Leibniz on the Frege Point

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Abstract   In the debate on the Frege Point, the 'Spinoza thesis' is often mentioned. But Leibniz is kept out. Yet, on this topic, Spinoza and Leibniz shared a fairly similar goal. They sought to root the assertive force in the conceptual activity of the subject. But Leibniz, unlike Spinoza, wanted also to build a coherent theory of propositions. Propositions are for him always provided with assertive force. But what is affirmed by the propositions of logic is only a possibility – the possibility of the conceptual link they express. Stronger assertions require something more: a mark of actuality, a modal symbol in logic or the use of *notae* or *particulae* which belong to natural languages. Leibniz does not modify his conception of propositions in his "*analysis particularum*". He tries to understand what we do when we use them in various contexts. The Leibnizian proposition is neutral, but it is not forceless. Since it is not forceless, there is no need to appeal to an external act or to a judgment. Leibniz thinks, like most of the authors of the Aristotelian tradition, that the proposition contains the act of judging. Since it is neutral, there is no need to venture into the many difficulties raised by cancellation to account for the force/content relation in the conditional, disjunctive or fictional contexts.

Keywords   Proposition. Kudgment. Concept. Assertion. Spinoza, Frege. Leibniz.

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1 The Slogan *Praedicatum Inest Subjecto* is About Propositions

In an influential article, Peter Geach sheds light on what he himself named the Frege Point:

> A Thought may have just the same content whether you assent to its truth or not; a proposition may occur in discourse now asserted, now unasserted, and yet be recognizably the same proposition. (Geach 1965, 449).

If the same proposition may sometimes be asserted and at other times not be asserted, then propositional content itself must be distinguished from what Frege called "assertive force".[1] The Frege Point (henceforth FP) mainly lies in the interpretation of this distinction, on the one hand, and on the other hand, in its acceptance or rejection. It touches on a number of central points in the philosophy of language and the philosophy of mind, hence the abundance of works it has given way to.

The current questions in this field are primarily concerned – though not exclusively – with the theory of propositions.[2] For the sake of convenience, I distinguish between five main questions:

(i) The nature of propositions and their relation to assertion – are there unasserted propositions?

(ii) The identity of propositional content – can, for example, an assertion have the same propositional content as a question?

(iii) The nature of predication and its relation to judgment – is the link that unifies the different parts of a proposition dependent on judgment?

(iv) The role of assertive force in representation – could a neutral entity, deprived of assertive force, have a representational function? And lastly,

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[1] Cf. Frege 1984, 280-1, 383 and the passages concerning the introduction of a sign of assertion in the symbolism. He writes for example about Peano's notations: "That is to say, we must deprive the relation sign of the assertoric force with which it has been unintentionally invested. And this holds just as much for my conceptual notation as for Mr. Peano's. However, we do still sometimes want to assert something, and for this reason I have introduced a special sign with assertoric force, the judgement-stroke. This is a manifestation of my endeavour to have every objective distinction reflected in symbolism" (247).

[2] Geach defines 'proposition' as "a form of words in which something is propounded, put forward for consideration". But, as is noted by Luís Duarte d'Almeida, that is not how he actually uses the term. He uses it to refer to the *content* that is put forward for consideration (see Duarte d'Almeida 2016). This point is significant in the context of the debate with the ascriptivists. As we are mainly interested in knowing what Leibniz means by 'proposition', we will be forgiven for neglecting what Geach thought of it.

(v)   The interpretation given to the force/content distinction involves, at least for certain authors, the nature of belief. In these cases, the discussion of the FP is about the structure of the doxastic space.[3]

Such is, in broad strokes, the geography of the descendants of Geache's paper. From a historical perspective its genealogy may also be of interest and, for the purposes of this contribution, Leibniz' place in that genealogy. I am perfectly aware of the seemingly anachronistic character of this endeavour. The force/content distinction does not exist, at least in these terms, in the Leibnizian *corpus*. It may be more careful to try to reconstruct *what would have been* or *what could have been* Leibniz' position on this distinction. Regardless, there are many arguments that favour overcoming these reservations. First argument: Geach himself, in his 1965 article, emphasizes the fact that Frege was already defending the FP at the time of the *Begriffsschrift* despite not yet having spelled his major ontological distinctions.[4] Geach seems to think that the FP can be detached from Frege's philosophy and discussed separately from it. This is assuredly a necessary condition for being able to export the FP to anterior historical sequences. Nevertheless, some authors are convinced of the contrary. For example, according to Peter Hanks (2015, ch. 1) the Frege Point implies the *Fregean picture*, i.e. a set of theses on the nature of propositions – that propositions are abstract objects, that propositions can be 'grasped', are the primary bearers of truth conditions, etc. – and the discussion of the FP concerns jointly all of these theses. One simple way of avoiding this difficulty is by allowing that Hanks is interested in the thick FP, and that the one which may be the subject of a genealogical investigation, and which would have been of interest for Leibniz, is the thin FP. Knowing precisely what should be included in this thin FP must be accurately determined. However, this can only be done through a historical study that must naturally, and minimally, include the relation between propositions and judgments.

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3   (i) and (ii) correspond to the useful distinction, proposed par Peter Hanks, between the "constitutive" and the "taxonomic" versions (Hanks 2015, 9). On (iii) see, for example, Recanati 2019, on (iv) for example Soames 2010 and 2015, 219-23. Finally, on (v) see Mandelbaum 2014.

4   Geach only elusively cites certain precise passages in favour of the Frege Point. He writes: "In some of Frege's writings the point is made in the course of his expounding some highly disputable theories, about sense and reference and about propositions' being complex names of logical objects called 'truth-values'. But the dubiousness of these theories does not carry over to the Frege Point itself. Admitting the Frege Point does not logically commit us to these theories; as a matter of history, Frege already made the point in his youthful work, *Begriffsschrift*, many years before he had developed his theories of sense and reference" (Geach 1965, 449).

The second argument that authorizes the historical enquiry relies on references made to Spinoza in the literature on the FP. The thesis according to which a thought is by nature assertoric is commonly referred to as the *Spinozist thesis*. Geach is partly responsible for this appellation given that he explicitly references the Scholium of Proposition 49 from the second part of the *Ethics* (Geach 1965, 457), and that he does so in order to back up the thesis that a thought is by nature assertoric. Therein he specifies that the Spinozist thesis is not incompatible with the FP since, even if we were to consider all thought as assertoric by nature, it would still be true that a thought may occur now unasserted, now asserted, without any change in content. Whatever the case may be, there is a Spinozist thesis that is heavily present in the debate concerning the FP, and where there is such a thesis it is tempting, if not legitimate, to *ipso facto* introduce a Leibnizian view.

The third argument can be found in the textual evidences. Some, that I mention below, are hidden in the recesses of Leibniz *corpus*, whereas others are before our eyes, so to speak. For example, in the famous passage from the correspondence with Arnauld in which Leibniz formulates the slogan *praedicatum inest subjecto*. With the FP debate in mind, let us take a look at this passage. Leibniz writes:

> I have given a decisive argument which in my view has the force of a demonstration; that always, in every true affirmative proposition, necessary or contingent, universal or particular, the concept of the predicate is in a sense included in that of the subject ; *praedicatum inest subjecto*; or else I do not know what truth is. Now, I do not ask for more of a connexion here than that which exists *a parte rei* between the terms of a true proposition, [...] *since there must always be some basis for the connexion between the terms of a proposition, and it is to be found in their concepts*. (Leibniz 1967, 63)[5]

This text passage is usually interpreted as being about the nature of truth against the background of the metaphysical problem of individuation. The 'decisive argument' can thus be reconstructed in the following manner:

1. I (Leibniz) possess a robust conception of truth. This conception entails that in all true propositions the predicate's concept must be included in that of the subject.
2. The same concept of truth applies to all types of propositions.
3. Amongst the true propositions, some are about individuals – have a term referring to an individual in the subject position.

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5 Written on the 4th of July 1686. The cuts are included in order to modify the perception of the text's aboutness. Emphasis original.

4.   From this there ensues, after some elaboration, a metaphys-
      ical theory of individuation.

The received interpretation therefore proceeds from truth to individ-
uation and is difficult to contest.[6] Its fault – which becomes clear once
we have read the previous passage with the FP debate in mind – lies
in the fact that it bypasses the problem of the proposition, the prob-
lem of its unity, and even that of its representational force, despite it
being very present in that passage and in many related texts. Leibniz
seldom discussed the nature of the concept of truth to which he as-
signs a role in his argument. However, he spends a great deal of en-
ergy on regimenting all propositions, including the negative ones and
those that he calls "hypothetical", into the aforementioned proposi-
tional format.[7] I also notice that, regarding this propositional for-
mat, Leibniz does not insist on the conjoint presence of the subject
and the predicate – the 'two-name theory' which has been greatly in-
sisted upon by Geach. In the most simple and non-relational cases, in
the absence of any grammatical obliquity, it is the *glue* that holds the
subject and the predicate together which interests him. The *inesse* is
presented as that which ensures this function of unification. Indeed,
if a proposition is considered as the representation of a conceptual
link in which the truth conditions are rooted, then its unity and its
representational aptitude are jointly conceived. We may therefore
modify the received interpretation of the passage from the letter to
Arnauld. The "decisive argument" should be understood as follows:
1.   All propositions are the expression of a connection between
      two terms.
2.   A proposition admits of truth conditions based on whether
      this connection is grounded or not.
3.   The grounding of all proposition is of a conceptual nature.
4.   There ensues, among other things, and after some elabora-
      tion, a position on the metaphysics of individuation.

According to the modified interpretation, Leibniz has not discovered
a powerful conception of truth from which he could have come to this
or that conclusion. Rather, he *begins* with a theory of propositions.
The first positive result of the investigation into what Leibniz's po-
sition on the FP might have been consists of this modification of our

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6   The received interpretation is accepted in Rauzy 2001. The interpretation given
against the background of the FP is approached by Di Bella 2014.

7   The effort of regimentation begins as early as the simple case of an affirmative par-
ticular. "quidam expertus est prudens" is regimented by the following analysis: the con-
cept of the subject (*expertus*) is in the concept of something (*Y*) which contains the con-
cept of the predicate (*prudens*); this inclusion holds for a species of the subject, not for
the subject taken in itself (A VI 4, 203).

reception of one of his most central theses. The slogan *praedicatum inest subjecto* sums up the central part of a theory of proposition *and not of a theory of truth*. Admittedly, we do not yet have Leibniz's position on the FP. But we have a way of obtaining it by seeking to clarify this conception of propositions.

It should be noted that this matter is neither a question of assent, nor of assertion, nor even of judgment. Can we then conclude that the Leibnizian proposition is neutral and that its predication is forceless? I do not believe so. For Leibniz is, as he often repeats, as Aristotelian as possible. He does not dispute the relation that unites propositions and judgments. Rather he tries a kind of neutralization. I intend to show that possibility and conceivability heavily intervene in the Leibnizian neutralization of predication.

2 Spinoza

Let us take force and assertion as our starting point. As we have seen, the position according to which all thought is assertive has, since Geach, been attributed to Spinoza. However, Spinoza does not speak in terms of thoughts, propositions, and assertions. He employs the vocabulary of ideas:

> In the Mind, there is no volition, or affirmation and negation, except that which the idea involves insofar as it is an idea. (E2P49)[8]

Here, the context is that of the debates with Descartes. We cannot endeavour to doubt everything by the exercise of the will and we cannot make doubt out to be a privileged instrument of the scientific method, since an idea is not firstly found in understanding and then ratified by a different and more ample authority that we call volition.[9]

The term 'idea' was particularly popular among post-Cartesian philosophers – Leibniz being a notable exception – whom considered it as clear. However, it was not. Leibniz insisted, as early as his parisian era, on the difficulties pertaining to the use of this word and on the importance of the context of its use.[10] The reference to Spinoza in the

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8   The Spinoza citations are from Curley 1985. Leibniz summarizes the whole sequence with a level of care and precision that shows that they have not escaped his attention: "In mente nulla datur affirmatio et negatio seu volitio praeter illam quam idea quatenus idea est involvit (+ nam trianguli idea involvit affirmationem quod duo ejus anguli duobus rectis aequales +). Per ideas enim intelligimus actum mentis, non picturam mutam ut quae est in fundo oculi, aut si placet cerebro" (A VI 4, 1721).

9   On the link between the Spinozist thesis, the problem of doubt, and the method see Steinberg 1993.

10   See Rauzy 2014.

debate concerning the FP thus raises a two-fold difficulty: Firstly, the difficulty pertaining to the transfer of the force/content distinction into the idiom of ideas, and secondly, the difficulty specifically pertaining to the use of the concept of idea in early-modern philosophy.

Concerning the first point, I remark that the transfer of the force/content distinction into the idiom of ideas, as Geach carries it out in "Assertion", is accompanied by a skillful paraphrase. Geach suggests that the force/content relation can be conceived by means of a form of presumption.[11] When a speaker employs, in a non-fictional context, a sentence that has the grammatical form of an assertion, it must be presumptively read or heard as an assertion. Insofar as it is the hallmark of presumptions to be removable by contextual elements, we may suppose that the non-assertive uses of language items that have the same form can, with the use of a version of cancellation, be explained by this general rule. The Spinozist thesis is introduced by Geach when he supposes that it says more or less the same thing, but in the realm of thought:

> The boy whose mind is wholly occupied with the thought of a winged horse, and who lacks the adult background knowledge that rules out there being such a thing, cannot but assent to the thought of there being a winged horse. (Geach 1965, 457)

To put in terms of propositional attitudes, the example borrowed from Spinoza gives relative priority to beliefs: the contents of thought are presumptively taken to be the objects of a belief, just as spoken or written sentences that have the grammatical form as an assertion are presumptively taken to be assertions. Any thought will be believed unless something prevents it in the informational context.

> When an isolated mental propositional content p is the object of the attention of a subject S, S presumptively believes that p. Spi(Pres.)

It is clear that, if it is to have a chance of entering the philosophical debate, Spi(Pres) should be specified and elaborated through different perspectives.[12] Concerning the present enquiry, and insofar

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11 "In written or printed language, however, there is something of a clue to what is meant assertorically. There is a certain presumption-though of course it can be upset in various ways that an author of a nonfictional work intends a sentence to be read as an assertion if it stands by itself between full stops and grammatically can be read as an assertion" (Geach 1965, 456).

12 Presumption requires a presumption-raising fact (Margalit 1983). Determining what is this fact in the case of thought contents is more difficult than doing so in the linguistic sphere in which the utterance of a grammatically adequate sentence is a natural candidate. The direction of the explanation – going from presumption in commu-

as the question is limited to its historical accuracy, we should note that historians haven't retained Spi(Pres) in their interpretation of E2P49. Jonathan Bennett notably defended a stronger interpretation in his commentary of the *Ethics*. Like Geach, Bennett translates Spinoza's text into the idiom of beliefs, but unlike Geach, he doesn't bother with presumption. He considers that the difficult scholium of the 49th proposition isn't about the relation of attention to belief. Rather, he takes it to be about the nature of ideas. According to Bennett, Spinoza maintains that all mental content designated as an idea is primitively belief-like; thoughts that are not beliefs are of a higher order and are more complex.[13] "The idea of p" envelops an affirmation not because the subject is naturally inclined to believe it, but because it would not even be an idea if it were not believed. Therefore, according to the strong interpretation, E2P49 contains *the identity* of what was then called idea and what we today call belief.

> Spi(Id.)   mental contents that are the object of a subject's attention (*ideas*) are beliefs.

Settling the question presents some difficulties. On the one hand, it is dangerous to involve the concept of presumption in an interpretation of Spinoza, when he, contrary to Leibniz, does not employ it. On the other hand, if it is legitimate to reflect on the principles that allow us to translate into our philosophical language ('belief', 'content') what Spinoza stated in his ('idea'), then it would be strange to treat what is said in the text as the very principle of translation that we are searching for. Spi(Id.) may be true of the *Ethics*, but it is certainly not said in the *Ethics*.

Let us then follow the second path and consider more directly the difficulties pertaining to the use of the concept of idea in early-modern philosophy. If, as I sated in the beginning, Leibniz showed such interest in the relation between conceptual contents and propositional contents, going so far as to make it the subject of his first slogan, it is undoubtedly because this relation was or had been of interest to those recent authors that made up his intellectual horizon. Furthermore, he must have believed that his contribution would offer some clarification. In fact, following Edwin Curley (1975), important commentators chose to place this relation at the heart of their interpretations. Curley and Michael Della Rocca (2003) stress the fact that it

nication to something presumption-like in thought – is also, and more generally, contestable. I remark that Geach made it into some kind of systemic principle in *Mental Acts*. See Geach 1957, 98.

13   "This seems to imply not merely that I shall make my idea the content of a belief unless I am prevented from doing so, but that the idea actually is a belief. [...] Every idea is intrinsically belief-like" (Bennett 1984, 170).

is indeed a proposition, or something that has a propositional format, that is at play in E2P49 – the affirmation that the tree angles of a triangle are equal to two right angles – and that the passage's details contain two complementary claims about this proposition. Spinoza firstly claims that the proposition contains the idea of the triangle:

> This affirmation involves the concept or idea of the triangle, i.e. it cannot be conceived without the idea of the triangle. For to say that A must involve the concept of B is the same as to say that A cannot be conceived without B. Further this affirmation (by E2Ax3) also cannot be without the idea of the triangle. Therefore, this affirmation can neither be nor be conceived without the idea of the triangle.

Conversely he claims that the idea of the triangle itself contains a proposition:

> Next, this idea of the triangle must involve this same affirmation, viz. that its three angles equal two right angles.

"Affirmation" simultaneously designates a propositional format and an assertion-like act. Spinoza invites us to pay less attention to the format and to concentrate on the act. His response to the third objection is very clear on this point (E2P49S). To the question of knowing whether a true proposition and a false proposition have the same ontological status and whether they contain the same kind of act – in other words whether identical formats imply something on the side of acts – Spinoza answers that affirmations that can be said to have the same format whatever their truth value are merely abstractions. They are affirmations in a general and abstract sense and they are also the effect of the will, taken in the general and abstract sense. He continues:

> Not however insofar as it [the will] is considered to constitute the essence of an idea. For to that extent particular affirmations differ from each other as much as ideas themselves. For example, the affirmation involved in the idea of a circle differs from that involved in the idea of a triangle as much as the idea of a circle differs from the idea of a triangle.

General propositions have no reality. The propositional format may render the act explicit (*actus signatus*), but it does not carry it out (*actus exercitus*). That which makes the affirming act real is not found in logic, it must entirely be analysed in terms of the causality in ideas.

3   Terms and Propositions

Spinoza, like Leibniz, proposes an important modification to the Aristotelian framework. Leibniz, like Spinoza, is a friend of concepts. The slogan *praedicatum inest subjecto* is a reminder that Leibniz' ontology of propositions is based on founded conceptual links. What separates him from Spinoza is his taking the propositional format and its relation to truth-values seriously.

In order to clarify this point, let us recall that truth's place in the logical edifice was determined by the tripartition of the three operations of the mind and of the three kinds of entities to which they gave way: concepts, propositions, and inferences or reasonings. According to the canonical text of Thomas Aquinas' commentary of the *Posterior Analytics*, truth belongs to the second and the third level of the edifice and is absent from the first – these levels are simultaneously chapters of the logic and parts of the Aristotelian corpus.

> The parts of Logic must therefore correspond to the different acts of reason, of which there are three. [...] The first of these is the understanding of indivisible or simple things, the act by which we conceive what a thing is. (some call this act 'intellectual representation' or 'intellectual imagination'). Aristotle's teaching in the categories is ordered to this act of reason. The second act of the intellect is the composition or division of things that are understood, the act in which truth or falsity is found. Aristotle considers what pertains to this act in his *On Interpretation*. The third act is proper to reason itself ; it is the act by which we proceed from one thing to another, so as to arrive at a knowledge of the unknown from the known. The remaining logical treatises pertain to the third act of reason. (*Commentary on Aritotle's Posterior Analytics*: *Expositio, Proemium*, 4; St. Thomas Aquinas 2007, 1)

The concept is, in itself, neither true nor false. It could be thought of as allowing a grasping of the essence. However, in order for it to be a truth bearer it must undergo a syntactical change. An affirmation or "composition", however simple, integrates it into an entity whose format is propositional.[14] Spinoza is perfectly aware of the heterodox nature of his claim that ideas envelop an affirmation. The principle according to which concepts are in themselves assertive frees him from the received logical syntax.[15]

Leibniz' theory of propositions resembles the Spinozist thesis insofar as it modifies the thomist tripartition. However, it makes a log-

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[14]   On this point see Rauzy 2001, 28-34.

[15]   Wilson 1993 insists on the difficulties raised by Spinoza's position on truth-bearers.

ically preferable modification possible. Leibniz chooses to rely on the analysis of terms – notions, concepts, and maybe even ideas.[16] He succeeds in laying the foundations of a logical calculus by expressing these terms in a novel symbolism. It must be carried out with the use of notations or characters for which rules of substitution are given. These rules must themselves line up with the traditional logic, i.e. make it possible to rewrite the syllogistic as a series of theorems.

Characters make up formulas. If a formula is equivalent to a character and can be substituted *salva veritate* for it, it is its value. A relation of equipollence is said to hold among those characters or formulae that can be substitute for each other without violating the laws of the calculus. In 1688, while in possession of a finished version of this calculus, Leibniz writes:

> Besides equipollence, there are many other relations which the subject itself will manifest, e.g., inclusions, similarities, determinations – each will be dealt with in the proper place. Relations are to characters and formulae what judgments are to concepts, or the second operation of the mind to the first. [...] Therefore, it is clear that formulae (which may be understood to include – as the simplest ones – the characters themselves), relations and operations, are related in the same way as concepts, judgments and syllogisms. (A VI 4, 920)

Thus, the new approach that emphasizes relations replaces the traditional tripartition. It is nevertheless accompanied by an important change that is heavily insisted upon by Leibniz: the reduction of propositions to terms and of terms to propositions.

> Propositions must be considered as terms, and terms must be considered as propositions. Leib(red.)*

This thesis is somewhat difficult because it is effectively stated in both directions.[17] It occurs in different drafts, often of an exploratory nature, such that it is not always possible to determine whether Leibniz therein gives his definitive opinion. The reduction which proceeds from left to right, from propositions to terms, is explicitly

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16 Here there are some nuances that we may set aside in the perspective of the FP. Leibniz writes in an important essay on logical calculus: "By 'term' I understand, not a name, but a concept, i.e. that which is signified by a name. You could also call it a notion, an idea" (A VI 4, 238/Leibniz 1966, 39).

17 "Just as any term can be conceived as a proposition, as we have explained, so also any proposition can be conceived as a term; thus, man's being an animal is a fact, is a proposition, is of such a kind, is a cause, is a reason, etc." (*Generales Inquisitiones*, § 109, A VI 4, 770/Leibniz 1966, 71).

presented as the core of the 1686 logical program and includes the hypothetical propositions:

> If, as I hope, I can conceive all propositions as terms, and hypotheticals as categoricals, and if I can treat all propositions universally, this promises a wonderful ease in my symbolism and analysis of concepts, and will be a discovery of the greatest importance. (*Generales Inquisitiones*, § 75, A VI 4, 764/Leibniz 1966, 66)

The universal affirmative proposition is written as an identity statement by means of an "indefinite" term whose use allows the algebraic expression of the quantity:

> An affirmative proposition is 'A is B' or 'A contains B' or, as Aristotle says, 'B is in A' (that is directly). That is, if we substitute a value for A, 'A coincides with BY will appear. [...] So 'A is B' is the same as 'A is coincident with some B' or A = BY. (*Generales Inquisitiones*, §§ 16-17, A VI 4, 751/ Leibniz 1966, 56)

Hypotheticals are categorically expressed when names of propositions intervene as subject and predicate:

> If *A* is a proposition or statement, by non-*A* I understand the proposition *A* to be false. And if I say *A is B*, and *A* and *B* are propositions, then I take this to mean that *B* follows from *A*. The validity of these substitutions has yet to be demonstrated. This will also be useful for the abbreviation of proofs; thus if for *L is A* we would say *C* and for *L is B* we say *D*, then for: If *L is B*, *it follows that L is B* one could substitute *C is D*. (A VI 4, 809)

These names of propositions can be considered as terms because terms are also bearers of truth and falsity:

> Certainly, in general I call a term 'false' which in case of incomplex terms is an impossible, or at any rate a meaningless term, and in the case of complex terms is an impossible proposition, or at any rate a proposition which cannot be proved; and so an analogy remains. (*Generales Inquisitiones*, § 75, A VI 4, 764/Leibniz 1966, 66)

The analogy remains, but it carries with it a number of difficulties. Most notably, Leibniz realized that predicative negation couldn't be identified to propositional negation: "*non est*, non est, *est non*".[18] He

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[18]   Cf. Lenzen 2014, which also constitutes the best synthetic presentation of Leibniz's logic.

also noted that categorical propositions could always be expressed in conditional form but that the converse was not true (A VI 4, 125). It seems to me that he ended up limiting the envisaged reduction by inviting us to only consider conceivable terms, i.e. possible terms. The hesitations, of which traces can be found in the *Generales Inquisitiones*, are very significant in this regard. Leibniz first introduces the truth predicate as follows:

> 'True' in general I define in this way: *A* is true if, when we substitute a value for *A*, and treat in the same way as *A* (if possible) anything which enters into the value of *A*, there never arises *B* and not-*B*, i.e. a contradiction. (*Generales Inquisitiones*, § 56, A VI 4, 757/Leibniz 1966, 60)

Then he seems to hesitate about possibility:

> It seems doubtful whether it is sufficient to prove a truth that, on continued analysis, it should be certain that no contradiction will arise; for it will follow from this that everything possible is true. For my part, I call an incomplex term which is possible 'true' and one which is impossible I call 'false'. But doubt is possible about a complex term, such as 'That A contains B', or 'that A is B'. (*Generales Inquisitiones*, § 61, A VI 4, 758/Leibniz 1966, 61)

In the later texts, particularly the *Nouveaux Essais*, he seems to have a stronger stance on the matter. Wherein Locke enumerates the different meanings of the truth predicate when applied to ideas, Leibniz comments:

> Theophilus: I think that one could understand 'true' and 'false', as applied to ideas, in that way; but as these different senses – involving 'conformity' to three quite different things – aren't in harmony with one another and can't conveniently be brought under a common notion, I would prefer to call ideas 'true' or 'false' by reference to a different tacit affirmation that they all include, namely the affirmation of a possibility. Thus, calling an idea 'possible' ('impossible') if there could (could not) be something that it was the idea of, I propose that we call possible ideas 'true' and impossible ones 'false'.[19]

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[19] "THEOPH. Je crois qu'on pourrait entendre ainsi les vraies ou les fausses idées, mais comme ces différents sens ne conviennent point entre eux, et ne sauraient être rangés commodément sous une notion commune; j'aime mieux appeler les idées vraies ou fausses par rapport à une autre affirmation tacite, qu'elles renferment toutes, qui est celle de la possibilité. Ainsi les idées possibles sont vraies, et les idées impossibles sont fausses" (*Nouveaux essais* II xxxii § 1, A VI 6, 269).

Possibility is truth in 'incomplex terms'. He specifies in book IV that he considers truth as a form of correspondence and, again, provides the following commentary:

> It's true that I have also attributed truth to ideas, by saying that ideas are either true or false; but what I mean by that is the truth of the proposition that the object of the idea is possible. And in that sense one could also say that a thing is true, i.e. attribute truth to the proposition that affirms the thing's actual or at least possible existence.[20]

In the calculus, as in the categorical tables, Leibniz forges a term for the sole purpose of expressing possibility. It is the Latin term *Ens* (being) – sometimes also *Res* (thing) – which he defines through conceivability:

> A being (*Ens*) is that whose concept involves something positive or that which can be conceived by us provided what we conceive is possible and involves no contradiction. We know this, first, if the concept is explained perfectly and involves nothing confused, but then in a shorter way, if the thing actually exists, since what exists must certainly be a being or be possible. (A VI 4, 1500)[21]

This term is systematically used in logic and in the expression of the syllogistic.[22] In this regard it should be noted that Leibniz did not introduce possibility in order to produce an analysis of modal statements. Rather, he did so to express the relationship between propositions and their conceptual ingredients. A term is conceived when it is the name of an entity whose possibility is established or presumed. For this reason we should be weary of what philosophers call "ideas". What they designate as such are concepts from which the dimension of possibility has often been omitted and with which it is highly unlikely that we could reach the truth.[23]

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20 "Il est vrai que j'ai attribué aussi la vérité aux idées en disant que les idées sont vraies ou fausses; mais alors je l'entends en effet de la vérité des propositions qui affirment la possibilité de l'objet de l'Idée. Et dans ce même sens on peut dire encore qu'un être est vrai, c'est-à-dire la proposition qui affirme son existence actuelle ou du moins possible" (*Nouveaux essais* IV v § 4, A VI 6, 397-8).

21 See also A VI 4, 149: "Aliquid autem et Ens revera quidem idem sunt, sed differunt in modo concipiendi. Possum etiam dicere Ens esse cujus conceptus aliquid positivi involvit, seu aliquid ponit quod a nobis concipi potest"; and the recurrent definition: "Ens est positivum quod distincte concipi potest" (A VI 4, 570).

22 "'Some *A* is *B*' gives '*AB* is a thing' [...] 'Every *A* is *B*' gives '*A* non-*B* is not a thing'" (Leibniz 1966, 81). The last part of the *Generales Inquisitiones* is dedicated to the use of *Ens* or *Res* in the syllogistic.

23 The critique of the logic of ideas is an important theme in *De Summa rerum* (1676). It marks the beginning of Leibniz' work on conceivability. For example, he writes:

It is therefore the conceivability of terms that allows for an understanding of the unification of the logical syntax and of the reform ultimately adopted. The propositional format imposes itself upon entities that we previously placed at the first level of the logic. The traditional tripartition is abandoned. Leibniz, like Spinoza, considers concepts or notions, as implicitly containing an affirmation. But he maintains, contrary to Spinoza, that this affirmation is made explicit in the logical syntax by means of the technical term *Ens* or *Res*.

Leib(red.)   All conceivable terms contain an affirmation of possibility and have, to this effect, a propositional format.

4 Assertion

When we conceive of a concept or a notion, we settle it, so to speak, into the logical space: it is the concept of something if it is a possible (*Ens*). Propositions are made of complex concepts for which we affirm one by one, and taken together, their possibility: *singulatim* and *simul*. What can be said of assertive force? The proposition symbolized in the logical calculus is sometimes called "*enuntiatio*" (A VI 4, 736-8), "truth"[24] but never, to my knowledge, "assertion". However, Leibniz sometimes inquires into the assertive force of a statement, especially when that statement contains a factive predicate or a predicate for which context favors a factive interpretation. In these cases, he mentions assertions and distinguishes conditional assertions from simple assertions. These kinds of analyses are found in fragments of rational grammar that are directed towards ordinary language, most notably in the text titled *Analysis particularum*.

I propose three examples taken from this text. Concerning *Ergo* and *Igitur*, which are "marks of inference", Leibniz makes the following remark. When we say:

(1)   The king is wise, therefore (*ergo*) the citizen is happy.

"When I think of something than which a greater can not be thought, I think of something different from when I think separately of the ideas of the individual things that are comprehended under these words, namely 'something', 'greater', 'be thought', 'not', 'can'. I have separately the idea of that which I call 'something', of that which I call 'greater' and of that which I call 'thought'; and so I think of one after the other. Later, I do not join the ideas of these things to one another, but I join only the words or symbols, and I imagine that I have the idea of that than which a greater cannot be thought – as if I were thinking of all these at the same time. In this, we deceive and we are deceived, and this is the origin of error about ideas. We have the ideas of simples, we have only the symbols of composites" (Leibniz 1992, 5).

24   For example in the title of the 1686 essay: *General Inquiries about the Analysis of Concepts and of Truths*, where 'Truths' denotes propositions.

We are not merely saying:

(2)   If the king is wise it follows (*sequitur*) that the citizen is happy.

Because, through (1), we are claiming that the king is wise and that the citizen is happy, but not through (2). He continues: here there is no Enthymeme, nor any defect in the proposition, there is only an envelopment (*involutio*).[25] In other words – insofar as I understand this passage – we need not suppose that the speaker is communicating through (1) some reasoning that is grounded in (2), that is to say an MP whose factual premise is implicit:

Explicit general premise: If the king is wise then the citizen is happy.

Implicit factual premise: The king is wise.

Conclusion: the citizen is happy.

The statement of (1) is factual in the sense that the facts –that the king is wise and that the citizen is happy– are neither more nor less asserted than the inference. This is, to paraphrase Geach, a double-barreled assertion: "an assertion about [the king] gets smuggled in along with, and under cover of, an instance of the MP" (Geach 1965, 453). This is why (1) has, for Leibniz, a greater assertive force than (2). However, nothing is said about the relationship between this greater force and the proposition itself (and it is mainly this relationship which is the object of the FP debate). It seems to me that, from the overall project of the text, and on the basis of what we know of the proposition as used by the logician, we may put forth an interpretation.

The proposition in itself affirms a possibility. The greater force grafts itself onto the propositional content by way of the *illatio* (*ergo*). The passage in question proposes an 'analysis' of *ergo* as follows: in its ordinary use, as a particle which belongs to Latin, *ergo* allows: (i) to signify an *illatio* – *ergo* indicates that what is said contains an inference – and (ii) to confer factivity – *ergo* indicates that each of the conjuncts states a fact and is taken to be true in the strong sense. We may raise some doubts; we may notice, for example, that the indicative mood should intervene in an account of the factivity of (1).

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25   "Ergo seu igitur. Nota illationis. Cum dico Sapiens est Rex, ergo felix est civitas, non tantum dico si sapiens est Rex sequitur quod felix est civitas, sed etiam affirmo sapientem regem et civitatem felicem esse, ac proinde totus syllogismus hypotheticus in his absolvitur. Ut proinde revera nullum hic sit Enthymema, neque suppressio, seu defectus propositionis, sed tantum involutio" (A VI 4, 658).

However, the important point lies elsewhere, in the layers of the semantics suggested by Leibniz and in the status it confers to propositions. Let us call *thin* proposition the logician's proposition that contains in itself an affirmation of possibility. The use of *ergo* makes it possible to add something to the statement of the thin proposition. The speaker bases himself on the logician's proposition and enriches it through the resources offered by the language. The conditional statement (2), contrary to (1), does not add anything with respects to possibility, it simply connects, through the resources offered by logic, the thin propositions 'that the king is wise' and 'that the citizen is happy'.

In the propositions that Leibniz calls hypothetical the antecedent and the consequent are thus thin propositions. This point is confirmed by numerous texts. The passages on the metaphysical status of "hypothetical propositions" in the letter to Foucher from 1675 offer one such confirmation:

> But although you do not enter explicitly into an examination of hypothetical propositions, I am still of the opinion that this should be done and that we should admit none without having entirely demonstrated and resolved it into identities.
>
> It is the truths which deal with what is in fact outside of us which are the primary subject of your investigations. Now in the first place, we cannot deny that the very truth of hypothetical propositions themselves is something outside of us and independent of us. For all hypothetical propositions assert what would be or would not be, if something or its contrary were posited ; consequently, they assume two things at the same time which agree with each other, or the possibility or impossibility, necessity or indifference, of something. But this possibility, impossibility, or necessity (for the necessity of one thing is the impossibility of its contrary) is not a chimera which we create, since all that we do consists in recognizing them, in spite of ourselves and in a constant manner. (Leibniz 1956, 235-6)

When it comes to thin propositions it is superfluous to add a marker of assertion. However, thin propositions only commit us to possibility, and it so happens that possibility is all that we require for the antecedent and the consequent of conditional sentences. This is good news for the debate concerning the FP. Recall that, for Frege, one of the main reasons for introducing the force and content distinction finds its origin in these kinds of sentence. The assertion of a conditional sentence does not imply the assertion of its components, and nevertheless supposes that we can grasp their content. The content of the components of conditionals is neither asserted nor semantically inert. For Leibniz, the antecedent and the consequent do not have

any special neutrality (as it is for Fregeans), nor are they stripped of their assertive force (as it is for anti-Fregeans). Their propositional status is perfectly normal.

Given that a thin proposition only commits us to possibility, it is probable that we will have to add something to it in most situations of communication; that we will have to consider it under a stronger modality, for example, actuality, probability, or necessity. We have at our disposal several means allowing us to do so. They are mentioned in the *Analysis particularum*. There exists, for example, adverbs of assertion: *ita, certe, omnino* – among those we can count *utique* and *non* which are "signs of affirmation and negation, that is to say, of truth and of falsehood".

> About these [*utique* et *non*] we will only have to note that one or the other of the two signs can be prefixed to any proposition or implied by it. […] Besides the sign of negation and of affirmation, we have other signs such as *forte* – that of the putting into doubt; *certe, omnino* the signs of the more complete affirmation; *necessario*: that of the perpetual, or necessary, affirmation. *An* (is it …?) signifies that we are asking which of the signs, that of negation or that of affirmation, must be prefixed. Moreover, all adverbs of assertion or of affirmation can be converted to nouns when speaking not about things, but about statements. For example, with 'A *utique* is B' we can say 'It is true that A is B' that is to say: 'the proposition *that A is B* is true'.[26]

The thin proposition contains the affirmation of possibility and allows us to avoid using the force cancellation (Recanati 2019) in the case of conditional sentences. Statements of an disjunction nevertheless seem to push Leibniz to recognize that an assertion can be modifiable and to envisage a rectification for illocutory acts. He introduces in the analysis of *alioqui*, what he calls, the conditional assertion to avoid having to systematically resort to rectification. This is our second passage, and this time the example is:

(3) The child will study, or else he will cry (*Puer studebit, alioqui plorabit*)

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26 "Restant Adverbia Assertionis, quae sunt Ita vel utique seu ja. Non. An vel annon. Omnino. Forte. Certe. Necessario. Ex his quidem utique et non, quae sunt signa affirmationis et negationis, seu veritatis et falsitatis in Enuntiatione, non possunt evitari. […] Praeter signum negationis et affirmationis dantur et alia, ut dubitationis, forte, affirmationis [plenissimae], ut certe, omnino, affirmationis perpetuae seu necessariae, ut necessario. An autem significat quaeri quodnam signum assertionis vel enuntiationis sit ponendum. Possunt tamen etiam assertionis seu Enuntiationis adverbia converti in nomina, si loco rerum loquamur de ipsis Enuntiationibus, ut A utique est B, id est verum est quod A est B, seu propositio A est B est vera" (A VI 4, 666).

If he does not study, he will cry: *A will be B, if A is not B then it will be C*. Leibniz continues:

> Here we must be careful because when we state: *puer studebit, alioqui plorabit*, or *puer studebit aut plorabit*, it is as if there were a correction of what was first said and we must ask ourselves whether this correction should be introduced in the general language. Because he who says *The child will study or else he will cry*, says that the child will study, then recognizes that he has said something false, and thereafter proposes a correction. *Or at least he will cry*. If we want to avoid [having to resort to] falsehood so that we won't need to introduce a correction, we may have to explain *aut* and *alioqui* in the following manner: *puer studebit nisi polraturus est*. Because there is neither cut nor omission in the case of conditionals, and we cannot say *puer studebit nisi ploraturus est* and absolutely infer that the child will study. I prefer in the general language to distinguish this conditional assertion from the absolute assertion and I prefer that we always be able to resort to omissions. As if I was saying: It follows that the child will study, *si non est ploraturus*.[27]

It can be surprising to see Leibniz introducing to types of assertions and moving away, in the analysis of *alioqui,* from the solution proposed for conditionals. This is how I understand the passage: if the use of the sentence is understood as the statement of a conditional assertion, the fact represented in the propositional content (that the child will study), is not affirmed. If it is understood as the statement of a simple assertion, it is affirmed. A seemingly disjunctive sentence is interpreted as a simple assertion if the fact contained in the first disjunct is affirmed. In this case the second disjunct introduces a correction: the speaker has said a falsehood. When this is not the case, when it is merely the possibility of the disjuncts that is affirmed, then a seemingly disjunctive sentence is interpreted as a conditional assertion. A conditional

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27 "Alioqui. Puer studebit, alioqui plorabit, hoc est: aut plorabit, seu: si puer non studebit, plorabit. Puer seu A erit studens seu B, si A non erit B erit plorans. Ita evitabitur repetitio, alioqui verbotenus interpretando fiet: puer erit studens, si puer non erit studens, erit plorans. Est tamen adhuc opus animadversione aliqua, nam qui dicit puer studebit, alioqui plorabit, vel puer studebit aut plorabit, est quasi correctio praecedentis, est videndum an hoc ferendum in lingua generali, ut quis proferat falsum seu corrigat sermonem suum. Nam qui dicit puer studebit aut plorabit, is utique dicit, puer studebit, sed mox agnoscit se falsum dixisse, itaque correctivum subjicit; vel saltem plorabit. Ut igitur falsitas evitetur nec correctione opus sit, forte aut vel alioqui ita exponi poterit: puer studebit nisi ploraturus est. Scilicet resectiones seu omissiones non succedunt in casu conditionis, nec si dicere licet puer studebit nisi ploraturus est, inde inferri potest absolute puer studebit. Malim in lingua generali istud conditionale assertum distingui ab absoluto, malim enim posse semper procedere omissiones. Perinde ac si dicerem: Sequitur quod puer studebit, si non est ploraturus" (A VI 4, 655).

assertion does not add any assertive force to that of the thin proposition. It is not clear whether Leibniz has some preference for one or the other of these assertions, or whether, as I believe, he considers them as two equal possibilities offered by the use of language.

The third example supports this latter interpretation. In a remarkable passage of the *Analysis particularum*, Leibniz compares:

(4)   I want you to be pious (*volo ut sis pius*).

and

(5)   I see that you are pious (*video quod es pius*).

He notes that in (4) it is not asserted that the addressee is pious, while in (5) it is. He then wonders whether this difference in the assertive force of the embedded proposition could be attributed to the semantic contribution of '*ut*' and of '*quod*' respectively. He notes that there are cases in which the opposite is true: a use of '*ut*' is accompanied by the assertion of the embedded proposition:

(6)   Make sure to be pious (*feci ut sit pius*).

and cases in which '*quod*' does not seem to introduce an assertion, as in:

(7)   It is said that Peter is learned (*Dicitur quod Petrus est doctus*).

in which the speaker report something but does not want to express his own assent. This passage proposes a finer analysis that includes the resources usually employed by Leibniz in his account of highly relational statements (*quatenus*):

> All things considered, in the first case the assertion is born out of the fact that the addition of 'make sure' includes the truth of the assertion; in the second case, the assertion is not entirely absent, it is made, although only relatively and not with full approval. The resolution is as follows: I want you to be pious, that is to say: I am wanting insofar as (*quatenus*) the wanted is this: that you be pious. I know that you are pious, I hear that you are pious; we could add: I know that it is true that you are pious, I hear that it is true that you are pious. In this sense, '*quod*' isn't one of those conjunctions that can be retained without a more extensive analysis.[28]

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[28]   "Re tamen recte expensa, priore casu oritur assertio ex eo quod veritatem assertionis includit additum feci; posteriore casu non abest omnino assertio sed ponitur, li-

The text is partly aporetic, but the attempt at a relational assertion deserves to be emphasized. Through Junigius, Leibniz learns to express irreducible relations by a reduplication of the predicate (*quatenus*).[29] A relation is then thought of as a species of *consequentia*. In his account of relations, Leibniz isolates a predicative part and an auxiliary expression, made explicit by reduplication, whose function is to authorize a set of inferences or to fix a reference. For example, in the relational *doctor = magis doctus,* he isolates *doctus*, which is a kind of radical, and, on the other hand: *magis aliquo qui est hic*, which counts as an auxiliary expression. The same analysis is applied to the 'ut-clause'. 'I am wanting' is asserted under a more or less strong modality, determined by context. 'Insofar as the wanted is this: that you be pious' is a determination of the predicate containing a reference to the proposition 'quod es pius'. Since the speaker strives for the fact itself, not just simple possibility, the proposition he references is asserted, and the assertion is simple or non-conditional.

5 The Leibniz View

Let us now attempt to present the main features of a Leibnizian position on the FP.

1. Propositions are both assertive and neutral. Assertive because they contain by default an affirmation or a judgment, and neutral because the default affirmation they contain is that of possibility.
2. The unity of the proposition is assured by the conceptual relation it contains. The composition act contributes to this unity.
3. We can attribute to the proposition a variety of modalities such as actuality, necessity, and probability (in the case of beliefs arising in degrees). These modalities are not part of the propositional content itself. They are prefixed in logic and in thought.
4. Questions are formulated by means of the same propositional content as assertions and orders.

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cet tantum relative nec cum plena approbatione. Resolutio talis est: volo ut sis pius id est Ego sum volens quatenus volitum est hoc: tu es pius. Vel adhibita definitione voluntatis; conor quatenus cogito: tu es pius. At feci ut sis pius significat, quia ego egi tu es pius. Scio quod tu es pius, audio quod tu es pius, addi potest: scio verum esse quod tu es pius, audio verum esse quod tu es pius. Caeterum ipsum, quod hoc sensu usurpatum videtur esse ex numero earum conjunctionum quae sine ulteriore resolutione possunt retineri" (A VI 4, 659).

29   See A VI 4, 1241-4 for notes taken from J. Jung; Mugnai (1992, 13, 79-80); and A VI 4, 643-4, 114-15 (for the analysis of *quatenus*), and 651-2.

The question of knowing how Leibniz conceives of the relation between assertion and belief deserves a separate study. Here it suffices to note that the Leibnizian position is anti-Spinozist in the following sense: although beliefs are primarily expressed through assertions, we need not describe the doxastic normativity on the sole basis of the grammar of assertion. The principle reason is this: beliefs arise in degrees. They require probability.

Finally, on the relationship between assertion and representation. Leibniz had an advanced conception of representation. We are indebted to Swoyer and to Kulstad for their decisive clarifications of the Leibnizian notion and use of 'expression', so much so that the precise signification of this notion is no longer a matter of debate: the expression of a thing by another thing is a structural resemblance, i.e. a second order relation between predicates that, themselves, designate properties and relations. These predicates, taken together, constitute an expression when their surrogates are found, or located, in that which is expressed. Since there are more predicates expressible in that which is expressed than there are predicates in the expression – for example, there are always more discernable locations in the city than there are locations symbolized on the map that represents it – we will furthermore say, to highlight this asymmetry, that the expression is an embedding. For Leibniz, proposition are abstract objects. They are abstract in the *positive* sense of 'logical' abstracts. The representational capacity of propositions can be explained by a disposition of the mind to locate or produce expressions (Rauzy 2014). The representational force of proposition is not mind-independent, but it does not depend on assertion or judgment.

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