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# Attraction and Repulsion: Understanding Aristotle's Poiein and Paschein

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**Attraction and Repulsion: Understanding Aristotle's *Poiein* and *Paschein***  
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**Introduction**

Philosophical scholarship in the 20th and 21st centuries has shown a renewed interest in the concepts of motion and activity. Within Aristotle scholarship, this renewed interest has led to a surge in studies examining concepts such as *physis*,<sup>1</sup> *kinēsis*,<sup>2</sup> *dynamis* and *energeia*.<sup>3</sup> Although these concepts are indeed pivotal to Aristotle's thinking, it is surprising that other concepts, which equally express motion and activity,<sup>4</sup> have received much less attention. Two terms have been especially neglected: the correlated concepts of "acting" (*poiein*) and "being acted upon" (*paschein*).<sup>5</sup>

There are several reasons why this failure to attend to *poiein* and *paschein* is unjustified and, in fact, constitutes scholarly neglect that needs to be rectified. First, these concepts emerge at pivotal places in Aristotle's oeuvre: *poiein* and *paschein* are two of the ten categories pertinent to grasping the ultimate referents of linguistics, semantics, and metaphysics. Secondly, they play an important role in helping one understand the principles that rule processes such as generation

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<sup>1</sup> Cf. S. Waterlow, *Nature, Change, and Agency in Aristotle's Physics: A Philosophical Study*, Oxford: Clarendon Press, 1982 and H.S. Lang, *The Order of Nature in Aristotle's Physics: Place and the Elements*, Cambridge, Cambridge University Press, 1998.

<sup>2</sup> Cf. L.A. Kosman, "Aristotle's Definition of Motion," in: *Phronesis: A Journal of Ancient Philosophy* 14, 1969, pp. 40-62; D. W. Graham, "States and Performances: Aristotle's Test," in: *Philosophical Quarterly* 30, 1980, pp. 117-130; D.W. Graham, "Aristotle's Definition of Motion," in: *Ancient Philosophy* 8, fall 1988, pp. 209-215.

<sup>3</sup> Cf. J. Stallmach, *Dynamis und energeia; Untersuchungen am Werk des Aristoteles zur Problemgeschichte von Möglichkeit und Wirklichkeit*, Meisenheim am Glan: A. Hain, 1959.

<sup>4</sup> Our paper examines the *general* notion of motion and activity, including both *kinēsis* and *energeia*. For this reason we will speak both of "motion" and "activity." We will explicate this further in section 2 (b) of this paper.

<sup>5</sup> In our view, by translating *poiein* as "acting" and *paschein* as "being acted upon," we can do justice to the relationship between the two terms, as it allows us to hear both the active voice associated with *poiein* in Attic Greek and the passive voice associated with *paschein*; for a further elaboration of the active and the passive voice, see the first section of our paper. However, since even such a provisional translation of *poiein* as "acting" and *paschein* as "being acted upon" could interfere with grasping the full meaning of these two terms, we will mostly use transliterations of these terms.

and corruption in the sublunary world.<sup>6</sup> Moreover, their importance increases when it is realized that Aristotle appears to have devoted a whole book to the concepts of *poiein* and *paschein*, as Diogenes Laertius testifies.<sup>7</sup>

Yet, what exactly is the significance of *poiein* and *paschein*: what kind of motion or activity do these two notions designate? This question is closely intertwined with an inquiry into the *relationship* between these two concepts, since they are often mentioned together and used as correlatives. Thus, our inquiry into the meaning of *poiein* and *paschein* needs to ask the important question of why there are two categories and not one to designate motion or activity. Although this question is hardly new – it has already been raised by Plotinus,<sup>8</sup> among others – it has largely been forgotten, and its importance has been overlooked. Our paper seeks to revive the question of why there are two categories rather than one, and offers a new solution.

Our main thesis is that the relationship between *poiein* and *paschein* involves a dynamic of attraction and repulsion, which explains both their identification with and distinction from each other. We speak of attraction since the two concepts at times appear to be so correlated that they almost collapse into one another as if they formed one concept. At other times, however, *poiein* and *paschein* appear to be opposed as two utterly distinct ideas (signifying ‘active’ and

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<sup>6</sup> Cf. the title of Burnyeat’s essay “Aristotle on the Foundations of Sublunary Physics,” which serves as an introduction to the collection of essays edited by F. de Haas and J. Mansfeld: *Aristotle’s On Generation and Corruption I*, Oxford: Clarendon Press, 2004. In his essay, Burnyeat addresses how *On Generation and Corruption* discusses foundations on different levels: physical, conceptual, and teleological (pp.13-24). Cf. also Mueller, who speaks of *GC* as “a presentation of the *general principles* for studying the features of the sublunary world” (*Notre Dame Philosophical Reviews* 2005-06-17).

<sup>7</sup> According to Diogenes Laertius, the title of this (now lost) work is: “περὶ τοῦ πάσχειν ἢ πεπονθέναι.” Diogenes Laertius, *Lives of Eminent Philosophers* V.22, translated by R.D. Hicks (London: Heinemann) 1925. Cf. also A. Trendelenburg, *Geschichte der Kategorienlehre*, Hildesheim: Georg Olms Verlagsbuchhandlung, 1864 [1963], p. 131. The latter speaks, however, about “περὶ τοῦ ποιεῖν καὶ πεπονθέναι.” The fact that “περὶ τοῦ πάσχειν ἢ πεπονθέναι” has been catalogued by Diogenes Laertius among Aristotle’s logical works leads Moraux to suggest that this work consisted of an examination of *paschein* as “one of the categories of being” (P. Moraux. *Les listes anciennes des ouvrages d’Aristote*, Louvain: Éditions Universitaires de Louvain, 1951, p. 46).

<sup>8</sup> Cf. Plotinus, *Enneads* VI.1.11 and VI. 3.28. Plotinus, *Enneads*, with an English translation by A.H. Armstrong, Cambridge: Harvard University Press, 1966.

‘passive’ causality respectively), and thereby seem to repulse each other. Aristotle’s refusal to collapse *poiein* and *paschein* into one another while simultaneously showing their correlation demonstrates his acknowledgement of the dynamic that is at the heart of motion or activity: an irresolvable tension between an ‘active’ and ‘passive’ factor that both attract and repulse each another.

In the following, we will first explore the meaning of *poiein* and *paschein* in the *Categories* and *On Generation and Corruption*. Subsequently, we will first offer proof to suggest that *poiein* and *paschein* can be unified in one concept, and then arguments demonstrating the need for their separation. Ultimately, this will lead us to the conclusion that *poiein* and *paschein* are caught in a dynamic between attraction and repulsion, caused by mutual dependence and irrevocable difference.

### **1. *Poiein* and *paschein* as correlated categories and as contrary principles of physical change**

In the *Categories*, Aristotle lists *poiein* and *paschein* as two of the ten categories:

Of things said without any combination, each signifies either substance (οὐσία) or quantity (ποσόν) or qualification (ποιόν) or relation (πρός τι) or where (ποῦ) or when

(ποτ□) or being-in-a-position (κεῖσθαι) or having (ἔχειν) or acting (ποιεῖν) or being acted upon (πάσχειν) (*Categories* 4, 1b25-1b28).<sup>9</sup>

The linguistic morphology<sup>10</sup> of *poiein* and *paschein* unlocks their meaning. In contrast to the other eight categories that are all expressed in “static” terms (such as nouns, adverbs, or interrogatives), *poiein* and *paschein* are grammatically expressed in “dynamic”<sup>11</sup> terms, i.e., as verbal infinitives.<sup>12</sup> Their morphology emphasizes that *poiein* and *paschein* are referents for the verbal constituents of sentences. From a semantic perspective, this means that *poiein* and *paschein* denote motions or activities. What distinguishes *poiein* and *paschein* is their voice: “cuts” or “walks” are verbs designating motions expressed in the active voice<sup>13</sup> to be categorized as *poiein*; in contrast, “being cut” or “being walked” are in the passive voice,<sup>14</sup> illustrating *paschein*.

The recognition of the difference between the active and passive voice is important, since it implies that Aristotle is sensitive to the various *directions* that motions and activities can take.

In other words, there is a difference in meaning at the very root of every motion and activity. This

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<sup>9</sup> We have modified Ackrill’s translation. Cf. Aristotle. *Categories and De Interpretatione*, translated by J.L. Ackrill, Oxford: Oxford University Press, 1963.

<sup>10</sup> The grammatical expressions Aristotle employs to denote the various categories are “grammatically heterogeneous” (Ackrill, 1963, p. 78).

<sup>11</sup> Cf. H. Bonitz, *Über die Kategorien des Aristoteles*, Darmstadt: Wissenschaftliche Buchgesellschaft, 1853 [1967] p. 57.

<sup>12</sup> This is something which they share with the categories of being-in-a-position (κεῖσθαι) and having (ἔχειν). However, since these latter two are missing in Aristotle’s other discussions of the categories (except in the *Topics*), we will not elaborate upon them here. For a discussion of *keisthai* and *echein*, cf. p. 24 of Trendelenburg’s *Geschichte der Kategorienlehre*, Hildesheim: Georg Olms Verlagsbuchhandlung, 1864 [1963], where he discusses the specific grammatical form of these two categories. *Keisthai* partly refers to intransitive uses of the infinitive, and *echein* partly refers to the Greek perfect, since – as the examples indicate – it refers to “a possession of an activity.” Ackrill notes that these verbal infinitives “can be used as a verbal noun” (Ackrill, 1963, p.78).

<sup>13</sup> The active voice “represents the subject as performing the action of the verb.” The example Smyth gives is λούω *I wash*.” See H.W. Smyth, *Greek Grammar*, Cambridge: Harvard University Press, 1984, § 1703, p. 389.

<sup>14</sup> The passive voice “represents the subject as acted on.” Smyth mentions as examples ἐωθοῦντο (they were pushed) and ἐπάιοντο (they were struck). Smyth, 1984, § 1735, p. 394.

difference is categorized as “doing” or “acting” in the most general sense of *poiein*<sup>15</sup> in contrast to that of its antonym, *paschein*, which captures the most general sense of “being done to,” or “being acted upon.”<sup>16</sup> What is remarkable is that, although *poiein* and *paschein* are different, they are dependent upon each other as well: as antonyms they cannot be grasped without referring to each other.

The antonymical and correlated character of *poiein* and *paschein* also appears in another work that devotes special attention to these two concepts: *On Generation and Corruption*. Aristotle argues here that *poiein* and *paschein* are explanatory of the reciprocal processes that take place between qualitative contraries (*GC* I.7, 323b30-324a5) such as hot and cold, and wet and dry. These processes account for the generation and corruption of the “primary bodies” (τὰ πρῶτᾶ σώματα, *GC* II.3 330b7 or τὰ ἀπλᾶ σώματα, *GC* II.3 330b8) and what his predecessors called “elements” – i.e. water, fire, air, and earth.<sup>17</sup>

By making use of *poiein* and *paschein* as explanations for the reciprocal processes taking place between contraries, Aristotle shows that contrariety is vital to the relationship between these two notions. Notably, Aristotle states that agent (*to poioun*) and patient (*to paschon*) are contraries (*GC* I.6, 323b30-324a9) and he uses the language of “opposition” (ἀντιθήσομεν, *GC* I.6, 323a18) when referring to *poiein* and *paschein*. In combination with our reading of *poiein* and *paschein* as correlated categories designating active and passive motion respectively, this

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<sup>15</sup> Cf. Trendelenburg, 1863, p. 137. *Poiein*, as Liddell and Scott illustrate, has in Attic Greek an extensive field of meaning, denoting doing and making in various varieties (Liddell and Scott, 1980, pp. 1427-9.). Hence, it is better suited for usage in a generic sense than other verbs that denote action, such as *prattein*. *Poiein* in this broad sense should not be confused with Aristotle’s use of this term in the *Nicomachean Ethics*. There, Aristotle uses the term in a much more limited sense, i.e., that of “instrumental doing” or “making.” It is then contrasted with *prattein*, an activity that is an end in itself. Aristotle, *Nicomachean Ethics*, VI.2 1139b1-4, VI.4 1140a1-23; see also Aristotle’s *Magna Moralia* 35, 119713-13.

<sup>16</sup> Cf. Trendelenburg, 1864, p. 137. Instead of using *poiesthai*, Aristotle resorts to *pascho* to express the passive voice. This is in line with its common usage in the Attic Greek language: Cf. Liddell and Scott, *Greek-English Lexicon*, revised and augmented by H.S. Jones, Oxford: Oxford Clarendon Press, 1983, p.1347.

leaves us to wonder about the status of *poiein* and *paschein*: are they truly two separate concepts or are they to be grasped similarly to Aristotle’s comprehension of contraries, i.e. as “being different in species, but similar in genus” (*GC* I.7, 323b30-34)?<sup>18</sup> If they are merely antonyms, correlatives and contraries, we have sufficient reason to assign *poiein* and *paschein* to *one* single category, instead of allocating them their own categories. Of course, this then raises the issue: to what category could we reduce *poiein* and *paschein*? In the following we will examine two options: (a) *poiein* and *paschein* as unified in the genus of relation (*pros ti*) and (b) *poiein* and *paschein* as unified in the genus of motion or activity broadly speaking.<sup>19</sup>

## **2 (a) Unification: *poiein*, *paschein* and the genus of relation (*pros ti*)**

In his *Enneads*, Plotinus<sup>20</sup> suggests that *poiein* and *paschein* can be embraced under a single heading. In his view, *poiein* and *paschein* are to be consigned to the category of relation: “both are relation (*pros ti*), in all cases where action (*poiein*) is related to passive affection (*paschein*); if one looks at the same on one side it is action (*poiein*), but if on the other, it is affection (*paschein*)” (VI.1.22). Underlying his suggestion is the idea that one and the same process can be interpreted or looked at in two ways, either in terms of *poiein* or in terms of *paschein*. One process – for example heating – can be looked at from the perspective of the heating source, and then called “heating.” When looked upon from the perspective of the cold

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<sup>17</sup> In other words, “elements,” are, in fact, composites. Aristotle’s term in *GC* II.3, 330b22-23 is “mixed” (μικτόν).

<sup>18</sup> Wildberg speaks pointedly of “similarity in difference.” Wildberg, 2004, p. 231.

<sup>19</sup> Other options to grasp *poiein* and *paschein* under one genus may be suggested as well. Ammonius distinguishes four principal and primary categories: substance, quantity, quality, and relative, and suggests that *poiein* and *paschein* can be grasped as a result of the mingling of the primary categories of substance and quality. Cf. Ammonius, *On Aristotle’s Categories*, translated by S.M. Cohen & G.B. Matthews, London: Duckworth, 1991, 92, 6-11. Following Ammonius’ lead, we could thus plead to subordinate *poiein* and *paschein* to the category of “qualification” (ποιδόν), which could be justified on the basis of their constant association with qualitative change in *GC*.

water being heated however, we could equally call it “being heated.” Heating and being heated are ultimately correlated, as the meaning of “heating” is not complete without referring to something “being heated.” Therefore, acting (*poiein*) and being acted upon (*paschein*) are, in the end, to be unified in a genus that shows their codependence upon each other: relation.<sup>21</sup>

Plotinus’ proposal finds further evidence in *Metaphysics* V.15, where Aristotle characterizes “that which can act” (ποιητικόν) and “that which can be acted upon” (παθητικόν) as expressions signifying relatives:<sup>22</sup>

Some things are said to be *relative* (πρὸς τι) in the way that double is relative to half or triple to one-third, or generally the multiple to what is one of many parts, or what exceeds to what is exceeded; others are meant in the way that what can heat (θερμαντικόν) is relative to what can be heated (θερμαντὸν), or what can cut (τμητικόν) to what can be cut (τμητὸν), and generally what is active (ποιητικόν) to what is passive (παθητικόν) (*Metaphysics* V.15, 1020b26-30).<sup>23</sup>

Equally telling is *Physics* III.1:

Being in *relation* to something (πρὸς τι) is attributed to what exceeds or falls short, or to what acts (ποιητικόν) and what is acted upon (παθητικόν), or generally (ὅλως) to what

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<sup>20</sup> Plotinus was presumably not the first one to make this suggestion; before the time of Boethus this issue had already been debated. Cf. S. Strange, 1992, footnote 504.

<sup>21</sup> For a similar but modern view on the categories of *poiein* and *paschein*, we may invoke Kant, who finds *action* and *passion* “derivative concepts,” and who lists reciprocity between agent and patient as belonging within the group of relation. I. Kant, *Critique of Pure Reason*, translated by N. Kemp Smith, New York: St. Martin’s Press, 1929 [1965], B 106 ff.

<sup>22</sup> Apostle, 1980, p. 87.

<sup>23</sup> Sachs’ translation, with some modifications. *Aristotle’s Metaphysics*, Santa Fe: Green Lion Press, 1999.



moves (κίνητικόν) and what is moved (κίνητόν): for what moves is a mover of something moved (τὸ γὰρ κίνητόν κίνητόν τοῦ κίνητοῦ), and what is moved is moved by something moving it (καὶ τὸ κίνητόν κίνητόν ὑπὸ τοῦ κίνητικοῦ), and there is no motion apart from things (*Physics* III.1, 200b29-33).<sup>24</sup>

On the basis of the preceding passages, it is difficult to deny the correlated character of the subjects involved in the processes of *poiein* and *paschein*. If it is true that the subjects involved in *poiein* and *paschein* are correlatives, then we have good reason to infer that the processes in which they are engaged, i.e. *poiein* and *paschein*, are correlatives themselves and can, thus, be consolidated into the category of relation.<sup>25</sup>

## 2 (b) Unification: *poiein* and *paschein* and the genus of motion or activity

Although the preceding section offers ample evidence for the consolidation of *poiein* and *paschein* in the category of relation, we may wonder whether this unification does justice to the specific role that *poiein* and *paschein* play within Aristotle's oeuvre. Building upon another suggestion of Plotinus,<sup>26</sup> the genus that could unify both *poiein* and *paschein* is motion or activity broadly speaking, including both *kinēsis* and *energeia*, and *praxis* and *poiēsis*, but also *alloiōsis*,

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<sup>24</sup> Slightly modified translation. Unless noted otherwise, we will use Sachs' translation of the *Physics*: Aristotle, *Aristotle's Physics; A Guided Study*, translated and annotated by J. Sachs, New Brunswick/London: Rutgers University Press, 1995.

<sup>25</sup> Cf. Trendelenburg, 1864 [1963], p. 131.

<sup>26</sup> Plotinus was presumably not the first one to make this suggestion. Cf. S. Strange, 1992, footnote 504. "Some critics had already argued before the time of Boethus that *poiein* and *paschein* belonged to a single category, that of change (*kinēsis*), cf. Simplicius, 63, 6-9 and 303, 5-16. They were followed by Plotinus (*Enn.* VI.1.11 and VI. 3.28) and perhaps earlier by Galen (*Institutio Logica* 13,9)." Cf. also Simplicius, 2003, 62, 24 and 66, 16-67,8. Dexippus also raises this issue, see his commentary on Aristotle's *Categories* 30, 35-31,3, and he offers possible answers in response to this issue in 31, 3-10 (Dexippus, *On Aristotle Categories*, translated by J. Dillon, London: Duckworth, 1990), which we will discuss later. Cf. also Trendelenburg, 1864 [1963], p. 132.

*metabolē, genēsis* and *phthora*, et cetera.<sup>27</sup> While it is true that the unification of *poiein* and *paschein* within the category of motion broadly speaking is of a different kind than the unification entailed by *pros ti*, the model of unification as proposed here builds upon the dialectical relationship between *poiein* and *paschein* as established in the previous section, and simultaneously shows how this dialectic between *poiein* and *paschein* plays itself out in the generic field of motion and activity.

Plotinus' suggestion that *poiein* and *paschein* could be unified in a category such as motion and activity finds support in the following argument. If (1) we take seriously the claims following from our reading of the *Categories* that *poiein* and *paschein* address active and passive motions referred to by verbs such as “burning” and “cutting”, and if (2), in addition, *poiein* and *paschein* signify physical processes between contraries as *GC* shows, then (3) we have sufficient evidence to prove that *poiein* and *paschein* are, in fact, ways of explaining motion.

The advantage of unifying *poiein* and *paschein* in the genus of motion and activity broadly speaking is that it does justice to the scope of meaning within which we have seen *poiein* and *paschein* function so far: that of categories signifying motion and activity, and that of principles of physical, elemental, change. Moreover, the inclusion of *poiein* and *paschein* in the genus of motion or activity proverbially kills two birds with one stone: it allows us both to capture the specific scope of meaning of *poiein* and *paschein*, and to speak of the correlated character of *poiein* and *paschein*, which is so integral to these two concepts. For, as *Physics* III clarifies, motion (*kinēsis*) has two components – that which moves and that which is moved –

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<sup>27</sup> Within Aristotle's analysis of *poiein* and *paschein* we do not encounter specific tools to distinguish those different kinds of movement. For instance, although Aristotle's analysis in *GC* I.6 and I.7 initially seems to suggest that *poiein* and *paschein* are to be restricted to qualitative change (*alloiōsis*), his association of *poiein* and *paschein* with substantial change (namely as elemental transformation) (e.g. *GC* II.4, 331a7-16) prompts us to abandon this perspective.

and both are in relation to (πρὸς τι) one another (*Physics* III.1, 200b29). As Aristotle writes: “what moves is a mover of something moved, and what is moved is moved by something moving it” (*Physics* III.1, 200b32-34). To explain his two-pronged approach to motion in terms of mover and moved, Aristotle explicitly calls for an analogy between the pair *poiein-paschein* and *kinein-kineisthai*. Subsequently, in *Physics* III.3, Aristotle appeals to *poiein* and *paschein* to explain how the process of motion may involve two components whose activities (*energeiai*) are nonetheless *one* and the same.<sup>28</sup>

More evidence for the consolidation of *poiein* and *paschein* in the category of motion and activity can be found in Aristotle’s discussion of the activity of sense-perception in *De Anima* II.5. There Aristotle asserts that our senses “produce (*poiein*) no sensation (ποιουῦσιν αἴσθησιν) apart from external objects” (*DA* II.5, 417a4-5). It is only through “being acted upon (*paschein*) and being moved (*kineisthai*) by something capable of acting (*poiētikou*) and being active”<sup>29</sup> (*DA* II.5, 417a18) that our senses come to exercise their activity. This means that an activity (*energeia*) such as sense-perception is fundamentally dependent upon both the “active” activity (*poiein*) of the perceptible objects and the “passive” activity (*paschein*) of the sense-organs. Very similar to his ideas in *Physics* III, here Aristotle arrives at the conclusion that “the activity of the sensible object and the activity of the sense-faculty are *one and the same*” (*DA* III.2, 425b26, our italics). In other words, while dependent upon both *poiein* and *paschein*, perception is in fact a single, unified activity.

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<sup>28</sup> Many scholars question what this identity is. Cf. M.L. Gill, “Aristotle’s Theory of Causal Action in *Physics* III.3,” in: *Phronesis* 25 (3), 1980 (pp. 129-147), pp. 140 ff.; cf. E. Hussey’s notes to *Aristotle’s Physics, Books III and IV*, translated with notes by E. Hussey, Oxford: Clarendon Press, 1983, p. 67. According to Aquinas, the unity that Aristotle speaks of here is being one and the same “in things” (lecture 5, 317), i.e. “in subject” (lecture 5, 318) but “not one and the same according to reason” (lecture 5, 318): St. T. Aquinas, *Commentary on Aristotle’s Physics*, translated by R.J. Blackwell, R.J. Spath & W.E. Thirlkel, London: Routledge and Kegan Paul, 1963.

<sup>29</sup> This translation is our own.

Briefly, what we can conclude from *Physics* III.3 and *DA* II. 5 and III.2 is that Aristotle explicitly uses the language of *poiein* and *paschein* to elucidate the “active” and “passive” factors involved in motion and activity, thereby offering further evidence for the unification of *poiein* and *paschein* in the category of motion and activity without sacrificing their correlated character.<sup>30</sup>

Despite the above evidence however, integrating *poiein* and *paschein* in the genus of motion or activity overlooks one crucial fact: *poiein* and *paschein* do not only refer to the processes of “active” and “passive” motion or activity respectively, but also to the *causes* of “active” and “passive” motion or activity. The following section will focus specifically on this causative aspect of *poiein* and *paschein*, which will complicate an all-too-easy reduction of *poiein* and *paschein* to one category.

### **3. Distinction: *poiein*, *paschein* and causation**

The reduction of *poiein* and *paschein* to one, more basic concept is problematic insofar as *poiein* and *paschein* do not only acquire meaning through reference to one another, but also have a certain sense of independence. What lies “below” the layer of correlated motions and activities is the unmistakable fact that *poiein* and *paschein* signify the different active and passive causes that make those processes possible. For instance, *poiein* does not only refer to the active process of heating, but also points to the role of the thing in question (e.g. fire) that brings about this

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<sup>30</sup> The exclusive focus in this section on *poiein* and *paschein* as categories unified by motion does not exclude that other categories, such as quality and quantity and substance, may involve motion or change as well. Cf. Reale’s analysis of how being as potency and being as act cut across all categories (Reale, 1990, p. 275). What we are arguing for is that Aristotle’s description of the categories *poiein* and *paschein* comes closest to explicitly analyzing movement or activity, and specifically the different sources of movement or activity.

change. Similarly, *paschein* may imply the process of being heated, but also the underlying susceptibility of the substrate to be heated (e.g. the flammable nature of wood).

*GC I.7* offers evidence that including these underlying causative factors is indispensable to gaining full comprehension of *poiein* and *paschein*:

For sometimes it is the substratum (ὑποκείμενον) which we speak of as acted upon (πάσχειν) as when we say that the human being is cured (ὑγιάζεσθαι) or heated (θερμαίνεσθαι) or chilled (ψύχθεσθαι) or any other things of this kind; sometimes, though, we say that what is cold (το ψυχρόν) is heated (θερμαίνεσθαι), what is ill (το κάμνον) is cured (ὑγιάζεσθαι). And both are true – the same thing happens in the case of the agent (τὸ ποιῶντος): sometimes it is the human being that we say heats, sometimes we say that what is hot (το θερμόν) heats – for there is a sense in which it is the matter (ἡ ὄλη) that is acted upon (πάσχει) and another sense in which it is the contrary (*GC I.7*, 324a16-23).<sup>31</sup>

As this passage indicates, there are two modes of addressing change. One view, reflected in one mode of speaking, pays attention to the *subject* that acts and the *underlying substrate* that is acted upon; the other focuses on the qualitative opposites that act and are acted upon.<sup>32</sup> By including

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<sup>31</sup> This translation is a mixture of Forster's (Aristotle, *On Coming-to-be and Passing-away*, translated by E.S. Forster, Cambridge: Harvard University Press, 1965) and Williams' translations (Aristotle, *De Generatione et Corruptione*, translated by C.J.F. Williams, Oxford: Clarendon Press, 1982) with some of our own modifications. It is noteworthy how consistent Aristotle is in using active verbal voices to indicate *poiein*, and passive verbal voices to indicate *paschein*. Cf. also Wildberg, 2004, p. 233.

<sup>32</sup> In *Physics I.7*, Aristotle contends that it is *impossible* for contraries to be acted upon by another (*Physics I.7* 190b33, our emphasis). Instead, Aristotle argues there for a "third" thing that is involved in "natural coming into being" (191a4ff), namely something that "underlies" the contraries (I.7 191a19). Sachs comments: "But bare opposites such as white and not-white cannot turn into each other; some underlying thing that had one of the opposites in it comes to have the other in it" (*Aristotle's Physics: A Guided Study*, translated by J. Sachs, New

the subject and the substrate of change<sup>33</sup> in his analysis, Aristotle provides more insight into *poiein* and *paschein*. In the case of *poiein*, the initiating cause of change<sup>34</sup> (for example, a *human being* who is heating something) may be associated with *poiein*, but also the qualitative contrary (e.g. the hot) that acts. When we speak of *paschein*, we could point to the underlying material substrate (e.g. a stone is being heated, but also to the affected quality (e.g. the cold). In other words, when addressing *poiein*, the initiating cause of the form of change demands recognition as much as the (contrary) quality that is brought about. Similarly, while addressing *paschein*, we should acknowledge the matter – the fundamental material cause that enables a subject to be prone to be affected – as much as the contrary quality that is affected.

Thus, there are different ways of explaining the processes of *poiein* and *paschein*. *Poiein* pertains both to the agent (as the carrier and possessor of a certain *form*) and the *form* itself, i.e. the quality in question, which is one member of a pair of opposites. Correspondingly, *paschein* pertains both to the patient as the carrier and possessor which allows for a change in quality, i.e., *matter*, and to the affected quality itself. The following passage from *GC* II.9 explicitly connects being affected (*paschein*) and being moved (*kineisthai*) to matter, but also links acting (*poiein*) and moving (*kinein*) to “another power,” presumably the source of motion which carries a particular *form*:

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Brunswick/London: Rutgers University Press, 1998, p.48). When we address change, we cannot do so by solely referring to the extremes within which the change takes place. We also have to take into account that which is changing: the substrate.

<sup>33</sup> Wildberg speaks of the “carriers of the quality” (Wildberg, 2004, p. 234).

<sup>34</sup> Cf. *Physics* II.3, 194b29-33.

For it belongs to matter (ύλης) to be affected (πάσχειν) and be moved (κινεῖσθαι), it belongs to another power (ἑτέρας δυνάμεως) to move (κινεῖν) and act (ποιεῖν) (*GC* II.9, 335b29-31).<sup>35</sup>

Through the inclusion of *form* and *matter* in the analysis of *poiein* and *paschein*, our earlier comprehension of *poiein* and *paschein* as mere correlatives or contraries unified by a common genus encounters serious difficulties. If *paschein* is indeed *also* characteristic of matter, and if *poiein* *also* belongs to form, we need to reassess the issue of the identity and difference of *poiein* and *paschein*. More specifically, it appears that, because of their association with form and matter, the meanings of *poiein* and *paschein* need to be distinguished, and their independence needs to be reinstated. For, as causative principles, both form and matter have a certain sense of independence. That even matter has a particular kind of independence can be retrieved from *Physics* I.9, where Aristotle ascertains that matter is “almost, and in a certain respect is, an *ousia*, which the deprivation is not at all” (*Physics* I.9 192a5-9). The next section of our paper will elaborate on the issue of the dependence and independence of the two categories of *poiein* and *paschein*.<sup>36</sup>

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<sup>35</sup> Modified translation. Williams translates: “For it is the *property* of matter to be acted upon and to be moved, whereas causing movement and acting belong to another capacity” (Williams, 1982; our italics). Williams’ translation of ‘property’ may weaken the actual meaning expressed by the genitive of possession used to indicate the relationship between matter and *paschein* and *kineisthai*. Forster’s translation renders the genitive of possession construction in the following way: “for to be acted upon, that is, to be moved, is *characteristic* of matter, but to move, that is, to act, is the function of another power” (Forster, 1965; our italics).

<sup>36</sup> This raises the interesting question of what the consequences are of this ‘causal’ reading of *poiein* and *paschein* for understanding a work such as the *Categories*, which is presumably ‘innocent’ on the topic of the matter-form distinction. Unfortunately, this discussion falls outside the parameters of this paper.

#### 4. *Poiein* and *paschein*: identity and difference revisited

Dexippus<sup>37</sup> and Simplicius<sup>38</sup> both offer thoughtful responses to the issue of the dependence and independence of *poiein* and *paschein*. In Dexippus' view, *poiein* and *paschein* can be part of one and the same event, but are ultimately different in being. *Poiein* and *paschein* cannot be reduced to each other: "neither is that which acts, insofar as it acts, acted upon, nor does that which is acted upon, in so far as it is acted upon, act."<sup>39</sup> For instance, when X heats Y, X is not heated by Y insofar as it heats Y and when Y is heated by X, Y does not heat X insofar as it is heated by X. X and Y play different roles in each process of *poiein* and *paschein*. In principle, *poiein* and *paschein* have distinct natures: e.g. heating, although accompanied by being heated, *is* not being heated, it principally refers to the action of that which confers heating. Similarly, being heated is not the same as heating. Although food, in order to be heated, requires a source of heating, the process of being heated has a different meaning than that of heating. Even in composite entities, Dexippus writes, the two processes do not "come together (συνέρχεται)," although the two principles (ἄρχαι) "show confluence (συμπίπτειν) into the same place."<sup>40</sup>

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<sup>37</sup> In the introduction to Dexippus' commentary *On Aristotle Categories*, John Dillon writes that Dexippus' commentary offers "a boiled-down version of the results of Porphyry's erudition, probably largely mediated through Iamblichus" (Dillon, 1990, p.11). In Simplicius' view, Dexippus added almost nothing himself to the work of Porphyry and Iamblichus (Dillon, 1990, p.11). Nonetheless, "Dexippus, then, is of interest both as a surviving testimony to the great achievement of Porphyry in turning aside Plotinus' rejection of Aristotle's *Categories* and as partial evidence for the content of Iamblichus' commentary" (Dillon, 1990, p.12).

<sup>38</sup> Simplicius, *On Aristotle's Categories* 9-15, 2000; Simplicius, in his commentary to the *Categories*, retrieves Aristotle's writings in a way that is appropriate to his own purposes, although this is not solely the case (e.g. Gaskin, 2000, p. 3). He devotes forty pages to *poiein* and *paschein*. For him, the stakes are high. In order to show the different levels of reality emanating from the one, he needs to clarify the status of *poiein* and *paschein*, and to prove that "Aristotelian categories have an application beyond the sensible world, to the mind and intellect, and even to the One itself" (Gaskin, 2000, p.2). Cf. also N. Vamvoukakis, "Les catégories aristotéliciennes d'action et de passion vues par Simplicius," in: Aubenque, P. (ed.) *Concepts et catégories dans la pensée antique*, Paris: J. Vrin, 1980 (pp. 253-270), p. 254.

<sup>39</sup> Dexippus, 1990, 31, 2-4.

<sup>40</sup> Dexippus, 1990, 31, 4-6. As different principles, *poiein* and *paschein* thus coincide (*sympiptein*), but do not come together (*synerchein*).



Simplicius argues in a similar fashion, separating the activities of the agent and the patient: “the agent does not undergo *qua* agent, nor the patient act *qua* patient”<sup>41</sup> and “the agent insofar as it acts and possesses pure operation is not moved at all.”<sup>42</sup> Vamvoukakis renders Simplicius’ reading of *poiein* and *paschein* in the following way: “these two categories do not have their own *being* within their mutual relationship, as is the case with the left and right or the ‘up’ and the ‘below;’ the agent and the patient each produces its proper work (*oeuvre*), the one *qua* agent, the other *qua* patient.”<sup>43</sup> Said differently, there is a significant disparity between concepts such as left and right which are *merely* correlatives and do not have meaning without reference to each other, and the concepts of *poiein* and *paschein*, which refer to each other but also have their own distinct sphere of meaning.

The fact that the patient provides the occasion and necessary condition for an action does not diminish the relevance of action, or, as Vamvoukakis expresses it, the “ontological content of the action.”<sup>44</sup> This equally applies to the patient: although dependent upon the agent, its being “is not entirely dependent upon the action of the agent.”<sup>45</sup> In other words, the patient has a certain being “that is proper to it.”<sup>46</sup> Vamvoukakis gives the example of a statue made of brass: “the cause of the passion of the brass, for example, is not only the sculptor, i.e., an external cause to it [the brass], but the brass itself: it is precisely because the brass is susceptible to being transformed into a statue (and this “susceptibility” is uniquely due to its being insofar as it is brass) that it provides the sculptor with the possibility of exercising his action.”<sup>47</sup> To use

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<sup>41</sup> Simplicius, 2000, 312, 10-11.

<sup>42</sup> Simplicius, 2000, 313, 9-10.

<sup>43</sup> Vamvoukakis, 1980, p. 256; cf. Simplicius, 2000, 299, 4-5.

<sup>44</sup> Vamvoukakis, 1980, p. 262.

<sup>45</sup> Vamvoukakis, 1980, p. 263.

<sup>46</sup> Vamvoukakis, 1980, p. 263.

<sup>47</sup> Vamvoukakis, 1980, p. 263.

Aristotle's example of medicinal food acting upon the ill patient (*GC* I.7, 324b1-3), the possibility of the patient's healing is due to his susceptibility to be transformed by the food, and this susceptibility is not due to an external cause, but to his own body. Dexippus concludes by saying that Aristotle distinguishes *poiein* and *paschein* "in accordance with his views on *causal principles*."<sup>48</sup> Although a process of change appears to be one and continuous, this change is due to different causes that converge in one and the same place.

Hence, Dexippus and Simplicius offer reasonable grounds for pulling the meanings of *poiein* and *paschein* apart, and for establishing their independence from each other. When considering *poiein* and *paschein* as representative of different causal principles, their classification as two distinct categories is sensible as it affirms Aristotle's statement that the categories "have different things primarily underlying them, which cannot be reduced one to the other or both to the same thing" (*Metaphysics* V.28, 1024b10-13).

Yet, both *poiein* and *paschein* remain dependent upon one another and derive their identity in part from this dependence: in its interwovenness with matter (*hylē*), *paschein* does have its own sphere and responsibility, but remains ultimately dependent upon a particular kind of *poiein* that sets it into motion. It cannot create its own form or *eidos* – this "radical incapacity"<sup>49</sup> is immanent to it. Moreover, when not governed by form, matter in the form of *katamoenia* obstructs nature,<sup>50</sup> giving rise to monsters (*Generation of Animals* IV.4, 770b15-17). By contrast, it seems that the *poiein* expressed by an agent is more independent than a patient's *paschein*, since the agent can at least create its own *eidos*. However, the *poiein* of an agent also

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<sup>48</sup> Dexippus, 1990, 31, 8-10.

<sup>49</sup> Vamvoukakis, 1980, p. 265.

<sup>50</sup> *Ibid.*

remains dependent upon a particular *paschein*. For example, without the occasion provided by the wood, the woodworker's artwork could not come into being.

Thus, it can be established that what is central to the relationship between *poiein* and *paschein* is a tension between identity and difference.<sup>51</sup> As antonyms and correlatives, *poiein* and *paschein*'s difference remains tied to the identity in *genus* that they share: each is to be understood through the other. Yet, what complicates a complete collapse of the two categories into one is their connection to the framework of causation. If we take this causal aspect of *poiein* and *paschein* seriously, then we have to contest the claim that *poiein* and *paschein* can be collapsed into one another as if they formed one concept and instead have to emphasize their difference. For, if it is the case that *hylē* is interwoven with *paschein*, and if *hylē* "is almost, or is, an *ousia*" (*Physics* I.9, 192a5-9), then *paschein* has a certain independence.<sup>52</sup> Similarly, the activity of form, *poiein*, is to be understood on its own terms, as the movements and activities of the first mover and first agent as described by Aristotle indicate.

### **5. *Poiein* and *paschein*: the irresolvable tension between identity and difference**

To comprehend the relationship between *poiein* and *paschein* more fully we propose to see their relationship in terms of a dynamic of *attraction* and *repulsion*. Insofar as they are to be understood through one another, their mutual co-dependence attracts them so much to one another that they seem to unify. The attraction pulling together *poiein* and *paschein* is most clearly visible in correlated processes such as burning and being burned, or cutting and being cut.

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<sup>51</sup> In his paper "Aristotle and Passivity," Stefano Franchi showed the tension between two different conceptions of "passivity:" "the relational view" and the "receptive view" (Franchi, "Aristotle and Passivity," APA Central Division Presentation, 2004, p.6). Our paper also, in part, takes up this issue of tension, but more broadly with regard to the relation between the categories of *poiein* and *paschein*.

<sup>52</sup> Cf. Vamvoukakis, 1980, p.263.

The fact that processes such as these can only function in conjunction and correlation with each other indicates that the mutual attraction between *poiein* or *paschein* is so strong that it prevents either of them of having self-subsistence or identity outside of their relationship.

Nevertheless, the relationship between *poiein* and *paschein* is also marked by repulsion since the two concepts sometimes appear to be so opposed to each other so as to repel each other and assert their distinction from each other. The repulsion causing the two concepts to separate manifests itself most clearly where *poiein* and *paschein* designate ‘active’ and ‘passive’ causality respectively. For, contrary to correlatives such as left and right whose meaning is *solely* dependent upon each other, *poiein* and *paschein* each have their own sphere of meaning, such as becomes visible in the ‘active’ activity associated with form and the ‘passive’ activity associated with matter. Although interdependent, the *poiein* of form and the *paschein* of matter are emphatically different. In stressing their own sphere of meaning, *poiein* and *paschein* exclude the other from itself, and thereby repulse one another, leading the concepts to separate.

Yet, as causes who often work in conjunction, *poiein* and *paschein* also remain tied to each other, which prevents them from separating completely. It is for this reason that the dynamic of attraction and repulsion is particularly well-suited to explain the relationship between *poiein* and *paschein*, because it (a) grasps this relationship in terms of an ongoing process, (b) elucidates the grounds for the dual movements of unification and distinction, (c) accounts for the dialectical tension that exists between those two movements, and (d) emphasizes that, no matter how far the repulsion extends, *poiein* and *paschein* are still attracted and correlated to each other. In short, the dynamic of attraction and repulsion allows us to acknowledge each concept’s proper function and autonomy, while also recognizing the co-dependence between the concepts that inevitably

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attracts them to one another. In other words, attraction and repulsion allow us to explain *poiein*'s and *paschein*'s incorporation of each other, without conflating them or overlooking their respective independence.

The tension between attraction and repulsion can be explicitly retrieved on the basis of *Physics* III.3. Aristotle argues here that acting and being acted upon belong to the same movement, but are fundamentally different in being (*einai*) (III.3, 202b10). He states: "acting is not the same as being acted upon, but that to which these belong, the motion, is the same" (*Physics* III.3, 202b24). This demonstrates that *poiein* and *paschein* remain committed to each other and converge with one another so as to make motion possible, but are simultaneously utterly distinct from one another qua causative principles and beings. In addition, *Metaphysics* IX.1 argues that the potentiality for *poiein* and *paschein* is in a way one, and in a way distinct (*Meta* IX.1, 1046a19-22) thereby enforcing the idea that the tension between identity and distinction is at the root of Aristotle's understanding of these two concepts.<sup>53</sup>

In closing, we argue that at the core of the relationship between *poiein* and *paschein* is a dynamic between attraction and repulsion, caused by mutual dependence and irrevocable difference. The relationship between these concepts thereby comes to epitomize what is at the

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<sup>53</sup> A further exploration of the tension between *poiein* and *paschein* can be found in Stoic thought in the concept of tension or *tonos*. For Chrysippus, *tonos* or tensional movement (*tonikē kinēsis*) is associated with breath or *pneuma*. The pneumatic or tensional movement gives stability to all things in the *kosmos*, both animate and inanimate: "The inward movement or movement toward the center holds the body together and produces cohesion and unity, and being; the outwards movement or movement toward the periphery causes dimensions and qualities." (D.E. Hahn, *The Origins of Stoic Cosmology*, Columbus: Ohio State University Press, 1977, p. 166.) Hahn is here referring to *Stoicorum Veterum Fragmenta* 2.451, 452, 551. The tension between the movement inward and the movement outward (which happen simultaneously) makes things both unified and distinct from other beings. We could argue that we find some anticipation of this concept of *tonos* in Aristotle's thinking about *poiein* and *paschein*. What the Stoics call outward motion is the movement of repulsion that pushes *poiein* and *paschein* away from each other into their own distinct domain of beings; what the Stoics call inward motion is the movement of attraction that unifies *poiein* and *paschein*. *Poiein* and *paschein* cannot be identified without appealing to both movements. Without the tension between these two movements, *poiein* and *paschein* cannot emerge as the fascinating – distinct yet unified – concepts that they are.

essence of any motion or activity: a dynamic convergence and divergence of active and passive causal factors.

## Epilogue

Whereas we have examined the concepts of *poiein* and *paschein* so far in rather narrowly defined contexts such as the *Categories* and *On Generation and Corruption*, there are many more places in Aristotle's oeuvre where the significance of *poiein* and *paschein* needs to be recovered. One of these works is the *Nicomachean Ethics*, where Aristotle explicitly shows interest in these concepts, as indicated by the following sections:

For excellence consists rather in acting well (εὖ ποιεῖν) than in being acted upon well (εὖ πάσχειν) to one (*EN* IV.1, 1120a13).

A courageous person is acted upon (πάσχει) and acts (πράττει) according to the merits of the circumstances and as *logos* guides them (*EN* III.7, 1115b19-21).<sup>54</sup>

As these passages highlight, Aristotle's approach to the issue of virtue (*EN* IV.1) and to a specific virtue such as courage (*EN* III.7) consists of taking into consideration *both* "active" activity (*poiein* or *prattein*) and "passive" activity (*paschein*). This remarkable facet of Aristotle's thinking, to take into consideration in his ethics the role of the "patient" and the idea of being acted upon well indicates that the current reappraisal of Aristotle's ethics and his general ideas on

movement cannot be complete if they discuss action and agency alone, but have to include Aristotle's ideas on suffering and patiency as well.

Although one of the above quotes from the *Nicomachean Ethics* also seems to show that Aristotle favors "active" activity above "passive" activity, an understanding of motion or activity in Aristotle's ethics is incomplete without a discussion of "passive" motion or activity. By acknowledging the fact that, for Aristotle, an agent is a patient as well, we acquire a more holistic view of the metaphysical, physical, and ethical world as Aristotle must have considered it – where agents are never considered as autonomous, but always engaged in interactions with other beings and forces of different kinds. Thus, this research of *poiein* and *paschein* implies that we need to revise our image of the ideal human agent of Aristotle's ethics, and thus our concept of virtue.

Whereas we, modern readers of Aristotle, might tend to perceive ethical agents from a rather autonomous point of view, the ideal, virtuous, human agent of Aristotle's ethics is both a good agent *and* a good patient, i.e. a being in full interaction in the *polis*, acting properly in response to people, political events, emotions or affections (*pathē*), et cetera. Thus, the concept of virtue entails both *acting* well and *being acted upon* well. Moreover, the ideal human agent of Aristotle's ethics is a being who acts properly in response to the way he or she has been set in motion by the first mover, i.e. the *divine* (cf. *Metaphysics* XII.7, 1072b3-4). Thus, the investigation of *poiein* and *paschein* given here may provide us with a new impetus to recover the important interaction between "active" activity and "passive" activity as it comes to the fore in Aristotle's ethics.

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<sup>54</sup> This translation is our own.

## BIBLIOGRAPHY

### Primary Sources:

- Aristotle. *Aristotle's Categories and Propositions (De Interpretatione)*, translated with commentaries and glossary by H.G. Apostle (Grinnell: The Peripatetic Press) 1980.
- . *Categories and De Interpretatione*, translated by J.L. Ackrill (Oxford: Oxford University Press) 1963.
- . *Aristotle's De Anima, Books II and III*, translated by D.W. Hamlyn (Oxford: Clarendon Press) 2002.
- . *De Anima*, translated with notes by W.D. Ross, Oxford: Oxford University Press, 1999.
- . *De Generatione et Corruptione*, translated by C.J.F. Williams (Oxford: Clarendon Press) 1982.
- . *De la génération et de la corruption*, translated and edited by C. Mugler (Paris: Les Belles Lettres) 1966.
- . *Generation of Animals*, translated and introduced by A.L. Pecks (London: Harvard University Press) 1963.
- . *Metaphysics, Volumes I and II*, edited by W. D. Ross (Oxford: Oxford University Press) 1997.
- . *Metaphysics, Books I-IX, Oeconomica, Magna Moralia*, translated by H. Tredennick & G.C. Armstrong (Cambridge: Harvard University Press) 1996.
- . *Aristotle's Metaphysics*, translated by J. Sachs (Santa Fe: Green Lion Press) 1999.
- . *Aristotle's Metaphysics Books IV-VI*, translated with notes by C. Kirwan (Oxford: Oxford University Press) 1971.
- . *Aristotle's Nicomachean Ethics*, translated with commentaries and glossary by H.G. Apostle (Grinnell: Peripatetic Press) 1984.
- . *The Nicomachean Ethics*, a commentary by the late H. H. Joachim, edited by D.A. Rees (Oxford: Clarendon Press) 1970.
- . *Nicomachean Ethics*, translation, glossary and introductory essay by J. Sachs, (Newburyport: Focus Publishing) 2002.



- . *Nikomachische Ethik*, translated and annotated by F. Dirlmeier (Berlin: Akademie Verlag) 1999.
- . *On Coming-to-be and Passing-away*, translated by E.S. Forster (Cambridge: Harvard University Press) 1965.
- . *On Coming-to-be and Passing-away (De Generatione et Corruptione)*, translated by H.H. Joachim (London: Oxford University Press) 1926.
- . *On the Soul*, with an English translation by W.S. Hett (Cambridge, MA: Harvard University Press) [1936] 1995.
- . *On the Soul and On Memory and Recollection*, translated by J. Sachs (Santa Fe: Green Lion Press) 2001.
- . *Physics*, edited by W. D. Ross (Oxford: Oxford University Press) 1998.
- . *Aristotle's Physics: A Guided Study*, translated by J. Sachs (New Brunswick/London: Rutgers University Press) 1998.
- . *Aristotle's Physics, Books III and IV*, translated with notes by E. Hussey, (Oxford: Clarendon Press) 1983.

### **Lexicons:**

Liddell-Scott. *Greek-English Lexicon*, revised and augmented by H.S. Jones (Oxford: Oxford Clarendon Press) 1983.

Oxford English Dictionary, *Online version*, 2005.

### **Secondary Sources:**

Ammonius, H. *On Aristotle's Categories*, translated by S.M. Cohen & G.B. Matthews, (London: Duckworth) 1991.

Aquinas, St. T., *Commentary on Aristotle's Physics*, translated by R.J. Blackwell, R.J. Spath & W.E. Thirlkel (London: Routledge and Kegan Paul) 1963.

Bonitz, H. *Aristotelische Studien, Fünf Teile in einem Band* (Hildesheim: Georg Olms Verlagsbuchhandlung) 1969.

Bonitz, H. *Index Aristotelicus* (Darmstadt: Wissenschaftliche Buchgesellschaft) 1955 [1870].

- Bonitz, H. *Über die Kategorien des Aristoteles* (Darmstadt: Wissenschaftliche Buchgesellschaft) 1967 [1853].
- Burnyeat, M. "Aristotle on the Foundations of Sublunary Physics," in: F. de Haas & J. Mansfeld (eds.), *Aristotle: On Generation and Corruption, Book I: Symposium Aristotelicum* (Oxford: Clarendon Press) 2004, pp. 7-24.
- Dancy, R. "On Some of Aristotle's First Thoughts About Substances," *Philosophical Review* 84, pp.338-373.
- Devereux, D.T. "Inherence and Primary Substance in Aristotle's *Categories*," in: *Ancient Philosophy* 12 (1992), p.123.
- Dexippus. *On Aristotle Categories*, translated by J. Dillon (London: Duckworth) 1990.
- Diogenes Laertius. *Lives of Eminent Philosophers*, translated by R.D. Hicks (London: Heinemann) 1925.
- Driscoll, J. "ΕΙΔΗ in Aristotle's earlier and Later Theories of Substance," in: D.J. O'Meara (ed.), *Studies in Aristotle*, Vol. 9 (1981), p. 147, fn.63. Cf. W.D. Ross (ed.), *Aristotle's Prior and Posterior Analytics* (Oxford: Clarendon Press) 1949.
- Eberhard, Ph. *The Middle Voice in Gadamer's Hermeneutics; A Basic Interpretation with Some Theological Implications* (Tübingen : Mohr Siebeck) 2004.
- Franchi, S. "Aristotle and Passivity," APA Central Division Presentation, Chicago, 2004.
- Frede, D. "On Generation and Corruption I.10: On Mixture and Mixables," in: F. de Haas & J. Mansfeld, *Aristotle: On Generation and Corruption, Book I: Symposium Aristotelicum* (Oxford: Clarendon Press) 2004, pp.289-314.
- Furth, M. *Substance, Form and Psyche: an Aristotelian Metaphysics* (Cambridge: Cambridge University Press) 1988.
- Graham, D.W. "Aristotle's Definition of Motion," in: *Ancient Philosophy* 8, fall 1988, pp. 209-215.
- Graham, D.W. "States and Performances: Aristotle's Test," in: *Philosophical Quarterly* 30, 1980, pp. 117-130.
- Hahn, D.E. *The Origins of Stoic Cosmology* (Columbus: Ohio State University Press) 1977.
- Kant, I. *Critique of Pure Reason*, translated by N. Kemp Smith (New York: St. Martin's Press) 1929 [1965].

- Kosman, L.A. "Being Properly Affected: Virtues and Feelings in Aristotle's Ethics," in: A. Oksenberg Rorty, *Essays on Aristotle's Ethics* (Berkeley: University of California Press) 1980, pp. 103-116.
- Kosman, L.A. "Aristotle's Definition of Motion," in: *Phronesis: A Journal of Ancient Philosophy* 14, 1969, pp. 40-62.
- Lang, H.S. *The Order of Nature in Aristotle's Physics: Place and the Elements* (Cambridge: Cambridge University Press) 1998.
- Lyons, J. *Introduction to Theoretical Linguistics* (Cambridge: Cambridge University Press) 1968.
- McKirahan, R.D. *Philosophy before Socrates; An Introduction with Texts and Commentary* (Indianapolis: Hackett Publishing Company) 1994.
- Morau, P. *Les listes anciennes des ouvrages d'Aristote* (Louvain: Éditions Universitaires de Louvain) 1951.
- Moravcsik, J.M.E. "Aristotle's Theory of Categories," in: Moravcsik, J.M.E. (ed.) *Aristotle. A Collection of Critical Essays* (Garden City, NY: Anchor Books) 1967, pp. 125-145.
- Mueller, I. "Review of F. de Haas & J. Mansfeld, *Aristotle: On Generation and Corruption, Book I: Symposium Aristotelicum* (Oxford: Clarendon Press) 2004," in: *Notre Dame Philosophical Reviews* 2005-06-17.
- Natali, C. "On Generation and Corruption I.6," in: F. de Haas & J. Mansfeld, *Aristotle: On Generation and Corruption, Book I: Symposium Aristotelicum* (Oxford: Clarendon Press) 2004, pp. 195-217.
- Philoponus, *On Aristotle's Physics 5-8*, translated by P. Lettinck (Ithaca: Cornell University Press) 1994.
- Philoponus, *On Aristotle's On Coming-to-Be and Perishing 1.1-5*, translated by C.J.F. Williams (Ithaca (NY): Cornell University Press) 1999.
- Plotinus, *Enneads*, with an English translation by A.H. Armstrong (Cambridge: Harvard University Press) 1966.
- Porphyry. *On Aristotle's Categories*, translated by S.K. Strange (Ithaca: Cornell University Press) 1992.
- Reale, G. *A History of Ancient Philosophy, Volume II. Plato and Aristotle* (Albany: State University of New York Press) 1990.

- Sihler, A.L. *New Comparative Grammar of Greek and Latin* (New York/Oxford: Oxford University Press) 1995.
- Simplicius. *On Aristotle's Categories 1-4*, translated by M. Chase (Ithaca: Cornell University Press) 2003.
- Simplicius. *On Aristotle's Categories 9-15*, translated by R. Gaskin (Ithaca (NY): Cornell University Press) 2000.
- Simplicius. *On Aristotle's Physics 7*, translated by C. Hagen (Ithaca (NY): Cornell University Press) 1994.
- Smyth, H.W. *Greek Grammar* (Cambridge: Harvard University Press) 1984.
- Stallmach, J. *Dynamis und energieia; Untersuchungen am Werk des Aristoteles zur Problemgeschichte von Möglichkeit und Wirklichkeit* (Meisenheim am Glan: A. Hain) 1959.
- Trendelenburg, A. *Geschichte der Kategorienlehre* (Hildesheim: Georg Olms Verlagsbuchhandlung) 1963 [1864].
- in: Aubenque, P. (ed.) *Concept* (Paris: J. Vrin) 1980.
- Waterlow, S. *Nature, Change, and Agency in Aristotle's Physics: A Philosophical Study* (Oxford: Clarendon Press) 1982.
- Wedin, M. *Aristotle's Theory of Substance; The Categories and Metaphysics Zeta* (Oxford: Oxford University Press) 2000.
- Wehrle, W.E. *The Myth of Aristotle's Development and the Betrayal of Metaphysics* (Lanham: Rowman & Littlefield Publishers) 2000.
- Wildberg, Christian. "On Generation and Corruption I.7: Aristotle on *poiein* and *paschein*," in: F. de Haas & J. Mansfeld, *Aristotle: On Generation and Corruption, Book I: Symposium Aristotelicum* (Oxford: Clarendon Press) 2004, pp. 219-242.