

PRELIMINARY WHITE PAPER EXPERT CONSULTATION SERIES QUESTIONS FOR PROF. RAHMAN

Drawing from the later *ādāb al-baḥth wa-l munāzara* tradition the ADAB project aims to intervene in contemporary debating culture and specifically design a new alternative model for university debating formats. A rough characterization of contemporary debating formats can be delivered as games where parties act strategically to win. Interestingly, this seems to be the very idea of dialogic logic. And you define dialogue as “specific interactions between agents within an adequate game structure, and in which the logical validity is then defined in terms of winning strategies” (*translation*). Notwithstanding its ingenuity, we fear that the dialogical logic might overshadow another equally important component of argumentation, the virtuous conduct (*ādāb*). *Ādāb* refers to epistemic and practical virtues one must develop to be counted as a proper arguer, and in their absence the agent will be named a “quarreller”.

Taking into account ADAB project’s aspiration for analytical competence and virtue:

1. What is the role of virtue and virtuous conduct in dialogic logic, and how our new debating format can benefit from dialogical logic?

This is indeed a very important question. Let me separate into different ones

1.1 WHAT IS THE ROLE OF VIRTUE AND VIRTUOUS CONDUCT IN DIALOGIC LOGIC?

1.1 RESPONSE:

1.1a. VIRTUOUS CONDUCT AS TAKING RESPONSIBILITY FOR ONE’S ASSERTIONS AND ACTIONS.

1.1b VIRTUOUS CONDUCT AS BEING COMMITTED TO EXPLANATORY PERSPICUITY

1.1a Response (a): *Virtuous conduct as the intertwining of rights and obligations*

From the very beginnings of (contemporary) Dialogical Logic; the Dialogical Framework was understood as linking ethics and Logic.

Indeed, the main philosophical tenet of the dialogical approach is that invites to re-examine the usual order between the meaning and deontic dimensions: it is not the case that a deontic force is attached to an already given semantic core (for example by means of adding a deontic operator to a given proposition), but judgemental content amounts to the intertwining of rights or entitlements and obligations or commitments in games of giving and asking for reasons.

This approach assumes that grasping a concept comes to take responsibility for an assertion involving this concept in face of the tribunal of public scrutiny - see P. Lorenzen’s (1969) print of this John Lock Lectures at Oxford: *Normative Logic and Ethics*, Mannheim: Bibliographisches Institut, and P. Lorenzen & O. Schwemmer (1982), *Konstruktive Logik, Ethik und Wissenschaftstheorie*, Ethik, Mannheim: Bibliographisches Institut.

More precisely, the dialogical perspective emphasises the point that the validity of an inference emerges from the fact that knowing how to produce the reasons that constitute the

meaning of the premisses leads to knowing on how to produce the reasons that constitute the meaning of the conclusion. Knowing how to produce a reason, is understood as knowing how to accomplish the task associated to the propositions involved in the asserted premisses and conclusion.

In such a context attributing knowledge (or truth) to someone in relation to an assertion – made, e.g., as answer to an enquiry or problem (*maṭlūb*) – amounts to endorse his/her assertion and therefore, overtake, the responsibilities that constitute the content of such an assertion. In other words, attributing knowledge, comes to overtake the duties linked to the further assertions, this assertion commits and entitles to.

➡ Thus, in such a framework, there is not room for an irresponsible *quarreller*.

However, one might wish to stress the fact that, letting quarrellers by side, the fine-grained analysis of Argumentation contained in traditional Rhetoric, contribute to the cognitive features of the dialogical interpretation of inferences, understood as adding persuasive explanatory power to deductive steps.

Indeed, one wishes not only be forced to a conclusion, by applying the rules of a calculus to the given premisses, but we would also like to be *convinced*, why this particular conclusion follows from these premisses. In this sense, persuasion is here linked to wining *perspicuity* on the inferential steps, by the adequate dialogical interaction, rather than persuasion in the sense of *deceiving* or leading to a trap.

➡ It is in this precise point, the winning of explanatory perspicuity, where the dialectical stance on material and formal arguments shows its full strength

1.1b. Response (b): *Virtuous conduct, perspicuity and explanatory power*

A virtuous, responsible conduct, of an interlocutor is to induce *perspicuity* by developing explanations on the deductive steps (why this step and not another?). In fact, Paul Lorenzen and Kuno Lorenz, the inceptors of dialogical logic, conceived the notion of dialogical meaning as emerging from *teaching-learning* situations (*Lehr-Lernsituationen*).

Notice that perspicuity is foremost the result of a perspective **inside** a play, by the means of which a sequence of moves is grasped as a process yielding a whole, namely, the argument here conceived as an explanation. At this level, the perspicuity won, should emerge as the meanings links that lead from one step of the explanation to the other, until the explanandum is reached.¹

¹ For a very simple example think an argument where the Opponent **O** has asserted the conjunction *A&B*, and the Proponent **P** is committed to assert *A* : the main thesis of **P** is : I can assert *A* if you concede *A&B* Clearly, **P** has the choice to develop his argument with two plays : 1) he can ask **O** to assert both members of the conjunction (**O**'s assertion of *A&B*, commits her to such answers), 2) he can simply ask **O** to assert the left of the conjunction.. From the point of view of dialogical explanatory perspicuity, the second play rather than the first one makes it patent why the argument is trivially sound : it shows that the reason for asserting the conclusion *A* is based on the reason of accepting *A* as a premiss. In fact from the point of view of meaning, *B*, does not add anything to the understanding of why the argument goes through.

Then we have perspicuity as the grasping a process from a higher-level perspective. So, from the strategy level, we can grasp how some sequence of moves that set the meaning at the play level are optimal in relation to establishing logical validity or correct (material) inference.

At a higher level, the argumentative perspective, selects those winning strategies that fulfil optimality conditions from the explanatory point of view.

➡ **It is in this precise point, the commitment to *explanatory perspicuity* developed during the game of giving and asking for reasons, where the dialectical stance on material and formal arguments shows on of its most salient strengths.**

So far so good but what about the rules that govern interaction and explanation? Should we not ask for perspicuity of them? I will come back to this in my response to questions 3, 4 and 5.

Let us deal now, briefly, with the second part of the question that is also linked to the questions 3, 4 and 5

1.2 HOW OUR NEW DEBATING FORMAT CAN BENEFIT FROM DIALOGICAL LOGIC?

1.2 RESPONSE: THE DIALOGICAL STANCE OFFERS A UNIFYING FRAMEWORK FOR TEACHING, STUDYING AND DEVELOPING MATERIAL AND FORMAL ARGUMENTS

Dialogical Logic is a framework, not a particular logic: we can as I shall mention further on, cast different patterns of reasoning, including different logics

A general response is that, that from a methodological point of view, the Dialogical Framework, has a richer structure than most of the other frameworks for shaping argumentation.² Indeed, it allows distinguishing

The dynamic constitution of meaning, declined as
 the *local* rules for meaning; that establish how to challenge and how defend a statement involving a given expression
 the *global* rules for meaning that prescribe how to develop an argument on a thesis (such as: who starts, the allowed sequence of moves, when does play finish, order of challenges, time constraints, repetitions,) in order to achieve explanatory power
The dynamic constitution of both material and logical inference, which concerns the process of selecting the sequence of moves optimal in relation to achieving material and logical inference

² See N. Clerbout & Z. McConaughy (2022). "Dialogical Logic". In E. Zalta (ed.), *Stanford Encyclopedia of Philosophy* <https://plato.stanford.edu/entries/logic-dialogical/> S. Rahman, Shahid, Z. McConaughy, A. Klev, and N. Clerbout (2018). *Immanent Reasoning or Equality in Action: A Plaidoyer for the Play Level*. Cham: Springer.

It leads to reflect and select those properties of the inference relation which are taken to be the most suitable for developing patterns of correct reasoning in a particular field (I shall come back to this further on)

Moreover, the Dialogical Framework allows to reconstruct and study logic and argumentation not only from the ancient and medieval tradition but also,³ because of its unifying power, it can be used to explore how traditional argumentative patterns can contribute to contemporary argumentation theories on deduction, such as legal reasoning, foundations of mathematics and so on.⁴

➡ Let me mention that from our teaching experience in Lille, those undergraduate and graduate students who benefited of lessons on dialogical logic, are enthusiastic about a framework that allows, to combine epistemological perspectives, historical insights and logical rigour for dealing for all the jungle of plural deductive systems developed nowadays.

In relation to the questions

2. Does pragmatic-semantics also differ from classical logic, and where is the point of entry for the pragmatic-semantic approach when it comes to designing a new university debate tournament procedure?
3. How should we account for the non-classical logic(s) in our procedure?

Let me answer them together

2&3 DOES PRAGMATIC-SEMANTICS ALSO DIFFER FROM CLASSICAL LOGIC, AND WHERE IS THE POINT OF ENTRY FOR THE PRAGMATIC-SEMANTIC APPROACH WHEN IT COMES TO DESIGNING A NEW UNIVERSITY DEBATE TOURNAMENT PROCEDURE? HOW SHOULD WE ACCOUNT FOR THE NON-CLASSICAL LOGIC(S) IN OUR PROCEDURE?

2&3 RESPONSE:

**THE DIALOGICAL FRAMEWORK IS NOT ARGUMENTATION + LOGIC
THE DIALECTICAL STANCE ON LOGIC IS NOT THE DIALOGICAL USE OF
RULES OF LOGIC, BUT IT IS ABOUT *THE DIALOGICAL CONSTITUTION OF
LOGIC***

³ See Z. McConaughey (2021), *Aristotle, Science and the Dialectician's Activity. A Dialogical Approach to Aristotle's Logic*. PhD-Université de Lille. Rahman & Iqbal & Soufi's (2018) *Inferences by Parallel Reasoning in Islamic Jurisprudence. Al-Shīrāzī's Insights into the Dialectical Constitution of Meaning and Knowledge*. Cham: Springer. This work is a reconstruction and logical study of Walter E. Young's (2017) landmark text, *The Dialectical Forge: Juridical Disputation and the Evolution of Islamic*. Cham: Springer.

⁴ See S. Magnier (2013), 2013, *Approche dialogique de la dynamique épistémique et de la condition juridique*, London: College Publications, H. C. Nordtveti Kvernes (2022). *A Dialogical Framework for Analogy in Legal Reasoning. The Ratio Legis and Precedent Case Models*. London: College Publication; C. Lion (2023). *L'Intuitionnisme Dialogique*. Paris: Garnier, in print, S. Rahman & N. Clerbout (2015). *Linking Games and Constructive Type Theory: Dialogical Strategies, CTT-Demonstrations and the Axiom of Choice*. Cham: Springer-Briefs.

In relation to *classical logic*, I will here take it as referring to the main-stream truth functional approach, with a model-theoretic semantics, a semantic notion of logical validity (true in every model), and a syntactic view on inferences as concerning derivations of content-free *formulae* (not propositions), whereby the system is sound and complete, if every syntactically valid derivation coincides with a semantic valid proposition and vice versa.

Often with the term *classical logic*, the traditional Aristotelian syllogism is meant. Often too, the former and this second meaning are conflated, since it is (on my view), wrongly assumed that Aristotelian logic is truth functional.

I will briefly discuss the use of the Aristotelian framework, further on, and here I will focus on *classical logic* as meaning, truth-functional one.

For the fruitfulness of the Dialogical Framework for general theory of argumentation and even as general methodology of academic debates within the university, I think I have already provided some material in my response 1.2.

The *classical* approach to meaning, knowledge, truth and logic, is to put in a very rough nutshell the following. It assumes the strict separation of **Syntax, Semantic and Pragmatics**, whereby the first, **Syntax**, concern **sign-sign relations**, that establish the rules of combinations of signs to produce other more complex signs (such as producing sentences from words), the second concerns **the sign-object interrelation** between a domain of objects and signs. The relation is said to “interpret” the signs and by so doing it establishes their “meaning, and the third, *pragmatics*, concern the **sign-user** interrelation This interrelation establishes the different uses signs can take.

Notice that the strict separation between syntax, semantics and pragmatics, already assumes, that interaction, or more generally **use** or **context**, does not affect meaning.

Moreover, this assumes that language consists primarily in a list of signs void of content, that might obtain meaning. The meaning of an expression, amounts herewith, to laying down truth-conditions: thus, knowing the meaning of an expression is knowing its contribution to the truth-value of the propositions it constitutes. Laying down the truth conditions for predicates and singular terms amounts, roughly, to prescribing which classes of objects satisfy an predicate, and how to interpret a singular term (a name for one and exactly one individual). Usually, truth is left undefined or part of the metalanguage. The standard resulting logic assumes, third-excluded, non-contradiction, *ex falso sequitur quodlibet* and other well-known logical inference rules.

Now, it should be patent, this “baby logic”, will not be useful to analyse argument, that involve, temporal (it will be true that) , modal (it is necessary that) , deontic (it is obligatory to, agent g promises to) and epistemic dimensions (agent g, knows/believes that).

One option is to extend the classical approach, so that the standard logical language is syntactically enriched by the introduction of temporal, modal, deontic and/or epistemic operators and, the formal semantic is extended by relativizing the truth conditions to time instants, possible worlds, ideally morally possible worlds and/or state of information. Such kind of extensions, run usually under the title of *non-classical logics* – despite the fact that they are extensions rather than alternative logics. But the dynamics of meaning and

knowledge, our sheer capacity to revise our beliefs and so on seem to require of such a kind of extension a very complex architecture, often quasi static after all. The point is that the pragmatic level of context and use are reduced to semantic truth-functional conditions: we usually call it the semantization of pragmatics.

In such a context argumentation theory assumes the already a system of logical rules, which will be incorporated to the argumentative framework. Thus, what results is an **argumentative framework +logic**, whereby semantic and deductive features are shaped by the logical system and the pragmatic dimension is understood as **using**, the logical rules within a dialectical framework.

From a methodological point of view, the amount of different alternative logics, with different semantics and simply different frameworks, makes it quite difficult to compare and choose if an application is called for.

As mentioned above, the Dialogical Framework, goes exactly the other way around. It starts with the pragmatic level, in the sense discussed in my response 1.1.

- Let me add, to what has been said, the following general remarks on pragmatics as interaction: Every action pursues has an objective, or more precisely: each intentional act, has an object toward this intentional act is directed. **Interaction** is the coordination of the different intentional acts of several agents towards a common objective. **Dialogical interaction in epistemological contexts** is the coordination of acts of giving and asking for reasons in order to answer to a main question – recall Al Fārābī’s notion of *maṭlūb*, whereby as assertions are conceived as answers to an enquiry.⁵

But how to deal with the various non-classical logics. How to respond to Quine’s dictum *when non-classical logics speak of a deviant connective they change the subject of conversation*⁶

The point of Quine can be put as posing the question on how to establish a meaningful dialogue on the standards of inferential rationality associated to an expression if those standards differ. The answer of Lorenzen and Lorenz, was to distinguish *local meaning* and *global meaning*, on their view, inherent to *teaching-learning* situations (*Lehr-Lernsituationen*). Thus, classical and intuitionistic connectives share the same local meaning (*necessarily symmetric* or player independent), but differ only on one rule on global meaning (the play rules that generate the structural rules of the strategy level), namely whereas in

⁵ This paragraph answers a very relevant question put to me by Prof. Juan Redmond (Univ. Valparaiso).

⁶ Recall the famous paragraph in his *Philosophy of Logic*, but similar can be found in earlier works: *To turn to a popular extravaganza, what if someone were to reject the law of non-contradiction and so accept an occasional sentence and its negation as both true? An answer one hears is that this would vitiate all science. Any conjunction of the form 'p∧~p' logically implies every sentence whatever; therefore, acceptance of one sentence and its negation as true would commit us to accepting every sentence as true, and thus forfeiting all distinction between true and false. In an answer to this answer, one hears that such a full-width trivialization could perhaps be staved off by making compensatory adjustments to block this indiscriminate deducibility of all sentences from an inconsistency. Perhaps, it is suggested, we can so rig our new logic that it will isolate its contradictions and contain them. My view of this dialogue is that neither party knows what he is talking about. They think they are talking about negation, '~', 'not'; but surely the notation ceased to be recognizable as negation when they took to regarding some conjunctions of the form 'p∧~p' as true, and stopped regarding such sentences as implying all others. ere, evidently, is the deviant logician’s predicament: when he tries to deny the doctrine he only changes the subject.* Quine (1986, second edition, p. 81)

classical logic the global ruling allows the Proponent to, so to say, *redo* his response to a challenge (or ignore the last challenge launched by the Opponent and answer to a previous one), such kind of backwards moves are not allowed to the Opponent when in an intuitionistic setting – which generates the rejection of weakening to the right at the proof-theoretical level. In other words, if there is some common ground about which we agree to disagree, this common ground, is in a dialogical setting the *local meaning*, given by player independent rules

This, among other philosophical challenges, motivated the program for *Dialogical Pluralism* incepted in Saarbrücken and Lille by 1997, which extended the scope of the original project of Lorenzen and Lorenz (limited to classical and intuitionistic logic, and some early proposals towards modal logics), to include a large number of non-classical logics including free-logics, modal logics, temporal logics, connexive logic, paraconsistent logics, relevant logics and linear logic.⁷

Disagreement on rational standards gave rise to a plural perspective on logics: but they are all developed in a Dialogical Framework. No need to change the overall dialogical setting. Thus, roughly, different logics can be achieved by changing different rules for global meaning: For example, if we wish that the resulting logic, respect relevance constraints, one can combine constraints on how to constitute the meaning of predicates, for example: restricting the use of the predicate “Odd” to natural numbers and not, say, fruits, and perhaps, also required that steps of an argument are developed in such a way that all the meaning constituents of the premisses are deployed in the argument.



Thus, from the dialogical point of view, a logic is not argumentation + logic, but logic is the result of rules that set meaning by means of interaction

We also had the chance to benefit from Dr. Young’s expertise. The questions we asked him tackled the issue of truth and whether there was a need to readjust/reformulate the Munazara procedure. We want to ask you about a concern that was brought by Dr. Young. In his response, he reminded us of the development of new logics, for instance, paraconsistent logic. Although this remainder is more than welcome, we fear over-complication. Eventually, the new Munazara Model will take university students as its participants:

4. Would it be an oversimplification to remain loyal to Aristotelian principles of reasoning (identity, non-contradiction, excluded middle)?
5. Do these principles ensure some sort of rightness/justice in issues concerning practical wisdom?

Again I will respond to both at the same time

4&5 WOULD IT BE AN OVERSIMPLIFICATION TO REMAIN LOYAL TO ARISTOTELIAN PRINCIPLES OF REASONING (IDENTITY, NON-CONTRADICTION,

⁷ See Rahman&Keiff (2005), Keiff (2007), Rückert (2011), Redmond&Fontaine(2011).

EXCLUDED MIDDLE)? DO THESE PRINCIPLES ENSURE SOME SORT OF RIGHTNESS/JUSTICE IN ISSUES CONCERNING PRACTICAL WISDOM?

4&5 RESPONSE:

CHOOSING AMONG SEVERAL RULES FOR THE DEVELOPMENT OF AN ARGUMENT, COMMITS TO PONDER ON WHICH LOGICAL PRINCIPLES ARE TO BE ENDORSED

ENDORING LOGICAL PRINCIPLES SHOULD ALSO BE PART AND PARCEL OF THE DIALECTICAL STANCE.

The problem is not that it is an oversimplification, but that the principles are taken as given.

Notice that arguments, involving future contingents, that also assume free-will have difficulties with rules that impose third excluded. Temporality is a general issue, revision too.

What about deontic reasoning: do imperatives express truth functional propositions underlying such principles?

In general, non-contradiction is fine, however, some thinkers (both contemporary and in the ancient and medieval traditions) will even defend the necessity to allow within an argumentative process to have some degree of tolerance in relation to contradictions – I made me also guilty of such explorations when I was young.

Non-monotonic reasoning, the kind of reasoning that allows retracting a conclusion if a new argument defeats one of the premisses that lead to that conclusion, contests the very notion of logical inference underlying the Aristotelian principles.

Now, leaving contradictions and no monotonic reasoning by side – on my view, the drastic solution of contemporary paraconsistent logicians and non-monotonic reasoning is not necessary or at least not always so if the distinction between play and strategy level is carefully kept apart,⁸ notice that many argumentative frameworks, in medieval and even contemporary Legal thought, do not comply with all of those principles.

What we plea for, is to have unified setting that allows reflecting and choosing on the rules that yield such principles in the context of given set

One way, that in Lille we called, *structural abduction*, is the following: Assume you recognize that one given argumentation pattern deployed in a field is taken to be sound. Then we inspect, the general argumentative rules that yields such pattern. This will also set the underlying rules for meaning and logical inference.

➡ So, choosing these rules, as mentioned in response to 3&4 amounts to setting the parameters of rationality and it is important and, on my view, crucial to make it clear, that

⁸ See chapter 2.4.3.2 in Rahman & Iqbal & Soufi's (2018) *Inferences by Parallel Reasoning in Islamic Jurisprudence. Al-Shīrāzī's Insights into the Dialectical Constitution of Meaning and Knowledge*. Cham: Springer.

those parameters can and must be subject to reflection. As mentioned above the dialogical setting provides the means of doing so.

➡ Having said, both the Aristotelian framework as further developed by Al Fārābī, Avicenna, the post Avicennean logician, and particularly so by the Islamicate medieval Dialectic, have some important features and lessons from which we can and even should learn from. As an example, among many, I attach, the draft of a paper by Walter E. Young and myself on the fallacy of composition that illustrates this point and puts at work most of the issues discussed before.