

*John Toland's 'Remarques Critiques sur le Système  
de Monsr. Leibnitz de l'Harmonie préétablie'*

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The piece translated below appeared as article 5 in the *Histoire critique de la République des lettres* for 1716. Published anonymously, its traditional attribution to John Toland may now be taken as established.<sup>1</sup> It was transmitted to the *Histoire* by Pierre Desmaizeaux who also sent the piece which it criticises, 'Réponse de M. Leibnitz aux réflexions ... de M. Bayle'. This was written in 1702 but not published until 1716 when it appeared as article 4 in the same volume of the *Histoire*. Leibniz's response to Toland is in a letter of the same year to Samuel Masson, the editor of the *Histoire*. 'Remarques critiques' has never been reprinted, and a facsimile copy of the journal pages follows our translation in this issue of *The Leibniz Review*. This is the first published English translation.<sup>2</sup>

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*Critical comments on Monsr. Leibniz's system of 'pre-established harmony' in the course of which the reason is [115/116] sought why the metaphysical systems of mathematicians are less clear than those of others. Written at the behest of Her Majesty the late Queen of Prussia<sup>a</sup>,<sup>3</sup>*

**M**adam, your Majesty's commands are always so reasonable that up till now I have found it very easy to comply with them. But I will not hide the fact that it is impossible in the present case for me to satisfy your curiosity. The document<sup>4</sup> that you have been so kind as to put into my hands in order to see what I think of it, is as little intelligible to me as the language of the Hurons. This confession should in no way be taken as a criticism of the illustrious author, but must be due entirely to my own ignorance, which I am more ready to confess than others are to accuse me of. Besides, perhaps M. Leibniz intended to present to your Majesty some *acroamata*, just as long ago Aristotle used to do for his royal disciple.<sup>5</sup> But his genius was never equal [116/117] to your own, and Aristotle was one of those great men, in whose mouth the jargon of enthusiasts and the verbiage of the ignorant embodied profound mysteries, curious subtleties, *rhetres*,<sup>b</sup> and oracles.

Whatever else may be true, M. Leibniz's system certainly doesn't impress me

with its novelty, since it has an obvious connection, in part with the *Cabbala* of the rabbis, as can be seen in a Latin book called *Cabala denudata*, or *The Cabbala Revealed*.<sup>6</sup> These very clever teachers recognise only *a single substance of all things*. This substance is *mind*, which, according to them, is actually divided into as many *individuals*, as there are *mathematical points* in the universe. The *accidents*, in which each of these is dressed, are what they call *matter*. Matter is not, as you doubtless think, madam, a *substance*, but rather a *shadow*, which they often call a *nothing*.<sup>c</sup> Everything [117/118] they say about the thoughts of these numerous minds, about their various ways of uniting, dividing, assembling, squeezing together, or separating, (which is how they constitute the particular quantities that we call *bodies*, but which, in their philosophy, are only *minds* disguised by *shadows* or covered by *nothings*) fits perfectly well with M. Leibniz's ideas, so far as I can discern them. So imagine, madam, that it is a republic of minds that has the honour of writing to your Majesty today—for although I am not especially big or especially fat, I contain a good enough number of mathematical points to make up a fair republic all by myself. (But I fear that anyone who likes puns will tell you that it is only pure matter which is marking this paper here, and that there is no mind involved [118/119] at all.) Whatever happens, I beg you very humbly to compare the original with the *expressions* and the *passages* that I quote in this letter, where I am not concerned just to show off my wit.

The very title of this document worries me. I do not understand the word 'harmony' in connection with *the soul*. Aristoxenus,<sup>7</sup> equally good as a philosopher and as a musician, was the first to hold that the soul is a kind of harmony. But it is not in that sense that M. Leibniz uses the word; and moreover he does not mention Aristoxenus as authority or spokesman. I understand even less what is meant by the whole title, 'system of pre-established harmony', for the author recognises no real constraint or mechanism in things, no necessity or pre-destined fate. 'Entelechy' is as unintelligible to me in the mouth of a modern writer as it is in the books of Aristotle - the words 'soul' and 'mind' are not clarified in the least by this unfamiliar term. I can't make anything of 'indivisible active mirrors'<sup>8</sup>—another expression for minds. [119/120] The author certainly does a very good job in such an obscure subject of employing a large number of synonyms—although none of those he makes use of in this piece seems to me any clearer or more familiar than 'soul' or 'mind', which is what he is writing about. I would never have been able to guess the difference between the 'small indivisible substances'<sup>9</sup> of M. Leibniz and the *atoms* of Epicurus, if he had not told me later<sup>10</sup> these small substances are minds, and that Epicurean atoms are *nothings*, and that

*mind* is the only substance, and *matter* is merely modal. Good God! Matter a mode!—and what's more a mode of mind! But let us go on. I do not understand how 'nothing can disturb these primitive entelechies, or active principles',<sup>11</sup> if they are bodies; and if they are minds (as is the view of the author and of the rabbis), then matter (as both of them explicitly say) is only an accident. This theory turns the most widely-held notions upside-down, for it holds that there is an infinity of minds which have no more thought or<sup>12</sup> perception than particles of matter [120/121] have according to ordinary philosophy.

I cannot understand how there can be 'no constraint in substances except in external appearance',<sup>13</sup> (a fine way of resolving the difficulties of divine foreknowledge and man's liberty!); and that being so, it is impossible for me to distinguish between reality and appearance. The author would have done well to explain to us the nature of these 'characters which represent the most abstract reasonings to the imagination',<sup>14</sup> what the *imagination* itself is according to him; how these 'characters' act on it or in it, and how it sees objects in these wonderful 'mirrors',<sup>15</sup> of which he speaks so often. I almost said 'these magic mirrors', for in fact that is what they are. 'Since bodies', says M. Leibniz, 'are not atoms, but divisibles—and indeed divided—to infinity, and since everything is filled with them, it follows that the smallest body is affected by the smallest changes in any of the others, however distant and however small it may be, and so must be an exact mirror of the universe. This means that a sufficiently penetrating mind would, in proportion to its penetration, [121/122] be able to see and foresee in each corpuscle what is happening and what will happen both in that corpuscle and outside it'.<sup>16</sup> That is all highly original, isn't it, madam? Upon my word, I know many people who would not, for all the world, want me to have the penetration to see the present and the future in any of their 'small indivisible active mirrors'!<sup>17</sup> What a good thing my lack of penetration is for them!

As for the rest, it seems useless to me to speak of the soul if 'everything happens in the body with regard to the details of phenomena as if the wicked doctrine of those who (following Epicurus and Hobbes) believe that the soul is material were true; or as if man himself were only body, or an automaton. They have extended to man' (adds M. Leibniz) 'what the Cartesians maintain with regard to all other animals, since they have in effect shown that man, with all his reason, does nothing which is not a play of images, passions, and movements in the body. We have prostituted ourselves' (he continues) 'in trying to prove the opposite, and have only prepared the way for the [122/123] triumph of the mistake by approaching it in that way'.<sup>18</sup> But why call this doctrine 'wicked' or a 'mistake'

if things ‘happen as if’ it were true, if ‘they have in effect shown’ that they do, and if ‘we have prostituted ourselves in trying to prove the opposite’? As for ‘consciousness’ or ‘internal perception’, it necessarily always accompanies thought, since it is nothing other than *thought itself reflected*,<sup>19</sup> and there is never a perception so simple that it is not noticed, otherwise it would no longer be a thought. I am amazed that the author can have doubted this, and that he can have believed that animals are not capable of reflection—they show well enough by their actions that they are, and no experience can ever prove the contrary.

M. Leibniz says ‘I consider souls, or unities, as atoms of substance, for in my view there are no material atoms in nature’.<sup>20</sup> We have touched on that in passing, and you can see that he still denies that *matter* is a *substance*. This will be a very surprising discovery for those who maintain that matter is the only substance in the universe. They will also learn [123/124] that souls are ‘intelligent points’.<sup>21</sup> Now, since points are not real beings but just pure abstractions, these gentlemen would be sure to say (for materialists have always been great mockers) that all M. Leibniz’s *minds* are *all in his mind*, and entirely imaginary. For my part, madam, I reject not only *material atoms* (with M. Leibniz) but also (as against him) *atoms of mind*, or, as he calls them elsewhere, ‘small indivisible substances’.<sup>22</sup> For, according to me, since substance, reality, or the universe is infinite, its continuity (so to speak) is never really divided, and consequently there are no independent parts of matter. Particular bodies are only mentally divided from universal extension by their modifications, which themselves, however, are nothing real, but only relative to us and to our way of conceiving things. This is how I understand the words ‘body’, ‘part’, ‘particle’, ‘something’, ‘a certain being’. And as the infinite can only be expressed by the infinite, so all its [124/125] real attributes are really infinite, as for example is *extension*. By contrast, conceptions of modes are always finite, such as *round* or *square*, *red* or *blue*. But it would be a very simplistic idea, to think that the finite idea we have of modes implies the actual division of substance.

But, to return to Mr. Leibniz, he maintains, ‘that the atom, even though it has parts, has nothing to cause any variety in its tendency. On the other hand, the soul, though completely indivisible, involves a compound tendency, that is to say a multitude of present thoughts, which are all in it at the same time, in virtue of its essential relatedness to all the other things in the world’.<sup>23</sup> I frankly admit that I will never understand how an ‘indivisible point’ can have a ‘compound tendency’, or any kind of tendency or movement - let alone have a multitude of thoughts at the same time. According to me, thinking is done by a *compound*

*being*. It is a *sui generis* movement which begins, continues, and ends; it has its generation, succession, and corruption, just as do all the other modes of substance; [125/126] and it is also divided and determined, simple or compound, amplified, diminished, or abstract. These are all phenomena which can be naturally understood and explained, by the springs, movements, and ability, by the strength, perfection, disorder, or destruction of a compound being—but never by any *indivisible thing*, by any ‘unity’ or ‘atom’ of substance. I am not only puzzled by what he says about thought; I also do not know how a *unity* without parts can have any relation to things *outside of it*. For as regards ‘the essential relatedness to all things in the world’, I understand that about as well as I do an intelligent ‘monad’, which contains all its thoughts ‘at the same time’ (when I always thought they were *successive*) and which contains them even sometimes when it is not thinking about them at all, and isn’t currently producing any idea of them. And, to be fair to everyone, that seems to me every bit as reasonable and as well founded as the system of *innate ideas*, and those *select maxims* which are engraved from the beginning on the souls of all men, even though for a long time they know nothing about them, [126/127] and perhaps never think of them in their entire lives.

In a word, all these splendid phrases—‘represent finitely God’s infinity’, ‘in their own way scaled-down worlds’ (speaking of souls), ‘fertile simplicities’, ‘virtually infinite unities of substance’, ‘centres which express an infinite circumference’, ‘possible coexistences and coexistent possibilities’<sup>24</sup>—all these phrases, I say, although perfect French, are nevertheless quite unintelligible to me. But, then, madam, perhaps you have a key for understanding this document. Or did you want to see if I was one of those people who are convinced they can understand everything, and who, rather than openly confessing their ignorance, struggle to find some meaning where there isn’t any? As for me, I have no problem in acknowledging that I don’t have a sufficiently exalted mind, a sufficiently lively intellect, and a sufficiently broad understanding to imagine a *soul* which is an ‘intelligent atom’, a ‘monad of substance’, a ‘primitive entelechy’, an ‘active mirror’, which not only represents the most abstract objects [127/128] to the imagination, but which, notwithstanding its ‘monadic indivisibility’, has a ‘compound tendency’, and an ‘essential relation’ to all the parts of nature, containing in itself an unnumbered number of thoughts simultaneously, without there being any substances in the world other than such minds, ‘monads’, ‘entelechies’, or ‘mirrors’. And I understand the idea that bodies are only *shadows* or *nothings*, as little as I understand how there exist as many separate and distinct *minds*, as there are *mathematical points* in the universe.

Allow me to remind you here, madam, of what you have done me the honour of saying to me more than once: that of all those who take up philosophy, *mathematicians* satisfy you least—especially when they try to explain the origin of things in general, or the nature of the soul in particular. And you have been surprised that for most of them, in spite of their geometrical precision, *metaphysical ideas* are a *terra incognita*, and an inexhaustible source of chimeras. This remark is very discerning indeed, madam, [128/129] and the reason for this turn of mind on the part of *mathematicians* seems to me very easily found. When abstract notions are taken for real beings, or when relative ideas pass for absolute things, it is as if similarities or comparisons are taken for solid and accurate proofs. Thus certain terms, invented by *mathematicians* for very good reason in order to focus the imagination and help develop their calculi, have often been misunderstood by others, and sometimes indeed misapplied by certain *mathematicians*, who (instead of using them as architects use scaffolding, for the convenience of workmen) have put them forward as so many fundamental principles, on which they have then constructed theories. In this way it has been maintained that *lines*, *surfaces*, and *mathematical points* really exist in nature, and from that they have drawn many conclusions: amongst others, *that extension is composed of mathematical points*—which is to say that length, breadth, and depth, are made up of what is neither long, nor broad, [129/130] nor deep, or that size comes from what is not a quantity. Similarly, the term ‘infinity’ has been strangely confused, causing a thousand errors and equivocations. *Number* has been supposed *infinite*, as if it were something real; and because our mind can go on adding one for ever (to put it crudely), it has been concluded that an *infinite number* actually exists. It is the same with *infinite time*, *infinite thought*, *asymptotic lines*, and a large number of other *progressions to infinity*. These are genuinely infinite with respect to the operations of our understanding, but not in themselves; for whatever is infinite in its nature, actually is so, and what merely can be infinite, most certainly is not.

*Mathematicians* make use of numbers, motions, and quantities which are given, and they make from them various calculi (which are extremely useful) without bothering about the physical causes of things; because for their purposes it is enough that, given that things are arranged in such and such a manner, such and such [130/131] consequences necessarily follow from them. But to imagine that they can give an account of the nature of things by such calculi, is precisely where their error lies. Gravitation, or the tendency of all bodies to their centre, is one thing, and the cause of this gravitation is another. The one is a fact, and

JOHN TOLAND'S 'REMARQUES CRITIQUES'

the other is the reason for it. And it is no less an error for *philosophers* to think they can succeed in their investigations without in any way applying to natural phenomena the *mathematician's* calculi. Without them they will never be able to work out (for example) the size of the effect of one thing on another, or the consequences which follow from it. From all this I draw this conclusion: that a man can be an excellent *mathematician*, without being even a mediocre *philosopher*; but he can never be a profound *philosopher* without being a passable *mathematician*.

How lucky is our celebrated *Newton*, who possesses both these qualities, so rarely united in the same person! However—to avail myself here, madam, of that freedom which is [131/132] inseparable from true philosophy—I will add that I could never accept that great man's view on *weight*, which he claims is as *essential to matter* as is extension, and moreover is *specific*, in that the weight of each body depends on the amount of matter that it contains.<sup>25</sup> As against that, since I am persuaded that *action is as essential to matter as is extension or impenetrability*, it seems obvious to me that weight is only a particular movement or a certain determinate action, which depends on its own impulsive causes, just like all other determinate movements, of whatever kind. Weight is a necessary effect of the great machine (I mean of the structure of the world in its current state), and not of matter as such; just as the movement of a watch is different when it is assembled, from when all its parts, separated from each other, are thrown confusedly on the table. But this is not the place to examine the matter. The *specific weight* of bodies should be the [132/133] subject of a book, rather than of a digression which I hasten to finish, madam, in order to assure you of my complete obedience to your commands, and of the profound respect, with which I have the honour to be, Madam, etc.

Berlin, 14 January 1703

[Notes in the article]

a It is now some time since these remarks came to hand, but we were waiting for a suitable opportunity to include them in this *Histoire*. We do this today with the greater pleasure, since the author had before him the article by the illustrious M. Leibniz, which the reader has just seen.<sup>26</sup>

b This is what the Lacedaemonians called oracles.<sup>27</sup>

c M. Berkeley, an Irish theologian and mathematician, has produced a work intended to prove that there is neither *matter*, nor *body* in the world, and that everything is *mind*. So there we have *The Cabbala Revealed*, which is becoming very fashionable. See *Histoire critique*, vol. 6, pp. 556 [sic] & 357.<sup>28</sup>

*Translators' Notes*

<sup>1</sup> Stuart Brown, 'Two papers by John Toland: His "Remarques Critiques sur le Systême de M. Leibniz ..."' and the last of his *Letters to Serena*', *Quaderni di filosofia*, 4 (1999), 55-79; Antonio Lamarra, 'An anonymous criticism from Berlin to Leibniz's philosophy: John Toland against mathematical abstractions', *Studia Leibnitiana*, sonderheft 16 (1990), 89-102; R.S. Woolhouse, 'John Toland and "Remarques critiques sur le Systême de Monsr. Leibniz de l'Harmonie préétablie"', *Leibniz Society Review*, 8 (1998), 80-87.

<sup>2</sup> Slightly different versions of Leibniz's 'Réponse de M. Leibniz aux reflexions contenues dans la seconde édition du Dictionnaire Critique de M. Bayle, article Rorarius, sur le systême de l'harmonie préétablie', *Histoire critique de la République des lettres*, art. 4, vol. 11 (1716), pp. 78-114, can be found in Pierre Desmaizeaux, *Recueil de diverses pièces sur la philosophie ...* (Amsterdam, 1720), and G, vol. 4, pp. 554-71; translated in L, pp. 575-85. With a record of some of the variations, the piece as published in the *Histoire* is translated in WF, pp. 107-26. Leibniz's reply to Toland's article 5, 'A letter from Leibniz to Samuel Masson' is printed in G, vol. 6, pp. 624-9, and translated into English in AG, pp. 225-30.

<sup>3</sup> 'Remarques Critiques sur le Systême de Monsr. Leibnitz de l'Harmonie préétablie; où l'on recherche en passant pourquoi les Systêmes Metaphysiques des Mathematiciens ont moins de clarté, que ceux des autres; écrites par order de Sa Majesté la feuë Reine de Prusse', *Histoire critique de la République des lettres*, 1716, vol. 11, article 5, pp. 115-33. The square bracketed pairs of numbers record the pagination of the original.

<sup>4</sup> I.e. what was published as 'Réponse de M. Leibniz aux reflexions ... de M. Bayle', *Histoire critique*, art. 4, vol. 11 (1716). In the following notes we have tied Toland's references to this to the section numbers of the translation in WF. Toland's quotations are sometimes rather free.

<sup>5</sup> acroamata: oral esoteric teaching only for the initiated. 'It would appear ... that Alexander not only received from his master [Aristotle] his ethical and political doctrines, but also participated in those secret and more profound teachings which philosophers designate by the special terms "acroamatic" and "epoptic"' (Plutarch, *Lives*, 'Alexander', 7 (as in Bernadotte Perrin (trans), *Plutarch's Lives* (Heinemann: London, 1919), vol. 7, p. 241)). The story that Aristotle taught Alexander the Great is now in question, cf. for example, Anton-Hermann Chroust, *Aristotle: New Light on his Life and on some of his Lost Works*, (Routledge & Kegan Paul: London, 1973), vol. 1, chap. 10.

<sup>6</sup> A translation (1677-84) of various cabbalistic works published by Christian Knorr

JOHN TOLAND'S 'REMARQUES CRITIQUES'

von Rosenroth (? - 1689).

<sup>7</sup> Aristoxenus of Tarentum, at first a Pythagorean and then a student of Aristotle (see Cicero, *Tusculan Disputations*, I.x.19). It is not clear why he, and not Pythagoras, is said to be 'the first'.

<sup>8</sup> para. 4.

<sup>9</sup> A concocted phrase (but see, for examples, paras. 4, 8, 16, 18).

<sup>10</sup> paras. 9, 11.

<sup>11</sup> para. 5.

<sup>12</sup> Reading *ou* for *on*.

<sup>13</sup> para. 6.

<sup>14</sup> para. 7.

<sup>15</sup> paras. 4, 5

<sup>16</sup> para. 5 (where Toland has 'affected' Leibniz originally had 'individually affected').

<sup>17</sup> para. 4.

<sup>18</sup> para. 8.

<sup>19</sup> para. 8.

<sup>20</sup> para. 9.

<sup>21</sup> para. 6? (quotations are not exact).

<sup>22</sup> para. 7.

<sup>23</sup> para. 10.

<sup>24</sup> paras. 11, 22?, 23?

<sup>25</sup> 'essential to matter': Newton did not make this claim (see Ernan McMullin, *Newton on Matter and Activity* (University of Notre Dame Press: Notre Dame IN, 1978), chap. 3. 'specific': Newton, *Principia*, defs. 5, 8.

<sup>26</sup> I.e. 'Réponse de M. Leibniz aux réflexions ... de M. Bayle'.

<sup>27</sup> Lacedaemon: the country whose capital was Sparta; oracles and rhetres: see Plutarch, *Lives*, 'Lycurgus', sects. 6, 13.

<sup>28</sup> Vol. 6, 1714, p. 356-7. A notice and account of Berkeley's *Three Dialogues between Hylas and Philonous* (London, 1713).

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