

ISSA Proceedings 1998 - Argument Structure And Disciplinary Perspective



Many in the informal logic tradition distinguish convergent from linked argument structure. How intuitively we may present this distinction is quite familiar. In some arguments, several premises may each be offered to support some conclusion but these premises are apparently intended to be taken together, to work together to constitute a case for the conclusion. Each premise given is somehow incomplete in itself. Its removal would leave the argument with a gap. As Stephen N. Thomas puts it in *Practical Reasoning in Natural Language*, the “reasoning involves the logical combination of two or more reasons,... each of which needs the others to support the conclusion.” (Thomas 1986: 58) Following Thomas, we say that such an argument has *linked* structure. By contrast, some arguments will have what Thomas calls *convergent* structure, where two or more premises are intended to support the conclusion separately, independently giving evidence for it.

The problem of distinguishing linked from convergent structure has proved vexing; indeed so vexing that it is currently the central problematic issue for understanding argument structure. The terminology in which Thomas and others have drawn the distinction is one obvious explanation for this difficulty. What do these key concepts of logical combination, premises needing each other, or being separate or independent mean? These characterizations are shot through with terms whose precise meaning is far from clear. What does it mean to say that reasons logically combine, that they need the others, that they fit together? What does it mean to say that they are completely separate or independent?

The metaphorical nature of the terms in which the linked-convergent distinction is frequently cast may betray a more fundamental difficulty with this distinction. It is a confusion over just exactly what this distinction is to mark. It is the thesis of this paper that the linked-convergent distinction, which we regard as a logical distinction, is frequently confused with a dialectical or pre-logical distinction, the distinction between multiple and co-ordinatively compound argumentation as

defined by the pragma-dialectical school. This distinction is sometimes regarded as marking the linked-convergent distinction, but only using different terminology. However, as I shall argue, the distinction is quite different. According to van Eemeren and Grootendorst in *Speech Acts in Argumentative Discussions*, a multiple argumentation consists of “a series of separate and independent single argumentations for or against the same initial expressed opinion.” (van Eemeren and Grootendorst 1984: 91) Each argumentation is (or is intended to be) individually sufficient to justify accepting (or rejecting) the initial expressed opinion. With co-ordinatively compound argumentation, the single argumentations are “only sufficient together” (van Eemeren and Grootendorst 1984, 91). In *Argumentation, Communication, and Fallacies*, they point out that in “multiple argumentation, the constituent single argumentations are, in principle, alternative defenses of the same standpoint” (van Eemeren and Grootendorst 1992: 73). Again, “What matters most is that the individual arguments should count as independent defenses of the same standpoint” (van Eemeren and Grootendorst 1992: 75). By contrast, “Compound argumentation consists of a combination of single argumentations that are...presented collectively as a conclusive defense defense of a standpoint....In a coordinative argumentation, each argument individually is presented as being a partial support for the standpoint, but it is only in combination with the other arguments that it is presented as a conclusive defense” (van Eemeren and Grootendorst 1992: 76, 77).**[i]**

Why should we not see van Eemeren and Grootendorst as drawing the linked-convergent distinction, only using different terminology? Why does the multiple versus co-ordinatively compound terminology mark a different distinction from the linked-convergent contrast? The answer comes, as I have already suggested, from the fact that the multiple-co-ordinatively compound distinction is dialectical, whereas the linked-convergent distinction is logical. We have two different disciplines here out of which these distinctions have come, disciplines with different perspectives on argumentation. Let me make it clear that by saying that these perspectives are different, I am not suggesting that one perspective is valid and the other not, or that one perspective is superior to the other. The perspectives of these disciplines may be equally valuable, but they are different, have different goals, and should not be confused.

The goal of a *logical* analysis and evaluation of an argument is to determine

whether the premises constitute good reasons for accepting the conclusion, good in the sense of constituting inductively strong or sufficient or deductively necessitating reasons for the conclusion. The unit of analysis, then, is the premise-conclusion nexus. In developing a system of argument diagramming from the logical point of view, a system containing circles, arrows, and perhaps other elements, we understand these elements as making manifest the internal structure of such a nexus. That is, the various statements and their support relations are internal to an argument and together constitute one unit of analysis. The tools of argument analysis are tools for manifesting this internal structure.

This contrasts with the tools needed for a properly dialectical analysis of argumentation. Where the focus of interest concerns how well a critical discussion has come to a reasoned resolution of some disputed question, the argumentation included in the critical discussion need not form one single unified argument developed over the course of the discussion. In the case of resolving some dispute, a proponent may put forward a reason which he regards as sufficient to defend some claim. This reason, then, constitutes the premise in a distinct argument for that claim. Yet the proponent may later withdraw that reason, and thus the argument, under critical questioning from the challenger. She may not accept that reason and the proponent may have no premises - at least premises which she will accept - from which to argue for it. He may then offer another reason for the claim. Clearly this could be repeated a number of times. Each time a premise is withdrawn and replaced, the proponent is putting forward a different argument. Alternatively, a proponent may put forward what he regards as a number of distinct arguments for his claim. This could happen in a critical discussion with several interlocutors. The reason or premise one interlocutor is prepared to accept may not be acceptable to the others. But by presenting a series of reasons, the proponent has given each interlocutor at least one reason which that interlocutor finds acceptable (Compare van Eemeren and Grootendorst 1992: 74). If then each reason is sufficient to justify the claim which is the issue of this critical discussion (and seen as sufficient by each interlocutor), by offering this series of reasons the proponent will have brought about a resolution of the dispute favorable to him. But notice that he has brought this about *not* through one argument but through a whole series. The proponent's argumentation consists not of one argument developing cumulatively, but of a number of discrete arguments. Again, for rhetorical purposes, a proponent may present a plurality of arguments for the same conclusion. A claim becomes more

credible the more often one hears it repeated, especially if it is repeated in varying contexts. Surely if a proponent wants to get his audience to believe some claim, he may want to repeat it a number of times. But he can certainly vary the context by each time giving a different reason for that claim. The tools for carrying out a dialectical analysis of argumentation then must include a way of indicating that an argumentative passage or exchange includes a number of distinct, separate arguments. A *dialectical* analysis of argumentation, then, will focus on a different unit, a whole argumentation, possibly containing multiple arguments, where a logical analysis will take an individual argument as its unit of analysis. Different disciplines then will legitimately have different analyses of argument structure.

Dialectical analysis comes out specifically in the identification of multiple argument structure and the distinction between multiple and co-ordinatively compound argumentation structure in the pragma-dialectical approach. By saying that a multiple argumentation consists of a series of single argumentations, each sufficient or intended to be sufficient to accept the conclusion, van Eemeren and Grootendorst indicate that the unit of their analysis of argumentation is more than a single argument. Their use of “conclusive” is significant here. Their discussion also indicates that we should judge an argumentation to be multiple when the single premises “should each be regarded as conclusive defenses of the speaker’s standpoint” (van Eemeren and Grootendorst 1992: 79). “Conclusive” is revealing for highlighting the separateness of the arguments in multiple argumentation. It is a modal term. On one standard understanding of “conclusive,” to claim that the premise or premises of an argument constitute a conclusive defense of the standpoint is to claim that they entail or necessitate the conclusion. It is to claim that the argument from those premises to the conclusion is deductively valid. This is significant, because from a logical point of view, no argument is stronger than a deductively valid argument. If certain of the reasons or premises put forward for a conclusion constitute a deductively valid argument for that claim, any remaining reasons will in no way strengthen the deductively valid argument that we already have, for one cannot strengthen a deductively valid argument. One cannot have any support for a conclusion stronger than premises which necessitate it. That a premise necessitates a conclusion could then be taken as a sign that any other premises offered in support of that conclusion are parts of one or more other, numerically distinct arguments for it. “Conclusive” then highlights the fact that in multiple argumentation we have two

or more separate arguments for the conclusion.

Use of “conclusive” is also problematic, however, for arguments, although logically cogent, will not always provide conclusive support for their conclusions. We must allow for the possibility of multiple argumentation where each of the separate arguments provides less than conclusive evidence to justify accepting the conclusion, and we must also allow for the possibility of co-ordinatively compound argumentation where the premises collectively provide support but not conclusive support for the conclusion. In this connection, Snoeck Henkemans’ appeal to modal qualifiers in distinguishing multiple from coordinatively compound argumentation is very insightful. In her view, modal words such as “probably,” “certainly,” “possibly,” “necessarily,” “make explicit the degree of certainty with which their standpoint is advanced” (Snoeck Henkemans 1992: 108). In deciding then whether an argumentative text has multiple or coordinatively compound structure, we should not look solely for units whose premises conclusively support their conclusions. Rather. If the argumentation consists of more than one argument [premise], in order to determine which structure is to be attributed to the argumentation, the analyst has to judge whether each individual argument is sufficient to support the standpoint with the claimed strength, or whether the arguments only have sufficient weight if they are combined (Snoeck Henkemans 1992: 113). Clearly, if each premise supports the conclusion with the strength claimed, then we have good reason to count the argumentation as multiple. On the other hand, if only the premises in combination have sufficient strength, we have reason to count to argumentation as coordinatively compound.

Hence, although there is an obvious parallel between the multiple and coordinatively compound distinction and the convergent and linked distinction, these two distinctions do not amount to the same thing. We have more than a terminological difference here. The multiple-coordinately compound distinction is a dialectical distinction, while the linked-convergent distinction is logical. Multiple argumentations consist of a plurality of arguments, while convergent arguments are single, argumentative units. This is not to deny that when approaching an argumentative passage from a logical point of view, it is important to determine whether the passage contains one or a plurality of arguments. That will determine the units to be subjected to logical analysis and evaluation. But identifying those distinct units is preliminary to *logical* analysis –

it is a prelogical analysis employing, from the logical point of view, a prelogical distinction – while identifying distinct units may be integral to dialectical analysis. Characterizing convergent argument structure in a way to make it coincide with multiple argumentation structure then is a mistake. It confuses dialectical with logical structure.

Keeping this in mind, we can see how certain characterizations of convergent structure are inappropriate, since they amount to characterizing this structure as multiple argumentation. This is most notably true of Thomas's first characterization of convergent argument structure: When "each reason supports the conclusion completely separately and independently of the other, the reasoning is *convergent*" (Thomas 1986: 60, italics in original). Thomas's wording is quite strong here. If by "completely separately and independently," Thomas means completely separately and independently, then convergent reasons on his characterization are separate distinct arguments for the conclusion. The cogency of each reason as support for the conclusion should be assessed separately from any of the other reasons. Thomas apparently endorses this interpretation when he says that "A convergent argument is equivalent to separate arguments (or evidence coming from separate areas) for the same conclusion" (Thomas 1986: 61). We say "apparently endorses," for in the light of Thomas's further elaboration of the nature of convergent arguments, it is not clear that he would endorse the view that convergent reasons should *always* be regarded as the premises of distinct arguments for the conclusion. Suffice it to say at this point that at least one of his characterizations may plausibly be interpreted this way.

In *Argument Structure: A Pragmatic Theory*, Douglas Walton analyses the differences among a number of tests for the linked-convergent distinction as falling along two axes: the Falsity-Suspension axis and the No Support-Insufficient Proof axis.

Some tests will ask us to consider the effect on the support the remaining premises give a conclusion if one premise is false. Others will ask us to consider the effect on the support if one premise is suspended, i.e. blocked out of the mind. If that premise were simply removed from the premise set of the argument, what would be the effect on the support the remaining premises give to the conclusion? Again, some tests will judge an argument to be linked if and only if the support is completely undercut, while others will judge the argument linked if and only if the resultant support is insufficient to show the conclusion. The various combinations

of these two axes yield four possible tests for distinguishing linked from convergent arguments: Falsity/No Support, Falsity/Insufficient Proof, Suspension/No Support, Suspension/Insufficient Proof. Of these four, Walton regards the last, the Suspension/Insufficient Proof ... Test: *If one premise is suspended (not proved, not known to be true), then conclusion is not given enough support to prove it* (Walton 1996: 119, italics in original). As “being an analysis of the meaning of the linked-convergent distinction, generally, in an ideal argument in which the premises are collectively sufficient for the conclusion” (Walton 1996: 151). It provides “a right minded contextual framework, and a sensible pragmatic viewpoint on what is meant by the linked-convergent distinction generally” (Walton 1996: 181).

Appraising how Walton came to this position and his overall views on the linked-convergent distinction developed in *Argument Structure* is beyond our scope here. He acknowledges that this test frames the multiple versus co-ordinatively compound distinction of the pragma-dialectical school. If our argument is cogent that this dialectical distinction does not amount to the linked-convergent distinction, then Walton’s claim that the Suspension/Insufficient Proof Test properly analyses that distinction is mistaken.

In *Informal Logic: Possible Worlds and Imagination*, John Eric Nolt also in effect characterizes convergent (or as he prefers to call them, split-support) arguments as separate arguments. In such arguments, the premises “work independently; neither needs to be completed by the other..., but stands by itself as a separate line of reasoning.” The premises then constitute “separate inferences” (Nolt 1984: 31). Nolt carries this through in his instructions for evaluating convergent arguments. Each inference should be evaluated separately. The reasoning of a convergent argument “will generally be as strong as the strongest chain of reasoning it contains,... [T]he overall strength of the argument is as great as the overall strength of its strongest chain” (Nolt 1984: 90). If an argumentative text contains two (or more) separate arguments for the same conclusion, then from a logical point of view, those arguments should be evaluated separately. The logical cogency of one is a separate issue from the cogency of the other. But in such a case, we are dealing with *distinct* arguments, not a single unit of argument. Nolt is quite consistent, then, in regarding a split support argument as being as strong as its strongest chain, as long as we recognize that split support arguments are multiple argumentations and not convergent arguments.

But Walton and others might very well ask why we need the lin-ked-convergent distinction in addition to the multiple co-ordinatively compound distinction. Why within arguments which we all agree are co-ordinatively compound do we need to distinguish those whose internal structure is linked from those whose internal structure is convergent? Some further remarks Thomas makes concerning convergent argument suggests why. He makes the following claim:

It is possible to have a correct convergent diagram in which the result of combining the separated reasons would (if this were done) be a stronger argument than either reason provides alone, as long as the *negation* or *falsity* of the various separated reasons would not decrease the support given by the other(s) to the conclusion (Thomas 1986: 62, footnote 18, italics in original). This assertion is problematic as it stands. What argument is the correct convergent diagram to be a diagram of? Is it the diagram of the various numerically distinct arguments, each giving a separate, independent reason for the conclusion? Or is it the diagram of the result of combining these several arguments into one? If the convergent-linked, multiple -co-ordinatively compound distinctions amounted to the same thing, then the convergent diagram would represent a plurality of arguments, and the combined argument would have co-ordinatively compound, i.e. linked structure. But Thomas does not regard the resultant combined argument as having linked structure. The last clause makes reference to what he regards as another hallmark of the linked-convergent distinction. Reasons are convergent if the falsity of any one of them would in no way affect the strength of support each of the others affords for the conclusion. If by contrast the falsity of one of the reasons undercuts the strength of the others, the structure is linked. This allows for the possibility that the strength of two or more premises considered together will be greater than the *strength of the strongest premise*, and that the strength of the overall argument will be diminished by the falsity or withdrawal of any of its premises. The argument will be convergent as long as the strength of each remaining premise considered separately remains the same.

Notice that this allows the combination of a plurality of premises which supplement each other, which work together logically in terms of the weight of the entire case for the conclusion, but which are still regarded as convergent. No wonder, then, that there is confusion over the linked-convergent distinction. One would think that if the combined weight of the premises offered to support a conclusion were greater than the weight of any premise taken individually, then

the premises would be working together, logically supplementing each other, and thus should be linked. But Thomas now allows that under certain circumstances they may be convergent, even though in such a case we shall have only one argument.

What this apparent conflict between Thomas's criteria for drawing the linked-convergent distinction may indicate is that within the class of arguments which from a dialectical perspective have co-ordinatively compound structure, we need to distinguish convergent from linked arguments. This reinforces our thesis that these two pairs of distinctions do not amount to the same thing. We are dealing not with one but with two structural distinctions here and thus with two problems in delimiting argument structure. That for *logical* reasons we should want to distinguish linked from convergent arguments is easily shown. Indeed we claim no originality for this point. Consider the following argument:

There is no evidence that capital punishment for first degree murder constitutes an effective deterrent for these crimes. It cannot restore life to the murder victim. If applied to the wrong person, there is no way that wrong can be redressed. It signals that brutality is an option for the state. Hence the death penalty for premeditated murder should not be a judicial option. Here four distinct reasons are given for the conclusion. Although all four reasons together give a stronger case for the conclusion than each separately, each by itself counts against capital punishment and thus for the conclusion. Intuitively this argument is convergent. From a logical or logico-epistemological point of view, the premises of an argument must be acceptable and adequately connected to the conclusion. Now suppose the first premise were recognized false. Suppose there was evidence that under certain circumstances at least, say when the administration was swift, sure, and equitable, capital punishment constituted an effective deterrent for first degree murder. Given that information, the first premise would no longer be acceptable. Yet the remaining premises would still constitute a case against capital punishment. The falsity of one premise would not spell the demise of the entire argument, although if all four premises had been true, we would have had a stronger case for the conclusion than that made by the remaining three. The point is that even if the first premise proves unacceptable, it still makes sense to proceed with the logical evaluation of the remainder of the argument.

Now contrast these considerations with the following argument: Capital punishment signals that brutality is an option for the state. Brutality must never

be an option for the state. Hence capital punishment must not be permitted.

Suppose the first premise were found false and thus unacceptable.

Suppose some forms of capital punishment, e.g. lethal injection, were certifiably non-brutal. Then the remaining premise would not give us much of a reason for opposing *those* forms of capital punishment.

Suppose, on the other hand, that brutality is an acceptable option for the state, at least under certain circumstances. Then under those circumstances, capital punishment might be quite permissible.

Intuitively it seems we need both premises together to constitute a case for the conclusion of this argument. Intuitively it is linked, and the contrasting logical fate of this argument with that of the convergent argument when it is imagined that one premise is false shows the cogency of drawing the linked-convergent distinction.

Whether an argument is linked or convergent has a bearing on its logical evaluation. The distinction is relevant from the logical point of view. Hence, it is important that we keep the logical purpose of this distinction in mind when we draw it and not confuse it with prelogical or dialectical considerations, even though those distinctions may be valuable for the logical and dialectical analysis of argumentation. The linked-convergent distinction and the multiple-coordinatively compound distinction are two different distinctions, ultimately expressing two different disciplinary perspectives, and we should not use the latter to explicate the former.

NOTES

[i] We shall comment on the significance of “conclusive” shortly.

REFERENCES

Eemeren, F.H. van & R. Grootendorst (1984). *Speech Acts in Argumentative Discussions*. Dordrecht-Holland/Cinnaminson-USA: Foris Publications.

Eemeren, F.H. van & R. Grootendorst (1992). *Argumentation, Communication, and Fallacies: A Pragma-Dialectical Perspective*. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Nolt, J.E. (1984). *Informal Logic: Possible Worlds and Imagination*. New York: McGraw-Hill Book Company.

Snoeck Henkemans, A.F. (1992). *Analysing Complex Argumentation*. Amsterdam: SICSAT.

Thomas, S.N. (1986). *Practical Reasoning in Natural Language 3e*. Englewood

Cliffs, NJ: Prentice-Hall.

Walton, D. (1996). *Argument Structure: A Pragmatic Theory*. Toronto: University of Toronto Press.