ARGUMENTUM AD HOMINEM:
FROM CHAOS TO FORMAL DIALECTIC

The method of dialogue-tableaus as a tool in
the theory of fallacy

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Introduction

Surveying the field of extant theories of fallacy, under the guidance of C.L. Hamblin,[1] had a sobering effect on the present authors. It became obvious to us that in this field intuitions reign supreme while well-defined scientific distinctions are rare, and such distinctions as are to be found are very vague indeed. As it turns out, the problem is not that too little has been written about fallacies (which was our first hunch), but rather that what has been written is quite unsystematic. In order to get an impression of the chaos that prevails here it is sufficient to choose a number of introductory text-books on logic and to compare their discussions of fallacies. For an up-to-date and comprehensive description of this chaos let us also refer to Hamblin's book, *Fallacies,* which contains a wealth of material. However, except for its last chapter *fallacies,* too, contains little by way of theory, and only few suggestions of a historical nature as to how one might go about it developing one. At the outset the following considerations seem to us to be of the utmost importance:

(1) Painstaking historical investigations of the views of fallacies which are to be found in philosophical literature from Aristotle till the present moment are needed, for the systematic suggestions they offer and also because contemporary uses of language are, as Russell said, [2] «shot

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[1] C.L. Hamblin, *Fallacies,* Methuen, London, 1970. The expression «formal dialectic» is taken from this book.

[2] Bertrand Russell, *Wisdom of the West,* Macdonald, London, 1959.

through with the fading hues of past philosophic theories» (p. 309). The questions that have to be asked therefore comprise the following: «In what way does ... (author) use the expressions 'argumentum ad hominem', 'petitio principii', 'non sequitur' ?» No realistic theory construction concerning fallacies is to be expected if the history of fallacies is bypassed. An important contribution to this historical work as a preliminary to theory construction is the above mentioned work by Hamblin.

(2)   There is a lack of analytical tools for the task of analysing and classifying fallacies. That we have not yet got much in the way of a theory of rational argumentation is at least partly due to the shortage of instruments suitable for this task. Our contention is that in the field of argumentation generally and more especially in the sphere of fallacy theory construction can profit from certain tools developed in (modern) formal logic, viz. in the theory of the so-called logical constants. Our working hypothesis will be that especially the dialogical set-up of first-order predicate logic that we owe to P. Lorenzen (and indirectly to E. W. Beth) will be very suitable as a starting point for further theory construction in the field of argumentation. In fact the method of dialogue-tableaus is the first successful fragment of a theory of discussion, since other attempts at developing such a theory do not contain any definition of what it means to win or to lose a critical discussion.

In this paper we shall use these ideas as working hypotheses in order — first goal — to clarify what various authors have meant when saying that an *argumentum ad hominem* has been employed in a certain discussion. The following pages contain:

I. an attempt to map the terminological differences we have found in the uses of the expression 'argumentum ad hominem'. We shall try to point out some constants in these uses and in the views that are expressed by means of them,

II. an exposition of the main elements in the history of this

expression, by means of the framework offered in Lorenzen's dialogue-theory of logical constants,

    III. a conclusion, and

    IV. suggestions for further research.

I. In the literature we have investigated, at least four different meanings of the expression *'argumentum ad hominem'* can be discerned:

    1. By *'argumentum ad hominem'* is meant a purely personal and *direct* attack; this is the way in which Beardsley, [3] Carney and Scheer, [4] Kahane, [5] Michalos [6] and Purtill [7] use the expression. In the words of Carney and Scheer (o.c., p. 20):

> The ad hominem fallacy (fallacy directed to the man) is committed when the conclusion of an argument states that a view is mistaken, and the reasons given for this conclusion amount to no more than a criticism of the person or persons maintaining the view.

Copi, [8] Rescher [9] and Guttenplan and Tamny [10] call this an 'abusive *argumentum ad hominem'*.

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[3] Monroe C. BEARDSLEY, *Practical Logic*, Prentice-Hall, Englewood Cliffs, 1950.

[4] James CARNEY and Richard SCHEER, *Fundamentals of Logic*, MacMillan, New York, 1964.

[5] Howard KAHANE, *Logic and Contemporary* Rhetoric, Wadsworth Publ. Comp., Belmont, 1971.

[6] Alex C. MICHALOS, *Improving Your Reasoning*, Prentice-Hall, Englewood Cliffs, 1970.

[7] Richard L. PURTILL, *Logical Thinking*, Harper and Row, New York, 1972.

[8] Irving M. COPI, *Introduction to Logic*, second edition, Macmillan, New York, 1961.

[9] Nicholas RESCHER, *Introduction to Logic*, St. Martin's Press, New York, 1969.

[10] S.D. GUTTENPLAN and M. TAMNY, *Logic*, Basic Books, New York, 1971.

2. By 'argumentum ad hominem' is meant an *indirect or direct* attack on the person: Copi, ([8]) Rescher ([9]) and Guttenplan and Tamny. ([10]). E.g. (Copi, o.c., pp. 54f):

> We may designate this fallacy on the first interpretation as the «abusive» variety. It is committed when, instead of trying to *disprove the truth* of what is asserted, one attacks the man who made the assertion ...
> The other interpretation of the fallacy of *argumentum ad hominem*, the «circumstantial» variety, pertains to the relationship between a person's beliefs and his circumstances. Where two men are disputing, one may ignore the question of whether his own contention is *true or false* and seek instead to prove that his opponent ought to accept it because of his opponent's special circumstances.

3. A very wide meaning is assigned to this expression if one says (in the words of Whately, ([11]) p. 200) that an *argumentum ad hominem* «is addressed to the peculiar circumstances, character, AVOWED OPINIONS, or past conduct of the individual». To this definition corresponds the language used by Whately himself (o.c.), Hyslop ([12]) and Johnstone ([13]).

4. By 'argumentum ad hominem' is meant an argument *ex concessis*: cp. Schopenhauer, ([14]) Locke ([15]) and Perelman and Olbrechts-Tyteca ([16]). Locke says (o.c., Bk. 4, Ch. 17, §§ 19-21):

([11]) Richard WHATELY, *Elements of Logic*, B. Fellowes, London, 1829.

([12]) James HYSLOP, *The Elements of Logic*, Charles Scribner's Sons, New York, 1905.

([13]) Henry W. JOHNSTONE Jr., *Philosophy and Argument*, Pennsylvania State U.P., 1959.

([14]) Arthur SCHOPENHAUER, *'Eristische Dialektik.'* In: *Der Handschriftliche Nachlass*, vol. III, Waldemar Kramer, Frankfurt a.M., 1970.

([15]) John LOCKE, *Essay on Human Understanding*, Scientia Verlag, Aalen, 1963.

([16]) Ch. PERELMAN and L. OLBRECHTS-TYTECA, *The New Rhetoric — A Treatise on Argumentation*, University of Notre Dame Press, Notre Dame, 1969. Translation of: *Traité de l'Argumentation*, Presses Univ. de France, Paris, 1958.

Before we quit this subject, it may be worth our while a
little to reflect on four sorts of arguments that men, in
their reasonings with others, do ordinarily make use of to
prevail on their assent; or at least so to awe them, as to
silence their opposition ...

Thirdly, a third way is to press a man with consequences
drawn from his own principles or concessions. This is al-
ready known under the name of *argumentum ad homin-
em*.

If we use the numbers in the above numbering as names for
the extensions (i.e., for the classes) of the concepts described
in 1 to 4 inclusive, then we can say:

$$1 \subset 2 \subset 3$$
$$4 \subset 3$$

i.e., 3 contains the other classes as proper
sub-classes,

$$1 \cap 4 = \varnothing$$

i.e., 1 and 4 are completely disjunct.

In other words, 1 and 4 are completely distinct uses of the
expression 'argumentum ad hominem'.

II. We shall now try to sketch the main stages in the history
of the expression 'argumentum ad hominem'. In doing this
we may confine ourselves to a part of the sources quoted, with-
out any loss.

The first to use this expression as a technical term was
Locke. He explains what he understands by it in a single sent-
ence (see quotation sub I above). Hamblin maintains (o.c., p.
161) that Locke got the idea of introducing this expression
from Aristotle ([17]) (177b):

«But when not harping, you have the power to harp: and
therefore you could harp when not harping.» «No: he has
not the power to harp-while-not-harping; merely when he

([17]) Aristotle. *De Sophisticis Elenchis, The Works of Aristotle*, vol. I,
Oxford U.P., Oxford, 1937.

is not doing it, he has the power to do it.» Some people solve this last refutation in another way as well. For, they say, if he has granted that he can do anything in the way he can, still it does not follow that he can harp when not harping: for it has not been granted that he will do anything in every way in which he can; and it is not the same thing «to do a thing in the way he can» and «to do it in every way in which he can». But evidently they do not solve it properly: for of arguments that depend upon the same point the solution is the same, whereas this will not fit all cases of the kind nor yet all ways of putting the question: it is valid against the questioner, but not against his argument.

In several medieval treatises we find the distinction, influenced by Aristotle, between 'ad hominem' and 'ad orationem' (cp. Hamblin, o.c., p. 161). In the treatise *Summa Elencorum Sophisticorum* ([18]) we find (cp. o.c., p. 430):

Sed tamen prius sciendum est quod solutionum alia est vera, alia falsa. Quam quidem divisionem ostendit Aristoteles aliis verbis dicens *alia esse ad orationem, alias ad hominem* (our italics — E.M.B./J.L.M.). Illa solutio est *ad orationem* que ostendit et solvit vitium ipsius orationis; que quidam solutio dicitur vera. Illa vero est *ad hominem* que non vitium orationis solvit, sed hominem impedit.

The works of Whately, Schopenhauer, Hyslop, Perelman and Olbrechts-Tyteca, and Johnstone (sub 3. and 4. above) contain extensive discussions of *ad hominem* that go into much more detail; we shall look into these further on. The group of modern introductions to logic (Copi, Castell, Carney and Scheer, Rescher, Guttenplan and Tamny) and of popular scientific works in the field of (still embryonic) argumentation theory (Beardsley, Michalos, Purtill, Kahane) does not offer many new points of view. The second group (Whately etc.) is much

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([18]) L.M. DE RIJK, *Logica Modernorum I*, Van Gorcum, Assen, 1962.

more interesting for our purpose:

1. *Whately's* view is that what he calls an *argumentum ad hominem* can be permissible (o.c., pp. 201f):

> It appears then (to speak rather more technically) that in the «*argumentum ad hominem*» the conclusion which actually is established, is not the absolute and general one in question, but relative and particular; *viz.* not that «such and such is the fact,» but that «*this man* is bound to admit it, in conformity to his principles of Reasoning, or in consistency with his own conduct, situation, & c.» ... All this, as we have said, is perfectly fair, provided it be done plainly, and *avowedly,* but if you attempt to *substitute* this partial and relative Conclusion for a more general one — if you triumph as having established your proposition absolutely and universally, from having established it, in reality, only as far as it relates to your opponent, then you are guilty of a Fallacy of the kind which we are now treating of.

In order to analyse what Whately says here it is convenient to employ the terminology introduced by Paul Lorenzen in his dialogical set-up of formal(ized) logic ([19]). Lorenzen formulates the definitions of the logical constants of first-order predicate logic (connectives and quantifiers) as rules for verbal behavior in critical debates. These are two-party verbal «feuds» where the issue is a thesis T, which one party (the proponent, P) wants to defend and the other party (the opponent, O) wants to criticize. The opponent may or may not concede the truth of certain propositions at the outset of the discussion, in the sense that the proponent may make use of these concessions — by attacking (criticizing, challenging)

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[19] For expositions in English of the dialogical tableau-method, see a.o.: Paul Lorenzen, *Normative Logic and Ethics,* B.I. Hochschultaschenbücher, Mannheim, 1969; Kuno Lorenz, 'Rules versus theorems — A New Approach for Mediation Between Intuitionistic and Two-valued Logic', in *Journal of Philosophical Logic 2* (1973), pp. 393-415.

them — and the opponent may not. The proponent argues *for* his thesis, we may say, *ex concessis* (i.e. on the ground of, or: by means of, the opponent's concessions). The class of the opponent's concessions may, of course, also be empty, provided the proponent agrees to enter such a discussion.

	Opponent	Proponent
Initial concessions	{ —	
		— — — — — — thesis

Logical truth can now be defined as follows: a thesis T is a *logical truth* iff a proponent of T has a winning strategy against *any* opponent with respect to T (whether he/she makes any concessions in advance or not). A thesis T *follows logically from* a set of concessions iff a proponent of T has a winning strategy against any opponent with respect to T who makes at least these concessions.

Lorenzen does not use the expression 'ex concessis'. We have found it a. o. in the work of Perelman and Olbrechts-Tyteca in their discussion of arguments *ad hominem* and think it is eminently suited as a technical term also in Lorenzen's dialogue-logic (as we shall call it, for short).

Whenever the opponent has a choice as to what he/she may do next we shall speak of different *lines of attack* (or *lines of criticism*). Then we can also say: a thesis T *is a logical truth* iff a proponent of T has a winning strategy *against every possible line of attack* (according to the rules of the verbal «game») — and similarly for 'follows logically from'. — The expression 'lines of attack' will not be found in Lorenzen's expositions of his own dialogue-logic either but is introduced here.

With this terminology at our disposal we can now formulate what Whately says in the passage just quoted, in the following manner:

If P has defended his/her thesis T successfully, against O's criticism, by arguments *ex concessis*, then it is not yet settled whether T is *true*, not to speak of: whether T is *logically true* (valid). What has been settled is merely that anyone who concedes what O concedes (namely O's *avowed opinions*) cannot maintain *this* criticism of T.

Notice that we do not say that such a person cannot successfully carry out *any* critical attack on T. For it is quite possible that, for all we know, the same or another opponent making the same concessions (and no other ones) can take up another line of attack such that P cannot maintain T against that attack.

In Whately's text this is not very clearly put, which is understandable, since he did not possess the analytic tool or instrument for structuring his thoughts which we have used here: the method of dialogue-tableaus, borrowed from elementary logic. In fact, Whately mixes up the following points:

a. the insight that T is not necessarily defendable against a person who makes the same concessions but who chooses another line of attack;

b. the insight that even if T is defendable against any opponent O who makes these concessions, irrespective of the line of attack O may choose, this does not guarantee the truth of T; for T to be true the truth of those of O's concessions which are needed for the defence (relative to some line of attack) is also required.

2. The argument in *Schopenhauer's Eristische Dialektik* is not clear:

a. In Schopenhauer's view the aim of scientific dialectic is to analyse «jene Kunstgriffe der *Unredlichkeit* im Disputieren» (o.c., p. 676). i.e. the various artificial tricks of an **unreasonable** kind which are used in discussions. His negative view with respect to these *Kunstgriffe* is understandable from what he says in a note (o.c., p. 671):

Meine Ansicht also ist, die *Dialektik* von der *Logik*

schärfer zu sondern als Aristoteles gethan hat, der *Logik*
die objektive Wahrheit, so weit sie formell ist, zu lassen:
und die Dialektik auf das [nicht immer objektive —
E.M.B./J.L.M.] *Rechtbehalten* zu beschränken ...

b. After having formulated this a-logical starting point he
announces that he will describe the various *Kunstgriffe* with-
out relating them to the question of who is objectively right
or wrong. He seems to hold, therefore, that it is possible to use
them without being unreasonable. Nevertheless the examples
he offers of such *Kunstgriffe* carry a strong negative flavor.

c. It is interesting to observe that Schopenhauer first men-
tions *ad hominem* as one of the *modi* of discussion but later
lists *argumentum ad hominem* as one of the *Kunstgriffe* (cp. 3.
below).

Our conclusion is that Schopenhauer fails to give a clear
exposition of what he considers to be admissible moves in a
rational discussion; if he had done that first, he could have
analysed the *Kunstgriffe* by means of this system of rules for
admissible moves (see sub IV below).

3. New is what *Hyslop* says about the possibility of leading
ones opponent into contradiction by means of an *argumentum
ad hominem* (o.c., p. 251f):

> They [i.e. the *argumenta non ad res* — E.M.B./J.L.M.] are
> invalid only as proofs or disproofs of a matter in discus-
> sion, but they are not invalid as means of establishing a
> contradiction between two propositions ... Hence the se-
> veral *argumenta non ad res*, in merely proving a contra-
> diction somewhere, are fallacies of *ignoratio elenchi*, in
> the relation of assuming that they prove anything. But we
> must distinguish between this and their valid use for
> establishing a contradiction.

Hyslop here uses some seemingly opaque expressions, viz.
«(*in*)*valid as* proofs or disproofs ...» and «(*in*)*valid as* means
of establishing a contradiction ...». What he means is however

clear and can be put differently; in fact what he says corresp-
onds fairly well with what we are acquainted with from Lo-
renzen's dialogue-method in formal logic (a negation is attack-
ed by conceding the negated proposition):

Opponent	Proponent
Initial concessions $\left\{\begin{array}{c} U_1 \\ . \\ . \\ U_k \end{array}\right.$ . . . . . $\sim U_i = U_n$?	 U_i (attack on $\sim U_i$) *Ipse dixit* ! (or: *Ipse concedit* !)

Unless O can embark on another line of attack, he/she has
lost the discussion; the line of attack or criticism depicted
above is in any case lost. But, as Hyslop says, P has not there-
by proved his point (cp. our discussion of Whately, sub II. 1).
Hyslop does not seem to realize, however, that for some
theses and concessions P *can* prove his/her point by refuting
every possible line of attack in this manner.

Precisely what in O's verbal behavior turned out to be
«fatal» (to this line of criticism) ? The answer is clear: O has
questioned, or challenged, a proposition (U_i) which he himself
has conceded *not* to question: one of his own initial or subse-
quent concessions.

We now come to a point in Lorenzen's model for rational
discussions which is of considerable importance and which,
in our experience, puzzles many students of dialogue tableaus.
It concerns what may be called *the basic asymmetry between
the debaters,* which at first is felt by many to be «unjust» to op-
ponents, i.e. to grant a special favor to proponents: while the
proponent may attack any of the opponent's statements, any

number of times, the opponent may, at any stage of the discussion, only attack P's *last* statement (utterance of a proposition). That there is no question of an injustice or a privilege here follows from (1) and (2):

(1) Already at the outset of the discussion the relation between the debaters is not a symmetric one. For in Lorenzen's conception of a rational discussion there is only one initial P-concession: the thesis T. (In order to understand that the rules of the discussion are not only reasonable but completely natural it is also necessary to keep firmly in mind that T may be a conjunction of any (finite) number of sentences: T may be a whole philosophical system ! This will become important again when we analyse Johnstone's views below.)

(2) If we allow one and the same individual opponent O to pursue various lines of attack, one after the other, P has not won the discussion with O until O cannot think of any other possible line of attack and has lost all those he/she could think of.

(In this way one individual critic can in principle explore a complete philosophical system, looking for logical weaknesses by paying attention to the logical constants occurring in the propositions of which the system consists.)

So, if, and only if, O is granted this right of multiple lines of attack can he/she reasonably be required to attack any one statement only once within the same line of attack; and this may be formulated as a requirement to always attack P's last statement, if an attack is performed at all (rather than a defense of an attacked own statement).

Now observe that P can *compel* the opponent into making the «fatal» step of doubting his or her own concessions only because O is only allowed to attack P's last statement. In the above schema this was U_i, one of O's concessions.

Observe also that P cannot be so compelled. In the following situation:

Opponent	Proponent
	$\vdots$
	V_i
	$\vdots$
	$\sim V_i$
V_i	

P will lose this line of attack if he/she is so unwise as to challenge O's last statement, V_i:

	$?\,(V_i)$
Ipse dixit !	
	(opponent wins)

But P, unlike O, does not have to do that, for he or she may also attack one of O's earlier statements,and so perhaps avoid losing this line of attack.

This shows that the basic form of verbal inconsistency is not to utter two contradictory propositions, one after the other, but *to utter and to challenge* the same proposition within one and the same line of attack from ones adversary. (The opponent has always a winning strategy, however, if P utters a *conjunction* of two contradictory propositions, V and $\sim$ V, but we need not go into that here.) If inconsistency is defined in this way, as basic inconsistency, then consistency is required of both parties in a rational discussion: any participant in a rational discussion who shows verbal inconsistency within a certain line of attack loses that line of attack.

In order to interpret and to make more precise by means of dialogical tableaus such discussions of arguments *ad hominem* as that of e.g. Hyslop, one obviously has to have a firm grip of the rules for negation in dialogue situations.

4. *Perelman and Olbrechts-Tyteca* make the following distinctions (o.c., p. 110f):

The possibilities for argumentation depend on what each participant is ready to concede, on the values he recog-

nizes, on the facts on which he indicates his agreement: for this reason, any argument is an argument *ad hominem* or *ex concessis*. The frequent opposition of argument *ad hominem* to argument *ad rem*, the first relating to opinion, the second to the truth or the thing itself, is due to the fact that people forget that the truth in question has to be accepted. In terms of our theory, argument *ad rem* corresponds to an argument that is claimed to be valid for all reasonable beings, that is, *ad humanitatem*. Argument *ad humanitatem* would be a special, but important, case of argument *ad hominem*. ... Argument *ad hominem* must not be confused with argument *ad personam*, which may be defined as a personal attack on the opponent and which aims essentially at disqualifying him.

Using our terminology from the dialogical set-up of the theory of logical constants we can sharpen these distinctions. Assume that P is the proponent of a thesis T and O an opponent of P in respect of T; then the distinctions made by Perelman and Olbrechts Tyteca can, we think, be formulated as follows:

— the authors call P's argumentation *'ad rem'* if and only if P pretends to be able to win all possible lines of attack;

— P's argumentation is called *'ad hominem'* if and only if P conducts his argumentation merely with the claim that he can win one or more lines of attack from this opponent, O, owing to concessions made by O;

— P's argumentation is called *'ad personam'* if and only if P attacks the person of O although a description of the personal traits ascribed to O are not a part of P's thesis, nor of O's concessions.

Arguments of the first two kinds can be permissible, those of the third kind never are.

5. *Johnstone* gives a definition of *'argumentum ad hominem'* which coincides with Whately's. Nevertheless, it is hard for him to distinguish between the meanings of *'argumentum ad rem'* and *'argumentum ad hominem'* (o.c., p. 3f):

> ... the abyss that separates conflicting philosophical sys-
> tems precludes any use of argumentum ad rem; for to
> appeal to evidence in attacking a position that claims
> to include all evidence is to beg the question. Thus every
> valid philosophical argument is ad hominem ...

What follows is an attempt to clarify Johnstone's position,
again by means of distinctions and terminology taken from the
dialogue-theory of logical constants.

In a «formal» dialogue (cp. Lorenzen (^{2})) all of the propon-
ents arguments are *ex concessis,* by definition of 'formal dia-
logue'; hence they are *argumenta ad hominem* in the termino-
logy of Perelman and Olbrechts-Tyteca. A «material» dialogue
is, again by definition, one in which arguments *ex concessis*
are permitted, but in addition also «ostensive» arguments, in
defence of attacked atomic propositions.

Notice that a discussion about mathematical truth is a
«formal» dialogue, i.e. a dialogue in which all arguments are
ad hominem in the sense of *ex concessis.* In discussions in
other fields of science the situation is generally otherwise;
there ostensive arguments can and must be used: «But look
here !» and the like, unless the debaters are concerned with
whether one statement with empirical content follows logical-
ly from other statements with empirical content.

Now Johnstone claims that in a philosophical discussion,
too, all arguments are *ad hominem.* He probably means to
say, among other things, that with the exception of reference
to relevant literature (which may be grouped with the con-
cessions) ostensive arguments usually cannot be applied. But
he means more than that: «... to appeal to evidence *in attack-
ing a position that claims to include all evidence* is to beg
the question». I.e., he offers a reason *why* ostensive argum-
ents cannot be used.

Observe that Johnstone is concerned with what an *oppon-
ent* may do. He obviously does not consider it reasonable that
the opponent demands a preliminary discussion as to whether
or not the system to be defended by P really includes all evid-
ence ! Rather he presumes that the parties take it for granted

that T is a complete philosophical system and that P is unable to add another word to it. If that is so, then indeed O cannot *expect* any material justification from P (although O is of course free to accept ostensive, or material, arguments if they are offered). However, O is entitled to expect *some* justification of T from P (otherwise there would be no discussion of T). There now seem to be the following possibilities:

either (a) P defends the atomic propositions in T which O has attacked with «Ipse dixit !» — i.e., defends the system by showing that someone who makes O's concessions cannot maintain O's criticism of it;

or else (b) P defends the attacked atomic propositions by showing that they are *not incompatible with* O's concessions;

or else (c) P defends the system *as a whole* merely by showing (which may be hard enough) that it does not contain any inconsistencies (viz. Hilbert's position in respect of the justification of mathematical theories);

or else (d) P defends the system *as a whole* by challenging O to point out an inconsistency in T.

The kind of defence described sub (a) is clearly *stronger than* that sub (b), which is stronger than that sub (c), and the one sub (d) is the weakest of these kinds of justification, or ways to meet criticism.

Johnstone is so unclear *because he does not sharply distinguish between the roles of opponent and proponent in respect of a thesis T*. It is impossible to impose our distinctions (a) - (d) upon his text, which brings to mind the frequently heard expression «immanent criticism». This expression, too, is much too vague to allow for a clarification in terms of one of the alternatives (a) - (d). We rather think that all the possibilities (a) - (d) are running through the head of those who demand that their systems be criticized only «immanently». Observe, finally, that no matter how we interpret him Johnstone cannot possibly mean the same by 'argumentum ad rem' as Perelman and Olbrechts-Tyteca do.

Let us now take a close look at one of Johnstone's examples of an admissible argumentum ad hominem (o.c., p. 64):

One of the arguments used by Eudoxus in the attempt to show that pleasure is the chief good was that «any good thing — e.g., just or temperate conduct — is made more desirable by the addition of pleasure.» But Aristotle called attention to the fact that an argument of exactly the same type can be constructed to show that the chief good is not pleasure. For, as Plato had already argued, «the pleasant life is more desirable with wisdom than without,» so that wisdom would seem to be the chief good.

Schematically:

Aristotle (O)	Eudoxus (P)
	Pleasure is the chief good (T)
[?]	Argument A: all good things are made more desirable by the addition of pleasure
Counterargument B: all good things are made more desira-ble by the addition of wis-dom	

Johnstone analyses this discussion thus:

Aristotle does not attack T directly (hence we have put the first question mark in parentheses), but attacks argument A by which Eudoxus supports the thesis, T. Johnstone asks us to notice that Aristotle cannot now advance as an argum-ent a case of something that does *not* become more desirable by the addition of pleasure, for that would be begging the question (compare our first quotation from Johnstone above) ! Aristotle's argument B is, and rightly so, in Johnstone's opi-nion, *ad hominem,* in the sense that he attacks Eudoxus' thesis with «his own» principles. Similarly Eudoxus cannot answer argument B by showing, e.g., that pleasure does not become more desirable by the addition of wisdom; to Johnstone this

would mean begging the question, too. For this reason Aristotle's criticism is devastating, in Johnstone's opinion.

We do not find this analysis very satisfactory. In our opinion the force of Aristotle's argument can only be the following: *if* counterargument B is accepted, *then* Eudoxus cannot any longer support T by means of argument A. Aristotle must, furthermore, be allowed to attack A directly (by instantiation, i.e. by means of directly a counter-example) and Eudoxus must be allowed to attack B directly. In our opinion neither of the two gentlemen has as yet lost the discussion.

What Johnstone wants to say in his discussion of this classical example seems to be the following: some people (probably including Johnstone himself) expect an opponent to confine him- or herself to *principles of argumentation and refutation that are accepted by the proponent* — i.e. to the proponent's logic and perhaps also of other first principles.

This, too, seems to be a component of the demand which is so often encountered, especially in connection with idealistic philosophy, that criticism be «immanent criticism». On one very important condition this requirement, as far as logic is concerned, seems a very reasonable one; for if P and O use different logics and consequently different (if any) rules of discussion, a discussion between them is unlikely to take place, and if it does, it cannot be considered a *rational* one. P's demand that O must use P's logic in attacking P's philosophy seems reasonable, however, only on the following twofold condition:

(1) P must have expressed to O his/her readiness to enter into a discussion *about his or her own principles of argumentation and refutation as well as about those favored by O*. This discussion should be conducted in accordance with the following rules:
(i) each party is obliged to answer all questions raised by the other party about the logic favored by the former, (ii) each party is obliged to listen carefully to an explanation of, *and to learn,* the principles of the logic favored by the other party.

(2) O must either have refused to enter into this discus-
sion or the discussion must already have taken place
with loss for O, or without any of the parties having
clearly «won».

If these conditions are fulfilled, then the demand of «imman-
ent criticism» seems to be very appropriate. If, however, these
conditions are not satisfied, there seems to be no reason why
P should have the right to prescribe his or her own logical
principles to every candidate for the role of opponent, and
still expect to be considered a «reasonable philosopher» by
other minds.

III. *Conclusion*

We believe that we have demonstrated the value of Lorenzen's
dialogical set-up of the theory of logical constants as a con-
ceptual tool and as a source for adequate terminology in the
theory of fallacies. The concepts
  — the thesis under discussion,
  — the proponent of the thesis,
  — the opponent of (the proponent with respect to) the
    thesis,
  — the concessions of the opponent,
and furthermore the concepts, new to the present discussion,
  — a line of criticism (line of attack),
  — a line of defence (not employed above),
  — a formal argument,
  — an ostensive argument,

and finally the definitions of

  — P has won this line of attack against O in the discussion
    about T,
  — P has won the discussion about T against this opponent,
    O,

— P has a winning strategy with respect to T against every opponent who makes the same concessions as O,

— P has a winning strategy with respect to T against every opponent, no matter what concessions the opponent makes,

have helped us to make more precise a number of views and opinions expressed by present and past authors.

Stephen Toulmin's view on the relationship between «formal» and «informal» logic, defended in his *The Uses of Argument,* is thereby refuted. There is no sharp distinction between «formal» and «informal» logic.

Conversely, it is only reasonable to expect some feedback from the further study of fallacy (irrational argumentation) and of rational argumentation on the model for critical discussions drawn up by Lorenzen, and on the rules for producing rational arguments. Take as an example the situation that the opponent in the course of the discussion withdraws one or more of his concessions as a consequence of the proponent's questions and other remarks. Such behavior is generally considered as eminently rational. Yet Lorenzen's model in its present form does not accommodate this situation and should therefore be amended so as to account for the development and change of opinions and even of concepts (revision of definitions) in the course of a discussion of some length.

IV. *Suggestions for further research: from a list of fallacies to a «complete» set of production rules for rational arguments.* ([20])

We conclude with some general remarks about possible kinds of systems of rules for the evaluation of arguments as fallacies. The relationship between inadmissible, merely rhetorical *Kunstgriffe* (as Schopenhauer called them) and a the-

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([20]) We have drawn considerable inspiration from Ch. 8 (Formal Dialectic) in Hamblin's *Fallacies*, although our point of view deviates from his on several basic points.

ory of what constitutes rational argumentation can be construed in two different ways.

(1) The first presupposes that the theory of rational argumentation is formulated as a set of *necessary conditions* which an argument must satisfy in order to pass as rational. Rhetorical *Kunstgriffe* can then be analysed and unmasked as moves which do not satisfy these conditions, e.g. as moves which transgress certain prohibitions.

(2) A second and more contemporary approach consists in formulating a finite set of *production rules* for generating rational arguments. Lorenzen's dialogical rules which constitute definitions of the connectives and quantifiers are in fact rules of this kind. Such rules are *sufficient conditions* for calling the produced argument rational. Only the condition — here to be called 'the restrictive condition' — that the argument can be generated by one or more of these rules is a necessary one. Schopenhauer's *Kunstgriffe* and other fallacies can then be unmasked as arguments *which cannot be generated* by the production rules. They do transgress one rule, viz. the restrictive condition that prohibits the use of arguments that cannot be generated by means of the production rules.

In the pursuit of a theory of rational and irrational argumentation and of fallacy it seems wise to aim at such production rules for the generation of rational arguments as the ideal kind of theory, although rules of the first kind are not to be despised entirely, at least as long as the theory of rational argumentation is in its infancy.

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