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Leibniz and Toulmin: Rationalism without Dogmas (Pluralism, Pragmatism, and Gradualism)

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ABSTRACT: The aim of this paper is to connect Leibniz's and Toulmin's conceptions about practical and deliberative rationality. When trying to rationally justify contingent judgments Leibniz, like Toulmin, defends a weighing argumentative method. Thus, in Leibniz we can discern the balance between the legitimate demands of formal models of rationality and the lessons of a practice "situated" on a historical, social, and evaluative context (*theoria cum praxi*).

KEYWORDS: Leibniz, Toulmin, reasonableness, scales of reason, theoria cum praxi

INTRODUCTION

Usually, G.W. Leibniz has been considered as a typical example of rationalist thinkers of XVII century, joined to 'new science' and deep trust in human reason. 'Nothing happens without a sufficient reason', as prays the known principle of his philosophy. This is also the first Toulmin's approach to the philosopher of Leipzig, as pointed out, for example, in his excellent book *Cosmopolis* (1990[2001]). However, Leibniz was far from the classical model of rationalist, à la Descartes, but a rationalist with a lot of tones and shades. Stephen Toulmin himself regards Leibniz as what it could be called a 'qualified rationalist':

(...) Although he continued to advocate Unity as a general program, Leibniz saw the world made up of multiple levels of units: not all of them had the same theoretical status as 'particles' in Newton's dynamics. Instead, he recognized differences of complexity in the activities —even the perception— of different natural systems, and he referred to them as so many distinct kinds of 'monads' within his overall System of the World. (Toulmin, 2001[2003], p. 136)

In Leibniz, we cannot establish a clear cut distinction between his life, his public activities, on the one hand, and his thought and his philosophical reflections, on the other. This issue has been also remarked on by Toulmin since Leibniz's 'rationalist dream' is the outcome of an age characterized by theological disputes, religious wars, and political upheavals (Toulmin, 1990[2001], pp. 145 ff.).

At this point it is beneficial to recall that, in Leibnizian thought, theory and praxis are strongly tied, mutually co-involved, according to his known motto 'theoria cum praxi.' This means that the theoretical reason is guided by the necessities of the practical reason in the same way that the practical reason clarifies its goals with the developments and the imperatives of the theoretical reason. That is the case with Toulmin's philosophical standpoints too (Toulmin, 2001[2003], p. 247).

Furthermore, the universe of human praxis is headed by the *factum* of the contingent, those that could be in another way;¹ that is, the realm of liberty, morals, politics and, in sum, of history. Starting from Aristotelian practical philosophy, Leibniz clearly objects the determinism, as pointed out in his criticism to Spinoza's *Ethics*: 'If all things exist necessarily ... moral philosophy would be destroyed.' In short, the contingency is not only a metaphysical principle but basically a moral one, since it makes possible the freedom of individuals and, thus, the non forecast of their actions. In Leibniz's opinion, human action is not only free but is expressed in a great variety (pluralism) and human history, individual and social, is up to it, constituting the contingent *par excellence*.² Besides, this sphere of the contradiction of interests, and the difference. This complex approach to reality is what Leibnizian rationalism copes with.

In the following, I present some of the key elements of Leibniz's conceptions about practical and deliberative rationality and their connection to Toulmin's ones. Both uphold a type of rationality in which the principles must be joined to the particular and contingent, to what it is characteristic of the case and its circumstance. That is, a 'situated' rationality, namely, a historical one, linked to differing interests and values, and bonded to practice and experience (*reasonableness* in Toulmin's terms).

1. THE MAXIM PROJECT OF LEIBNIZ

Faced with the challenge of scepticism, Leibniz suggests a two-way solution. The first and best known is a rigorous and strict formalization of thought, which Fernando Gil calls 'the maxim project.' It involves the idea of a *Characteristica univeralis*, a conceptual logic —which was later to inspire Frege's *Begriffsschrift*— that would allow for only one valid solution from the premises under consideration: «instead of discussing, let's calculate».³ It is the working model for geometry and arithmetic; the method of deductive logic, which is the art of reason in the domain of the necessary —where principles, such as that of non-contradiction, applied to the possible or to essences, work (*NN.EE.* I, ch. 1, §5; *Monadology* 31; *Theodicy* 44, 169). It is also the dream of Rationalism, which aspires to a universal method, a perfect language and a unitary system of Nature, with the mathematics model as its starting point:

But there are also other cases in which a judge of controversies other than reason is equally unnecessary, since truth can be clearly found by precise paths and commonly known ways, as it is the case with geometric and arithmetical issues about the magnitude of things. Certainly, there is no need of judge in

¹ This Leibnizian support of the contingency was in a moment when theological controversies about free will and predestination are changing into the polemics on the liberty and the natural determinism. The scientific developments showed a universe tied to general laws that allow forecasting the natural facts so, if human being is a part of the natural world, his actions has to be subjected to the same causal determinism. Leibniz adopts mechanicism, up to a point, but strongly rejects the absolute determinism in any form.

² Leibniz affirms, criticizing art. 6 of Descartes' *Principia*: 'We have free will not when we perceive, but when we act' (GP IV, 357).

³ In this regard, Leibniz shows himself to be the clearest precursor of modern formal logic, which becomes the dominant conception in many contemporary readings of this philosopher. On the one hand, the idea of a *Characteristica universalis* is a precedent of symbolic logic; and, on the other, his *raciocinator* calculus is a precedent of contemporary conceptions of mathematic-algebraic logic.

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calculus; it is enough to carefully enumerate without omitting anything for the conclusion to follow necessarily, in all evidence, as in the case of Geometry.⁴

In this approach, the search for a universal and perfect language plays a prominent role, as Toulmin has highlighted in his works. That is, the development of a universal language by means of symbols and words that drive reason and where mistakes are merely calculation faults.

However, this research was not original of Leibniz since there was an important tradition in that sense. We have not to forget Toulmin's viewpoint that Leibniz was a product of his age. In fact, Leibniz knew the works of the forerunners in the search for a perfect language: Ramon Llull, John Dee, Pedro Bermudo, George Dalgarno, Atanasio Kircher or John Wilkins (Eco, 1993). In Leibniz, the project of a universal or rational language would have the advantage that the symbol, the *Characteristica*, does not only represent directly ideas and cognitive contents (like Egyptian ideograms or Chinese writing), but allows reasoning in a way similar to arithmetic calculation: 'Cum Deus calculate et cogitationem exercet, fit mundus.'⁵

As pointed out by Marcelo Dascal, the cognitive role of language as an instrument of reason is a precedent of modern theses about the identification of language and thought (Fodor, Dretske). Clearly, Leibniz affirms that thought is basically symbolic (Dascal, 1978, 1987; Rutherford, 1995).

Nevertheless, Leibniz recognizes the great gnoseological and moral value of natural languages as proven by his important etymological studies. One of the principles of his thought is the positive appraisal of diversity and plurality —as commented further on.

As remarked by Concha Roldán in her excellent work 'Langue naturelle et éthique rationnelle' (in press), the plurality of languages is not only unavoidable but necessary from the ethical Leibnizian project which wants to show the complexity and metaphysical richness of individuals.

Thus, from a pluralist Leibnizian perspective, the diversity of natural languages is richness, with an enormous value, and the *Characteristica* would be an auxiliary language in order to help our comprehension of the world and our understanding of others⁶:'(...) cuius auxilio diversae nationes animi sensa comunicare et quae scripsit alter in sua quisque lingua legere queat ...'⁷

Summarizing, the 'maxim project' does not finish Leibnizian 'theoria cum praxi.' Specifically, the formal-calculistic model is clearly insufficient for contingent matters (moral, juridical, political, etc.), and Leibniz himself acknowledges this:

Thus the form of disputation has been shown to be necessary in necessary matters where eternal truths occur but not in contingent matters where the most probable must be chosen. (...) For the common saying is true enough, *rationes non esse numerandas sed ponderandas*; arguments are not to be counted but weighed.⁸

⁴ Brief commentaries on the judge of controversies or the balance of reason and norm of the text § 58 (A, VI, 1).

⁵ Dialogue de la conexión entre les mots et les choses, 1677 (A VI, 4, 22).

⁶ La place d'autrui principle is a main rule of Leibnizian practical reason: put yourself in the place of others (La place d'autrui, 1679. A VI, 3, 903904).

⁷ De numeris characteristicis ad linguam universalem constituendam (A VI, 4, 264).

⁸ Letter to Gabriel Wagner on the value of logic, 1696 (L 467).

2. LEIBNIZIAN MINIMAL METHOD

In Leibniz we also find a 'minimal method' when trying to rationally justify contingent judgments. As remembered by Ezequiel de Olaso (1995), Leibniz was the philosopher of the diversity, pluralism and tolerance, and always considered positively the controversies, upon the condition that they will be regulated by means of a method. It seems without a doubt that debate and controversy are basic, extended, and typically ways of human interaction. The controversies are a type of polemics that hold an intermediate position between discussion and dispute, but which would not be reduced to mere unsolvable conflicts of preferences.

At this point a dialogic perspective of analysis is required; one that does not unleash wild rhetoric, and one that serves to justify rationality in contingent judgments, especially, in situations of conflict —the method mentioned by Olaso. There is no doubt that dialogue (among churches, states, philosophers, and cultures) is a key to Leibniz's theoretical and practical moral problems dealing with scientific-technical research, with professions, with the clash among cultures, etc. stirs up the concern about practice, moving us away from abstract moral theories and closer to the case method. This issue approximate Leibniz to Toulmin and Jonsen's theses about 'new casuistry' (Toulmin and Jonsen, 1988), a kind of moral reasoning related to circumstances and situations, as a reaction against the oversimplification of moral realm and against the 'tyranny of principles' (Toulmin, 1981). They reject 'moral geometry' but rather preferring 'practical wisdom.' The new casuistry does not offer 'prescriptions' or 'recipes' but upholds the necessity of analysis, weighing and valuation of circumstances; it is, basically, 'prudent.' In the case of Leibniz, justice is inconceivable apart from prudence. Justice, in this sense, would be no more than a form of prudence that avoids hurting others and fosters Common Good (the basic principle of his ethical-political thought).⁹

So, neither a mechanical application of principles nor abandonment to passions in judgment serves as a valid instrument for this type of analysis. Leibnizian —and also that of Toulmin and Jonsen— is rather a proposal, like Aristotle's *phronesis*, which is placed on an intermediate or pragmatic level, or a *blandior ratio*; i.e., non-rigid forms of reasoning which are crucial in most of Leibniz's theoretical and practical enterprises, without a clear line between them:

-The importance of presumption and interpretation in legal domain.

-The gradualist approach to religious differences and the search for a re-unification of the churches (Irenism).

-The idea of 'defensibility' (reasonableness) in *Theodicy* versus naïve Lutheran literalism.

-The understanding of science as a guided, cooperative and institutionalized activity.

-Ethical consequentialism, close to some utilitarian approaches.

-Political pragmatism, etc.

Therefore, Leibniz does not consider a mere calculistic method (the mere sum of probabilities, for example)¹⁰ to be a suitable instrument for the analysis of contingent matters — in the way that classic deductive logic is for necessary things.

⁹ Elementa Juris Naturalis (A VI, 1, 459-465; L 134, 137).

¹⁰ There is a tension, even some confusion, in Leibniz between the concept of probability, linked to juridical tools as presumption, and the notion of prudence. The former has an algorithmic character, as a mathematical model, to deal with uncertainty; whereas the latter has more to do with the relational and gradual ideas of proportionality and similarity. Somehow, prudence would be characterized by 'utility', weighed with probability, without being reduced to it.

For Dascal (2001), Leibniz would be an example of a 'soft rationalist', who has abandoned an arrogant and totalitarian approach to reason. In Leibniz, we can discern, using Toulmin's terms, the balance between the legitimate demands of formal models of rationality and the lessons of a practice 'situated' on a historical, social and evaluative context.

This weighing 'method' would include:

-rules of a heuristic type (such as presumptions);¹¹

-the determination of the status quaestionis of argumentative process;

-paying attention to the descriptive terms of other's position;

-considering the epistemic reliability of premises;

-assessing the relevance of the elements of discourse;¹²

-taking into account analogies and comparisons;

-specifying the burden of proof.

This picture of argumentative weighing method fits with Toulmin's criticism on argumentations —in *The Uses of Argument*— considered as merely formal-deductive inferences, reacting against narrow and classical logical approaches to ordinary reasoning. This way we can make *reasonable*, although *defeasible*, decisions, which are non-definite and non-stringent. Thus, returning to the question in relation to moral dilemmas or conflicts: given certain circumstances (with specific particular elements, with different agents involved), the choice in a particular moment for one certain precept or principle over another does not cancel the one being rejected. Even if it weakens it, the now rejected norm can be adopted under different circumstances.¹³ In other words, the non-applied norm still holds a degree of normativity that will fade only insofar as it is not being used or in dialectic relation with its use or lack of use in ethical practice — inviting a gradualist analysis of moral principles and concepts.

In Leibniz's work, the 'scales of reason' metaphor emerges as the essential weighing element for rational argumentation in the domain of the contingent, the praxis, and the particular case; scales which, as Dascal says, would no longer have a digital or metrical character (the algorithmic project), but would *also* have a dialectic and comparative character. We say 'also' because, for Leibniz, these two projects are not incompatible or in opposition. Rather, they are complementary. This is precisely Toulmin's central thesis in *Return to Reason*; namely, to restore the balance between the rationalist ideal of necessity and certainty, on the one hand, and ordinary practice and experience, on the other. It would involve a re-equilibrium between rhetoric and logic, the case and moral theory. (Toulmin 2001[2003], pp. 250-51).

¹¹ As any other type of inference, a presumption leads us from a certain amount of already proven or, at least accepted, premises to a conclusion, which constitutes the assumed fact. What is characteristic of presumptions is that we reach certain conclusions from certain factual information for want of other data, but we have the possibility to modify the conclusion if more information is provided. That is to say, it involves a dispensable or revisable conclusion, which is the outcome of a weakened type of inference (in which the deductive property of monotonicity does not appear). Presumptions are, in general, fundamentally, although not exclusively, based on a probability or normality judgment that is the outcome of experience, upon the relation between certain fact (trace-fact or base-fact) and a fact that is taken to be true (presumptive fact).

¹² The notions of 'epistemic reliability' as well as that of 'relevance' are elements of contemporary theories on pragmatics and belief change (Sperber and Wilson; Gärdenfors). In both cases 'qualitative' and not merely 'quantitative' or 'enumerative' elements of discourse are emphasized.

¹³ This is especially contemplated in the case of legal norms, in which the jurist's interpretation in favor of a norm and against an incompatible one does not eliminate conflict, since it does not necessarily cause its revision or derogation.

Unlike the calculistic model (the classic logical-deductive one), which gives rise to definitive and stringent conclusions (i.e., certainties), the weighing model, as represented by the scales of reason, would not provide absolute certainties. However it would provide reasonable 'justified inclinations' in favor of one of the pans of the scale or one of the points of view at issue; this amounts to an inclination that is consistently non-definitive, non-conclusive, and revisable (*incliner sans necessiter*). This idea of unbalance plays a fundamental role in Leibniz's metaphor, since to balance would be to concur with the skeptic, just as is the case with Buridan's ass.¹⁴

The concept of weighing, of the balance of reasons, is clearly inspired in the activities of the jurists, particularly, in their juris-prudential doings,¹⁵ to the extent that Leibniz refers to it as 'inventive and juridical logic' or as 'the art of the plausible consequences':

I want to introduce the scales of Law, a new type of instrument with which one cannot estimate wealth and precious stones, but, what is more valuable, the weight of reasons. Usually it is said that the one who has the supreme faculty of deciding in his hands after pondering all elements must not count, but *weigh* the arguments of those deciding, the stances of the authors, the expressions of those deliberating. (...) In this manner, we finally reach the matter —outstandingly useful throughout life— of the tabernacle of jurisprudence, where it was so hidden that could scarcely be recognized. In view of this discovery, it should indeed be considered that *just as mathematicians have exercised logic, that is, the art of reason in necessary things in an optimum way and to a greater extent than anyone else, also juriconsultants have practiced it in contingent matters.*¹⁶

This is another agreement between Leibniz and Toulmin since the latter has upheld the parallel between logic and jurisprudence, as a starting point of his study of ordinary argumentations:

Arguments can be compared with law-suits, and the claims we make and argue for in extra-legal contexts with claims made in the courts, while the cases we present in making good each kind of claim can be compared with each other. A main task of jurisprudence is to characterise the essentials of the legal process: the procedures by which claims-at-law are put forward, disputed and determined, and the categories in terms of which this is done. Our own inquiry is a parallel one: we shall aim, in a similar way, to characterise what may be called 'the rational process', the procedures and categories by using which claims-in-general can be argued for and settled. (...) the 'jurisprudential analogy' in mind: our subject will be the *prudential*, not simply for *jus*, but more generally of *ratio*. (Toulmin 1958[2003], pp. 7-8).

3. PRAGMATISM, PLURALISM AND GRADUALISM

These three characteristics of Leibnizian philosophy are the logical complements to his idea of reasonableness.

We have also mentioned the strong tie among theory and praxis in Leibnizian thought. This issue is going to incline Leibniz to an ethical-legal-political consequentialism, far from the ethical foundationalism, formalism, and abstraction, as defended by Kant. For Leibniz, the utility

¹⁴ Brief commentaries on the judge of controversies or the balance of reason and norm of the text § 65a (A, VI, 1).

¹⁵ It is practical wisdom that justifies and decides on juridical matters of experiential and, most of the times, complex character; due to the multiplicity of legal sources, the protection of interests in conflict, the indetermination and graduality of concepts, gaps, etc. Recall that the young Leibniz starts his intellectual activity precisely in the domain of Law.

¹⁶*For a balance of Law* (C 210). See likewise the above mentioned *Letter to Gabriel Wagner*, where Leibniz stands that nobody has been closer to the pondering balance of reasons than the jurists.

and the results of knowledge will be the fundamental principles of sciences in general so he indeed maintains an ordering of the sciences by means of their results (*effectus*) instead of their subjects (*subjecta*).¹⁷

Thus, the praxis does not reduce to a marginal aspect of knowledge nor only refer to the realm of applications, but it is comprised as an element that governs and marks out cognitive activities. Consequently, Leibniz is a gnoseological anti-foundationalist; in order to justify knowledge, we have to see to the coherence of the belief system, or the coherence amongst the system and a heap of empirical confirmations (coherentism), or to the set of results obtained by applying the theory (pragmatism). Against Cartesian intuitivism and the worship to the distinct and clear idea, Leibniz advocates to an approach usually called 'formalism' but whose main axle is that the known truths system has to be under the test of the internal coherence and the coherence with experience facts too (Rescher, 1986, p. 130).

Leibniz is aware of the complexity, diversity, and plurality of the world, in the historical and contingent side as well as in the natural and necessary one. However, this fact is not a problem, but a richness, since his principle of plenitude stands that the better world is, in any case, the 'fuller' world and, therefore, nothing or almost nothing has to be rejected and all or almost all can be integrated and harmonize. In sum, Leibniz is interested in positive and enrichment aspects presented in all rational reasoning.

The ultimate rationale of Leibnizian pluralism is his perspectivism. In the same way that each monad reflects the universe from a perspective, each culture represents its own view of the world, i.e., a perspective of the same reality:

Just as the same city regarded from different sides offers quite different aspects, and thus appears multiplied *by the perspective*, so it also happens that the infinite multitude of simple substances creates the appearance of many different universes. Yet they are but perspectives of a single universe, varied according to the *points of view*, which differ in each monad.¹⁸

So, Leibnizian universalism cannot be assimilated to a cosmopolitism without face since Leibniz foresees that different cultures preserve their individual character (like monads), at the same time that they make up a more complex order that will finish with human discords.

Finally, Leibnizian method of rationality, based on comparison and weighing, has been interpreted as a typically pragmatic resource (in the sense of linguistic analysis). Therefore, heuristic rules, epistemological considerations, and other resources of *blandior ratio* would constitute a type of para-logical theory, which is added to logic in order to offer an account of a non-rigorous domain, namely that of argumentation on contingent matters. This is Marcelo Dascal's interpretation, and it stands in opposition to other views that take Leibniz's model of softer rationality as an invitation to 'widen' logic. It is this latter approach that I defend: *Nihil sine ratione* \rightarrow *Blandior ratio* \rightarrow *Blandior logica.*¹⁹

¹⁷ *De arte inveniendi* (C 169)

¹⁸ *Monadology* §57 (GP VI, 616)

¹⁹ In this context I understand logic in a 'minimal' way, as the mere representation of certain arguments by means of schematizations which help to better understand, even visually, which are the inferentially important points and stamp more rigor to a certain set of argumentations. Therefore, logic is not something exclusive of mathematics or of the hard sciences, such as physics, but of all domains in which an argumentative process is involved (that is, all questions of a practical type).

Beyond appealing to weighing, comparison, and analogy —all of which are mechanisms of an indubitable gradual character—, some basic principles of Leibniz's metaphysics, such as the principle of continuity, deal in detail with the gradualist perspective that I defend. There are many texts in which we can find this gradualist or continuistic metaphysical approach.²⁰ One of the characteristics of this approach is the exclusion of defined leaps, breaks, or cuts in the domain of the real: *natura non facit saltus*. Although Leibniz called this general principle of physics and mathematics '*lex iustitiae*', he did not explicitly apply it to the normative domain; and, in logic, he always adopted the bi-valued classic deductive model. Only in some fragments (i.e. *NN.EE*. IV, ch. 16) does he appeal to the need to build a type of logic that accounts for the degrees of plausibility.

It is also interesting to highlight that Leibniz's metaphysical idea of graduality (a term, which among other things, he also called: a principle of transition, a law of continuity, or a principle of change without leap) appears in his mature philosophy, whereas his interest in jurisprudence is, as has been already pointed out, rather early. Maybe this chronological discordance is part of the reason why Leibniz did not consider this principle in the normative and logical domains.

In any case, I will here dare to establish a connection between these metaphysical principles and Leibniz's approach to practical rationality. The notions of weighing as well as those of comparison and similarity take place in a gradual manner, by means of transitions instead of leaps or breaks.

What has been said serves as an invitation to logically implement Leibniz's gradualism by a fuzzy calculus in which propositions take their truth-value in the interval [0, 1]. Consequently, the notion of 'truth' can be 'modulated', as it happens in ordinary experience and argumentation, so that 'true' and 'false' have lost their static and abstract character.²¹

Fuzzy logic does not benefit relativism in any way, but it makes manifest truth's relational character. Thereby the opposition between 'truth' and 'opinion', which has been a matter of concern in Western thought since pre-Socratic times, is rejected as irrelevant and confusing (Trillas, Alsina and Terricabras, 1995, p. 40).

The same is the case with normative notions, which, from the point of view of practical deliberation, are of special interest to us. Deontic descriptions of licitness, prohibition and duty, in this spirit, are treated as gradual notions. From this perspective, a particular action can have a more or less degree of licitness and, to the extent that it is not completely licit, it will have some degree of illicitness. The core of this type of analysis is the principle of graduation, according to which, when two facts are similar, their juridical treatment must also be similar. This idea is clearly due to the above-mentioned Leibnizian principle of transition or continuity (*lex iustitiae*).

4. RATIONALISM WITHOUT DOGMAS

Concluding, Leibniz and Toulmin would share a kind of soft and tinged rationalism, opened to difference, plurality and controversy. When trying to rationally justify contingent judgments Leibniz and Toulmin defend a weighing and qualified argumentative method. Thus, in both of them we can discern the balance between the legitimate demands of formal models of rationality and the lessons of a practice 'situated' on a historical, social, and evaluative context (*theoria cum*

²⁰ Monadology, Letter to Varignon, Letter to Rémond, Theodicy, NN.EE.

²¹ The relational notion of truth is closely similar to the ontological and moral views of Dewey's pragmatism.

praxi). That is, a way to cope with complexity of life and with its contingency and uncertainty; in sum, a rationalism without dogmas.

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