliefs, are often of a sort that will promote the satisfaction of the desires if the beliefs are true. It is this second fact on which I shall focus.

It requires that two aspects of our beliefs and desires be coordinated, their content and their effect. Suppose I believe that the glass in front of me contains water, and I desire to drink. The content of my belief is that a certain glass contains water, and the content of my desire is that I get a drink. Some actions I might perform will satisfy my desire if my belief is true, and others will not. So the contents of my desire and belief determine a certain class of actions: those that are appropriate or reasonable given the contents of the desire and the belief. But the desire and belief themselves are, it seems, mental states. And these mental states are related by laws of nature to certain behavior. Because I believe and desire as I do, I act in a certain way. I reach out, grab the glass, raise it to my lips, and swallow. This is an appropriate action, one that will lead to the satisfaction of my desire, if my belief is true. So the two aspects of my cognitive state, its doxastic and appetitive contents, on the one hand, and its effects, on the other, are coordinated.

This coordination suggests a certain benevolence on the part of God or Mother Nature. If this belief and desire resulted in my emptying the water on my head, or singing the National Anthem, then attribution of malevolence or a sense of humor might be more appropriate. But the evidence is in favor of benevolence, although perhaps of a rather grudging or parsimonious variety.

The principle that these two aspects of cognition are thus coordinated I call "efficient and benevolent cognition." By "efficient," I mean to express the idea that we do work in a lawlike way. Other things being equal, others in the same cognitive states that I am in will behave or act as I do.

In this paper, I begin by putting before the reader a straightforward version of the principle, whose conflict with the circumstantial nature of the attitudes will be fairly apparent. I show how appreciation of the circumstantial nature of action raises problems for this version. I then state a second version, which accommodates the circumstantial nature of action and the attitudes, explains it, and defends it against a possible criticism.

First Version

Here is the first version:

(1) If (i) believing P and desiring Q cause A, then (ii) A promotes Q, given P.

The idea is very simple: (i) envisages that there is a certain psychological law, connecting the property of believing P and desiring Q with the property of performing action A. If God or Mother Nature has wired us up in this way and is benevolent, our environment must meet certain conditions; (ii) gives those conditions.

P and Q are propositions.¹ The notion of proposition I have in mind is based on the theory of situations, but the ideas presented here do not require exposition of that theory. It comprehends both objectual and qualitative propositions. That is, propositions may have objects as constituents in some sense, as is natural to suppose, given circumstantial theories of reference; for example, "President Reagan is asleep" expresses a proposition with Reagan himself as a constituent, rather than some properties he uniquely instantiates. But propositions may also have only relations and properties as constituents, as seems natural for "every President is asleep" and some uses of "The President is asleep." For the purposes of this paper, the crucial property of propositions is that they are true or false absolutely, not relative to the circumstances of the agent.

A is an action; I take actions to be properties of a certain sort. As I use the terms an action is a uniformity across acts; that is, if you and I both raise our right hands, the acts are different, but the actions are the same.

I take causing and promoting as primitive. The first is a relation between properties. The latter, in this version, is a relation between a property (performing a certain action) and two propositions. A strong construal of an action promoting Q given P is that it guarantees Q given P; a weaker construal is that it merely makes Q probable, given P. For the purposes of this paper, this difference will not matter.

So the principle tells us that if things are benevolently organized, then a desire and a belief will cause an action, only if the action promotes the satisfaction of the desire, given the truth of the belief. That is, if (i) is a psychological law for a class of agents, (ii) should be a principle that governs the environment of the agents.

Version (1) strikes one, at first, as surely too simple, but headed in the right direction. But if the attitudes are circumstantial, it will not work at all. If what I believe and desire depends, not just on the internal mental states that we can conceive as leading, in lawlike ways, to actions, but also on the external circumstances in which those mental states occur, then the efficient benevolence envisaged by (1) looks impossible. For why should the actions, caused by those mental states, be appropriate to the attitudes one has in virtue of the mental states plus these additional, contingent circumstances, that can vary among cognitively similar individuals? It seems like God or Mother Nature would be faced with the choice of varying the action to suit the circumstantially determined attitudes, and so abandoning efficiency, or letting the actions vary only with

 $^{^{1}}$ It is a fact of some interest, I think, that we ordinarily take actions or other properties of individuals as the objects of desire, rather than propositions. We are much more likely to say "x wants to go to the store" or "x desires to be at the store" than "x desires that he be at the store." I think reflection on this point would strengthen the arguments I make here. But for simplicity I take propositions to be the objects of both belief and desire.

the mental states, abandoning benevolence. We must either give up (1), or give up the doctrine of circumstantially determined attitudes.

Actions and Circumstances

We should give up (1), for it does not have things right. It envisages too simple a relation between actions and the propositional contents of beliefs and desires.

It is a familiar point that there are different ways to individuate actions. Suppose you move your right hand in a certain manner, thus grabbing the glass in front of you and bringing it to your lips, and I move my right hand in the same manner, thus grabbing the glass in front of me and bringing it to my lips. Have we performed the same action or not? It depends on how we individuate actions. Our acts were behaviorally similar, and if we use this as our criterion of individuation, we may be said to have performed the same action: moving in the way one does when one grabs a glass in a certain direction and at a distance in front of one with one's right hand and brings it to one's lips. But we can also individuate actions by their results, by reference to the propositions they make true. Given this criterion of individuation, we did not perform the same action. You made it the case that the glass in front of you was at your lips, but I did not. I could have done so, by moving my arm in a different way, which would have resulted in grabbing the glass in front of you and moving it to your lips. But, had I done that, I would not have performed the same action on the first criterion, for quite different behavior is required for me to get the glass in front of you to your lips than is required of you to get it there.

When we think of actions as being caused by cognitive states, we must have a behavioral notion of action in mind. We expect agents that are cognitively similar to move their body and limbs in the same way. There is no reason to expect these movements to make the same propositions true, since this will depend not only on the behavior, but also on the circumstances in which it occurs. Thus *making true* does not have as parameters only behaviorally individuated actions and propositions, but also agents and their circumstances.²

Similarly, *promotes* is not simply a relation between behaviorally individuated actions and a pair of propositions but also requires agents and their circumstances as parameters. The movement we are imagining me to make may guarantee or make probable that I get a drink from glass G, given that G contains water, if I perform it

²Note that to take into account bodily differences, we need to make a further distinction between behaving in the same way and moving in the same way. Extending one's arm fully will not, with individuals of different arm lengths, lead to the same movements, if these are individuated in terms of the number of inches over which the arms move. In an earlier version of this paper, I added another parameter to the promoting relation discussed below, having to do with bodily characteristics, and another parameter to the causing relation. The idea was that a cognitive state caused behaviors depending on psychological type, and where things are benevolent, the psychological type accords with the bodily characteristics. This approach was taken because of a background assumption that perceptual states should be individuated in terms of objectively determined circumstances, and so this should also be true of cognitive states. However, I do not now feel very clear about how things should be handled, and so ignore the issue in this paper.

when G is exactly twenty-three inches in front of me in a certain relative direction. The same movement, made by you, with G twenty-three inches in front of you, will not guarantee or make it probable that I get a drink from G, given that G contains water. Nor would my making that very movement promote my getting a drink from G, in slightly different circumstances, with G, say, twenty-nine inches away instead of twenty-three. In those circumstances, the movement would merely make me look silly, as if I thought my arms were longer than they are.

So, given that it is behaviorally individuated actions we need for the psychological principles, the promotion relation (whether it is construed as guaranteeing truth or something weaker), must be made relative to agents and circumstances. Version (1) simply will not work.

An Improved Version

I now put forward and explain an improved version of the principle, which accommodates the circumstantial nature of action, by exploiting the circumstantial nature of the attitudes.

First some preliminaries. The principle will be put forward in the form of a necessary condition for a relation of benevolence holding between three items: a psychology, a projection relation, and an environment. A psychology is a system of psychological states, behaviors, and causal principles governing them. In (1), it was assumed that cognitive states can be directly assigned pairs of propositions, which a person in those states believes and desires. Now we make the weaker assumption, that they can be assigned such propositions relative to circumstances. We break the circumstances into the context and the wider circumstances. The context includes both the agent and his spatiotemporal location—although here I am ignoring the latter. The wider circumstances are properties, including complex relational properties to other objects that an agent might have. These assignments are made by a projection relation:

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Projects (a, C, S, Q, P) iff a desires Q and believes P in virtue of being in state S in circumstances C.
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I use "cognitive states" for those psychological states that have this relation to some agents, circumstances, and propositions.

I leave it open just what underlies the projection relation. It might be an additional fact about agents that God or Mother Nature establishes, in addition to the facts of the psychology. Or it might be an artifact of our commonsense theory for dealing with the facts of psychology for the various purposes for which we need to deal with them. Something like the former is, I take it, Searle's view, while the latter I take to be common to various forms of the identity theory and functionalism. I am inclined to favor the latter view, and think that the considerations brought forward in this paper are relevant to arriving at a plausible version of it, but this topic is not further considered here; indeed, couching the project in terms of benevolence—either the real benevolence

of God or the metaphorical benevolence of Mother Nature—fits most easily with the first view. If we hold the second view, this benevolence becomes something like a postulate underlying the commonsense theory.

Here then is the improved version:

(2) Let Ψ be a psychology, E an environment, and Proj a projection relation. Let a, S, and A range over agents, states, and actions of Ψ respectively, and C range over circumstances of E. If Ψ is benevolent for E according to Proj, the following must hold:

Whenever

- (i) an agent a is in circumstances C such that Proj (a, S, C, Q, P), then
- (ii) a is also in circumstances C' such that some action A caused by S is such that Promotes (a, A, C', Q, P).

In my example, my circumstances included seeing a glass that was in front of me, call it G. In virtue of being in the cognitive state I was in, I believed, of this glass, that it had water in it. Had a different glass, G', been in front of me, I would have then believed that G' had water in it, even though I was in exactly the same cognitive state. The possibility of this sort of relativity to circumstance is built into (ii).

Someone else in the same cognitive state would have desired that they get a drink from G, not that I do so. This involves relativity to context; that is, this difference would remain even if this other person were assumed to be in exactly my circumstances. Thus we need both the agent and the wider circumstances as parameters of the projection relation.

In my example, my being in this cognitive state causes me to move my hand and arms in a certain way, which works effectively to get me a drink. This would only work if I do it, and only in certain circumstances, as we discussed above. So now promoting has become a more complex relation. However, the circumstances that are relevant to my attitudes and those that are relevant to my action are not the same.

In the example, there is a certain glass, G, that I both have a belief and desire about, and act upon. The circumstances that determine that my belief is about G have to do with the fact that I am looking at it, and it is the cause of certain aspects of my perceptual and cognitive state. The circumstances that determine that my movement intersects with the position of G at about the right point, and thus promotes my drinking rather than spilling water on myself or missing the glass entirely, have to do with the distance and position of the glass relative to me, and also the length of my arms and other such facts.

For this reason, we do not cite the same circumstances in (i) and (ii). Rather, we place a requirement on the environment E, that when an agent is in circumstances that determine, together with his cognitive state, certain attitudes towards an object, he will also be in circumstances that determine, together with the behavior caused by the cognitive state, actions that are reasonable given the attitudes.

Note that it would be much too stringent to require that every action caused by S stand in the promotion relation. S may cause actions that have parts that are also

actions, but which, considered in isolation from the larger wholes, do not promote anything helpful. And S may cause irrelevant actions, like fidgeting. All of this is compatible with benevolence, so analyzed.

The sort of benevolence for which we have evidence is hardly as perfect as this might suggest. Sometimes our beliefs and desires cause behavior that does not promote satisfaction of the desire, even if the belief is true. We might weaken the conditions by saying "typically when" or even "sometimes when." The last alternative might be appropriate for Mother Nature, if her ambition is really just to allow a few agents enough freedom from total frustration that they reproduce. Or, rather than explicitly weakening the conditions, we may think of the analysis as providing us with a constraint that, like most conditionals, holds only relative to certain assumed background conditions (Barwise 1985).

How benevolent are things? Suppose an experimental psychologist puts spectacles on me that make G appear closer than it really is, so when I reach for it I miss it and look silly. In this case, the environment has not lived up to the demands of unconditional benevolence, given my psychology. So, the presence of experimental psychologists is enough to disprove unconditional benevolence, in this strongest sense. But unless they are allowed to take over the world, a more modest form of benevolence is still a possibility. And, to be fair, various odd circumstances that lead to illusions and clumsy behavior occurred even before the advent of experimental psychology. Note that the effect of insisting on unconditioned benevolence would be to insist that all such instances of illusion and ineptitude are instances of false belief. An insistence of this sort would lead to a criticism of version (2) that I now consider.

(Over) Burdening Belief

The objection is that (2) is motivated by a misdiagnosis of the problems with (1), and as a result brings in circumstances twice over. The critic³ would maintain that while action is circumstantial, the attitudes are only contextual. That is, the projection relation should be relative to context, but not to wider circumstance: only the context, the identity of the agent, is needed to intervene between cognitive state and attitude. And, furthermore, the job of closing the gap between the behavior a cognitive state causes and the goal it is to promote, should be mainly borne by the proposition believed. That is, the truth of the proposition believed should guarantee that the agent is in those circumstances in which the behavior caused promotes the goal desired.

On this view, our example is diagnosed as follows. I must have believed not simply that the glass had water in it, but also that it was a certain distance and direction from me—exactly the distance and direction it had to be for my action to promote my getting a drink.

³The critics I have in mind are Bob Moore, David Lewis, Roderick Chisholm, and Hector-Neri Castañeda. The first three have independently developed conceptions of the attitudes as relations to properties of the agent, and Castañeda's inclination to suppose that all indexicals and demonstratives can be analyzed in terms of "I" and "now" makes me think he would also make a criticism of this sort.

On this view, we replace projection with a simpler relation:

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Projects' (a, S, Q, P) iff a believes P and desires Q in virtue of being in state S.
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On this conception, one can represent cognitive states by pairs of properties of agents. The cognitive state I was in is represented by the pair: being such and such a distance and direction from a glass full of water; drinking a glass full of water from which he is such and such a distance and direction. To get from the state so represented to the proposition, we need only the context.

However, *projects'* can be defined in terms of *projects*:

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Projects' (a, S, Q, P) iff
for every C, Projects(a, S, C, Q, P).
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Not all cognitive states that bear the projecting relation to some agents, circumstances, and pairs of propositions will bear the projecting' relation to agents and pairs of propositions, only those for which the wider circumstances are irrelevant, in that once a is fixed, the content of belief and desire is also fixed. We can call this subclass of contextual but noncircumstantial cognitive states *merely contextual*. There is no need for me to deny the possibility of cognitive states that are merely contextual, and the analysis of benevolence in (2) extends to them. So the possibility of such cognitive states does not count against (2). We can retain (2) and entertain the possibility that all cognitive states are merely contextual as a hypothesis. A psychology with only merely contextual and not circumstantial cognitive states would be benevolent, but a benevolent psychology need not be of this sort. It is just a matter of how much God or Mother Nature wanted to make use of the stabler aspects of our environment.

To see what sorts of issues are relevant to this hypothesis, let us first note how unrealistic it would be to suppose that the content of our beliefs fix all of the circumstances relevant to the success of our action. Consider the force of gravity. If I am in space or on the moon or in some other situation where gravitational forces are much diminished, the movement we envisage me making in the example will not lead to getting a drink; the water would fly out of the glass all over my face—or perhaps I would not even grab the glass, but instead propel myself backwards. If all possible failures are to be accounted for by false beliefs, the corresponding true beliefs must be present when we succeed. So, when I reach for the glass, I must believe that the forces of gravity are just what they need to be for things to work out right.

But it hardly seems probable that everyone, even those with no knowledge of gravity, believes, when they reach for a glass of water, that the gravitational forces are what they are; such an attribution would drain the word "belief" of most of its content. Benevolence certainly does not require such omnidoxasticity, to misbeget a phrase. A more efficient way for Mother Nature to proceed is to fit our psychology to the constant factors in our environment, and give us a capacity of belief for dealing with the rest.

She could have been confident that by the time we achieve space travel and have some need for action-affecting beliefs about gravity, we will have developed the concepts required to do so.

There are countless other circumstances necessary for our action to be successful that are constant throughout the normal range of humans. One might conjecture a general belief, that things are normal, underlies much of our action. But if we distinguish believing that things are normal from not believing that things are abnormal, this conjecture seems groundless.

These reflections do not decide the issue, for the hypothesis in question requires only that all of the nonconstant circumstances relevant to action be comprehended by what is believed; the constant factors can be dealt with by admitting our psychology is benevolent only for environments that embody them.

It does, however, suggest where the issue does lie. Let me suggest a crude picture of psychology and projection that motivates my skepticism about the hypothesis.

Suppose that, although there being a glass twenty-three inches in front of me is hardly a constant circumstance in my environment, there is a constant relation between a certain perceptual state and this circumstance. And suppose that there is a similar but different perceptual state that is similarly related to there being a glass twenty-nine inches in front of me. Suppose further that these states have the property of referring to the object that plays some prominent role in their causation: in these cases, the glass in question. Finally, suppose that cognitive states are complex, that perceptual states of this sort can be components of them, and that the projective properties of cognitive states are systematically related to the referential properties of their components.

Given this picture, we may expect that different cognitive states, with different components, may project the same beliefs and desires, in slightly different circumstances. In one case, I am twenty-three inches from G. In the other, I am twenty-nine inches from it. My perceptual states are different. But both perceptual states are of the same glass, G, and the cognitive states of which they are components project the same desires and beliefs, that I get a drink from G and that G contains water. Still, given the different components of the different cognitive states, their causal roles may differ, even though their projective properties do not. The first cognitive state gives rise to behavior suited to the circumstances stably related in the environment to its perceptual component—that is, my arm moves to a spot twenty-five inches away—and the second gives rise to behavior suited to the circumstances stably related to it—I extend my arm a bit further.

If this were the way things worked, the hypothesis in question would be incorrect. To understand the relation between cognitive states, the beliefs and desires to which they give rise, and the actions they cause, we would have to recognize circumstances as a significant parameter of the projection relation.

While the picture sketched is crude, it seems the principle it illustrates could survive in more sophisticated accounts. It seems then that version (2) can at least claim the virtue of not ruling out such accounts a priori, so that the contextualist hypothesis can be weighed against alternatives.4

⁴Research on this paper was begun while on sabbatical leave from Stanford University. It was also supported by a grant from the National Science Foundation and a grant to the Center for the Study of Language and Information from the System Development Foundation.

This paper owes a great deal to a seminar on planning and practical reasoning, held at the Center for the Study of Language and Information during winter quarter 1984. Thinking about Bob Moore's theory of knowledge and action was particularly helpful. While the ideas in this paper are basically in the spirit of Barwise and Perry 1983, the seminar and other discussions with Michael Bratman, Stan Rosenschein, John Etchemendy, Ned Block, David Israel, and others led to an increased appreciation of the importance of action in thinking about the attitudes. Both Jon Barwise and I have been thinking a great deal about such matters, and hearing his ideas on the semantics of OLP, a simple programming language based on English commands, was extremely helpful. Other developments in the theory of situations are reported in Barwise and Perry 1985.