

# Assertions in Contexts and Degrees of Justification (A Peirceist Approach)

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## 1. Contexts in which Assertions are made

I assume that a context encompasses the set of behaviors that constitute and regulate a range of behaviors aimed at fulfilling purposes [Niño 2011a, 2011b]. I also assume that each context in which assertions take place has different ways to perform reasoning in accordance with the interests or purposes that it aims to solve<sup>1</sup> and that to each context belongs a specific way of justification that provides the standard for what counts as justified assertion in each of these contexts.

For the sake of the argument, I will only use two types of contexts: (a) a practical context and (b) a scientific context. In (a) the purposes are practical in the sense that cover issues that require solutions and methods more or less immediate and effective. The type of reasoning or inference that takes place in (a) is not completely solid under formal logic, while effective in relation to practical needs. In (b), purposes are theoretical in the sense that they don't need to be urgently resolved, which makes the search process slow, requiring much effort (intellectual) and training, so that a group of people can participate in their resolution. The modes of reasoning and inference in (b) closely follow the rational method of scientific inquiry; a way that, as rational science, necessarily is not the most rational to solve practical issues.

### 1.1 Kinds of propositions, inferences and assertive commitments

According to the position that I adopt (Gabbay & Woods, 2005) both propositions and arguments have certain degrees of resistance. On the one hand, there are robust propositions and inferences, i.e., propositions and arguments that support various counterexamples. For example "birds fly" is a robust proposition despite claims that penguins do not fly. In addition to robust propositions and inferences we also find fragile propositions and inferences. Fragile arguments contain fragile premises, i.e., premises that do not support counterexamples. For example, a proposition such as "All bodies have potential energy" is fragile because the mere fact of finding a body without potential energy would stop accepting the proposition as true.

Keep in mind that there are intermediate degrees between fragile and robust. There may be entirely fragile propositions (which are false with a single counterexample), very fragile and moderately fragile, until moderately robust, very robust and completely robust<sup>2</sup>.

On the other hand, and adopting Brandom's vocabulary, we say that a subject acquires an assertive commitment towards a statement when she is able to vindicate it showing the reasons that she has and that authorize or legitimate her to make the statement (Brandom 1994, 260). One can give a set of reasons to support the statement in question whether there are counterexamples, and it is this support for the statement that involves being committed to it. However, it also indicates that a

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<sup>1</sup> The idea of degrees of justification as I understand it was inspired by the work of Niño (2009, 2011, 2011a). However, as discussed in Carlos Garzón (2010, 2011), and especially Niño (2011) we have several differences in the way we conceive the conditions for defining and determining degrees and standards of justification.

<sup>2</sup> Until this point, I follow Gabbay & Woods, 2005.

proposition such as “All bodies have potential energy” is fragile because a single counterexample would refute it, which would mean that we are willing to abandon the commitment to the statement if we find a single case against it.

Given the fact that a proposition is fragile or robust depending on whether it supports counterexamples, then, these degrees of resistance to the propositions should lead to the adoption of certain degrees of assertive commitments. Following this line, we say that a commitment is *firm* when the propositional content of the statement in question is robust and the commitment is *unstable* when the propositional content of the statement in question is fragile. Keep in mind that if an individual's assertive commitments are gradual, there must be a range of commitments that goes from the firmest to the most unstable. Thus, the degree of commitment will be proportional to the set of cases against the statement that support its propositional content.

In short, an individual takes a statement as having a robust or fragile propositional content depending on the set of contrary experiences that such an individual would be willing to accept or reject, and that provision constitutes his degree (firm/unstable) of commitment to the statement uttered.

This framework gives us the key tools to develop the idea of degrees of justification of assertions. But before that, let me say a few words about inferential justification methods adopted in different contexts in which assertions take place.

## 1.2 Methods of Justification

Having the task of justifying an assertion is looking for reasons to support it, and to do the latter is to seek a kind of permission to make the assertion. Now, having a reason to affirm it is to be able to show, among other things, which method we used to support it or to hold it legitimately.

A method of justification includes one or more schemes of inference which uses a speaker to authorize the support of the proposition asserted. Inspired by Peirce (1877), I will consider only four of these methods:<sup>3</sup>

Tenacity: "P is true, because I believe it is true."

Authority: "P is true because X (where X is an authority on the subject) says it is true."

A priori: "P is true, because a priori ABC reasons show it is so".

Scientific Method: "Possibly P is true because provisionally P is a set of Consequences follow XYZ that are verified by experimental circumstances."

It should be noted that these four schemes or methods are not exhaustive, but give us a guide for characterizing the dependence between methods and degrees of justification in a context.

Here is where it comes into play the relationship between contexts in which assertions take place, their corresponding purposes, assertive commitments and methods of justification. What matters here is that different justification methods determine different degrees of justification of assertions based on the context in which they are being used. I will explain this in detail.

## 2. Towards a theory of degrees of justification

Using the conceptual tools that we have seen, we can say that in each context in which the assertion is made, different methods of justification are used, which will confer the conclusions certain degrees of resistance depending on the degree of resistance from their premises. But these methods of justification, along with the resistance of its premises and conclusions and the

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<sup>3</sup> Strictly speaking, these are for Peirce's methods for fixing beliefs. I'll take them as justification methods by way of example only, to reflect some of the insights that I wish to develop.

corresponding degree of commitment that a speaker takes towards them, involve certain justificatory degrees for certain assertive contexts.

With this in mind, one adopts assertive commitments towards the conclusions of reasoning, depending on how fragile or robust the premises are (or they are interpreted). In that sense the conclusion inherits the commitment (firm/unstable) depending on the degree of resistance (fragile/robust) of the premises. One takes a proposition as robust or fragile depending on whether they are the result of defeasible reasoning, and ultimately, depending on the purpose (practical or theoretical) in which the reasoning is used. For example, if the argument is made in a practical context, perhaps the premises of this argument are taken in a robust way, i.e., as accepting counterexamples, and as the conclusion of a form of reasoning by authority.

Each context requires different modes of commitment to the statements. There are different degrees of justification for the contexts of assertion depending on the degree of commitment required by the context of the speaker. For example, in the practical context an assertion is highly justified if the speaker's commitment to the statement is firm and if it is the result of applying the method of tenacity or authority. But in the scientific context, an assertion is highly justified if the speaker's commitment toward the statement is unstable and is the result of the *a priori* or scientific methods. Conversely, in the practical context an assertion will have a justificatory low degree if the speaker's commitment to the statement is unstable and is the result of the scientific method, and in the scientific context an assertion will have a justificatory low degree if the speaker's commitment to the statement is firm and is the result of the method of tenacity.

This does not mean that the assertions made in the practical context can't be the product of the application of the scientific method. Indeed, if in this context a speaker makes assertions that are the result of the application of the scientific method and takes the premises in a robust way, then her commitment is firm, which will be reflected in the firmness and robustness of the conclusion. Ultimately, there are many possible combinations that can occur here between types of inferences or methods of justification, types of propositions (robust, fragile), the degrees of assertive commitments (firm/unstable) and degrees of justification (high, medium, low).

In conclusion, we might say that the kind of inferences that are made in different contexts in which assertions take place is based on statements (premises and conclusions) towards which we adopt firm or unstable assertive commitments —depending whether its propositional content is fragile or robust— and whose justificatory degrees are high, medium or low. If this is true, at first glance this type of treatment would realize the elements involved in our practices of justification. The elements and relationships described in this paper are only a sketch to be fully developed and whose required elements exceed the length of this paper. I hope, at least, to have shown that it is possible to adopt gradualness of assertive commitments and of justification and to provide an explanation pragmatically broader and richer of the phenomenon of justification.

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