Informal Logic: Between Logic and Epistemology

Iryna Khomenko
Taras Shevchenko National University of Kyiv
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What is Informal logic?

- philosophical analysis of concepts

*Ryle G. Dilemmas, 1954*
What is Informal logic?

• the study of the informal fallacies

  Carney J.D., Sheer R.K. Fundamentals of Logic, 1964
  Kahane H. Logic and contemporary rhetoric, 1971, 2013
What is informal logic?

- formal logic without formality

*Copi I. Informal logic, 1986, 1995*
What is Informal logic?

- the mediator between formal logic and reasoning in natural language

What is Informal logic?

• applied epistemology

McPeck J. Critical Thinking and education, 1981
Siegel H. Educating reason: rationality, critical thinking and education, 1988
What is Informal logic?

- the study of the practice of critical thinking

  Fisher  A., Scriven M. Critical thinking: it’s definition and assessment, 1997
  Fisher  A. Critical thinking: an introduction, 2011
What is Informal logic?

- the normative study of argument

*Blair J.A. and Johnson R.H. Logical self-defence, 1977, 2006*
Label

practical logic
philosophy of argument
theory of argument
applied epistemology
theory of reasoning
theory of critical thinking
Definition 1

“Informal logic is the best understood as the normative study of argument. It is the area (branch) of logic which seeks to develop standards, criteria and procedures for the interpretation, evaluation, and construction of arguments and argumentation used in natural language (in everyday discourse)”

Definition 2

Informal logic is the normative study of argument. It seeks to develop standards, criteria and procedures for the interpretation, evaluation, and construction of real arguments.
Subject Matter of Informal Logic

- real argument
- natural argument
- everyday argument
- actual argument
- real-life argument
- ordinary argument
- mundane argument
- marketplace argument
“one of the vices of formal logic is virtual disappearance from the mandate of logic of the focus on real argument “

R.H. Johnson Manifest Rationality, 2000
What is Real Argument?

“actual natural language arguments used in public discourse, clothed in their native ambiguity, vagueness and incompleteness”

*J.A. Blair and R.H. Johnson*
What is Real Argument?

“arguments that have actually been used to try to persuade people, the sorts of arguments the student will encounter outside the classroom”

J.A. Blair and R.H. Johnson
What is Real Argument?

“the arguments found in discussion, debate and disagreement as they manifest themselves in daily life”

L. Groarke
What is Real Argument?

“real or natural arguments are not the subject matter of formal logic”

T. Govier
Areas of Application

• social and political commentary
• news reports and editorials in the mass media (newspapers, magazines, television, the World Wide Web, twitter, etc.)
• advertising and corporate and governmental communications
• in personal exchange
What Kind of Argument is Subject Matter of Informal Logic?

- a reason-giving argument / an inferential structure
- a disputing argument / a kind of dialog
Reason-giving Argument

• The arguer expresses a point of view on a question, and offers as support for this position one or more reasons.

• The arguer addresses the argument to one or more readers, listeners or observes who need no reply.

• Arguing in this sense is typically (though not always) emotionally neutral, and typically not accompanied by hostility.
Definition

A reason-giving argument is a structure with a conclusion supported by one or more premises, which may or may not be supported by further premises. Rules for the construction and criteria for the quality of arguments in this case are matter of formal logic.
Disputing Argument

• Arguing requires at least two arguers.

• The arguers express to each other divergent opinions on some question.

• Each one attempts to get the other(s) to accept his/her point of view, not necessarily by offering reasons in support of it.

• Emotional intensity and even hostility often accompany such disputes, though not always.
Disputing Argument

A disputing argument is a form of dialogical interaction, in which arguers aim to resolve a conflict of opinion by verbal means. Rules for construction and criteria for the quality of arguments in this sense are matter of informal logic.
Components of Argument

- Traditional approach
- Toulmin’s approach
- Johnson’s approach
Traditional Approach
(Reason-giving Argument)

- **premises** (argument, reason)
- **conclusion** (thesis, standpoint, claim)

A reason-giving argument is a claim-reason complex
Toulmin’s Approach

- Claim
- Data/grounds
  - Warrant
  - Backing
  - Modal qualifier
  - Rebuttal
- Conclusion
- Premises
Toulmin’s Model

- **Data**
- **Warrant**
- **Modal Qualifier**
- **Claim**
- **Backing**
- **Rebuttal**
Harry was born in Bermuda

Probably

He is a British subject

Generally

a person born in Bermuda will be a British subject

In accordance with some law ...

Unless neither of his parents was a British subject.
Johnson’s Approach
(Disputing Argument)

- Premises
- Conclusion
- Dialectical tier

- Premises
- Conclusion
Real Argument

A real argument is a disputing argument, which can be defined as a system composed of premises, conclusion and dialectical tier.

A disputing argument is a claim-reason-dialectical tier complex
Definition 3

Informal logic is the normative study of disputing argument. It seeks to develop standards, criteria and procedures for the interpretation, evaluation, and construction of disputing arguments.
Area that Informal Logic Belongs to:

- Logic
- Epistemology
Does Informal Logic belong to the Realm of Logic?

Viewpoint 1

“I have a great deal of sympathy with the intensions of those philosophers who speak of “informal logic”, but I don’t think that any clarity is gained by using the term “logic” for what they are doing”

J. Hintikka
Does Informal Logic belong to the Realm of Logic?

Viewpoint 2

“What is logic?
A classic answer is that logic is the appraisal of reasoning or argument...
According to this definition, there is no question that informal logic is logic”

J.B. Freeman
Is informal logic the area of logic?

**Viewpoint 3**

“The label informal logic covers a collection of normative approaches to the study of reasoning in ordinary language that remain closer to the practice of argumentation than formal logic”

*F. H. van Eemeren*
Does Informal Logic belong to the Realm of Logic?

Viewpoint 3

“Informal logic may be seen as a branch of argumentation theory. Put the other way around, any over-all theory of argumentation will need to contain as a component a theory of informal logic”

J.A. Blair and R.H. Johnson
Does Informal Logic belong to the Realm of Logic?

Viewpoint 4

“It might in fact better called “theory of argument”. Its questions have however traditionally been regarded as part of logic, broadly conceived. The name can thus be taken to refer to that part of logic as traditionally conceived that is not covered by contemporary formal logic”

D. Hitchcock
Summary

Informal logic

• is not logic
• is logic
• is logic or theory of argument
Logic

**Formal**

1. Normative study of reason-giving argument
2. Verbal argument
3. Artificial language

**Informal**

1. Normative study of disputing argument
2. Verbal argument
3. Natural language
Logic

**Formal**

4. Formal standards, criteria, procedures
5. Logical form
6. Formal methods

**Informal**

4. Non-formal standards, criteria, procedures
5. Argument structure, scheme
6. Diagramming methods
Logic

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<th>Formal</th>
<th>Informal</th>
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<td>6. Validity</td>
<td>6. Acceptability</td>
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<td></td>
<td>Sufficiency</td>
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<td>7. Good/bad argument</td>
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Does Informal Logic belong to the Realm of Epistemology?

“The epistemology of informal logic is then a piece with the epistemology of formal logic and that of anything else. It involves spelling out the character of particular informal practice and principles, and making cases for regarding them as valid or invalid, justified or unjustified. These cases must in turn be evaluated in terms of our general theoretical understanding of the strengths and weaknesses of such cases. The project of enhancing that theoretical understanding is a primary strand of epistemology. It is in this sense that the epistemology of informal logic is of piece with epistemology generally”

H. Siegel
Does Informal Logic belong to the Realm of Epistemology?

“The term “informal logic” tends to “anchor” the study of arguments in formal logic. Such a nomenclature tempts us to use models of reasoning based on deduction and potentially to miss the actual nature of most reasoning. “Applied epistemology” focuses the discipline towards the actual practice of how people come to and should come to justified beliefs. In an analogy with applied ethics, the study of people’s actual epistemological practices can provide both information and challenges for the theoretician of reasoning.”

M. Battersby
Does Informal Logic belong to the Realm of Epistemology?

“Informal logic is epistemological. Two central questions concern premise acceptability and connection adequacy. Both may be explicated in terms of justification, a central epistemological concept”

J.B. Freeman
Does Informal Logic belong to the Realm of Epistemology?

“The standard of relevance is widely regarded as central to argument analysis and evaluation, but to our knowledge relevance has not been dealt with in epistemology. Besides that, argument has uses other than those of interest to the epistemologist: to justify beliefs or knowledge claims. Epistemic norms are beside the point for argumentation whose goal is to reach agreement or to defeat an opponent…”

*R.H. Johnson, J.A. Blair*
Summary

Informal logic can be considered as an applied epistemology in a sense that it is the application of epistemological findings to the evaluation of arguments.
Approaches to Argument Evaluation

- fallacies approach
- criteria approach
Traditional Criteria Approach

• Validity
• Soundness

An argument is good if and only if it is formally valid and its premises are true.
Hamblin’s Approach

- alethic criteria
- epistemic criteria
- dialectical criteria
The Alethic Criteria

1. The premises must be true.

2. The conclusion must be implied by them.
The Epistemic Criteria

1. The premises must be known to be true.

2. The conclusion must follow clearly from them.
The Dialectical Criteria

1. The premises must be accepted.

2. The passage from premises to conclusion must be of an accepted kind.
Informal logic

Johnson and Blair

ARS

• **acceptability** of each premise;
• **relevance** of each premise to the conclusion drawn from it;
• **sufficiency** of the premises in combination to support the conclusion.
Informal logic can be viewed as a discipline that is at the junction of interests of logic and epistemology.
Thank you for your attention!