

Plato on Coming-to-Be: A Midway Path between Eleaticism and Creationism

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ABSTRACT

The *Parmenides* is the locus of Plato's *theoria motus abstracti* (that is, abstract kinematics) for it is here that Plato gives a mereological and locational analysis of motion (First Deduction: 138b7-139b3) and discusses the famous puzzle of the instant of change (Second Deduction: 156c1-157b5). But there is another scholarly very neglected text from this dialogue that provides us with great insights about Plato's theory of change: the Fifth Deduction (160b3-163b6) and its answer to the Eleatic argument against coming-to-be. I shall devote my paper to Plato's discussion of the coming-to-be (γένεσις) of beings from what is not; first, by expounding what Plato says in the Fifth Deduction, second, by putting his theory in a bigger philosophical ecosystem (the

quarrel between Eleaticism and Creationism). Then, I shall argue for two points: first, coming-to-be as described in the Fifth Deduction is, at first sight, incompatible with Plato's account of motion given in the First Deduction; second, the logic behind the Fifth Deduction - if consistent - must be a non-classical temporal logic that restricts Leibniz's laws of identity to some but not all properties.

Keywords: Plato, *Parmenides*, Metaphysics of Change, Meta-ontology, Coming-to-be, Temporal Logic

INTRODUCTION

The *Parmenides* is the locus of Plato's *theoria motus abstracti* (that is, abstract kinematics) for it is here that Plato gives a mereological and locational analysis of motion (First Deduction: 138b7-139b3)¹ and discusses the famous puzzle of the instant of change (Second Deduction: 156c1-157b5)². But there is another scholarly very neglected text from this dialogue that provides us with great insights about Plato's theory of change: the Fifth Deduction (160b3-163b6) and its answer to the Eleatic argument against coming-to-be.

I shall devote my paper to Plato's discussion of the coming-to-be (γένεσις) of beings from what is not; first, by expounding what Plato says in the Fifth Deduction, second, by putting his theory in a bigger philosophical ecosystem (the quarrel between Eleaticism and Creationism). Then, I shall argue for two points: first, coming-to-be as described in the Fifth Deduction is, at first sight, incompatible with Plato's account of motion given in the First Deduction; second, the logic behind the Fifth Deduction - if consistent - must be a non-classical temporal logic that restricts Leibniz's laws of identity to some but not all properties.

PART 1: PLATO'S FIFTH DEDUCTION AND THE ONTOLOGY OF COMING-TO-BE

Let us capture in a nutshell what Plato says in the Fifth Hypothesis/Deduction (in what follows, for reason of space, I shall quote Plato's text only if mandatory, and avoid as much as possible any philological discussion). To focus on my point, I will not enter in scholarly discussion on the general interpretation of the second part of the *Parmenides* (see Proclus, *Theol. Plat.* I

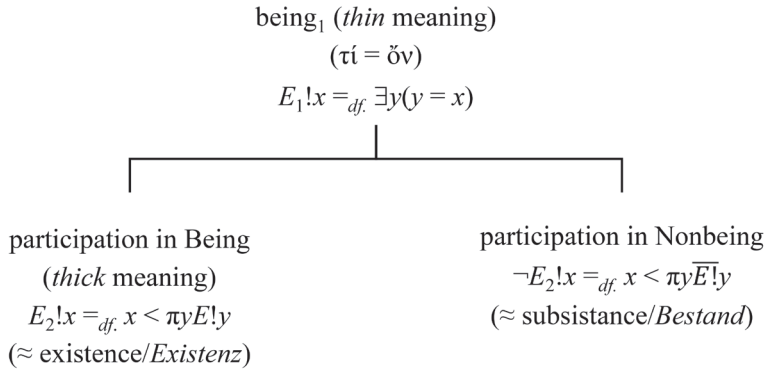
7-12, *In Prm.* I 630.37-643.5, VI 1051.34-1064.12 for ancient discussions, and Priest 2014: 118-121 for a very short overview of the modern exegeses), or on the relation between the Fifth Deduction and the other Deductions (especially the Sixth)³. I believe that sometimes it might be exegetically useful to 'naively' take the textual material at face value, without further assumptions about what the author would have had in mind while writing it. To allude to only one exegesis of the second part of the *Parmenides*, perhaps it might be the case that it was a mere piece of dialectical gymnastic (or, slightly differently, a training in dialectics), but that does not preclude that Plato's reasonings could be interesting and stimulating in themselves and, so, deserve a charitable and philosophically-loaded reading. I shall provide such a reading for the Fifth Deduction.

As pointed out by Diès (1923, p. 37), Cornford (1939, p. 217-231), Menn (1994, p. 74, 94-95) and Priest (2012, p. 43-47; 2014, p. 128-130), in the Fifth Deduction (which studies the assumption "the One is not"⁴ taken as being extensionally tantamount to "the One is a nonbeing" and "the One partakes of not-being"), Plato mainly deals with the problem of non-being, that is both the ontological puzzle of the 'ontic status' of what is not (nonbeings as members of the ontology) and the semantic question of whether and how one can truly talk or think about what is not (nonbeings as intentional objects)⁵. In doing so, the whole Fifth Deduction, from its leading assumption to its arguments and conclusion, is reminiscent of Gorgias' claim "if there is what is not, it will both be and not be at the same time; insofar as it is considered as not being it will not be, but insofar as what is not is, it will on the other hand be" (Sext. Emp. *AM* 7.67, trans. R. Bett, see (Diès, 1923, p. 19, p. 108 n. 1; Cornford, 1939, p. 226)), and, as such, is a response to Eleatic ontology.

Indeed, the Parmenidean motto that anything one can truly think or speak about has being (since Parmenides supports a meta-ontology which states that intentionality yields ontological knowledge given that, first, meaning involves reference, and, second, reference implies existence/being⁶ – both assumptions that forcefully Routley (1980), amongst other Meinongians, argues against) implies either that it is impossible to think about an object that is not since that object has no being at all and, consequently, is not something (Parmenides' own view: nonbeing is neither thinkable nor sayable, trying in this direction forms the 'False Path' or 'Doxastic Road' of *On Nature*, see Frg. 2, 6, 8 and *Sph.* 237b-239a), or that if one thinks about a nonbeing, that object must somehow *be*, that is, it must have some being after all. Plato chooses the latter path. To avoid the contradiction (thinking about an object that both is and is not), Plato – at least in the Fifth Deduction – distinguishes between a 'thin' and a 'thick' meaning of *being* (to borrow Fine (2009)'s terminology), in such a way that it is possible to think or speak about an object that is in the 'thin' sense, but is not in the 'thick' sense (such an interpretation of the Fifth Deduction can be traced back to Cornford (1939, p. 217-231) and, in recent times, is – albeit slightly differently – defended in (Menn, 1994, p. 74, p. 94-95; A&A, §IIIa2; Granieri, 2022; Marion, 2022, p. 17-31; 2023, p. 549-567); for reason of space, I refer the reader to these works for a meticulous defence of this exegesis since my paper aims at discussing other aspects of the Fifth Deduction – for other readings of the Fifth Deduction, see discussion on scholarship in endnotes⁷). Such a distinction is Meinongian in spirit⁸, albeit not completely in letter (on this point,

I agree with Granieri (2022) and Marion (2022, p. 19-31))⁹.

- 'Thin' meaning of being (being₁ thereafter): to be₁ is to be something or a 'that' (τῖ), that is, to be₁ is to have some distinctive characteristics, i.e., to *partake* of some characterizing ideas (i.e., every participation/true predication/true ascription of any property entails being₁). In other words, to be₁, an object must have an identity that sets it apart from everything else (160c5-161a5, see (Cornford, 1939, p. 219; McCabe, 1996, p. 36-37) for a short and efficient presentation of this idea). In Meinong (1907)'s dialect, being₁ is very close to the *Sosein* (= the bundle of characterizing properties) of something. To formalize the idea, to be₁ is to be selectable, recognizable or identifiable in the first-order domain of quantification (the basic criterion argued for in Quine (1948)), that is, to be a value of a bound variable: $E_1!x =_{df.} \exists y(y = x)$.
- 'Thick' meaning of being (being₂ thereafter): to be₂ is to partake of the idea of Being (161e3-162b8, esp. 162a4-b3¹⁰). In Meinongian words, being₂ is close to the *Sein* (= the non-characterizing and 'ontologically-loaded' properties¹¹) of something. To formalize the idea, I follow Priest (2012): $E_2!x =_{df.} x < \pi y E!y$ where '<' is the asymmetric relationship of participation, and ' $\pi x \Phi x$ ' is the idiosyncratic symbol that designates the idea of Φ -ness (in what follows, $\overline{\Phi}$ is the opposite/complement of Φ , i.e., 'to be $\overline{\Phi}$ ' means 'to be non- Φ ', in such a way that 'to be \overline{E} ' means 'to be a nonbeing₂' and ' $\pi x \overline{E}x$ ' designates the idea of Nonbeing₂).



Hence a thing or ‘that’ can be₁ without being₂: such a being₁ is an intentional object of which one can think and speak of (in other words, this being₁ forms the extra-linguistic referent of any meaningful speech or thought about it, see Scolnicov (2003, p. 153) amongst others), albeit it does not exist in the strong sense since it is₂ not (it does not partake of Being). Such is the One (which is not) of the Fifth Deduction, and, more generally (of course, with the proviso that by ‘One’ Plato also, kantsciously and transcendently, aims to refer to items in general – such an issue, what did Plato have in mind while saying ‘the One’ in the *Prm.*?, still remains a hot spot within scholarship on Plato’s *Parmenides*), all non-beings (for instance: *ficta* like Tom Bombadil, mere *possibilia* like the possible bald man in the doorway, etc.).

From the point of view of metaphysical grammar, Plato marks the difference between the copulative or predicative meaning of the verb ‘to be’ captured by the verb of participation μετέχειν (see 161e3-162b8) insofar as any truthful characterization of the type ‘*x* is Φ ’ or ‘*x* partakes of Φ -ness’ implies that *x* is in the thin sense (161e3-162a11)¹², and the verb ‘to be’ in its strictly existential meaning – which is captured by the synonymy between ‘*x* is’, ‘*x* is a being’ and ‘*x* partakes of Being’ (see Granieri (2022) for a more detailed discussion on this point).

The first meaning equates *being* ($\delta\upsilon$) and *something* ($\tau\acute{\iota}$) - to be something is to be₁ *simpliciter*

*iter*¹³ -, not the second. Both have an existential import however: a minimal (but non-null) import for being₁ (in agreement with the reversal of Quine’s dictum: ‘no entity without identity’¹⁴) and a full import for being₂. Plato states their independence: an object can be₁ without being₂. More importantly, to be₁ is a sufficient criterion for being an intentional object that one can truly talk or think of. In doing so, Plato foresees the Meinongian Thesis of *Außersein* between *Sosein* and *Sein*, that is, the independence between what is an object and its ontological status. The only slight difference with Meinongianism is that neither Meinong (1907) nor modern Noneists as Routley (1980) vindicate the equivalence of being and something (or the conflation between *Sein* and *Gegebenheit*). Quite the contrary, it is their key-idea to give up the troublesome oddities of classical ‘Parmenidean’ thinking by distinguishing what is something and what exists (on this point, they follow Gorgias’ proto-Meinongian insights, see Sext. Emp. *AM* 7.78-82, *MXG* 6 980a8-19 and Priest, Routley & Norman (1989, p. 11-12); Gorgias is also followed by Aristotle, see *SE* 5 166b37-167a7, 25 180a32-38, *An. Post.* 2.7 92b29-30, *Metaph.* Θ .3 1047a33-b1 and (Menn, A&A, §1y1c; Marion, 2023, p. 567)).

Since my aim is not to provide a full analysis of the Fifth Deduction, I shall discuss neither the meta-ontological nor historical consequences of such a theory of nonbeing (that has been done

elsewhere by many scholars, notably in Marion (2022, p. 14-31)), but focus my discussion on an outcome that Plato explicitly draws from this theory: beings₁ that do not be₂ can *move* from not-being₂ to being₂ (162b9-162c6), although they

cannot move in a more physical way (162c6-d6: they cannot be locally moved since they do not exist in the spatiotemporal world, i.e. they are nowhere, nor be altered since they would lose their identity, that is, their being₁).

Prm. 162b9-e4¹⁵

Οἷόν τε οὖν τὸ ἔχον πως μὴ ἔχειν οὕτω, μὴ μεταβάλλον ἐκ ταύτης τῆς ἔξεως; — Οὐχ οἷόν τε. — Πᾶν ἄρα τὸ τοιοῦτον μεταβολὴν σημαίνει, ὃ ἂν οὕτω τε καὶ μὴ οὕτως ἔχη. — Πῶς δ' οὐ; — Μεταβολὴ δὲ κίνησις· ἢ τί φήσομεν; — Κίνησις. — Οὐκοῦν τὸ ἐν ὄν τε καὶ οὐκ ὄν ἐφάνη; — Ναί. — Οὕτως ἄρα καὶ οὐχ οὕτως ἔχον φαίνεται. — Ἐοικεν. — Καὶ κινούμενον ἄρα τὸ οὐκ ὄν ἐν πέφανται, ἐπεὶ περ καὶ μεταβολὴν ἐκ τοῦ εἶναι ἐπὶ τὸ μὴ εἶναι ἔχον. — Κινδυνεύει. — Ἀλλὰ μὴν εἰ μηδαμοῦ γέ ἐστι τῶν ὄντων, ὥς οὐκ ἔστιν εἴπερ μὴ ἔστιν, οὐδ' ἂν μεθίσταιτό ποθέν ποι. — Πῶς γάρ; — Οὐκ ἄρα τῷ γε μεταβαίνειν κινεῖται ἂν. — Οὐ γάρ. — Οὐδὲ μὴν ἐν τῷ αὐτῷ ἂν στρέφοιτο· ταῦτο γὰρ οὐδαμοῦ ἄπτεται. ὄν γὰρ ἐστὶ τὸ ταυτόν· τὸ δὲ μὴ ὄν ἐν τῷ τῶν ὄντων ἀδύνατον εἶναι. — Ἀδύνατον γάρ. — Οὐκ ἄρα τὸ ἐν γε μὴ ὄν στρέφεσθαι ἂν δύναιτο ἐν ἐκείνῳ ἐν ᾧ μὴ ἔστιν. — Οὐ γὰρ οὖν. — Οὐδὲ μὴν ἀλλοιοῦται που τὸ ἐν ἑαυτοῦ, οὔτε τὸ ὄν οὔτε τὸ μὴ ὄν· οὐ γὰρ ἂν ἦν ὁ λόγος ἔτι περὶ τοῦ ἑνός, εἴπερ ἡλλοιοῦτο αὐτὸ ἑαυτοῦ, ἀλλὰ περὶ ἄλλου τινός. — Ὅρθως. — Εἰ δὲ μήτ' ἀλλοιοῦται μήτε ἐν ταύτῳ στρέφεται μήτε μεταβαίνει, ἄρ' ἂν πῃ ἔτι κινεῖτο; — Πῶς γάρ; — Τό γε μὴν ἀκίνητον ἀνάγκη ἡσυχίαν ἄγειν, τὸ δὲ ἡσυχάζον ἐστάναι. — Ἀνάγκη. — Τὸ ἐν ἄρα, ὥς ἔοικεν, οὐκ ὄν ἔστηκε τε καὶ κινεῖται. — Ἐοικεν.

“Can something that is in some state not be so, without changing from that state?” — “It cannot.” — “So everything of the sort we’ve described, which is both so and not so, signifies a change.” — “Doubtless.” — “And a change is a motion – or what shall we call it?” — “A motion.” — “Now wasn’t the one shown both to be and not to be?” — “Yes.” — “Therefore, it appears both to be so and not so.” — “So it seems.” — “Therefore the one that is not has been shown also to move, since in fact it has been shown to change from being to not-being.” — “It looks that way.” — “Yet, on the other hand, if it is nowhere among the things that are – as it isn’t, if in fact it is not – it couldn’t travel from one place to another.” — “Obviously not.” — “So it couldn’t move by switching place.” — “No, it couldn’t.” — “Nor could it rotate in the same thing, because it nowhere touches the same thing. For that which is the same is a being, and what is not cannot be in anything that is.” — “No, it can’t.” — “Therefore the one, if it is not, would be unable to rotate in that in which it is not.” — “Yes, you’re quite right.” — “And, surely, the one isn’t altered from itself either, whether as something that is or as something that is not. For the argument would no longer be about the one, but about something else, if in fact the one were altered from itself.” — “That’s right.” — “But if it isn’t altered and doesn’t rotate in the same thing or switch place, could it still move somehow?” — “Obviously not.” — “Yet what is unmoved must enjoy repose, and what reposes must be at rest.” — “Necessarily.” — “Therefore the one, as it seems, since it is not, is both at rest and in motion.” — “So it seems.”

Trans. Gill & Ryan

According to 162b9-c6, the coming-to-be₂ of a being₁ is a kind of *migration* within the ontological domain of quantification \mathfrak{D} , or to put it differently, a being₁ swaps its participation in nonbeing₂ for partaking of being₂. In a formal chronological language, the coming-to-be of a is encapsulated in the formula $(t < t') \wedge \langle \exists x(x = a), t \rangle \wedge \langle \neg E!a, t \rangle \wedge \langle \exists x(x = a), t' \rangle \wedge \langle E!a, t' \rangle$, i.e., $(t < t') \wedge \langle \exists x(x = a), t \rangle \wedge \langle \overline{E}!a, t \rangle \wedge \langle \exists x(x = a), t' \rangle \wedge \langle E!a, t' \rangle$, where $\langle \varphi, t \rangle$ is a *temporalized well-formed formula*, i.e., a pair \langle well-formed formula, time of valuation \rangle , see the following diagram:

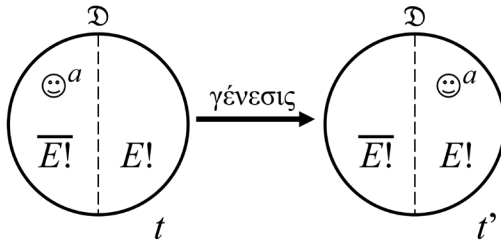


Figure 1. Plato's Migrationist Theory of Coming-to-Be

In other words again, for Plato, coming-to-be is a motion/change of something from a diminished sort of being (being₁ + not-being₂) to full being (being₁ + being₂) (it passes from the former to the latter, it passes into being₂). In doing so, Plato distances himself from the Abrahamic idea that coming-to-be is a creation *ex nihilo*, i.e., the generation of something from nothing (in formal setting, the formula: $(t < t') \wedge \langle \neg \exists x(x = a), t \rangle \wedge \langle \exists x(x = a), t' \rangle$), see the diagram:

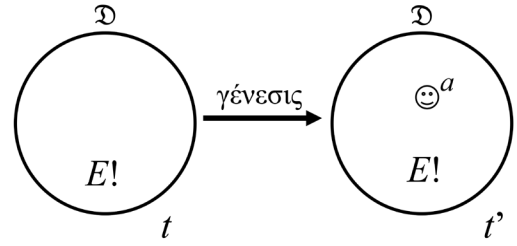


Figure 2. Creationist Theory of Coming-to-Be

Rejecting creationism but dealing with the analysis of coming-to-be, Plato meets another Eleatic challenge (ascribed by some to Melissus, to Gorgias by others), namely the dilemmatic argument that coming-to-be is impossible, i.e., that things cannot go in and out of being, given that something can come-to-be neither from being nor from non-being¹⁶ (of which there are several variants in Sextus Empiricus, Gorgias and Aristotle, see DL 9.100 and *Phys.* 1.8 191a24-33¹⁷ and, for a short discussion, Prior (1967, p. 138-143) and Brémond (2017, p. 45-47) - this argument can be seen as a gloss on Parmenides' discourse against the possibility of coming-to-be and passing-away in frg. 8.5-25¹⁸). Here, the texts:

Phys., 1.8 191a27-31

καί φασιν οὔτε γίγνεσθαι τῶν ὄντων
οὐδὲν οὔτε φθείρεσθαι διὰ τὸ ἀναγκαῖον μὲν
εἶναι γίγνεσθαι τὸ γιγνόμενον ἢ ἐξ ὄντος
ἢ ἐκ μὴ ὄντος, ἐκ δὲ τούτων ἀμφοτέρων
ἀδύνατον εἶναι· οὔτε γὰρ τὸ ὄν γίγνεσθαι
(εἶναι γὰρ ἤδη) ἐκ τε μὴ ὄντος οὐδὲν ἄν
γενέσθαι· ὑποκεῖσθαι γάρ τι δεῖν.

DL 9.100

οὐδὲ μὴν γένεσις ἐστὶ, φασίν. οὔτε γὰρ
τὸ ὄν γίνεται, ἔστι γάρ, οὔτε τὸ μὴ ὄν, οὐδὲ
γὰρ ὑφέστηκε· τὸ δὲ μὴ ὑφεστῶς μηδὲ ὄν
οὐδὲ τὸ γίνεσθαι εὐτύχηκε.

In a nutshell, the Parmenidean *modus tollens* (whose the consequent of the conditional premise is taken to be an exclusive disjunction) is as follows (see (Prior, 1967, p. 139; Routley, 1980, p. 371)):

1. If something comes-to-be, it does so either from what is or from what is not
2. But it cannot come-to-be from what is already, for this is not a real coming-to-be
3. Nor it can come-to-be from what is not, for from what is not nothing can come-to-be
4. Therefore nothing can come-to-be

Premise 2 is on fairly safe ground, at least if - *contra* Aristotle - coming-to-be cannot be conceptually reduced to a mere transformation of something into something else (see below). As for the premise 3, it is nothing more than a question-begging rejection of creation *ex nihilo* that was a blind-spot for Greek philosophers before the emergence of Christianity¹⁹ (on the

So they [the Eleatics] say that none of the things that are either comes to be or passes away, because what comes to be must do so either from what is or from what is not, both of which are impossible. For what is cannot come to be (because it is already), and from what is not nothing could have come to be (because something must be underlying).

Trans. R. P. Hardie & R. K. Gaye
(slightly modified)

Nor, say they, is there any coming into being. For that which is does not come into being, since it *is*; nor yet that which is not, for it has no substance, and that which has no substance or existence cannot have had the chance of coming into being either.

Trans. R. D. Hicks (slightly modified)

claim '*ex nihilo nihil fit*', see Empedocles *apud* MXG 2 975b1-4 and *apud* Philo, *Aet.* 2.5, and Lucretius, *De Rerum Natura*, 1.148-173; as far as I know, MXG 1 974b19-975a21 was the early defense in a Greek and non-Christian philosophical text of the conceptual possibility of creation *ex nihilo*²⁰). To be fair, Christian (and other Abrahamic) theologians have always had great difficulties to explain such a creation out of nothing, and, ultimately, either settle for the idea of a divine *fiat* (God is so powerful that Her will brings everything out of nothing), or provide a migrationist reading of God's creative act (Leibniz for instance: roughly, God creates or actualizes the best possible world amongst the many possible worlds that She scrutinizes in Her mind). Unlike the Christians that support a divine *fiat* who like to explain oddities with mysteries, Plato finds an acceptable understanding of the contradictory of the premise 3 by distinguishing two meanings of 'to be' (since he believes that this premise is

true if ‘to be’ means ‘to be₁’): something can come-to-be₂ from what is₁ but is₂ not.

Of course, as is often the case, Aristotle forcefully criticizes such an *ontological motion* from inexistence/nonbeing to existence/being at several places (*Phys.* 5.1 225a20-b3, *Metaph.* Θ.3 1047a32-b2, see Menn (1994, p. 76 n. 5, p. 94 n. 29; A&A, §IIIa2)). He strongly disagrees with such an *ad hoc* distinction between two senses of ‘to be’ and with the idea that coming-to-be is a *motion* (κίνησις) in the narrow sense (on Aristotle’s distinction between κίνησις and μεταβολή, see *Phys.* 5.1-2 and (Marion, 2023, p. 80-82): roughly, motion involves the persistence of what is moving, whereas change involves that what is changing does not remain the same). Then, Aristotle offers another account of coming-to-be based on the idea that something comes-to-be from something else, i.e., that a being comes-to-be from another being that already is potentially what it will actually become at the end of the process, that is, coming-to-be is a *transformation* rather than a *creation* or a *migration* within the ontology (*Phys.* 1.7-9, 5.1, *GC* 1.3-4, etc.) - therefore, coming-to-be, in the strictest meaning of these terms, is a *change* (μεταβολή) rather than a *motion* (κίνησις)²¹. In doing so, Aristotle answers to the Eleatic question ‘whence do any being come from?’ and neutralizes the Eleatic argument by supporting that the premise 2 is false for a certain understanding of coming-to-be, namely the transformationist one (and, therefore, unlike Plato, he unconditionally accepts the truth of the premise 3). In formal language, Aristotle says: $(t < t') \wedge \langle \neg \exists x(x = a), t \rangle \wedge \langle \exists x(x = b), t \rangle \wedge \langle \exists x(x = a), t' \rangle \wedge \langle \neg \exists x(x = b), t' \rangle$, i.e., b becomes a or b is transformed in a (transformation is akin to a *replacement* or a *substitution* of one individual constant by another in \mathfrak{D}).

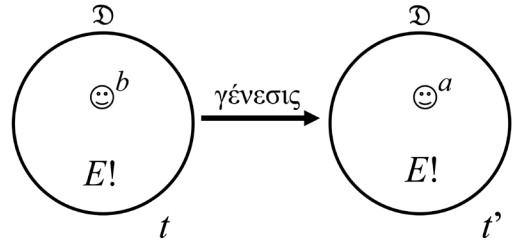


Figure 3. Aristotle's Transformationist Theory of Coming-to-Be

To sum up, let's summarize the three theories of coming-to-be and the temporal (both chronological and tensed) logics underlying their key-assumptions as follows (a is something iff a is selectable or recognizable in the first-order domain \mathfrak{D} ; ' \mathcal{H} ' is the 'it has always been the case that' operator, ' \mathcal{P} ' the 'it was the case that' operator, and ' \mathcal{N} ' the 'now' operator of standard tensed logic)²²:

- **Creationism:** something comes-to-be from nothing.
 a comes-to-be at t' iff $(t < t') \wedge \langle \neg \exists x(x = a), t \rangle \wedge \langle \exists x(x = a), t' \rangle$
 a comes-to-be now iff $\mathcal{H}\neg \exists x(x = a) \wedge \mathcal{N} \exists x(x = a)$
- **Transformationism:** something comes-to-be from something else.
 a comes-to-be at t' iff $(t < t') \wedge \langle \neg \exists x(x = a), t \rangle \wedge \langle \exists x(x = b), t \rangle \wedge \langle \exists x(x = a), t' \rangle \wedge \langle \neg \exists x(x = b), t' \rangle$ ²³
 a comes-to-be now iff $\mathcal{H}\neg \exists x(x = a) \wedge \mathcal{P} \exists x(x = b) \wedge \mathcal{N} \exists x(x = a) \wedge \mathcal{N}\neg \exists x(x = b)$
- **Migrationism:** something that is already something (that is, a being₁) swops its property of nonbeing₂ for that of being₂.
 a comes-to-be at t' iff $(t < t') \wedge \langle \exists x(x = a), t \rangle \wedge \langle \overline{E}!a, t \rangle \wedge \langle \exists x(x = a), t' \rangle \wedge \langle E!a, t' \rangle$
 a comes-to-be now iff $\mathcal{H} \exists x(x = a) \wedge \mathcal{H} \overline{E}!a \wedge \mathcal{N} \exists x(x = a) \wedge \mathcal{N} E!a$

So, it appears that Plato's migrationist theory of coming-to-be is a midway path between Abrahamic creation *ex nihilo* and Aristotle's transformation of what it is in something else. Indeed, migrationism shares with creationism the idea that something could not formerly have been something else, but has in common with transformationism the same reluctance for the idea that ontology could vary in size over time, i.e., that the size of the ontological domain of quantification could increase or decrease (the view that the cardinality of the ontology does not vary over time was already expressed by Melissus, see *MXG* 1 974a4-6)²⁴.

To better grasp the difference between creationism and migrationism, it can be helpful, or at least informative, to locate these theories in the contemporary quarrel in quantified temporal logic that opposes *temporaryism/transientism* (ontology varies over time: some objects come into and go out of \mathfrak{D} , i.e., they are temporary in \mathfrak{D} , sometimes they fail to be) and *permanentism* (ontology does not vary over time: no object comes into and go out of \mathfrak{D} , i.e., the inhabitants of \mathfrak{D} are always or permanently the same) discussed at length in Williamson (2013)²⁵. More formally (where 'S' represents the 'sometimes' operator and 'A' the 'always' operator of standard tensed logic²⁶):

- *Temporaryism*: sometimes, something is sometimes nothing.
 $S \exists x S \neg \exists y (x = y)$
- *Permanentism*: always, everything is always something.
 $A \forall x A \exists y (x = y)$

If ontology is assimilated to the domain of the unrestricted quantifiers (that is, if the quantificationalist meta-ontology of Quine (1948) is assumed), it straightaway appears that some migrationist theories as Plato's in the

Fifth Deduction are versions of permanentism (since all beings₁ always are inhabitants of \mathfrak{D} , so to speak nonbeing₂ and being₂ are only two exhaustive and exclusive regions of \mathfrak{D}), whereas obviously all creationist theories are temporaryist. Of course, a migrationist theory might be temporaryist provided it abandons Quinean meta-ontology and replaces it, for instance, with a Meinongian one (for instance, Routley (1980, p. 361-394) defends a temporaryist migrationism with Meinongian unrestricted quantifiers - that is, ontologically unloaded quantifiers - against some versions of permanentism). Matters are not so clear as far as transformationist theories are concerned, but, at first sight, they are permanentist in spirit (or, at least, conservative on the question whether or not the size of the ontology can vary over time). Needless to say, Eleaticism (the view that there is no coming-to-be, i.e., that everything always is and never changes) is an extremist permanentism, whereas Heraclitean processualism (the view that there is no being but only becoming, i.e., that everything is always changing, in every respect) tends to be an extremist temporaryism (on the opposition between Parmenides' immobilism and Heraclitus' transientism as a paradigmatic antagonism in philosophy, see *Tht.* 179d1-181b5).

However, Plato's theory of coming-to-be is not unproblematic in the general economy of the *Parmenides*: such an account, at first sight, is in tension with Plato's account of motion as developed in the First Deduction.

In the First Deduction (138b7-139b3), Plato provides a mereological and locational analysis of motion and establishes that a moving item must have parts and at least two partial locations, it is partially in its *terminus a quo* and partially in its immediate *terminus ad quem*, and therefore it moves across them. The moving item is partially in the two neighbouring

places. Aristotle supports the same ‘anti-atomist’ idea in *Phys.* 6.4 234b10-20 and 10 240b20-241a6. Aristotle’s testimonies suffice to answer to the objection that the analysis of the Firth Deduction holds only for local motions but not for other kinds of motions. Indeed, unlike Plato, Aristotle clearly states that such an analysis is *de jure* applicable for every sort of change, either local or not²⁷.

Accordingly, if coming-to-be is a genuine kind of motion, while moving, the object needs to partially partake of not-being₂ and to partially partake of being₂ at once. But, one can think that being₂ is not a property that allows a more-than-two discrete or continuous range of acceptable values, in such a way that it is impossible in fact to only partially partake of being₂, and so impossible to *move* from not-being₂ to being₂ (a dialetheist alternative is to claim that, while moving from not-being₂ to being₂, an item is in a contradictory state, viz. it is₂ and is₂ not at once – such a solution is in the vein of Priest (2012; 2014) – dialetheism is the metaphysical claim that some, but not all, contradictions are true).

Roughly, a simple solution consists in dropping out the absoluteness of participation, that is, in taking participation as a matter of (infinite) degree rather than as an absolute relation that either holds or does not hold (Miró Quesada-Cantuarias (2004, p. 28-30) and Fronterotta (2018) both suggest to use a ∞ -valued Łukasiewicz fuzzy logic to formalize such a claim). Since the idea of being₂ – at least in its behavior *qua* idea – needs not to be dissimilar to other ideas, one can partake of being₂ at an arbitrary degree from zero to fullness. Thus, in the process of leaving not-being₂ to obtain being₂, an object can progressively partake less and less of not-being₂ and more and more of being₂ (in a way, there are ghosts – not full beings₂ – in Plato’s universe). I should confess that I do not see any good reason to forbid such a move.

PART 2: ROUTLEY’S MEINONGIANISM AND THE LOGIC OF COMING-TO-BE

Richard Routley/Sylvan was a Meinongian (a ‘Noneist’ to speak in his philosophical dialect, that is, he claims with force that there are items which do not exist like an ethical defense of capitalism, green ecological economic growth, the actual king of France, Tom Bombadil, and the round square cupola on Berkeley College, i.e., formally: $\exists x[\exists y(y = x) \wedge \neg E!x]$ where the particular quantifier ‘ \exists ’ is ontologically unloaded or neutralized) and also, in the good sense, a systematic philosopher. Contrary to usual Meinongian manifestos, Routley (1980) (a 1000-page exploration of Meinong’s Jungle) devotes a chapter to Meinongianism and philosophy of time (Routley, 1980, p. 361-409). In particular, Routley (1980, p. 371-374) challenges the Eleatic argument against coming-to-be. Against the modern Parmenidean anti-temporaries who take reference to imply existence and follow, at best, Plato’s migrationist insights about coming-to-be (sometimes, they non-formally try to follow Aristotle’s transformationist path; often, they simply endorse the Eleatic rejection of change), Routley (1980) provides a Meinongian answer to the Eleatic challenge of the possibility of becoming-existent. In doing so, Routley (1980) unconsciously rediscovers the key-idea of Plato’s migrationism *modulo* the crucial fact that, unlike Plato and some modern Parmenideans, Routley (1980) is truly Meinongian and believes that being₁ has a null existential import rather than a minimal one: something comes into being from something that is a nonbeing; so to speak, something swaps nonbeing for being.

Routley (1980, p. 361-394) (esp. p. 372-373 for the philosophical motive discussed below) points out that such a Meinongian theory of coming-to-be needs a non-classical (called ‘neutral’) chronological untensed logic that allows to

quantify over nonbeings, since it is the mistaken commitment to classical temporal logic and its ontologically loaded quantification (on which, see Prior (1967)) which grounds the Eleatic argument according to which nothing can come into or go out of being. Hence classical logicians are stuck either with Parmenides' changeless reality and no word can be said about what is not, or with the desperate help of some 'Platonizing' hypostatizing strategy which allows to give some positive existential import to beings₁ (insofar as, by anti-Meinongian and Quinean lights, every item that belongs to the domain of the quantifiers really is or exists)²⁸. But such a strategy is done at the cost of ruling out all change features connected to being (like becoming, coming-to-be, dying, ceasing-to-be, persisting, and so on) from the realm of properties. For classical predicate logic which is ruled by Leibniz's laws of identity (identity is the *extensional* coincidence on *all* properties²⁹, i.e., identity means indiscernibility, an 'intuitive' definition that appears in Aristotle's *Top.* 7.1 152a30-38, *SE* 24 179a37-40 and should be shared by Plato and his followers; anyway, the argument against the alteration of nonbeings₂ in *Prm.* 162d5-8 (+ 163a7-b1) states

that if a nonbeing₂ changes its properties, then it does not remain the same being₁, i.e., it loses its identity and comes to be different from what it was formerly, it is obvious that such a reasoning is implicitly based on a version of Leibniz's laws, see below) cannot be applied to these change features. Indeed, the two sentences 'Socrates is dying' and 'Socrates is a philosopher' do not speak about the same thing, namely Socrates, because the former can be false at a time while the latter being true: either these sentences do not state some properties of the same Socrates (by Leibniz's laws), or one of them - likely the first - is in fact not a well-formed sentence because the transient being-denying feature - dying - involved is not a genuine predicate/property. Such a classical constraint on the realm of well-grounded properties is - by McTaggart (1908)'s well-known regress machinery - only rendered more palatable if *tensed* predicates (like was-dying, is-dying, will-be-dying) are allowed (and so, despite the tactical moves done in Prior (1967, p. 1-19))³⁰.

More precisely, as far as coming-to-be₂ is concerned, a more sophisticated version of the puzzling argument that the hypostatizing strategy has to face runs as follows³¹:

- | | |
|--|---|
| 1. coming-to-be ₂ is a genuine being ₂ -entailing property | <i>Hypothesis</i> |
| 2. a being ₁ comes-to-be ₂ iff it swaps its nonbeing ₂ for being ₂
$a \text{ comes-to-be}_2 \text{ at } t_i \text{ iff } (\overline{E!} a_{t < t_i} \wedge E! a_{t > t_i})$ | <i>df. coming-to-be</i> |
| 3. before its coming-to-be ₂ , something that is a being ₁ has the property of non-being ₂ , but after its coming-to-be ₂ , is has the property of being ₂
$\exists x(x = a \wedge \neg E! a_{t < t_i} \wedge E! a_{t > t_i})$ | <i>first gloss on 2</i> |
| 4. before its coming-to-be ₂ , something that is a being ₁ lacks the property of being ₂ but has it after its coming-to-be ₂
$\exists x(x = a \wedge \neg E! a_{t < t_i} \wedge E! a_{t > t_i})$ | <i>second gloss on 2</i> |
| 5. to come-to-be ₂ , a being ₁ must be identical to itself before and after its coming-to-be ₂
if a comes-to-be ₂ at t_i then $a_{t < t_i} = a_{t > t_i}$ | <i>third gloss on 2</i> |
| 6. but, to be identical amounts to share all properties
$\forall x \forall y [x = y \equiv \forall \Phi (\Phi x \equiv \Phi y)]$ | <i>Leibniz's law</i> |
| 7. therefore, a being ₁ before its coming-to-be ₂ is and is not identical to itself after its coming-to-be ₂
$(a_{t < t_i} = a_{t > t_i}) \wedge \neg (a_{t < t_i} = a_{t > t_i})$ | first conjunct from 5 &
second conjunct from
4+6, contradiction |

To escape the contradiction 7, the supporter of the hypostatizing strategy should abandon one of the premises. The easy way is to drop out the premise 1 by arguing that coming-to-be₂ is not a genuine property, likely on the ground that being₂ is not itself a real property (if so, the tactical move is to introduce a dubious property-filter that discriminates properties and nonproperties). Of course, there are other ways to challenge the argument in a classical framework (especially by adding some extra-logical assumptions on the nature of individuals: fourdimensionalism, sequentialism, etc.), but making a survey of these tactics is not relevant for my actual enquiry, and, therefore, I refer the reader to Seibt (2008, p. 136-146) for a longer discussion on the incompatibility between Leibniz's laws and change. The point of interest is that, amongst these many options, Routley (1980) selects another way of understanding Leibniz's laws, and I shall argue that Plato either would follow him or would accept the contradictory claim 7.

The path taken by Routley (1980, p. 371-394) to avoid the difficulties of the hypostatizing strategy is to give up classical dogmas, especially the premise 6 of the argument presented above: the non-classical temporal logic must be a *chronological* one (that is: *tenseless* but such a feature is not mandatory at all, see Routley (1980, p. 385)) that replaces Leibniz's *extensional* laws of identity for things that change over time with a constrained variant of these laws that restricts the relevant properties only to *dated* or *time-indexed* properties as dying-at-*t* (where *t* is a constant, dying-at-seven-o'clock-on-the-fifth-of-June-399BC for instance) or being-a-philosopher-at-*t*. Identity over time is the coincidence on all dated properties (formally: $\forall x \forall y [x = y \equiv \forall \Phi_t (\Phi_t x \equiv \Phi_t y)]$ where ' Φ_t ' is the dated property ' Φ -at-*t*'), undated temporary properties as being-a-philosopher and undated transient/processual properties as dying are dropped out: albeit they are well-grounded

properties, Leibniz's laws do not apply to them³². Another fashionable version of the same strategy (modifying the premise 6) consists in restating Leibniz's laws in a temporalized way without introducing dated properties, that is: identity is the extensional coincidence-at-all-times on all properties (formally: $\forall x \forall y [x = y \equiv \forall \Phi \forall t (\langle \Phi x, t \rangle \equiv \langle \Phi y, t \rangle)]$)³³. As points out by Rescher & Urquhart (1971, p. 242-243), the difference between the two versions is the following: the first retains the atemporal version of Leibniz's laws (given that there is no quantifying over time) but adopts a heterodox temporalized class of properties (the dated ones), whereas the second temporalizes Leibniz's laws but saves the orthodox atemporal and phenomenological conception of properties³⁴. As it is often the case, beyond the estimation of theoretical cost and benefits, choosing between these two reformulations of Leibniz's law is *in fine* a matter of metaphysical aesthetics. In any case, to face in a satisfactorily way the troublesome problems of the hypostatizing strategy, I believe, Plato must follow a similar route of weakening Leibniz's law.

Indeed, Plato is aware of the puzzle of the incompatibility between the hypostatizing strategy pursued in the Fifth Deduction and Leibniz's unrestricted laws, for Plato argues that the One of the Fifth Deduction which is₁ but is₂ not, on the one hand, is altered (or, to speak *Hegelianese*, alienated) inasmuch as it moves from nonbeing₂ to being₂ (for motion/change necessarily implies a change in some property, i.e., the moving item modifies something in its original bundle of characteristics³⁵), and, on the other hand, is not altered inasmuch as it keeps its identity which is its being₁, i.e., its distinctive bundle of characterizing properties that allows it to be recognized and identified amongst all other items (162e4-163b6). Indeed, there is a series of arguments in regard to the alterability of the One (for a detailed study on the logical structure of the Fifth Deduction, see Rickless (2007, p. 212-223)).

Prm. 162e4-163b6

Καὶ μὴν εἴπερ γε κινεῖται, μεγάλη ἀνάγκη αὐτῷ ἀλλοιοῦσθαι· ὅπῃ γὰρ ἂν τι κινήθῃ, κατὰ τοσοῦτον οὐκέθ' ὥσαύτως ἔχει ὥς εἶχεν, ἀλλ' ἐτέρως. — Οὕτως. — Κινούμενον δὴ τὸ ἐν καὶ ἀλλοιοῦται. — Ναί. — Καὶ μὴν μηδαμῇ γε κινούμενον οὐδαμῇ ἂν ἀλλοιοῖτο. — Οὐ γάρ. — Ἦι μὲν ἄρα κινεῖται τὸ οὐκ ὄν ἐν, ἀλλοιοῦται· ἢ δὲ μὴ κινεῖται, οὐκ ἀλλοιοῦται. — Οὐ γάρ. — Τὸ ἐν ἄρα μὴ ὄν ἀλλοιοῦταί τε καὶ οὐκ ἀλλοιοῦται. — Φαίνεται. — Τὸ δ' ἀλλοιούμενον ἄρ' οὐκ ἀνάγκη γίγνεσθαι μὲν ἕτερον ἢ πρότερον, ἀπόλλυσθαι δὲ ἐκ τῆς προτέρας ἕξως· τὸ δὲ μὴ ἀλλοιούμενον μήτε γίγνεσθαι μήτε ἀπόλλυσθαι; — Ἀνάγκη. — Καὶ τὸ ἐν ἄρα μὴ ὄν ἀλλοιούμενον μὲν γίγνεται τε καὶ ἀπόλλυται, μὴ ἀλλοιούμενον δὲ οὔτε γίγνεται οὔτε ἀπόλλυται· καὶ οὕτω τὸ ἐν μὴ ὄν γίγνεται τε καὶ ἀπόλλυται, καὶ οὔτε γίγνεται οὔτ' ἀπόλλυται. — Οὐ γὰρ οὖν.

“Furthermore, if in fact it moves, it certainly must be altered; for however something is moved, by just so much it is no longer in the same state as it was, but in a different state.”—“Just so.”—“Then because it moves, the one is also altered.”—“Yes.”—“And yet, because it in no way moves, it could in no way be altered.”—“No, it couldn’t.”—“So insofar as the one that is not moves, it is altered, but insofar as it doesn’t move, it is not altered.”—“No, it isn’t.”—“Therefore the one, if it is not, is both altered and not altered.”—“Apparently.”—“Must not that which is altered come to be different from what it was before, and cease to be in its previous state; and must not that which is not altered neither come to be nor cease to be?”—“Necessarily.”—“Therefore also the one, if it is not, comes to be and ceases to be, if it is altered, and does not come to be or cease to be, if it is not altered. And thus the one, if it is not, both comes to be and ceases to be, and does not come to be or cease to be.”—“Yes, you’re quite right.”

Trans. Gill & Ryan

First, the *modus ponens* (162e4-163a3, 163a4-5, premise 2 from 162b9-c6):

1. If the One is moving, then it is altered
2. The One is moving (it comes-to-be and passes-away)
3. The One is altered

Second, the *modus tollens* (163a3-4, premise 1 can also be found in 162d5-8 and 163a7-b1, such a premise amounts to the claim that every alteration - that is, every change/motion - is both a coming-to-be and a ceasing-to-be³⁶; premise 2 is implicit in 162d5-e2):

1. If the One is altered, then it does not remain the same
2. The One remains the same
3. The One is not altered

Then, Plato puts the conclusions of the two arguments together, and concludes - as usual in the Fifth Deduction - that the One both is altered and is not altered, both comes and ceases to be and nor comes neither ceases to be.

As these arguments show, Plato - at least in the *Prm.* - takes every change feature to be an alteration that entails coming-to-be a new being₁ and ceasing-to-be the old being₁. Need-

less to say, such a view involves an obvious commitment to Leibniz's extensional laws of identity. Thus, Plato is stuck with the troublesome oddities of the hypostatizing strategy.

To avoid the difficulties of the hypostatizing strategy, Plato has two options: either, as Routley (1980) does, he weakens Leibniz's laws by restricting them to *dated* properties (therefore, an alteration or another change feature needs not to be a coming-to-be₁, albeit it can be a coming-to-be₂), or he accepts the contradictory claims - as 'the One is both altered and not altered' - that conclude the text of the Fifth Deduction (in a similar way, as regards the argument against the hypostatizing strategy presented above, Plato would have accepted the contradictory conclusion 7), that is, he assigns a contradictory bundle of properties to the One, that is, a paraconsistent being₁ (in which case he supports a dialetheist position, the one attributed to him by Priest (2012; 2014, p. 118-139) and, therefore, takes the opposite stance of Gorgias' anti-dialetheist position vindicated in Sext. Emp. AM 7.67). For philosophical and textual-trust reasons (see the last sentences of the Fifth Deduction, at *Prm.* 163a6-b6, but also the very last sentences of the dialogue in *Prm.* 166c2-5 - on this point, see (Priest, 2014, p. 101-104; Marion, 2022, p. 27-31)), I tend to believe that Plato has *esoterically* chosen the latter path (and his choice, perhaps, has been more explicit in his oral lectures than it is in his transmitted exoteric dialogues³⁷).

To end this paper, let's point that the hypostatizing strategy alluded above offers many mappings from the Fifth Deduction to modern non-Meinongian views, especially in the area of modal metaphysics. To just introduce to them (which are, by the way, stuck with classical quantified logic since they defend that being₁ has a non-null existential import and

that Leibniz's laws are unrestricted to dated properties; therefore they face the aporia mentioned above³⁸): some variants of possibilism (beings₁ ≈ mere possible items that are but do not exist, and beings₂ ≈ actual items that both are and exist, a position defended by the strawman Wyman in Quine (1948, p. 2-5) and, historically, by the Leibnizian-Wolffian tradition, see Baumgarten (1757, §61-63)) and contingent non-concretism (Williamson (2013)'s for instance: beings₁ ≈ contingently non-concrete beings, and beings₂ ≈ concrete beings). Despite their differences, these positions share the same Platonist understanding of coming-to-be as a motion from one area of the domain of quantification to another. For instance, Williamson (2013, p. 28-29) explicitly states, while arguing for permanentism (the view that ontology does not vary over time), that dying is just to become non-concrete as a living person, and, conversely, that birth is the obtaining of the property of concreteness as a living person³⁹ (however, Williamson (2013) makes no attempt to explain how such a thesis can be compatible with classical Leibniz's laws once concreteness is taken to be a genuine property): something that is well characterized comes-to-X from something that *is* but is not X.

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ENDNOTES

- 1 On Plato's analysis of change in the First Deduction, see Marion (2023, p. 207-225).

- 2 On the puzzle of the instant of change in Plato's *Prm.* and its legacy in the Platonic Tradition, see Marion (2018; 2023, p. 225-254).
- 3 On these questions, I refer the reader to Marion (2022, p. 24-31).
- 4 Where the verb 'to be' has an existential meaning, see (Cornford, 1939, p. 230-231; O'Brien, 2005, p. 235-241).
- 5 For another recent reading, see Tuozzo (2021) who defends that, here, the One refers to an arbitrary *Form* and that the problem of the Fifth Deduction is the fact that Forms are contingently in space and time (sometimes they are spatiotemporally instantiated, sometimes not). I prefer to remain neutral on the question of the identity of the One (whether it is the first principle, the Forms, or any non-existent object). Everything I'm about to say seems compatible with Tuozzo's hypothesis (since Tuozzo, as myself, supports that the Fifth Deduction is concerned with spatiotemporal existence rather than negative predication).
- 6 Frg. 3, 6.1. On the Parmenidean meta-ontology (which is the same as the meta-ontology defended by the strawmen McX and Wyman in Quine (1948)), see Marion (2022, p. 14-18).
- 7 Migliori, 1990, p. 324-340; McCabe, 1996, p. 36-37; Fronterotta, 1998, p. 97-98; Scolnicov, 2003, p. 147-157 (amongst many others) have followed Damascius, in *Prm.* II.291 Ruelle (= Westerink & Combès, 2003, p. 82.1-6) in believing that the Fifth Deduction anticipates the discussion on negation and non-being in the *Sph.* (to not be Φ is to be other than Φ), i.e., they think that saying 'the One is not' is equivalent to 'the One is other than everything else' (Cornford, 1939, p. 231 makes the same point, but his exegesis avoids the problems raised by such an idea). Granieri (2022) has successfully argued against such a reading. His arguments, I believe, definitively establish that this interpretation is not defensible.
- 8 On the Meinongian tendencies of some Greek philosophers (especially the Stoics who distinguish between *being* and *something*, between *existence* and *subsistence*), see (Long & Sedley, 19871, p. 162-165; 19872, p. 166-168; Brunschwig, 1988; Dancy, 1991, p. 63-76. Allen (1983, p. 284-285) briefly and unsuccessfully argues (from a Quinean point of view, see Quine (1948)) against the 'Meinongian' reading of the Fifth Deduction by Cornford (1939, p. 217-231) (philosophically speaking, for a well-argued defence of Meinongianism against Quinean orthodoxy, see Routley (1980)).
- 9 There is another defensible (which, it should be noted beforehand, is quite compatible with mine) reading of the Fifth Deduction implicitly defended by many scholars (it is towards this reading that Gill (2002) - whose exegesis was anticipated by the 13th-century Byzantine scholar George Pachymeres, see in *Prm.* 1304.4sq. in Gadra *et al.*, 1989, p. 52-53, p. 110-111 - and Granieri (2022) seem to go, I believe, for instance). To put it in the more efficiently way: the distinction is not between two sorts of being (being¹ vs. being²), but between two sorts of participation in Being. The first that corresponds to being¹ is that by partaking of any idea, a thing *indirectly* or *mediately* partakes of Being because every idea directly partakes in Being (if so, in the Fifth Deduction, Being has a function akin to Being as a 'vowel-kind' in *Sph.* 253a1-c3), while the second which corresponds to being² is that a thing *directly* partakes in Being without any mediation. Such a reading is well-supported by the fact that Aristotle taught us that Plato admits two kinds of participation: 'horizontal' participation between ideas, and 'vertical' participation between an idea and a sensible particular (see *Metaph.* A.9 991a29-30, M.5 1079b33 and the fragments of the Περὶ φιλοσοφίας (coll. II of the papyrus of Aï Khanum in (Auffret, 2019)), this idea appears in Plato in the *Sophist*, but also in the *Phaedo* and the *Republic*). In other words, a thing can mediate partake of Being because it 'vertically' partakes of another idea which itself 'horizontally' partakes of Being (to translate in Gill (2002)'s words: 'x vertically partakes of Φ which itself horizontally partakes of Being' amounts to 'x partakes of being in regard to <being a Φ >'; but the thing can also additionally directly or 'vertically' partake of Being. Therefore coming-to-be is the motion from 'vertically' partaking of non-Being from 'vertically' partaking of Being. Note that, usually, since Damascius' commentary, scholars are quick to link the Fifth Deduction and the negation *qua* difference/otherness from the *Sph.* (to not be Φ is to be other than Φ), in such a way that saying 'the One is not' amounts to 'the One is other than everything else', see Damascius, in *Prm.* II.291 Ruelle (= Westerink & Combès, 2003, p. 82.1-6), Migliori, 1990, p. 328; McCabe, 1996, p. 36; Fronterotta, 1998, p. 97-98; Scolnicov, 2003, p. 147, p. 150, etc., I agree with Granieri (2022) that it is not the more accurate reading of the Fifth Deduction.
- 10 The passage is highly convoluted and difficult to understand. I keep the text of the manuscripts, and, therefore, follow Gill 2002 in her rejection of Shorey (1891)'s emendations at 162a6 and 162a8 and deletion at 162b2 (Shorey's suggestions at 162a8 and 162b2 were adopted by John Burnet in his OCT edition, but already discarded by Diès (1923, p. 108)). Philological affairs do not matter for my purpose in this paper, since it is clear that, here, Plato distinguishes between two sorts of being or - that is equivalent from some point of view - two sorts of participation in Being.
- 11 On the difference between *characterizing* and *non-characterizing* properties, see Routley (1980, p. 2-3, p. 45-52, p. 180-187).
- 12 On the veridical meaning of 'to be' in *Prm.* 161e3-162b8, see Kahn (1981, p. 115-117).

- 13 On the equivalence of *being* (ὄν) and *something* (τι) in Plato's *Sph.*, see Aubenque, (1991).
- 14 Quine, 1981, p. 102; 1992, p. 52-53.
- 15 I borrow the Greek text from the OCT edition (Burnet).
- 16 On the Fifth Deduction as Plato's answer to the Eleatic challenge of the impossibility of coming-to-be, see (Cornford, 1939, p. 230; Menn, 1994, p. 74, p. 112).
- 17 Other texts: Sext. Emp. *PH* 2.243, 3.104-105 and *AM* 7.378-379. For Melissus, see *MXG* 1 974a1-6 and *Simpl. in Phys.* 103.13sq., 162.24sq. + (Barnes, 1982, p. 184-185; Brémond, 2017, p. 70)); and for Gorgias' variant, see Sext. Emp. *AM* 7.71 and *MXG* 6 979b26-34. For a scholarly discussion of the Eleatic challenge as it appears in *Phys.* 1.8 and Aristotle's solution, see Clarke (2015).
- 18 On Parmenides' reasoning against coming-to-be and ceasing-to-be, see Barnes (1982, p. 184-190).
- 19 On Aquinas' departure from Aristotle on the theory of coming-to-be and creation *ex nihilo*, see *Sum. Theol.* Ia, q.45, art.2 and, for a very short discussion, (Barnes, 1982, p. 197-198).
- 20 On this text, see Brémond (2017, p. 82-85). The Peripatetic author of the *MXG* quotes Hesiod's *Theogony* v.116-117 and v.120 to sustain the intelligibility of creation *ex nihilo*, note that these verses are those that are parodied by Epicharmus in his pastiche of Xenophanes' denial of coming-to-be (argued for in *MXG* 3 977a14-22: there are no divine births, gods do not begin to be), see DL 3.10 and (Barnes, 1982, p. 86-89).
- 21 Note that Aristotle's view is just one kind of transformationism amongst others. For instance, the position of Ionian physicists and Anaxagoras who reduce coming-to-be and passing-away to mere qualitative changes (that is, alterations), Empedocles' theory of ceasing-to-be as dissociation and coming-to-be as association, and Democritus' theory of coming-to-be as atomistic reconfiguration are other versions of transformationism. Therefore, in arguing against them, Aristotle's *GC* 1.1-4 forms a debate that occurs only within the transformationist framework. On Aristotle's reply to the Eleatic puzzle about coming-to-be in *Phys.* 1.7-9, see Clarke (2015).
- 22 Note that an A-theorist can generally translate the coming-to-be of the individual *a* (Socrates for instance) by the tensed formula $E!a \wedge \mathcal{P}\neg E!a$ ('Socrates was not before but he is now' or 'it is now the case that Socrates is, and it was previously the case that Socrates is not) or - if nothing can be born again after its death - by $E!a \wedge \mathcal{H}\neg E!a$ ('Socrates is now but it has always be the case before that Socrates was not'), and its ceasing-to-be by $E!a \wedge \mathcal{F}\neg E!a$ ('Socrates is now but will not be after') or $E!a \wedge \mathcal{G}\neg E!a$ ('Socrates is now but it is always going to be the case after that Socrates will not be'), whether or not tense operators have prophylactic effects of de-ontologizing what is within their scope (i.e., they are 'anti-Quinean' devices that block unwanted ontological commitments to merely past or future objects, and so do not satisfy Barcan-style formulas, see Prior (1967, p. 137-174, esp. p. 142-162) and its awkward system Q whose formal oddities are notably discussed in (Williamson, 2013, p. 69-71)), and whether or not the property of being *E!* is understood in a quantificationalist way or as a genuine property.
- 23 Note that given Simplification, Transformationism entails Creationism, but not the reverse.
- 24 On these three theories of coming-to-be, see Marion (2023, p. 562-564).
- 25 To avoid any confusion: the opposition between permanentism and temporarism is reducible neither to that of eternalism and presentism (of course, eternalism entails permanentism, but not the reverse), nor to that of A-theory and B-theory. Note also that Williamson (2013) is primarily focused on the opposition between *necessitism* (ontology is necessary: it is necessary that everything is such that it is necessary that something in the domain of quantification is identical with it - in short: necessarily everything is necessarily something) and *contingentism* (ontology is contingent: it is possible that something is such that it is possible that everything in the domain of quantification is distinct from it) that belongs to modal metaphysics, but devotes some developments to the analogical opposition between *permanentism* (encapsuled in the thesis that it is always the case that everything is such that it is always the case that something in the domain of quantification is identical with it - in short: always, everything is always something) and *temporaryism/transientism* (sometimes, something is sometimes nothing) that belongs to temporal metaphysics.
- 26 For any well-formed formula ϕ , these operators can be defined as follows: $\mathcal{S}\phi =_{df.} \mathcal{P}\phi \vee \mathcal{N}\phi \vee \mathcal{F}\phi$ and $\mathcal{A}\phi =_{df.} \mathcal{H}\phi \wedge \mathcal{N}\phi \wedge \mathcal{G}\phi$.
- 27 On the analysis of motion in the Fifth Deduction and its parallels in Sextus Empiricus (Diodorus Cronus' account of change) and Aristotle, see (White, 1992, p. 69-72; Marion, 2023, p. 210-225; 2025). A simple way to object to Plato's and Aristotle's theory is to state that, according to Standard Analysis and Cantor-Dedekind axiom, there are no neighbouring locations or directly successive locations in a densely ordered continuum; therefore, there is no motion from a location to the next adjacent one. On the mereo-locational logics of change (in Plato and Aristotle, but also in Hegel and beyond), see Marion (2025).
- 28 Quite fortunately, Routley (1980, p. 366-367, p. 373, p. 398) labels such a hypostatizing strategy "chronological platonism". Some variants of the hypostatizing view (namely, the free quantified tensed logics of Rescher and Cocchiarella) are shortly discussed in Prior (1967, p. 158-162, p. 173).

- 29 A VI.4 746 and Russell & Whitehead (1910, p. 176-180).
- 30 For a logical approach on tenses as *predicate modifiers* (rather than *sentence operators* as in Prior (1967)), see Sullivan (2016) and the objections to Sullivan's proposal raised by Williamson (2016) (especially the objection that "a sentence operator can always be dressed up as a predicate modifier" in such a way that, *in fine*, Sullivan's approach makes no substantive difference with Priorian orthodoxy).
- 31 More generally, on the tension between Leibniz's laws of identity and change, see (Rescher & Urquhart, 1971, p. 241-243; Routley, 1980, p. 369-372; Rescher, 1996, p. 64-65; Bottani, 2003, p. 160; Seibt, 2008, p. 136-146). Leibniz's law is the following formula: $\forall x \forall y [x = y \rightarrow \forall \Phi (\Phi x = \Phi y)]$. Let be $x = a_{t_{<ti}}$ et $y = a_{t_{>ti}}$, and assume the change from Φa to Ψa at ti . By the non-identity of the discernibles $\forall x \forall y [\exists \Phi (\Phi x \wedge \neg \Phi y) \rightarrow x \neq y]$, both $(\Phi a_{t_{<ti}} \wedge \neg \Phi a_{t_{>ti}}) \rightarrow a_{t_{<ti}} \neq a_{t_{>ti}}$ and $(\neg \Psi a_{t_{<ti}} \wedge \Psi a_{t_{>ti}}) \rightarrow a_{t_{<ti}} \neq a_{t_{>ti}}$ obtain. Therefore, change is incompatible with Leibniz's laws and the idea that individuals persist (in the sense of *endurance*, that is, an object perdures by being wholly present at many times) through change. Such an argument obviously grounds Plato's *Prm.* 162d5-8, 163a7-b1. Note that this argument seems to have been anticipated by Gorgias, see *MXG* 6 980a1-4. For convenience, I opt for the idea that what is temporally qualified is the individuals rather than the predicates or the copula (on these three options, see (Bottani, 2003; Varzi, 2005, p. 118-123)), but, here, such a device should not be read as implying a particular metaphysical view (namely fourdimensionalism, as it is the case in Lewis (1986, p. 202-204) and Sider (2001, p. 92-132)).
- 32 Such a strategy had already been defended by Wilson (1956), but in a classical framework (see (Rescher & Urquhart, 1971, p. 242; Seibt, 2008, p. 138-139) for some alleged difficulties of this strategy in a classical framework).
- 33 This tactical move is notably favoured by Rescher & Urquhart (1971, p. 242-243).
- 34 To be exhaustive, there is a third way to modify Leibniz's laws that consists in introducing a time-variable rather than a time-constant (as Routley (1980) does) in the expression of the predicate (formally: $\forall x \forall y [x = y = \forall \Phi \forall t (\Phi_x = \Phi_y)]$ where ' t ' is a variable and ' Φ_t ' means ' Φ -at- t '). But, *in fine*, at least from a logical point of view, such a formula can be taken to be tantamount to $\forall x \forall y [x = y = \forall \Phi \forall t ((\Phi x, t) = (\Phi y, t))]$.
- 35 Note that, the 13th-century Byzantine scholar George Pachymeres, in his commentary on *Prm.* (which is a sequel to Proclus' transmitted commentary, it should be remarked that the non-Neoplatonizing and 'Aristotelian' commentary of Pachymeres is undoubtedly more helpful than Proclus' and Damascius' baroque and fantasist exegeses - anti-logical readings that are ideologically and deceptively defended in Proclus, *in Prm.* 630.27-635.27 and *Theol. Plat.* I.9 by the way - for understanding Plato's letter), objects to Plato that, from an Aristotelian point of view, the sentence 'if it moves, it alters' is false, while the converse 'if it alters, it moves' is true (*in Prm.* 1306.17sq. in Gadra *et al.*, 1989, p. 55, p. 113 and Diès, 1923, p. 110 n. 1). Of course, in *Prm.* and in other places (*Tht.*, *Sph.*, etc.), Plato understands 'alteration' in a broader sense than Aristotle's change in *sensible qualities* (see *Phys.* 7.3): alteration is a change in property broadly understood.
- 36 Again, an Eleatic-style idea, see Routley (1980, p. 372).
- 37 Don't look at this footnote if you want some new insight on the difference between the philosophy defended by Plato in his exoteric dialogues and in his esoteric lectures (the most famous: the lecture *On the Good*). I shall not try to give a bibliography on this vexed question. The issue is well-known by every scholar since, at least, two centuries. However, I just wish to confess that I'm not a Tübingen's zealot. I only believe the following 'might'-conditional: if Plato were a good philosopher, then he might be a dialetheist one (that is, Platonism and classical consistency can walk hand in hand only with great difficulties).
- 38 For instance, following some Russellian and Quinean insights (see (Russell, 1903, §442-447; Quine, 1960, p. 172-173), Williamson (2013, p. 402-422) who defends a hypostatizing strategy in a classical framework suggests to explain or to paraphrase a tensed object-language with an untensed metalanguage which uses time-indexed and dated formula (tensed operators in the object-language are paraphrased by quantification over times). Therefore, because there are no undated properties in the metalanguage, Leibniz's laws are restricted to dated properties. In doing so, 'what appears as transience in the object-language is treated in the metalanguage as a mere difference between times' (Williamson, 2013, p. 408). Thus, there is no real radical change (and, therefore, no real change features like dying or coming-to-be). Such a reduction of a transient-full language to a transient-free metalanguage is severely judged in Routley (1980, p. 366-368, p. 389-394).
- 39 Such a view is reminiscent of the theory of *Phd.* 70d-72e (the so-called 'cyclical argument'), 102d-106e according to which birth and death respectively are, for the former, the gain of the participation in Life and the loss of the participation in Death, and, for the latter, the loss of the participation in Life and the gain of the participation in Death (it is obviously an instance of the general scheme argued for in the Fifth Deduction). On Plato's account of change in the *Phd.*, see Sedley (2013) (in which the criticisms of Aristotle's *Phys.* I.9 are debunked).

