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How to understand the normativity of reason in the context of logical pluralism: a pragmatist approach

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(Note: this is a sketch of a project where we use logical expressivism to advance logical pluralism)

“My fundamental idea is that the ‘logical constants’ are not representatives; that there can be no representatives of the logic of facts.”

Wittgenstein, 1921

"The concept of logical consequence is one of those whose introduction into the field of exact formal investigations was not a matter of arbitrary decision on the side of this or that investigator: in making precise the content of this concept, efforts were made to conform to the everyday ‘pre-existing’ way it is used."

Tarski, 1933

“The mode of existence of a rule is as a generalization written in flesh and blood, or nerve and sinew, rather than in pen and ink”

Sellars, 1951

Plaidoyer of a pragmatist tradition (critically reacting to Cartesianism):

Mind and cognition

Static Dualism (radical separation)	X	Dynamic interactions (embodied processes)
Things <i>inside</i> of <i>my</i> mind	X	<i>We</i> operate with things in <i>our</i> world
Mind as a vehicle	X	Mind as a (biological) capacity

Knowledge, reason, practice

Know that (theory)	X	Know how (practice and actions)
Representation (idea, image)	X	Act of representing
Representing-passive mirror	X	Illuminating-active lamp (expressivism)
Think and act (content)	X	Act and think (competence, abilities)
Actions and use in terms of content	X	Content in terms of actions and use

Language and logic

Picture, representation, image	X	ruled governed practices (“meaning is use”)
Truth (possibility of falsehood)	X	Correction (possibility of correction)
Meaning as reference (bottom up)	X	Meaning fixed by inferences (top down, practical reasoning)
Logical laws: Limits of imagination what to do”)	X	Logical laws: limits of acting and doing things (“I do not know

Anti-cartesianism:

Cognition and reasoning are not a matter of an entity consuming and manipulating representations, but they are special capacities of some situated and embodied animals of (*deontologically*) engaging in a permanent and dynamical exchange with other animals in selective parts of their environment.

Problem:

Deontologically engaging?! Is that relevant?

Yes! Normative stance!

I think normativity is crucial to understand (our) rationality.

What are we, then? What is rationality?

A pragmatist proposal:

What is *special* about us is not what we have inside our minds but what we can do in the world.

We are beings that give each other rules, norms, criteria to evaluate things, to reason, to infer, to act in a highly unstable and mysterious world.

Outline

Introduction

1. A pragmatist point of view to tackle the nature of logic
2. Logic and morality

Some final remarks

Introduction

**(on some philosophical
problems concerning
Logical Pluralism)**

Some preliminary remarks:

We have nowadays different and legitimate non-classical logical systems with many different and interesting (local) applications. (For example, nonmonotonic reasoning, belief revision, vagueness, constructive math, conflicting information, discursive dynamics, quantum world etc.)

PROBLEM 0: The existence of **alternative logics** raises the question of which one is **correct/legitimate**. Further, if any is correct, is it universally correct? (universality, a prioricity, necessity *should be revised*). In which sense and why one logic should be taken as the **cannon** for reasoning? Should any deviations from this **paradigm** mean no-reasoning?

PROBLEM 1: Is all that a matter of **convention** and **arbitrary** choices? Is it all about introducing different formalisms and choosing one of them for determined goals? How to be a pluralist concerning the relation of logical consequence, without being a conventionalist? If logic is just a matter of introducing a formal system, we may overlook the comprehensiveness of the whole enterprise about bounds of rationality.

PROBLEM 2: Is it **rational** to reason non-classically? In other words, if we also legitimately reason non-classically, what does it mean to be rational? If we do have some philosophical motivations in some of the non-classical approaches, they may be very heterogeneous. (Brouwer's solipsism, Priest's dialetheism etc.) If it is in some cases even more rational to reason non-classically (paraconsistent cases), could we integrate **very heterogeneous philosophical motivations** under one philosophical program?

PROBLEM 3: To be **normative** about correct reasoning is "easy" for a logical monist. How could we deal with the normativity of logic in the context of logical pluralism?

Anti-realist, pluralist, relativist (but how?)

→ **Let's go pragmatist** to have a comprehensive program to deal both with the nature of logic and logical pluralism!

→ Inspired by Wittgenstein, and more recently by Brandom (1994, 2000) and Peregrin (2014), I am aiming at focusing on normativity to tackle logical pluralism. That is: to understand connections between judgement, inference, action and reason under the phenomenon of normativity (ie. rule guidance, ruled governed practices).

→ To shift constructivist discussions on logic from epistemic notions (as knowledge, belief and information) to normative notions (as authorizations, prohibitions and rules)

→ No conventionalist!! but, I would like to allow revision!!

→ As a consequence, the plurality of logics should be grounded in the plurality of our daily (inferential) practices.

→ We may have different and conflicting principles and reason very differently in different contexts.

Part I

**A pragmatist point of view
to tackle the nature of
logic**

Four ingredients of my proposed pragmatism:

1. **Antirealism:** Logical vocabulary do not relate to any particular state of affairs in the world but to *OUR* criteria or norms to evaluate descriptions and actions in the world. We are not talking about facts and truth, but about our criteria to evaluate facts and truth. Logical principles does not represent anything in reality. **MOTTO:** We use logical principles to correct our actions, info, perception, interactions, theories etc. And not to describe things.
2. **Expressivism:** Logical rules *show, express, make explicit*, possible forms of representing our world. Logical systems express some of our public commitments and norms in rational discussions and practices.
3. **(Pragmatist) Inferentialism:** Understanding, meaning, cognition are connected to inferences and not to reference. Practices are inferentially articulated and can be publically tested and controlled.
4. **Proof theory:** Once we are stressing logical vocabulary as normative, our focus should be set on the nature of rules and norms (proof-theoretical). The focus is on ruled inferences and in their applications and not on truth, models and satisfaction (practical know how, education, training, dynamical reasoning and use)

The right question about logical pluralism is NOT:

What is the **true** logic? How many true logic do we have?

Rather:

What are the best (inferential) practices in a particular context? **Role** and **function**

We do not have a plurality of rationalities, since we have a plurality of logics.

Rather:

To be rational (**like us**) is indeed to dynamically coordinate and master various heterogeneous ways of reasoning, conforming them to innumerable selective environmental pressures.

What I am proposing here is, in a sense, an „anthropological approach“ to logic as a normative phenomenon.

In other words, it is to take logic as a human phenomenon grounded in our (highly) heterogeneous normative practices.

Re-stating a strong anti-realist thesis:

I reject that there are prohibitions/authorizations (rules and instructions) in the world without human beings (or any rational agent)! There is no such a thing as a “real or true rule” in the nature.

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Literature often uses normative vocabulary: entitlement, commitment, respect, authority, obligation, etc.

As a consequence of my proposal, “must be”, “have to be”, “necessarily” etc. should be taken as “ought to”.

Common wisdom would say that the former are logical notions and the last one is a deontological notion. I think they do not differ in nature.

Both notions should be taken as normative.

Ok, but what is new in my (normative) approach?

- Motivations for non-classical logics are very heterogenous (eg. Brouwer's solipsism, Priest's dialetheism)
- Dummett's anti realism emphasizes epistemic notions. I want to emphasize normative and deontological notions for social agency, cooperation, collaborative and regulative joint activities (games!). Abilities, competences and capacities; The programs (epistemic and normative) are independent, but compatible indeed.
- The recent literature about logical pluralism very often neglects some relevant philosophical issues as *Handlung*, *Praxis*, Normativity. "Carnapian" Conventionalism: Communication?, revision?, incommensurability?, arbitrariness?, connections between reason and logic?
- Notable exception Field 2009: Anti-realist and relativist approach! For him, the core concern of classical logic (and many non-classical logics too) is to be characterized in terms of legitimacy of belief, not in terms of necessary truth preservation. I will propose an expressivist approach in which we are preserving commitments, and not legitimate beliefs or truths.
- Costa Leite *et. all* (2014) address a highly metaphysical enterprise concerning logical pluralism with their ontology of galaxies. I would like to go, say, pragmatical instead of ontological to develop an integrated platform for logical pluralism.
- Brandom (1994 and 2000) and Peregrin (2015) emphasizes normative vocabulary, as *prohibition and authorization, violation, permission, obligation, respect, obedience to understand logical constant*. However they do not advance anything concerning logical principles and the legitimacy of alternative logics.

Part II

Logic and morality

Morals in Logic!?

The interpretation to be developed here is that:

1)
rational obligation should be taken as moral obligation

and, in particular, that

2)
logical necessity should be taken as a kind of moral coercion, based on the normative notions of rules (prohibition, authorization, respect, authority, commitment etc.)

In a relevant sense, this strategy is against Carnap's tolerance principle (1937)!

“In logic there are no morals. Everyone is at liberty to build his own logic, i.e. his own language, as he wishes. All that is required of him is that, if he wishes to discuss it, he must state his methods clearly, and give syntactical rules instead of philosophical arguments” (Carnap 1937, §17).

Two readings:

1) negative: Tolerance! From a logical point of view, we cannot say that a logic is forbidden.

2) positive: Freedom! Everything is possible! To allow plasticity and innovations is important, but Carnap's tolerance principle is a (large) open door for conventionalism and arbitrariness.

Note: Conventions alone do not coerce anybody! Mere configurations on a piece of paper does not compel us to draw any consequence. No disposition of signs has itself a normative power or pragmatic force to guide our inferential practices.

In spite of Carnap, I am in (very) good company!

Frege (1897) seminally relates the nature of logic to the philosophical discussion on moral and freedom:

"Logic has a closer affinity with ethics [than with psychology] ... Here, too, we can talk of **justification**, and here, too, this is not simply a matter of relating what actually took place or of showing that things had to happen as they did and not in any other way" (Posthumous Writings, p. 4).

And others:

Peirce ("logic is the ethics of thinking"), Ramsey, and Wittgenstein (1930, WWK pp. 128, 131, 175), Field (2009)

Big question:

What is the nature of **logical necessity**? What does it mean that B follows from A (in a given system)? What does it mean, "to follow from"? In what sense an inference compels us to judge the truth of a conclusion from the assumption of the truth of the premises?

My proposal:

Logical necessity has its roots in the rational obligation compelled by our urge, as rational beings, in following agreed rules.

Logical consequence is a relation that makes explicit determined relations of authorization and prohibition inherent in inferential practices of agents in communities. Practices are always inferentially articulated.

A direct consequence is **relativism**: that different communities may have different norms. Further, we may have heterogeneous norms in the same communities. Further, an individual may vary her reasoning according to pressures in her environment and to the nature of her needs, interests and tasks.

A new interpretation of Frege's **truth preservation**: Brandom (1994, 2000) and Peregrin (2014) defend some inferentialism in the *Begriffsschrift*. There the main notion is not true, but inference. One should *make explicit* inferential relation in terms of assertible content. **Preservation of truth should be taken as preservation of commitment** (as truth is a command to assent).

To **assert** something is to commit to the truth of some propositional content and to the consequences and incompatibilities of that content. To fail to understand the transmission of commitment is to fail to reason and to understand inferences.

Inferentialism: Logic expresses the inferential relations which hold good in our language. Meaning is determined by inferential articulations. To understand the meaning of concept is to master the use of a word.

The inferences above are held as correct.

(1) from "Nemo is a fish" to "Nemo is an animal"	(2) from "This is red all over" to "It is not blue all over."
(3) From "Today is Monday" to "Today is not Sunday"	(4) from "Now it is 25 degrees Celsius" to "Now it is not 26 degrees Celsius"

Logical vocabulary enables us to *express* rules by introducing conditionals, negations, existentials and universals, for instance. They make inferential rules explicit.

"Every fish is an animal" "No object which is all over red can be all over blue." "No day can be both Monday and Sunday" "Two degrees of temperature cannot be ascribed simultaneously to particular place and time"

Accordingly, those are rules vindicating the previous inferential transition we make in our daily practices.

Some final remarks

1. I am offering a comprehensive account of the nature of logic emphasizing pragmatist and normative features to tackle logical pluralism. This account should be anti-realist, relativist, pluralist, but not conventionalist.
2. I think logical expressivism and (pragmatist) inferentialism render the possibility of public control, justification, correction and development of logics. If we get the right formalism, we can change practices and by changing practices we can change formalism.
3. Morality is not a consequence of being logical, but it is the other way around. We are logical in virtue of our morality and not vice-versa. We give each other rules to judge and to do things in the world.
4. Practices and language are already inferentially articulated. That is, they are full of commitments, authorizations and permissions.
5. To be a logical pluralist means to be a moral pluralist. No ethical imperatives, but “*mores*”, that is, customs, conventions, ways of life, traditions, practices, habits etc.

Many thanks for your attention!

Muito obrigado pela sua atenção!