

# Unknown Texts from the Academy Edition of Leibniz Related to the Rehabilitation of Substantial Forms

ライプニッツアカデミー版全集における未知のテキスト—実体的形相復興に関連した論述について—

枝村 祥平 (教養教育部准教授)

Shohei EDAMURA (Faculty of Liberal Arts and Education, Associate Professor)

〈要旨〉

Important texts from the Academy Edition of Leibniz have been introduced concerning the rehabilitation of substantial forms. For instance, Michel Fichant introduced *De Corporum Concorso* (1678) as a canonical text of the rehabilitation. Richard Arthur also translated some texts in which Leibniz declared that there are substantial forms. But there are untranslated texts that involve significant discussions on the topic. In this research note, I introduce notable passages from them and show my interpretations.

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## 1. Introduction

One of the most well-known theses of Leibniz's matured metaphysics is that the world or universe is full of monads or immaterial substances that are analogous to the human mind (AG.222 = M.66). According to Leibniz, even mineral stones are composed of mind-like and living substances. He opposed to Descartes who argued that a body is an extended substance and its essential attribute is nothing in common with the human mind. He also rejected the Hobbesian materialism according to which the human being is a lump of matter, and the Gassendian atomism, namely the view that an inorganic body is a collection of absolutely solid atoms. But Leibniz did not hold the matured view when he wrote a letter to Jakob Thomasius in 1669, where he argued that there are substantial forms in bodies, but these forms are nothing but their geometrical figures (A.II.i.20). Later he took note of the significance of scholastic philosophy, and as well known, he wrote that "the belief in substantial forms has some basis" and scholastic philosophers are "not so distant from the truth" in the *Discourse on Metaphysics* of 1686 (AG.42 = DM.10). Thus Leibniz is said to have "rehabilitated" substantial forms.

Distinguished scholars have attempted to specify when Leibniz exactly rehabilitated substantial forms.

According to André Robinet, Leibniz rehabilitated substantial forms in the letter to Johann Friedrich of autumn 1679 (Robinet 1986, p. 250), where Leibniz wrote that "[he reestablished] substantial forms with demonstrative certainty and explain them intelligibly" (A.I.ii.225; Garber, 2008a, p. 48). Later Michel Fichant argued that *De Corporum Concorso* of 1678 is a canonical text of the rehabilitation, and that Leibniz's investigation of physics, especially the law of conservation, is essential for the rehabilitation (Fichant, 1998, p. 179). Daniel Garber doubted the relevance between the law of conservation and rehabilitation, and introduced another important text *Conspectus for a Little Book on the Elements of Physics* [*Conspectus libelli elementorum physicae*] (hereinafter *Conspectus*, Summer 1678 – Winter 1678-79(?), A.VI. iv.1986-1991) in which Leibniz had argued that there are substantial forms (Garber, 2008a, p. 49).

Meanwhile, many texts related the rehabilitation have been translated: Fichant translated *De Corporum Concorso* to French, and Richard Arthur published English translations of Leibniz's early works that include metaphysical discussions of body and continuum. But although Arthur's translation has *Conspectus* and *Metaphysical Definitions and Reflections* [*Definitiones cogitationesque metaphysicae*] (Summer 1678 – Winter

1680-81, A.VI.iv.1393-1403) that are important for understanding Leibniz's rehabilitation of substantial forms, not all the works related to the rehabilitation are translated there. In this research note, I introduce four works from the fourth volume of Leibniz's philosophical writings in the Academy Edition. I will quote notable passages from them and show my interpretations.

### 1. *Distinctio mentis et corporis*

I start from *Distinctio mentis et corporis* (hereinafter *Distinctio*, Early 1677 – Early 1678(?), A.VI.iv.1368-1369) that is categorized to the group of metaphysical works. Leibniz discussed the ontological status of body in this short work. He started with a skeptical worry wondering if bodies really exist in the world. Like Descartes, Leibniz distinguished his mind from the body since he could reasonably doubt if bodies really exist. And he suggested that it is possible that bodily phenomena merely exist within the perceiving mind, but nothing that corresponds to the phenomena exists outside. Leibniz thought that even if we see extended phenomenal bodies, they might be mere appearances that do not have any mind-independent reality. We can understand his view from the following passage:

Corpus autem voco id omne quod eis quae sentimus simile est. Impossibile autem hoc esse, ex eo patet, quia impossibile est ullo modo nos certos reddi posse, de existentia corporum, seu impossibile esse rationibus philosophicis probari unquam corpora ne sint apparentiae an substantiae. (A.VI.iv.1368)

According to Leibniz, we cannot be sure about the existence of bodies since we do not find a good reason to decide whether bodies are substances or mere appearances that only exist in the perceiving mind. His view is quite similar to that in a draft of the *Discourse on Metaphysics*, where he wrote that “[he did not] attempt to determine if bodies are substances in metaphysical rigor or if they are only *true* phenomena like the rainbow” (AG.65). To be sure, Leibniz suggested that bodies can be substances, though we do not have good evidence to claim that they are. Yet he was reluctant to declare that bodies *are* substances even at the last part of the work, showing a skeptical view concerning the reality of the bodily world:

Certum est apparentias esse in me, sed non ideo sequitur totidem esse substantias extra me, quot videntur causae apparentiarum; id est totidem esse

corpora. Nullo modo probari potest ratione naturali, quod dentur substantiae divisibiles seu corporeae. (A.VI.iv.1369)

Thus Leibniz was not sure if there are many corporeal substances, and Leibniz certainly did not declare that there are substantial forms in *Distinctio*. But it is a good milestone to get out of the monistic metaphysics of *De Summa Rerum* (1675-76) where he wrote that “no thing really differs from another” and “all things are one, just as Plato argues in the *Parmenides*” (DSR.95 = A.VI.iii.573). Here Leibniz seems to have suggested that there is only one substance, significantly influenced by Spinoza. But in *Distinctio*, he argued that there can be many substances in the world.

### 2. *Aus und zu Jungius' Logica Hamburgensis*

*Aus und zu Jungius' Logica Hamburgensis* (hereinafter *Jungius' Logica*, Fall 1678 – Winter 1679/80 (?), A.VI.iv.1066-1084) is a text that may look quite irrelevant to the metaphysics of substantial forms. In this work, Leibniz elaborated Jungius' famous work *Logica Hamburgensis*. Like Aristotle's *On Category* and *De Interpretatione*, Jungius' book deals with many important ontological categories which Leibniz also discussed in *Jungius' Logica*. After introducing the significance of logic as an art of finding truths, Leibniz discussed many important concepts of logic, such as predicate, relation, and subject. Then he started to distinguish “whole [*totus*]” from “part [*pars*]” as the following:

Estque vel communis pluribus praedicamentis, quae est inter totum et partem, subjectum et adjunctum, causam et effectum, ubi totum facit essentielle (cum partes se penetrant seu loco non sunt disjunctae, ut compositum ex anima et corpore, materia et forma) vel quantitativum ubi loco sunt distinctae (+ imo temporis partes loco non distinctae, attamen positione +), partem et distinguit in proximam et remotam. (A.IV.iv.1067)

Leibniz suggested that a composite of soul (form) and body (matter) is a whole. Although it has two components, these components are not spatial parts, and thus the composite of form and matter does not have parts in the sense that an aggregate of stones has many parts. After suggesting that time also has parts, he discussed causes:

Causa interna vel externa. Notat internam seu materiam et formam tam late aliquando sumi, ut et ad

Ens per accidens extendatur, stricte constituere Ens per se et locum tantum habere in substantia. Forma et Materia differunt, quod illa huic inhaeret. (A.VI.vi.1068)

The two internal causes, namely a formal and a material cause, make up “being [*ens*] per se.” Form inheres to matter, and both of them are “located” in a substance. And Leibniz contrasted “being per se” with “being by accident”:

Etiam simitas est Ens per accidens (+ non putem +). Ens per aggregationem ex pluribus numero diversis et completis componitur; et quidem vel Entibus veris vel ex Entibus per accidens. Est vel mere aggregatitium ut acervus tritici, vel cum certo ordine, quod vocant Ens per ordinem, quod habet quasi materiam et formam. (A.IV.iv.1069)

Although Leibniz’s distinction of terms is not so clear, we can roughly understand his view as the following. A thing is either a “true being [*ens verus*]” or “being by accident.” Both “mere aggregate” and “being by order” are categorized to the latter. Some aggregate is not spatially well-ordered, such as a racial group whose members live in distant places. Some aggregate, such as a brick wall, is spatially ordered, and any of its parts has another part that belongs to the aggregate relatively close to it. An interesting point is that “an ordered being” has a “quasi” form and matter. If so, Leibniz may not have taken “form” as substantial form in this work since Leibniz may have understood “form” as referring to a broad concept that includes a form for an organic body, and a form for a well-ordered body. But the latter is obviously not a substantial form.

Leibniz once stopped discussing metaphysical categories after this passage focusing upon features of many types of syllogism, but later he distinguished “internal” and “external” causes again:

Causa externa vel interna. Interna materia vel forma. Materia ex qua, in qua et circa quam. Materia ex qua Permanens vel transiens. Materia permanens est etiam pars constituens ut lignum statuae, transiens ut truncus est materia statuae. De materia in qua et circa quam infra ubi de subjecto. (A.VI.iv.1082)

In this passage, Leibniz mainly discussed matter. There are three kinds of matter: Matter from which something is brought about, and matter within something, and matter around something. The first one, matter from

which something is brought about is either permanent or transient. When a pile of woods is stably left, each wood is a permanent portion of matter. On the other hand, a log is a transient part of the whole if it is taken off from the whole pile.

To sum up, although Leibniz discussed “form” in *Jungius’ Logica*, he did not define it as substantial form that provides a metaphysical unity to one thing. And we cannot take it as evidence that he was committed to the existence of substantial forms.

### 3. *Praefatio ad libellum elementorum physicae*

*Praefatio ad libellum elementorum physicae* (hereinafter *Praefatio*, A.VI.iv.1992-2009) was written between Summer 1678 and Winter 1680/81, as well as *Conspectus*, which Daniel Garber discussed as an important text concerning the rehabilitation of substantial forms. An editor interprets it as a commentary of the work titled *Libellus elementorum physicae*, which Leibniz actually could not complete.<sup>(1)</sup> *Praefatio* starts with a discarded short paragraph (A.VI.iv.1992), followed by a version of draft [*abgeschlossener Entwurf*]. Leibniz at first introduced methods of physics, and explained how the human mind understands attributes of bodies. He then discussed how corporeal qualities are explained in terms of the mechanistic theory:

Quoniam autem omne confusum sua natura in distincta resolubile est, etsi fortasse id non semper sit in nostra potestate, hinc sequitur omnes corporum qualitates atque mutationes tandem sua natura reduci posse ad distinctas quasdam notiones, in corpore autem si sola materia spectetur sive id quod spatium replet, nihil aliud distincte concipi potest quam magnitudo et figura quae ipsi insunt ratione spatii, et motus, qui est spatii variatio. Itaque quae materialia sunt explicari possunt per Magnitudinem, Figuram et motum. Scio multos viros doctos dissentire, et qualitates exempli causa calorem, lucem, vim elasticam, gravitatem, vim magneticam, considerare tanquam quaedam entia absoluta ex forma substantiali emanantia, neque ego hanc eorum considerationem plane rejicio, saepissime enim non est necesse ut harum qualitatum resolutionem quaeramus. (A.VI.iv.2006-2007)

Leibniz argued that we only conceive magnitude and figure *if solely that which fills up space is considered*. This

is a conditional statement, and he did not argue that a body is a spatially extended thing that does not have any other property. Then Leibniz introduced another view that we cannot provide a completely mechanistic explanation of heat, light, elastic force, gravity, magnetic force, and others, and substantial forms cause these qualities. He further suggested that mechanism does not explain an internal principle of a body. Leibniz then introduced another conditional statement that if body has substantial form, then some sensation and appetite should be ascribed to it. Again, this is a conditional statement, and we cannot conclude that Leibniz was committed to the existence of substantial forms from this statement alone.

Leibniz discussed the non-mechanical view in another passage as well:

Scio etiam viros quosdam optimos et doctissimos ferre non posse ut omnia corporum phaenomena mechanice explicentur, hoc enim putant obesse religioni, eoque posito sequi credunt machinam mundi neque Deo neque ulla alia substantia incorporea indigere, quod merito absurdum et periculosum censent, itaque alii immediatum Dei concursum ubique adhibent alii intelligentias sive angelos motores passim introducunt; nonnulli statuunt quendam animam mundi aut principium nescio quod hylarchicum, cujus opera efficiatur, ut gravia ad tellurem tendant, aliaque contingant ad systematis conservationem pertinentia. Sed haec omnia non sufficiunt ad reddendas rationes, nam sive Deum, sive angelum sive animam, sive nescio quam aliam substantiam incorpoream operatricem introducamus, semper in rei veritate explicari potest causa modusque operandi, modus autem quo corpus operatur distincte explicari non potest, nisi explicetur et quid partes ejus contribuant, hoc autem non intelligitur nisi eorum relatio inter se et ad totum, hoc est ipsorum figura et situs, et hujus situs mutatio sive motus, et magnitudo, et pori et alia id genus mechanica intelligantur, haec enim semper operationem variant. (A.VI.iv.2008)

Leibniz referred to the view that not all phenomena are mechanically explained. And he admitted that mechanical explanations do not work for the actions of incorporeal substances, such as God, angels and souls. Then he gave a critical note upon the concept of the world soul or “hylarchicum” proposed by Henry More. According to Leibniz, More assumed that gravity is an

action of the world soul. But Leibniz rejected this kind of explanation since how the world soul moves bodies is not clearly understood comparing to the mechanical explanation.<sup>(2)</sup> He concluded that the mechanical explanation has an advantage over other explanations. But as we can see from the following, he did not hold a thoroughgoing mechanism that completely excludes metaphysics from the investigation of nature:

Quodsi scivissent illi qui leges mechanicas oppugnant, ipsas leges mechanicas denique resolvi in rationes metaphysicas, et rationes illas metaphysicas a divina voluntate sive sapientia oriri non adeo mechanicas explicationes aversarentur. Ego sane expertus sum non posse motuum physicorum rationes reddi per solas regulas mathematicas, sed metaphysicas propositiones necessario adjungendas esse. (A.VI.iv.2008)

Leibniz argued that the mechanical laws of nature hold. He also added that there should be a further reason why these laws hold, and only metaphysics can provide it. But he did not go further to suggest a relevance between the conservation law and the existence of substantial forms as he did in *Metaphysical Definitions and Reflections* (A.VI.iv.1988 = RA.233).

As for the mechanical view, Leibniz reexamined it as the following:

Ego vero sic sentio: Omnia quidem sua natura esse clare distincteque explicabilia, et a Deo manifestari posse nostro intellectui, si vellet, et non posse corporis operationem satis intelligi, nisi intelligatur quid partes ejus conferant; ac proinde nullam sperandam ullius phaenomeni corporei explicationem, nisi adhibita partium constitutione; verum hinc minime sequitur nihil aliud in corporibus intelligi posse nisi quod sit materiale et mechanicum; neque etiam sequitur in materia solam extensionem reperiri. (A.VI.iv.2009)

Leibniz argued that the nature of something should be clearly and distinctly understood by virtue of the natural intellect given by God. And he suggested that many bodily phenomena are clearly understood through the mechanistic theory. Yet he wrote that a material thing does not necessarily consist in extension, and suggested that it has an “acting force [*vis agendi*]”:

Nam licet attributa corporum confusa revocari possint ad distincta, sciendum est duorum generum esse attributa distincta, alia enim petenda esse ex Scientia Mathematica, alia vero ex Metaphysica. Ex scientia

quidem Mathematica, magnitudinem, figuram, situm, et horum variationes, sed ex metaphysica existentiam, durationem, actionem et passionem, vim agendi, et actionis finem sive agentis perceptionem. (A.VI.iv.2009)

Here Leibniz introduced the attributes of bodies in an interesting way. Some attribute is relevant to the mathematical science, while another is relevant to the metaphysics. Leibniz then introduced a bold claim as a conclusion, namely that sense and appetite are ascribed to every body:

Itaque arbitror in omni corpore esse quendam sensum atque appetitum, sive animam, ac proinde soli homini formam substantialem atque perceptionem sive animam tribuere tam esse ridiculum, quam credere omnia hominis solius causa facta esse, et terram universi centrum esse. Sed ab altera parte sentio, ubi semel ex sapientia Dei et natura animae leges naturae mechanicas generales demonstraverimus, tunc in particularibus naturae phaenomenis explicandis ad animam vel formam substantialem ubique recurrere tam esse ineptum quam recurrere in omnibus ad absolutam Dei voluntatem; nam actio animae ex statu organi atque objecti et operatio Dei ex singularum rerum conditionibus determinatur, non quidem necessitate materiae, sed impulsu causae finalis sive boni. (A.VI.iv.2009-2010)

His argument for the existence of substantial forms is not so clear here. Leibniz suggested that the action of a soul, such as an appetite, is not a material phenomenon that is mechanically brought about, but an action toward a final cause or good. But the reason why he thought that even an inorganic body has an appetite is not obvious.

#### 4. *Characteristica Verbalis*

Lastly I introduce *Characteristica Verbalis* (hereinafter *Characteristica*; A.VI.vi.333-337; May-June 1679 (?)). It is categorized to the group of works concerning “science in general, characteristics, and universal calculus” by editors of the Academy Edition. This work is mainly about definitions of words. But like logical works, it contains some discussion of important categories. In the following, we find an interesting discussion of subject and adjective, followed by those of human beings, inorganic bodies, and substantial forms:

Discrimine inter Substantiva et Adjectiva in

*Characteristica careri potest. Nam inter corpus et extensum, nihil aliud interest, quam quod corpus videtur significare: subjectum extensum; quod tamen satis jam in voce extensi continetur. Ita homo nihil aliud est quam subjectum humanum seu subjectum humanitatis. Soliti autem sunt homines excogitare hujusmodi nomina substantiva subjectum includentia pro illis rebus, quas magis considerant, nam rerum extensarum multitudo constituit quendam coetum seu aggregatum cujus partes habent non tantum convenientiam sed et connexionem; rerum vero calidarum multitudo dispersa est. Similiter omne aurum in toto mundo consideratur velut totum quoddam (unde nec dicimus in plurali aura sed auri copiam, de l’or, gold), ita et omnes homines unum coetum facere intelliguntur, praesertim cum accedat hominum ex se invicem propagatio. Hinc oritur illa quaestio an res specie differant; concipiunt enim homines quasi semina quaedam etiam in rebus inanimis, ut metallis: et chymici inprimis huc inclinant, qui etiam qualitibus omnibus quasi quaedam subjecta radicalia ascribunt. Ita credunt formas substantiales latere in seminibus, colores in quibusdam tincturis, odores in sulphuribus, sapes in salibus; ita ut formae (cum suis scilicet vehicul) ex subjectis quibusdam extrahi et aliis infundi possint. Sed cum haec minus certa sint, nec satis liquido sit explicatum quid intelligunt homines cum de differentia specifica quaerunt, ideo ista nunc quidem in *characteristica* negligemus, donec distinctius constituentur. (A.VI.iv.334-335)*

Leibniz first suggested that a body is understood as an extended subject. Extension is contained in it. A human being, in contrast, is not understood as a merely extended subject. Here Leibniz suggested that some feature of a human being, such as a cognition, cannot be understood as a mode of extension. Leibniz then introduced the concept of aggregate in which many parts are “connected.” For instance, hot parts or particles are dispersed in a hot thing, and golden particles are dispersed in a lump of gold. Then Leibniz introduced the term “seminals [*semina*],” as he had in a letter to Johann Friedrich of 1671 (A.II.i.116).<sup>(3)</sup> Although Leibniz did not argue that seminals explain chemical properties of matter in the letter, he seems to suggest that matter has chemical properties that result from seminals in *Characteristica*. Then he even suggested

that there are substantial forms in seminals.

*Characteristica Verbalis* is a unique text in which Leibniz introduced seminals as well as substantial forms. Although the reason why he postulated the existence of substantial forms in the context of explaining chemical properties is not obvious, we can see his commitment to the existence of substantial forms in seminals, and in bodies in general.

## Notes

- (1) Leibniz at least wrote *Conspectus* as a summary of *Libellus elementorum physicae*. But he did not finish chapters that were supposed to follow it.
- (2) Later in letters to Clarke, Leibniz also rejected Newton's theory of gravity since it did not provide a reasonable explanation for how distant bodies attract each other (L.701-702). And he argued that if we assume that God perpetually acts upon bodies and makes them move exceeding their natural powers, God would be conceived like "a soul of the world" (L.690).
- (3) Maria Rosa Antognazza argues that Leibniz held that bodies result from imperishable seminals, suggesting that seminals are immaterial and mind-like substances that are quite similar to monads or simple substances introduced in the *Monadology* of 1714 (Antognazza, 2009, pp. 112-113). But in my view it is unlikely that Leibniz ascribed perceptions to a seminal. Christia Mercer also argues that Leibniz introduced his theory of corporeal substance in 1671, according to which a body is a collection of unconscious minds or mind-like substances (Mercer, 2001, pp. 164-166). But although Mercer cites the statement "[e]very body can be understood as a momentary mind or a mind without recollection" from the letter to Arnauld in November 1671 as evidence of her reading, I do not think that Leibniz suggested that a body is a collection of immaterial substances, given that in the letter he merely argued that body and mind have something in common since both of them have conatuses.

## Abbreviations of Primary Texts and Translations

- A: *G.W. Leibniz Sämtliche Schriften und Briefe*. Edited by Deutsche Akademie der Wissenschaften zu Berlin. Berlin: Akademie-Verlag, 1923-. Cited by series, volume and page.

## 5. Summary

We have seen four texts related to the rehabilitation of substantial forms. Among them, perhaps *Praefatio* and *Characteristica* are important given that Leibniz explicitly argued that there are substantial forms, though an argument for their existence is not clearly shown, comparing to *Conspectus* and *Metaphysical Definitions and Reflections*.

- AG: *G.W. Leibniz Philosophical Essays*. Translated and edited by Roger Ariew and Daniel Garber. Indianapolis: Hackett, 1989.
- DM: *Discours de métaphysique*. Cited by section.
- DSR: *G.W. Leibniz De Summa Rerum*. Translated and edited by G.H.R. Parkinson. New Haven: Yale University Press, 1992.
- L: *G.W. Leibniz Philosophical Papers and Letters*. Translated and edited by L.E. Loemker. Dordrecht: Reidel, 1976.
- M: *Monadologie*. Cited by section.
- RA: *G.W. Leibniz The Labyrinth of Continuum*. Translated and edited by R.T.W. Arthur. New Haven: Yale University Press, 2001.

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[Kanazawa Seiryō University, Associate Professor]