Practical Reasoning and the Structure of Fear Appeal Arguments

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There is considerable interest in fear appeal arguments in both the normative (logical) and the empirical (psychological) literature on argumentation. However, these two streams are, so far, relatively independent of each other. In this paper, an attempt is made to join them together, or at least to open up a canal between them.[1]

Fear appeal arguments are studied in logic under the category of *argumentum ad baculum,* a species of informal fallacy (although there has been some doubt expressed whether they really belong here, as we will see below). In speech communication, fear appeal arguments have been studied to determine their efficacy in getting a target group of respondents to adopt a recommended course of action. Primarily, commercial advertisements directed to a public audience have been the focus.

In this paper, we identify important, underlying structural relationships between these two aspects, that is, the normative aspect of whether the argument is correct or fallacious and the empirical aspect of whether the argument is efficacious or not in gaining compliance.

1. Ad baculum arguments

The traditional *argumentum ad baculum* (argument to the club or stick) has long been recognized as a fallacy in logic textbooks. But the texts differ on how to define it. Some define it as the use of threat in an argument, others define it as the use of force, and still others define it as appeal to fear. In fact, most of the cases cited by the logic textbooks do involve threats. But there are also quite a few cases of use of tactics of intimidation (so-called "scaremongering") that do not take the form of one party specifically issuing a threat to the other party.

A threat (or more accurately, the act of making a threat) is defined (Walton 1992b, 163) as a speech act that meets three essential conditions:

> *1. Preparatory Condition:* The hearer has reasons to believe that the speaker can bring about the event in question; without the intervention of the speaker, it is presumed by both the speaker and the hearer that the event will not occur.

> *2. Sincerity Condition:* Both the speaker and the hearer presume that the occurrence of the event will not be in the hearer's interests, that the hearer would want to avoid its occurrence if possible, and that the hearer would take steps to do so if necessary.

> *3. Essential Condition:* The speaker is making a commitment to see to it that the event will occur unless the hearer carries out the particular action designated by the speaker.

The most commonly effective type of *ad baculum* argument involves an indirect speech act-the utterance put forth by the speaker-and has the (overt) form of a warning, but both speaker and hearer realize that (covertly) a threat is being made. For example, a known gangster says to the owner of a small business: "You should pay us protection money, because this is a very dangerous neighborhood. The last guy who didn't pay had his store looted and destroyed, right after he failed to pay." In this type of case, the indirect speech act gives the proponent a route for plausible deniability, namely, "I never made a threat-it was only a warning!"

The appeal to fear type of *ad baculum* argument does not involve a threat, but instead has only the form of a warning that some bad or scary outcome will occur if the respondent does not carry out a recommended action. In an example cited in Walton (1992a, 230-31), an advertisement for a particular brand of mouse bait warns the audience that they should never go near a dead mouse because they could get Lyme disease. Then it tells the audience that with this particular brand of mouse bait, they will never need to go near the mouse. Instead, the mouse will simply go off to die, after it eats the bait.[2]

In another case described by Clark (1988, 111), the father in a Pakistani commercial finishes his dinner, lights up a cigarette, and falls to the floor, dead. As the doctor pulls the sheet over the man's

face, he says to the camera, "This could be you if you don't give up smoking."[3]

Both these examples of *ad baculum* arguments are fear appeals. Nevertheless, the speaker does not make a threat to the hearer, in the sense defined above. Both appeals are threatening to the hearer, in the sense that they pose some message of danger or harmful consequences to the hearer. The difference is that in neither case does the speaker tell the hearer that he personally (the speaker) intends to bring about this bad event if the hearer does not do the recommended action.

These cases pose a problem for logic. Should the *argumentum ad baculum* be defined more narrowly, as a type of argument that uses a threat (or appeal to force, however that might be defined)? Or should it be defined more broadly, so that it can include fear appeals that do not involve the making of a threat? These questions of how widely or narrowly to define the *argumentum ad baculum* are discussed by Wreen (1988, 1989). 1 have advocated the more inclusive approach (1992a, chap. 5).

Pursuing this more inclusive approach poses the additional problem of how to define the fear appeal type of argument (that does not essentially involve a threat) as a distinctive type of argument with a clear structure that could be appealed to in evaluating cases. Part of the solution to this problem is that the fear appeal argument has the structure of a type of argumentation called *argument from consequences*, the argument for accepting (rejecting) the truth of a proposition by citing the consequences (for the respondent) of accepting (or rejecting) that proposition (Walton 1992a, 26). Argumentation from consequences is frequently used in deliberation, where one party is giving another party advice on how to proceed in a situation that calls for choice of actions. Here it takes the following two forms:

(AC-)   If you (the respondent) carry out action A,
        then negative consequences will follow;
        therefore, you should not carry out A.

(AC+)   If you (the respondent) carry out action A,
        then positive consequences will follow;
        therefore, you should carry out A.

The same forms, (AC-) and (AC+), can apply where the action is an omission or a failure to carry out some designated action A. Here

'positive' and 'negative' mean, respectively, "good (bad) for the respondent," and "perceived to be good (bad) by the respondent."

2. Empirical research on fear appeals

Fear appeal is recognized as a distinctive type of argumentation by empirical researchers, who see it as a kind of argument used to threaten a target audience with a fearful outcome (most typically that outcome is the likelihood of death) in order to get the audience to adopt a recommended response. Witte defines *fear appeal* as "a persuasive message that attempts to arouse the emotion of fear by depicting a personally relevant and significant threat and then follows this description of the threat by outlining recommendations presented as effective and feasible in deterring the threat" (1994, 114). Such a threat is normally composed, according to Witte, Sampson, and Liu, of "some terrible consequence or harm that will befall the individual for not adopting the recommended response" (1993, 3).What is described as *threat* here could perhaps be defined (in view of the definition of *threat* proposed above) as a threatening situation.

Among the fear appeals used in commercial advertisements and other kinds of public messages meant to elicit responses from a public audience are the following. Janis and Feshbach (1953) studied fear appeals warning teenagers that their teeth will decay if they do not brush them properly. Rogers and Mewborn (1976) studied ads telling smokers that they will die an excruciating death from lung cancer if they do not quit smoking. Witte (1994) studied fear appeals that expressed a threat to college students that they would get AIDS if they did not use a condom properly.

Witte's research indicated that fear appeals can be effective, but only under two conditions: (1) the threat must be credible, so that the respondent takes it as a real danger to him or her, and (2) the action recommended to deter the threat must be perceived by the respondent as feasible and easy to carry out. In fact, our analysis is that this research indicates that the respondent is influenced by the balance between factors 1 and 2. Only if the feasibility and ease of the recommended action outweigh the threat will the respondent be persuaded to take the action. Otherwise, the respondent will choose to deal with the threat emotionally, for example, by rationalizing that it might not really happen. This structuring of the options appears to be a function of the logic of the fear appeal argument.

In fact, in the case of using fear appeals to try to get adolescents to use condoms in a Canadian program, the response typically given by adolescents who resisted the message was, "It could never happen to me." This was credited to a characteristic of adolescents, who feel that they are "immortal" or that deadly consequences could never happen to them personally.[4] This amounts to a question or denial of condition 1 above.

These empirical questions about the efficacy of fear appeals as arguments lead to, and appears to be connected with, normative questions concerning the conditions under which such arguments are correct or incorrect. By `correct' and `incorrect' here, I do not mean deductively valid or inductively strong; instead, I refer to the pragmatic standards under which such arguments are used to shift a burden of proof in a dialogue exchange (Walton 1992b). Fear appeal arguments do appear to have a structure, as species of argumentation from consequences, that does involve normative requirements under which they may be used correctly (appropriately), or not, to meet these requirements.

Of course, this normative question of whether the argument is correct or not, according to some structural standard of what constitutes a correct argument, is not the primary concern of the empirical research on appeal to fear. The primary concern of this research is to determine the conditions under which such arguments are *effective* (efficacious) in the sense of successfully leading the respondent audience to comply with the recommendation of the conclusion by carrying out the designated action.

However, as I hope to show here, these two concerns are connected in the case of fear appeal arguments. The respondent, as will be shown below, is essentially constricted in his or her range of acceptable actions by the underlying structure of the fear appeal argument as a species of practical reasoning.

An important point about the empirical research terminology is that the term threat is defined differently from the meaning given to it cited above. Witte (1994, 114), for example, defines *threat* as "a danger or harm that exists in the environment whether individuals know it or not." The warning "lung cancer causes death" is a *threat* in this sense, but it is not necessarily a *threat* in the sense I define (I 992a).

Hence, it is vitally important to distinguish here between an argument that is threatening and an argument that expresses a threat (in the sense defined, carefully, above). Something that is *threatening* is

something that poses a danger or harm to safety or self-preservation. An argument can be threatening, in this sense, without expressing a threat to the respondent (in the speech-act sense defined above). For example, Chicken Little, in the fable, warned "The sky is falling!" and this was found to be very threatening (alarming) by the other barnyard animals, but Chicken Little was (presumably) not making a threat to the other animals in the sense of issuing a threat to beat them up if they didn't give him chicken feed, or something of the sort.

As simple as this grammatical point about *threat* and *threatening* appears to be, it is the source of much confusion in the subject of fear appeal arguments.

3. Structure of the argument from fear appeal

The argument from fear appeal has a structure based on the following components. The argument has a proponent, *P*, who engages in dialogue with a respondent (opponent, audience), *R*. The purpose of the dialogue is for *P* to get *R* to carry out a particular action, *A*. The means of getting compliance centers on a danger, *D,* that is a very bad outcome from *R's* point of view, and generally represents a potential loss of *R's* safety or continued well-being. In many cases, *D* represents loss of life for *R*. This characteristic is evident in the range of cases cited in section 1, above.

The crux of the argument from fear appeal is the following conditional, presented as a message from *P* to *R*.

(CF)   If you (*R*) do not bring about *A*, then *D* will occur.

The conditional (CF) is used in the argument from fear appeal as part of the following inference, presented by *P* to *R*. More accurately, this chain of reasoning is a sequence of two inferences linked together.

(DF)   *D* is very bad for you.
        Therefore, you ought to stop *D* if possible.
        But the only way for you to stop *D* is to bring about *A*.
        Therefore, you ought to bring about *A*.

The effect of (DF) when employed in a particular case against a respondent R, is to put R between a rock and a hard place. Either R must accept that D will happen, an outcome that is, of course, very hard for R to live with or R must bring about A. Thus the purpose of using the fear appeal argument is to get R to bring about A, the recommended course of action (omission).

However, another aspect of the practical context in which this type of argument is used in everyday conversational exchange is that generally bringing about A involves some level of hardship or unpleasantness for R. Thus when P uses the fear appeal argument, it has to provide enough incentive to overcome $R's$ resistance to doing A. The fear appeal argument is scary. It is not used or useful in the broad range of cases of everyday arguments. It is needed only when there is enough resistance or inertia on the part of R that an argument with a strong impact is needed to overcome that resistance-hence the appropriateness of the expression "between a rock and a hard place" to describe the position of R. Bringing about A for R involves some degree of pain, effort, or unpleasantness. Thus for the argument to be effective, the negative value of D for R must be significantly greater than the negative value of carrying out A. The awful badness of D, so to speak, must force R toward the option of choosing the limited badness of A. Pain must be chosen in order to avoid greater pain.

One aspect of the fear appeal argument that is not an essential characteristic of it, but is nevertheless important in seeing how it works, relates to the two variables D and A. Quite often, D is a long-term consequence that may well occur at some future, unspecified time. But A may be an action that requires immediate steps to be taken right now, or that affects what is happening on a short-term, more immediate basis for R. This temporal aspect is characteristic of practical reasoning as used in deliberation and planning (see Wilensky 1983, Bratman 1987, and Walton 1990).

This aspect is important because appeal to fear arguments are frequently most useful where there is a trade-off between a long-term outcome or goal and some daily action that has short-term impact. These arguments frequently involve a choice between long-term safety and immediate gratification. Thus, if the respondent does not have much of a grasp of the long-term consequences of actions, or for some reason does not care about them, then the use of the argument from appeal to fear may not be effective. This type of argument may be more effective on some respondents than on others. If the respondent

is an adolescent, for example, who has little interest in, or appreciation of, the long-term consequences of his or her actions, then the fear appeal argument will not be effective.

At least part of the structure of the argument forms (CF) and (DF) is clearly that of argumentation from consequences. *A* is being recommended as a course of action that the respondent should take, on the grounds that it will avert bad consequences (namely, *D*) for him or her. But to get a wider perspective on argument from fear appeal as a distinctive type of argument used to chain a sequence of inferences together, we must turn to an analysis of practical reasoning.

4. Practical reasoning

Practical reasoning has a distinctive form as a type of reasoned inference as analyzed in Anscombe (1957), Diggs (1960), von Wright (1963, 1972), Clarke (1987), Audi (1989), and myself (1990)[5]. In its simplest form, a practical inference is based on two premises. The first premise states that an agent *a* has a goal *G* in mind, and the second premise states that some action *A* is thought to be a means of realizing *G* by *a.*

(PI)   *G* is a goal for *a.*
           a thinks that bringing about *A* is a means to bring
              about *G.*
           Therefore, *a* concludes that bringing about *A* is a
              practically reasonable course of action.

Practical reasoning is a chaining together of a sequence of subinferences of the form (PI).

A simple example, of the kind studied by Diggs (1960), will illustrate how practical reasoning is used in everyday deliberative communication exchanges:

Case D: A passerby in the corridor of Centennial Hall says
             to Professor G., "Excuse me, could you tell me how
             to get to Graham Hall." Professor G. replies: "Yes.
             Go down to the end of the corridor that way, then
             turn right, go past the Dean's Office, turn left at the
             end of the hallway and go past the *Media* section:'

In case *D*, the passerby makes it clear from his/her question that his/her goal is to get to Graham Hall. This is a very specific goal. Professor G. then proposes a course of action that, he/she says, will bring about the realization of goal *G* for the passerby. The deliberative exchange in case *D* is initiated by a "how" question that asks for advice on a means of carrying out a goal. It could also be described as an information-seeking communicative exchange in which one party (Professor G.) is presumed by the other party (the passerby) to be in a position to know about the information sought by this party.

In other cases, a goal may be abstract. For example, a physician's goal in treatment may be to contribute to the health of his or her patient. But because "health" is a highly abstract concept, it may be nontrivial to see, in a concrete situation, what it amounts to, or what (arguably) is likely to contribute to it.

According to the survey of the structure of argument characteristic of practical reasoning I provide elsewhere (1992c), practical reasoning is a pragmatic species of argument, best evaluated as a dialogue exchange between a proponent *P* and a respondent *R*. Each party to the dialogue has a set of commitments of the type defined by Hamblin (1970, 1971). The aim of the proponent in the dialogue is to use the premises of a practical inference of the form (PI) reasonably to see to it that the conclusion becomes a commitment of the respondent.

In such a dialogue framework, the respondent initially is not committed to the conclusion; that is, the respondent is disposed to question or even to reject it. For each use of a practical argument of the form (PI) by P, there exists a matching set of four critical questions for R to use (Walton 1992c, 999):

(CQ)   1. Are there alternative means of realizing *G*, other than *A*?
       2. Is it possible for a to do *A*?
       3. Does a have goals other than *G*, which have the potential to conflict with a's realizing *G*?
       4. Are there negative side effects of *a*'s bringing about *A* that ought to be considered?

In the dialogue exchange, if the two premises of an argument of the form (PI) are satisfied, in a given case, by the evidence put forward by *P*, then a burden of proof, or weight of presumption, is placed against *R* to respond. If *R* poses any one of the four critical questions

in (CQ), then the weight of presumption shifts back to P to answer the question.

Generally, in the kinds of cases of fear appeal arguments considered here, the second critical question is not in doubt. So the relevant concerns relate to the three other premises. In case D above, for example, question 1 may come to be raised if there is more than one route to Graham Hall that would be a potential candidate for A. Suppose, for example, that one route is shorter, but more complicated than the other. Which then is the "best" route? If the passerby uses the longer route, he/she may be less likely to get lost, and giving directions may be easier for Professor G. What is "best" here means what is conducive to the fulfillment of the goal in an efficient manner.

Question 3 may be important because R may have other goals that are also significant. Question 4 is likely to be significant as well in fear appeals, because carrying out A may be difficult or painful for R. It may be that carrying out A has other consequences for R that, as R sees it, are even more painful or significant than D.

5. Critical questions in fear appeals

When a fear appeal argument is used to try to get a respondent to adopt a recommended course of action, it is our hypothesis that the structure of the argument can best be analyzed as a case of practical reasoning used in advice-giving dialogue (a species of two-party deliberation dialogue).[6] The fear appeal is based on the premise that the respondent may be presumed to have the goal of self-preservation. The second premise is that the respondent understands, or can be brought to understand, that certain actions on his or her part will contribute to that goal, or will be contrary to its realization. The reasoning is time-indexed or temporal in nature. The conclusion the respondent is supposed to draw is that he or she ought (practically speaking, conditional on his or her commitment to goals) to adopt the recommended course of action.

But what options does the respondent who is deliberating rationally have? How can the respondent escape the conclusion of the inference? These options are represented by the four critical questions (CQ).

Consider the smoking case. The respondent does not want to get lung cancer, since this is a very painful outcome that will shorten his or her life. Hence getting lung cancer in the future is $D,$ a dangerous

outcome, that conflicts with the basic goal of self-preservation. More-over D is generally perceived as a very bad, painful outcome. But how can the respondent avoid D? In this case, the recommended ac-tion (omission) is to stop smoking. Is there any way to resist this dichotomy of being "between a rock and a hard place"?

We then come to a searching for a way out among the critical ques-tions. Are there means of avoiding D other than quitting smoking? It seems there is no room for a loophole here, because smoking is thought by scientific experts to be sufficient as a condition for lung cancer (over a long enough period), or at least sufficient to make it very likely. And there seems to be no known prophylactic or protection against this outcome if one smokes. At least, these are popular pre-sumptions, presumed to be based on scientific findings.

Second, is it possible to quit smoking? The answer is yes it is pos-sible, but it is difficult. This brings us to question 4.

Quitting smoking is difficult because it is an addiction, and with-drawal is painful. Moreover, there are other consequences that may be perceived as unpleasant. For example, it is known that people who quit smoking tend to gain weight. Thus, there are negative side ef-fects of A, and worst of all, these consequences are immediate rather than long-term (in the distant future). Thus carrying out A requires some strength or resolution of firm commitment. This is the problem of weakness of will (*akrasia*).

But critical question 3 is also a factor. Smoking is one of those small pleasures or rewards that helps us get through the day, when we need to feel some reward for effort. In this way, smoking does fulfill a need or goal-reward or pleasure on a short-term basis.

At this stage of reasoning, conflicts of goals can occur. The re-spondent needs to decide which goal is more important. And if there is a conflict of goals, the respondent may need to consider whether there is some other way of bringing about the secondary goal that would remove the source of conflict with the primary goal. For ex-ample, some source of short-term pleasure other than smoking (that does not have the same deadly consequences) might be found.

In the AIDS case, a factor is that sexual pleasure (having sexual intercourse with schoolmates) was evidently a very strong short-term source of pleasure (and perhaps also social satisfaction) among ado-lescents. Also, the students interviewed came from a small town, where purchase of condoms at the drug store meant that one was likely to be identified by relatives or friends of the family. Thus the argument

from fear appeal has to contend with escape routes through both critical questions 3 and 4.

But the biggest obstacle to the use of the argument from fear appeal in this case is that the adolescents think of themselves (personally) as "immortal"; that is, they resist the idea that AIDS is really a danger to them, personally. This amounts to a questioning of the second premise of the practical inference, as noted above. In this case, it means doubt or denial of the proposition that AIDS is a danger that will cause my death.

The other thing to be careful about with the use of fear appeal arguments is that if the respondent gets any sense that the probability of the threatening outcome is being exaggerated, the respondent will use that as an avenue to escape from the pressure of the argument. The use of the overblown fear appeals, such as the film "Reefer Madness," which was used in the fifties to try to scare teenagers away from drugs, is the classic case. Thus in presenting a fear appeal argument, it is very important to appear to be "factual" and to avoid the impression that the dangerous outcome is being "hyped" or exaggerated.

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Notes

2. Many of the student respondents in my argumentation class worried that it could be a significant side-effect if the mouse crawled into some inaccessible space in the house and then died there.

3. Evidently this ad was pulled because viewers found it too shocking and disturbing to be appropriate as a television commercial message (see Clark 1988, 111).

4. This special report was broadcast on the CBC *Evening News,* 12 November, 1994.

5. Historically, the notion of practical reasoning traces back to Aristotle's concept of practical wisdom, or *phronesis* (see especially the *Nicomachean Ethics).*

6. On the goals and characteristics of these types of dialogue (conversation, talk exchange), see *Plausible Argument in Everyday Conversation* (Walton 1992b).

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