

Forms for "Informal Logic"

The heuristic of target forms
and "ignoratio elenchi" forms

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There are two main messages in this note. The first message is a suggestion for helping our students solve the difficult interpretive problems of finding the arguments in articles, editorials, and letters in newspapers and magazines. It is suggested that the traditional method of providing a list of fallacious forms serves our students well. They can use such a list to organize, for critical evaluation, the diffuse arguments in current publications. I label these forms 'target forms.' We can aim at these forms in our efforts to reconstruct arguments as having some structure which reveals some of their merits or demerits. The second message is given by presentation of two forms which are not usually included on textbook lists of fallacious forms. These new useful target forms are shown to be forms which can be labelled as forms of **ignoratio elenchi** fallacies. The first message provides two reminders. We are reminded of the utility of elementary formal deductive logic in courses focusing on the critical examination of everyday reasoning. We are also reminded that there is no precise distinction between formal and informal logic. The second message will remind us that defective arguments classified as **ignoratio elenchi** fallacies or "irrelevant conclusion" fallacies are frequently best understood as defective ways of organizing several other arguments in order to deduce a conclusion from the conclusions of these other arguments. Frequently, when the charge of irrelevant conclusion can be made, the charge is

made because arguments, perhaps very good arguments, are used to establish a conclusion C1, but C1 is not what is needed as a premiss to deduce, with other premisses, a main conclusion C*.

When we assign students the task of re-expressing some arguments in ordinary language as categorical syllogisms and then evaluating the syllogisms for validity we give them an assignment which is easier than the assignment: Evaluate these arguments for deductive validity. The students are given some specific forms into which to reconstruct these arguments. Of course, there is no mechanical procedure for re-expressing an argument as a syllogism. The student needs to make interpretive judgments to decide which statement is the conclusion, which are premisses, and which statements or expressions are not parts of the argument. Furthermore, the student needs to make semantical judgments on which categorical statements best re-express the ordinary language statements. Nevertheless, the students are not left to cast about blindly to find some structure in the arguments relevant to the evaluation of the argument as valid. They have syllogistic forms as targets to aim at in giving form to the argument and the standard categorical forms as targets to aim at in re-expressing the premisses and conclusion. A second advantage in being supplied with these target forms is that the argu-

ment evaluation becomes simplified once the argument is reconstructed with one of the target forms. Frequently, arguments with a target form have already been evaluated; consequently, merely reconstructing an argument as having a certain form is tantamount to evaluating it. Think of how quickly we evaluate an argument if we reconstruct it as a case of **modus ponens** or reconstruct it as affirming the consequent. In any event, we usually have well developed procedures for evaluating arguments with target forms. Thus, in the case of the syllogistic forms we, and our students, can tell within a few seconds whether or not a syllogism in standard form is valid. The problem of determining validity becomes more complicated if the students are able to use any one of the denumerably many forms of the full sentential and predicate logic. Nevertheless, once students have had some guided practice in reconstructing arguments, their semantic judgments narrow down to a few the candidates for an argument's form within sentential and predicate logic. Again, as in the case of reconstructing into syllogisms, having a reservoir of forms into which the arguments are to be molded provides the students with targets at which to aim in their efforts at reconstruction and also greatly simplifies their task of evaluation.

I submit that teaching our students the elements of formal deductive logic provides them an ideal for the evaluation of all arguments. The ideal is to reconstruct an apparently formless argument in ordinary language or an argument which appears to have its own unique form by reconstructing it as an argument which has some one of our target forms (standard forms). We can, then, determine fairly readily whether or not an argument with a standard form has or lacks merit. In addition to revealing this ideal of argument evaluation, instruction in elementary deductive logic also helps the development of attitudes crucial for critical evaluation of reasoning. A very valuable aspect of learning how to apply this ideal is the development of a degree of ruthlessness towards the wording of the ordinary language arguments.¹ To force an argument into a target form frequently requires ignoring much of a passage as irrelevant to the argument and requires considerable rewording of the relevant parts to mold them into premisses and conclusions in some standard form. It has been my experience that students develop quickly the art of "digging out" premisses and conclusions from a passage when they are aiming at certain forms or patterns they have already seen; and this is especially true when they are aiming at the forms discussed in elementary deductive logic, eg., syllogistic and classical sentential logic. Don't you think that as a logic instructor that much of your superiority over your students in finding structure in arguments is due to the fact that you have had so much more practice in reconstructing arguments in the patterns suitable for evaluation as deductively valid?

There is no need to illustrate this use of target forms in the application of formal deductive logic. I have described standard practice in deductive logic. The suggestion that we try to approximate this ideal for the evaluation of all types of arguments is, I believe, a suggestion that we follow a commonly used method for teaching "informal" fallacy detection. This commonly used method, which makes the term "informal fallacy" oxymoronic, is to provide students with a list, usually not well organized, of fallacious forms of reasoning. Typical entries on such a list are forms of: illegitimate appeals to authority, illegitimate appeals to pity, hasty generalization, **ad hominem** appeals, and **post hoc ergo propter hoc**. On this so-called "fallacy approach," examples are provided to show that the forms are defective because they can take us from clearly true premisses to conclusions which are outrageously false or nonsense—to conclusions which are not even probably true given that the premisses are true. Thus the forms

are shown not only to be deductively invalid but also are shown not to be plausible patterns of inductive reasoning. Guided by this list of fallacious forms as targets, students are "turned loose" upon ordinary language arguments to condemn them, if possible, by reconstructing them as having some form similar to one of the defective forms on the list. This method is common enough. Perhaps, though, the suggestion, that this commonly used method is highly desirable and shows the need for teaching deductive logic to use it well, is not so commonly accepted. Further generalizations about this method of target forms will not be nearly so useful for reminding us of its merits as will an example of its application.

A typical list of fallacious forms contains some form, or forms, of Genetic Fallacies such as **GF**, below:

GF: Genetic Fallacy form,

P was not reached by careful reasoning and thoughtful consideration.

∴ P is false (wrong).

Consider the excerpt below from a Jan. 7, 1982 Columbus, Ohio **Citizen Journal** (CJ) editorial.

The ruling by a federal judge striking down the Arkansas law favoring the teaching of the biblical story of creation as "science" in public schools is a victory for the Constitution and common sense.

U.S. District Judge William Overton clearly saw that the law was an effort to require the teaching of religion in public schools and that creationism is "simply not science."

The law's goal was to force equal time for so-called "creation science" in the vast majority of schools which teach the theory of evolution. It was whooped through the Arkansas legislature by members afraid of being accused of "voting against God" and was signed by the governor before he read it.

This editorial presents a battery of arguments to make a case for the points that the Arkansas law on teaching creation science was wrong and that Judge Overton's decision was justified. The first two paragraphs give us the conclusions for these arguments. Most of the arguments in the editorial may be correct. But we are now looking for the fallacious ones to dismiss before giving more careful scrutiny to the premisses of the arguments which are or appear correct (non-fallacious). When we read the third paragraph we are struck by the fact that the writers shift to criticizing the Arkansas legislature and the governor for the way in which they passed the bill. Our list of fallacious forms has put us on the alert for fallacious reasoning when there is a shift to criticizing people. But what is the significance of the abuse in this editorial? By bearing in mind the pattern of Genetic Fallacy **GF** we are alert to fallacies involving abusing people for the way in which they arrive at a belief, principle, etc., as a way of criticizing the belief, principle, etc. So, we aim at **GF** as the target for reconstructing the third paragraph argument for the conclusion suggested in the first two paragraphs. We get the structured argument below.

The Arkansas legislature and governor did not pass the creationism teaching law by careful reasoning and thoughtful consideration.

∴ The Arkansas creationism teaching law is bad legislation.

Once we have reconstructed the third paragraph argument in the above form, a few brief reminders about the defects of the Genetic Fallacy suffice to dismiss the argument as fallacious. We have seen here the twofold utility of having target forms. They help us organize the argument and they expedite evaluation of it. Further illustration of this use of target

forms to illustrate reconstructing arguments by aiming at familiar forms of **ad hominem**, **ad populum**, etc., would sketch out a typical chapter on "informal fallacies." My goal here is not to illustrate a standard textbook list. My goal is now to make a case that two patterns should be added to the standard lists of fallacious forms. These two new forms will enable us to support the vague charge that an argument is fallacious because of irrelevant conclusion by exhibiting a defective form used in the argument. Of course, a purpose for the preceding praise of the method of using target forms was to provide a rationale for the introduction of two more forms.

Let us now consider two target forms which are not usually presented in textbooks. In fact, they may have never been presented in any twentieth century text. Perhaps they are not presented because they are so obviously fallacious that it seems as if people would never argue in these ways. Nevertheless, we shall see that we can interpret people as arguing in these ways and that these ways of reasoning may be justly called "committing an **ignoratio elenchi** fallacy." For lack of better terminology I will call these forms of argumentation affirmative and negative argumentation. I call them "argumentation forms" as opposed to "argument forms" because, as examples will show, they are frequently useful for organizing the structure of an overall line of argument containing several arguments.

The form of **affirmative irrelevant argumentation**:

Some X are Y. (Some X or other is Y.)
Z is some X. (Z is an X.)

∴ Z is Y.

An example of affirmative irrelevant argumentation:

P1: Some way of controlling inflation is desirable.
P2: Increasing unemployment is some way of controlling inflation.

∴ Increasing unemployment is desirable.

The form of **negative irrelevant argumentation**:

X is some Y.
Z is not X.

∴ Z is not some (not any) Y.

An example of negative irrelevant argumentation:

P1: Focusing a logic course exclusively on arguments as they are actually given in newspapers and magazines is some way of teaching students the skills needed for evaluating arguments as they are actually given.
P2: Teaching elementary deductive logic is not focusing a logic course exclusively on arguments as they are actually given in newspapers and magazines.

∴ Teaching elementary deductive logic is not a way of teaching students the skills needed for evaluating arguments as they are actually given.

Baldly presented the forms are preposterous. People who want to convince others with their arguments would never present their arguments explicitly in these forms. Perhaps, because these forms seem so unlike any forms of reasoning which occur in daily life, logicians have not paid attention to them since medievals discussed supposition of terms. Recall that medievals did discuss cases of what I call affirmative irrelevant argumentation by discussing examples such as the one immediately below:

P1: Some horse of yours is a horse you promised to give me.
P2: Dobbin is some horse of yours.

∴ Dobbin is a horse you promised to give me.

I hope, however, that the examples I have given make it plausible at least that some people's reasoning on a topic could be outlined as having these forms which can be regarded as a type of irrelevant argumentation. The people could give excellent arguments for the premisses (P1, P2); but arguments for these premisses are irrelevant to the conclusion in as much as getting more arguments for these premisses or strengthening the arguments for these premisses is of no help in drawing the given conclusion from these premisses. I hope that further examples of these fallacious patterns will strengthen my case that these are useful forms to add to our standard lists of fallacious forms and that recognition of these forms increases our understanding of the accusation that an argument, or line of argumentation, involves a relevance fallacy. The remainder of this note consists of examples using these two forms as target forms for structuring and, thereby, evaluating arguments as they are actually given in everyday reasoning.

Let us first consider an example of what is becoming a paradigm of a fallacy of irrelevance. In their book: **Argument: The Logic of the Fallacies**, McGraw-Hill Ryerson, Toronto 1981, John Woods and Douglas Walton borrow from Johnson and Blair to give an example of **ignoratio elenchi**. Woods and Walton characterize **ignoratio elenchi** on p. 50 as "illicit changing of subject matter." They go on to write the following on pp. 50-51: "Many interesting examples of this fallacy as given by R.H. Johnson and J.A. Blair." They note pp. 55-64 of **Logical Self-Defense**, R.H. Johnson and J.A. Blair, McGraw-Hill Ryerson, Toronto 1977. They then cite one illustrative case:

(Senator) Paul Martin rose to defend his hometown of Windsor, Ontario against the remark of Arthur Hailey in his novel **Wheels**. Hailey had said that 'grimy Windsor' is 'matching in ugliness the worst of its U.S. senior partner (Detroit).' Martin is reported to have responded:

When I read this I was incensed....Those of us who live there know that (Windsor) is not a grimy city. It is a city that has one of the best flower parks in Canada. It is a city of fine schools, hard-working and tolerant people.

When he mentioned the flower parks, Martin did produce an argument to counter Hailey's appraisal. But then, as Johnson and Blair point out, Martin changed the subject when he started to discuss the fine schools and hard-working tolerant people. These facts may be appealing, but they are not relevant to Hailey's accusation; they do not tell us whether Windsor is ugly or fair. A shift of subject has taken place; the last part of the argument is an **ignoratio elenchi**."

I have no quarrel with the critical analysis of Johnson and Blair. Here my purpose is to represent their critical analysis as implicitly showing that Martin's line of reasoning could be reconstructed as using the affirmative irrelevant argumentation form. Casting part of Martin's line of argument into this form makes explicit why his shift of topic is illegitimate, viz., the shift is using the defective form. My reconstruction of Martin's line of argument is below.

P1: Some ways of making a city an agreeable place to live are ways of making that city not ugly and not grimy.
P2: Having hard-working and tolerant people is some way of making a city an agreeable place to live.

∴ Having hard-working and tolerant people is a way of making a city not ugly and not grimy.

P3: Windsor is a city having hard-working and tolerant people.

∴ Windsor is a city which is not ugly and not grimy.

Martin illegitimately shifts the topic because P1 tells us only that some way or other of making a city agreeable is a way of keeping it from being ugly and grimy. By only arguing for P2 he shifts from the requirement of showing that having hard-working people etc., is in fact one of those ways of keeping a city from being ugly and grimy.

For another example of affirmative irrelevant argumentation consider the excerpt below from a letter in the Feb. 1, 1982 *Lantern*. (The *Lantern* is the student daily of the Ohio State University in Columbus, Ohio.) The student does correctly report the views of my colleague, Professor Andrew Oldenquist, as Oldenquist expressed them in a *Lantern* article.

In the article "Professor links schools, crime," Professor Oldenquist's prescription for curing societies ills is a dosage of guilt followed by shame administered for value learning. He blamed sociologists and psychologists for undermining our schools' influence on childrens' values. If this is true, can Professor Oldenquist explain why millions of people pay thousands of dollars to psychiatrists, psychologists and clinical workers in an attempt to free themselves from emotionally destructive guilt? Anxiety, frustration and depression imprison far too many people and I believe it is the result of the type of value teaching Professor Oldenquist advocates. If we adhere to the principle of teaching values through guilt and shame, the inevitable result could very well be an oppressive mind.

Eileen Hill, Junior

You may find other flaws in her reasoning. But she is clearly arguing that Oldenquist's methods of teaching values are undesirable because they are psychologically damaging. To reach her conclusion she suggests that methods of Oldenquist's type for teaching values have produced psychological damage. Unless we want to accuse her of making unwarranted generalizations we should take her use of 'type' to refer to: "some methods for teaching values by guilt and shame," rather than to: "all methods for teaching values by guilt and shame."

Reconstruction of the argument against Oldenquist:

P1: Some methods of teaching morality by inducing sentiments of shame and guilt are psychologically damaging.

P2: Professor Oldenquist's methods of teaching morality are some methods of teaching morality by inducing sentiments of shame and guilt.

∴ Professor Oldenquist's methods of teaching morality are psychologically damaging.

Let me cite another example of this type of fallacious reasoning which I read in the *Lantern*. The article reported an interview with a journalism instructor who was deploring the poor writing skills of Ohio State students. He made a good case that instructors throughout the university should correct grammatical and spelling errors on student essays and papers. He also made a good case that the corrections should be more than mere notations that an error had been made; some reduction in grade should be made for the grammatical and spelling errors. This journalism instructor was reported as saying that he felt justified in giving journalism students an E (failing grade) for a single misspelled word. I would hypothesize that this journalism instructor reasoned fallaciously to justify his harsh grading procedure in the following way:

P1: Some ways of reducing journalism students' grades because of spelling errors is desirable and justified.

P2: Giving a journalism student an E for a single misspelled word is some way of reducing students' grades for spelling errors.

∴ Giving a journalism student an E for a single misspelled word is desirable and justified.

The immediately preceding example suggests, I think, how common this fallacy may be. Don't you find many lines of argument directed to showing us that some proposal Z is desirable (undesirable) but all the argument is directed towards showing that some proposal of Z's type is desirable (undesirable)? And isn't there frequently little said to show that the definite proposal Z is one of the desirable (undesirable) ones of this type? For one more example of a fallacy of this type those who have vol. iv no. 3 of the *Informal Logic Newsletter* can turn to p. 32 where in the Examples-Supplement of that issue I present an editorial which can be analyzed as committing this kind of relevance fallacy.

Let me now turn to providing a few examples of that pattern I labelled: negative irrelevant argumentation. "Throw the rascals out!" In election campaigns we frequently find arguments for an opposition candidate which are really arguments against the incumbents. Citizens equipped, from their logic classes, with the form of negative irrelevant argumentation can readily dismiss such lines of argument by recognizing that they have defective forms such as that in the argument below:

P1: Re-electing the incumbent is some way of providing incompetent government.

P2: Electing the opposition candidate is not re-electing the incumbent.

∴ Electing the opposition candidate is not any way of providing incompetent government.

Writers of letters for and against frequently use this line of argument. For one example, consider a line of argument which makes a case that working towards a nuclear weapons freeze is a way (some way) of showing respect for human life. It is then noted in passing, or left unsaid as too obvious for words, that opposition to abortion is not working towards a nuclear weapons freeze. It is then concluded, or insinuated, that opposition to abortion is not a way of showing respect for human life. For another example of the same kind of argumentation, we find people arguing that those who oppose capital punishment or work for a nuclear weapons freeze but do not oppose abortion lack a genuine respect for human life. In so far as evidence is given in this kind of argument against those not opposing abortion it is given for the premiss that opposing abortion is a (some) way of showing respect for human life. But what is needed in this case is evidence that opposing capital punishment or proposing a nuclear weapons freeze are not sufficient by themselves to show respect for human life. In the preceding example what was needed was, of course, evidence that opposing abortion is not sufficient by itself to show respect for human life.

To remind ourselves that the above lines of argument actually used consider the letter below from the Feb. 1, 1982 *Columbus Citizen Journal*:

I cannot take right-to-lifers very seriously. If they really are concerned about saving human lives, why aren't they out demonstrating against our government's vast expenditures on a first-strike nuclear war capacity? Of the hundreds of millions who will be killed if we continue on our present course, only about half will be Russians.

Millions of people in the world who are dying from starvation could be saved if our energies and resources were properly directed.

Carlos Clayton, Lancaster, Ohio

Readers of Mr. Clayton's letter could, if aware of the negative irrelevant argumentation pattern, reconstruct the argument of the first paragraph as the fallacious argument below.

P1: Demonstrating against nuclear war is some way of showing respect for life.

P2: Acting as a pro-lifer is not demonstrating against nuclear war.

∴ Acting as a pro-lifer is not some way (not any way) of showing respect for life.

I admit that in these arguments on the abortion topic the fallacious lines of argument are being developed to help the arguers go on to commit some **ad hominem** fallacy. In my experience, these lines of argument have been developed in contexts in which people are trying to prove that their opponents are hypocrites and thus what they hold on various issues is incorrect. But this pattern of reasoning is not used only to make a case—poor case—that someone or some group is hypocritical. Isn't it tempting to use this pattern of reasoning to make a case that you are "without sin?" You note that drinking to excess, being unfaithful to your spouse, and being a racial bigot are some ways of being immoral. You next note that your life-style is not one of excessive drinking, marital infidelity, and racial bigotry. It is tempting to conclude, isn't it, that your life-style is not any way of being immoral?

Let me give one more example. The police are frequently criticized as not doing their real job when they "ticket" people for small violations such as jay-walking. There may be good reason why the police should tolerate small violations of the law. But the following line of reasoning is a very bad way to argue for such toleration.

P1: Apprehending major criminals is some way of doing proper police work.

P2: Apprehending very minor offenders is not apprehending major criminals.

∴ Apprehending very minor offenders is not any way of doing proper police work.

To give such an argument explicitly would be embarrassing. Nevertheless people do implicitly give such arguments. Consider the following Nov. 11, 1982 letter to the *Columbus Citizen Journal*. The writer is reacting to an earlier article reporting the "ticketing" of a jogger for trespassing because he was running on a private road in an apartment complex.

It's hard to believe a jogger was cited by Columbus police and could be fined or put in jail for running in quiet and scenic Clintonville while murders and rapists run free around the city.
Michael Greiner, Columbus

Don't you think that the above pattern about police work is used implicitly in Greiner's letter?

More examples provided by me will not provide the best evidence for my thesis that these two patterns are useful patterns to add to our standard lists of fallacious forms of argument or argumentation. The best evidence will be provided by the fact that others find them useful target forms. Let me close with two suggestions on how these views on relevance fallacies could be developed further. In this note I alluded to the fact that medievals had talked about the pattern I called 'affirmative irrelevant argumentation' in their discussion of supposition of terms. Perhaps it could be shown that these patterns do represent significant relevance fallacies and that the defects in these patterns can be understood by understanding how users of them are confused about supposition of terms. It would be nice to use medieval logical theory to explain, explain to logicians but not students, the nature of defects in current arguments. It is well-known, if not notorious, that there can be deductively valid arguments in which the premisses are about a totally different subject than the conclusion. Are such odd arguments devices for commit-

ting relevance fallacies? On p. 51 of their book referred to earlier, Woods and Walton write: "Classical deductive logic yields an account of 'correct argument' that admits the possibility of committing the worst fallacies of relevance you can imagine." Do the views of relevance fallacies in this note help us understand if such odd valid arguments are really relevance fallacies, and if so, how?

Notes

1 The editors have reminded me that readers should be warned that my suggested use of "target forms" flaunts any "principle of charity" for argument interpretation. (This newsletter has published excellent efforts to articulate and to justify principles of charity: Ralph Johnson vol. iii no. 3, June 81, Jonathan Adler vol. iv no. 2, May 82, and Trudy Grovier vol. iv no. 3, July 83.) The editors correctly observe that my first illustration of this method—the Genetic Fallacy example below—ruthlessly forces the editorial from the **Columbus Citizen Journal** into a preconceived pattern of a Genetic Fallacy. My ruthless analysis does require generalizing the parts of the passage taken as giving premisses so that they can be said to reduce to abusing people for using a poor method for reaching a decision. My target form, which to some may seem to be a Procrustean bed, requires interpreting the conclusion in a strong form as saying that a decision is definitely wrong because adopted by a poor procedure instead of interpreting it as saying that the decision is dubious.

Nevertheless the first example is a good example for illustrating the use of target forms. A thesis presupposed by the use of target forms is that such ruthlessness in structuring argumentative passages is a primary virtue for argument interpretation. Charity is, perhaps, only a remedial virtue. I hope that the remarks on the value of "targets" and the other analyses in the paper support this thesis. In this note let me add the following consideration on charity as a remedy for ruthlessness.

A principle of charity can be well applied, if not best applied, to guide correction of an interpretation which seems harsh or unfair. Hence, if we have first forced an argument into a form which represents it as a foolish fallacy and such an interpretation seems harsh or unfair we can say: "Look, let us reconsider the passage to see whether or not we should interpret it in **that** foolish way." But we need **that** foolish interpretation laid out as a departure point. A principle of charity can be clearly focused if used to guide interpretation away from a harsh analysis. The principle is not so helpful if we are still looking for an argument while trying to apply it. I suspect that most trained or experienced "informal logicians" apply a principle of charity while running through their minds harsh analyses of the type given by use of target forms. They say to themselves something such as: "I could analyze this passage as a blatant **ad hominem** abusive fallacy but perhaps what is really intended is. . ." However, students do not have these elementary forms of fallacy against which to apply a principle of charity. Also students do not have the training so that they can quickly, and in their heads, tentatively interpret the passage as presenting one of stereotypic forms of fallacy. So, I submit that use of target forms should be taught as at least one of the first steps in argument analysis. ●

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