# On a Further Difficulty for the Bridge Conception of Conditional Norms

Giovanni Battista Ratti\* Jorge L. Rodríguez\*\* Tobías Schleider\*\*\*

# Abstract

In this article, we briefly expose and analyze a difficulty that the so-called *bridge conception* of normative conditionals must face concerning some possible applications of the *principle of conditional distribution* to the normative domain.

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## Premise

The so-called *bridge conception* of conditional norms – viz. the conception according to which normative conditionals are best reconstructed in the logical form of a descriptive antecedent connected to a normative consequent – formally represents normative conditionals as follows:

[1] p→Oq

Such a conception has important merits, but also different problems, on which we have previously discussed in the pages of this journal<sup>1</sup>.

What we want to point to in this paper, and briefly discuss, is another puzzle of this formal representation, which stems from the application of the *principle of conditional distribution* (PCD).

<sup>\*</sup> Istituto Tarello per la Filosofia del diritto, Dipartimento di Giurisprudenza, Università degli Studi di Genova, via Balbi 30/18, 16126, Genova, Italia, *gbratti@unige.it.* 

<sup>\*\*</sup> Facultad de Derecho, Universidad Nacional de Mar del Plata, c/25 de Mayo 2855/65, CP 7600, Mar del Plata, Argentina, *jorgerodriguez64@yahoo.com*.

<sup>\*\*\*</sup> Departamento de Derecho, Universidad Nacional del Sur, Bahía Blanca, Argentina; Facultad de Derecho, Universidad Nacional de Mar del Plata, c/25 de Mayo 2855/65, CP 7600, Mar del Plata, Argentina, *tschleider@gmail.com*.

<sup>&</sup>lt;sup>1</sup> See Ratti 2017, Rodríguez 2017. For further discussion, see also Navarro, Rodríguez 2015: 91-105.

### 1. First Application of PDC: Conditioned Conditional Norms

In propositional logic<sup>2</sup>, the following formula, representing PCD, is a tautology<sup>3</sup>:

$$[2] [p \to (q \to r)] \to [(p \to q) \to (p \to r)]$$

It says that, when a conditional sentence " $q \rightarrow r$ " is conditioned by another sentence ("p"), it entails the conditional formed by " $p \rightarrow q$ " as its antecedent, and " $p \rightarrow r$ " as its consequent. For instance, "If it rains, then (if you go out without an umbrella, then you get wet)" entails "If (if it rains, then you go out without an umbrella), then (if it rains, then you get wet)".

PCD seems to generate some doubts when applied to the bridge conception of conditional norms<sup>4</sup>.

A first possible application of PCD to the bridge conception is the following:

$$[3] [p \to (q \to Or)] \to [(p \to q) \to (p \to Or)]$$

Here we have in the antecedent a conditional norm (" $q \rightarrow Or$ ") with a further factual condition ("p") concerning the application of the norm itself. What the application of PCD generates in the consequent is that if such a further factual condition ("p") implies the factual antecedent of the conditional norm ("q"), we obtain another conditional norm with the first factual condition as its antecedent.

This may sound counterintuitive since, whereas in the antecedent we have an obligation subject to two different factual conditions ("p" and "q"), if there happens to be a conditional connection between both facts, only one of them ("p") would be sufficient to derive the obligation. Moreover, were "p" false, "p  $\rightarrow$  (q $\rightarrow$ Or)"

 $[2^*] \operatorname{O} \{ [p \to (q \to r)] \to [(p \to q) \to (p \to r)] \}$ 

 $[2^{**}] \operatorname{O}[p \to (q \to r)] \to \operatorname{O}[(p \to q) \to (p \to r)]$ 

Which, in standard deontic logic, would translate into:

 $[2^{***}] \; [\operatorname{Op} \to \operatorname{O}(q {\rightarrow} r)] \to [\operatorname{O}(p {\rightarrow} q) \to \operatorname{O}(p {\rightarrow} r)]$ 

<sup>&</sup>lt;sup>2</sup> This is common knowledge among logicians. As a matter of context of discovery, the inspiration to discuss the problem referred to in the text stemmed from reading Kneale, Kneale 1962: 537.

<sup>&</sup>lt;sup>3</sup> It must be observed that what is sometimes called Frege's law, i.e.

 $<sup>[</sup>FL] \ [p \to (q {\rightarrow} r)] \leftrightarrow [(p {\rightarrow} q) \to (p {\rightarrow} r)]$ 

is also a propositional tautology. Its transposition within the domain of the bridge conception would be also quite problematic, but what we say in the text regarding PCD can be easily extended to it. On Frege's law, see e.g. Palladino 2002: 77-91.

<sup>&</sup>lt;sup>4</sup> This conception is traditionally opposed to the so-called *insular conception*, according to which conditional norms are to be reconstructed as " $O(p \rightarrow q)$ ", in that the "conditional quiddity" of the hypothetical norm is well within the scope of the deontic operator, not without (as happens in the bridge conception). On the bridge/insular dichotomy, see Alchourrón 1996. According to the insular conception, the application of PCD to the normative realm is parasitic to the rule of O-necessitation, turning propositional tautologies into deontic tautologies. This would turn [2] into [2\*]:

Which translates into:

and " $p \rightarrow q$ " would be both satisfied, and then we would obtain " $p \rightarrow Or$ ", i.e., "Or" would be derivable solely from the verification of one of the conditions.

Suppose, for example, that, according to the law, if someone is not an essential worker ("p"), then if she goes out during a mandatory confinement disposed by health authorities ("q"), she ought to be punished ("Or"). From the application of PCD one can derive that, if it is the case that if someone is not an essential worker. then she went out during a mandatory confinement, it follows that if she is not an essential worker, then she ought to be punished. This sounds counterintuitive, indeed. However, as a possible answer it could be argued that, if it were the case that knowing that someone is not an essential worker allows us to conclude that she went out during a mandatory confinement, then knowing that she is not an essential worker would allow us to conclude that she ought to be punished, simply because in this case not being an essential worker guarantees that the antecedent of the conditional norm "if someone goes out during a mandatory confinement, she ought to be punished" is satisfied. Besides, if the first condition is not satisfied (i.e., in our example, if someone is indeed an essential worker) then the conditional "If someone is not an essential worker, she ought to be punished" would be a vacuous implication derived from the principle " $\sim p \rightarrow (p \rightarrow q)$ ".

## 2. Second Application of PDC: Conditioned Entailed Obligations

Be that as it may, there is a second possible application of PCD to the bridge conception of conditional norms. It can be represented as follows:

$$[4] [p \rightarrow (Oq \rightarrow Or)] \rightarrow [(p \rightarrow Oq) \rightarrow (p \rightarrow Or)]$$

The antecedent of this complex conditional would fare well in representing scenarios like the following: "If you are a party in a contract, then (if you ought to comply with it, you ought to do it in good faith)". The consequent represents the connection between two conditional norms "If you are a party in a contract, then you ought to comply with it", and "If you are a party in a contract, then you ought to comply with it in good faith".

So far so good. What we have in [3] is a conditional norm in the antecedent and another in the consequent, mutually related in the following way: if a certain duty is subject to two different factual conditions, if one of these conditions implies the other, the sole verification of the first is sufficient to derive that duty. By contrast, when it comes to [4], we have that a conditional norm entails another whenever the condition which is the antecedent of both conditional norms implies that one of these obligations implies the other. The problem here is that [4] does not appear to be logically true. Consider the following example: in normal circumstances, if you have the duty to leave your home and go outside, this does not imply that you ought to get dressed in any particular way. However, in a pandemic scenario ("p"), if you have the duty to go outside ("Oq"), you have the duty to wear a facial mask ("Or"). Now, it may be the case that in a pandemic scenario you have the duty to leave your home and go outside (" $p \rightarrow Oq$ "), for instance, if you, being a doctor, are an essential worker. But this does not necessarily imply that in a pandemic scenario you have always the duty to use a facial mask (" $p \rightarrow Or$ "), if you simply stay home.

If such an argument works as a counterexample against [4], as it seems, the problem it illustrates is not trivial. This is so because if one of the applications of PCD is shown to give rise to an anomaly like the one just presented, the bridge conception of normative conditionals can be called into question, at least if we use material conditionals as connectives, and need a comprehensive review of its strategy of representation.

#### 3. Conclusion

What we have introductorily discussed here is a problem seldom considered in the literature dealing with the bridge conception of normative conditionals, namely that the application of PCD to normative conditionals is not easy to reconstruct, differently to what happens with thoroughly descriptive conditioned conditionals.

We have proposed two possible interpretations of the normative counterpart of PCD. The former may have some counterintuitive features but can probably be accommodated into a valid logical setting, whereas the latter cannot. If this is correct, we can conclude that the bridge conception of normative conditionals needs to be revised, at least if we want to use the material conditional as an *explanans* of the connection which links the antecedent and the consequent of a normative sentence.

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