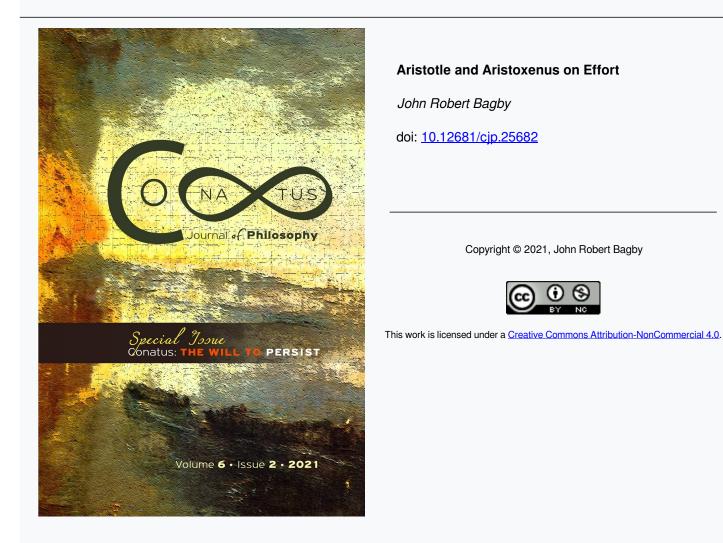




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# Aristotle and Aristoxenus on Effort

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#### Abstract

The discussions of conatus – force, tendency, effort, and striving – in early modern metaphysics have roots in Aristotle's understanding of life as an internal experience of living force. This paper examines the ways that Spinoza's conatus is consonant with Aristotle on effort. By tracking effort from his psychology and ethics to aesthetics, I show there is a conatus at the heart of the activity of the wuxń that involves an intensification of power in a way which anticipates many of the central insights of early modern and 20<sup>th</sup> century European philosophy. The first section outlines how Aristotle's developmental conception of the soul as geometrically ordered lays the foundation for his understanding of effort. The developmental series of powers of the soul are analogous to the series of shapes in mathematics. The second section links the striving of the soul to the gradual acquisition of virtues as a directed activity unifying multiplicity. The third examines the paradiam of self-awareness that Aristotelian effort involves. In the final section I show how ancient Greek theories of music were founded on the experience of striving. The "nature" of music is defined by Aristoxenus, and Theophrastus, in relation to the passion and intentionality of the soul. The geometrical order, as a synthesis of elements in geometry, music, or ethics, is a generative process in which past elements are retained and reintegrated in later stages of development. It requires effort to think geometrically, and the progress of knowledge itself is an integral aspect of all effort. Effort is the lived and self-aware cause which, moving step by step in an orderly and deliberate way, grows and advances upon itself. For both Spinoza and Aristotle, effort is the immanent intelligence which accomplishes what is in the purview of its understanding. Thus, will, in this conception of effort, is not something we already possess innately, but emerges gradually by an effort aimed at improvement.

**Keywords:** effort; conatus; geometrical order; self-awareness; consciousness; ancient Greek music; musicology

The discussions of *conatus* in early modern metaphysics have certain roots in Aristotle – primarily in his psychological sense of continuity, power, and activity. The language of living force, effort, and striving are prefigured in Aristotle's understanding of life, experience, and *energeia*, as an interiority of effort. Aristotle does not have a single term meaning striving or effort, but there are several relevant terms that he used:  $\pi ov \epsilon \tilde{\iota} v$ ,<sup>1</sup>  $\epsilon \pi \iota \mu \epsilon \lambda \epsilon (\alpha \varsigma,^2 \epsilon \pi \iota \tau \epsilon (\nu \epsilon \iota v,^3 \sigma ov \tau o \nu (\alpha \varsigma,^4 \sigma ov \tau \epsilon (\nu \epsilon \iota v,^5 \delta \rho \epsilon \xi \iota \varsigma,^6 \delta \rho \epsilon \gamma \epsilon \sigma \theta \alpha \iota,^7 \pi \rho o \epsilon \xi \epsilon \iota v,^8$  $\sigma \pi o v \delta \alpha \varsigma,^9$  and  $\sigma \pi o v \delta \alpha \tilde{\iota} o \varsigma$ .<sup>10</sup> Tracking the significance of effort from his psychology to ethics and aesthetics, one finds a *conatus* at the heart of the activity of the  $\psi v \chi \eta$  that anticipates many of the insights of early modern and 20<sup>th</sup> century continental philosophy from Spinoza<sup>11</sup> and Leibniz<sup>12</sup> to Bergson's *attention to life*,<sup>13</sup> Heidegger's care-structure,<sup>14</sup> and Deleuze's intensity.<sup>15</sup> I will examine effort and intensity in Aristotle's philosophy and link them to Spinoza's *conatus*, as an internal principle of causality.

<sup>6</sup> Appetite, desire, yearning. Aristotle, *Metaphysics*, 9: 1048a13; Aristotle, *De anima* 3: 433a7-434a20; Aristotle, *Movement of Animals*, 703a5.

<sup>8</sup> Attention. Aristotle, Art of Rhetoric, 3: 1415a30; Aristotle, Nicomachean Ethics, 10: 1175b7.

<sup>9</sup> Effort, strain. Aristotle, *Art of Rhetoric*, 1: 1370a13.

<sup>10</sup> Intensity of character, serious, strenuous, good. Aristotle, *Nicomachean Ethics*, 10: 1176a17; Aristotle, *Categories*, 11b17.

<sup>11</sup> Baruch Spinoza, *A Spinoza Reader: The Ethics and Other Works*, trans. Ed Curley (Princeton, NJ: Princeton University Press, 1994).

<sup>12</sup> G. W. Leibniz, *G. W. Leibniz's Monadology: An Edition for Students*, trans. Nicholas Rescher (Pittsburgh, PA: University of Pittsburgh Press, 1991).

<sup>15</sup> Gilles Deleuze, *Difference and Repetition*, trans. Paul Patton (New York: Columbia University Press, 1994).

<sup>&</sup>lt;sup>1</sup> Effort. Aristotle, *Nicomachean Ethics*, 5: 1138b27, 8: 1154b8.

<sup>&</sup>lt;sup>2</sup> Effort. Aristotle, *Nicomachean Ethics*, 1: 1099b20; care. Aristotle, *Art of Rhetoric*, 1: 1370a11.

<sup>&</sup>lt;sup>3</sup> Intensify. Plato, *Republic*, 6: 498b; strained, Aristotle, *Art of Rhetoric*, 1: 1360a 25.

<sup>&</sup>lt;sup>4</sup> Intense exertion. Aristotle, *Art of Rhetoric*, 1: 1370a13; Aristotle, *Politics*, 8: 1342a1; *Problems*, 5: 882b1.

<sup>&</sup>lt;sup>5</sup> Contribute, concentrate, converge, intensify. Aristotle, *Metaphysics*, 9: 1050a23; Aristotle, *Eudemian Ethics*, 1: 1216a33; Aristotle, *On Sleeping and Waking*, 2: 455a35; Aristotle, *Art of Rhetoric*, 1: 1360b7; Aristotle, *Poetics*, 4: 1459a26.

<sup>&</sup>lt;sup>7</sup> Strive, yearning, stretch out. Aristotle, *Metaphysics*, 1: 980a, 9: 1048a13; Aristotle, *Physics*, 1: 192a20; Aristotle, *Nicomachean Ethics*, 10: 1175a16.

<sup>&</sup>lt;sup>13</sup> Henri Bergson, *Creative Evolution*, trans. Arthur Mitchell (New York: The Modern Library, 1944).

<sup>&</sup>lt;sup>14</sup> Martin Heidegger, *Being and Time: A Translation of* Sein Und Zeit, trans. Joan Stambaugh (Albany, NY: State University of New York Press, 1996).

Spinoza understood *conatus* to be the actual essence of singular things,<sup>16</sup> which *adequately* describes the individuation of an enduring human life as striving to persevere in, and increase, its powers of acting. Spinoza may have denied free will as an infinite faculty,<sup>17</sup> but he still had a philosophical vision based on effort, will, and freedom. Freedom is built up gradually through the development of knowledge. One's freedom, for Spinoza, is acquired by a persistent effort striving for the improvement of the understanding. The improvement, or emendation, of the intellect is what defines rationality itself for Spinoza. The use of reason is therapeutic and intellectually energizing. A persistent exercise of reason generates powers and virtues. The adequate cause, like an adequate idea, is immanent to conatus itself - striving and affirming itself. Particular volitions are directly linked to the understanding, so we can only affirm what we understand. We are conscious of our existence in the act of striving as the actual essence of our being. Essence and existence are united in the internal experience of the adequate idea as a causal act which conceives and affirms itself. Furthermore, it is only adequate knowledge (active affects) which leads us to happiness.

Spinoza wondered, if blessedness or true peace of mind were "readily found without great effort, how could nearly everyone neglect it?" and concludes the *Ethics* with the famous line which states that "all things excellent are as difficult as they are rare."<sup>18</sup> While therapeutic rationality and creative intelligence are rare, certain efforts or active ways of *striving* can in fact cause them to come to be. Reason and happiness arise from persevering in the work of cultivating habits and virtues. Ethical progress follows the same rational structure of the causal matrix of nature and thought (exemplified in the geometrical order of the *Ethics* itself). Rather than being constrained by these structures, thought freely affirms their existence in the act of striving, as with the effort of a singular volitions.<sup>19</sup>

I will show how this developmental sense of *conatus* (as a cause which, by becoming conscious of itself and using reason, improves itself) is consonant with Aristotle's dynamic sense of effort. The first section outlines Aristotle's developmental conception of the soul as geometrically ordered. The second links the striving of the soul to the acquisition of virtues. The third examines the paradigm of self-awareness that Aristotle's dynamic-psychical effort involves. In the final section I show how ancient Greek theories of music were founded on the experience of striving. Aristoxenus' *Elements*, while not given

<sup>19</sup> Ibid., 2p49.

<sup>&</sup>lt;sup>16</sup> Spinoza, *Ethics*, 3p7.

<sup>&</sup>lt;sup>17</sup> Ibid., 2p49.

<sup>&</sup>lt;sup>18</sup> Ibid., 5p42Schol.

in the geometrical order, parallels the fundamental ontological significance of *striving* in Spinozism. The geometrical order, as a synthesis of elements, is the same in geometry, music, or ethics: it is a generative process in which past elements are preserved and reintegrated. Effort is the lived and self-aware cause which, moving step by step in an orderly and deliberate way, grows and advances upon itself.

#### I. The soul's activity as geometrically ordered

Aristotle approached the task of defining the soul geometrically. This does not mean he approached it statically. Much to the contrary, he approached it assuming: (1) The need for a "dynamic" definition, that is to say, the sort of definition of a *composite* which includes matter and form (similar to the sort which Archytas gave<sup>20</sup>).<sup>21</sup> (2) That experience is sufficient to account for its arising as a principle, i.e. by induction.<sup>22</sup> The hylomorphic whole, the ensouled, unifies an infinite multiplicity. There is a sort of syllogism, or cognitive gathering, irreducible to predication, by which the "life of the soul" acts as a dynamic continuity weaving complexity (of movements) and multiplicity (of works) into a unity, by a convergence of causal factors. In the geometrical progress of the soul, prior elements come together and integrate to engender a greater power, complexity, and precision of action. The relation of a triangle to a parallelogram is analogous to the power and activity in the works of the soul. The work of the soul is a gathering or syllogizing of causal ingredients. The first term is the material (multiplicity and potency), the second term is the activity (or "essence" τὸ τί ἦν εἶναι).<sup>23</sup> The "body having life potentially" is a material ingredient, which must be connected to an activity, such as digesting, sensing, or moving, in which body and soul form a community and continuity. The middle terms are the *enactments* of the potentials "held" by the living body, and it is on the basis of the "work" of distinct forms of life that the definitions of different kinds of souls are distinguished.

The definition must "include and display the cause."<sup>24</sup> "Include" translating ένυπάρχειν, implies that the power must be placed in its proper position in the "series" (ἕφεξις) of grounding relations of constitutive properties,<sup>25</sup> i.e. a relation to prior powers on which the emergence of subsequent abilities

<sup>24</sup> Aristotle, *De anima*, 2: 413a13.

<sup>&</sup>lt;sup>20</sup> Aristotle, *Metaphysics*, 8: 1043a22.

<sup>&</sup>lt;sup>21</sup> Aristotle, *De anima*, 2: 414a15.

<sup>&</sup>lt;sup>22</sup> Aristotle, *Posterior Analytics*, 2: 100a10.

<sup>&</sup>lt;sup>23</sup> Ibid., 2: 94a30-38.

<sup>&</sup>lt;sup>25</sup> Ibid., 2: 414b20.

depends (as perception depends on nutrition), and to further powers which reintegrate prior activity into a higher order (as thinking depends on, but surpasses experience, memory, and perception).<sup>26</sup> The *inclusion* or *integration* of the cause thus refers to the successive emergence of powers, spanning from the "body having life" to the activities of a soul that is sensing, growing, developing, learning, and acquiring virtues. The soul's activity and all its powers will depend on some particular organized body (involving motion and rest). Aristotle insists that "what is ensouled [žµψυχον] is made of both [έξ άμφοῖν]" and that "the soul is the actuality [ἐντελέγεια] of some body."<sup>27</sup> This formulaic expression of the soul, Aristotle insists, is irreducible to a single definition because each of the powers, each different middle term, will form a different definition based on its peculiar works.<sup>28</sup> This means that we cannot merely deduce one from the other - i.e. nutrition, perception, or memory each requires its own treatment and involves its own phenomena that must be experienced in its own peculiar works, and with their own particular limits and purposes.

Despite the irreducible diversity of the faculties, they are also intimately connected, as Aristotle says: "For always the one-next-in-the-series [ἔφεξις] includes the prior-one in potential."29 Aristotle relates his definition to a geometrical one in this conception of a developmental series, i.e. insofar as the geometrical demonstrations of a triangle differ from those of the quadrilateral. The properties of the triangle need to be demonstrated in relation to the triangle itself, and likewise for the quadrilateral. They are irreducible one to the other. But the quadrilateral can be understood by means of triangles inscribed potentially within it, e.g. in parallelograms. All quadrilaterals have eight triangles inscribed in them potentially. But this is not the case with the triangle, since it has no quadrilaterals inscribed within it. It is prior in series, and simpler. Thus, the series of powers of the soul, like figures in mathematics, must be examined both individually and as a development through successive parts involving more and more complicated compositions which both include and surpass the ones which came before. There is a *developmental continuum* emerging from the most rudimentary functions of life such as eating or breathing and rises up through sensory and motor powers to memory, thinking, and deliberating.<sup>30</sup>

<sup>&</sup>lt;sup>26</sup> Aristotle, *Metaphysics*, 1: 980a27-982a3.

<sup>&</sup>lt;sup>27</sup> Aristotle, *De anima*, 2: 414a17.

<sup>&</sup>lt;sup>28</sup> Ibid., 2: 414b20-35.

<sup>&</sup>lt;sup>29</sup> Ibid., 2: 414b30, (my translation).

<sup>&</sup>lt;sup>30</sup> See Felix Ravaisson, *Essai Sur la Métaphysique D'Aristote* (A l'imprimerie royale, 1837), 413-443, 532-540; Veronique Fóti, "Merleau-Ponty's Vertical Genesis and the Aristotelian Powers of the Soul," in *Phenomenology: Japanese and American Perspectives. Contributions to* 

The ensouled continuity of the soul, especially in human life, strives for, sustains, and develops many different powers and works. They do not all have equal status or the same consequences. Some ground or make possible the emergence of others (e.g. memory follows after perception, and language follows memory),<sup>31</sup> and others are reciprocally transformed by the relation to the powers they make possible (e.g. logos retroactively transforms emotions).<sup>32</sup> The events of development temporalize the dynamic continuum as a series of sub-ordinate, or prior efforts and activities, rising by an intensification of the power of action. The body having life potentially reaches out towards the quasi-vegetative form of a new-born baby which gradually develops animal-like mobility, perceptivity, and eventually the imagination of a childhood, learning to crawl and speak. The powers of life intensify and grow, rising, becoming more precise and accurate by building on prior achievements. It is only by persevering that experience and thinking later emerge in youth and adulthood. Each individual must rise in the generative series of life's gradual cultivation. This growth is akin to the generation of geometrical knowledge. Furthermore, as we will see going forward, it is a self-initiated causality which is not only the cause of its own mobility, but also of its development and improvement. The mind improves itself by its own exercise: "the one who cultivates the mind by working it [νοῦν ἐνεργῶν], cares for its improvement [θεραπεύων], and brings it into the best condition, seems also to be most dear to the gods [...] and it is likely this person is the happiest."33

#### II. Tendency and effort in ethics

In this section I will examine the role of effort in ethics, outlining how it relates to pleasure, attention, and virtue. Effort can be defined in a restricted sense as a persistence in acting which involves the awareness that the activity is encountering resistance and thus requires attention in order to be accomplished. In this sense, it will be painful and fatiguing. But effort can have a broader sense, as the living force which is continuously exercised attentively and dynamically adjusted by intelligence. In the broader sense, effort is synonymous with care and skill. Since work ( $\xi_{\rho\gamma\sigma\nu}$ ) involves effort, *energeia* ( $\xi_{\nu}\xi_{\rho\gamma\epsilon\mu\alpha}$ ) sometimes involves effort as well.

Of the different *works* that the soul performs well (perception, motricity, memory, speech, etc.), some arise spontaneously and with pleasure, while

Phenomenology, ed. B. C. Hopkins, 39-51 (Dordrecht: Springer, 1991).

<sup>&</sup>lt;sup>31</sup> Aristotle, *Metaphysics*, 1: 980a27-982a3; Aristotle, *Posterior Analytics*, 2:100a3-9.

<sup>&</sup>lt;sup>32</sup> Cf. Rudolf Bernet, and Sarah Allen, *Force, Drive, Desire. A Philosophy of Psychoanalysis* (Chicago, CH: Northwestern University Press, 2020), 43-46.

<sup>&</sup>lt;sup>33</sup> Aristotle, *Nicomachean Ethics*, 10: 1179a23-24, (my translation).

others are toilsome and demand our effort.<sup>34</sup> The activities of the soul can contribute to sustaining life as well as possibly leading it to its eventual flourishing ( $\varepsilon \delta \alpha \mu \omega \nu (\alpha)$ .<sup>35</sup> The growth of happiness emerges from a combination of experience, education, virtues, and friendships. Just as we must learn the properties of triangles before parallelograms (since the latter's demonstrations make use of triangles), so too, we must gain experience before we can have skill or practical wisdom, and we must moderate our urges before we can devote ourselves to education. Effort is the immanent cause sustaining the progress of each person's development.

Pleasure plays an important role in the cultivation of virtues. The activities proper to virtue are potent sources of pleasure and the pleasure that accompanies them is a contributing factor in the "steadfast" engagement and attentiveness in action. Pleasure is not merely something to which one's character disposes them well or badly, as if simply an obstacle on the path to virtue. Nor again is it a useless addition which we feel but has no causal influence. Pleasure plays a positive role by aiding, sustaining, and strengthening the force of striving. Aristotle explains this with an example in Nicomachean Ethics 10.5. A musician will find it nearly impossible to pay attention to someone talking if there is really enjoyable music playing in the background. The reason is that the predisposition of a musician involves a *tendency*, or irresistible *attraction*, that draws their attention and fixes it on the greater source of pleasure. This is not a purely passive infliction, it is rather appeals to the musical disposition which already belongs to the soul of the listener. The intensity of the pleasure is linked to the activity of the soul. The pleasure has an inborn cause which integral to the soul's being at work. Aristotle emphasizes this fact by specifying that the musician is a flute player and that what they hear is flute playing. The intensity of pleasure in a musician is due to their ability to sympathize with the pleasure of playing the flute passionately.<sup>36</sup> The musician cannot listen without subtly imitating what they hear, and this quickly consumes their attention because there is a pleasure amplifying and concentrating the activity. The most intense listening is not merely passive but involves an active participation: listening as producing the notes again, as if playing along with what one hears.<sup>37</sup>

The key is that pleasures have a constructive and concentrating role in activities. Aristotle says, pleasure contributes to the completeness of the

<sup>&</sup>lt;sup>34</sup> Aristotle, Art of Rhetoric, 1: 1370a5-13.

<sup>&</sup>lt;sup>35</sup> Aristotle, *Nicomachean Ethics*, 1: 1097b1-20, 1098b19.

<sup>&</sup>lt;sup>36</sup> Ibid., 10: 1175b5.

<sup>&</sup>lt;sup>37</sup> These passages parallel Aristotle, *Problems*, 19: 919a36, 921a36, examined below.

activity.<sup>38</sup> This completeness is not a static state, but a dynamic condition like the prime of life, health, and happiness.<sup>39</sup> Pleasure's influence *focalizes* activity by drawing together a multiplicity of feelings and efforts into a unified striving. Intentionality, and practical action generally, involve a concentrating of multiplicity into a coherent whole. Aristotle describes the growing intensity of the soul as a converging multiplicity of activities and pleasures which are conducive to participating in a common ability in a higher order and unity. These pleasures contribute to "the growing-together [συναύξουσι] of the activity."40 Growingtogether implies a mutual augmentation through cooperation. The pleasures of music are *conducive* to intensifying and concentrating the psychical activity productive of, and sustaining, the acts of listening and playing.<sup>41</sup> Each activity has its own particular pleasures which help to focus and amplify that peculiar activity.<sup>42</sup> We are distracted by the pleasure of an activity when it makes us unable to pay attention  $(\pi \rho o \sigma \epsilon \chi \epsilon \iota \nu)^{43}$  to another activity: "the pleasure coming from the flute-playing diminishes [ $\varphi \theta \epsilon i \rho \epsilon i$ ] the activity of reason [ $\lambda \delta \gamma \sigma v$ ]" (1175b7). The coexistence of the two activities, Aristotle says, leads gradually, by the one producing a greater pleasure, to drive out the other until the other activity ceases.<sup>44</sup> Pleasure sustains the activity by contributing to the intensification of effort and attention. Certain activities require higher degrees of effort and strain, and the pleasures, for the most part, are proportionate to the degree of psychical energy (effort) of the particular act. Intensity of pleasure is proportional to the intensity of effort. The pleasure increases the focus of attention which, again, increases the effectiveness of action. The unique pleasures of each effort are integral to the success of that specific activity. When someone learns music, geometry, or architecture, their achievements are partly due to the fact that people "make progress [ $i\pi\iota\delta\iota\delta\delta\alpha\sigma\iota\nu$ ] in the works they enjoy [ $\chi\alpha\iota\rhoo\nu\tau\epsilonc$ ]."<sup>45</sup> The enjoyment facilitates the focus and perseverance.

<sup>41</sup> Cf. Aristotle, *Politics*, 8: 1341a 38.

<sup>45</sup> Ibid., 10: 1175a36.

<sup>&</sup>lt;sup>38</sup> Aristotle, *Nicomachean Ethics*, 10: 1175a33.

<sup>&</sup>lt;sup>39</sup> Ibid., 10: 1175a35.

<sup>&</sup>lt;sup>40</sup> Ibid., (my translation).

<sup>&</sup>lt;sup>42</sup> Aristotle, *Nicomachean Ethics*, 10: 1175a33.

<sup>&</sup>lt;sup>43</sup> Plato used this word in conjunction with  $vo\tilde{v}_{\zeta}$ ; Plato, *Republic*, 396b, 406d, 407b, 549d, as "concentrating attention" or "concentration of the mind [ $\pi\rho\sigma\sigma\epsilon\chi\sigma\nu\tau\alpha\zeta$  τον  $vo\tilde{\nu}\nu$ ]," Plato, *Republic*, 432b. Aristotle employs this word on a few important occasions, most notably in *Art of Rhetoric*, 3.14. *Προσεχτιχόν* is the ability to sustain a listener's attention, something that is required in effective speeches. The rhetorician catches the audience attention by an "appeal to the listener," Aristotle, *Art of Rhetoric*, 3: 1415a30. The speaker draws on, or exploits, the attentive capacities of the listener. What they are able to attend to is what they are already striving to hear. Aristotle, *Art of Rhetoric*, 3: 1415b3.

<sup>&</sup>lt;sup>44</sup> Aristotle, *Nicomachean Ethics*, 10: 1175b10.

Virtuous activities involve a sustaining and intensifying of effort which progresses by gathering and integrating a multiplicity of contributing factors. This amplifying concentration is at work in practical life: the gathering of many "means" into a single end (τέλος) characteristic of practical-wisdom (φρόνησις), which "make[s] us enact the thing related to the end [ $\tau \dot{\alpha} \pi \rho \dot{\delta}_{\zeta} \tau \dot{\delta} \tau \epsilon \dot{\lambda} \delta_{\zeta} \pi \sigma \epsilon \tilde{\epsilon}$  $\pi \rho \alpha \tau \tau \epsilon \iota v$ ]."<sup>46</sup> Even among the virtues themselves there is an intensification into higher virtues which depend on the cooperation of them all together in a developmental series. The skillful conducting of multiplicity into unity is the defining characteristic of *phronesis*, which itself only describes a heightened state of rational intentionality and striving. It is like a funnel that draws into itself a multiplicity of habits, experiences, and deliberations of which it makes use of to intensify its effectiveness in action.<sup>47</sup> It is by the accumulation of conducive elements that virtue grows, so much so that "all virtues will have already begun together when the one, phronesis, has emerged."48 Thus, the virtue which is responsible for good "conduct" ( $\pi \rho \alpha \xi_{LG}$ ), for Aristotle, is the one *conducting* life in such a way that brings all the habits and virtues together so they contribute to a common end ( $\tau \epsilon \lambda o_{\zeta}$ ): i.e. doing the right thing at the right time in the right way, and paving the way for happiness or flourishing (εὐδαιμονία). This is explicit in relation to pleasure as well; "it is not necessary for us to inquire what these pleasures are," he says, "but whether they contribute something [συντείνουσί<sup>49</sup> τι] at all to happiness or not, and in what way they contribute [ $\pi \tilde{\omega} \zeta$  συντείνουσι]."<sup>50</sup> The pleasures and activities all *strive*together as a symphonic crescendo that harmonizes as one. Furthermore, there are pleasures which have an affinity ( $\sigma u v \omega x \epsilon u \tilde{\omega} \sigma \theta \alpha t$ ) with each other, and this means that they mutually support and strengthen one another.<sup>51</sup> In practical deliberation, there is a strain by which the effort of the soul draws together a multiplicity into a dynamic whole so that all the different vectors bend and converge into the one purpose. "Now no one deliberates about the end – this has been assumed (already) by everyone; but about the things that lead [or

<sup>&</sup>lt;sup>46</sup> Ibid., 10: 1145a6, (my translation).

<sup>&</sup>lt;sup>47</sup> Ibid., 10: 1142a15-20.

<sup>&</sup>lt;sup>48</sup> Ibid., 10: 1145a2, (my translation).

<sup>&</sup>lt;sup>49</sup> The meaning of  $\sigma\nu\nu\tau\epsilon i\nu\epsilon i$  is broadly conduce, draw-together, strain, intensify, contribute, and converge. It signifies a concentration of multiplicity. Plato uses  $\tau\epsilon i\nu\omega$  verbs to refer to the intensity of human action, such as, "I spoke with too great intensity [ἐντεινάμενος]," Plato, *Republic*, 536c; or, in the analogy between the body and a city, he says that the parts stretch out to be integrated by the soul; Plato, *Republic*, 462c. The members "tend [τείνοντας] to the same goal;" 464d. It also has musical connotations, not only the tightening of a string but also as a scale stretches from the high notes to the low; Plato, *Republic*, 432a.

<sup>&</sup>lt;sup>50</sup> Aristotle, *Eudemian Ethics*, 1: 1216a33.

<sup>&</sup>lt;sup>51</sup> Aristotle, *Nicomachean Ethics*, 10: 1175a29.

stretch out to  $\tau \epsilon_1 v \delta v \tau \omega v$ ] it – whether this or that contributes [ $\sigma v v \tau \epsilon i v \epsilon_1$ ],"<sup>52</sup> i.e. contributes to the goal.

The conduct of one who has practical wisdom will draw-in and hold-intension a greater and greater mass of experiences and virtues by concentrating all that they developed gradually in education and practice, sustaining this potentiality through the process of development towards the goal of happiness. This effort brings about a strenuous, serious, or intense moral character ( $\sigma\pi\sigma\sigma\sigma\sigma_{\alpha}$ ) (which is the underlying model of excellence which Aristotle assumes throughout his ethics).<sup>53</sup> Moral action is a matter of tuning the appropriate degrees of tension and relaxation of effort ( $\dot{\epsilon}\pi\pi\tau\epsilon(\nu\epsilon\tau\nu)$ ,  $\dot{\alpha}\nu\epsilon\sigma\tau\nu$ ),<sup>54</sup> as well as of the pleasures which distract or augment virtuous activity.<sup>55</sup> Pleasures, activities, and understanding contribute in a confluence of causal factors which growstogether to produce virtue and happiness. The convergence of factors lends itself, above all, to the philosophical or contemplative life,<sup>56</sup> increasing the soul's tension and concentration. Effort, in Aristotle's developmental sense, is a growing and evolving energy of the soul, the exercises of which, by persevering, are increasingly able to act with precision and effectiveness.

Progress and development are initiated by effort but are sustained by pleasures that gradually increase the facility and ease of action. In the *Art* of *Rhetoric* 1.11 Aristotle says, "pleasure is a sort of movement of the soul, an intensive [ἀθρόαν] and perceptible establishment [κατάστασιν] emerging naturally."<sup>57</sup> Aristotle also tells us that "care [ἐπιμελεία], effort [σπουδάς], and intense exertion [συντονίας], are painful [...] unless people become habituated to them; then habit makes them pleasant." (1370a13, *my modification of Reeves trans.*). In this sense, habit aids the prolonged activity and reduces the pain and fatigue of intense exertion. Philosophy requires great efforts which can even lend the appearance of a mere toil without progress. In the *Protrepticus*, Aristotle goes so far as to argue that philosophy in fact gradually becomes easy (ῥαστωνέω), and that, far from being toil, it had progressed in precision more than any other art and in less time, despite the fact that no one was getting paid for their intense efforts (διαπονήσειαν).<sup>58</sup> He explains this by the fact that the

- <sup>55</sup> Ibid., 2: 1106b17-1107a39.
- <sup>56</sup> Ibid., 10: 1177a11-1178a9.

<sup>58</sup> Aristotle, *Protrepticus: A Reconstruction of Aristotle's Lost Dialogue*, trans. D. S. Hutchinson, and Monte Ransome Johnson, http://www.protrepticus.info, 24-25; cf. Matthew D. Walker,

<sup>&</sup>lt;sup>52</sup> Aristotle, *Eudemian Ethics*, 2: 1226b9-13.

<sup>&</sup>lt;sup>53</sup> Ibid., 10: 1177a1-10.

<sup>&</sup>lt;sup>54</sup> Ibid., 6: 1138b23.

<sup>&</sup>lt;sup>57</sup> 1369b33 (my modification of Reeves translation). This "establishment" is not so much a "settling-down [...] into a state" as Reeves and Freese render it. It is an active *building up*, raising, and emerging growth of intensity.

effort it involves leads to potent pleasures: "the fact that everybody is fond of it and wishes to spend their leisure on it, letting everything else go, is no small evidence that the close attention [it involves] occurs together with pleasure; for no one is willing to work hard for a long time."<sup>59</sup> From this Aristotle concludes that philosophy is something of intrinsic value and which we strive for in a way that is in accord with our nature, echoing the remarks about the contemplative life in *Nicomachean Ethics* book 10.

In conclusion, Aristotle presents an ethics of effort. It is by rational and moderate efforts that he thought virtue and happiness came about. In the prior section I outlined the analogy between syllogistic thinking, hylomorphism, and the growth of life. The first premise is material, and the middle term is an activity. I intentionally omitted mention of the "conclusion" since life moves from middle term to middle term continuously as it develops. The "end," conclusion, or limit of life cannot be a simple termination or completion. The "end" of human action is not death, but rather the continuous engagement in the activities of the virtuous life and wisdom.<sup>60</sup> So too, the "teleology" of *conatus* is not defined entirely in terms of the "goal" towards which it tends as a termination of action but denotes the *completeness* of the effectiveness of the operation of unifying and directing multiplicity. The "end" is not where living activity stops, but the determinacy by which it sustains itself in action.

#### III. Life as striving: Intensification, and manifestation

In this section I will detail how life is known in a unique way, i.e. by living first hand. Effort is likewise known by being lived, and furthermore, the effort to know and the knowledge of effort coincide. Life is a self-expressive tendency, for Aristotle, either spontaneously as desire ( $\delta \rho \epsilon \xi t v$ ) or by deliberate choice ( $\pi \rho \alpha \alpha (\rho \epsilon \sigma t v)$ ).<sup>61</sup> The soul is a source of movement and of sentience.<sup>62</sup> We feel the push of life, both as an interior-force of which we ourselves are the source and also in its resulting movements. Aristotle touches on the duplicity of life's vital push in *Nicomachean Ethics* 9.9 saying that "living in its governing sense appears to be perceiving and thinking."<sup>63</sup> Life is an activity whose exercise is somehow aware of itself at once actively and passively (effort and feeling).

<sup>&</sup>quot;Aristotle, Isocrates, and Philosophical Progress," *History of Philosophy & Logical Analysis* 23, no. 1 (2020): 197-224.

<sup>&</sup>lt;sup>59</sup> Aristotle, *Protrepticus*, 25.

<sup>&</sup>lt;sup>60</sup> Aristotle, *Nicomachean Ethics*, 1: 1098b23.

<sup>&</sup>lt;sup>61</sup> Aristotle, *Metaphysics*, 9: 1048a10.

<sup>&</sup>lt;sup>62</sup> Aristotle, *De anima*, 2: 413b13; 3: 433a7-435b25.

<sup>&</sup>lt;sup>63</sup> Aristotle, *Nicomachean Ethics*, 9: 1170a20, (Sachs' translation).

[I]f one who sees is aware [ $\alpha i\sigma \theta \dot{\alpha}\nu \epsilon \tau \alpha \iota$ ] that he sees, and one who hears that he hears, and one who walks that he walks, and similarly in the other cases there is something in us that is aware [ $\alpha i\sigma \theta \alpha \nu \dot{\alpha} \mu \epsilon \nu \sigma \nu$ ] that we are at-work [ $\dot{\epsilon}\nu \epsilon \rho \gamma \sigma \tilde{\nu} \mu \epsilon \nu$ ], so that whenever we perceive we are aware that we perceive [ $\alpha i\sigma \theta \alpha \nu \dot{\omega} \mu \epsilon \theta$ ',  $\check{\sigma}\tau\iota \alpha i\sigma \theta \alpha \nu \dot{\omega} \mu \epsilon \theta \alpha$ ] and whenever we think we are aware that we think, and if being aware that we are perceiving or thinking is being aware that we are [ $\dot{\epsilon}\sigma\mu\dot{\epsilon}\nu$ ] (since our being [ $\tau \dot{\sigma} \epsilon \tilde{\iota}\nu \alpha \iota \tilde{\eta}\nu$ ] is perceiving or thinking), and being aware [ $\alpha i\sigma \theta \dot{\alpha} \nu \epsilon \sigma \theta \alpha \iota$ ] that we are alive [ $\zeta \tilde{\eta}$ ] is something pleasant in itself [...].<sup>64</sup>

This awareness of existence and life is not a complete transparency in which the self thinks itself as a clear and distinct concept. It is not a static object in which we discern a finite set of components. Life's self-awareness is a continuously intensifying tendency undergoing transformations. It is first only an obscure urge which we feel by living it. This is what we should see within his term wakefulness (έγρηγορός), meaning both to awaken-oneself (like the middle voice) and to be aroused or stirred (passively).<sup>65</sup> Wakefulness implies both a vivid awareness of sensation as well as an auto affection of the vivacity of motricity (χινητιχόν) – as being an interior source of motion.<sup>66</sup> Wakefulness is the sentience, mobility and self-awareness of an animal, which has its seat in the common-sense faculty, as something all the senses share together with the motor organs. The common sense, as the ruling sense, is "that to which the others converge [πρός δ συντείνει τἆλλα],"<sup>67</sup> which is also that through which they all grow in intensity by combining together. They mutually amplify each other in experience (connecting sensations, imagination, and memory). Awareness is somehow rooted in touch, and touch, for Aristotle, is almost synonymous with perception itself.<sup>68</sup> And yet, the common sense is not in the skin, but we are told it resides in the heart. But it is not really "in" the heart or the skin or any single organ, (at least not in the way we now think of mental representations as residing in the brain). It is rather an awareness *common* to the

<sup>&</sup>lt;sup>64</sup> Ibid., 1170a27-35, (my modification of Sachs' translation).

<sup>&</sup>lt;sup>65</sup> For Aristotle's subtle descriptions of self-awareness, see L. A. Kosman, "Perceiving That We Perceive: On the Soul III, 2," *The Philosophical Review* 84, no. 4 (1975): 499-519. Cf. P. Corkum, "Attention, Perception, and Thought in Aristotle," *Dialogue* 49, no. 2 (2010): 199-222; who gives an admirable interpretation, making active attention a necessary ingredient in all awareness.

<sup>&</sup>lt;sup>66</sup> Aristotle, On Sleeping and Waking, 2: 455a17.

<sup>&</sup>lt;sup>67</sup> Ibid., 2: 455a35, (my translation).

<sup>&</sup>lt;sup>68</sup> See Pascal Massie, "Touching, Thinking, Being: The Sense of Touch in Aristotle's *De anima* and Its Implications," *Minerva - An Internet Journal of Philosophy* 17 (2013): 74-101.

body having life and yet each part still contributes its own peculiar works (hands, ears, mouth, etc.). Now, we can't go into detail here on exactly how this works, but what I mean to underline is that the wakefulness of the common sense is both active and passive, being both a source of movement, coordination, and a convergence of diverse sensations.<sup>69</sup> Appetite (ὄρεξις) has its seat in the center and is the place where force is concentrated and directed.<sup>70</sup> Aristotle says this center, as a mediating term between sensation and mobility, is "well-grown [εἰφυῶς] to be mobile [κινητικόν] and supply strength [παρέχειν ἰσχύν].<sup>71</sup> The inner force of life (ψυχικῆς) is an inborn (σύμφυτον) spirit (πνεῦμα).<sup>72</sup> It is the nature of this *pneuma* to be able (δύνασθαι) to expand (αὐξάνεσθαι, ἐκτεινομένη) and contract (συναγόμενα, συστέλλεσθαι).<sup>73</sup> These movements and tensions are the primary works (ἔργα) of the common sense.<sup>74</sup> These correspond directly with an increase and decrease of forcefulness, an amplification or attenuation of effort. Thus, the embodied *wakefulness* of life is the pneumatic activity which intensifies its perceptive and mobile *conatus*, unifying and directing animal life.

This self-awareness is not exhausted in any particular act, and so selfconsciousness is not something possessed once and for all, nor conceived statically. Its truth is lived in a dynamic, embodied, and self-temporalizing intentionality of the soul. The auto affections, therefore, involve a diversity of vital motions and a plurality of activities. It is, thus, also a hetero affection, since it always involves a relational character of each act. This "self-knowledge" is not conceptual or propositional. It is, instead, a subtle knowledge that cannot be communicated, in the same way that experience generally ( $i\mu\pi\epsilon\iota\rhoi\alpha\varsigma$ ), cannot be communicated, but must be acquired firsthand. It must be lived by each of us in our own efforts to learn and develop. Thus, Aristotle says:

[T]he truth [ $d\lambda\eta\theta\epsilon_{\zeta}$ ] in matters of action [ $\pi\rho\alpha\varkappa\tau\iota\kappa\sigma\tilde{\iota}_{\zeta}$ ] is discerned [ $d\pi\sigma\delta\varepsilon\varkappa\tau\epsilon\sigma$ ] from works [ $\epsilon\rho\gamma\omega\nu$ ] and from life [ $\beta\epsilon\sigma\nu$ ], since they are the determining thing [ $\kappa\epsilon\rho\tau\sigma\nu$ ] in these matters. Thus, we must investigate the things that have been said [concerning happiness

<sup>&</sup>lt;sup>69</sup> Aristotle, On Sleeping and Waking, 2: 456a7.

<sup>&</sup>lt;sup>70</sup> Aristotle, *Movement of Animals*, 703a5.

<sup>&</sup>lt;sup>71</sup> Ibid., 703a17, (my modification of Nussbaum's translation).

<sup>&</sup>lt;sup>72</sup> Ibid., 703a14. See Adriel M. Trott, "Does It Matter? Material Nature and Vital Heat in Aristotle's Biology," in *Contemporary Encounters With Ancient Metaphysics*, ed. Abraham Jacob Greenstine, and Ryan J. Johnson (Edinburgh: Edinburgh University Press, 2017), 167-169.

<sup>&</sup>lt;sup>73</sup> Aristotle, *Movement of Animals*, 703a20-22, 702b23-24; Aristotle, *On Sleeping and Waking*, 2: 456a13. This parallels many of the views of early stoics on tension, which they described as both effort and *pneuma*; see A. A. Long, and D. N. Sedley, *The Hellenistic Philosophers* (Cambridge; New York: Cambridge University Press, 1987), 280-286. Cf. Felix Ravaisson, *Félix Ravaisson: Selected Essays* (London: Bloomsbury Academic, 2016), 94.

<sup>&</sup>lt;sup>74</sup> Aristotle, *Movement of Animals*, 703a19.

and virtue] by bringing them to the test of works and life, and we must accept them only if they sing-in-harmony [ $\sigma \nu \nu \alpha \delta \delta \nu \tau \omega \nu$ ] with these works, while if they are out of tune [ $\delta \iota \alpha \phi \omega \nu o \delta \nu \tau \omega \nu$ ] one ought to consider them mere words [ $\lambda \delta \gamma \sigma \nu \varsigma$ ].<sup>75</sup>

Thus, life, soul, awareness, and truth are conceived on the bases of an intensification of effort which grows continuously in a developmental process of self-improvements (that reintegrates its past achievements to conduct activity more and more effectively). Greater degrees of self-awareness arise inductively, as experience is gained through carefully and attentive observation across an immense multiplicity of moments.<sup>76</sup> The cognitive act of the soul which conducts multiplicity skillfully must have adequate knowledge of causes. This is the relevant sense of reason in life and its works, as a knowledge of the order and connections constituting the generation of an informed multiplicity. In the same way that certain activities are ends in themselves, undertaken and enjoyed by the same effort, so too self-awareness is enacted and perceived in a complex whole. It is in this same sense that Spinoza ridiculed those who thought possessing virtues deserved recompensed or praise, "as if virtue itself, and the service of God, were not happiness itself, and the greatest freedom."77 Virtue is an end in itself as an activity which initiates and gives to itself (intensify) in its activity - both exercises and experiences; perseveres and rejoices.

IV. The expressive effort and intensity of feelings in music

In this section I will further examine the psychology of effort and intensity in the aesthetic feelings involved in music. I will draw on, and build off of, the above discussion of pleasure, self-awareness, and the intensification of striving. I will show that effort provided the basis on which Aristotle and Aristoxenus understood the nature of music.

There are many marvelous questions raised about music in the Aristotelian collection of texts called the *Problems* that appeal to the role of effort, attention, sympathy, and degrees of intensity. "Why do many people singing together preserve the rhythm better than few?"<sup>78</sup> "Why do people listen with more pleasure to people singing melodies they happen to know beforehand, than

<sup>&</sup>lt;sup>75</sup> Aristotle, *Nicomachean Ethics*, 1179a18-20, (my translation).

<sup>&</sup>lt;sup>76</sup> Aristotle, *Metaphysics*, 1: 980b26-981a23; Aristotle, *Nicomachean Ethics*, 6: 1142a13-32; Aristotle, *Posterior Analytics*, 2: 99b15-100b15.

<sup>&</sup>lt;sup>77</sup> Spinoza, *Ethics*, 2p49Schol.

<sup>&</sup>lt;sup>78</sup> Aristotle, *Problems*, 19: 919a36.

if they do not know them?"<sup>79</sup> The problems examined draw up examples in which degrees of intensity of feeling are produced and sustained by active participation in music. One proposed answer to the second question suggests that we listen with greater pleasure to someone singing a melody we are familiar with because we sympathize ( $\sigma u\mu \pi \alpha \theta \eta_{\varsigma}$ ) more, due to the fact that we sing-with ( $\sigma u \nu \alpha \delta \alpha \ell$ ) them, and we are told, everyone enjoys singing who is not forced to do it.<sup>80</sup> The feeling of pleasure which arises while listening to music is, thus, identified as a participation and a *striving* – a free or voluntary initiative undertaken and felt as an auto affection. This parallels the account from *Nicomachean Ethics* 10.4, examined above, in which a flute player's attention becomes engrossed in listening to flute playing. Sympathy, here, involves one's own effort and the degree of attention and participation are proportional to the intensity of pleasure.

This proposed reason, in *Problems*, is echoed by a principle laid down in Theophrastus text on melody. He wrote that "the movement productive of melody, which occurs around the soul is exceedingly accurate: when the soul wishes to articulate [¿puŋyeúeiv] it with vocal sounds, it directs the sounds [...] and it does so in accordance with what it wishes."81 The melody is a sign of the effort producing it which involves both the want and the success at steering its movements accurately.<sup>82</sup> Theophrastus tells us that it is, in part, by *leaving out* the notes which, if included, would destroy the melody, that its accuracy is achieved. If the intervening notes were heard, the melody would be destroyed by what is not in tune.<sup>83</sup> Theophrastus rejected the Pythagorean theory that melody arises merely from numbers and ratios. Instead, it is due to the *selective accuracy* of the soul "there is only one thing that can be said to be the nature of music: the movement of the soul that occurs with a view to release from the evils due to the emotions. If it were not this, neither would the nature of music exist."84 Theophrastus therefore posited a psychological rather than a quantitative underlying nature to musical expression. The qualitative approach makes effort the fundamental element of musical expression. It is impossible to conceive of music, properly speaking, which is not an intimate unity of the subject with the object: between the effort and its manifestation, the want and the accuracy with which it fulfills it. The nature of melody is the growing and dynamic expressivity of the soul which

<sup>&</sup>lt;sup>79</sup> Ibid., 19: 921a32.

<sup>&</sup>lt;sup>80</sup> Ibid., 19: 921a36.

<sup>&</sup>lt;sup>81</sup> Theophrastus, "Theophrastus on the Nature of Music," in *Theophrastus: Reappraising the Sources*, trans. C. M. J. Sicking, eds. J. M. van Ophuijsen, and Marlein van Raalte (New Brunswick, NJ: Transaction Publishers, 1998), 101.

<sup>&</sup>lt;sup>82</sup> Andrew Barker, "Theophrastus and Aristoxenus: Confusions in Musical Metaphysics," *Bulletin of the Institute of Classical Studies* 47, no. 1 (2004): 101-117.

<sup>&</sup>lt;sup>83</sup> Theophrastus, "Music," 105.

<sup>&</sup>lt;sup>84</sup> Ibid., 106.

acts in an adequate manner (cause) to free itself from spiritual afflictions and affections, amplified by the pleasure that accompanies the attentive effort and draws joy or consolation from its own free, expressive activity.

Another of Aristotle's student, Aristoxenus, also made effort the principle of musical expression. He tells us that the comprehension ( $\xi i \nu \epsilon \sigma c$ ) of music is due to the activity of sense-perception and memory:

We must perceive the sound that is coming to be and remember that which is past. In no other way can we closely attend to [or keep company with], [ $\pi \alpha \rho \alpha \varkappa o \lambda o \upsilon \theta \epsilon \tilde{\iota} \nu$ ] the music.<sup>85</sup>

This involves both hearing and thinking, so that "by the former we discern the magnitudes of the intervals, by the latter we contemplate the functions of the notes."<sup>86</sup> As Staufer explains, "the nature and value of music (for Aristoxenus) lie in the conscious perception of its sonorous patterns, not in the sonorities themselves."<sup>87</sup> This does not mean that it is purely cerebral or that it leads to an analysis or static concept. Music is a prelinguistic cognition. There must be a training of the perceptive faculty of judgement itself (common sense) developing it to "discern well" ( $e\bar{v} \times p(vetv)$ .<sup>88</sup> In this sense, musical knowledge will remain tethered to the arts ( $\tau \tilde{\omega}v \tau t \pi v \omega v$ ) as something which we have mastery of, ( $\pi p \alpha \gamma \mu \alpha \tau e v \omega v$ ), <sup>89</sup> rather than conceptual knowledge.<sup>90</sup> This training will, by intensifying the activity of the common sense and developing its power, enable the soul to perform accurate discernment.<sup>91</sup> One who has a mastery of music, when they hear a series of notes, will be able to anticipate, to some degree, the notes that will follow, because they possess something of the principle of its

<sup>&</sup>lt;sup>85</sup> Aristoxenus, *Harmonika Stoicheia: The Harmonics of Aristoxenus*, trans. Henry Stewart Macran (Hildesheim: Georg Olms Verlag, 1902), 193, (translation modified).

<sup>&</sup>lt;sup>86</sup> Aristoxenus, *Harmonics*, 189, (translation modified).

<sup>&</sup>lt;sup>87</sup> Amanda Staufer, "The Unifying Strands: Formalism and Gestalt Theory in the Musical Philosophies of Aristoxenus, Descartes, and Meyer," *Musical Offerings* 9, no. 1 (2018): 31-41, and particularly 35.

<sup>&</sup>lt;sup>88</sup> Aristoxenus, *Harmonics*, 33.20. I use the paragraph and line numbers for the Greek text when I have given my own translation, page numbers when using Macran's translation.

<sup>&</sup>lt;sup>89</sup> Aristoxenus employed an empirical method of observation to understanding melody, but its data is not an external object, but is something that must be enacted and mastered. Thus, he calls it a mastery *pragmateia* ( $\pi \rho \alpha \gamma \mu \alpha \tau \epsilon i \alpha$ ) which implies the concrete activity of doing what is known: it is *know-how*. The primary initiative taken to produce what will be enacted concretely with mastery for oneself ( $\pi \rho \alpha \gamma \mu \alpha \tau \epsilon i \alpha \sigma \alpha \eta$ ), (middle voice) one must delimit all the movements of voice that singing enacts, i.e. movement in place; Aristoxenus, *Harmonics*, 3.5-7. Melody is something *done* or performed and likewise the study of music is a mastery of concrete action; ibid 1-2.

<sup>&</sup>lt;sup>90</sup> Aristoxenus, *Harmonics*, 33.21.

<sup>&</sup>lt;sup>91</sup> Ibid., 33.10.

production: the attitude of the effort which expresses it.

The active attention involved in listening to or making music involves a continuity of effort. Insofar as melody is something that is produced gradually through a succession of pitches, it is continuous in the same way speech ( $\lambda \xi \xi \epsilon_L$ ) is, i.e. by following a natural order and growing the whole from a subordinate series of movements following a natural law.<sup>92</sup> Aristoxenus explains the peculiar form of continuity which defines melodic expression:

It is not that one needs to pay attention to [intervals] coming to be from equal or unequal [magnitudes] in order to understand [the source of melodic] continuity, but to [pay attention to] the productive-nature [ $\varphi \dot{\upsilon} \sigma \iota \nu$ ] of melody and must attempt [ $\pi \epsilon \iota \rho \alpha \tau \dot{\epsilon} \sigma \nu$ ] to attentively-observe [ $\pi \alpha \tau \alpha \nu \sigma \epsilon \tilde{\iota} \nu$ ] and exert oneself enthusiastically [ $\pi \rho \sigma \theta \upsilon \mu \sigma \dot{\upsilon} \mu \epsilon \nu \sigma \nu$ ] to establish [ $\tau \iota \theta \dot{\epsilon} \nu \alpha \iota$ ] 'what follows what' by natural tendency in the vocalized intervals by song.<sup>93</sup>

Music comes about by the establishment of consecutive vocalizations, but it's not reducible to the consecutively analyzed notes as if taking each discretely and simply comparing it to the others in relation to magnitude or number. Instead, the *following* of each note by another is something which involves the continuity of sustained effort, an enduring attitude, and the ebbs and flows of consonance-dissonance-resolution or tension-relaxation. Again, as with Theophrastus the *nature* of melody is its productive cause, i.e. a psychological *initiative, articulation,* or mobile *intentionality*. Aristoxenus starts with the act of signing itself as the *generative cause* from which his "elements" develop synthetically; by a training that involves both precision in sensitive discernment and intellectual subtlety. The adequate idea will not only involve coherent relations among its parts (explainable in rational demonstration) but will possess the cause itself from which the effects (songs) are produced.<sup>94</sup>

Aristoxenus warns that we will miss the fundamental *nature* of music entirely if we reduce it to either vibrations of air or numerical ratios. The

<sup>&</sup>lt;sup>92</sup> Aristoxenus, *Harmonics*, 27.27. Speech uses changes of pitch semantically, like raising pitch signifies a question, but it does not deliberately *hold* pitches. Speech fluctuates in pitch continuously, and if one holds a pitch, the utterance becomes chanting or singing; Aristoxenus, *Harmonics*, 8.14-10.10.

<sup>93</sup> Ibid., 28.20-24.

<sup>&</sup>lt;sup>94</sup> Here, the elements of Spinoza can be fruitfully compared with that of Aristoxenus. The parts must come together and exclude all that prohibits the emergence of the form that wish strives to articulate. For Spinoza, blessedness depends on our properly including and prohibiting affects. Only what harmonizes with reason contributes to active affects.

essence of music, its nature, is the continuity of wish and striving. Good singing is skillful and the accuracy fulfilling the intent is an obviously sources of our enjoyment of an artist's performance. This is highlighted perhaps in difficult passages, we are attracted to and charmed by the skill with which the melody and rhythm are articulated. Aristotle questions why singing a quarter tone is so difficult and "the difficulty is due to the strain and compression of the voice; and there is an effort in these; since they require effort, they are more likely to fail."<sup>95</sup> It is the precision of achieving what one strives for that marks great performers. Effort need not be taken strictly as the strain to act precisely, it encompasses the whole of mental intentionality. Again, the pleasure we take in these sentiments is not merely an external stimulation but will involve the auto affection by which we feel our own power of acting and these sentiments integrate with, and amplify, our attention – the more one's attention is engaged, the more profound the experience becomes.

This interpretation of music as a dynamic quality of effort was already implied in Socrates discussions of modes in *Republic*, book 3,% in which Doric is said to suggest a stern and tempered character while Lydian is relaxed, Mixolydian is excessive and lamenting etc. – all of which are credited to the theories of Damon. A mode somehow expresses the intensity, attitude, and character of the one articulating it. Aristotle reiterates this in Politics 8.7, which is mainly in agreement with the *Republic*, but gives an even more nuanced view in which Lydian plays a more prominent role,<sup>97</sup> due to its healing and cathartic powers.<sup>98</sup> A guiding question of the passage is whether music should be used only as something merely listened to, or whether it must be taught - involving active participation. Aristotle affirms that the ability to judge musical performance depends on one having already engaged with or even mastered the arts, especially if one is to judge well.<sup>99</sup> It is on the basis of such effort that we must interpret the three "divisions made in some philosophers,"<sup>100</sup> which Aristotle professes agreement with: character (ήθικά), concrete deliberate action (πρακτικά), enthusiasm (ἐνθουσιαστικά).<sup>101</sup> We should take them as three *tendencies*, each of which essentially involves a degree of tension in psychical energy. His investigation then moves

<sup>&</sup>lt;sup>95</sup> Aristotle, *Problems*, 19: 917b34.

<sup>&</sup>lt;sup>96</sup> On the difference between Theophrastus and Plato, see Sicking "Theophrastus on the Nature of Music," 141.

<sup>&</sup>lt;sup>97</sup> Aristotle, *Politics*, 8: 1342b23-35.

<sup>98</sup> Ibid., 8: 1342a10-17.

<sup>&</sup>lt;sup>99</sup> Ibid., 8: 1340b15-40.

<sup>&</sup>lt;sup>100</sup> Ibid., 8: 1341b34.

<sup>&</sup>lt;sup>101</sup> Ibid., 8: 1341b35.

between two extremes of the tendencies in music. On the one hand, as a deliberate skillful action ( $\pi \rho \alpha \varkappa \pi \iota \varkappa \alpha$ ), or inspiration and invigoration of spirit, (ἐνθουσιαστικάς),<sup>102</sup> on the other, a means of relaxation and amusement that releases tension,<sup>103</sup> and are *not* strenuous (σπουδαίων).<sup>104</sup> The one extreme involves work, the other rest, but in both cases, it is a matter of intensity or tension of psychical energy. Aristotle observes cleansing ( $\chi\alpha\theta\alpha\rho\tau\iota\kappa\dot{\alpha}$ ) and healing (latpeias) powers of music, which can relax excessive tensions and anxieties.<sup>105</sup> This involves an increase in tension giving way to a subsequent relaxation: an ecstatic trance like frenzy which, like a purge, releases one from psychological/emotional afflictions. Aristotle tells us that the intensity or forcefulness (ἰσχυρῶς) of passions in the soul is a source of purification, which explains the effects of enthusiasm.<sup>106</sup> The listener undergoes a purging of violent emotions, which is followed by the pleasure of relief.<sup>107</sup> He compares this enthusiastic purification to pity and fear.<sup>108</sup> In this way, music involves, for Aristotle, a developmental series of psychical activities unfolding according to a determinate order in which later moments build off and reintegrate the prior.

A related set of questions are raised in *Problems* 19.27, which helps to make sense of this ethical dimension of music. One question raised is, how, "even though melody is without words, [does] it nevertheless possesses ethical character[?]"<sup>109</sup> A proposed explanation given is that it ( $\xi_{\chi \epsilon \iota}$ ) has or bares movements in a way different from being moved by a sensible phenomenon.<sup>110</sup> Unlike the movements of normal sensation, this movement has a likeness to character, and is connected to concrete intentional actions ( $\pi \rho \alpha \kappa \tau \iota \kappa \alpha \iota$ ), which are the signs of character.<sup>111</sup> The

<sup>&</sup>lt;sup>102</sup> Ibid., 8: 1340a13.

<sup>&</sup>lt;sup>103</sup> Ibid., 8: 1342a1.

<sup>&</sup>lt;sup>104</sup> Ibid., 8: 1339b18.

<sup>&</sup>lt;sup>105</sup> This parallel claim of Pythagorean music therapy, Iamblichus, *On the Pythagorean Life* 15, 64, 1-65, 1, in Sorabji, vol. 1, 304. Also Elias, *Prolegomena* 31, 8-25. "[...] the function of music alone is to heal the afflictions of the soul and body. For this reason, philosophy is the 'greatest music,' because it is healer of the afflictions of the soul, from which it is also called medicine of souls." Quoted from Richard Sorabji, *The Philosophy of the Commentators, 200-600 AD: Vol. 1 Psychology (with Ethics and Religion)* (New York: Cornell University Press, 2005), 301-302.

<sup>&</sup>lt;sup>106</sup> Aristotle, *Politics*, 8: 1342a7.

<sup>&</sup>lt;sup>107</sup> Ibid., 8: 1342a15.

<sup>&</sup>lt;sup>108</sup> Ibid., 8: 1342a7. On the complexity of Aristotle's treatment of the cathartic powers of music, see G. R. F. Ferrari, "Aristotle on Musical Catharsis and the Pleasure of a Good Story," *Phronesis* 64, no. 2 (2019): 117-171.

<sup>&</sup>lt;sup>109</sup> Aristotle, *Problems*, 19: 919b27.

<sup>&</sup>lt;sup>110</sup> This parallels Aristotle, *Politics*, 8: 1430a30.

<sup>&</sup>lt;sup>111</sup> Aristotle, *Problems*, 19: 919b27-37.

ethical character of melody is indicative of different dispositions, emotions, and attitudes which produce them. These movements make us sympathize with modes of thinking, feeling, and acting (the specific qualities of effort). Melody (μελωδός) and song ( $\mu \epsilon \lambda_{0c}$ ) involve a psychical striving which both has and manifests its character.<sup>112</sup> Listening implies a *work* of the soul intensifying and concentrating attention in participation with the character, attitude, or intention of a concrete effort expressing the song. There is a growing intensity in the continuous exercise of this striving which progressively increases the richness of its contents. It is not the attribute of a subject but the operative auto affection of a concrete *conatus*. The results of these creative efforts are acts of signing or playing a melody. Not only is music ethical because it is a *sign* of the character directing and engendering its movements, but also because its suggestive power makes us both imitative and sympathetic. Imitation leads to self-initiated action. This was of particular interest to Socrates in understanding the influence of musical education as part of habit and character development that are conducive to philosophy. One who sings in a way which suggests the firm resolve of a courageous yet temperate spirit, will, by imitating good character, become ready to be that way deliberately. By singing such tunes, one becomes accustomed to strive for the character this music suggests. Furthermore, the communal participation of music fosters a sympathetic and caring attentiveness to others and our place in the community.

To sum up, the *nature* of melodic production is explicable only by reference to the effort of the soul. A musical performance is a sign of careful attention and intentional precision. We sympathize with the striving and imitate it while listening closely to the notes they *choose*. We have a feeling of choice, of wish, and of effort – a delicate but deliberate striving that is alert and manifesting its marvelous facility and ease at shaping sound and giving continuity to movement. The effect of music is not simply a sympathetic feeling *that* someone is acting intentionally (effort in general) but *how* (concrete effort involving character). Again, it's not merely *that* the feeling is intense, but the intensity permeates and shapes the contents. The striving has a *sui generis* character that we struggle to describe, in the same way that we struggle to describe the difference between the taste of blueberries and strawberries. We intuitively know the singular character of a melody and can participate with its *effort*. It is not the attribute of a subject, nor the cogito of intellectualism, but the effort, which is not fully transparent to itself, but still evident in being lived – a *conatus*.

#### V. Conclusion

Aristotle did not simply define life, force, and psychical activity but appealed to first-hand experience. He elevated them to primary importance as fundamental

<sup>&</sup>lt;sup>112</sup> Ibid., 19: 920a5.

principles. These principles are also not thereby rendered unintelligible but ground the very life of experience and our striving for truth. It is with effort that the dynamic sense of psychical activity takes on a philosophical primacy. By an analogy with what is most immediately evident, i.e. our own immediate sense of living, we come to grasp the most fundamental principles of philosophy and ethics. Effort, striving, and persevering are not expressed by general concepts, definitions, or even clear and distinct ideas. They are nonetheless known adequately by being enacted, and since their enactment is the internal cause of their existence and development, this knowledge must be active and implies mastery. Just as Spinoza's described the generation of virtue guided by reason, so too Aristotelian virtue emerges from a series of dependent conditions and Aristoxenian melody passes through movements which are made continuous by living effort. It requires effort to think, and the progress of knowledge itself is an integral aspect of all effort. *Conatus* is the immanent intelligence which comes to know and to improve itself by acting. Here, the faculty of will and understanding coincide and effort itself is cause and self-aware.

#### References

Aristotle. *Aristotle's Metaphysics*. Translated by Joe Sachs. Santa Fe, NM: Green Lion Press, 1999.

Aristotle. Aristotle's On the Soul; and, On Memory and Recollection. Translated by Joe Sachs. Santa Fe, NM: Green Lion Press, 2001.

Aristotle. *Aristotle's Posterior Analytics*. Translated by Hippocrates G. Apostle. Grinnell, IA: Peripatetic Press, 1981.

Aristotle. *Art of Rhetoric*. Translated by John Henry Freese. Cambridge, MA; London: Harvard University Press, 1929.

Aristotle. *Athenian Constitution; Eudemian Ethics; Virtues and Vices*. Loeb Classical Library 285. Cambridge, MA: Harvard University Press, 2014.

Aristotle. *De anima*. Translated by C. D. C. Reeve. Indianapolis, IN: Hackett Publishing Company, 2017.

Aristotle. *Eudemian Ethics*. Translated by C. D. C. Reeve. Indianapolis, IN; Cambridge, MA: Hackett Publishing Company, Inc, 2021.

Aristotle. *Metaphysics*. Loeb Classical Library 271. Cambridge, MA: Harvard University Press, 2014.

Aristotle. *Metaphysics*. Translated by C. D. C. Reeve. Indianapolis; Cambridge, MA: Hackett Publishing Company, 2016.

Aristotle. Nicomachean Ethics. Loeb Classical Library 73. Cambridge, MA:

Harvard University Press, 2014.

Aristotle. *Nicomachean Ethics*. Translated by Joe Sachs. Focus Philosophical Library. Newbury, MA: Focus Pub/RPullins, 2002.

Aristotle. *On the Soul; Parva Naturalia; On Breath*. Loeb Classical Library 288. Cambridge, MA: Harvard University Press, 2014.

Aristotle. *Parts of Animals; Movement of Animals; Progression of Animals*. Loeb Classical Library 323. Cambridge, MA: Harvard University Press, 2014.

Aristotle. *Poetics*. Edited and translated by Stephen Halliwell, W. H. Fyfe, and Doreen C. Innes. Revised by Donald Russell. Cambridge, MA: Harvard University Press, 1995.

Aristotle. *Politics*. Translated by H. Rackham. Loeb Classical Library 264. Cambridge, MA: Harvard University Press, 1932.

Aristotle. *Posterior Analytics Topica*. Loeb Classical Library 391. Cambridge, MA: Harvard University Press, 2014.

Aristotle. *Protrepticus: A Reconstruction of Aristotle's Lost Dialogue*. Translated by D. S. Hutchison, and Monte Ransom Johnson, 2017. http://www.protrepticus.info/protr2017x20.pdf.

Aristotle. *Rhetoric*. Translated by C. D. C. Reeve. Indianapolis; Cambridge, MA: Hackett Publishing Company, Inc, 2018.

Aristoxenus. *Harmonika Stoicheia: The Harmonics of Aristoxenus* (Elements of Harmony). Translated by Henry Stewart Macran. London: Oxford at the Clarendon Press, 1902.

Barker, Andrew. "Theophrastus and Aristoxenus: Confusions in Musical Metaphysics." *Bulletin of the Institute of Classical Studies* 47, no. 1 (2004): 101-117.

Bergson, Henri. *Creative Evolution*. Translated by Arthur Mitchell. New York: The Modern Library, 1944.

Bernet, Rudolf, and Sarah Allen. *Force, Drive, Desire. A Philosophy of Psychoanalysis*. Chicago: Northwestern University Press, 2020.

Corkum, P. "Attention, Perception, and Thought in Aristotle." *Dialogue* 49, no. 2 (2010): 199-222.

Deleuze, Gilles. *Difference and Repetition*. Translated by Paul Patton. New York: Columbia University Press, 1994.

Ferrari, G. R. F. "Aristotle on Musical Catharsis and the Pleasure of a Good

Story." Phronesis 64, no. 2 (2019): 117-171.

Fóti V. M. "Merleau-Ponty's Vertical Genesis and the Aristotelian Powers of the Soul." In *Phenomenology: Japanese and American Perspectives*. *Contributions to Phenomenology*, edited by B. C. Hopkins, 39-51. Dordrecht: Springer, 1998.

Heidegger, Martin. *Being and Time: A Translation of* Sein Und Zeit. Translated by Joan Stambaugh. Albany, NY: State University of New York Press, 1996.

Kosman, L. A. "Perceiving That We Perceive: On the Soul III, 2." *The Philosophical Review* 84, no. 4 (1975): 499-519.

Leibniz, G. W. *G.W. Leibniz's Monadology: An Edition for Students*. Translated by Nicholas Rescher. Pittsburgh, PA: University of Pittsburgh Press, 1991.

Long, A. A., and D. N. Sedley. *The Hellenistic Philosophers*. Cambridge and New York: Cambridge University Press, 1987.

Massie, Pascal. "Touching, Thinking, Being: The Sense of Touch in Aristotle's *De anima* and Its Implications." *Minerva - An Internet Journal of Philosophy* 17 (2013): 74-101.

Nussbaum, Martha C. Aristotle's De Motu Animalium: Text with Translation, Commentary, and Interpretive Essays. Princeton, NJ: Princeton University Press, 1978.

Plato. *Republic*. Translated by Joe Sachs. Newburyport, MA: Focus Publishing, 2007.

Ravaisson, Felix. Essai Sur la Métaphysique D'Aristote. A l'imprimerie royale, 1837.

Ravaisson, Felix. *Félix Ravaisson: Selected Essays*. Edited by Mark Sinclair. London: Bloomsbury Academic, 2016.

Sorabji, Richard. *The Philosophy of the Commentators, 200-600 AD: Vol. 1 Psychology (with Ethics and Religion).* Ithaka, NY: Cornell University Press, 2005.

Spinoza, B. *A Spinoza Reader: The Ethics and Other Works*. Edited by E. Curley. Princeton, NJ: Princeton University Press, 1994.

Staufer, Amanda. "The Unifying Strands: Formalism and Gestalt Theory in the Musical Philosophies of Aristoxenus, Descartes, and Meyer." *Musical Offerings* 9, no. 1 (2018): 31-41.

Trott, Adriel M. "Does It Matter? Material nature and Vital Heat in Aristotle's Biology." In *Contemporary Encounters With Ancient Metaphysics*, edited

by Abraham Jacob Greenstine, and Ryan J. Johnson, 158-178. Edinburgh: Edinburgh University Press, 2017.

van Ophuijsen, J. M., and Marlein van Raalte. *Theophrastus: Reappraising the Sources*. New Brunswick, NJ: Transaction Publishers, 1997.

Walker, Matthew D. "Aristotle, Isocrates, and Philosophical Progress." *History of Philosophy & Logical Analysis* 23, no. 1 (2020): 197-224.