

THESIS



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ANGER: A PHILOSOPHICAL DISCUSSION

BY

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ABSTRACT

ANGER: A PHILOSOPHICAL DISCUSSION

By

Henry Eugene Cline

This dissertation is about anger. Much of my talk about anger is causal talk, so the first half of the dissertation is devoted to getting clear on the causal principles which will be applied to anger in the second half of the dissertation.

The first chapter is a discussion of some ontological aspects of causation. The main result from chapter one used in later chapters is that fictional entities do not causally affect real temporal entities. I call this restriction on the causal relation the weak intracategoriality of causal relations.

Chapter two contains a discussion of some epistemological aspects of weak intracategoriality, viz., we do not look for real temporal effects of fictional "causes", and we do not look for fictional "causes" of a real temporal effect. (I will later construe states of anger as real temporal effects).

In chapter three causal language is discussed. In this chapter I discuss singular causal statements. I argue that we need to be able to make singular causal statements even though we do not know the technical content of the covering

laws for those statements. I use some of these distinctions to argue against Russell's claim that "cause" has nothing to do with science.

Chapter four serves as a transition from the earlier discussion of causes per se to the later discussion of anger in causal terms. Here I discuss the relations which I will take seriously in my attempt to give a partial description of anger, viz.,

1. the being made angry by relation ("x is made angry by e"), and
2. the being consciously angry at relation ("x is consciously angry at z"), and
3. the being biologically angry at relation ("x is biologically angry at z"), and
4. the being justifiably consciously angry at relation ("x is justifiably consciously angry at z"), and
5. the being justifiably biologically angry at relation ("x is justly biologically angry at z").

In the last section of chapter four I discuss the "x is made angry by e" relation. I argue for the following biconditional description of x is made angry by e:

x is made angry by e if and only if.

1. x is angry, and
2. e is a cause of x's anger.

Chapter five contains a discussion of how we focus our citations of causes to suit our instrumental purposes. I

argue that, at least prima facie, the following biconditional truly describes conscious anger at. Where x and z are individuals (real or fictional)¹ and e is an event.

x is consciously angry at z if and only if

1. there is some e such that x is made angry by e, and
2. x consciously believes that there is some e such that
 - a. e made x angry, and
 - b. e is untoward, and
 - c. z did e.

In chapter six I give a biconditional for biological anger at and I argue that to understand conscious anger at (or biological anger at) evolutionarily, we need to generally restrict the objects of episodes of these kinds of anger to entities which actually entered into their causal genesis.

In the last chapter I give and argue for a biconditional construal of justified conscious anger at and I give a biconditional construal of justified biological anger at. I then suggest that biological anger at and conscious anger at may be identical. I close with a discussion of this possibility.

¹Strictly speaking x can't be fictional because of the first condition on the biconditional and the principle of weak intracategoriality.

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CHAPTER I: SOME ONTOLOGICAL ASPECTS OF CAUSATION: WEAK,
MODERATE AND STRONG INTRACATEGORIALITY.

A. INTRODUCTION TO THE CHAPTER.

In the following discussion I make the assumption that there are two mutually disjoint, jointly exhaustive, kinds of entities, viz., real entities and non-real entities. I call non-real entities fictional entities. I sometimes call real entities non-fictional entities.

There are a number of possible positions one might hold as to the field of the "x causes e" relation. One might think, for instance, that expressions occurring in the x and e slots can refer to anything, real or fictional. If one thinks, on the other hand, that the field of the relation is restricted to, say, spatio-temporal entities then one thinks that the "x causes e" relation applies only within that category of entities. This is to think that the relation is intracategorical.

In this chapter I will talk about three positions on the intracategoriality of the "x causes e" relation (hereafter the "causal relation"). These three positions are:

1. That the causal relation is a weak intracategorical relation.
2. That the causal relation is a moderate intracategorical relation.
3. That the causal relation is a strong intracategorical relation.

In the remainder of this chapter I'll formulate weak, moderate and strong intracategoriality for the causal relation. Then I'll discuss each one, accepting weak intracategoriality, giving some arguments for accepting moderate intracategoriality (without being committed to it myself) and rejecting strong intracategoriality (while putting a weaker, but still somewhat dubious, version in its place).

What I call weak intracategoriality is a restriction on the field of the causal relation. Weak intracategoriality is the claim that fictional entities are not related to real entities as causes to effects, i.e., fictional entities do not causally affect real entities.¹

Moderate intracategoriality requires weak intracategoriality plus the conditions that real entities do not causally affect fictional entities, and fictional entities do not causally affect fictional entities.

Strong intracategoriality is the claim that all and only real entities are causal relata. Strong intracategoriality requires moderate intracategoriality, plus the

¹Strictly speaking, it is events which we think of as being causally related to events. "Entities," (in the general sense which includes objects, processes, flashes, etc.) may not all be thought of as being causal relata. This consideration is written into the account in later chapters, where events which cause other events (episodes) are discussed. It is not written into the account in earlier chapters. This makes the earlier chapters easier to read than they'd otherwise be. Besides, there is a sweeping justification for leaving this consideration out, even in later chapters. This is the fact that temporally real entities can be treated as events. Enduring physical things for instance, can be treated as just being long-lasting events.

condition that every real entity stands in a causal relation to at least one other real entity.

B. THE ARGUMENT FOR WEAK INTRACATEGORIALITY.

Weak intracategoriality is a very plausible restriction on the field of the causal relation. Weak intracategoriality seems so plausible that it might seem silly to argue for it. Since, however, I employ it in a rather heavy handed way in later chapters, I'll argue for it here.

My method of argument is to generalize over specific cases where our presupposition of weak intracategoriality is especially transparent. In doing this I am making the assumption that these examples can be safely generalized over, and although I think this assumption is correct, it should be kept in mind. The two specific cases I'll use involve the discovery of x-rays and the discovery of Troy. I'll consider the discovery of Troy first.

Troy was once thought of as a figment of Homer's imagination, a mythical city created to embellish heroic literature. So long as Troy was thought of as an imaginary city, nobody considered looking for the actual physical remains of Troy. In particular, Schliemann only looked for the remains of Troy after he came to the conclusion that Homer was talking about a real city.

The other example is the discovery of x-rays by Röntgen near the end of 1895. Röntgen was experimenting by passing a charge through a tube which was shielded by a close fitting cardboard mantle. Some nearby paper with a chemical on it became brilliantly fluorescent while the charge was being passed through the tube, even though the tube was shielded by the cardboard mantle. Röntgen postulated x-rays as the cause of the glowing screen, and hypothesized many of the properties of these unknown rays. Among Röntgen's hypotheses were that:

1. All substances were more or less transparent to x-rays. Named in order of decreasing transparency were, for example, wood, aluminum, lead.
2. Many substances emitted light when exposed to x-rays.
3. X-rays were generated whenever and wherever the cathode rays of the discharge tube struck any solid body as a target.
4. Heavy elements, such as platinum, emit more x-rays than light elements like aluminum when struck with cathode rays...etc.¹

Results following upon the discovery of x-rays are too numerous to catalogue. It suffices to say that the discovery of x-rays was instrumental in the determining of the number of electrons in the carbon atom, led to the discovery

¹George Lindenberg Clark, "X-Rays, Nature Of", in the Encyclopedia Britannica, 1951, Vol. 23, p. 838.

of radioactivity, and "opened up the inner world of the atom."¹

The inference leading to this explosion in knowledge was the inference that Röntgen himself made, and that others found to be unobjectionable, viz., that some kind of radiation from the closed box had made the coated paper outside the enclosure glow. Röntgen, who had "no idea what kind of radiation this might be, called it simply "x-rays".² But that it was a real phenomenon was never in question - because it produced a real effect. Thus, the connection hypothesized between the glowing paper and the cathode tube radiation discharges was acceptable conceptually. Any inference to a fictional cause of the glowing paper would have been absurd on its face.

Our refusal to bother looking for the remains of Troy so long as we believe that Troy is a fictional entity makes sense on the assumption of the weak intracategoriality of

¹Isaac, Asimov, The New Intelligent Man's Guide to Science, p. 637.

²Ibid. Asimov, p. 637. Emphasis added. It should be noted that in both examples it is real temporal entities (the remains of Troy, the glowing paper) that are shown not to be the effects of fictional causes. This leaves open the possibility that fictional entities could cause non-temporal real entities, entities like propositions and numbers. Although I don't believe this is possible, I shall not argue for it here, but shall simply assume that fictional entities don't have real effects of any kind, temporal or non-temporal. In fact I shall assume that non-temporal real entities never stand in causal relations with anything whatsoever. Even if this assumption is false, it does not undercut my later discussion, which is concerned with the causes of a particular kind of temporal entity, namely episodes of anger.

causal relations. So does our insistence that the glowing paper in Rontgen's experiment has to have a real cause, even if it means postulating that cause as an unknown kind of ray called, mysteriously enough, x-rays. Both of these examples make sense on the assumption that fictional entities are not related to real entities as causes to effects.

In general, then, to consider any entity to be fictional is to deny that that entity bears the "causes" relation to anything in the non-fictional temporal world.¹ So, if Quine is angry at Pegasus (a state which I will later argue is at best fairly uninteresting from the perspective of a causal appreciation of anger), then Quine cannot be caused to be angry by Pegasus so long as Quine's angry state is a real temporal entity (which, as a state of the angry Quine, it clearly is).

This ontological assumption has an epistemological corollary, namely, that it's fruitless to look for the temporal effects of any fictional entity. One might as well look for Prometheus' liver, or the wings of Pegasus, as for the ruins of Troy, under any interpretation which takes Troy to be fictional. The initial conception of Troy as fictional moots any attempt to look for the physical ruins of Troy. To look for stones cut by the builders of Troy, or the skeletons of long dead citizens of Troy is to presume that

¹When I argue for moderate intracategoriality, I also assume that real non-temporal entities aren't related to fictional entities as causes to effects.

Troy is more than a fictional entity: It is at least to presume that Troy is a non-fictional temporal entity.

I label the weak principle of intracategoriality WPI.

WPI: Fictional entities are not related to non-fictional entities as causes to effects.¹

C. THE ARGUMENT FOR MODERATE INTRACATEGORIALITY

Dretske implies that a moderate principle of intracategoriality is true when he says that causal relations are "genuine" relations which require the existence of their relata.

If one thinks of a genuine relation as one which requires the existence of its relata, then wanting, desiring, seeking, hoping, believing and imagining are not relations at all, at least not relations between the subject and what he is said to want, believe in or seek. Causality, however, is a genuine relation. I can believe there is a bug in my soup, or be afraid that this is so, without there actually being a bug in my soup, but nothing can cause there to be a bug in my soup, or be the effect of this state of affairs, unless there really is a bug in my soup.²

Dretske's claim is that the moderate intracategoriality of causal relations is true, i.e., that causal relations hold only amongst real entities, though there may be some

¹Ibid. p. 637.

²Fred Dretske, "Causal Theories of Reference", in The Journal of Philosophy, Vol. LXXIV No. 10, October 1977, p. 62.

real entities which do not bear causal relations to any other real entity (Dretske doesn't comment on this latter condition one way or the other).

The weak intracategoriality of causal relations is a necessary condition for moderate intracategoriality. There are two other necessary conditions for moderate intracategoriality. They are:

1. Fictional entities are not causes of fictional entities.
2. Non-fictional entities are not causes of fictional entities.

The first of these new conditions is not obviously true. Someone might say that causal relations do obtain between fictional entities on the basis of what looks like pretty good literary evidence. Fyodor Pavlovich's buffoonery causes father Zosima to become ill in The Brothers Karamazov, the Minotaur kills unfortunate Greek adventurers in the legend of Theseus, and Kurtz causes great changes in his jungle compound in The Heart of Darkness. The examples seem endless.

However, a crucial presupposition of all genuine causal investigation is lacking in all such cases. It is standard doctrine, concerning causes, that they may be present and yet no one ever be aware of them. Ontologically, causes operate independently of anyone's awareness of them. Sometimes we discover them, and sometimes we fail to discover them (or even to look for them), but such success or failure

operate independently of anyone's awareness of them. Sometimes we discover them, and sometimes we fail to discover them (or even to look for them), but such success or failure does not bring them into existence or make them non-existent.

Any relation a fictional entity bears to another fictional entity, on the other hand, is stipulated. It is usually stipulated by the author of the work of fiction. This includes the above purported causal relations. Someone, in each such case, has constructed the story so that the fictional characters in question have the properties that they do, including the property of bearing "causal" relations to other fictional entities.

Someone is aware of the "causes" in cases like these, because the author has stipulated those "causes" (at least the author is aware of the "causal relations" obtaining between his fictional creations, even if no one ever reads his books or hears his stories). So the usual independence of the existence of causes from our knowledge of them is not preserved in literary contexts. Thus it is a mistake to say that fictional entities in a piece of literature or folklore are causally related to other fictional entities in that

same piece of literature or folklore. The use of causal language here is, at best, metaphorical.¹

The third condition on moderate intracategoriality is that non-fictional entities are not related to fictional entities as causes to effects. Once this condition is argued for, I will have argued for all the conditions needed to establish moderate intracategoriality.

I'll discuss two sorts of purported counterexamples to the third condition. Then I'll close the argument for the third condition by giving the same sort of argument I gave for the second condition.

One of the more plausible counterexamples to the third condition is the following sort of case. It seems that cases of authorship are cases where a real entity stands in a causal relationship to a fictional entity. It seems plausible to suggest, for instance, that Arthur Conan Doyle caused Sherlock Holmes to be a brilliant detective. I will argue that such examples are not obvious counterexamples to the third condition on moderate intracategoriality.

¹Part of the problem here is that many entities referred to in literature ought not to be regarded as obviously fictional. Some references are clearly to real entities, even when unfamiliar names are used for those entities. There is reason to believe, for instance, that Ginsberg's reference to Moloch in Howl is a reference to America. (See Allen Ginsberg, Howl and Other Poems, pp. 17-18.) It's also pretty clear that many references in novels are to actual places and times. What to do in a case like David Copperfield, when types of people are embodied in a particularly clear way in a specific character, is not entirely clear. These are not definitionally fictional entities of the clear sort discussed in chapter two. I'll discuss this issue further as I consider the third condition on moderate intracategoriality.

It seems that the verb wanted in "Arthur Conan Doyle caused Sherlock Holmes to be a brilliant detective" is not "caused" but, rather, "created". It also seems that the phrase "caused to be a brilliant detective" should be replaced by the phrase "created a brilliant detective character".

If the word really wanted here is "caused", what such a claim seems to amount to is that if it weren't for Conan Doyle doing such-and-such, there would have been no brilliant detective Holmes. Doyle's activities as an author are here seen as some sort of a necessary condition of Mr. Holmes. Sometimes there is also a causal reading to the effect that Doyle's writings are some sort of a sufficient condition of Mr. Holmes. Causes are often thought of in terms of necessary or sufficient conditions, so these claims may seem at least prima facie, to be causal.

However, it seems false to say that Doyle's writings are a necessary condition for the "existence" of Holmes as a fictional character. Someone else could have created that fictional character whom we recognize as Holmes. If so, Doyle's authorship may turn out to be sufficient, but not essential, to the creation (not the causation) of that delightful fictional character who constantly mistakes induction for deduction.

More importantly, giving necessary or sufficient conditions does not imply that a causal relation is present. It is logically necessary and sufficient for a number to be

divisible by two that that number be an even number. It's linguistically necessary and sufficient that the shortest spy be the shortest spy, and it's linguistically necessary that the shortest spy be a spy. None of these claims describe, or imply the presence of, any causal relations, so it's false to say that establishing something as a necessary or sufficient condition of something else establishes that a causal relation holds between the two.

Hence, it's not obvious that establishing Doyle's writings as a necessary or sufficient condition of Holme's properties implies that Doyle caused Holmes to have those properties.

So it's not obvious that cases of authorship are cases where a non-fictional temporal entity (an author) causally affects a fictional entity.

The second sort of counterexample is where some real entity is said causally to affect some fictional entity in a work of literature. Suppose, for instance, that it's claimed that the real university at Christminster is the cause of Jude's consternation in Hardy's Jude The Obscure. Sue seems to be making just this point (from the perspective of the reader) when she says to Jude that he is

one of the very men Christminster was intended for when the colleges were founded; a man with a passion for learning, but no money, or opportunities, or friends... You were elbowed off the pavement by the millionare's sons.¹

¹Thomas Hardy, Jude the Obscure (New York, 1961), p. 151.

Here is a case where it looks like a real entity (Christminster) is related to a fictional entity (Jude) as cause to effect. At least two things are wrong with taking this as a causal relation.

The first thing wrong with taking this as a causal relation is that it occurs in a literary context, and (seemingly) only a literary context, i.e., Hardy's novel. So again we lack the separation of epistemological and ontological considerations which seems so typical of relations which are clearly causal. If there are relations in Jude which appear to be explicitly causal, they are there because Hardy put them there.

It's also not obvious how to interpret discourses like novels and the purported references to real entities that occur within them. It does seem fairly clear that such references in novels (say the name of a well known real place) are often taken to refer to that place. Sometimes the relationship, in the novel, between such a named place, and the fictional characters in the novel, are very informative as to the nature of the place. In good novels these relations often tell us a lot about what our own reactions would be were we in similar "shoes". Sometimes such informativeness is so clear that it impresses large groups of people. This is true in the present example, where Hardy's comments about the elitism of British universities helped prompt the founding of Ruskin College, Oxford.

This informativeness makes it less obvious that Jude is a merely fictional entity only occurring in the literary context. At this point the principle of moderate intracategoriality may become legislative. Perhaps Jude is best viewed as some sort of general event description of the type that figures in a causal law, representing socially significant general properties of a class of aspiring young scholars in the England of the 1890's.

One of the reasons for thinking this is that causal relations appear in factual accounts of actual states of affairs. As a story about the elitism of British universities Hardy's novel might not be about relations between a real university and a fictional character at all. It might be about the universal experience of people like Jude, i.e., people who are poor aspiring young scholars. If so, the reference to Jude may not be a simple reference to a character who is clearly fictional. The reference to Jude may turn out to be causally informative only insofar as almost all of his properties are conjoined in a way which we find commonly instantiated.

What such a reference is, is much harder to say, but it does not seem to be a reference to precisely the sort of entity later discussed under definitionally fictional entities.¹ Nor does "Jude was caused to be upset by the

¹Definitionally fictional entities are discussed in section C of chapter two. Whatever Jude is, in Hardy's novel, he does not seem to be the same sort of fantastic definitionally fictional object as Pegasus or Bellerophon.

policies adopted at Christminster" seem to be a singular causal statement of the sort discussed in chapter three.

So, such relations aren't causal where they are merely stipulated, and where they are causally informative this is because the author has woven some aspects of some general causal relation into the story, and it's no longer clear that such cases are cases violating the third condition on moderate intracategoriality. Besides, in all such cases, we have the general problem of reference from within a non-factual literary context.

If moderate intracategoriality were true (and I think that it is, though nothing very much hangs on this claim for my later discussion), its formulation could be expressed in terms of the moderate principle of intracategoriality (MPI).

MPI: Causal relations hold only between real entities.

D. THE ARGUMENT FOR STRONG INTRACATEGORIALITY.

Strong intracategoriality is true if all and only real entities are causal relata. The truth of moderate intracategoriality would insure that only real relata are causal relata. What remains to be shown is that all real relata are causal relata, and this seems false. Real non-temporal entities like numbers and propositions are seemingly not causal relata.

A weaker version of strong intracategoriality may be true, however. This is intracategoriality where the field of the relation is restricted to real temporal entities. I label the restricted version of strong intracategoriality with a prime superscript, viz., SPI'.

SPI': All and only temporal real relata are causal relata.

For SPI' to be true, only temporal real relata are causal relata, and all temporal real relata are causal relata. Moderate intracategoriality would show that only real relata are causal relata. I've assumed that there are only two kinds of real entities, temporal and non-temporal, and that only one of these (temporal real entities) are causal relata (since the non-temporal real relata like numbers and propositions were assumed to not be causal relata at all). So the arguments for moderate intracategoriality also shows that only temporal real relata are causal relata.

The following examples are intended to show that we think that all real temporal entities are causal relata. The first example is a science fiction one involving the disintegration of Troy. The second is an example from the history of science, i.e., the postulation and discovery of neutrinos.

Consider the following science fiction scenario, set in the early twenty-first century A.D. The earth is completely destroyed, disintegrated to the point where there is no particle larger than an atom left intact from the original planet. Perhaps all of earth's matter has been transferred into energy. Since it's our earth, the ruins of Troy existed on its surface just before the destruction of the planet.

I think that most of us share the following epistemological attitude about the destruction event. Either Troy made some difference in the disintegration process, and if we had sophisticated enough technology, detection devices, and body of theory, we could trace back the events in the disintegration process which lead back to Troy; or else Troy is not real.

If there are no physically discoverable (hence existent) events which lead back to Troy, then Troy was not a real city. The best argument I can think of for how difficult it is to rule out the possibility of such discovery is the history of science.

A presupposition of this optimism about discovering real entities, in this case the disintegrated Troy, is that if Troy is a real city then Troy made a difference in the disintegration process. I claim that this is a common presupposition whenever the entity in question is a temporally real entity. This claim is made even clearer by the story of the postulation and discovery of neutrinos.

Experimenters in the beginning of the twentieth century were puzzled by the fact that an unexplained amount of energy was lost in the decay of radioactive nuclei. Wolfgang Pauli suggested that the energy was carried out by an undetected particle leaving the radioactive nuclei. This particle was very mysterious, however,

It had no charge and no mass; all it had, as it sped along at the velocity of light, was a certain amount of energy. It looked, in fact, like a fictional item created just to balance the energy books.¹

Neutrinos seemed almost impossible to detect. That is, they seemed to have almost no effects (other than the originally observed loss of energy). A neutrino has no mass and charge. A neutrino virtually does not interact with matter. Calculations show that "the average neutrino could pass through 100 light years of solid lead with only a 50% chance of being absorbed."²

Yet the physicists were confident that neutrinos existed, and were confident that since they existed, they would have some real effects. Asimov notes:

Naturally physicists could not rest content until they had actually tracked down the neutrino; ... But how detect (sic) an entity

¹Op.Cit. Isaac Asimov, The New Intelligent Man's Guide To Science, p. 284.

²Ibid. p. 285.

as nebulous as the neutrino- an object with no mass, no charge, and practically no propensity to interact with ordinary matter?¹

An experiment was set up on the assumption that, though the average neutrino does not interact with matter, there will be an incredibly small percentage of neutrinos that will. Experimenters set up their instruments by a fission reactor in Georgia, where antineutrinos were detected. This was taken to show the existence of neutrinos.

The Troy example and the neutrino example indicate the strength of the presumption that if something is a temporal real object then that thing has discoverable effects no matter how difficult it may be to make them out.

If we presume this then, we presume that SPI' is true:

SPI': All and only temporal real entities are causal relata.

¹Ibid. pp. 285-86. Emphasis added.

CHAPTER II: SOME EPISTEMOLOGICAL ANALOGUES OF WEAK INTRACATEGORIALITY.

A. INTRODUCTION TO THE CHAPTER.

The discussion in this chapter is primarily related to the truth of the weak intracategoriality of causal relations. If weak intracategoriality is true, we'd expect just the sort of results concerning our attitudes towards causal investigation that are argued for in this chapter. The two most important of these results are:

1. That we have a strong conceptual block to investigations into purported causal relations which we believe violate the principle of weak intracategoriality, and
2. That such blocks are obviously legitimized in at least one sort of case, viz, the case where the purported cause is definitionally fictional.

In the closing pages of this chapter I use the above two results to draw some morals about the causal investigation of anger.

B. STRONG CONCEPTUAL BLOCKS TO CAUSAL INQUIRY.

In this section I discuss one epistemomological aspect of the claim that fictional entities are not related to real entities as causes to effects.

Consider Troy again. To believe that Troy is fictional is to have a certain sort of very strong epistemological block which precludes inquiring as to the whereabouts of Troy's ruins. I call this sort of block a conceptual block to causal inquiry. To believe that Troy is a figment of Homer's imagination is to believe that Troy is fictional, and this belief implies the presence of just such a block. No causal inquiry which looks for the ruins of Troy will be seriously carried out by someone who genuinely thinks of Troy as a merely fictional city. In fact, this is part of what it is to understand what a fictional city is.

The x-ray example helps to make an even more pertinent point. As soon as Röntgen saw the paper glow, he postulated a real temporal entity as the cause of that glow, and there was no thought that the real temporal effect (the glow) might be "caused" by some fictional entity. This indicates that if one is looking for a cause of some real entity, then one won't consider fictional entities as candidates for causally affecting that real entity. This is the other side of weak intracategoriality.

So the belief that an entity is fictional precludes any attempt to locate the real effects of that entity, and the belief that an entity is real precludes any attempt to look for fictional causes of that entity. Both of these blocks are supported by weak intracategoriality, viz, fictional entities do not causally affect real entities.

Though the belief that an entity is fictional moots any attempt to locate the actual physical effects of that entity, and the belief that an entity is real moots any attempt to look for the fictional causes of that entity, people sometimes get convinced that an entity once thought to be fictional is, indeed, real. This conviction sometimes comes from testimony of authorities, or from an unexpected experience (the ruins of Troy might have been stumbled across by an authority able and willing to recognize a recalcitrant experience). What one won't do, on my account, is seek to be convinced by seriously inquiring after the real evidence causally related to some entity which is firmly believed to be fictional.

Sometimes one's beliefs aren't fixed as to whether or not some entity is fictional. Here the intelligibility of a causal inquiry using the entity in question as the cause of some real entity remains open.

Our beliefs about the real status of some entity are fixed where that entity is taken as the cause of some real effect, as in the x-ray case. Here, even if we aren't sure what the entity is, we are sure that it is real. Our beliefs aren't fixed in the case where we suspect some entity might be real, but the possibility remains open that it is merely fictional, i.e., in a case like Troy.

In a case like Troy the intelligibility of a causal inquiry using Troy as a cause of some real entity remains open, so long as we don't conceive of Troy right off as a

fictional entity. A similar situation holds with regard to anger and its proper objects, as I'll try to show in later chapters. In such a case, since no initial conceptual block is present for the person who is causally investigating the anger, that person is psychologically free to investigate until the entity is shown to exist by its effects, the causal chain proves too difficult to establish, or a terminal conceptual block is arrived at.

The following is an example of a terminal conceptual block. It might have been the case that Schliemann was able to conceive of Troy as a real city, to investigate various sites for possible ruins of Troy, and to nonetheless discover that Troy was an imaginary amalgam of (say) several ancient cities. This sort of finding is a terminal conceptual block which moots further inquiry into the non-fictional effects of Troy for anyone who has such a block. The acceptance of a terminal conceptual block is tantamount to deciding, after some investigation, that any causal investigation which seeks non-fictional effects related to the entity of interest is bootless, because the entity of interest is not real.

Both initial and terminal conceptual blocks rule out causal investigation on the part of anyone having such a block. Once such a block is "in place" causal inquiry won't be carried out because causal inquiry would violate the deep seated belief which is expressed by weak intracategoriality.

One important difference between initial and terminal conceptual blocks, which I'll make use of in later chapters, is that terminal conceptual blocks are arrived at after an investigation.

Initial conceptual blocks may be old terminal conceptual blocks or they may be entirely a matter of prejudice or a priori belief. In either case, they won't allow causal inquiry to get off the ground. Not all refusals to consider causal investigation based on a priori grounds are prejudiced, but most prejudice is bad precisely because it takes on certitude independently of investigation of any sort, where some investigation might be informative. In later chapters I will argue that there are good reasons for not generally ruling out causal investigations of anger on a priori grounds.¹

The causal search for non-fictional Troy could be either initially blocked conceptually (as it was for a long time) or terminally blocked conceptually (which block would then constitute a new initial conceptual block for later inquirers accepting it).

The search for Troy's ruins is initially blocked conceptually for someone who conceives right off of Troy as a merely fictional entity. The causal investigation of Troy is again blocked conceptually when Troy has been the object of an initial causal investigation, but turns out to be

¹See the discussion of Santa Claus on pages 8 and 9 of this chapter for an example of a nonprejudiced a priori strong conceptual block to causal investigation.

fictional on the basis of evidence (evidence procured in the particular investigation or elsewhere).

Note that we can discover, on the basis of non-fictional evidence, that the object of investigation cannot exist as described. We may discover, for instance, that it's physically impossible for there to have been a site of the sort upon which Troy was supposedly located in any appropriate part of our world.¹

The epistemological analogue of weak intracategoriality is that the person who accepts the claim that Troy is a fictional entity will not think of Troy as the kind of entity that can actually leave physically real ruins, and will also not think of Troy as the kind of entity which can explain properties of physically real entities.

Initial and terminal conceptual blocks are epistemological blocks of a strong sort. It's not as though the putative investigator doesn't know how to go on with his causal investigation. The very notion of going on with an investigation which looks for real effects or fictional causes is blocked conceptually (won't be entertained or, at least, won't be seriously entertained). Someone who thought that Troy was a merely fictional city and who also persisted in looking for the actual physical ruins of Troy, would be confused, at best. And someone who found some real physical ruins, and who persisted in hypothesizing fictional Troy as

¹Most causal investigation will hardly be this decisive. When it is, it's a way to accept non-prejudicially a strong conceptual block to causal inquiry on a posteriori grounds.

the cause of those ruins, would be confused too. To so persist would be like admitting that Santa is fictional, but nonetheless looking for his footprints in the snow, or seeing footprints in the snow and attributing them to an admittedly fictional Santa.

Schliemann conceived of Troy as a real city, located on the northeast promontory of Asia Minor, between the valleys of two rivers. Thus, Schliemann was able to treat the story of Troy as susceptible of certain sorts of causal inquiry, and there was, for him, no initial conceptual block to looking for the actual physical ruins of Troy.

In 1872, digging by Schliemann established the existence of an acropolis at the site just mentioned. In 1893, near the same site that Schliemann excavated, Dorpfeld dug up walls of massive Mycenaean design, accompanied by appropriate potsherds, and containing buildings properly belonging to the Mycenaean period preceding the time at which Homer's poems were written. Evidence procured by archaeological investigation, prompted by Schliemann's removal of the initial conceptual block to causal inquiry, is now taken to settle the issue of the physical location (hence the existence) of Troy.

Both initial and terminal conceptual blocks are thus removed. Schliemann conceived of Troy as a real city, looked for physical evidence connected to (caused by) the existence of that city, and found ruins. Once Troy was taken to be a real city, all the things generally true of real cities and

their effects became appropriate to the finding of Troy. Once found, Troy was shown to satisfy the existence condition which must be satisfied by every entity having causal effects in the class of real entities.

C. DEFINITIONALLY FICTIONAL ENTITIES.

One question arising here is: "When are we justified in taking some entity to be merely fictional?" In the following paragraphs this question is discussed.

Where an entity is definitionally fictional, we are correct in thinking that that entity is not related to any real entity as cause to effect, and we are correct in thinking this a priori, independently of any causal investigation. Whether or not an entity is definitionally fictional is, though, not merely a matter of decision on our part.

Santa Claus, the Minotaur, unicorns, Pegasus, and Bellerophon are fictional by definition. With these entities, the initial conceptual block is not just a function of prejudice or some false a priori scheme that we accept with no justification at all. It is a function of our language, and so long as we want to account for our way of speaking, we can give reasons to support the initial conceptual block to the causal investigation of the entity. In fact, for an entity like Santa, and for people who speak our language,

it's not possible to remove the initial conceptual block to the causal investigation of Santa.

This is because where something is fictional by definition we not only won't look for causal evidence concerning its existence, but no surprising data could count as such evidence. Consider what Kripke says about digging up "unicorn" fossils in Naming and Necessity.

even if archeologists or geologists were to discover tomorrow some fossils conclusively showing the existence of animals in the past satisfying everything we know about the unicorns from the myth of the Unicorn, that would not show that there were unicorns.¹

Kripke uses this example to deny that there might have been unicorns. One reason one might deny that there might have been unicorns is that unicorns are fictional by definition which means, among other things, not simply that there aren't any, but that there can't be any.

This supports the separation of the fictional and real domains by weak intracategoriality, and suggests that more might be said about the reasonableness of various epistemological blocks to causal investigation. One thing that's fairly clear at this point is that definitionally fictional entities are some of our clearer examples of fictional

¹ Saul Kripke, "Naming and Necessity", in Semantics of Natural Language, edited by Donald Davidson, p. 253. Also see Kripke's remarks on pages 763-65. (These later remarks were pointed out to me by Bob Steinman).

entities, and thus some of our clearer examples of the sort of entities that don't causally affect real entities.

One should distinguish conceptual blocks arising from the violation of weak intracategoriality from weaker epistemological blocks, where it is the case that we think a causal investigation is appropriate, but we just don't know how to carry out the appropriate investigation. This was the situation for many years after the postulations of neutrinos - physicists did not know how to go about detecting the particles and also didn't have the necessary technology.

This leads to another point, namely that in the realm of a conceptually appropriate and technically promising causal investigation, the investigator is often spurred to invention. Epistemological blocks of a non-conceptual sort often lead to the forging of new investigative tools and methods. Dorpfeld's investigation of the site that he chose provided much more clear cut evidence that Troy has been found than did Schliemann's investigation. Schliemann's methods led to the destruction and ignoring of many relevant artifacts, and prompted Dorpfeld to develop more sophisticated excavation methods. The history of the investigation of x-rays and neutrinos tells a similar tale.

So causal investigation of Troy was only performed when the relatum sought seemed to the investigators to be real, and it spurred the investigators to invent new methods to get at the entity in question. There are two virtues here: The focussing of causal investigation on real relata, and

the invention of new methods to get at a relatum not yet arrived at. The persistence required for the latter is partly a reflection of the investigator's implicit assumption of something like modified strong intracategoriality.

What is needed to start such an inquiry off is the indication that a causal search is initially promising, and this is sometimes not easy to show.¹

Removing Troy from the category of "mythical entities" and putting it into the category of "real cities" makes it an appropriate object of causal investigation (where Troy is sought out as the cause of some real effect). In general, when causal analysis is applied to an entity we look for evidence causally connected to that entity. Applying a causal analysis to, say, a "mythic" history, will always involve trying to find non-mythological components of that history and causal relations which obtain between those components. If enough causal evidence shows up, those who took the story told in the history to be referring to a mythical pattern of events will have been shown to be wrong.

D. SOME MORALS ABOUT THE COMING DISCUSSION OF ANGER DRAWN FROM THE FIRST TWO CHAPTERS.

Depending how far we can get with a causal interpretation of anger (which implies that we won't bring in

¹In particular, it's not easy to show for anger.

fictional entities as causes of anger), those who insist that all emotion (including anger) is essentially, wholly, or even primarily, a function of imaginary (or "purely conceptual") processes involving, say, intentionally inexistent entities, or our "surreality", or our "beliefs about the object of our emotion", begin to seem less convincing.¹

It's notorious that surrealities and objects of belief are not restricted to real items. And it's also true to say that talk about objects of belief, and talk about surreal "existences" isn't extensionally well behaved, whereas talk about causes may well be. So insofar as anger can be accounted for causally, anger need not be accounted for in terms of the surreality or beliefs of the angry thing. A stronger conditional is that if anger can be shown to be identical with one or more of the relata in a series of causes and effects, anger will not involve surrealities and beliefs in any essential way. The antecedent of the latter conditional is too strong a claim for me to show, but if I can show the truth of the antecedent of the former claim, the truth of the antecedent of the latter becomes more plausible.

¹I have Solomon and Kenny in mind here.

CHAPTER III: SOME LINGUISTIC ASPECTS OF CAUSATION:
SINGULAR CAUSAL STATEMENTS AND SOME OF THEIR CHARACTERISTICS.

A. INTRODUCTION TO THE CHAPTER.

This chapter is about singular causal statements. In the first section I talk about the singular causal statements we use to describe some causal relations, and the relation between those singular causal statements and the logical form of the causal laws which cover them. In the second section I talk about the way in which singular causal statements allow us to proceed at a workable level of knowledge, i.e., we can properly make singular causal statements without having to know the technical content of the predicates in the full covering laws for those statements. In the third, and final, section of this chapter I reply to Russell's charge that "cause" is not a word used in mature science, so interest in causal language has very little to do with what goes on in science. I respond to Russell by using the earlier claims about the relation between singular causal statements and the laws which cover them.

B. SINGULAR CAUSAL STATEMENTS.

The following partial account of singular causal statements is based on Donald Davidson's "Causal Relations".¹

Let "x" and "y" be variables which range over events. Let "n", "s", "p", and "r" be dummy letters to be replaced, respectively, by a name of a specific date, a name of a time interval, a name of a spatial position, and a name of a spatial interval. Let "t" be the function that assigns to an event the time at which that event occurs. Let "l" be the function that assigns to an event the location at which that event occurs. Let "F" and "G" be predicates which are interpreted as expressing properties of events. A singular causal statement is a statement of the form $(ix)[Fx \ \& \ t(x) = n \ \& \ l(x) = p] \text{ caused } (iy) [Gy \ \& \ t(y) = n+s \ \& \ l(y) = p+r]$.

So a singular causal statement about the relationship between Homer's Troy and the ruins of Troy found by Schliemann, could be filled in as follows. Take Homer's Troy to be a living city-event occurring about 1000 B.C. at spatial coordinate @. Take Schliemann's ruins to be a ruin event occurring about 1972 A.D. at location @. We can use the following dictionary to make a singular causal statement about the causal relation between the two events. Let "Fx"

¹ Donald Davidson, "Causal Relations," in The Journal of Philosophy, Vol. LXIV, November 1967, pp. 699-700.

be defined as "x is a living city-event." Let "n" be replaced by "1000 B.C.", and "p" by "@". Let "Gx" be defined as "x is a ruin event". Let "s" be replaced by "2872 years", and "r" by "zero".

The singular causal statement "Homer's Troy caused the ruins that Schliemann discovered" would be of the form mentioned above.

Such a statement would be true on Davidson's account only if it is covered by a true causal law of the appropriate logical form. Letting variables "x" and "y" range over events, variable "w" range over time, variable "z" over space, variable "u" over time intervals and variable "v" over spatial intervals, Davidson finds it attractive to think that a full fledged causal law has the form of a conjunction of statements of the form of P and Q below, where "Cxy" means "x caused y".

P: $(x)(w)(z)[(Fx \ \& \ t(x)=w \ \& \ l(x)=z) \longrightarrow (\exists!y)(\exists!u)(\exists!v)(Gy \ \& \ t(y)=w+u \ \& \ l(y)=z+v \ \& \ Cxy)]$

and

Q: $(x)(w)(z)[(Gx \ \& \ t(x)=w \ \& \ l(x)=z) \longrightarrow (\exists!y)(\exists!u)(\exists!v)(Fy \ \& \ t(y)=w-u \ \& \ l(y)=z-v \ \& \ Cyx)]$.

So P tells us, for instance, that certain types of causes (say, living cities) have a particular effect (say, ruins at some specific time and place).

Davidson does not take his covering law picture to be an attempt to define the causal relation, because all he has done is to give what he takes to be the logical form of covering laws for singular causal statements.¹

C. ENGINEERING USES OF SINGULAR CAUSAL STATEMENTS.

The focus of ordinary causal discourse is the singular causal statement, and not the technical terms contained in the predicates of the covering laws. Suppose I watch you throw a rock against a window and make the singular causal statement "that rock caused that window to break".

I am certain that the window broke because it was struck by a rock--I saw it all happen; but I am not (is anyone?) in command of laws on the basis of which I can predict what blows will break what windows.²

Here Davidson intends "laws" in a full blooded scientific sense. We can't specify the relevant covering laws every time we see a window break. Yet here, as in the case

¹Ibid. p. 701.

²Donald Davidson, "Actions Reasons and Causes", in the Care and Landesman edited Reading in the Theory of Action, p. 193.

of Troy, as well as in the later anger examples, we really believe that there are causal connections, e.g., between being harrassed and being angry, and between the rock and the broken window. In fact one instance of a rock breaking a window, and one instance of harrassment being followed by anger, will often be sufficient to convince us that a causal relation is present.

When we were little it took only one good burn to convince us that stoves, when hot, caused pain when touched. This also suggests that it is admissible to use causal language when we do not know of any even putatively relevant covering law. The singular causal statement stands as the initial way to linguistically focus attention in such cases, and serves as a starting point for explanation; an explanation we may begin by citing cases and describing them, trying to make further careful description, and eventually (if we're capable and interested) looking for what might be the underlying common event-predicates in the covering laws.

It is a virtue of our causal talk that it allows us to proceed in this way. Otherwise our causal accounts of things would have to proceed at an unworkable level of knowledge. To require that we know the content of the precise general laws which govern a causal relation before we assert any singular causal statements reporting instances of that relation would remove causal talk from our language. Though the singular causal statement may give us a partial (descrip-

tive) explanation, it is very rarely the case that such explanation proceeds initially within the context of a full causal theory replete with all true causal laws. (Though this could happen when, after a true theory is developed, a previously observed sequence of events is suddenly recognized as being an instance of a causal relation described in the theory and is expressed in a singular causal statement.) We commonly use causal language to report our everyday manipulations of our surroundings. We manipulate these surroundings pretty confidently thinking that we'll get similar results in similar situations with nary a thought for the laws covering those regularities. Our causal solutions to problems are systematic and intelligent. We also talk about our ways of causally modifying our environment, and in so doing we've developed what I shall call the "engineering" use of causal talk¹ which allows us to discourse intelligently about the relative merits and demerits of everyday manipulations of our environment. Two other (Kantian) names for such discourse are "prudential" and "technical". Both of these are names for discourse which operates on the pattern "to get result y, perform operation x".

Engineering uses are uses where we're concerned with the causal characterization of a problem because of some

¹This term suggested by Joel Feinberg in his "Sua Culpa," in the Feinberg and Gross edited Philosophy of Law, p. 380.

of some instrumental aim of ours. Usually, in an engineer-causal analysis of a problem, we're interested in discovering some convenient aspect of that problem to manipulate causally, in order to get some wanted result.

So, for instance, if we're interested in engineering a safer nuclear reactor, we won't wait until we've got covering laws in hand which cover all the phenomena occurring in our reactor before we go ahead and build it. We look for practical ways in which to formulate a recipe for a safe reactor. In the typical pragmatic approach some crucial words in the last sentence also have an "engineering" reading, e.g., we're interested in practical "safety", not safety against all physically possible contingencies. Use of causal talk in engineering enterprises has been said to be a "recipe"¹ or "lever"² usage.

Scientific usages of causal talk, on the other hand, are sometimes called "lantern"³ uses of causal talk. This metaphor is intended to indicate that scientific uses of causal language are uses in which light is thrown on the causal relation being studied (perhaps by gaining an understanding of the predicates in the covering laws which indicate the common structure of events).

¹"recipe" is used by D. Gasking, in his "Causation and Recipes," in Mind, Vol. 64, p. 483.

²"lever" is used by Joel Feinberg, in Op Cit., 374

³"lantern" is also used by Feinberg, in Loc Cit.

In contrast, engineering uses aren't primarily concerned with understanding these predicates, except to the extent that such understanding leads to a more convenient manipulation.

So, in engineering uses, we employ the causal idiom, but we've often not got, nor are we trying to get, a theory which provides covering laws with appropriate technical extralogical vocabulary.

We take advantage of our engineering knowledge of situations when we manipulate the causal relata in an engineering way. So, for instance, suppose that a ninth grade science teacher tells the following story about the procedures of a simple-minded science:

John Firestone was experimenting by heating chemicals on his kitchen stove, and he left the kitchen, forgetting that the stove was on. Upon return, he found a large mass of black material which was pliable, but tough. Repeating the process, he discovered he could make more of it. This tough black stuff was the first artificial rubber, and Firestone got rich from its invention.¹

There are many physical laws, on the covering law model, which are instanced in the relations amongst the chemicals heated by Firestone, even if neither he, nor anyone else of his day, knew of those laws. Firestone

¹Ninth grade science teachers always added the last conjunct, when I was in school, to spur at least some of us to recognize the possibility that science might be important.

could make lots of rubber, and the rubber he made on one day turned out pretty much like the rubber he made on other days, so long as the same causal relata were related in the same way. The ability to engineer such results may be dependent upon regularities of a pretty high order, but the person taking advantage of these regularities only has to understand them at a common sense level in order to get consistent results. This engineering sort of causal manipulation is, in fact, parasitic upon the existence of regularities amongst causal relata, but it is not parasitic upon the knowledge of those laws by the person doing the engineering (though one suspects someone will try to find them out because of an epistemological analogue of modified strong intracategoriality).

Many of the relations which we call causal in ordinary language, and which we take advantage of every day, are like this engineering model. We pull levers to get results, even when we don't know what the intervening "mechanism" is. Often we pull levers to get results without even being aware that we're pulling levers. It's no test of the truth of the foregoing, for instance, if Firestone denies he's using causation in an engineering sense. His behavior is pretty good evidence to the contrary.

Such engineering features of causation are manipulative techniques which are employed to get certain results. And

When we have a general manipulative technique which results in a certain sort of event A, we

speak of producing A by this technique (heating things by putting them on a fire). When in certain cases application of the general technique for producing A also produces B we speak of producing B by producing A (making iron glow by heating it) and in such cases we speak of A causing B.¹

Such regular techniques are called "recipes" by Gasking, and once such a recipe is figured out we can then be more efficient at putting certain causal relata together to get certain results.

I'm going to argue that there are recipes for more than heating iron, and that we miss important aspects of anger if we don't appreciate the ways in which states of anger are caused, and the recipe-like ways in which those states affect the environment of the angry thing. I am also going to argue against any attempt to disassociate anger from such causal considerations.

D. DISCUSSION OF RUSSELL.

In the last part of this chapter I discuss the relationship between engineering and scientific uses of causal language. It's important to discuss this relationship, however briefly, because it explains, in part, how engineering uses of causal language serve as more than mere pragmatic

¹D. Gasking, "Causation and Recipes" in Mind, Vol. 64, January 1955 p. 483.

tools. This relationship also allows us to hold out the hope that engineering considerations, once they indicate promising causal regularities, can be the basis of further causal investigation of a lantern sort.

In Mysticism and Logic Russell denies that causation has anything to do with science. Russell considers three definitions of causation which he finds in Baldwin's dictionary.

Causality (I) The necessary connection of events in the time series.....

Causation (notion of) Whatever may be included in the thought or perception of a process as taking place in consequence of another process.

Cause and Effect (I) Cause and effect.... are correlative terms denoting any two distinguishable things, phases, or aspects of reality, which are so related to each other that whenever the first ceases to exist the second comes into existence immediately thereafter, and whenever the second comes into existence the first has ceased to exist immediately before.¹

Russell rejects the first definition because it confuses logical necessity with physical necessity. He rejects the second because it's epistemological, and what is wanted is an ontic characterization of the causal relation (whether the relation is thought of or not). He rejects the third because of the difficulty of specifying just what an "event" is, and because any regular expected common sense sequence

¹ Bertrand Russell, Mysticism and Logic, p. 187.

can be interrupted unexpectedly, so the time interval between cause and effect is otiose. Russell assures us he is

far from denying that there may be such sequences which in fact never do fail. It may be that there will never be an exception to the rule that when a stone of more than a certain mass, moving with more than a certain force, comes in contact with a pane of glass breaks. I do also not deny that the observation of such regularities, even when they are not without exceptions, is useful in the infancy of a science: the observation that unsupported bodies in air usually fall was a stage on the way to the law of gravitation. What I deny is that science assumes the existence of invariable uniformities of sequence of this kind...¹

Developed science, Russell goes on to tell us, doesn't talk about any pairs of events between which some supposed causal nexus could be sought. The sort of vague qualitative talk found in everyday discourse is replaced in a mature science (like physics), not by a more precise account of events, but by "certain differential equations... which hold at every instant for every particle of the system."² And here there is nothing properly called "cause" and nothing properly called "effect" in any ordinary meaning of those terms.

This non-causal account, Russell tells us, is itself dependent upon the assumption that the particles quantified over are part of a relatively isolated system (a system be-

¹Ibid. p. 188

²Ibid. p. 194.

having constantly despite changes in other parts of the universe), and some usual features of causal analysis are thus cut away.¹ Not only are the particles in the system not related in an obvious cause-effect way, but the system is not viewed as part of the larger universe with which it causally interacts.

Russell then goes on to say that the usual cause-effect relation considered by philosophers (what we report in our singular causal statements), are only the simplest forms of a "relatively isolated system", i.e., they are systems in which (by ceterus paribus clauses) the philosopher isolates "A's causal relation to B".²

I view Russell's disagreement with the causal analysis of science as something less than an effective rejection of that analysis. Causation has not been defined by me in either of the first two ways with which Russell quarrels. Davidson's covering laws, which are required to be of a specific logical form, may not be explicitly present in the equations of astronomical physics, as Russell says. It still could be the case, however, that the surface formulation of scientific laws (in terms of differential equations or whatever) can be recharacterized as being logically of the form of some covering causal laws. The literal formulae

¹Especially Hobbesian and LaPlacean claims about some "grand" causal network.

²Ibid. p. 199.

used in an advanced portion of science need not be taken to be in correct logical form. Nor does the "fact" that equations make no reference to causes preclude their reporting a causal relation.

CHAPTER IV. TRANSITION TO A SPECIFIC DISCUSSION OF ANGER
AND THE "X IS MADE ANGRY BY Y" RELATION.

A. TRANSITION TO A SPECIFIC DISCUSSION OF ANGER

My basic picture of anger is that episodes of anger are caused by events in the world, and that anger is directed back at things in the world.

Where "e" is an anger causing event, x is a person caused to be angry by that event and z the thing at which the angry person is angry, the following diagram illustrates my basic picture.

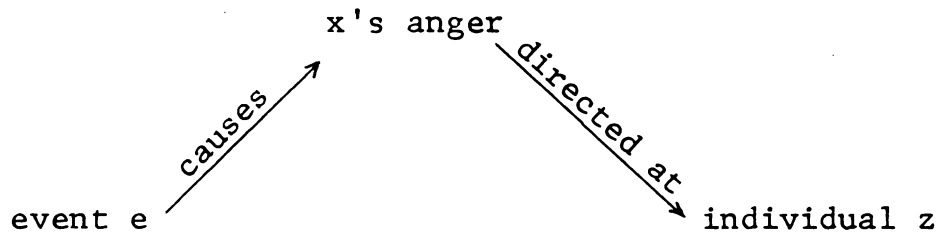


Figure one: My basic picture of anger.

This diagram will be fleshed in in remaining chapters and connections between e (the cause of the anger) and z (the object of the anger) will be discussed.

In thinking about anger this way I find the following five relations to be of particular interest.

1. The being made angry by relation (x is made angry by y).

2. The being consciously angry at relation (x is consciously angry at z).
3. The being biologically angry at relation (x is biologically angry at z).
4. The being justifiably consciously angry at relation (x is justifiably consciously angry at z).
5. The being justifiably biologically angry at relation (x is justifiably biologically angry at z).

I will try to show that these relations are of interest because their consideration leads to some important causal conclusions concerning anger. Consideration of these relations leads to important conclusions concerning anger, rather than a complete characterization of anger (or a definition) of anger. Such definitive results are very difficult to arrive at.

The discussion of these relations will eventually lead to our considering some causal aspects of anger, including behavioral, physiological and environmental aspects of anger. Most of the causal claims made about anger that follow are, however, philosophical, in the same sense that preceding remarks were philosophical, and constitute part of a sort of conceptual analysis of anger.

The causal aspects of anger discussed in what follows are, I think, informative in at least three ways. First, they link human anger with anger in non-human animals, which seems to me at least to reflect ordinary usage. Second,

they help us to begin to appreciate what the functions of an emotion like anger might be (in terms of survival value, for instance). Third, the causal consideration of anger sets us up, in a particularly nice way, to ask questions about whether or not anger continues to be a useful emotion for humans to display.¹

Before I begin giving cases of people who are made angry by something I'd like to briefly discuss two more reasons why I've adopted the above relations as the format in which to discuss anger.

The first reason is that anger seems to be relational in the way depicted by these relations. This will be borne out more fully in subsequent discussion, but there are some fairly good reasons for preferring the above sorts of relations as the beginning way to depict anger than, say, construing anger as a one-place unbreakable predicate (as in "x is angry-at-y").

I'm not aware of anyone who treats anger in this way, for even the most anti-analytic accounts require anger to "have" an object (see Solomon², for instance). Quine, at

¹It might be the case, for instance, that the usefulness of anger to humans is coming to be a thing of the past. Such questions turn out to be empirical questions on my account, and they are discussed in the last chapter.

²Robert Solomon, The Passions, An interesting aspect of anger which I'll return to in later chapters is Solomon's observation that anger "always requires a responsible agent as its object (even if it is anger at the weather, anger at a jammed door, or anger at the termites that are devouring one's house)." p. 285

one point¹, does treat belief as being an unbreakable one-place predicate, but the difficulties of so treating belief are pretty well known, not the least of which is that there can no longer be certain sorts of inferences about logical relations among beliefs. The same difficulty arises for Chisholm's adverbial treatment of belief. On either Quine's or Chisholm's account, the fact that I believe that there is a bulldog in the room with me is logically independent of whether or not I believe that there is a dog in the room. To "believe bulldogly" is not to "believe dogly" for "believe bulldogly" is an unbreakable one place predicate with no logical relation to "believe dogly."

There is no more logical relation between "believing bulldogly" and "believing dogly" than there is between "believing bulldogly" and believing something about a prime number ("believing prime numberly"?). But intuitively we think that there are logical relations between the first two of these beliefs. Believing that there is a bulldog in the room entails believing that there is a dog in the room. We want these logical relations to be represented in the way that we formulate belief sentences.

The same holds for anger. If we were, for instance, just angry-at-z (and not angry at z), there would be no way

¹W.V. Quine, Word and Object, p. 216. Also seen the second chapter of Chisholm's Theory of Knowledge. To be fair to Quine, it should be pointed out that this one-place construal of belief is one of about six ways to construe belief found in various of Quine's writings.

to represent any logical relation between, say, being angry at a bulldog and being angry at a dog. If, on the other hand, we can interpret being angry at as a two place relation, these logical relations immediately become representable.

The second reason for choosing these relations is that they are connected in a way that I find interesting. Some of these relations are subrelations of one another. So, for instance, if a person is justifiably angry at an object, he is angry at an object. As it turns out the second and third relations from the list above are subrelations of the first relation, and the fourth and fifth relations are subrelations of the second and third relations respectively. This will serve to connect, as I later hope to show, even conscious anger at to what makes (actually causes) the angry person to be angry.

B. A SPECIFIC DISCUSSION OF ANGER: "BEING MADE ANGRY BY".

I shall now give five cases of anger which will be useful examples for the subsequent discussion.

CASE 1: Chris's team is playing basketball against Larry's team in the men's intramural building. Larry, as is his habit, persists in applying the rules in two quite different ways; strictly to the opposing team and very loosely (where favorable) to his own. Larry submarines Chris under the

basket, sending him crashing out of bounds. In retaliation, Chris clearly blocks Larry's next shot but, in the time-honored tradition of pick-up basketball, Larry calls a foul on Chris and his team retains possession. As Chris receives the next inbounds pass Larry trips him and the ball flies loose. Chris scrambles to recover the loose ball and gets to it before Larry or any of Larry's teammates. As Chris picks up the ball Larry calls travelling on him. Chris is made angry by this "last straw".

CASE 2: Consider the following quote from the New York Times of February 7, 1968:

Phoenix, Ariz. Feb. 6 (A.P.)

Linda Marie Ault killed herself, policemen said today, rather than make her dog Beauty pay for her night with a married man.

The police quoted her parents, Mr. and Mrs. Joseph Ault, as giving this account.

Linda failed to return home from a dance in Tempe Friday night. On Saturday she admitted that she had spent the night with an Air Force lieutenant. The Aults decided on a punishment that would "wake Linda up". They ordered her to shoot the dog she had owned for about two years.

On Sunday the Aults and Linda took the dog into the desert near their home. They had the girl dig a shallow grave. Then Mrs. Ault grasped the dog between her hands, and Mr. Ault gave his daughter a .22 caliber pistol and told her to shoot the dog. Instead, the girl put the pistol to her right temple and shot herself.

The police said that there were no charges

that could be filed against the parents except possibly cruelty to animals.¹

Imagine that some Times reader, say Jones, reads this account and is made angry by what Joseph Ault did.

CASE 3: White, an engineer, has predicted that the shutdown of the Big Rock Nuclear Plant will be routine and short lived. The cooling of the reactor core will proceed apace, according to his public claims, and the reactor will be repaired and put back into operation in a few weeks with no danger to the public. The temperature in the reactor core continues to rise, however, as the main cooling system and back-up cooling systems fail. White is made angry by the increasingly hot reactor, and the slipshod performance of the reactor crew.

CASE 4: Lee Wilson used the hay blower to put the last of his hay into the barn, and went up to the house for supper. Suddenly smoke was seen coming from the south hay loft, and then the upper south side of the barn was engulfed in flames. By the time fire trucks arrived the barn was in flames and all the fire company could do was prevent the flames from jumping to the adjacent granary and tractor shed. The dairy farm which was Lee's life work, and the

¹Newton Garver, "What Violence Is", in the Wasserstrom edited Today's Moral Problems, p. 416.

sole source of income for him, his wife and seven children, went up in smoke. There was not adequate insurance. The fire marshall, sifting through the smoldering ashes, determined that the fire originated where the hay blower entered the mow, and was probably caused by a stone blown up the shaft which set off a spark. Lee is made angry because he allowed stones to get into the hay.

CASE 5: Bob has sent to Sports Memorabilia Inc. for a set of shirts, hats, mugs and socks which have the picture of a Spartan on them, are green and white, and which commemorate M.S.U.'s 1979 N.C.A.A. basketball championship. After checking the mail daily for six months, Bob receives a package from Sports Memorabilia. Ripping the box open, Bob finds that, instead of green and white shirts, hats, mugs and socks with the M.S.U. letters emblazoned on them, he has been sent blue and maize shirts, hats, mugs and socks with the block M of the University of Michigan on them. There is also a cover letter to all loyal Wolverine fans from Long John Orr. Bob is made angry by being mistakenly sent blue and maize things, and begins to toss them around the room.

With these five cases in mind, I shall attempt to give a biconditional for the "made angry by" relation.

The domain of the relation is the set of all things that are made angry by something. My cases all involve people and I shall continue to speak as if its only people who are angry, but people do not seem to be our only cases

of things that are made angry. Wounded bears, bees whose honey has just been stolen and lions with thorns in their paws may also be examples of things that are made angry by other things. I have people in my cases because angry people are our most interesting examples of angry things, and not because it's supposed to be obvious that angry people are our only examples of angry things (in fact, prima facie, they seem not to be our only examples of angry things).

The biconditional for the relation is as follows, where x is a real individual and e is an event.

x is made angry by e if and only if

1. x is angry, and¹
2. e is a cause of x 's anger.

I take it that the first conjunct on the right hand side of the biconditional is unexceptionable, for if something is made angry by something, then at least it's angry.

Justifying condition two requires a more extended discussion, since many may think that there is no connection between being made angry and being caused to be angry.

I will argue, in succession, that:

1. If someone is made angry by something, we think that there are appropriate ways causally to manipu-

¹Here anger is treated as undefined. I treat it this way throughout the thesis. This does not mean that I take it to be undefinable.

late the situation in which the angry person is made angry in order to affect his anger.

2. If there is no causal relation between some event and the angry person, then that event did not make him angry.

It seems clear that we really do believe that there are causal relata to be manipulated in an engineering manner in cases of anger, and that we do manipulate these relata for ourselves, and others, all the time.

In each case where someone is angered by something, the story linking the angry person causally with the world is a complex story, often involving such things as objects perceived by the angry person just before and during the episode of anger, physiological changes which occur in the angry person, and the environment in which the angry person finds himself. But all this complication does not belie the fact that we think we know well enough some of the causal relata involved in cases where people are made angry to engineer different results by a change of circumstance, or a change in the beliefs of the angry person, or a modification of some other relatum. We show that we do believe that such engineering regularities obtain when we try to engineer a change in such cases on the basis of our experience of other cases.

Take Chris's case as an example. In this case, Chris is angry because he has been pushed, tripped and treated roughly by Larry. Chris is made angry by what happened to

him in that particular basketball game. He is angry because he was pushed and shoved in a way not allowed by the rules of the game in which he agreed to participate.

A simple way to engineer a change in this situation is to remove Larry (or Chris) from it. If Larry isn't in the gym, other things being equal, Chris won't be made angry by Larry's acts (which are a special sort of event).¹ Other ways to make Chris not to be made angry by Larry's acts are to change Chris' conception of the game, or to talk Larry into changing his game. These are examples of modifying the causal relata in such a situation to avoid someone's being made angry. We do so for one another, and for ourselves, very frequently.

Some background information is useful in order to make some of these moves effective. For example, knowing about Chris' and Larry's dispositions would be helpful. But we are familiar enough with general patterns of behavior that emerge in various situations to make a list of the sort of changes we can expect to be effective in preventing a person from being made angry by events occurring in such situations, and at least some of these changes are straightforward modifications of the environment (removing Larry or Chris from the scene).

¹The "all things being equal" clause makes this a "relatively isolated system" in Russell's sense.

What I've done for the first case could be done for each of the other five cases, although the specifics of the engineering manipulation of relata may be harder in some of the other cases, e.g., in the reactor case (where present knowledge is lacking even at the engineering level).

I've now argued that if we are made angry by something, there are appropriate causal manipulations of the situation which affect that anger. This would be odd if being made angry is unrelated to causes of anger.

The second argument for condition two shows that if there is no causal relation between some event and an angry person, then that event did not make the angry person angry, viz., we require anger-making events to be causes. Consider the following case:

CASE 6: I'm Murphy the Masher. The thunk-thunk of the bent wiper blade whapping on the edge of the windshield hits on my nerves like a rubber mallet on a busted kneecap. It's been one of those nights. 8:45, two hours ago, I got a hot tip on big Bo Steinmacher, so I thought I'd get to him before the cops could. Met him in an alley behind Vito's. It's just gettin' dark as I coast into the alley with my lights out and the engine off. As I pull to a stop, the door at the back of the Willis Bar & Grill opens up. I take this as a sign that Bomacher will see me there. I get out of the car, and feel in my pocket for my sap. Just as I turn to the door I see a movement off to my left. I hear a shuffle and turn just in time to find this big paw over my



juglar, and some kind of ugly face behind a nylon stocking snarling at me. I go to kick the lug and get a Louisville Slugger in the right temple. Next thing I know the cops are there, Bomacher's in custody, and I'm up for failing to divulge the whereabouts of a known criminal, unless I'm willing to press charges for assault with a deadly weapon. I'm really mad at the lug that hit me, and it sure looks like that lug is Bomacher. I'm gonna press charges if for no other reason than to get even for the grapefruit on my right profile.

Let's suppose that Murphy is made angry by being beaten. Let's suppose further, that Bomacher's modus operandi usually includes wearing a nylon stocking for a mask. That Bomacher is large, left handed, snarls a lot, and has a large collection of Louisville Sluggers. Murphy gets angry, looks around for a thing to cite as what makes him angry that has all the above properties and comes up with big Bo.

Now, suppose, however, that though big Bo has all the above properties, big Bo is not the person who beat Murphy. It is too pat a case, big Bo was framed.

My claim here is that no matter how closely big Bo resembles the person who beat Murphy, if big Bo is not identical with that person, then big Bo did not cause Murphy to become angry and (hence) big Bo's act is not appropriate to cite as an act which made Murphy angry. Correct causal connections are the crucial difference between being guilty and

being framed. They are also the crucial difference between being an act or event which makes someone angry, and being an act or event merely thought to make someone angry.

The above two arguments show that we require anger-making events to be causes. If these arguments, and the condition two which they argue for, are correct, then a corollary follows. It is that if x is made angry by e , then e must be a real temporal entity. For by the above arguments e must be a cause of x 's state of anger. This state is a real temporal entity; so by weak intracategoriality, e must be a real temporal entity. Let us check this corollary, and condition two from which it is derived, by considering a case where the angry person cites, as what makes him angry, a fictional act. I argue that such cases are not cases where the citation made by the angry person is correct.

CASE 7: Jimmy, a five year old boy, has gone with his uncle to see Star Wars. Jimmy is enthralled by Darth Vader, and desperately wants a Darth Vader mask for Christmas. Jimmy's parents keep putting him off by saying "perhaps Santa will bring one for you." His parents think that Jimmy has too vivid an imagination, and would rather that he not be too taken by characters like Darth Vader. So, on Christmas eve, they stuff Jimmy's stocking with red woolen underwear. Upon seeing what "Santa brought" Jimmy is made angry.

My view is that one cannot literally be made angry by a fictional act. Santa's acts are clear examples of fictional

acts. So Jimmy cannot literally be made angry by anything Santa does, since being made angry by some acts entails the existence of those acts.

Note that I'm not claiming that Jimmy doesn't believe that some act (or acts) of Santa's makes him angry. I'm claiming that Jimmy falsely believes that some act of Santa's is what makes him angry. I'm going to give two arguments for this claim. The first argument is rather weak, and the second is stronger.

The first argument concerns Jimmy's own attitude towards his claim that Santa's act makes him angry. If Jimmy cites Santa's act as what makes him angry, then Jimmy thinks that Santa is real. Jimmy thinks that the real Santa brought him woolen underwear for Christmas. If Jimmy learns, and comes to believe, that Santa is fictional and could not literally do those things, then Jimmy will drop his claim to be made angry by what Santa did. In general, someone will only think that some act or event made him angry if he also thinks that the act or event which made him angry exists, and if he finds out that it doesn't exist, he'll drop the claim that that act or event made him angry.

My second argument notes that so long as the angry person persists in claiming that he has been made angry, he will pick something else that he takes to be a real act or event as the act or event that makes him angry, if he picks anything at all. This is especially clearly illustrated in

the case of a child like Jimmy who picks the acts of a definitionally fictional entity as the anger-making acts. But the same holds true when the angry person picks a more plausible anger-making event. Imagine taking any of the cases listed so far as a sort of elaborate "Candid Camera" situation, in which the event cited as the anger-making event is an elaborately deceptive prop. Suppose, for instance, that there is no nasty-acting Larry in the Chris-Larry case, just some fantastically sophisticated hologram with a midget running around inside of it, pushing and shoving poor Chris. Or suppose that the overheated nuclear reactor which our engineer is brought in to study is an elaborate N.R.C. test bed, in which engineers who are in line for promotion are tested under stress situations for their understanding of basic problems associated with reactors. In order for the stress to be present the engineer must be unaware that he's just being tested. Similar changes could be made in each of the other cases.

In such cases, what Chris and White cite as the event which makes them angry does not exist, as described. It is my claim that, when informed of the true nature of the situation, both Chris and White, will cite only real events (perhaps the acts of the midget-containing hologram, and the deceptive behavior of the actors at the dummy reactor) as the events which made them angry, if they cite anything at all. So long as they wish to characterize them-

selves as being made angry, in other words, they will pick only what they take to be real events as the events which actually make them angry, if they pick any events at all.

This completes my argument for the necessity of condition two of the biconditional. The argument shows that if x is made angry by e , then e must be a cause of x 's anger and (as a corollary) cannot be fictional. A remaining difficulty with the biconditional is that it seems to let too much in. Is it genuinely the case that any event from among the causes of an episode of anger is an anger-making event?

It is, of course, trivial, that anything from among the causes of an episode of anger is a cause of that episode of anger. What's not trivial is whether any cause is an event which made the angry person angry. My biconditional account of " x is made angry by e " entails that anything from among the causes of an episode of anger is something which makes the angry person angry, viz.,

x is made angry by e if and only if

1. x is angry, and
2. e is a cause of x 's anger.

I don't think that this is a real problem, however, since people will cite a wide variety of events as things which make them angry. If Chris is a neurophysiologist, for instance, he may cite as "what makes him angry" the firing

of some neuron in his brain, or the release of some catecholamines, etc. The range of interests, knowledge and purposes of angry people makes a wide range of causes citable as "what makes the angry person angry". Besides, since I want to hold out for the possibility that animals get angry too, and the causes which make an animal which is physiologically quite different from you and me angry may be very different from the causes that operate on you and me, it is desirable not even to restrict the range of "what makes angry things angry" to the wide variety of things which people cite as what makes them angry.

This doesn't mean, however, that we'll agree that anything from among the causes will be appropriately cited as the event which made the angry person angry. There is some sort of focus in our citations of what makes us angry. Notice, for now, how "natural" it would be in each of my cases for the angry person to try to pick out what seems to him to be a very appropriate event (or act) that makes him angry, as follows:

- CASE 1. Chris: "Larry's calling travelling on me really makes me angry!"
- CASE 2. Jones: "What that Ault creep did to his daughter, Linda; that really ticks me off!"
- CASE 3. White: "Carelessly allowing the reactor to over-heat makes me mad!"
- CASE 4. Lee: "Carelessly allowing those stones into that hay makes me angry!"

- CASE 5: Bob: "The inept handling of my shipping order by the people at Sports Memorabilia really grinds me!"
- CASE 6: Murphy: "Getting that Louisville massage steams this boy!"
- CASE 7: Jimmy: "Getting woolen underwear in my stocking makes me upset and angry!"

CHAPTER V: CONSCIOUS ANGER AT.

A. INTRODUCTION TO THE CHAPTER.

This chapter is concerned with the objects of conscious anger at. The chapter is broken down into three further sections. In the next section I discuss citations of a cause of some event and citations of the¹ cause of some event, and indicate how incredibly strong citations of the cause are. Since citations of a cause are too weak to help us to focus on an object of anger at, and citations of the cause are too strong to ever be correct, in the third section I indicate how I think angry people do focus their beliefs about what made them angry. This focussing is in terms of "untoward acts". In the fourth section I give a biconditional construal of conscious anger at, using results from the previous sections to focus discussion.

B. CITATIONS OF A CAUSE COMPARED WITH CITATIONS OF THE CAUSE.

The following cases and arguments are designed to point out some differences between citing some cause as a cause of

¹Where the cause is the unique cause which is appropriate to cite no matter what one's instrumental aims. I will eventually argue that there is no such cause.

some event and citing some cause as the cause of some event. The events whose cause I am eventually interested in discussing in terms of these differences are episodes of anger. The distinction between citing some cause as a cause of some event and citing some cause as the cause of some event is a distinction which applies to the citing of causes of events other than just episodes of anger. For this reason the first paragraphs of the following discussion of citations of a cause and citations of the cause contain a general discussion, it is not just a discussion involving cases of episodes of anger.

I want to reassert the ontological independence of causes. We are impinged upon causally by many causes of which we are unaware. A person can be caused to be angry by some cause *c* and not know it, believe it, say it or think it. If I hit my head on my office door and get angry because of it, I don't need to understand the causal processes which transmit the impact of the door on my flesh to my central nervous system, or to even be aware of the existence of such processes. Surely, however, these processes are part of the causal story as to how I became angry. There are many cases, the vast majority of cases, where *c* is a cause of some person's anger, where *c* is a thing which has that angry person's anger (in some sense) as an effect, of whose existence that angry person is unaware.

In ordinary life when we explicitly mention causes, we are usually picking out some particular causes in the

citable causal network for some purpose of ours,¹ and differences in purpose sometimes lead us to cite different causal relata. The most common and central use of causal talk is the prescientific engineering use of causal recipes in situations where we are unaware of the specific content of the full covering scientific "causal" law.

To make these claims clearer, I'll use the case of White, our engineer, who is trying to cool an overheated reactor. The focus of the immediately following paragraphs is on White's causal analysis of how to cool the reactor.

As an engineer, White has been explicitly schooled in a sophisticated way, to take advantage of certain sorts of recipes when dealing with a complex technical apparatus (like a nuclear reactor). If White finds a recipe which he can use to get the reactor to cool down quickly, efficiently, and if he puts that recipe into action without any additional threat to the population surrounding the reactor and cools the reactor cheaply, then he is likely to think of some cause connected to that efficient recipe for the cooling of the reactor as being the cause of reactor cooling.²

¹A bad paraphrase of Goodman is appropriate here: "causes are where you find them, and you find them (almost) everywhere".

²I remind the reader that I'm not talking about causes of White's anger here. I'm talking about what White will come to think of as the cause of the reactor cooling.

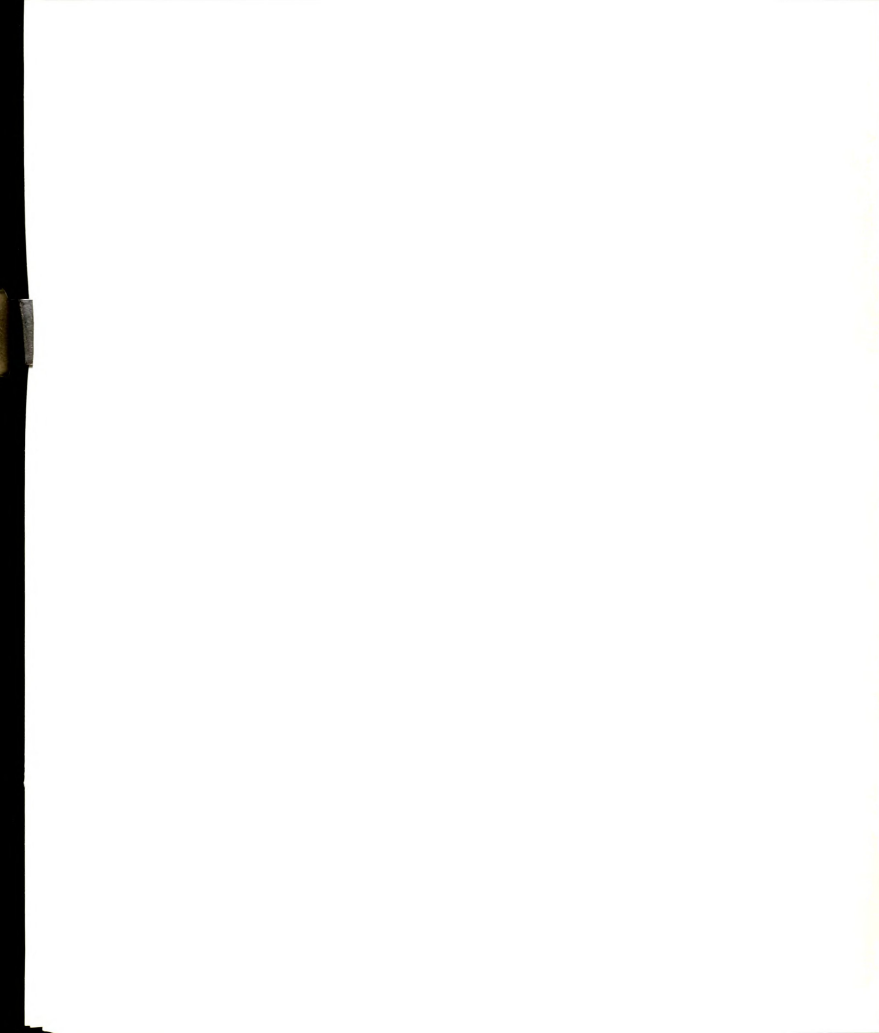
What might lead White to think of some cause as the cause of reactor cooling can be illustrated by the following (rather silly) extension of case 3.

CASE 3': White, as an engineer, whose chief purpose at the moment is to cool the reactor, has calculated that twenty pounds of baking soda, added to the hot reactor, will cool the reactor. White has an employee named Schmidt dump the baking soda into the reactor, and the reactor cools down almost immediately.

White's chief purpose is to cool the reactor down. This chief purpose (or aim) is achieved by adding baking soda to the reactor. White's point of view is largely determined by the engineering-type considerations which he's applying to the problem of cooling the reactor. The surprise of finding that baking soda will work, along with an understanding of the chemical reactions involved, and the inexpensive nature of the solution to his problem, leads White to cite the adding of the baking soda as the cause of the reactor cooling. This same cause would be likely to be cited as the cause of cooling by anybody who had the same technical training and the same instrumental aims as White. As a technique to cool similar reactors which are overheated, White's adding of the baking soda will be thought of as a crucial part of a reactor-cooling recipe.

In general, when we make recipe citations for instrumental purposes, we consider only a small subset of all the causes of which we are aware. The set of all causes of which we're aware is, in turn, only a small subset of all the causes that could be truly cited. If White were not trying to accomplish his instrumental end of cooling the reactor, and was citing causes from some arbitrary list of events causally related to the overheated reactor, he might recount how the mining of uranium ore in Idaho is a remote cause of the reactor overheating. As an engineer trying to cool the reactor down, however, White is aware of lots of these types of causes which he won't even think of as relevant causes to cite in his frantic effort to restore the reactor to cooler temperatures. There are also lots of causes which White doesn't know about, some of which might have been manipulated in order to prevent the core from overheating in the first place, and some of which he's urgently trying to discover in order to get a recipe which works to cool the reactor down.

White, like the rest of us, could cite more causes than he does. One reason we don't cite more causes than we do, is our sense of practical causal relevance. This sense of causal relevance, in turn, may be partly explained by the necessity of things with limited knowledge, time and power (things like us) to get along (and survive) in this world.



From the standpoint of any instrumental aims that we accept, if some cause seems to us to fit those aims in a particularly relevant way, then we tend to think of that cause as the cause of the event in question.

From the standpoint of engineers who share White's purposes, the adding of baking soda to overheated reactors is likely to get cited as the cause of reactor cooling in any similar situation where White's recipe is used and causes an overheated reactor to cool.

The Pennsylvania Worker's Weekly, however, is a paper which cites heroes of labor. According to the Weekly, Mike Schmidt, a labor crew foreman, risked his life to add the baking soda to the overheated reactor, and it is Mike Schmidt's heroic act, and not the adding of the baking soda, which is the cause of the reactor's cooling.

We may be able to get White and the Pennsylvania Worker's Weekly to agree on what counts as the cause of reactor cooling, viz., they may agree that it's Schmidt's adding the baking soda that cooled the reactor. But even here, however, there may be detectable differences in emphasis; White tending to emphasize the adding of the baking soda per se, and the Weekly emphasizing the heroism of proletarian Schmidt as the adder of the baking soda.¹

¹Of course, in this case, there is really one cause cited and not two. The Weekly citation and White's citation are two descriptions of the same act, viz., Schmidt's adding of the baking soda. In the following case (the Smith case) different citations of the cause will be made.

The differences between White and the Weekly are pretty mild compared with differences that actually do arise as to what to cite as the cause of some event¹. To drive this point home, consider the following citations of the cause of an episode of anger experienced by an angry factory worker named Smith.

CASE 8: Smith is a factory worker who puts goop on car tops so that vinyl roofs can be affixed to them. Smith gets angry often, but now says he's angry at the way in which his job has "gone bad". (Smith is like most of us and is not as articulate as an Oxford don). When asked what has made him angry, Smith replies at some length, that he's been made angry by his bossy foreman, who has just told him to shape up or ship out.

The first citation of the cause of Smith's anger comes from the standpoint of Marxism. If I am a Marxist sociologist looking at Smith's anger to determine what causes it, I may focus rather narrowly on Smith's labor to see if it is

¹Note that we are less confident of citations of the cause in this reactor case than we were in the case of the window and the rock (see the Davidson quote on page 35). We are even less sure of our citations of the cause with anger, than we are with such citations in the case of the reactor. This may be because of the increasing complexity of the event whose causes we are citing. It almost certainly has to do with the increased personal investment in finding the cause of an episode of anger, as opposed to the minimal investment usually associated with finding the cause of a broken window.

of a particularly alienating sort. Smith is asked to do routine, humdrum and dehumanizing things, and is not allowed to keep the fruits of his labor (presumably the car?). If I could make out a particularly good case that Smith's labor is "alienated", then I would expect that other Marxists would agree with me that the cause of Smith's anger is his alienating labor (a long event).

If, on the other hand, I am a geneticist, I may focus exclusively on the fact that Smith is an alpha male who possesses an xyy chromosone, which explains both Smith's large size and his persistently angry behavior. And the possession of an xyy chromosone will ultimately be seen as the cause of Smith's anger by every geneticist who shares my beliefs.

If I am Smith, I may just as easily have claimed, very sincerely, that the cause of my anger was the goop that dripped on to my shoes just as my foreman (who happens to be a woman) yelled at me.¹

When faced with a so-called "classic" case of anger at, each of the above perspectives claims to have almost sole authority when it comes to diagnosing the true cause of that case. From the standpoint of our militant geneticist, Smith's explanation of his anger as well as the Marxist's

¹One can readily see that the situation may be additionally complicated ad nauseum. The Freudian analyst, the feminist analyst etc. can all jump in and stake out a claim to identify the cause of Smith's anger.

are not even relevant to finding the causes of Smith's anger. This is especially vexing in a case like Smith's where the angry person is (let's suppose) genuinely alienated, hates goop, and has xyy chromosomes.

Given these considerations, what now are we to think of a claim which purports to cite the cause of an episode of anger? If the definite article is to be taken literally, such a claim is simply too strong. It amounts to saying that the cause cited is the only relevant cause to cite. The point to note here is that we ought almost never baldy to cite some cause as the cause of an episode of anger because it's very doubtful that there is any such cause.

C. CITATIONS OF CAUSES AND OBJECTS OF ANGER.

If we consider the citations that angry people make when emphatically picking out the event which made them angry, it is evident that sometimes the angry person is claiming to be citing the cause of his anger. Consider, for example, the following first person emphatic citations taken from the end of the last chapter (and supplemented with such a citation from the Smith case).

CASE 1. Chris: "Larry's calling travelling on me really makes me angry".

CASE 2. Jones: "What that Ault creep did to his daughter, Linda, that really ticks me off!"

CASE 3. White: "Carelessly allowing the reactor to over-heat makes me mad!"

- CASE 4. Lee: "Carelessly allowing those stones into that hay makes me angry!"
- CASE 5. Bob: "The inept handling of my shipping order by the people at Sports Memorabilia really grinds me!"
- CASE 6. Murphy: "Getting that Louisville massage steams this boy!"
- CASE 7. Jimmy: "Getting woolen underwear in my stocking makes me upset and angry!"
- CASE 8. Smith: "Getting a lot of guff from my ignorant foreman makes me mad!"

One can easily imagine, in each of these cases, that the angry person is willing to assert the truth of the citation below given that he makes the citation above.

- CASE 1. Chris: "Larry's calling travelling on me is the act that makes me angry!"
- CASE 2. Jones: "What that Ault creep did to his daughter Linda is the act that makes me angry."
- CASE 3. White: "Carelessly allowing the reactor to overheat is the act that makes me angry!"
- CASE 4. Lee: "Carelessly allowing those stones into that hay is the act that makes me angry!"
- CASE 5. Bob: "The inept handling of my shipping order by the people at Sports Memorabilia is the act that makes me angry!"
- CASE 6. Murphy: "Getting that Louisville Slugger massage is the act that makes me steamed!"
- CASE 7. Jimmy: "Getting woolen underwear in my stocking is the act that makes me angry!"
- CASE 8. Smith: "Getting a lot of guff from my ignorant foreman is the act that makes me angry!"

Of course, not all emphatic first person citations of what makes people angry can be taken as purporting to identify the cause of the angry person's anger. And, in fact, very often the angry person would admit that he had not cited the cause of his anger. Many angry people are quite careful, and would not claim to identify something which is a very appropriate cause to cite from the standpoint of all instrumental aims as what makes them angry. Many people would also be willing to pick more than one thing to cite as what makes them angry. But there are a large number of emphatic first person citations in which the angry person seems to be literally claiming to pick the cause of his anger.

We need not look too far to find one reason for this. If something were appropriately cited as the cause of an episode of anger, then that cause would be a particularly relevant cause of anger from the standpoint of all instrumental purposes, and the anger of the angry person would be very understandable (and, no doubt, easier to justify).¹

First person emphatic citations of what makes people angry are not to be counted as citations of the cause of anger. Not only is it doubtful that there is any such cause, but people are not generally in a privileged position to

¹And it would be widely accepted as the cause, much as the stone thrown through a window (in a non-blaming context) may be widely accepted as the cause of the windows breaking.

cite causes of their anger, and may even be wrong in citing something as a cause of their anger (Jimmy is wrong when he cites Santa's giving him woolen underwear as causing his anger). So first person citations (or any citations, for that matter) that purport to identify the cause of an episode of anger are to be discounted.

But there is still a focus in first person emphatic citations which should not be discounted.¹ Angry people do not pick just any event to characterize as the event that makes them angry. In all the above cases (and, I claim, in each case of a first person citation of "what makes me angry") the angry person cites an event which he believes is "bad" in a particular way.

In each case where a person cites what makes him angry the angry person cites some event (actually some act) that he takes to be untoward. The angry person is taking the event which makes him angry to be "bad, wrong, inept, unwelcome, or in some other of the numerous possible ways untoward."²

To say that an act is taken to be untoward is to say that it is taken to be not justified. A justify of an act

¹The angry person will only pick out, as what makes him angry, events which he believes to be untoward.

²The use of "untoward" here is suggested by a reading of John Austin's "A Plea for Excuses", in the Feinberg and Gross edited Philosophy of Law, pp. 316-329.

said to be untoward is to show that the act is not untoward at all. In the Chris-Larry case, Larry would be giving a justification of his act if he showed that he was violating none of the rules of the game in which he and Chris agreed to participate. In claiming his act to be justified, Larry is claiming that his act was not untoward at all, and that Chris was incorrect in so characterizing it.

Untowardness may also be excused, and to give an excuse for an untoward act is to say something about the doer of the act (the agent). To offer an excuse for an untoward act is to admit that it was "sort of" untoward (in the sense of bad, inept or clumsy) but to claim that it was not untoward in the sense that it was done intentionally by an agent. When excuses are offered it is usually on the part of an actor who is claiming something other than full agency (and, hence, something less than full responsibility). Quite often excuses are claims on the part of the accused to the effect that the accused is compelled to act or under duress.

It is agents who are being accused of acting untowardly in the above citations, and these agents will be taken as the objects of anger by the people making these emphatic first person citations. This can be seen from the way in which successive citations from the last list of citations (the list of first person citations of the thing that makes one angry) imply their counterparts on the following list of citations. Citations of the act that makes one angry imply

citations of anger at the doer of that act. So for each of my cases:

- CASE 1. Chris: "I'm angry at Larry!"
- CASE 2. Jones: I'm ticked off at Ault!"
- CASE 3. White: "I'm angry at whoever carelessly allowed this reactor to overheat!"
- CASE 4. Lee: "I'm angry at whoever carelessly allowed these stones into the hay!"
- CASE 5. Bob: I'm angry at the people who handled my order at Sports Memorabilia!"
- CASE 6. Murphy: I'm angry at Bomacher!"
- CASE 7. Jimmy: I'm angry at Santa!"
- CASE 8. Smith: I'm angry at my foreman!"

Though there are cases where the object of our anger is not an agent (I'm angry at my office door, having hit my head on it), we still seem to regard those objects as agents; witness my tendency to kick the door in retribution after I've been made angry by hitting my head on it. So such examples aren't clear counterexamples to the claim that angry people at least momentarily take (believe) the object of their anger to be an agent.

Before focussing on the biconditional for conscious anger at, let's remember that my basic picture of anger is that episodes of anger are caused by events in the world, and that the anger which is so caused is directed back at objects in the world.

Causal relations obtaining between causes of states of anger and states of anger were considered in the last chapter and in this section of this chapter. These relations are reported by the "x is made angry by e" locution.

The following account of conscious anger at is a preliminary to the discussion of the second basic feature of anger mentioned above. I want to get clearer on what people take as objects of their conscious anger before I discuss this feature of anger explicitly. The remainder of this chapter is devoted to a discussion of the biconditional for conscious anger at, and the second part of the next chapter contains an account where I try to characterize conscious anger at in a way which emphasizes causal relations obtaining between states of anger and the objects of those states of anger.

D. A BICONDITIONAL CONSTRUAL OF CONSCIOUS ANGER AT.

First person emphatic citations focus on acts that are thought to be untoward, and citations of objects of anger focus on the agents who do those acts. In order to consider this claim more fully I want to now give a set of necessary and sufficient conditions for episodes of conscious anger at.

Let "e" be a variable which ranges over events. Let "z" be a variable which ranges over agents (real or fictional). Let "x" be a variable that ranges over angry people.

x is consciously angry at z if and only if

1. There is some event e such that x is made angry by e, and
2. x consciously believes that there is some e such that
 - a. e made x angry, and
 - b. e is untoward, and
 - c. z did e

The above biconditional may be formalized as follows.

Where "1" and "2" are dummy letters for variables, let "C 1 2" be read as "1 is consciously angry at 2." Let "M 1 2" be read as "1 is made angry by 2". Let "U 1" be read as "1 is untoward" and let "D 1 2" be read "1 did 2". "B 1" is a belief operator containing within its scope the first well formed formula to its immediate right.

Using this dictionary, the above biconditional reads:

$$(x) (z) [Cxz \equiv (\exists e)(Mxe \ \& \ Bx (\exists e)[Mxe \ \& \ Ue \ \& \ Dze])]$$
¹

¹The biconditional does not read $(x)(z)[Cxz \equiv (\exists e)Mxe \ \& \ (\exists e)Bx(Mxe \ \& \ Ue \ \& \ Dze)]$ because it seems that one can believe one is made angry by an imaginary (non-existent) insult. It doesn't read $(x)(z)[Cxz \equiv (\exists e)Mxe \ \& \ Bx(ix)(Mxe \ \& \ Ue \ \& \ Dze)]$ because this would have the angry person always believing that he had picked out the cause of his anger. It perhaps should read $[Cxz \equiv (\exists e)Mxe \ \& \ (Bx)(\exists e)(Mxe \ \& \ Ue \ \& \ Dze)]$ which would give us a "definition schema" but would not require that we quantify into an opaque context. The actual justification for quantifying into an opaque context, as is done in the body of the paper, is fairly complex, and a subject worthy of individual attention. In order to quantify into the belief context (to universally instantiate and then substitute co-referential singular terms) the belief context must be one in which the belief of the angry person only picks out specific objects (z's), viz., the belief of the angry person is a de re belief.

An intuitive translation of this biconditional might be "A person is consciously angry at an individual just in case he has been caused to be angry, and he believes that the individual at which he's angry caused him to be angry by doing some untoward act."

I'll now argue that the conditions on the right hand side of the biconditional are necessary conditions on conscious anger at.

The argument for the first condition runs as follows. One cannot be angry at some individual without being angry. One cannot be angry (in an occurrent sense) without being in a state of anger. One cannot be in a state of anger without that state being caused. So to be angry at some individual, one has to be in a caused state of anger.

I will now give two separate arguments for the remaining three conditions (conditions 2a, 2b and 2c) assuming that the first condition (x is made angry by e) is impeccable.

The first argument is an argument to the effect that every time we have a case of conscious anger at this implies that it is a case where the angry person believes that some untoward act made him angry and that some agent did that act.

If correct, this argument would show that every time we have a case of conscious anger at, this implies a case where an angry person believes an untoward act made him angry, and

we also have a case where an angry person believes that some actor did that act.¹

The first step of the first argument is to show that every time we have a case of conscious anger at, this implies a case where the person who is (occurently) consciously angry at believes that some untoward act made him angry.

That this is true in all my cases is shown by the following list of citations:

List of emphatic-made-angry-by citations made by occurently angry people

CASE 1. Chris: "Larry's calling travelling on me really makes me angry!"

CASE 2. Jones: "What that Ault creep did to his daughter, Linda, that really ticks me off!"

CASE 3. White: "Carelessly allowing the reactor to overheat makes me mad!"

CASE 4. Lee: "Carelessly allowing those stones into that hay makes me angry!"

CASE 5. Bob: "The inept handling of my shipping order by the people at Sports Memorabilia really grinds me!"

CASE 6. Murphy: "Getting that Louisville massage from Bomacher really steams this boy!"

CASE 7. Jimmy: "Getting woolen underwear in my stocking from Santa makes me angry!"

CASE 8. Smith: "Getting a lot of guff from my ignorant foreman makes me mad!"

¹I thank Bob Steinman for help with this argument.

To show that this is generally the case, consider how odd it would seem for a person who claims to be consciously angry at to claim that no untoward act made them angry.

Interlocuter: "Chris, are you angry at anything?"

Chris: "Yes, I'm angry at Larry."

Interlocuter: "Did something that Larry did make you angry?"

Chris: "No, Larry did nothing to make me angry."

Interlocuter: "Did Larry do anything bad or untoward in any way?"

Chris: "No, I don't believe Larry did anything wrong."

I believe that in such a case we'd be puzzled by Chris' claim to be angry at Larry. The same point can be made for any of my other cases, even the Jimmy-Santa case. In fact, the only way we can understand Jimmy's anger at Santa is if Jimmy believes Santa did something untoward which made Jimmy angry. I claim that this constitutes prima facie evidence that if someone is consciously angry at an agent this implies that he believes that the agent did an untoward act which makes him angry.¹

Notice that in taking some event *e* to be an untoward act, the angry person implicitly takes there to have been an

¹This argument is extended in Appendix A.

agent who did it, even if the only way he can refer to that agent is as "the person who did e to me".

Because I feel uncomfortable with the adequacy of the above argument for the necessity of conditions 2a, 2b and 2c, I want to give a second, more standard, sort of argument for their necessity.¹

I claim, in the second argument,² that conditions 2a, 2b and 2c are individually necessary for conscious anger at. I first consider the case where 1, 2a and 2b are assumed true, and 2c is assumed to be false. Then I consider the case where 1, 2b and 2c are assumed true and 2a is assumed to be false. I fail to get an adequate counterexample off the ground in these two cases. Then I assume that conditions 1, 2b and 2c are true and that condition 2a is false. I save this case for last because it's the hardest case to deal with, and my response to it is weaker than my response to the other cases (thus leading me to claim that the four conditions on the biconditional are only prima facie necessary conditions.)

Suppose that we have a purported case of conscious anger at where the person claims to be consciously angry at

¹I still assume that condition one needs no further argument and has already been established.

²I am indebted to Bob Steinman for this argument.

an object (z), the person is caused to be angry,¹ the person believes that an untoward act caused him to be angry, but claims that z didn't do e. This, again, is to say "Yes, I'm angry at z, and untoward act e made me angry (hence an act without justification or excuse made me angry) but I don't believe agent z did e." It seems fair, in such a case, to deny that the person really is angry at z, because untoward act e is not attached to z,² and this case becomes like the Chris case discussed in argument one, e.g., (supposing Chris really is caused to be angry by some event e):

Interlocuter: "Chris, are you angry at anything?"

Chris: "Yes, I'm angry at Larry."

Interlocuter: "Did some untoward act make you angry?"

Chris: "Yes, I was tripped and pushed."

Interlocuter: "Was this act untoward?"

Chris: "Yes."

Interlocuter: "So you believe Larry did this untoward act?"

Chris: "No."

¹And, hence, is angry if moderate intracategoriality is true.

²And if Chris picks some other act, e, which he believes is untoward, we will just have to ask him again "Do you believe Larry did e?" Until we find an act which Chris does believe Larry did, we will not agree that Chris is consciously angry at Larry.

This seems odd, indeed, and I think the reason it seems odd is that we require people who are angry at an agent to ascribe untowardness to some act of that agent.

Suppose, for the second possible counterexample, we have a case where conditions 1, 2a and 2c are assumed true, and condition 2b is assumed false. This is a case where someone is consciously angry at an object (z), is caused to be angry by some event (e), believes that he is caused to be angry by an event (e) which was done by an agent (z) but claims that e is not untoward.

Again, let's interpret Chris' case this way. By hypothesis Chris really is caused to be angry by some event (e) and Chris believes some event e which z did make him angry, but Chris thinks that e is not untoward:

Interlocuter: "Chris, are you angry at anything?"

Chris: "Yes, I'm angry at Larry."

Interlocuter: "Did Larry do something to make you angry?"

Chris: "Yes, Larry did several things to make me angry."

Interlocuter: "And was anything Larry did untoward?"

Chris: "No, everything Larry did was just fine."

Surely this also seems very odd. Again, I claim that the reason it seems odd is because we require condition 2b to be met in order to have conscious anger at.

Now consider a possible counterexample to the effect that Chris is consciously angry at Larry, some event makes Chris angry, Chris believes Larry acted untowardly, but Chris does not believe that any untoward act of Larry's caused him to be angry. Again, we get an odd dialogue:

Interlocuter: "Chris, are you angry at anything?"

Chris: "Yes, I'm angry at Larry."

Interlocuter: "Did Larry act untowardly?"

Chris: "Yes, he bumped and pushed me."

Interlocuter: "Is this what makes you angry at Larry?"

Chris: "No, Larry did nothing at all to make me angry at him, I'm just angry at him."

If Chris cites no act of Larry's which makes him angry we may continue to question Chris as to why he's consciously angry at Larry. If Chris gives a reason which does not refer to an act of Larry's which makes Chris angry we can make some sense of what Chris is saying. Perhaps Chris will say he's angry at Larry because Chris can't stand Italians and Larry is an Italian. If so, it seems plausible to say that Chris is misdescribing his dislike of Larry as anger at Larry. If no citation of an untoward act of Larry's is forthcoming as to why Chris is angry at Larry, we may suspect that Larry's bumping and pushing Chris really is what Chris believes makes him angry but Chris is not willing

to admit it. Such a response to Chris is made more plausible if, immediately after Chris is pushed and shoved by Larry, Chris attacks Larry.

These arguments constitute evidence that the four conditions on conscious anger are necessary, viz.,

x is consciously angry at z if and only if

1. There is some event e such that x is made angry by e, and
2. x consciously believes that there is some e such that
 - a. e made x angry, and
 - b. e is untoward, and
 - c. z did e¹

What remains to be argued is that the conditions are sufficient, i.e. that whenever the conditions on the right hand side of the biconditional are met we have a case of conscious anger at an object of anger (here z).

In order to get a counterexample to this we would need a case of an occurrently angry person who believes that he's identified an agent who caused him to be angry by acting untowardly and is not angry at that agent.

¹Remember that anger at my office door after I hit my head on it is not a counterexample because, though the door is not an agent, I seem to take it as one when I kick it (in retribution?).

The following case seems to be just such a case:

CASE 1': A modified Chris-Larry case. Suppose that the Chris-Larry case is set up as before, but now an additional complication is added. This complication is the fact that I talked Chris into playing ball with Larry knowing (or at least suspecting) that Chris would become angry at Larry. In order to get Chris to play with Larry I lied to Chris about how much fun it would be to play with Larry etc.

Now suppose that Chris becomes aware of my shenanigans and views my talking him into playing with Larry as an untowards act which I performed, and which was a cause of his anger.¹

The question here is, can Chris:

1. be made angry, and
2. consciously believe that being talked into playing with Larry caused him to be angry, and
3. consciously believe that being talked into playing with Larry is untoward, and
4. consciously believe that I talked him into playing with Larry, and

still fail to be occurrently consciously angry at me?

¹Richard Hall points out that there may well be two episodes of anger here; the first when Larry pushes Chris out of bounds, and the second when Chris finds out about my lie. The first may have Larry as its object, the second, me.

The answer to this question is not exactly crystal clear. However, remember that for Chris to think my lying to him is untoward, he must think that my lying to him is unjustified. With this addition, however, it becomes harder to think of Chris as not being angry at me since he views my bad act (my lie) as both causing him to be angry and as being without justification.

If we also consider that to view the untoward act as my act (in the sense of human agency) Chris must also think of my act as without excuse, then it becomes a little more difficult to think of Chris as not being angry at me. For now, by hypothesis, Chris is:

1. made angry, and
2. believes he is made angry by being lied to, and
3. believes my lie made him angry, and
4. believes my lie is unjustified, and
5. believes my lie is without excuse.

It looks to me, again, that Chris is occurrently angry at me if his anger meets these conditions, and that the four conditions on the right hand side of the biconditional will generally be sufficient conditions for conscious anger at. Lacking a counterexample, the foregoing constitutes a prima facie case that these conditions are sufficient.

x is consciously angry at z if and only if

1. There is some e such that x is made angry by e, and
2. x consciously believes that there is some e such that
 - a. e made x angry,
 - b. e is untoward, and
 - c. z did e.

CHAPTER VI: PROPER OBJECTS OF CONSCIOUS ANGER AT,
BIOLOGICAL ANGER AT AND ITS PROPER OBJECTS, AND AN
ATTEMPT TO SHOW PROPER OBJECTS TO BE CENTRAL TO ANY
CAUSAL ACCOUNT OF CONSCIOUS OR BIOLOGICAL ANGER AT.

A. INTRODUCTION TO THE CHAPTER.

In this chapter I argue that conscious anger at usually succeeds in being directed at proper objects. A proper object of an episode of anger is an entity that actually entered into the causal genesis of that episode.

I then give a bioconditional construal of biological anger and argue that biological anger at also usually succeeds in being directed at proper objects.

I then argue that in order to understand the evolution of anger at (both biological and conscious) we need to make the notion of proper object central to our account of anger at.

B. WHY CONSCIOUS ANGER AT IS USUALLY DIRECTED TOWARDS A
PROPER OBJECT

This section is devoted to arguing that in conscious anger at, the angry person does usually pick out the agent who did the untoward act that made him angry.

In all of the preceeding cases anger has been treated as a caused state. Anger at takes us from being made angry by some event to being angry at some individual. If we are to understand why conscious anger at has evolved in a simple sort of causal way, some of the events that make one angry will have to be attached to some of the individuals at which one is angry.

It is here that the general picture given at the beginning of chapter four comes into play. That picture connects the act that makes the angry person angry with anger at the agent who acted to make the angry person angry.

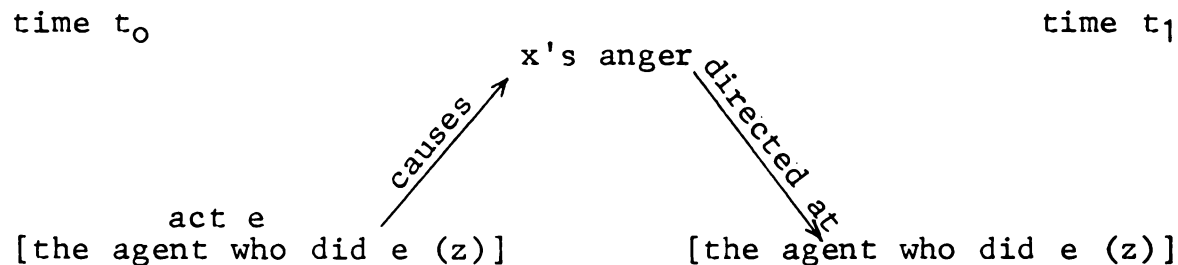


Figure two: x is made angry by e, and
x is angry at z.

When the object of anger is a person, as in the Chris case, the following sort of picture indicates the usual causal relationship between object and cause that I have in

mind.¹ Larry tripped, pushed and taunted Chris. When Chris became angry at Larry, it was a short time after Larry called travelling on Chris. Take this act of Larry's as "event e", and take Larry as "individual z". It may be the case that at the time at which Chris' anger was directed at Larry, Larry was no longer occurrently abusing Chris or anyone else. But because Larry is an agent, and agents quite often have long-lived dispositions to respond in certain ways in certain situations, Chris' anger at Larry at least has the potential function (so long as it is effectively directed at Larry) of modifying Larry's disposition to act in ways that make Chris angry. At the very least, Chris' anger at Larry, if it results in a well-directed attack on Larry, indicates a response to Larry's actions which is intelligible as an attempted modification of Larry's dispositions (and, hence, an attempted modification of the pattern of Larry's future actions).

The following argument indicates in more detail why it is generally the case that objects of an episode of conscious anger at are associated correctly with causes of that episode of conscious anger at. The argument involves consideration of three so-called kinds of "objects" of conscious anger at, viz., fictional "objects" of conscious an-

¹And this causal relation is always the case for the sort of anger at that I discuss in Appendix B.

ger at, non-causal objects of conscious anger at and causal (or proper) objects of conscious anger at. In the following argument I explain what each kind of object is, and then I argue that only proper objects help us to understand the majority of cases of conscious anger at. Of the three kinds of objects of conscious anger at, the first is not even an "object" in the ordinary sense (a real entity).

Fictional entities are sometimes said to be objects of anger. The cases in which they are said to be objects of anger are cases where the angry person says that he is angry at something, but that thing turns out (unbeknownst to the angry person) to be a fictional entity. I will discuss such a case in a moment, but for now I'll be content to just call such "objects" fictional objects of anger.

The second sort of object is an entity which is a non-fictional temporal entity, and which the angry person says he is angry at, but which does not enter into the causal genesis of the angry person's anger. I will call such objects non-causal objects of anger.

The third sort of object is an entity which the angry person says he is angry at, and which does enter into the causal genesis of the angry person's anger. Such objects are proper objects of anger.

These various kinds of object can be illustrated using an extension of the case of Smith, our angry factory worker, viz.,

CASE 8': Smith is an angry factory worker who puts goop on car tops so that vinyl roofs can be affixed to them. Smith gets angry often, but now says that he's angry at the way in which his job has "gone bad". When asked what makes him angry, Smith replies at some length, that he's made angry by his bossy foreman etc. Smith is eventually fired, and goes home angry.

The following three further extensions of the Smith case involve, respectively, a typical fictional object of conscious anger at, a typical non-causal object of conscious anger at and a typical proper object of conscious anger at.

CASE 8'': Suppose that after Smith gets fired by his boss, he goes home and says that though he admittedly is made angry by his boss, he is angry at the stork for having brought him into the world. Smith is consciously angry at a fictional object.¹

¹This is not to say that Smith is conscious of the fact that the stork is a fictional object. It is to say that, as far as Smith's awareness goes (which isn't very far) he is aware of being angry at being brought into the world, and he believes the stork is what brought him into the world. So Smith would deny that the stork is a fictional object, and this is connected with the fact that Smith believes he is angry at the stork, since people will believe they are angry at something only if they believe it's real. (c.f. the discussion of Jimmy's case on page 59-60.)

CASE 8''': If Smith walks home from work, in an angry state after being fired, and attacks the first perfect stranger he runs across, and claims that this perfect stranger is the object of his anger, the stranger may qualify as an object of conscious anger at, but the stranger would be a non-causal object of Smith's conscious anger at.

CASE 8''': Imagine that Smith says he's consciously angry at his boss for firing him, and this claim is backed up by Smith's suing his boss for psychological damage, going on unemployment for as long as he can to obtain maximum matching funds from his boss and trying to physically assault his boss. In this case Smith's boss qualifies as a proper object of Smith's conscious anger at (an object of anger which also enters into the causal genesis of Smith's anger).¹

If conscious anger is generally directed at a particular sort of object, this "directing" may be treated as a

¹Note that it's still the case that a proper object of Smith's anger could be lots of other things than his boss. But Smith wouldn't pick most of the individuals "associated" with causes of his anger as objects of his anger, and neither would the rest of us. This indicates that the notion of proper object is still too general to narrow the class of objects of conscious anger sufficiently, and something like the notion of an untowardly acting proper object is more appropriate for purposes of narrowing the class of objects of conscious anger at.

kind of "selection" by the angry person which can be better or worse, more or less cunning, and more or less successful. We then have to ask "More or less cunning with respect to what aim or goal?" The goal of such selection seems to be success in manipulating the causes in the environment which impinge on the angry person is a way which affects his well being. If conscious anger at failed in a high percentage of cases to pick out anything from the causal genesis of a person's anger, we'd have a difficult time appreciating it evolutionarily.

But of the above cases involving Smith, only the third is a case where Smith has picked something out to modify which put him into his angry state in the first place. Only in the third case did Smith pick a proper object for his anger and, thus, only in the third case do we have a case which illustrates one of the patterns which is common to cases of anger at which commonly conduce to a modification of a cause of one's angry state, and which I claim constitute the vast majority of anger at cases.

In most of my cases of anger (the first five cases, and the third Smith case above) the agent which the angry person takes to be the doer of an untoward act is a proper object of anger. This is most commonly the case, because conscious anger at does generally, connect us to the causes of our anger, and enable us physiologically (through increased strength, vividness of purpose etc.) to do things we could

not otherwise do as well. (Think of the little kid who has been pushed too far by an anonymous tease, and who has just figured out who that tease is. The resulting intense reaction will often result in the tease's picking on someone else. When it doesn't, this just shows that we need to talk about other capacities, and other strategies, than those associated with conscious anger at.)

Thus I want to claim that it is generally the case that the anger of consciously angry people is directed at proper objects as objects of their anger.

C. BIOLOGICAL ANGER AT.

One causal condition, then, which is satisfied by the majority of episodes of conscious anger at, is that those objects of anger which are picked out are proper objects.

On the account of biological anger which I'm about to give this usual "taking" of proper objects may be done in a pre-conscious way and may not involve the beliefs of the angry thing (though it may, too). What is usually, and usefully, selected as a proper object of an episode of biological anger at is an object, the angry manipulation of which is conducive to the survival of the angry thing.

Even where an episode of biological anger at succeeds in "taking" an object the manipulation of which is most conducive to the survival of the angry thing, it is dubious

that the taking of this object picks out the doer of the event which is the cause of the episode of biological anger at in question. So the doer of the event which is most effectively angrily manipulated in order to insure the survival of the biologically angry thing is the doer of (what I shall call) "the" cause of that episode of biological anger at, rather than the doer of the cause of that episode of biological anger at.

I'll now argue that there are the following good reasons to accept certain data about aggression and physiological change as relevant to the biological account of anger. Then I'll launch into an argument for a biconditional construal of biological anger at.

As I indicated early on in this dissertation (in the beginning of the last chapter and the precis) I do not think that ethologists, or the rest of us for that matter, are just being anthropomorphic when we attribute emotion to animals. I also believe that it's likely that aggression in, say, chimpanzees living under adverse ecological conditions may be similar to aggression displayed by humans living in similar ecological conditions.

So, for instance, food needs, and the size of an animal are factors which help determine which sorts of aggressive behavior have been reinforced as conducive to survival.

K.R.L. Hall says

it is now obvious that the characteristic expressions and frequencies of aggression within and between groups cannot be meaningfully considered without detailed reference to their ecological context. The large size, the food needs, and the ranging habits of baboons require them frequently to go away from shelter areas of trees or rocks. Controlled aggressiveness in this context is a valuable survival characteristic in that it insures protection of the group and group cohesion.¹

It is not too far fetched to think that the biological characteristics of humans also have a bearing on the types of aggressive behavior that people display, and that a biologically very different organism would have different survival needs and display dispositions to respond aggressively in different types of situations than people do.

One of the typical accompaniments of anger, in both humans and animals, is aggression. I also take it that it's not too far fetched to think "going in" that studying aggression in animals may turn out to be relevant to the understanding of aggression in humans. Insofar as aggression in humans is often associated with anger, the study of aggression might also tell us something about anger.

It is also interesting that typical physiological changes associated with aggression are also often associated with anger. Aggression is quite often tied to the release

¹K.R.L. Hall, "Aggression in Monkey and Ape Societies", in the J.D. Carthy edited The Natural History of Aggression, p. 62.

of noradrenaline in the aggressive animal, and Arnold has called the behaviour associated with aggression where noradrenaline is released "anger out".¹

The connection between the release of noradrenaline and the increase effectiveness of the aggression of the angry thing is impressive. This is because the release of noradrenaline ends up promoting "muscular strength" which explains, Arnold says, "why anger gives us the feeling of being stronger than usual" and, she goes on to assert that other well known chemical changes explain why fear makes us feel weak.²

I believe that the physiological changes, both felt and unfelt, that accompany anger (and aggression) are useful causal relata to understand, if we really want to understand anger or aggression. Aggressive behavior is one stereotypical reaction of angry people, and better understanding aggression should lead to the better understanding of the function of anger (which tends to exhibit itself in aggressive behavior.)

The same can be said for the physiological changes that occur in us when we are angry. Such changes seem even more closely connected with anger than overtly aggressive behav-

¹Magda B. Arnold, "Neural Mediation of the Emotional Components of Action", in the Magda B. Arnold edited The Nature of Emotion. p. 357.

²Magda B. Arnold, Ibid. p. 357.

ior, and it's quite difficult to even imagine a clear case of anger where there are no felt physiological changes in the angry thing which are connected to that anger. [This isn't to say that anger is just these physiological changes. It's not clear, at this point, what anger is (in the sense of identity) except anger].¹

I am now going to argue for a biconditional description of biological anger at. I will (arbitrarily, at this point) restrict the set of things which are "biologically angry at" to the set of animals, so let "x" range over animals, "z" range over individuals, and "e" range over events:

x is biologically angry at z if and only if

1. there is some e such that x is made angry by e, and
2. x biologically takes there to be some e such that
 - a. e made x angry, and
 - b. e is threatening to x's survival
 - c. z did e²

¹So I'm not simply endorsing some sort of general "feeling" theory about emotion here. Though I am endorsing the truism that anger is connected with certain felt physiological changes closely enough, so that understanding these changes would be likely to profit our understanding of anger.

²Where "1" and "2" are dummy letters for variables: Let "B 1 2" be "1 is biologically angry at 2". Let "M 1 2" be "1 is made angry by 2". Let "T 1" be an operator reading "1 biologically takes" which contains within its scope the first well formed formula to its immediate right. Let "S 1 2" be "1 is threatening to 2's survival". Let "D 1 2" be "1 did 2". The biconditional for biological anger at can be formalized as follows. $(x)(z)[Bxz \equiv (\exists e)Mxe \ \& \ Tx (\exists e)(Mxe \ \& \ Sex \ \& \ Dze)]$.

I'll now argue that the conditions on the right hand side of the above biconditional are necessary conditions of biological anger at, beginning with the following argument for the first condition.

Angry creatures qua angry creatures seem to always be in an identifiable physiological state. Physiological states are temporal real entities with fixed chemical and physical structures, and are clear examples of causal relata however they may arise from prior physiological states and the effects of the environment. The physiological state of aggressive animals is marked by known chemical correlates and substructures. The physiological state of an occurrently aggressive animal involves "the secretion of noradrenaline, increases in blood pressure, cholinergic vasodilation and changes in strength and muscular activity."¹ (Such patterns even emerge in species which are thought of dispositionally as effectively aggressive species. So, for instance, the medulla of the lion contains some 60% noradrenaline and 40% adrenaline, while the proportions are reversed in the rabbit.)

If animals are ever in occurrent states of biological anger at, and there are the reasons I have given in the last several pages to believe that they sometimes are, these states are caused states. Hence the first condition on biological anger is a necessary condition for biological

¹Ibid. p. 357.

anger at, viz., whenever we have an animal that's biologically angry at something, that state of biological anger at is caused.

The following arguments are intended to show that all biologically angry things meet the second, third and fourth conditions on biological anger at (the "taking" conditions).

One of the most bothersome claims made in this formulation of biological anger at is that the angry creature "takes" some object as the object of its anger in some preconscious biological way. The truth may be even more startling than the modest conditions I'm arguing for here because "taking" may not be entirely preconscious. Many of these animals may indeed not only be aware of their anger but they may even be talking about their anger with one another.¹

But, this stronger claim aside, there are many biological indications that animals do direct their attacks in ways which justify the "taking" metaphor, and which are causally connected to pretty understandable antecedent "anger making"

¹As Griffin says: "Except for the dances of the honeybees, and the sign language recently taught to captive chimpanzees, it is difficult to judge from available data whether animal communication behavior also includes specific information about the nature of the object or situation responsible for the emotional state conveyed. But rather than assuming the absence of such information a priori, it seems advisable to consider this an open question to be investigated." (Donald R. Griffin, The Question of Animal Awareness, p. 98). Emphasis added.

circumstances and events. The next several paragraphs are devoted to justifying this "taking" metaphor. The earlier claims about physiological differences between species, and the following claims about fish, lead one to believe that patterns of angry "picking out" of items in the environment are developed in particular but readily recognizable ways by particular species.

B. Oehlert, my daughter-in-law, found that she could keep Orange Chiclids, Etroplus maculatus, in permanent marital peace only if she kept two pairs, separated by a clear glass pane, in one tank. It sounds like a joke that her attention was regularly drawn to algae growth rendering the pane opaque by the observation of male Etroplus beginning to treat their females in an unkind manner. Cleaning the glass at once re-directed aggressive behavior towards the neighbor and restored peace between mates. The beautiful energetic economy of the behavior mechanism under discussion lies in circumventing the necessity to suppress aggression; far from being suppressed, the aggressive drive aroused exploited to perform the all-important function of territory defense.¹

Here, and in his classic On Aggression Lorenz discusses the function of aggressive animals singling out specific kinds of animals as objects of aggression, while virtually ignoring other kinds of animals also present in the environment. If it is true, as Lorenz has claimed, that

¹Konrad Lorenz, "Ritualized Fighting", in the J.D. Carthy edited The Natural History of Aggression, p. 46.

such aggressive behavior insures the optimal number of fish in a particular ecological niche for the furtherance of aggression are as specifically directed as they seem to be.

Usually, when people and other animals get angry, they behave in pretty stereotypical ways [both verbally (if they are able to behave verbally) and extraverbally]. Angry behavior is often aggressive behavior, as when dogs or people threaten "the" object of their anger, or destroy the capacity of "the" object of their anger to harm the angry animal.

Ethologists who study aggression, for instance, sometimes take the subject of their study to be "when an animal inflicts, attempts to inflict, or threatens to inflict damage on another animal."¹ It appears to ethologists working on aggression that the clearest cases (some would say the only cases) of true aggression occur species (which might help to partly explain the anthropomorphic "agency" content of conscious anger at). (That ethologists hold to this distinction is due, in part, to an attempt to distinguish between predation and aggression, but is not a restriction that is universally held to. The case where a Robin attacks birds of other species that look like

¹J.D. Carty, "Prologue and Epilogue", in Op. Cit., p. 2. Admittedly the notion of "aggression" is not simple, and needs much further attention itself.

Robins, for instance, is construed as a case of aggressive behavior.)

The physiological impulse to "well directed attack" that humans still feel in certain contexts, even when we are able consciously to suppress it, is an indication that the idea of a pre-conscious sense of "biological anger at" is still a sense of anger at which we experience, even though we are as "fully rational, competent human agents." It might even turn out, that as we learn more about the etiology of emotion in all animals, including ourselves, that we will discover that we do not control such impulses to the complete extent that we would like to (self congratulatorily) think that we do. Here it is hard not to concur with Lorenz:

However, it comes very hard to people not versed in biological thought to concede that Man with a capital M, still does possess instincts in common with animals. That particular kind of pride which proverbially comes before a fall prevents men from understanding the workings of their own instincts, including that of aggression. As it is causal insight influence chains of events and to direct them to our own ends, it is highly dangerous to assume the ostrich attitude in respect to the nature of human instincts.¹

Creatures exhibiting aggressive behavior and "well directed attacks" are still with us. It is even difficult

¹Op. Cit. Konrad Lorenz, "Ritualized Fighting", p. 49
Emphasis added.

to think of an animal that will not (or perhaps better, physically cannot) exhibit such behavior under any circumstances. Objects of aggressive behavior are also often objects the angry manipulation of which is conducive to the survival of the aggressive creature. Thus, I believe that biological studies are, even now, getting more and more evidence to support the "taking" conditions in my biconditional.

So it looks as if it is at least plausible to say, on the basis of the biological evidence, that whenever we have a biologically angry thing, the conditions on the right hand side of the biconditional are met. Arguments still need to be given that whenever these conditions are met we have biological anger at, viz., that these conditions are sufficient.

A counterexample to the if direction of the biconditional would be a case where we have an animal which:

1. Is caused to be angry by some event e, and
2. biologically takes there to be some event e such that
 - a. e is what makes it angry, and
 - b. e is threatening to its survival, and
 - c. z did e

and yet is not biologically angry at z.

It will be very difficult to come up with a counterexample of this sort because our criteria for deciding whether an animal is biologically angry at some object are

dependent on whether or not that animal acts aggressively towards that object, and such aggressive action (which, remember, is distinct from predation) is taken to indicate that the aggressive animal is biologically taking that object as threatening to its survival, and as an object of biological anger at.

Hence, I believe that the biconditional for biological anger is justified, viz.,

x is biologically angry at z if and only if

1. There is some e such that x is made angry by e, and
2. x biologically takes there to be some e such that
 - a. e made x angry, and
 - b. e is threatening to x's survival, and
 - c. z did e¹

My final claim about biological anger at in this section is that understanding how biological anger at has been conducive to survival requires us to assume, at least initially, that it is usually the case that the biologically angry creature has succeeded in biologically "taking" a genuine cause of its anger as being not conducive to its survival. Otherwise we have a difficult time understanding the evolution of aggressive biological "taking". Thus, it is

¹The justification for the ontology of this biconditional (events threatening to survival, and individuals who "do" those events) is that, as with conscious anger at, this is the way speakers of English seem to describe examples like Lorenz's fish tank example and Hall's baboon example.

generally the case that the event (e) biologically taken to be the cause of x's anger is a cause of x's anger and the object (z) biologically taken to be the "doer" of the event (e), is indeed the object that did it.

D. SOME REMARKS ABOUT CONSCIOUS ANGER AT, BIOLOGICAL ANGER AT, AND PROPER OBJECTS OF ANGER.

Each of the above relations (conscious anger at, and biological anger at) is, trivially, a subrelation of the "x is made angry by y" relation. Consider the biconditionals again:

x is consciously angry at z if and only if

1. There is some event e such that x is made angry by e, and
2. x consciously believes that there is some e such that
 - a. e made x angry, and
 - b. e is untoward, and
 - c. z did e

x is biologically angry at z if and only if

1. There is some e such that e made x angry, and
2. x biologically takes there to be some e such that
 - a. e made x angry, and
 - b. e is threatening to x's survival, and
 - c. z did e

The first condition on conscious anger at and biological anger at insures that each is a subrelation of "being made angry by".

Thinking about these biconditionals a little more, it becomes apparent (as has been repeated elsewhere in this dissertation) that it is not just random objects at which people get angry (either consciously or biologically). Only entities believed to be untoward actors are taken as objects of conscious anger at, and only entities biologically taken to be not conducive to the survival of the angry thing are taken as objects of biological anger at.

Entities believed to be untoward actors, and entities taken as biological threats to survival are particular types of entities that we believe and "take" to causally affect us repeatedly each different time we are consciously or biologically angry. This recurrence is important, because if the types of objects we get angry at are types of object (untowards agents or threateners of survival) which are thought of and "taken" as causing us to be angry through untowards acts and threats to survival, then there is thought or "taken" to be a causal connection between the objects of our anger and the causes of our anger. We think of objects of anger as types of "doers" which cause our survival or our well being to be threatened, and we know what some of the characteristics of such objects are if these beliefs are true, e.g., in order to be intelligibly considered as causes

of our anger they must at least be thought to be real (by weak intracategoriality).

In order for anger at to be evolutionarily successful, it would appear that our beliefs about the entities at which we are angry, and our biological "taking" of those objects as objects of anger should turn out to be largely true.

In order for our beliefs and "takings" to be largely true there must be entities which are untoward agents and entities which threaten survival.

If it is entities which are untoward, or which threaten survival, that conscious and biological anger at have evolved to help us deal with, then it is the way in which we manipulate these entities that will be of primary interest in our attempt to understand anger causally, and not the way in which anger goes wrong when it takes on a non-causal or fictional "object".

All actually untoward and actually threatening entities are capable of affecting us causally, and this is one requirement for their being central in a causal account of anger at. If the evolutionary development of conscious and biological anger at is a history of adaptive responses on our part to entities which can cause us harm, then we find the earlier emphasis on proper objects of anger is reinforced.¹

¹Fictional objects may turn out to serve some adaptive function (the redirection of angry behavior in cases where that is the best we can do).

CHAPTER VII: JUSTIFIED ANGER AT.

A. INTRODUCTION TO THE CHAPTER.

In this chapter I talk about justified conscious anger at, justified biological anger at, and the possibility that they may be identical.

B. JUSTIFIED CONSCIOUS ANGER AT.

Justified conscious anger at is partly described by the following biconditional:

x is justified in being consciously anger at z if and only if there is some e such that

1. x is made angry by e, and
2. e is untoward, and
3. z did e, and
4. x consciously believes of this e that
 - a. x is made angry by e, and
 - b. e is untoward, and
 - c. z did e.¹

The variable e occurs in all the conditions because where a person is justifiably consciously angry at some

¹Where "1" and "2" are dummy letters for variables, "J 1 2" is read as "1 is justifiably consciously angry at 2", "M 1 2" is read "1 is made angry by 2", "U 1" is read "1 is untoward", "D 1 2" is read "1 did 2" and "B 1" is a belief operator containing within its scope the first well formed formula to its immediate right, the above biconditional is formalized as $(x)(z)(Jxz \equiv (\exists e)(Mxe \ \& \ Ue \ \& \ Dze \ \& \ (Bx)[Mxe \ \& \ Ue \ \& \ Dze]))$. Note that I am again quantifying into an opaque context.

agent the angry person's belief that he is caused to be angry by that agent's untoward act is true.

Consider some purported counterexamples to the claim that these are necessary conditions on justified conscious anger at.

Suppose that it's claimed we could have a case of conscious anger at where condition one is false. Such a counterexample would require that the person who is justified in being consciously angry at an agent is not made angry by any event. But, a person who is justified in being consciously angry is angry, and a person who is angry is in a caused state of anger. So condition one is necessary.

If the act that makes a person angry is not really untoward (condition two) then the angry person falsely believes that the object of his anger acted untowardly, and is thus unjustified in being angry at that object. If we want the beliefs of a person who is justified in being angry at some agent (z) to correctly pick out the agent of the untoward act which made him angry, then we want condition three to be met.

I will give further argument for the second and third conditions, let us consider the second condition first. Imagine a case where someone (x) is made angry by something which someone else (z) did, and the angry person believes that he is made angry by what the object of his anger (z) did, but that the angry person falsely believes that what the object of his anger(z) did was untoward.

Suppose, for instance, that White is made angry by the crew maintaining the reactor which has overheated. White correctly believes that the crew's maintenance of the reactor was a cause of the reactor's overheating, and White correctly believes that their allowing the reactor to overheat is a cause of his anger. White falsely believes, however, that the crew acted negligently (untowardly) in their maintenance of the reactor. (In reality the crew did all that was humanly possible to prevent the reactor from overheating). It seems pretty clear that in such a case White is not justified in being angry at the reactor crew.

Perhaps, however, the reason that this example works is because it was constructed to work this way. What about a case like the following?

CASE 9: The case of Hitler's barber. Suppose that Hitler's barber gets angry at Hitler for not leaving him a tip. Hitler walks out of the barber shop without even saying good day. Hitler's barber is angry at Hitler for what he takes to be an untoward act of Hitler's. It really is the case that Hitler's failing to leave a tip causes the barber to be angry. But, the reason Hitler failed to leave a tip is because tips are only left for good service, and the barber has just given Hitler a ridiculous bowl haircut hardly suiting the leader of the master race.

By hypothesis, all the conditions on justified conscious anger are met except the condition that the act which makes the barber angry be genuinely untoward.

Is the barber justified in being consciously angry at Hitler? The answer is no. We can see, from a third person standpoint that Hitler's act was not untoward, and that the Barber had no justification for getting angry at him.

One might think that any anger at Hitler is justified. But this is incorrect. Hitler is a terrible person, and we are justified in being angry at him for what he did that was actually untoward. Just because he is a terrible person, however, is not a sufficient reason to allow all episodes of anger at him (for whatever reason) to be justified. This is made clearer by the fact that we are not willing to let the following case of anger at Hitler be justified.

CASE 10: Suppose that Himmler is a worse person than Hitler, and that Himmler, like Hitler's barber, is angry at Hitler for something that he falsely believes Hitler to have untowardly done. Himmler believes (correctly) that Hitler cancelled all execution orders at Dachau for a month, and Himmler is angry at Hitler because he believes that what Hitler did is untoward.

Here, we feel more comfortable saying, "No, Himmler is not justified in being consciously angry at Hitler, because the untoward act Himmler attributes to Hitler is not untoward." The primary reason we initially would like Hitler's

barber to be justifiably consciously angry at Hitler seems to be that Hitler is such a rotten person that whoever is consciously angry at Hitler ought to be justifiably angry at Hitler no matter what the basis of his particular ascription of untowardness is. We see from Himmler's case that this is false.¹

The argument for the second condition gets us part way toward establishing the third condition. The second condition requires that the event which made the angry person angry be an untoward act. For e to be an untoward act, there has to be an agent who did e.

The remaining thing to be shown is that the agent who did e is the same as the agent who the angry person takes to have done e. Where this is not the case we get an episode of conscious anger at which is not justified, and this can be seen by considering any case where all but the third condition is met. Consider Chris' case again, where

1. Chris is made angry by being tripped, and
2. Tripping Chris is untoward, and
3. Somebody other than Larry tripped Chris, and
4. Chris believes that he is made angry by being tripped, and
5. Chris believes that tripping him is untoward, and
6. Chris believes Larry tripped him.

¹A similar argument shows the necessity of the third condition on justified conscious anger at. Hitler's barber will not be justified in being consciously angry at Hitler if the act he ascribes to Hitler was not done by Hitler, and neither will Himmler. The necessity of conditions two and three is bolstered by the argument in appendix C.

In such a case Chris is not justified in being angry at Larry, and we have such a case anytime all conditions except condition three are met.

This completes my argument for the necessity of conditions one, two and three.

I will now argue for the necessity of conditions four, five and six. To do so, I will imagine cases where a person claims to be justified in being consciously angry at an agent, but one of the conditions is not met. I will imagine a case where 4c is not met first, and then I will imagine a case where 4b is not met. I save the case where 4a is not met for last, because it's the most difficult to deal with, and the argument for the other two conditions helps set the stage for the argument that 4a is a necessary condition.

Imagine the following case, where Bob claims to be justifiably angry at Anne, but condition 4c is false.

CASE 11: Anne burns all of Bob's books on reference, and this makes Bob angry. Anne had no right to burn Bob's books (and not even a good reason for doing so) so her act is untoward. Bob believes that the burning of the books is untoward, and is what makes him angry, but Bob does not believe that Anne burned the books.

If Bob does not believe that Anne burned the books, Bob would not believe that he is angry at Anne for her act of

burning the books. We may then ask Bob why he's angry at Anne. Since he wants his anger at Anne to count as an episode of justified conscious anger, he'll give some reason for his anger at Anne. If his justification is that she performed some other untoward act than burning the books, we have to consider that act on its own merits to see if it is untoward, done by Anne, made Bob angry etc. It seems as though whatever act Bob comes up with as the basis of his justified conscious anger at Anne, Bob will have to come up with an act that is her act. Otherwise there is no connection between Anne and Bob's justification for being angry at her, and we won't count Bob's anger at her as justified.

To make this into a case where condition 4b is imagined false, suppose that Anne does all the things she does above, Bob believes that Anne's act made him angry, but Bob does not believe that Anne's act is untoward. This state of affairs is partly reflected in the following dialogue:

Interlocuter: "Bob, you're made angry by Anne's burning your books?"

Bob: "Yes!"

Interlocuter: "What, exactly, was untoward about Anne's burning your books?"

Bob: "I'm angry at Anne for burning my books but there was really nothing wrong in her doing so."

Interlocuter: "And you claim that you are justified in being angry at Anne?"

In such a case I believe we'd either deny that Bob believes there is nothing wrong with burning his books, or we'd deny that Bob is justified in being consciously angry at Anne.

Finally, imagine the following case (where 4a is made false).

CASE 11': Bob claims to be justified in being consciously angry at Anne. Bob is made angry by Anne's burning all his books on reference. Anne's act is untoward. Bob believes that Anne's act is untoward, and he also believes that Anne's act did not make him angry.

If we press Bob to see what act he actually believes made him angry, and he sincerely believes that no act at all made him angry, we have a case like that discussed on the bottom of page 90. We would have a case which is not a clear case of conscious anger at, let alone a case of justified conscious anger at.

But suppose Bob cites some other act of Anne's as what makes him angry. Bob says, for instance: "I believe Anne's burning my books was untoward, but what makes me angry is Anne's smashing my records yesterday."

If this is Bob's response, his claim to be justified in being angry at Anne is based on another anger-making act

than the one we are checking, and we'd check to see if Bob's anger at Anne is justified because of Bob's belief that she smashed his records. We'd check to see if she really did smash his records, if her act was really untoward, if Bob believes it's untoward and if Bob believes Anne did it. If we get no single act which fits all six conditions, then Bob's beliefs (including his belief that Anne did an act which made him angry) do not hook up to an object of his anger in a way which makes his anger at that object into a case of justified conscious anger at.

Thus,

x is justified in being consciously angry at z only if there is some e such that

1. x is made angry by e, and
2. e is untoward, and
3. z did e, and
4. x consciously believes of this e that
 - a. x is made angry by e, and
 - b. e is untoward, and
 - c. z did e

The next question is "are these conditions sufficient?"

Could, say, Jones:

1. be made angry by e, where
2. e is untoward, and where
3. z did e, and
4. consciously believe of this e that
 - a. e made him angry, and
 - b. e is untoward, and
 - c. z did e, and

still fail to be justified in being angry at z?

In the chapter on conscious anger it was argued that a person caused to be angry could not consciously ascribe causation of his anger to an event, ascribe untowardness to that event and ascribe the doing of that event to some individual without being angry at that individual. So Jones is angry at individual z, given the above conditions, and the sole remaining question to be answered is whether or not Jones is justifiably angry at individual z.

By hypothesis z's act is untoward (without justification or excuse and "bad" in some objectively verifiable way), and z's act causes x to be angry at z, so it seems as though whenever these conditions are met that Jones would be justified in being consciously angry at z.

This indicates, at least prima facie, that the biconditional for justified conscious anger at is correct, viz;

x is justified in being consciously angry at z if and only if there is some e such that

1. x is made angry by e, and
2. e is untoward, and
3. z did e, and
4. x consciously believes of this e that
 - a. x is made angry by e, and
 - b. e is untoward, and
 - c. z did e

C. JUSTIFIED BIOLOGICAL ANGER AT.

It seems odd to talk about justified biological anger at some object because the features of biological anger, as

It seems odd to talk about justified biological anger at some object because the features of biological anger, as I've described them, involve a preconscious biological "taking" of some object as a suitable object to angrily manipulate (by well-directed attack or threat) in order to help secure the survival of the angry animal.

But from a meta-perspective, we could ask of justified biological anger at some object that it succeed in modifying the relation of the angry thing to that object in some way which helps secure the continued survival of the angry thing.

So, as a tentative proposal in that direction I propose the following biconditional formulation of justified biological anger at (which I won't argue for).

x is justified in being biologically angry at z if and only if there is some e such that

1. x is made angry by e, and
2. e is threatening to x's survival, and
3. z did e, and
4. x biologically takes e to be
 - a. what made x angry, and
 - b. threatening x's survival, and
 - c. done by z

The intricacies of the causal functions of biological anger at remain to be made out by biology. Looking ahead, once we understand the biological response better, we may find that that understanding is a condition which allows us to modify the human biological anger response in ways more

conducive to our survival. Lacking more detailed knowledge of biological anger at, I put the above biconditional forth as a tentative formulation of justified biological anger at.

D. A COMPARISON OF JUSTIFIED CONSCIOUS ANGER AT AND JUSTIFIED BIOLOGICAL ANGER AT.

Compare the biconditionals for justified conscious anger at and justified biological anger at:

x is justified in being consciously angry at z if and only if there is some e such that

1. x is made angry by e, and
2. e is untoward, and
3. z did e, and
4. x consciously believes of this e that
 - a. x is made angry by e, and
 - b. e is untoward, and
 - c. z did e

x is justified in being biologically angry at z if and only if there is some e such that

1. x is made angry by e, and
2. e is threatening to x's survival, and
3. z did e, and
4. x biologically takes e to be
 - a. what made x angry, and
 - b. threatening to x's survival, and
 - c. done by z

Note that in both justified conscious anger at and justified biological anger at, the act which is taken as untoward or threatening to the survival of the angry thing is a cause of the episode of anger in question and was done by z. As far as the first condition is concerned justified conscious anger at and justified biological anger at may have all the same causes (the same events).

This suggests the further possibility that justified conscious anger at is identical with justified biological anger at, viz. that "untowardness" just means "threatening to survival", and "biological taking" is a form of belief.

There are two main problems with this view:

1. Untowardness is a technical term with lots of cognitive content.¹
2. If they are identical, this requires animals who "biologically take" entities as objects of their anger to have beliefs about those entities.

The first problem is admirably illustrated by a claim of Austin's. People are capable of making incredibly fine distinctions concerning untowardness. Consider the implication of intent or the implication of a lack of intent (which is a condition on responsibility and untowardness) expressed in the following sentences:

¹See appendix C for a discussion of some "finer" distinctions we make concerning untowardness.

- a₁ He clumsily trod on the snail.
- a₂ Clumsily he trod on the snail.
- b₁ He trod clumsily on the snail.
- b₂ He trod on the snail clumsily.

Austin says that in a₁ and a₂ "we describe his treading on the creature at all as a piece of clumsiness, incidental, we imply, to the performance of some other action."¹ In b₁ and b₂, on the other hand, treading on the snail is "very likely his aim or policy", and, "what we criticize is his execution of the feat."² One conclusion one might draw from this is that the person referred to in b₁ and b₂ is more sadistic than the person referred to in a₁ and a₂, and such considerations are relevant to our ascriptions of untowardness.

"Surely", one might argue, "Lorenz's fish do not have any such notion of untowardness". The conclusion seems to readily follow that untowardness is not the same as (identical with) being threatening to survival.

What we may have here, however, is a difference of degree and not a difference of kind. It is not entirely implausible to argue that people make the technical

¹Austin, Op.Cit. p. 326.

²Ibid. p. 326.

distinctions about untowardness that they do because people have a more sophisticated and cognitive sense of threats to survival, and not because such distinctions are irrelevant to people's survival. Rabbits may also biologically take entities to be threatening to their survival that lions are not physically capable of biologically taking as threats. This does not show that there is no common sense of "threat to survival" which includes threats to the survival of lions and rabbits, and it is not clear that the above admitted difference between people and fish establishes such a distinction between us.

The second main problem with the proposed identity of justified conscious anger at and, justified biological anger at for most philosophers, may be that the proposed identity requires animals to be consciously angry at the objects of their anger (and hence to have beliefs about those objects). I'm not convinced that this is so farfetched either. The "problem" here seems to be the ascription of consciousness to animals, and the truth of such an ascription depends on whether or not animals are conscious. This raises the question of animal consciousness (awareness), and it seems apparent, given recent studies and findings concerning animal awareness, that the possibility of animal awareness is

not an obviously empty possibility.¹ So I want to propose that it's at least an open question, whether justified conscious anger at is identical with justified biological anger at, at least insofar as animal's awareness of their anger is concerned.

E: IS THERE ANY JUSTIFIED ANGER?

It is possible, however, that there are no agents and hence no untoward acts (since untoward acts imply agency). And if there are no untoward acts, then there is no justifiable conscious anger at. This is quite different from the last suggestion, which was the suggestion that, perhaps, animals get consciously angry too.

The suggestion that there may turn out to be no agents at all, in the final analysis, is supported by the following speculative description of the history of conscious anger at. It once was the case that we thought of things in the world (trees, water, weather) as animated by spirits who

¹A pretty good bibliography of books and articles on this question is to be found in the back of Griffin's The Question of Animal Awareness. Griffin, a very careful ethologist, speaking about communication amongst animals says that animal "communication signals have turned out, at the very least, to include an announcement that the sender is of a given species, sex, and appropriate age, and is in one of a relatively few behavioral states, such as readiness for fighting, fleeing, or mating." Donald R. Griffin, The Question of Animal Awareness, p. 15. (Emphasis added.) This at least hints at the possibilities of awareness and beliefs for the animals sending these signals.

were responsible for doing good or bad things to us. We were once animists.

As we came to discover that the weather wasn't an agent, and we built lightning rods, so too we may come to discover that people aren't agents either, and we'll react to their threatening doings with physiological manipulation or therapy and conditioning, rather than with threats or reprisals (as we do with anger).¹

I don't intend to settle the questions raised in the last few paragraphs, but I do wish to point out (to those who think the alternatives posed are absurd) that some very different perceptions about the possibility of justified conscious anger at are found in important traditions. Buddhists look at all anger as an emotion which is to be eliminated as one becomes progressively enlightened. Some Christian traditions make conscious anger at into a paramount virtue of a righteous and angry God.

¹There are other possibilities. Among them is the possibility that though people aren't agents, treating them as though they are is an efficient way to deal with them.

APPENDICES

APPENDIX A.

In each of these cases the object of conscious anger at is thought (by the angry person) to be an agent who caused the angry person to become angry by acting untowardly. I think that this is generally the case. That it is generally the case can be seen by the fact that any sentence from the list on pages 73-74 is adequately paraphrased by the corresponding sentence from list the list on page 78, viz., by our being able to universally go from emphatic citations of what the angry person thinks makes him angry to citations of what the angry person takes as the object of his anger. It seems plausible, at this point, to suppose such a general paraphrase, though this paraphrase does have the strong consequence that emphatic citation of what makes one angry are (at least implicitly) citations of what the angry person takes as an object of anger. So to emphatically cite what makes one angry is to cite (at least implicitly) an object that one is angry at.

That angry people do believe that doers of untoward acts are objects of their anger is also indicated by the locution (usually addressed to z). "If you do y, I'll be angry at you!" Here we have the suggestion that angry people connect, a priori, the doing of untowards acts with anger at those who do those acts. Consider such citations for each of the eight cases listed so far:

- CASE 1: Chris (to Larry): "If you push me out of bounds again, I'll be angry at you."
- CASE 2. Jones (imagining himself talking to Ault just before Ault takes his daughter into the desert): If you go through with this crazy plan, I'll be really ticked off at you."
- CASE 3. White (to the reactor crew): "If you carelessly allow this reactor to overheat I'll be angry at you."
- CASE 4. Lee (perhaps to himself): "If you don't keep the stones out of the hayblower I'll be angry at you."
- CASE 5. Bob (to the people at Sports Memorabilia): "If you confuse my order, and send me the wrong stuff, I'm going to be angry at you."
- CASE 6. Murphy (to the masked figure with the baseball bat): "If you hit me, you'd better make it good, because I'm gonna make what happens to you something you'll remember for a long time."
- CASE 7. Jimmy (to Santa): "If you don't give me what I want for Christmas, I'll be angry at you."
- CASE 8. Smith (to his foreman): "If you give me any more guff I'm gonna stomp you!"

APPENDIX B.

Perhaps a less over-complicated way to treat the relation between being "made angry by" and "being angry at" is as follows.

1. Ignore the qualifiers "conscious" and "biological" and just discuss "x is angry at z".
2. Take "being made angry by" (x is made angry by z) as being a causal relation between an angry thing and an individual who acts in a way to make the angry thing angry.
3. Take "being angry at" (x is angry at z) as a causal relation between an angry thing and some individual who acts to make that angry thing angry.

Note that this is just a literal construal of the picture of anger given in the diagram at the beginning of chapter six, and does not involve belief on the part of the angry thing (and so is not the same as "conscious anger at").

If this resembles any account given in the foregoing, it resembles "biological anger at". But this account, as opposed to "biological anger at" does not allow for the possibility that anger at can go wrong (can take an object is not a proper object).

The assumption that anger at cannot go wrong, at least totally, could be bolstered by arguments to the effect that the changes in behavior and the changes in physiological

state of the angry person (if not his beliefs) serve to modify his causal relation to the object of his anger whether he believes it or not.

So, in Jimmy's case, his moping about the house, etc., serves to make the person who gave him woolen underwear feel guilty. In the Smith case, where Smith says he's angry at the stork, his behavior (which he may not even be aware of) "notifies" (perhaps subliminally) people at his work that Smith is to be avoided.

Where Smith attacks a perfect stranger (a non-causal object) his subsequent and consequent behavior also reveals his state of anger, and this may affect the reaction of all others who come in contact with Smith whether they are aware of it or not.

Even in a case where the object of anger has been dead for many years (Smith's mother who tormented him as a child, let's say) the memory of such an object may cause the angry person to shed tears of frustration (perhaps ridding his body of damaging chemicals). If such a change in an angry person is a change in one relatum (x) in the "x is angry at z" relation, then it may still be explained as a case where anger is directed at a proper object. In this case $x=z^1$.

This way of looking at anger would insure that:

¹Note that there is no "untowardness" requirement here!

1. Fictional objects are not objects of anger, and
2. Anger at is a subrelation of being made angry by, and
3. Anger at has a preconscious physicalistic (causal) interpretation.

It also seems to me to be a way of treating anger which has testible consequences because it encourages us to look for all sorts of physiological and behavioral changes which may not now be recognized, and which may not be felt (but which could, at least in principle, be measured).

APPENDIX C

Notice that whether or not an act is untoward is not up to the angry person. The following argument (through the Lars case several pages hence) is designed to

1. bolster the claim that untowardness has objective content, and
2. support the claim that both conditions two and three are necessary conditions of justified conscious anger at.

"Untowardness" has an objectively verifiable content. The complexity of "untowardness" makes it too difficult to give necessary and sufficient conditions for it. But some necessary conditions have already been given. To be untoward, an act has to

1. Be bad, wrong, inept, unwelcome, clumsy, careless, negligent or faulty in some way (hence, the act can't be justified), and
2. Be done by a responsible agent (hence, the act cannot be excused.)

To drive home the claim that "untowardness" has objectively verifiable content, and to put some teeth into condition three, and to argue for the necessity of conditions two and three, I will focus on the untowardness of an

act as judged by its consequences, and the way in which an act can be excused even though it has bad consequences.¹

An act is excused if it is admitted that it is bad, but it is denied that the doer of the act is responsible for the badness. Two common excuses, already mentioned, are that the person accused of doing an untoward act acted under duress (and was not fully in control of the act) and that the person accused of doing the act acted under compulsion (and was not fully in control of the act). If either of these excuses are accepted we say of the accused actor that he is not responsible for what he did, because there is some sense in which the act was not his.

Another sort of excuse, not included under duress or compulsion, is the excuse that one is not responsible for a consequence of one's act because that consequence was unforeseeable at the time of the act.

The sort of untowardness being discussed here, is that an act is untoward if it has easily foreseeable bad consequences (e.g., directing a deaf mute to cross the street when a bus is bearing down). If a consequence of an act is unforeseeable, then there is a legitimate sense in which the doer of that act is not responsible for that bad consequence. One might say that his act is not untoward qua that bad consequence.

¹And when an act is so excused it is not untoward and we see that we are not justified in being angry at the person who "did" the act.

There can be, interestingly enough, cases where an act is untoward (careless etc.) and where that act has (causally) bad consequences, but the act is not untoward qua that consequence. This occurs when the respect in which the act is untoward is not a respect which leads to the bad consequence. Consider the following case.¹

CASE 11: Lars gets a job in a restaurant. He places a large unlabelled can of rat poison beside cans of flour on a shelf near a stove in the kitchen. When the stove heats up, the rat poison explodes, and the fragments from the can slice up the salad chef.

Lars' act was untoward in the sense that he negligently placed the rat poison in a place where it was likely to be mistaken for flour. Lars' act was not untoward in the sense that it caused the salad chef to be sliced up. This is because Lars' should not be held to be responsible for a consequence of his act unless he could reasonably be expected to foresee that consequence of his act. The respect in which Lars' act was untoward is not a respect from which the bad consequence follows. This is to give an excuse for Lars. His act was negligent, but he is excused from being responsible for slicing up the salad chef, because the latter is a consequence of his act which he was not in control of.

¹This case is adapted from Feinberg, Op. cit. p. 376.

We require for acts that we hold to be untoward that:

1. They be bad, wrong, inept, unwelcome, clumsy, careless, negligent or faulty in some way (hence, not justified), and
2. They be done by a responsible agent (hence the act cannot be excused).

And one way an act can be excused, is when it's an act whose untowardness is judged by its effects, and no agent could foresee those effects.¹ Where an angry person believes that an act is untoward, we want his anger at the doer of that act to be justified only if the respect in which he believes the act to be untoward is a respect in which it is untoward.

Applying this excuse to Lars' case, yields the conclusion that we would be justified in being consciously angry at Lars for endangering the lives of bread-eaters when

¹Making out the details of such standards of care, and the appropriateness of citations of untowardness, is a complex matter. Appropriate ascription of untowardness varies with standards of care associated with occupations (we expect exterminators to exercise great care when spreading their poisons, and we expect them to know the properties which their poisons have), roles (parents are expected to exercise more care over their children than strangers, and an act deemed untoward when done by a parent may not be thought of as untoward when done by a stranger) and capacities. So, though much more could be said about such standards of care, it will not be said here, since the purpose of the above discussion was to indicate some of the objective content of untowardness and to justify the second and third condition on justified conscious anger at.

he put the rat poison by the flour, but we would not be justified in being consciously angry at Lars for slicing up the salad chef. To be justifiably angry at Lars for a consequence of his act, is to hold Lars responsible for the consequence of his act. If Lars is not responsible for some consequence of his act, because he could not foresee it, then his act is excused with regard to that consequence. Where such an excuse is present there is a sense in which the person accused of acting untowardly did not do the untoward act. This really links conditions two and three. We want z to have done untoward act e in order for anger at z to be justified.

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