

Toulmin's "Analytic Arguments"

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Abstract: Toulmin's formulation of "analytic arguments" in his 1958 book, *The Uses of Argument*, is opaque. Commentators have not adequately explicated this formulation, though Toulmin called it a "key" and "crucial" concept for his model of argument macrostructure. Toulmin's principle "tests" for determining analytic arguments are problematic. Neither the "tautology test" nor the "verification test" straightforwardly indicates whether an argument is analytic or not. As such, Toulmin's notion of analytic arguments might not represent such a key feature of his model. Absent a clearer formulation of analytic arguments, readers of Toulmin should be hesitant to adopt this terminology.

Keywords: Toulmin, uses of argument, analytic, synthetic, argument, quasi-syllogism, tautology, verification, Freeman

1. Introduction

In this paper I explicate and evaluate the concept of "analytic arguments" that Stephen E. Toulmin articulated in his 1958 book, *The Uses of Argument*. Throughout this paper I will refer to the 2003 Updated Edition, the pagination of which differs from the original, but aside from a new preface and an improved index, the text of which has remained unchanged.

My thesis is that Toulmin's definition of analytic arguments, and his corresponding distinction between analytic and substantial arguments, is unclear: it is therefore a mistake to employ the analytic-substantial distinction as if it is clearly established. Furthermore, I suggest that the distinction is not a crucially important component of Toulmin's model of argument layout, *contra* his claim that it is. I find that the agenda that Toulmin helped to inspire, of rejecting formal and other deductive standards as the paradigm of argument cogency and inference appraisal (cf. Gerristen, in van Eemeren, 2001; and Govier, 1987 and 1993), can safely proceed without trying to redeem Toulmin's definition of analytic arguments, or the analytic-substantial distinction. We should therefore bracket Toulmin's concept of analytic arguments, untroubled by the analytic-substantial distinction or its confusing formulation, while continuing to investigate the still contentious, but more valuable aspects of his theory of argument macrostructure, such as the nature of warrants and their field-dependent authorization.

My motivation is threefold: 1) Toulmin called the distinction between analytic and substantial arguments a "key" and "crucial" distinction for his 6-part model of argument macrostructure, attempting to ground that model in an anti-deductivist framework; 2) when they mention it at all, commentators of Toulmin's model (early and contemporary, critical

and sympathetic, alike) usually gloss the distinction too simplistically, tacitly suggesting that it can be unproblematically explicated while nevertheless giving diverse interpretations of it; 3) when scholars neglect to take account of Toulmin's conception of analytic arguments and of the analytic-substantial distinction, they still illuminate other aspects of Toulmin's model, profitably moving scholarship forward concerning issues such as Toulmin's influential concept of "warrant" (e.g. Freeman, 1991 and 2006; Hitchcock, 2003 and 2005; Bermejo-Luque, in Hitchcock (Ed.), 2005; Pinto, 2005; Klumpp, 2006; Verheij, 2006).

This paper will proceed as follows: First, because of considerations of space, I will provide only a brief synopsis of the problematic glosses of analytic arguments that commentators of Toulmin's model put forward.

Second, I will explicate and evaluate the "tautology test" for analytic arguments, showing that Toulmin inconsistently offers it as being *un*-authoritative. I indicate the confusing way formal validity is tied up with this first test for analyticity, showing that the tautology test does not help us to identify analytic arguments, as Toulmin asserts it sometimes does.

Third, I will explicate and evaluate the "verification test", showing that Toulmin inconsistently offers *this* formulation as being the *authoritative* one for analytic arguments. I suggest that like the tautology test, it also does not always help us to identify analytic arguments.

Finally, I will offer a summary of and response to Freeman's insightful comments on my interpretation (private correspondence, 2010). While his proposed interpretation of Toulmin's formulation of analytic arguments via the tautology test is interesting, I am reluctant to embrace it, without recourse to a broad interpretation of Toulmin's thought beyond his early articulation of analytic arguments as such, found in *The Uses of Argument*. Furthermore, I find that even if one accepts Freeman's interpretation, Toulmin's formulation of analytic arguments still suffers from a debilitating lack of clarity. My conclusion is that when appealing to Toulmin's 1958 articulation, we should conclude that it is irredeemably opaque. We may therefore safely put aside Toulmin's conception of analytic arguments, without trying to redeem it, while continuing to investigate the still controversial but at least more promising elements of the model of non-deductive argument macrostructure that Toulmin put forward in *The Uses of Argument*.

2. Problematic glosses

I want to very briefly mention some eminent voices who have implied through their analyses of Toulmin's model that analytic arguments can be clearly and summarily explained, whether they agree with Toulmin's conception or not; I respectfully disagree with these readers of Toulmin, and think they may have missed just how confusing Toulmin's articulation of analytic arguments is.

First (van Eemeren, Grootendorst, and Krugier, 1987), and (van Eemeren, Grootendorst, and Snoeck Henkemans, 1996), though they thoroughly investigate the bulk of Toulmin's model in their authoritative treatments, nevertheless neglect to spend too much time explicating analytic arguments. In their briefest of comments on this element of Toulmin's theory, they imply that analytic arguments are in great part identified by their formally deductive character, while acknowledging that Toulmin "thinks that analytic arguments are [not] always formally valid." The three principal "tests" Toulmin offers for determining analyticity (the tautology test, the verification test, and the self-evidence test) are not scrutinized in their treatments, though they seem to paraphrase Toulmin's tautology test in their gloss.

Some interpret analytic arguments in terms of the tautology test (e.g. Manicas, 1966; Korner, 1959; Cowan, 1964), but who also spend too little space explicating it. These scholars, like van Eemeren, et al., spend the majority of their effort critiquing other aspects of Toulmin's theory.

There are also those who gloss analytic arguments in terms of the verification test (e.g. Hardin, 1959; Cooley, 1960; Castaneda, 1960; Hitchcock and Verheij, 2006; Bermejo-Luque, 2009); but these scholars by and large also do not dedicate much space to its explication, and pass over the other ways Toulmin suggests to go about identifying analytic arguments.

(McPeck, 1991) simply equates analytic arguments with formally valid ones, without providing any analysis. He does not mention any of Toulmin's tests for identifying analytic arguments. (Will, 1960) similarly says that "neglecting a few non-essential refinements", an analytic argument is one in which "the data and the backing together entail the conclusion."

Some sympathetic and early reviewers (e.g. O'Connor, 1959), and interpreters who are tellingly not in Philosophy departments (e.g. Brockriede and Ehringer, 1960), pass over talk of analytic arguments altogether, these latter scholars being impressed more by Toulmin's model and less by the theory behind it.

Finally, (Freeman, 1991) is worth mentioning, because in his extremely detailed and influential discussion of "Toulmin's Problematic Notion of Warrant", he avoids ever referring to analytic arguments. Here is an example of authoritative scholarship concerning Toulmin's model that effectively ignores the analytic-substantial distinction, while fruitfully analyzing other distinctions that Toulmin makes. Whether agreeing or disagreeing with the substance of Freeman's analysis, the fact that he neglects to draw the reader's attention to the analytic-substantial distinction should be seen as a virtue of his essay, since if he had included such a discussion, it might have confused matters, and would in any case have been a divergent discussion from the topics he took on. This conclusion seems warranted when considering that none of the other scholars mentioned above were able to do justice to Toulmin's definition of analytic arguments. Almost all of them portray the analytic-substantial distinction as being more perspicacious than it really

is, whether endorsing it or not, but in any case without sufficiently explicating it. A try at an adequate explication is in order, to which I now turn.

3. The initial formulation of analytic arguments: the tautology test

Toulmin's first attempt at articulating analytic arguments, and the analytic-substantial distinction, comes in the section "Analytic and Substantial Arguments", from pages 114-118. It is in these first formulations that Toulmin immediately sets the reader up for confusion, because his initial definition of analytic arguments via the tautology test seems to cast it in terms of formal validity, which he later (e.g. pp. 118, 125, 132, and 134) claims is an entirely different distinction.

I begin with Toulmin's statement on page 114 that even though "as a general rule" only arguments of the form "data, warrant, so conclusion" may be set out in a formally valid way, whereas arguments of the form "data, backing for warrant, so conclusion" may never be set out in a formally valid way, there is still "one special class of arguments which at first sight appears to break this general rule": Analytic arguments, according to Toulmin's initial conceptualization, are a special class of argument that "can be stated in a formally valid manner" (p.115), even when the argument is articulated as "data, backing, so conclusion". Toulmin illustrates:

Anne is one of Jack's sisters;
Each one of Jack's sisters has (been checked individually to have) red hair;
So, Anne has red hair.

The second statement of this argument is the backing for the warrant, and is obtained by starting with what would have been the traditionally termed "major premise" in a syllogistic argument: "All Jack's sisters have red hair." When this statement is "expanded" (cf. pp. 91, 101, 102, 104, 108, 110, 115, 116), we can, according to Toulmin, eliminate the ambiguity as to whether it is a factual piece of data or a generalized rule expressing an (in this case, implied) inference license, choosing to phrase it as the latter, what Toulmin calls a "warrant": "Any sister of Jack's will (i.e. may be taken to) have red hair." Then by a further act of expansion, providing the "authorization" for the warrant in an explicit articulation of why it should be accepted as a legitimate inference license, Toulmin generates a statement of "backing": "Each one of Jack's sisters has (been checked individually to have) red hair." Here is the second statement in the argument above, the argument that has the form "data, backing, so conclusion" (p.115).

Toulmin claims that this is the kind of argument that breaks the general rule (he says) of formally valid arguments only being able to be expressed in the form "data, warrant, so conclusion". Here, Toulmin claims, is an argument that goes "data, backing, so conclusion", and that is also formally valid; thus, according to Toulmin, it is an analytic argument.

But Toulmin is not content to define analyticity only according to the formally valid layout of a “D; B; so C” argument. He says the argument above is also analytic because “if we string datum, backing, and conclusion together to form a single sentence, we end up with an actual tautology”. Toulmin seems to imply on page 115 that an argument passing the tautology test will thereby have its formal validity indicated, when he claims that “when we end up with an actual tautology . . . [we find that] not only the (D; W; so C) argument but also the (D; B; so C) argument can—it appears—be stated in a formally valid way”. In this way he seems to explicitly tie formal validity to analytic arguments.

Toulmin then provides the strongly stated definition on page 116 that does *not* mention formal validity: “an argument from D to C will be called analytic if and only if the backing for the warrant authorizing it includes, explicitly or implicitly, the information conveyed in the conclusion itself.” Toulmin repeats this definition on page 116, qualifying it by saying it is “subject to some exceptions”, and then reiterates that “we have to bring out the distinction between backing and warrant explicitly in any particular case if we are to be certain what sort of argument we are concerned with on that occasion.”

If we combine these criteria (that of formal validity and satisfying the tautology test) for analytic arguments, then we may say that Toulmin’s first formulation is that an analytic argument is one which, 1) when the backing of an implicit warrant is explicitly articulated in the argument, then the argument is formally valid; and 2) when all the statements of this expanded, formally valid argument are expressed in a single statement, then that statement is repetitive, i.e., tautologous.

4. Problems with the tautology test

I remarked earlier that (Manicas, 1966) interpreted the concept of analytic arguments through Toulmin’s tautology test. But we should remind ourselves that this test was meant as only a “provisional” definition of analytic arguments, and Toulmin explicitly called it such (p.118). Manicas’ brief criticism of Toulmin’s concept of analytic arguments thus is not too helpful, as it acknowledges only the provisional formulation of the concept, and does not recognize the different formulations Toulmin gave for analytic arguments in the second half of Chapter III. But is the tautology test really just a first try at defining analytic arguments? Does Toulmin ever truly abandon it in favor of the verification test (as Cooley and many others think is the case), or in favor of some other criteria? Does Toulmin retain the tautology test as a legitimate way to demarcate analytic arguments from substantial ones? These questions should not just be brushed aside, but I wonder if any of them can be answered with any kind of consistency according to Toulmin’s book, because even though he offers the tautology test tentatively, and then explicitly rejects it as being an exhaustive criterion for analyticity, he nevertheless refers to analytic arguments later via this conception: How then to reconcile Toulmin’s assertion on the one hand, that “in some cases at least, this criterion [the tautology test] fails to serve our purposes” (p.124), with his

statement on the other hand, made fifteen pages later, that “[i]n the analytic syllogism, the conclusion must in the nature of the case repeat in other words something already implicit in the data and backing” (p.139)? These considerations make the concept of an analytic argument difficult to penetrate. Readers should be left wondering to what extent the tautology test is authoritative, and to what extent it is not, since Toulmin seems to say it is both.

Aside from the ambiguity throughout the text as to whether and to what degree Toulmin endorses the tautology test, what to my mind is odd in all this is that the argument Toulmin has set out as his example, with what would have been the major premise “expanded” to be phrased as the backing of the associated warrant, is not at all formally valid, as Toulmin claims it is. Here is the expanded, supposedly formally valid, argument again:

Anne is one of Jack’s sisters;
Each one of Jack’s sisters has (been checked individually to have) red hair;
So, Anne has red hair.

But the truth of this conclusion is not formally entailed by the truth of the premises adduced in its support, due to the parenthetical clause in the backing. What if we adjust it to make it formally valid, and thus make it analytic, and thus render Toulmin’s formulation consistent with his example? In order for the conclusion to follow formally (what Toulmin later will call “unequivocally”), the conclusion would have to read: “Anne has (been checked individually to have) red hair”. Then the argument would read:

Anne is one of Jack’s sisters;
Each one of Jack’s sisters has (been checked individually to have) red hair;
So, Anne has (been checked individually to have) red hair.

But it would seem this is an illegitimate move, as retaining *in the conclusion* the parenthetical statement *found in the backing* changes the meaning of the conclusion: instead of being the claim that Anne *actually has* red hair, we have a claim that Anne has only been *checked* to have red hair. We want to keep the conclusion as it is: a statement about Anne in fact having red hair right now. So, Toulmin says that if Anne was right in front of someone, and that person was *right now* looking at Anne’s hair, and it appeared red to her, then the argument would be analytic:

Anne is one of Jack’s sisters;
Each one of Jack’s sisters (it is now being observed, i.e., it now appears) has red hair;
So, Anne has red hair.

In fact, Toulmin says this argument is “unquestionably analytic”; however, this version of it, with the modified parenthetical clause in the backing, suffers from the same problem as the one with the unmodified parenthetical clause in the backing: It is only formally valid so long as the parenthetical clause in the backing is also included in the conclusion. The reason is that just because the color of someone’s hair has been checked at one time, this does not mean it is now the color the person who first checked it saw it to be. Toulmin is right to see this as a shortcoming of the strength of the argument in question. He thinks of this as a “logical type jump”, from backing concerning the past to a claim concerning the present, and proposes to fix the type jump to show the argument’s analyticity by making the backing refer to a concurrent time as the conclusion. But Toulmin does not address what actually makes it not analytic *according to his own definition*, and that is its formal invalidity. Because it is also true that the person who is (right now) checking the hair might be color blind, or she might see blonde or brunette or every other color as red, or her senses could otherwise be distorted. So the strongest formally valid conclusion someone could draw from her observation of looking at Anne’s hair, even if she is looking at it right now, is that Anne’s hair *right now appears* red to her! So, if we are being utterly candid, as Toulmin urges us to be, the revised argument would retain the parenthetical statement in the conclusion, and would be:

Anne is one of Jack’s sisters;
Each one of Jack’s sisters (it is now being observed, i.e., it now appears) has red hair;
So, Anne (it is now being observed, i.e., it now appears) has red hair.

Of course, no one usually looks at the color of someone’s hair, and only allows herself to say that the hair she sees *appears* some color: usually, we uncontroversially believe someone’s hair *is* some color based on our current perception, so long as no countervailing concerns intercede that might speak against that belief. So altering the conclusion this way seems illicit. Still, if formal validity is a criterion of analyticity (so that an argument D; B; so C breaks the rule of *not* being formally valid), then however believable is the claim in Toulmin’s example that Anne has red hair, and however reliably it is reached via the backing, it would still *not* be “unquestionably analytic” (as Toulmin says it would be if Anne was standing right in front of someone) because even if she were standing right there, it would not be unquestionably formally valid without altering the conclusion by including the parenthetical clause.

Another way for the argument to be formally valid, instead of carrying over the parenthetical clause in the backing down to the conclusion and thus altering it, would be to *omit* the parenthetical clause from the premise and the conclusion altogether. Then either version of the argument (with or without the type-jump) would read:

Anne is one of Jack’s sisters;

Each one of Jack's sisters has red hair;
So, Anne has red hair.

This is surely formally valid. But without the parenthetical statement, we just have the major premise, unadulterated ("unexpanded" as Toulmin might have said). And so the argument above is just an unexpanded traditional syllogism. But Toulmin wanted to show how an argument could be formally valid when an *expanded* premise was articulated in the argument as backing (cf. pp. 91, 101, 102, 104, 108, 110, 115, 116), that such an argument might also pass the tautology test, and that such an argument would therefore be analytic. So eliminating the parenthetical statement to gain formal validity just turns the argument back into a traditional syllogism, where according to Toulmin the unexpanded major premise is ambiguously phrased. Therefore this is not the kind of argument Toulmin would test for analyticity.

What I conclude as a result of these reflections is that either Toulmin's example is poor, in which case he has inaptly illustrated his conception of analytic arguments, or his conception of analytic arguments is flawed. In either case, the concept of analytic arguments is not doing the job Toulmin purports it to do, which is to theoretically inform our understanding of his model of argument macrostructure. What Toulmin has shown in these examples is that his first articulation of analytic arguments does not hold, because from the beginning, his example does not "break the general rule", as he says it does, of an argument of the form "data, backing, so conclusion" being formally invalid. So instead of showing (as he suggests he has) that it is doubtful whether any arguments with an expanded major premise can ever be properly analytic, what he has shown is that we still don't know what properly speaking an argument's being analytic even means! This is especially telling when one considers that for the remainder of the book Toulmin uses the terms "analytic" and "substantial" as if he had established a clear conception of what those terms meant, even though he contemporaneously adapts their definitions while working with them. Far from being a candid treatment, Toulmin's distinction at first blush obscures more than it reveals.

To summarize what I think I have thus far established: according to his illustration, Toulmin was wrong to say that analytic arguments break the rule of "data, backing, so conclusion" arguments being formally invalid, since those expanded arguments are *as they stand* formally invalid: expanded arguments with backing in place of warrant do *not* yield formally valid arguments unless one modifies the statements in the arguments. This shows that expanded arguments are not analytic, but only if analyticity is just synonymous with formal validity, which Toulmin later claims is too crude a line to draw. These considerations are all made in light of the ambiguity as to whether Toulmin is consistent in his assertion that the tautology test is un-authoritative, which he explicitly maintains throughout his articulation of the verification test, but which he inconsistently implies *is* authoritative later in the book.

These reflections might be enough to show how unhelpful Toulmin's concept of analytic arguments is, due to its opaque initial formulation via the tautology test, but problems are compounded when we look at Toulmin's verification test, to which I now turn.

5. The verification test of quasi-syllogisms: the revised criterion of analytic arguments

As I mentioned at the beginning of this paper, and at the beginning of the last section, Toulmin ostensibly introduces the tautology test only provisionally, and then seems to reject it in favor of the verification test (though he later seems to adopt the tautology test partially). Still, according to the verification test, an argument is "analytic if, and only if . . . checking the backing of the warrant involves *ipso facto* checking the truth or falsity of the conclusion" (p.123).

I think I have shown that the tautology test should be rejected as a reliable indicator of analyticity because Toulmin's example never fulfilled what he purported it to, namely, a method of identifying analytic arguments. While Toulmin thought the tautology test shows that expanded arguments are rarely analytic, what he actually showed was that expanded arguments are rarely formally valid. In any case Toulmin wants to reject the tautology test for different reasons: because, he says, it does not allow us to determine the analyticity of an argument that has a quasi-syllogistic form (p.121). A quasi-syllogism is like a traditional syllogism except that instead of its major premise being expressed categorically, that statement is expressed in a qualified way (*ibid*).

Looking at the verification test by way of Toulmin's example of a quasi-syllogism, we find the following (by now hackneyed) argument:

Petersen is a Swede;
Scarcely any Swedes are Roman Catholic;
So, almost certainly, Petersen is not a Roman Catholic.

According to Toulmin the (formal?) validity of this argument is self-evident, so it should be classified as an analytic argument (p.122). Ignoring this further criterion of analyticity (the "self-evidence test") that seems to further complicate Toulmin's definition, if we interpret this argument's second statement as being ambiguous (which Toulmin claims we should do), then we can rephrase it to produce a generalized statement that allows us to infer the conclusion on the basis of the first statement; as an explicit warrant it might thus read: "If someone is Swedish then you may take it that he or she is not Roman Catholic". Then in a further act of expansion, if instead of an inference license, we state the backing that authorizes the warrant we get:

Petersen is a Swede;
The proportion of Roman Catholic Swedes is less than 5%;
So, almost certainly, Petersen is not a Roman Catholic.

Now this argument too, is analytic, though not because its validity is self-evident, nor because it is tautological when the statements are strung together, and certainly not because it is formally valid. It is analytic, for Toulmin, because if we were to check the truth of the backing, we would in effect be checking the truth of the conclusion. In other words, checking (exhaustively) to see that the proportion of Roman Catholic Swedes is less than 5% would be to check if Petersen is or is not a Roman Catholic. As such, according to the verification test, this argument is analytic, whereas according to the tautology test, it is not.

But there are few problems with this test for analyticity as I see it. First, to take the (Cooley, 1960) criticism: the verification test seems to be too broad, because it would call any argument analytic where backing-checking involves conclusion-checking. But this will include many arguments that, in Toulmin's own words are "not just implausible but incomprehensible" (p. 122) such as Toulmin's example:

Petersen is a Swede;
The proportion of Roman Catholic Swedes is less than 5%;
So, almost certainly, Petersen *is* Roman Catholic.

Here is an implausible (and perhaps incoherent) argument. But it is *still* analytic, according to the verification test, as checking the truth of the backing would involve checking the truth of the conclusion. But if this argument is analytic, then surely that speaks against the claim that formal logicians are wedded to the analytic paradigm, for they would not want to be wedded to a model of argument that allows one to infer the opposite of what one would expect to, on the basis of the reasons one adduces. So, as with the tautology test, either the test is not authoritative, or formal logicians are not really wedded to Toulmin's conception of analytic arguments as he says they are.

Perhaps one could respond to Cooley by insisting that analyticity is a distinction made within the class of arguments that have good warrants and backings for those warrants, so this complaint would not hold (Hitchcock, 2010, private correspondence). But even if Cooley's objection can be handled in this way, then another problem with the verification test still remains: while some quasi-syllogisms that fail the tautology test might still be analytic by virtue of the verification test, it could also be the case that some quasi-syllogisms pass the tautology test, yet fail the verification test. If this is so, then passing the verification test is not only not a sufficient condition for an argument being analytic, as Toulmin says it is, it is not at all a necessary condition for an argument being analytic. Take this one premise argument:

Petersen is a Swede with blonde hair and blue eyes;
Therefore Petersen is a Swede of European descent.

The implied major premise might be “All Swede’s with blonde hair and blue eyes are of European descent”, which, when expanded, might become a warrant such as “On the basis of a person being a Swede with blonde hair and blue eyes, one may take it that such a person is of European descent”. As such this is a quasi-syllogism that according to Toulmin’s formulation should be tested via the verification test, as it is expanded from a universal affirmative major premise. In a further act of expansion we might obtain the backing for the above warrant, authorizing it as an inference license via a claim such as: “Every Swede whom I have met with blonde hair and blue eyes is a Swede of European descent”. Then, when we include the backing in the original argument, we have the argument that is to be tested for analyticity:

Petersen is a Swede with blonde hair and blue eyes;
Every Swede whom I have met with blonde hair and blue eyes is a Swede of
European descent;
Therefore Petersen is a Swede of European descent.

Does this argument pass the verification test? No it does not, as checking the truth of the backing will never involve checking to see if Petersen is a Swede of European descent, so long as my experience in dealing with Swedes with blonde hair and blue eyes has never included dealing with Petersen. This argument is not analytic, then, according to the verification test, so long as I have never met Petersen.

But does this argument pass the tautology test? I think it is plausible to claim that it does, as stringing the statements together is repetitive: Petersen is a Swede with blonde hair and blue eyes *and* every Swede whom I have met with blonde hair and blue eyes is a Swede of European descent *and* Petersen is a Swede of European descent. “Petersen is a Swede” is repeated in the first premise and the conclusion. So then is the argument analytic? It seems we can’t be sure according to Toulmin’s formulation, because even though it passes the tautology test, that test is not meant to be a reliable test for quasi-syllogisms in the first place (the reason why the verification test was introduced). Furthermore, this argument is not formally valid, as Toulmin seems to say it should be if it passes the tautology test.

So at this point we should be confused. First, it is not the case that on their own, either the tautology test or the verification test provides both necessary and sufficient conditions for determining an argument’s analyticity: Toulmin’s strong formulations are misleading. But furthermore, Toulmin introduced the verification test because in the case of quasi-syllogisms, it was supposed to more reliably indicate an argument’s analyticity than the tautology test (pp.123-124). But it does not, as the above example shows: A quasi-syllogism may pass the tautology test but not pass the verification test. So it seems that two of Toulmin’s principle tests for determining analyticity are flawed, and that neither can

reliably determine an argument's analyticity. It therefore seems to be a mistake to use Toulmin's concept of analytic arguments as if it is clear. And considering that many scholars simply pass over the concept without their analyses suffering as a result, this should suggest that analyticity does not represent the crucial component of Toulmin's model that he claims it does.

6. Freeman's comments

James Freeman graciously agreed to read and remark on an earlier version of this paper. Further quotations belong to this correspondence (2010). The most telling observation from his numerous helpful comments regards a rejoinder to the argument I offer whereby I claim that the parenthetical clause included in the backing "Each one of Jack's sisters has (been checked individually to have) red hair" destroys the formal validity of the argument in question and so according to Toulmin's own definition, forces a failure of the tautology test (see pp. 5-8, above). He suggests that we could interpret Toulmin as meaning (while not explicitly claiming) that in our adding of the parenthetical clause in the backing, we are really "simulat[ing] universal quantification through conjunction", and if so, that the following version of the argument (which is equivalent to the one Toulmin explicitly formulates) "is formally valid and its associated conditional is a tautology:

Anne is one of Jack's sisters;
Anne has red hair & Sister # 2 has red hair & ... & Sister # n has red hair;
So, Anne has red hair."

Freeman says that "[f]or such arguments, the backing can be stated in the form of a conjunction which simulates a universally quantified statement because the backing concerns the objects in a finite set all of which have been observed and found to have a certain property and the backing statement simply reports this fact."

If Freeman is correct, then it seems there is an interpretation of Toulmin's example that does indeed pass the tautology test, and so is coherently analytic, according to Toulmin's own definition. If so, my critique on this front fails, and my claim that Toulmin's definition is opaque is rendered less convincing.

Unfortunately, my reply to Freeman's analysis must be very brief.

My response is that even if he is correct, and we justifiably construe Toulmin's backing in his example as being a conjunction of observation reports that simulates universal quantification, and so we see the example as correctly exemplifying the tautology test, we would still have to reconcile Toulmin's confusing articulation concerning the degree to which the tautology test is authoritative; this is a significant interpretive hurdle to clear, if one wishes to defend Toulmin's definition of analytic arguments from the charge of opacity. It is no small thing that Toulmin was decidedly unclear concerning the degree to which the tautology, verification, and self-evidence tests each reveals arguments that are

analytic. So even granting that the tautology test is a valid test on its own terms, in relation to the other tests, we still cannot say whether Toulmin took it as being authoritative or not, or the degree to which he took it to be authoritative, when dealing with the quasi-syllogism. Furthermore, Freeman's reading of Toulmin's example of an argument that passes the tautology test seems to go beyond *The Uses of Argument*, attributing to Toulmin more than Toulmin explicitly admits in the text. While I yield to Freeman's expertise as an interpreter of Toulmin's body of work beyond *The Uses of Argument*, and am happy to hear Freeman's interpretation offered "as a suggestion which might help clarify what Toulmin has to say", still, because Toulmin was less than clear on this point in *The Uses of Argument*, it seems his explicit formulation in that text is not saved.

In a word, Freeman's interpretation does not redeem the tautology test, nor Toulmin's definition of analytic arguments in *The Uses of Argument*.

7. Conclusion

I would like to suggest, in closing, that Toulmin's concept of analytic arguments found in *The Uses of Argument* is irredeemably opaque. If Toulmin's goal, through his conceptualization of the analytic-substantial distinction, was merely to motivate his model of argument macrostructure with an anti-deductivist approach, by showing that arguments can sometimes be cogent without being formally valid, then he succeeded: His examples all point to the idea that a conclusion may be reached legitimately, even if it is not reached formally. But if he meant to say something more subtle in the theoretical support for that model, then his formulation of analytic arguments and the analytic-substantial distinction does not accomplish that goal clearly. Perhaps it should not bother those who read Toulmin that his conception of analytic arguments in *The Uses of Argument* might be irredeemable: as inquirers interested and inspired by his anti-deductivist project, it seems possible to pass over Toulmin's analytic-substantial distinction, and yet to profit from examining his other, still contentious and provocative, but at least more clearly articulated ideas.

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