

Form and Organic Body. An approach to Leibniz's doctrine on expression*

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Abstract

In the correspondence with Lady Masham, Leibniz defines organism as order and artifice – two essential features of matter reflecting its production and arrangement by a sovereign wisdom. Designating the specific way in which matter is organized, the concept of organism is grounded on the Leibnizian idea of “organic body” as a “natural machine”, that is, as a machine in which each part is also a machine, in a mechanical composition that goes to infinity. However, which are the implications of this definition of body for Leibniz's doctrine on expression? Does it suffice to regard expression as a general theory concerning the relation of a substantial form to a body? If the composition of an organic body requires machines within machines *ad infinitum*, each being correlated to a form, then, what does an expression express? In order to address these issues, the main goal of this paper is to analyze the concepts of form and organic body, trying to understand the status of body and soul in the general framework of Leibniz's conception of expression.

Keywords

expression, form, organic body.

Resumo

Na correspondência com Lady Masham, Leibniz define organismo como ordem e artifício – dois aspetos essenciais da matéria, refletindo a sua produção e disposição por uma sapiência soberana. Designando o modo específico em que a matéria se encontra organizada, o conceito de organismo funda-se na ideia leibniziana de “corpo orgânico” enquanto “máquina natural”, ou seja, como uma máquina na qual cada parte é também uma máquina, numa composição mecânica até

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ao infinito. Contudo, quais as implicações desta definição de corpo para a doutrina leibniziana da expressão? Será suficiente considerar a expressão como uma teoria geral sobre a relação entre uma forma substancial e um corpo? Se a composição de um corpo orgânico exige máquinas compostas por outras máquinas *ad infinitum*, cada qual correlacionada a uma forma, então, o que é que uma expressão exprime? De modo a abordar estas questões, esta exposição tem como principal objetivo analisar os conceitos de forma e corpo orgânico, tentando compreender o estatuto do corpo e da alma no quadro geral da conceção leibniziana de expressão.

Palavras-chave expressão, forma, corpo orgânico

In the correspondence with Lady Masham, Leibniz defines ‘organism’ as order and artifice – two essential features of matter reflecting its production and arrangement by a sovereign wisdom¹. However, Leibniz’s conception of organism doesn’t exactly correspond to the biological definition of organism we have today. Instead of an individual entity composed by interdependent elements in order to accomplish life – something akin to Leibniz’s conception of ‘organic body’ –, the concept of organism in Leibniz’s writings seems to be closer to the concept of organization, that is, the general structure and order in which living beings are disposed².

This order is not just any order. In a letter to the same correspondent, Leibniz equates organism to the specific organization of a ‘natural machine’, that is, a machine of which each part is a machine, in a mechanical composition that goes to infinity³. As something essential to ordered matter, all bodies – or all organic

1. «[L]’Organisme c’est à dire l’ordre et l’artifice, est quelque chose d’essentiel à la matiere produite et arrangée par la sagesse souveraine, la production devant toujours garder les traces de son auteur. Cela me fait juger aussi qu’il n’y a point d’Esprits separés entierement de la matiere, excepté le premier et souverain Estre, et que les Genies, quelques merveilleux qu’ils puissent estre, sont toujours accompagnés de corps dignes d’eux». Letter to Lady Masham, beginning of May, 1704, GP III, 340.

2. On the meaning of ‘organism’ in Leibniz’s writings, see SMITH, J. E. H. *Divine machines: Leibniz and the sciences of life*. Princeton and Oxford: Princeton University Press, 2011, 105-106.

3. «[L]’organisme est essentiel à la matiere, mais à la matiere arrangée par une sagesse souveraine. Et c’est pour cela aussi que je definis l’Organisme, ou la Machine naturelle, que c’est une machine dont chaque partie est machine, et par consequent que la subtilité de son artifice va à l’infini, rien n’estant assez petit pour estre negligé». Letter to Lady Masham, June 30, 1704, §10, GP III, 356.

bodies – must be considered through the model of a natural machine. Each organic body is composed of other organic bodies, which are in turn composed of other organic bodies in an infinite composition.

Consequently, if a soul or a 'substantial form' is said to express a body, this body that it expresses needs to be accounted for according to this very definition of a natural machine. Nevertheless, which are the implications of this definition for Leibniz's doctrine on expression? How shall we envisage expression according to it? If the composition of an organic body requires machines within machines to infinity – as well as their respective correlation to a 'form'⁴ – then, what does an expression express?

In order to tackle these issues, the main goal of this paper is to analyze the concepts of form and organic body, trying to understand the relation between body and soul in the general framework of Leibniz's doctrine on expression.

To do so, our exposition will be divided into three parts. In the first part we will analyze the general outlines of Leibniz's conception of expression. In the second, we will focus on the expressive relation between a substantial form and a body – taken in its broadest sense. Finally – in the third part –, we will try to understand how Leibniz's concept of organic body can be accommodated to his doctrine on expression, trying to sketch some of the main difficulties that arise from the former conception.

1. Leibniz's conception of expression

Long before the first appearance of the notion of organism⁵, Leibniz had already explored with some depth the concept of expression. Approximately in 1677,

4. Although Leibniz's concept of substance undergoes a series of transformations throughout the development of his philosophical thought – an issue that we will not address here –, the concept of form shall be understood here only as a cognate of 'substantial form' or 'monad'.

5. The Academy editors date the first appearance of the notion of organism back to April/October of 1686, in the writing *Du rapport general de toutes choses*, where Leibniz clearly refers that: «[l]e rapport general et exact de toutes choses entre elles, prouve que toutes les parties de la matiere sont pleines d'organisme» (A VI, iv, 1615). Notwithstanding, Justin E. H. Smith and François Duchesneau suggest that the notion of 'organism' in the 1680s doesn't really seem to belong to Leibniz's lexicon of that precise period of his philosophical thought. In fact, although the above-mentioned writing points out to some

Leibniz presents us a first account of the concept of expression, defining it as a ‘relation of correspondence’. According to his words, «[t]hat is said to express a thing in which there are relations (*habitudines*) which correspond to the relations of the thing expressed»⁶. In a nutshell, the two terms involved in an expressive relation must present some certain features that correspond to each other.

Notwithstanding, in the text where Leibniz carries this first attempt at defining expression, the *Quid sit idea?*, it is left unsaid not only what is the nature of this correspondence, but also which kind of ‘relations’ or features must be involved in some kind of correspondence. In fact, we are even left wondering if there are some features which don’t need to be correspondent at all⁷. Despite these difficulties, this text exposes already two of the main traits of Leibniz’s doctrine on expression.

In the first place, the epistemological value of the concept of expression. According to Leibniz, what all expressions share in common is that «only from a contemplation of the relations in that which expresses, can we arrive to the knowledge of the corresponding properties of the thing expressed»⁸. Expression must, therefore, provide us with the means to obtain knowledge of things previously unknown. Each term in the expressive relation may be known through the analysis of its correspondent counterpart⁹.

of the metaphysical issues addressed on the *Système nouveau* (1695), its approach seems to be rather closer to the views that Leibniz developed only in the 1700s (see, SMITH, J. E. H., 2011, *Op. Cit.*, 102, 105 and 328 – footnote 31; and, DUCHESNAU, F., *Les modèles du vivant de Descartes à Leibniz*. Paris: Vrin, 1998, 341 – footnote 1). Accordingly, the letter sent to Lady Masham in the beginning of May, 1704 (GP III, 340, see footnote 1 of the present paper), could be accounted as one of the first appearances of the notion of organism. Nevertheless, it is important to notice that the notion of organism also appears in 1687, namely in the correspondence with Arnauld (see, Draft of a letter to Arnauld, September 1687, A II, ii, 237). This letter seems to validate the original dating from the Academy.

6. «*Exprimere* aliquam rem dicitur illud in quo habentur habitudines, quae habitudinibus rei exprimentae respondent». *Quid sit idea?* (ca. 1677), AA VI, iv, 1370.

7. As Leibniz refers, «[u]nde patet non esse necessarium ut id quod exprimit simile sit rei expressae, modo habitudinum quaedam analogia servetur». *Ibid.*, AA VI, iv, 1370.

8. «[E]x sola contemplatione habitudinum exprimentis, possumus venire in cognitionem proprietatum respondentium rei exprimentae». *Ibid.*, AA VI, iv, 1370.

9. For a further analysis on the epistemological dimension of expression, see SWOYER, C. “Leibnizian expression”. *Journal of the History of Philosophy*, 33 (1). Johns Hopkins University Press, 1995, 67. Although Leibniz does seem to bestow an epistemological value to expression, its significance is not an issue free from controversy. One must not forget the fundamental ontological asymmetry between

Secondly, the projective model of expression. The use of conic sections to illustrate an expressive relation – a recurring example throughout Leibniz's works – already appears in this text. For Leibniz, expressions which have a basis on nature – and not on convention – must have either some similarity or some connection, such as the expression between a circle and the ellipse which represents it optically, since any point in one of them must correspond to some point of the other¹⁰. Consequently, expression requires either similarity or analogy, but not equality¹¹. In fact, Leibniz uses this example in order to demonstrate that the same thing may be represented in several different ways without losing its truth value. In the example given, the projections in perspective of the conic sections of the circle are used to show that the very same circle may be represented differently but anyway accurately. An ellipse, a parabola, a hyperbola, or even another circle, a straight line or a point, all those figures, despite being partially or completely dissimilar to the circle they express, constitute nonetheless an exact representation of the very same thing¹². As in a geographic region and the map of that region – another example given in the *Quid sit idea?* –, the

that which expresses and the thing expressed. As Fernando Gil remarks, if «the definition of expression establishes, precisely, to be licit to infer from that which expresses the properties of that which is expressed [...] [then] it should be viable, in principle, to know the physical dynamics [...] from its expression on and by the soul, without being necessary to study them by themselves». However, «if we ignore the *translation rule* of the thing expressed into that which is expressed [...], we risk committing a wide *petitio principii* and merely making a projection [...] of that which is expressed over the thing expressed». GIL, F. “Expressão e Pré-Compreensão”. *Modos da Evidência*, Lisbon: INCM, 1998, 168. A deeper analysis of Fernando Gil's position on this subject may be found at ARAÚJO, S. “O problema da expressão leibniziana segundo Fernando Gil”. *Cultura*, 35 (2). CHAM – Centro de Humanidades and Húmus, 2016, 45-62.

10. «Patet etiam expressiones alias fundamentum habere in natura, alias vero saltem ex parte fundari in arbitrio ut sunt expressiones quae fiunt per voces aut characteres. Quae in natura fundantur, eae vel similitudinem aliquam postulant, qualis est inter circulum magnum et parvum, vel inter regionem et regionis tabulam geographicam; vel certe connexionem qualis est inter circulum et ellipsin quae eum optice repraesentat, quodlibet enim punctum ellipseos secundum certam quandam legem alicui puncto circuli respondet». *Quid sit idea?* (ca. 1677), AA VI, iv, 1370.

11. See footnote 7 above.

12. The same suggestion is clearly stated on the *Essais de Théodicée*, §357: [i] est vray que la même chose peut être représentée differement; mais il doit tousjours y avoir un rapport exact entre la representation et la chose, et par consequent entre les differentes representations d'une même chose. Les projections de perspective, qui reviennent dans le cercle aux sections coniques, font voir qu'un même cercle peut être représenté par une ellipse, par une parabole, et par une hyperbole, et même par un autre cercle et

terms of an expressive relation don't need to be equal, neither physically nor ontologically, in order to accurately correspond to each other. In short, different expressions may correspond to the same thing expressed¹³.

Though we are here very close to the conception of different perspectives over the same object, in this text Leibniz doesn't expressly introduce the notion of "point of view", or its connection with the concept of expression. Notwithstanding, in the widely known writing of 1686, the *Discours de Métaphysique*, we can already see some of the most famous Leibnizian formulations on this topic, which help to understand the ontological dimension of expression.

According to the *Discours*, not only each substance is able to express the whole universe, but also each expression must contain the entire universe in itself¹⁴. However, being the universe the same for every substance, each one expresses

par une ligne droite et par un point. Rien ne paroît si différent, ny si dissemblable, que ces figures; et cependant il y a un rapport exact de chaque point à chaque point». GP VI, 327.

13. The implications of expression, considered as a 'projective model', are also a non-consensual issue among Leibniz's interpreters. In general terms, the problem lies in the already referred ontological asymmetry between that which expresses and the thing expressed (see footnote 9 of the present paper). While some interpreters suggest that expression shall be understood as a 'function' – where each element of the thing which expresses should correspond to one, and only one element of the thing which is expressed –; others understand that expression is based on a 'structure-preserving mapping' – where there is no need for a total correspondence between all the elements of the thing which expresses and the thing which is expressed, provided that the thing which expresses preserves the 'structural' elements of the latter. For the first 'functionalist' reading of expression, see KULSTAD, M. "Leibniz's Conception of Expression". *Studia Leibnitiana*, 9 (1). Franz Steiner Verlag, 1977, 74. Against this position, and for the 'structuralist' account of expression, see SWOYER, C. (1995), *op. cit.*, 82. More recently there has been a renewal of this debate and a revision of these two positions. According to the work of Laura Herrera Castillo and Valérie Debuiche, no mathematical model – like a function or a structure-preserving mapping – is fully able to give an accurate explanation of expression, given that none is able to explain the principle of spontaneity of the substance – a primarily metaphysical issue which resists, as it were, to any kind of mathematical explanation. For further reading on this latter position, see CASTILLO, L. H. "G. W. Leibniz y el surgimiento de la perspectiva". *Dissertatio*, supplementary volume (3). Universidade Federal de Pelotas, 2016, 142-145; DEBUICHE, V. "L'expression leibnizienne et ses modèles mathématiques". *Journal of the History of Philosophy*, 51 (3). Johns Hopkins University Press, 2013, 437. Although we think that a 'structuralist' account of expression may be closer to what Leibniz meant when referring to this concept, we do agree that expression, as a fundamentally metaphysical concept, is irreducible to any kind of geometrical or mathematical explanation.

14. See, *Discours de Métaphysique*, §9, A VI, iv, 1541-1542.

it in its own manner. For this reason, Leibniz will consider each substance to be a mirror of the entire universe, just like «the same city is represented differently depending on the different positions from which it is regarded»¹⁵.

The notion that expression equates to a point of view is one of the utmost importance to understand this concept. It designates two of the most important features regarding each substance's expression: 'the infinity of the view' and the 'individuality of the point'. Each expression contains the entire universe, in an extension beyond imagination. Nevertheless, each single expression is different. Not only is it different from the expressions of other substances, but also it differs from the expressions which are anterior or posterior to it, according to the law of series of one and the same substance. But, why is it different? The answer lies precisely in the specificity of each point of view.

It is not entirely clear how much Leibniz conceives the notion of point of view as having or not a physical counterpart. If, on one hand, it is the body that seems to place the substance in a certain 'position' among other bodies and correlated substances; on the other, given that a substance is not extended, the notion of point of view should not be accounted for in terms of extension. Nevertheless, whether or not we adopt a material or immaterial interpretation of 'point of view', the main point of this notion seems to rest on the conception of 'relation'. Just like a physical object is said to stand in a certain position towards other objects, so does a substance stand in a certain relation towards other substances. In fact, as we will see, it is as a 'theory of relations' that expression seems to be better understood.

According to this latter account of expression, the point of view of each substance consists precisely in the way each substance is related to every other. As Michel Serres or Yvon Belaval suggest, each substance doesn't only *have* a point of view; they *are* a point of view. As such, each substance expresses its *situs* or situation which determines and is determined by a relation of coexistence among all substances¹⁶.

15. «De plus toute substance est comme un monde entier et comme un miroir de Dieu ou bien de tout l'univers, qu'elle exprime chacune à sa façon, à peu près comme une même ville est diversement représentée selon les différentes situations de celui qui la regarde». *Ibidem*, 1542.

16. See SERRES, M. *Le système de Leibniz et ses modèles mathématiques*. Paris: Presses Universitaires de France, 1968, 350-351; BELAVAL, Y. *Études leibniziennes. De Leibniz à Hegel*. Paris: Gallimard,

In this regard, given that perceptions and appetitions are the only truthful predicates attributable to a substance, its individuality can only be considered in terms of the expressions and relations it expresses. Consequently, even though we may consider the point of view as a source of an infinite expressive openness¹⁷, the ‘constraints’ resulting from its *situs* are, on the other hand, the very ground of each substance’s individuation. In other words, although each substance expresses the same universe, what distinguishes one substance from any other is precisely the individuality of a perspective that cannot be shared¹⁸.

Conversely, as it is well known, Leibniz also claims that each substance is like ‘a world apart’ independent of everything outside of itself, which means that all the things that can ever happen to it are only the results of its own being¹⁹. Although the expressions of all substances inter-correspond, a particular substance can never act upon another, nor be acted upon by any other²⁰. In fact, despite of being able to express the entire universe – or its underlying order of

1976, 123-124 and 142-146. Leibniz observes it as well. «Monades enim etsi extensae non sint, tamen in extensione quoddam situs genus, id est quandam ad alia coexistentiae relationem habent ordinatam, per Machinam scilicet cui praesunt. Neque ullas substantias finitas a corpore omni separatas existere, aut adeo situ vel ordine ad res caeteras coexistentes universi carere puto. Extensa involvunt in se plura situ praedita, sed quae simplicia sunt, etsi extensionem non habeant, situm tamen in extensione habere debent, quanquam illum punctatim ut in incompletis phaenomenis designare possibile non sit». Letter to De Volder, June 20, 1703, GP II, 253. On this issue, see also, REY, A.-L. “Action, Perception, Organisation”. In *Machines of Nature and Corporeal Substances in Leibniz*. Ed. Justin E. H. Smith and Ohad Nachtomy. Dordrecht: Springer, 2011, 164-167.

17. See, *Discours de Métaphysique*, §9, A VI, iv, 1541-1542.

18. For a further reading on the interconnection between point of view and individuation, see also CASTILLO, L. H. (2016). *op. cit.*, 132-133.

19. «[C]haque substance est comme un Monde à part, independant de tout autre chose hors de Dieu, ainsi tous nos phenomenes, c’est à dire tout ce qui nous peut jamais arriver, ne sont que des suites de nostre estre». *Discours de Métaphysique*, §14, A VI, iv, 1550.

20. As Leibniz remarks, «il est tres vray que les perceptions ou expressions de toutes les substances s’entreprennent, en sorte que chacun suivant avec soin certaines raisons ou loix qu’il a observées, se rencontre avec l’autre qui en fait autant». However, «il n’y a que Dieu [...] qui soit cause de cette correspondance de leur phenomenes, et qui fasse, que ce qui est particulier à l’un, soit public à tous, autrement il n’y auroit point de liaison. On pourroit donc dire en quelque façon, et dans un bon sens, quoyque éloigné de l’usage, qu’une substance particuliere n’agit jamais sur une autre substance particuliere, et n’en patit non plus si on considere, que ce qui arrive à chacune n’est qu’une suite de son idée toute seule, puisque cette idée enferme deja tous les predicats ou evenemens, et exprime tout l’univers». *Ibidem*, 1550-1551.

coexistences –, the truth is that each substance's expression is solely the result of its own complete idea or concept²¹. According to Leibniz, each substance's complete concept includes «all of the experiences belonging to it together with all of their circumstances and the entire sequence of exterior events»²². Therefore, besides its projective appearance, expression is grounded on a more fundamental ontological dimension: the very constitution of simple substances.

The view that expression is determined by the complete concept of a substance brings us to a last feature of expression – perhaps the most important one for the subsequent discussion –, namely the causal structure of expression.

As we have just seen, Leibniz conception of 'simple substance' implies that everything that a simple substance will ever express must arise from its own nature²³. As a consequence, nothing from without – that is, nothing external – may naturally enter into its series of expressions²⁴. Thereby, there is no possibility of interaction among substances. The expression of one substance can never be the efficient cause of the expression of another substance.

Nevertheless, as we have also observed, the expressions of all substances inter-correspond. A change in the expression of one substance affects the expression of all the substances in the universe²⁵. Accordingly, the reason for this inter-correspondence lies on the expressive nature that God attributed to each substance, which implies that «what happens to one corresponds to what happens to all the others, without their acting upon one another immediately»²⁶.

21. A concept which, in turn, is nothing but the complete series of all the expressions that will ever happen to a particular substance. As Leibniz points out, «on pourroit appeller nostre essence, ou idée, ce qui comprend tout ce que nous exprimons». *Ibid.*, §16, A VI, iv, 1555.

22. *Ibid.*, §9, A VI, iv, 1541.

23. «[T]out ce qui arrive à l'ame et à chaque substance, est une suite de sa notion, donc l'idée même ou essence de l'ame porte que toutes ses apparences ou perceptions luy doivent naistre (*sponte*) de sa propre nature». *Ibid.*, §33, A VI, iv, 1582.

24. «[N]aturellement rien ne nous entre dans l'esprit par dehors, et c'est une mauvaise habitude que nous avons, de penser comme si nostre ame recevoit quelques especes messageres et comme si elle avoit des portes et des fenestres. Nous avons dans l'esprit toutes ces formes, et même de tout temps, parce que l'esprit exprime tousjours toutes ses pensées futures, et pense déjà confusement à tout ce qu'il pensera jamais distinctement». *Ibid.*, §26, A VI, iv, 1570-1571.

25. See, *ibid.*, §14, A VI, iv, 1550-1551 (footnote 20 of the present paper); or §15, A VI, iv, 1553-1554.

26. *Ibid.*, §14, A VI, iv, 1549.

In causal terms, thus, the nature of each substance prevents the possibility of an efficient causality among substances. Notwithstanding, there is an ‘expressive cause’ and a final cause binding all substances. Each series of expressions belonging to each substance are independent and develop autonomously. Yet, all their changes correspond to one another. Hence, each change in one substance may be accounted for as the ‘expressive’ cause of a change in another²⁷.

However, it is important to remark that this expressive causality is only the consequence of the first cause, namely God. As Leibniz refers, «only God, from whom all individuals emanate continually [...] is the cause of this correspondence between <all substances> phenomena, and who makes public to all that which is particular to one, otherwise there would be no point of connection»²⁸. In other words, God is the creator of all substances and his creation is an act of will. If there is any kind of inter-correspondence between substances, this only happens in virtue of God’s will. God is the first cause of every substance, every expression and the inter-correspondence among expressions.

Notwithstanding, as Leibniz also points out, «all nature, end, virtue and function of all substances is only to express God and the universe»²⁹. As such, God can be accounted not only as the first cause of expression but also as its final cause³⁰. Given that inter-expression is one of the strongest proofs of God’s

27. The conception of ‘expressive causality’ shall be understood here not as a kind of ‘efficient causality’, but merely as referring to the ‘concomitance’ or ‘correspondence’ among all substances’ expressions and their respective changes. In this sense, an ‘expressive cause’ must not be considered under the scope of the Aristotelian doctrine of the ‘four causes’.

28. *Discours de Métaphysique*, §14, A VI, iv, 1550-1551.

29. *Ibid.*, §35, A VI, iv, 1585.

30. Actually, according to Stefano Di Bella, Leibniz «recognizes in final causes an explanatory primacy», granting them «a higher metaphysical dignity». In his words, although final causes are «deprived of physical ‘influence’», «they maintain [...] the effective explanatory priority». Nevertheless, the author also points out Leibniz’s rejection of God’s mere will as a source of explanation. In his regard, the rejection of the explanatory power of ‘pure will’ amounts to look for the ultimate ground of all beings and events in a «conceptual space»: the principle of reason. In this sense, the author distinguishes ‘cause’ and ‘reason’, claiming that the latter is also primary according to Leibniz’s philosophical thought. DI BELLA, S. “Leibniz on causation: efficiency, explanation and conceptual dependence”. *Quaestio*, (2). Brepols, 2002, 418-425. For a further reading on reasons, causes and ‘*requisita*’ see, CARRAUD, V. *Causa sive ratio. La raison de la cause, de Suarez à Leibniz*. Paris: Presses Universitaires de France, 2002, 391-492; and LYSSY, A. *Kausalität und Teologie bei G. W. Leibniz*. Stuttgart: Franz Steiner Verlag, 2016, 73-170.

existence³¹, expressive causality can also be regarded both as an outcome of the first cause and as means towards the end of expression itself. The best of all possible worlds – the actual universe – is one in which all series of expressions harmoniously inter-correspond.

As a consequence, the concept of expression only acquires its full significance when considered conjointly with another foundational conception of Leibniz's thought. The fact that each substance is like 'a world apart' and nonetheless all substances inter-correspond – or, in other words, the notion that there is an 'expressive causality' (grounded on the will of God) governing all substances – is precisely what Leibniz needs to justify one of the core tenets of his thought: the conception of a 'pre-established harmony'. Expression constitutes its operator. In a word, expression enables harmony and is in turn enabled by it³².

2. Form and body

Given the four main aspects of expression previously considered – its epistemological value; its projective character; its ontological dimension; and its causal structure – we are now in a better position to understand the expressive relation between a substantial form and the body to which it is correlated.

Although Leibniz already treats this relationship on the §33 of the *Discours de Métaphysique*, it is in the correspondence with Arnauld that we see a fuller account of it. In his letters to Arnauld, Leibniz claims that while the soul – or substantial form – and the body act, each one, according to their own laws, both were created in such a way that one's actions agree precisely to the actions of the other³³. Thus, at least in the end of the 1680s, the relation between the

31. See, letter to Arnauld, October 9, 1687, A II, ii, 245.

32. Circularity here must not be understood as a fallacy. Rather, the reciprocity between expression and harmony constitutes one of the most interesting originalities of Leibniz's philosophy. On this issue, see MIGUEL, B. O. *Leibniz. Crítica de la razón simbólica*. Granada: Editorial Comares, 2011.

33. See, for instance, Draft of a letter to Arnauld, July 14, 1686, A II, ii, 82: «[i]l n'y a donc que l'*Hypothese de la concomitance, ou de l'accord des substances entre elles* [...] Dieu a créé d'abord l'ame de telle sorte que [...] ce qui arrive à l'ame luy nait de son propre fonds, sans qu'elle se doive accommoder au corps dans la suite, non plus que le corps à l'ame; chacun suivant ses loix, et l'un agissant librement, l'autre sans choix, se rencontre l'un avec l'autre dans les mêmes phenomenes».

soul and the body was somehow thought of in the same model as the relation among substances. A body and a substance are like two parallel lines that, while corresponding exactly to each other, never intersect one another.

Notwithstanding, this doesn't mean that the body in itself was envisaged as a substance. For Leibniz, a corporeal substance is not one made up exclusively of a body, but rather one composed of a body and a substantial form. The substantial form is what gives reality and unity to a body. As Leibniz says to Arnauld, «*where there are only beings by aggregation, there aren't any real beings*»³⁴. Every divisible entity must suppose the existence of other entities endowed with a real unity, since a divisible entity can only derive its reality from the reality of those entities which are not divisible anymore.

In this sense, even though the relation of a form to a body seems to be causally similar to the relation between substances, if a body as a whole is not *one* substance, would it be legitimate to account for both relations in equal terms? In the correspondence with Arnauld this doesn't seem to be the case.

When the latter demands for a clearer explanation of the concept of expression, for he cannot understand how a soul may express the motions of the lymph vessels more clearly than the motions of Saturn's satellites³⁵, Leibniz answers that it is true that a soul doesn't always express clearly all the motions of the body. It is not possible that a soul, at a given time, may clearly distinguish all these motions. The same is also true for all that happens in the universe. At a given time, the soul cannot distinguish all the motions that happen in the entire universe.

Nonetheless, although each expression must contain the entire universe, there seems to be a qualitative difference – namely a difference in clarity – between the expression of the entire universe and the expression of what happens to the body correlated to a particular soul. Given that the soul seems to express other bodies *through* the relation they have to the body which is correlated to it, one

34. «[J]e croy que là où il n'y a que des estres par aggregation, il n'y aura pas même des estres reels». Letter to Arnauld, April 30, 1687, A II, ii, 184. Leibniz further adds, «tout estre par aggregation suppose des estres doués d'une véritable unité, parce qu'il ne tient sa réalité que de celle de ceux dont il est composé, de sorte qu'il n'en aura point du tout, si chaque estre dont il est composé est encore un estre par aggregation, ou il faut encore chercher un autre fondement de sa réalité, qui de cette manière, s'il faut toujours continuer de chercher, ne se peut trouver jamais». *Ibidem*.

35. See letter to Leibniz, August 28, 1687, A II, ii, 221.

may say that ultimately the soul expresses better – that is, more clearly – what belongs to this very same body³⁶.

The point here is that, while in causal terms the relation between the soul and the body remains the same as the relation between all substances – there is no interaction –, the fact that the soul expresses other bodies only *through* the relation which they have to its correlated body, introduces bodies as a necessary link between the soul and the universe. As we have mentioned earlier³⁷, the body seems to be the link that differentiates the point of view of each substance, according to the relations between the substance to which it is correlated and all other substances.

Substances don't simply express the universe. They express it according to a particular point of view, which seems to be regulated through the mediation of the body. As such, although each substance expresses the universe according to its own perceptual capacity, the singularity of each expression – including what in each expression is more or less clear – seems to be connected to the body and its relation with everything else. In this sense, the body seems to be a necessary condition for each particular expression of the universe.

In fact, it is on the basis of this account of body that Leibniz justifies – at least in part – the clearness of an expression. Since all the bodies of the universe are in sympathy with each other, a particular body must be affected in a certain way by the motions of all the rest. But the effect of other bodies in a particular one varies in intensity according to the way in which this body is more or less related to other bodies and their movements. Thus, since the states of the soul are said to be expressions of the corresponding states of the world and, particularly, of

36. «Il est vray que nous ne nous appercevons pas distinctement de tous les mouvemens de nostre corps, comme par exemple de celuy de la lymphe, mais [...] c'est comme il faut bien que je m'appercoive un peu du mouvement de chaque vague du rivage à fin de me pouvoir appercevoir de ce qui resulte de leur assemblage, sçavoir de ce grand bruit, qu'on entend proche de la mer. Ainsi nous sentons aussi quelque resultat confus de tous les mouvemens qui se passent en nous, mais estant accoustumés à ce mouvement interne nous ne nous en appercevons distinctement et avec reflexion, que lorsqu'il y a une alteration considerable [...] Or puisque nous ne nous appercevons des autres corps, que par le rapport qu'ils ont au nostre, j'ay eu raison de dire que l'ame exprime mieux ce qui appartient à nostre corps, aussi ne connoist on les satellites de Saturne ou de Jupiter que par un mouvement qui se fait dans nos yeux». Letter to Arnauld, October 9, 1687, A II, ii, 241-242.

37. See section 1, above.

the bodies to which they correlate to, so a particular expression must be understood as being more or less clear according to the way each change affects more or less the body to which it is related³⁸.

Accordingly, though the soul expresses best what pertains to its correlated body, confusion comes from the impossibility of the soul to attend to everything in particular. In other words, confusion comes from the impossibility of the soul to specifically attend to all those things that don't involve a remarkable change – just like the movements of all bodies which have less relation to its correlated body, or the several motions taking place inside the body itself³⁹.

Nevertheless, the Leibnizian conception of body is not one of a stable, unchangeable and indivisible structure⁴⁰. The body itself can only be considered as a unity in an abstract conceptual sense. As we have mentioned earlier, Leibniz's conception of body implies a structure of bodies within bodies to infinity, each correlating to a simple substance. So, how can this specific conception of body – as an 'organic body' – be accommodated to Leibniz account of expression? How does it effectively change the relation between the soul and the body?

The answer to these questions is not an easy one. If it were not paradoxical, one could say that one of the main difficulties raised by the conception of 'organic body' is that it redoubles the infinity of relations that an expression expresses. From a consideration of the relation between the soul and the body – and, according to it, the relation among all corporeal substances –, we pass to a consideration of the relation between the soul and an infinity of organic bodies within the organic body itself. Moreover, each organic body is also correlated to a substance, which, in turn, must relate to all other substances implied in this bodily structure, having a special kind of relation to what Leibniz will later come

38. See letter to Arnauld, October 9, 1687, A II, ii, 241-244; or, *Discours de Métaphysique*, §33, A VI, iv, 1581-1583.

39. For a thorough analysis on the difficulties raised by Leibniz's conceptions of confusion, clearness and perfection regarding the recognition of one's 'own' correlated body, as well as the notions of 'action' and 'passion', see ANDRAULT, R. "Passion, action et union de l'âme et du corps. Leibniz face à ses lecteurs cartésiens." *Vorträge des X. Internationalen Leibniz-Kongresses*. Ed. Wenchao Li, et al., Vol. I, Olms, 2016, 197-209.

40. As Adelino Cardoso accurately observes, «[t]he body is a *constellation* in the Leibnizian universe». CARDOSO, A. "L'analogie entre corps et langage chez Leibniz". *Leibniz et les Puissances du Langage*. Ed. Dominique Berlioz and Frédéric Nef. Paris: Librairie Philosophique J. Vrin, 2005, 165.

to designate as 'dominant monad'. Given the complexity of relations involved in the very notion of organic body, what are then the implications of this concept to Leibniz's account of expression?

3. Expression and organic body

Although the conception of a 'machine of nature' only seems to acquire its centrality mainly after the writing of 1695 – the *Système nouveau de la nature* –, where Leibniz specifically approaches this notion⁴¹, the conception of an organic body as a 'machine of nature' already appears in earlier writings. Of special interest to us, is its reference precisely in the letter to Arnauld where Leibniz proceeds to a thorough explanation of the concept of expression⁴².

The reference to a 'machine of nature', in the correspondence with Arnauld, seems to suggest that 'expression' in the 1680s was already thought of in a way capable of accommodating the conception of an organic body. The fact that, in this period, Leibniz defines expression as something common to all forms, considering it a genus from which perception, 'sentiment' and knowledge are

41. See *Système nouveau de la nature et de la communication des substances, aussi bien que de l'union qu'il y a entre l'âme et le corps*, §§10 and ff. (mainly), GP IV, 481 and ff.

42. «[J]e tiens que Dieu a donné des âmes à toutes les *machines naturelles* qui en estoient capables, parce que les âmes ne s'entremêchant point, et ne tenant point de place, il est possible de leur en donner d'autant qu'il y a plus de perfection d'en avoir et que Dieu fait tout de la manière la plus parfaite qui est possible». Letter to Arnauld, October 9, 1687, A II, ii, 259-260 (emphasis added). More important, though, is the paragraph that Leibniz suppressed when he sent this letter to Arnauld: «[q]uant aux substances corporelles, je tiens que la masse lors qu'on n'y considère que ce qui est divisible, est un pur phénomène, que toute substance a une véritable unité à la rigueur métaphysique, et qu'elle est indivisible, ingénérable et incorruptible, que *toute la matière doit être pleine de substances animées, ou du moins vivantes*, que les générations et les corruptions ne sont que des transformations du petit au grand ou vice versa, et qu'il n'y a point de parcelle de la matière, dans la quelle ne se trouve un monde d'une infinité de créatures, tant organisées qu'amasées. Et sur tout que les ouvrages de Dieu sont infiniment plus grands, plus beaux, plus nombreux, et mieux ordonnés qu'on ne croit communément; et que *la machine ou l'organisation, c'est à dire l'ordre, leur est comme essentiel jusque dans les moindres parties*. Et qu'ainsi il n'y a point d'hypothèse qui fasse mieux connaître la sagesse de Dieu que la nôtre, suivant la quelle il y a par tout des substances qui marquent sa perfection, et sont autant de miroirs mais différents de la beauté de l'univers; rien ne demeurant vide, stérile, inculte, et sans perception». *Ibidem* (emphasis added).

species⁴³, indicates that Leibniz was already allowing for a broad understanding of substance, capable of fitting into the complex structure of the living beings. An understanding that would be needed if we are to understand all matter as being infinitely organized, full of life, and, consequently, abounding in expression⁴⁴.

The account of body as a nested structure of machines within machines, and their correlated substances, doesn't seem – *prima facie* – to lead to a fundamental change in the general framework of expression. Most of the features of expression we have referred so far will remain the same. Substances, independently of their hierarchy within a particular structure, continue to not express anything that doesn't arise from their own depths. Causality among substances continues to be one of an 'expressive' kind. The efficient cause of a substance's expression continues to lie solely in its previous expression. In short, despite the progressive refinement of the conception of body, expression seems to maintain its epistemological value, its projective character, its ontological dimension and its causal structure.

On the other hand, though, if we consider the specificity of the relations between substances within the same organic structure, most significant problems concerning expression arise.

The conception of body as an infinite mechanical composition implies that the organization of a body is also an organization among substances to infinity⁴⁵. In this sense, the composition of a body requires that the so-called relation between the substance and the body becomes one of 'intra-organic substantial correspondence'.

In other words, although every substance relates to all other substances in the universe, there must be a special relation among the substances that compose the same organic structure. As such, among the infinite structure of substances

43. «L'expression est commune à toutes les formes, et c'est un genre dont la perception naturelle, le sentiment animal, et la connoissance intellectuelle sont des especes». *Ibid.*, A II, ii, 240.

44. For a deeper analysis on Leibniz's conception of the 'living' and its correlation to the general physical and metaphysical principles of the Leibnizian thought, see DUCHESNEAU, F., 1998, *Op. Cit.*, 316-326.

45. If each body relates to a substance, the conception of bodies within bodies to infinity requires a complex structure of substances to infinity as well – even if this structure is not one of substances within substances, given their unity and indivisibility.

that compose a specific organic body, at a specific time – given the ‘fluidity’ of bodies⁴⁶ –, there must be a certain specific relation which differs from the relation of these substances with all other substances that don’t belong to the same organic body.

Additionally, as we approach the mature Leibnizian philosophy, the question concerning the substantial correspondence becomes – as it were – more pronounced. While it is doubtful whether Leibniz really left the concept of corporeal substance⁴⁷, the fact is that in the beginning of the 1700s – much until the end of his life –, Leibniz seems to have shifted his attention from corporeal substances to simple substances or ‘monads’⁴⁸; a shift which will accentuate even more the inter-relational dimension of expression.

Be it as it may, whether we consider the substantial correspondence from the point of view of corporeal substances, or from the latter conception of monadic correspondence, the point is that the relation between substances correlating to the same organic body introduces new problems for a clear account of expression.

First, taking into account that a substance expresses best what pertains to its own correlated body – and, hence, its correlated substances –, it becomes quite problematic to define what the immediate object of an expression is. One could wonder if expression as perception is a perception of a physical object or only the perception of other substances’ perceptions. Even though this problem becomes bolder in Leibniz’s mature thought, it can nonetheless be addressed to Leibniz’s conception of corporeal substance. In this line of thought, one can

46. By ‘fluidity’ we mean that an organic body – in its infinite composition of other smaller organic bodies – might lose throughout its existence some of its smallest organic bodies, without changing its core features as a body – or, more accurately, without changing the essential features of the ‘dominant monad’ to which it is correlated. As Justin E. H. Smith observes: «[t]he particular material constituents of an organic body are no less in flux than those of an aggregate, yet this fluidity does not threaten the very existence of the machine of nature, since this existence is guaranteed by the underlying immaterial principle of unity, and not by the temporary assemblage of some particular components or others». SMITH, J. E. H. (2011). *Op. Cit.*, 112.

47. For a further reading on this topic, as well as on the different interpretations of it among Leibniz’s interpreters, see SMITH, J. E. H. (2011). *Op. Cit.*, 115-119.

48. A shift which, according to our view, doesn’t necessarily mean a rejection of the concept of corporeal substance, but rather a different perspective on it. For a detailed account of the difference between the middle and late periods of Leibniz’s philosophy, particularly in what concerns his conception of corporeal substance, see GARBER, D., *Leibniz: Body, Substance, Monad*. Oxford: Oxford University Press, 2009.

even question if an expression can be a true perception of an external state of things or just the perception of an internal state of the substance.

Second, it becomes also puzzling to understand how the substantial organization or hierarchy exactly affects expression. In other words, given that a specific organic body implies an infinite structure of organized substances related to a ‘dominant’ substance or monad – and taking into consideration that the only thing that can be found in substances is their expressions and their changes⁴⁹ –, it becomes rather difficult to discern the distinguishing features between the expressions of a dominant monad and the expressions of a subordinate one.

Certainly, one may consider that the expressions of a dominant monad and the expressions of a subordinate monad share the same properties, their distinction lying solely on the degree of clearness or confusion they hold. Notwithstanding, if confusion applies both to the movements of all bodies which have less relation to a substance’s correlated organic body, and to the several motions taking place inside the organic body itself, then what should be clear and what should be confused in the expression of a dominant monad or in the expression of a subordinate one? May the degree of clearness or confusion really give an ultimate account for the distinction between the expressions of a dominant monad and the expressions of a subordinate one?

On the other hand, as some authors also suggest, the expression of a dominant monad may be distinguished from the expression of a subordinate monad on the grounds that the dominant monad must contain all the reasons for what happens in the monads which are subordinated to it⁵⁰. However, as we have already seen, each substance contains the reasons for everything that happens in the universe. In fact, given the fluidity of organic bodies within the same organic body, a dominant monad must not only contain all the reasons for what happens in its subordinated monads, but also all the reasons for what happens to monads which are not any longer subordinated to it.

49. See *Monadologie*, §17, GP VI, 609. Even though Leibniz uses the term perception, since perception is a kind of expression, we preferred to use the latter term for the sake of clarity.

50. See, for instance, LOOK, B. «On Monadic Domination in Leibniz’s Metaphysics». *British Journal for the History of Philosophy*, 10 (3). Taylor & Francis, 2002, 379–399.

Thus, in what exact fashion must a dominant monad express the causal reasons for the expressions of the subordinate ones? What is the difference between expressing a subordinate monad or any other monad? Are we doomed to a perpetual return to Arnauld's question on the expression of the motions of the lymph vessels?

Conclusion

However difficult these latter questions on expression may be to answer, what all of them share in common is precisely the wide scope of a concept that can hardly be grasped. Nonetheless, the analysis we have carried out so far demonstrates that, since its earlier formulation in the 1670s, until the latter development of Leibniz's thought, the conception of expression was able to maintain its core features.

In fact, approximately in 1712, Leibniz presents a formulation of expression very similar to the one he had already made around the year of 1677. In his words, «it is sufficient for the expression of one thing in another that there should be a certain constant relational law, by which particulars in the one can be referred to corresponding particulars in the other»⁵¹. This indicates that while other central concepts in Leibniz's philosophy underwent a certain change, expression not only kept its meaning, but also provided some continuity between different phases of Leibniz's thought.

What makes expression such an enduring, unwavering concept is not only its epistemological value, its projective character, or its ontological dimension. Besides these three features, and also because of them – for they are interconnected –, one of the main reasons that seems to have contributed for the solidity of this concept, throughout the development of Leibniz's thought, is the fact that its causal structure allows for a 'multi-layered model of jurisdiction'. In whatever layer we are considering expression – be it the layer of bodies,

51. «Sufficit enim ad expressionem unius in alio, ut constans quaedam sit lex relationum, qua singula in uno ad singula respondentia in alio referri possint», *Conséquences métaphysiques du principe de raison*, §11, C, 15.

be it the one of substantial inter-correspondence, or even the one relating to the internal states of a particular substance –, each layer can be conceptually abstracted and independently analyzed, without intervening any interaction whatsoever between them.

To be clear, we can certainly ask what the ultimate reality of things is. Such a question must be made, and it is a perfectly legitimate question. But the most striking point about expression is not the way it explains the ultimate reality of things. In fact, the ultimate reality of things is just one of its several layers.

Ultimately, the most remarkable feature of Leibniz's conception of expression is the way in which all its layers correspond. After all, what else do we need to justify harmony?