

# OSCILLATING AFFECTS: SPINOZA'S MODELS FOR THE CONFRONTATION AND ADAPTATION OF OPPOSITE THINGS

Maxime ROVERE\*

**Abstract.** Spinoza's conception of "negativity" is generally approached under the angle of his metaphysics. Relying instead on ethical considerations throughout his work, this article proposes to identify a slight evolution in the philosopher's thought, especially between the *Tractatus de Intellectus Emendatione* and the *Ethica*. By showing that the first treatises are marked by a logician approach, and that the last texts clearly rely on a physical and mechanical model, it states that Spinoza, during the 1660s, might have undergone a change in his preferences as to which science (logic or physics) he would rather rely on. In particular, it suggests that the cinematic model, in the *Ethics*, is a pattern that helps conceiving of the relation between passions (especially when they are contrary to the obtention of the real good) and the intellectual love of God.

**Keywords:** Negative Affects, Physics and Ethics, Intellectual Love of God

## Introduction

The way Spinoza conceives the opposition and the coexistence of contraries has left his readers perplexed ever since the seventeenth century. In the pages he dedicated to the author of *Ethics*, Pierre Bayle wrote in his *Dictionnaire historique et critique* (1697):

On dit ordinairement tot capita quot sensus, autant de sentiments que de têtes ; mais selon Spinoza, tous les sentiments de tous les hommes sont dans une seule tête<sup>1</sup>.

The aim of that remark was to emphasise the absurdity of Spinoza's metaphysical thesis, which states that all things in the world are immanent to God, even when two of these things are in direct opposition. Commenting on this statement, Bayle observed that reducing the diversity of opinions to "one head" is making God "not only the efficient cause, but also the passive subject, the *subjectum inhaesioni*" of all interactions, even those which involve negation, destruction and

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\* Pontifícia Católica Universidade de Rio de Janeiro, Departamento de Filosofia, PUC-Rio, Rua Marquês de São Vicente, 225, Gávea, Rio de Janeiro, RJ. Brasil, Cx. Postal: 38097 | Cep. 22451-900. E-mail: maxime.rovere@gmail.com

death. According to him, Spinoza's philosophy exposes itself to ridicule that Bayle summarized in the now famous phrase:

Dans le système de Spinoza, tous ceux qui disent *les Allemands ont tué dix mille Turcs* parlent mal et fausement, à moins qu'ils n'entendent *Dieu modifié en Allemands a tué Dieu modifié en dix mille Turcs*<sup>2</sup>.

What is at stake here is not only the unacceptable character of the uniqueness of the substance, which implies the inherence of all natural beings in God. Above all, Bayle believed that he had detected in Spinoza's work a kind of blindness, which consists in denying the reality of negation. The fact that forces in direct opposition (including morally reprehensible events or harmful actions) may be referred to God appeared to him a blatant absurdity. In the sentence quoted above, the contrast between the brutality of the verb "to kill" and the soothing repetition of "modify" thus aims at highlighting a second aspect of the ridicule: according to Bayle, not only does Spinoza attribute everything to God, but he also seems to overlook the reality of violence. It seems that for Bayle the notion of "modification" obliterates the possibility of a radical opposition between the things of the world.

As we know, Spinoza's way of accounting for the negative as a modality within an infinite affirmation was to find much more benevolent interpretations among the German idealists, and particularly in Hegel. "*Omnia determinatio est negatio*" is Hegel's own version of a sentence originally formulated by Spinoza, which expresses exactly such an enclosing of negation within affirmation. In a recent paper, Yitzhak Melamed drew attention to the fact that this idea plays a decisive role in the metaphysics of a unique substance, precisely because it allows us to articulate the finite and the infinite. In this regard, Melamed writes that, "the issue of negation and the possibility of self-negation stand at the very center of the philosophical dialogue between the systems of Spinoza and Hegel."<sup>3</sup>

The issue of negation in Spinoza's work has indeed been tackled by many commentators, including Melamed, in an explicitly metaphysical approach. To them, negation appears as a crucial problem mainly because this concept should help us address the nature of singular things and their relation to the absolute.

By contrast, the aim of this paper is to propose a chronological and genetic approach to Spinoza's conception of negativity. The coherence of Spinoza's philosophy often keeps us from considering a chronological evolution of his thought, but the way he accounted for the opposition of things, and specifically the way he conceived of the opposition between affects and desires in a single individual, and the possibility of overcoming this opposition, seems to have come through a slight shift around the mid-1660s. Texts prior to 1662 seem to rely on a logical matrix in which the principles of non-contradiction and of the excluded middle play a key role. During the 1660s, however, as Huygens and other natural philosophers multiply the experiments and develop alternative theories to Descartes' mechanical philosophy, Spinoza seems to have given a more important role to models taken from physics. The preference for one model upon another does not indicate a break or incoherence in his philosophy, since like any other cartesian, Spinoza referred to pendulum physics

from the very beginning of his work, and like any other cartesian, he would never cease to respect basic logical rules. However, this article aims to show that Spinoza's approach to the opposition between affects reveals various and changing perspectives. Could it be that the communication of the oscillatory movements of pendulum clocks observed by Huygens played a role for the development of Spinoza's ideas? As Filip Buyse has shown in an important text, Spinoza starts developing a new formulation of the problem in 1665<sup>4</sup>. The kinematic model of moving things, capable of gradually adapting to one another, might contribute to the understanding of Spinoza's conception of the affects, including the most important of all, "the intellectual Love of God".

### 1. The principle of non-contradiction: between moral theory and metaphysics

In the famous pages that open the *Treatise on the Emendation of the Intellect*, Spinoza stages a spectacular confrontation between three desires. Because their objects (honor, wealth and pleasures) are heterogeneous, and because their possession is ephemeral, they leave the narrator in a great perplexity. There is a fierce competition between them, and as a result his mind is dragged in various directions (the verb "*distrabere*", which means "to tear to pieces", is used several times), until he runs the risk of seeing his life somehow destroyed. Moreover, these contradictory desires seem at first all equally opposed to Spinoza's ultimate goal, which is to find a true, shareable good, source of a continuous and eternal joy.

Since I saw that all of these things stood in the way of my working toward this new goal, indeed were so opposed to it that one or the other must be given up, I was forced to ask what would be more useful to me.<sup>5</sup>

Despite the very dramatic aspect of this passage, which in many ways resembles the play *Philedonius* by Franciscus Van den Enden,<sup>6</sup> it explicitly presents the contradiction between desires in logical terms – in this specific case, according to the principle of the excluded middle. Like the hero in the play, placed in front of a setting where two roads divide when the goddess *Prudentia* forces him to choose between them,<sup>7</sup> the narrator must decide between either giving up his first objects of desire, or giving up the true good. In this first presentation, the choice that must be made seems insurmountable: he must choose either one or the other. However, after studying in detail the danger associated with each of the objects, the inevitable disjunction seems to be mitigated. In the end, the narrator seems to find a solution other than the simple rejection of one of the alternatives:

(...) if they are sought as means, then they will have a limit, and will not be obstacles at all. On the contrary, they will be of great use in attaining the end on account of which they are sought (...).<sup>8</sup>

At first glance, such an operation is a bit surprising. How could the desires which appeared only a few lines above as "obstacles" have become "means" to obtain the "true good"? The answer is to be found in the notion of *moderation*. By placing the

negation within each desire, the heterogeneity of their objects ceases to lead to a conflict between them. The transformation of obstacles into means is thus to be read as a shift in perspective: as far as the thinking mind is concerned, the opposition between honors, wealth and pleasures, is only superficial (one could say it is a relative form of negativity), for the only thing the narrator *always* wants is the “true good” – and other desires can serve as means for obtaining it. The limit imposed on worldly desires as a form of moderation is thus determined by the thinking subject for himself, whenever he perceives what is best for him. This is how each of the three desires somehow finds its limit *before* opposing the others, to the extent that the subject relies on his own knowledge to disentangle the negative relations that hold between the objects of his desires and the pursuit of the true good.

However, Spinoza’s skilful displacement of negation – he rejects what could have been an absolute despise for vanities, and defends an only relative negation – does not challenge the reciprocal exclusion of the quests for honor, wealth and pleasures. Even if they are considered as means, there is no clear way of forming a consistent plan of life with these three things unless there is a more fundamental aim that subsumes them. In a way, the necessity of imposing a limit on each desire only confirms the fact that they cannot be in the same subject at the same time. The text thus reveals a second aspect of a logical opposition, for this, as we know, is called the principle of non-contradiction.<sup>9</sup>

From this point of view, the incompatibility of the worldly desires is solved only as far as a subject is concerned: as he considers them as “means”, he can relate to the “true good”. But whatever negation these desires carry is now entirely credited to their objects, considered by themselves. To Spinoza, this negativity of the objects, which imposes the necessity of turning away from them, is nothing less than an expression of an absolute negation they involve:

Indeed, all these strife and disturbances of the mind happen only in the love of those things that can perish, as all the things we have just spoken of can do<sup>10</sup>.

The ephemeral nature of the objects is a promise of suffering, precisely because they are all doomed to disappear. Consequently, Spinoza ascribes to honors, wealth and pleasures the weight of negativity associated with the “vanities” – reminiscent of the paintings that represent a combination of skulls, glass (broken or not) or soap bubbles that multiplied in European art of the time. The fact that the objects that seduce us enclose the possibility of non-being makes them all the more dangerous for the person who desires them. Who knows if by seeking them, he will not find death rather than life? Spinoza develops this perspective by multiplying the edifying anecdotes that exemplify the fact that men lose their lives because of their greed or their taste for pleasure<sup>11</sup>.

To sum things up, the contradiction between desires, as it appears in the *Treatise on the Emendation of the Intellect*, requires regulation for two reasons. First, those desires are in permanent conflict between themselves, and as long as they are considered in themselves, nothing can totally overcome it, since this conflict is

described in the form of the excluded middle. Second, they can destroy the subject they are in, since this eventuality is implied by the principle of non-contradiction. Spinoza, like the Stoics, injects a *logic* of negation both in the moral issues he deals with and in the edifying examples he uses. To put it briefly, the young philosopher organizes his conception of the conflict around a series of successive homonyms: opposition is exclusion; exclusion is negation; negation is destruction. Under these conditions, it is essential to avoid the conflict of desires and the subject's death by establishing of a rule of life.

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This model, which applies two elementary logical principles to moral theory, becomes more complex in the *Short Treatise on God, Man, and His Well-Being*. When Spinoza deals with negation in the domains of metaphysics, he is led to develop his conception into a broader theory.

In one of the chapters dedicated to God in the *Short Treatise*, he proposes to refer all the events of Nature to a single substance, taking this substance to be the *subject* (*subjectum*) of all thoughts.<sup>12</sup> What is a *subjectum*? This term means that the substance is both the *substratum* of its attributes (it is what they are in) and the *causa essendi* of whatever depends on it (it plays a role comparable to that of an essence to its properties, or that of a cause to its effects). Therefore, an *infinite* *subjectum* should be conceived of as an affirmation without limits that would embrace everything: it is the substance to which all predicates relate. This also means that the *subjectum*, being affirmative, can in no way be negative (according to the principle of the excluded middle) and therefore does not accept either external nor internal opposition. In other words, from the substance's point of view, nothing can be contrary to anything, since all in God is affirmative.

If we consider now particular things, one can easily conceive of opposition and even mutual exclusion, since each and every one of them is distinctly defined without reference to the others, although they have a common cause. "God's true perfection, writes Spinoza, is that he gives all things their essence, from the least to the greatest"<sup>13</sup>, and therefore every particular thing is endowed with a singular essence which belongs only to it. As God is the cause of all essence his affirmative perfection passes to each of them; but since "the infinite cannot be composed of a number of finite parts"<sup>14</sup>, the particular things can be rationally considered for themselves, and then be opposed to one another inasmuch their natures differ. Ultimately, Spinoza articulates variation and negation as two facets of one single being: in God, everything is infinite affirmation; and in Nature, finite things are all positive in what regards their own natures, but can be negative in relation to others. Negation is relative, affirmation is absolute.

When one moves from ontology to moral theory, this posture leads to a radically amoral view on human behavior: "Peter must agree with the Idea of Peter, as is necessary, and not with the Idea of Man; good and evil, or sins, are nothing but modes of thinking (...)."<sup>15</sup>

The drawback of this first sketch of Spinoza's metaphysics is that it maintains a strong rigidity in the opposition between things, as they are conceived of according to their own nature. In particular, it is impossible to accept that two things at first opposed to one another might eventually come into agreement.

(...) if particular things have to agree with another nature, they will not be able to agree with their own, and consequently will not be able to be what they truly are.<sup>16</sup>

If all things owe their natures directly to God, all they can do is stick to those natures. The principle of non-contradiction forbids any evolution. Particular essences thus turn out to be fixed natures which cannot become anything other than themselves.

However, we must bear in mind that the *Short Treatise* is explicitly devoted to "ethics and the true philosophy". In this respect, the principle of non-contradiction has a great advantage: it makes it possible to provide a clear and rather appealing formulation to a difference – which Spinoza and his contemporaries considered fundamental – between virtuous and vicious men. In Spinoza's view, as well as his readers' and friends', it is indispensable to explain how good men are saved and how the wicked are damned.

We conclude that if they are so miserable who love corruptible things (which still have some essence), how miserable will they be who love honor, wealth, and sensual pleasure, which have no essence?<sup>17</sup>

As we can see, Spinoza refuses to attribute any "essence" to the three perishable objects, because he refuses to consider men who seek them as being anything but "miserable": pursuing them would be like chasing the rainbow. Therefore, these vain objects are described as ontologically empty, and they are also capable of annihilating those who seek them.

This thesis seems so strange that it is necessary to take a step back. How can a philosopher seriously support the ontological inconsistency of wealth? Obviously money does exist and one can have it. If a person desired a specific sum—say, 100 guilders—he could attain it. But desire for wealth in general has no definition or limit, so it lures the person on an endless chase that can never achieve what it seeks. What seems to the contemporary reader a kind of baroque hyperbole is thus a clever way for Spinoza to fulfil one of the requirements of a classical moral theory, which should include a doctrine of "salvation". By removing all essence from ephemeral objects of desire, Spinoza provides his readers with a rationalistic interpretation of the difference between the elect and the damned.<sup>18</sup> Moreover, his logical reformulation makes this difference entirely independent from any judgment from God, or from any retribution or punishment after death.

Thus, Spinoza's seemingly strange refusal to attribute an essence to worldly objects makes it possible for him to mark the difference between salvation and damnation (or between eternal life and nothingness) on a rational basis. To act in a

way which does not agree with one's essence is to be already dead, or properly speaking, to be nothing.

We can conclude this analysis of Spinoza's earlier texts by emphasizing that the logical matrix used by the young philosopher when he tries to articulate the negation between moral theory and metaphysics has a major philosophical benefit, which could be defined as a kind of *cognitive optimism*.

I think I have now indicated sufficiently, and proven, that it is only true belief or reason that leads us to the knowledge of good and evil. So when we prove that the first and principal cause of all these passions is knowledge, then it will be clearly evident that when we use our intellect and reason properly, we can never fall into one of those we are to reject<sup>19</sup>.

By reducing the mutual relations of our desires (and their relation to the true good) to a metaphysics of essences, Spinoza is now able to reduce moral theory (understood as how to prevail over our passions) to a theory of knowledge. In this context, he does not anymore need provisional morals, such as the one he had established, following Descartes' example, in the *Treatise of the Emendation of the Intellect*. The only thing we need to live a good life is to correct our ideas so that we do not remain prisoners of unfounded beliefs. When "passion" and "opinion" become synonymous ("it will be the same whether we use the word *opinion* here, or *passion*<sup>20</sup>"), the logic of fixed things is enough to escape error and preserve oneself from nothingness. A system of ethics based on very simple thoughts – an ethics based on geometry, for instance – becomes possible.

## 2. The mechanization of power relations

Spinoza's theoretical optimism, at least in its logical form, left several questions unanswered. Some of these difficulties manifested themselves during the year 1665 under quite extraordinary circumstances. First, Spinoza received from one of his readers, Willem van Blyenbergh, letters that draw his attention to difficulties which he had not contemplated before. Later, his meeting and exchanges with Christiaan Huygens would make him experience new problems, the formulation of which might, contrary to expectation, contribute to solving the old ones.

The correspondence between Spinoza and van Blyenbergh took place during a violent outbreak of plague. Officially acknowledged during the year 1663, the plague had already caused nearly 25,000 deaths in Amsterdam by 1664.<sup>21</sup> In this context, questions of sin, negativity, evil and destruction had become collective obsessions. The population was so feverish that on January 21, 1665, the General States declared an official day of "fasting and prayer in order to ward off the anger of God and the fire of pestilence."<sup>22</sup> During that epidemic, van Blyenbergh managed to contact Spinoza, who had taken refuge on a farm belonging to the family of his friend Simon de Vries. The questions van Blyenbergh asked Spinoza were therefore all but gratuitous. If evil is negative – van Blyenbergh summarizes –, and the negative a non-being, how can one even conceive things to get better or worse? This question places Spinoza in an impasse that an article by Andrea Sangiacomo has perfectly described:

As van Blijenbergh straightforwardly resumes, ‘nothing else pertains to an essence than that which it possesses at the moment it is perceived’ (Ep. 22: 829; G IV: 137). This position, as noted, undermines both the reality of transitions between different states of perfection – which Spinoza reduces to mere negations – and the same identity of the thing through time, because the thing’s essence is different in different moments. Not only is Adam’s sin not a sin – because evil does not exist – but Adam himself is not the same before and after his fall.<sup>23</sup>

In other words, Spinoza’s logicist model seems to have reached its limits. His binary approach, which opposed affirmation and negation just as being and not being, ignored *evolution* and thus proved itself incapable of providing a description of what actually happened in the study-case of Adam. When someone is no longer happy, does he/she not come to a situation which is worse than before? When van Blyenbergh rose this problem, Spinoza had not coined any concept yet which he could use to provide a convincing solution.

Just a few weeks after having encountered these difficulties (van Blyenbergh’s letter 20 is dated from 16 January 1665), Spinoza would return home to Voorburg. There, Christiaan Huygens had found refuge against the plague at his father’s house, not far from Spinoza’s. At that time, the great astronomer was passionate about a phenomenon he was the first to observe: when two pendulum clocks are placed next to each other, they come to synchronize their movements by “some sort of sympathy.”<sup>24</sup> In this regard, Filip Buyse writes:

It is not unreasonable to assume that Spinoza was informed about this spectacular phenomenon since (as his Letter 26 to Oldenburg makes clear) he visited Huygens in that period and discussed with him scientific matters. Moreover, as Huygens’ notes of his observations reveal, he was still actively engaged in studying the phenomenon of the “sympathy” after March 1665, certainly throughout April but also later, even during the month of November, the month Spinoza wrote his Letter 32.

Buyse’s study is important in several ways. First, it allows us to identify a precise and documented event which was probably discussed by the two scholars in a period between March of 1665 (when Spinoza returned to Voorburg) and May of 1666 (when Huygens left for Paris). Second, Buyse’s study marks the emergence in Spinoza’s thought of a question of “concordance” between the bodies which at first neither he nor Huygens could solve. In this respect, their perplexity sheds new light on letter 32, in which Buyse proposes to read the conversation between Spinoza, Oldenburg and Boyle concerning “how we know the way in which each part of Nature accords with the whole, and the manner of its coherence with other parts” as a commentary on Huygens’ experience. And finally, from a philosophical point of view, Buyse’s study emphasizes the importance of the pendulum model for Spinoza.



Although Spinoza did not use the pendulum clock as a model for a body or for nature in general, the physics of the pendulum nevertheless played an important role in his thinking in the *Short Treatise* as well as in the *Ethics*.

Buyse is prudent enough not to conclude that Huygens' experiment on the pendulums led Spinoza to rethink his approach to the physics of bodies. He doesn't need to; textual evidence from the *Ethics* show that Spinoza was engaged – in a period that started around 1662 and continued up to 1675 – in rewriting some extracts of his earlier works to insert in a geometrical philosophy. More precisely, certain parts of the *Ethics* give a metaphysical extension to certain sentences that the philosopher had written in the *Principia* as merely physical considerations. Let us consider, for example, this remark slipped into the *Principia* in a commentary on Zeno's paradox:

(...) we can never conceive a motion so fast that we do not at the same time conceive a faster one. Our intellect finds a contradiction in conceiving a motion so fast that there cannot be a faster one, no matter how short its course may be<sup>25</sup>.

In the *Ethics*, that observation is adapted and rewritten in the following way:

There is no singular thing in nature than which there is not another more powerful and stronger. Whatever one is given, there is another more powerful by which the first can be destroyed.<sup>26</sup>

What in the *Principia* was only a rule of movement is reformulated in the *Ethics* in such a way as to have a broader meaning. It is no longer a matter of speed, but of strength, and it gives an account not of the relations of movement and rest, but of the destruction of singular things. Of course, there is an important difference. One speed does not destroy another speed, but one thing can destroy another thing. But this difference helps to think what destruction is in Spinoza's philosophy: as Bayle had well understood it, it consists in *modifying* a thing (in such a way that it loses its own nature).

The important point here is to see that Spinoza's axiom no longer presents destruction within the model of logical negation, but accounts for destruction in terms of forces, from the perspective of a physical, kinematic model. One of the methods of writing which govern the *Ethics* consists in exporting the principles of Cartesian mechanics into metaphysics, or to rewrite the utterances first intended for physics by modifying them in a way which extend their validity and separate them from specific objects (bodies). This sort of extension has major consequences for the way Spinoza interprets the phenomena of opposition and concordance. While the young philosopher struggled between affirmation and negation, truth and falsehood, good and temptations, the author of the *Ethics* can describe a wide range of oscillations.

### 3. The oscillating affects

When Spinoza engages in the application of a “pendular model” to the study of the affects, he is convinced that such a conceptual matrix provides us with an approach to the affects which is more accurate than those the great ancient or modern moralists had been able to put forward until then. He writes with pride:

(...) no one, to my knowledge, has determined the nature and powers of the Affects, nor what, on the other hand, the Mind can do to moderate them<sup>27</sup>.

The key concept of this sentence, which justifies its assertion, is that of “power”. Spinoza had found the means of conceiving and studying power relations since the mid-1660s – the concept of “*conatus*” he found in Hobbes’ *Leviathan* encouraged him in that direction. For that reason, Spinoza believed that his own study of the affects surpassed all that had been written on the issue up to his time. In the *Political Treatise*, his latest work, he will even more explicitly define his approach to moral theory in reference to physics:

I’ve contemplated human affects – like love, hate, anger, envy, love of esteem, compassion, and the other emotions – not as vices of human nature, but as properties which pertain to it in the same way heat, cold, storms, thunder, etc., pertain to the nature of the air<sup>28</sup>.

In the *Ethics*, the problem of the diversity and mutual contradiction of our desires is then presented under an entirely different form from his previous treatises. Of course, the most important change that occurred along the way lies in the fact that Spinoza has now developed an original doctrine of the relationship between Thought and Extension, particularly between the human mind and the human body. This doctrine ensures the unity of all events that are conceived under one attribute or the other<sup>29</sup>. This means that the physical description of the relationships between the bodies which are part of the human Body has an immediate relevance to the ideas that compose the human Mind. It is under these conditions that the hesitations presented in the *Treatise on the Emendation of the Intellect* appear under an entirely new light:

(...) vacillations of mind for the most part arise from an object which is the efficient cause of each affect. For the human Body (...) is composed of a great many individuals of different natures, and so (...), it can be affected in a great many different ways by one and the same body. And on the other hand, because one and the same thing can be affected in many ways, it will also be able to affect one and the same part of the body in many different ways. From this we can easily conceive that one and the same object can be the cause of many and contrary affects.<sup>30</sup>

In this passage, Spinoza explains how an individual can experience contradictory affects. To do this, he considers it enough to refer to the constitutive

diversity of the human body, for the human Body is obviously one, although composed of diverse parts. Spinoza's conception of the human Mind reflects both this unity and this diversity: while the Cartesian mind consisted of a single and indivisible "*res cogitans*", Spinoza defines the mind as a composite idea made of partly contradictory ideas. How are these contradictions possible in the same mind? As an answer to this question, Spinoza can rely on the body, united in spite of the diversity of its affections, to break any theoretical resistance. In other words, his rewriting of the axioms of the physics in metaphysical terms leads him to *somatize* his conception of the individual.

On these grounds, the *Ethics* develops a study of the passions as a mechanics of forces. In particular, the confrontation of opposing affects is now susceptible to a resolution which the logicist model did not allow. This resolution appears through an axiom, introduced at the beginning of the fifth part:

If two contrary actions are aroused in the same subject, a change will have to occur, either in both of them, or in one only, until they cease to be contrary.<sup>31</sup>

This axiom is one of the most remarkable cases of the rewriting underlined above. It is the enlarged version of axiom XIX of the *Principia*:

When two bodies which have opposite modes come into contact with one another, either both are constrained to suffer some variation, or else at least one of them is.<sup>32</sup>

As the problem of the opposition appears in the *Ethics*, the roles of all its fundamental concepts have changed, compared to Spinoza's earlier presentations. Firstly, the *subjectum* no longer appears here as an ontological *substratum*, and even less as the *cause* of opposing actions, but rather as the metaphysical place of their encounter (*in subjecto*). Secondly, Spinoza's formulation does not oppose things or desires, but only actions. This is particularly clear since these lines are the rewriting of an axiom which concerned only the relations of motion and rest. Thirdly, unity does not appear here as a primary *datum* that would originate in a "nature" (as was the case in the *Short Treatise*). The "subject" appears to maintain his own unity not by virtue of the principle of non-contradiction, but rather because of a rule inspired by kinematics which guarantees that opposing modalities will "cease their opposition" exactly as movements synchronize.

Thus, Spinoza uses in the *Ethics* a variation on axiom XIX of the *Principia* in order to lay down the principles of a mechanistic somatization of the human, entirely emancipated from the Cartesian model. Furthermore, this axiom concerning the unifying action of the subject – now more accurately described as *the overcoming of oppositions in a subject* – is used in the *Ethics* only once, to sustain the demonstration of proposition 7 of part V. The proposition itself reads as follows:

Affects that arise from, or are aroused by, reason are, if we take account of time, more powerful than those that are related to singular things which we regard as absent.<sup>33</sup>

Spinoza now takes *time* into account to understand how things adapt themselves to one another. In a way, the purpose of the demonstration of this proposition should be to explain what the *Short Treatise* had already established – namely, how effective is reason to fight harmful affects. As we have seen, when passions were reduced to mental operations, a strong logic would have been enough to succeed in this struggle. The logical remarks, however, of the *Short Treatise* did not relate to time nor to duration. When Spinoza tries to do so, in E VP7D, the pendulum model becomes very apparent:

(...) an affect that arises from reason is necessarily related to the common properties of things (...), which we always regard as present (for there can be nothing which excludes their present existence) and which we always imagine in the same way. So such an affect will always remain the same, and hence (by axiom 1), the affects that are contrary to it, and that are not encouraged by their external causes, will have to accommodate themselves to it more and more, until they are no longer contrary to it.<sup>34</sup>

As it often happens in the *Ethics*, Spinoza adopts several successive angles in the same demonstration. His first step consists in establishing that even in an existence where particular things are changing, we experience an emotional permanence. For something which is always present inspires the same affect. And this is the case of the “common properties”. Therefore, there is an affect that remains permanent, even in our changing lives.

Spinoza’s reasoning then turns on his axiom (the one that states that any opposition in a subject will eventually be overcome) to infer that the constant affect, which is associated to “common properties”, will eventually force the others to adjust. We should therefore conceive the gradual harmonization of the affects within the model of a progressive reconciliation of movements.

However, at this point, one must admit this use of the axiom of the fifth part is not completely convincing. Since contrary movements can coexist in the same human body, as the text of EIIP7S has shown: why could contrary affects not be maintained as such in one body, even taking time into account? The multiple contradictory relations of forces, made possible by the composition of the human body, should limit the validity of the axiom. The diversity of the parts of our body allows it to feel contradictory affections without being destroyed. Why then should we admit that our affects would necessarily overcome their opposition in time?

At this stage, we are more or less in the situation in which Huygens found himself when he observed the synchronization of the pendulums movement for the first time; we cannot see the necessity of a progressive accommodation of “contrary actions”. In this context, it is worth recalling the three elements in Huygens experiment which Filip Buyse takes to summarize. First, “synchronization is about

systems which have a rhythm of their own which is mutually adjusted". Second, "there should be a form of interaction between the systems. However, this interaction has to be 'small' so that the systems do not completely lose their autonomy". In the case of pendulums, Huygens finally understood that they communicated their movement by the mediation of the vibrations of the table. Thirdly, "the pendulums have the capacity to adapt themselves so that they form a unity." What do these three remarks about the autonomy of systems, the lightness of their interaction, and the constitution of a superior unity, teach us as to how rational affects can triumph over others?

First, they make us perceive the specificity of the case presented by E VP7D. Spinoza does not study the relationship between two complex kinematic-like systems (rational affects against non-rational affects, as the text of the proposition puts it); he rather studies the equivalent of a system with constant movement ("such an affect will always remain the same") confronted with some other complex one. The model of this demonstration would be better represented by a pendulum banging periodically into a wall (even if that wall is itself in constant motion).

This observation makes Spinoza's statement more evident. By taking time into account, he endeavors to describe the progressive aspect of moral improvement (a question he blames the Stoics for failing to address), and this improvement is conceived of as an interference between various affects and a constant love for what Spinoza once called "the true good", and which the subsequent propositions will define as "the intellectual love of God".

The hypothesis that Spinoza conceived of the progression towards supreme beatitude according to the model of communication of movements, seems to make the progressive adaptation of affects to the love of God a bit clearer. According to the oscillatory model, all emotional movements, when confronted with the most stable affect, will weaken inasmuch as they are not convenient or coherent with this love. Any desire for any particular thing that cannot be put into the service of seeking the intellectual love of God might indeed disappear. Eventually, the love of God always ends up overcoming passions since, unlike these, the cause that nourishes such love can never cease, and so "this Love toward God must engage the Mind most".<sup>35</sup>

Under these conditions, it becomes clear that the necessity of overcoming the affective divisions involves a certain *subject*. This term did not appear in EIIIP17S, when Spinoza stated the possibility of contradictory affections, because the body was then described as the sum of its parts, "composed of a great many individuals of different natures." On the other hand, the axiom of the fifth part, written *ad hoc* for this demonstration, singularly highlights the notion of *subject*. Eventually, this concept serves the ultimate purpose of the *Ethics*, since in the permanent affect that overcomes division, human and divine existence (reflecting Spinoza's two-level metaphysics) are now united:

The Mind's intellectual Love of God is the very Love of God by which God loves himself, not insofar as he is infinite, but insofar as he can be explained by the human Mind's essence, considered under a species of eternity; i.e., the

Mind's intellectual Love of God is part of the infinite Love by which God loves himself.<sup>36</sup>

It becomes here obvious that the kinetic and oscillatory models Spinoza refers to are articulated with the desire to think a new form of beatitude. As such, the conceptual matrix inherited from physics has a descriptive value, of course, and it allows Spinoza to provide throughout the third and fourth parts of the *Ethics* models for the affects which are often satisfactory. But that matrix also has a spiritual dimension through which the human subject finds a way of uniting with the infinite – not as an external object, but as in the very principle of process we could call *subjectivation*. Through the understanding given by the mechanist model, everyone can access a sense of oneself and of one's own determination which allows to unify one's own movements. It allows human beings to overcome their own contradictions and to assert more and more the existence of a force that knows no limit.

At this point, the current essence of individuals is adequate to that part of their operations they properly conceive. Therefore, the difference between good and evil ceases to be as static as it used to be in Spinoza's early years. Virtuous and vicious men no longer oppose each other as *beings* and *non-beings*, but as *trajectories* defined by different destinations – the ones advancing towards more and more “freedom”, the others drawn away in self-destructive servitude. The theological difference is saved, although it has been transformed, following the rules of movement, into tendencies towards better or worse.

### Conclusion

What the young Spinoza called the conflict of desires, the experienced philosopher described in terms of contrary actions that can accommodate to each other. If Spinoza did not always approach the difficulty the same way, it is not only because he found himself crossing the lines between metaphysics and moral theory. It is also because the difference of these fields became more complex due to the diversification of the tools of Reason itself. Whether one refers to a logical or to a physicist model, the consequences vary. Thus, the increasing importance of the latter in Spinoza's successive writings sheds light on the fruitful interferences between Spinoza's own philosophical evolution and the works of other philosophers, such as Willem van Blyenbergh and Christiaan Huygens.

This evolution, at the same time, highlights the flexibility of Modern Reason, which borrows its models from everywhere, regardless of the specificity of the subject matter. In this respect, the relationship between the movement of pendulums and human affects illustrates the complex relationship between the different branches of natural philosophy. Without knowing it, the Cartesian physicists might have provided Spinoza with a matrix from which he could describe moral progress more adequately than by resorting to the logical tools used in his early works.

## References

- <sup>1</sup> Bayle, P., *Dictionnaire Historique et Critique* (Rotterdam: R. Leers, 1697), 261. In English *The Dictionary Historical and Critical of Mr. Peter Bayle*, ed. Des Maizeaux (London: D. Midwinter at al., 1738), vol. 5, 211: “We commonly say, quot capita tot sensus, as many men so many minds; but according to Spinoza all the minds or thoughts of men are in one head.”
- <sup>2</sup> Bayle, P., *Dictionnaire Historique et Critique*, 261. In English: “According to Spinoza’s system, whoever says “The Germans have killed ten thousand Turks”, speaks improperly and falsely, unless he means God modified into Germans has killed God modified into ten thousand Turks” (The Dictionary Historical and Critical of Mr. Peter Bayle, which volume??? 211).
- <sup>3</sup> Melamed, Y., “Omnis determinatio est negatio”: determination, negation, and self-negation in *Spinoza and German Idealism*, ed. E. Förster and Y. Y. Melamed (Cambridge: Cambridge University Press, 2012) 175 – 196, on. 176.
- <sup>4</sup> Buyse, F., *Spinoza and Christiaan Huygens: The Odd Philosopher and the Odd Sympathy of Pendulum Clocks*, in this volume.
- <sup>5</sup> Spinoza, B., *Treatise on the Emendation of the Intellect*, in *The Collected Works of Spinoza*, vol. I and II, ed. and trans. by E. Curley (Princeton: Princeton University Press, 2016), TdIE 6, [II/6].
- <sup>6</sup> Van den Enden, *Philedonius*, act I, scene 3, in *Philedonius 1657: Spinoza, Van den Enden e I classici latini*, ed. Proietti, O. (Macerata: EUM, 2010), 197.
- <sup>7</sup> Van den Enden, *Philedonius*, act II, scene 1, in Proietti, O., (2010), 229.
- <sup>8</sup> Van den Enden, *Philedonius*, act II, scene 1, in Proietti, O., (2010), 43.
- <sup>9</sup> In Aristotle’s words: “It is impossible for the same attribute to belong and not belong at the same time and in the same relation to the same thing.” See Aristotle, *Metaphysics*, trans. W. D. Ross (Oxford: Clarendon Press, 1924), 2 vols, Book IV (Γ), chap. 3, 1005 b 19-20.
- <sup>10</sup> Spinoza, B., *Treatise on the Emendation of the Intellect*, TIE 9, [II/7].
- <sup>11</sup> See Spinoza, B., *Treatise on the Emendation of the Intellect*, TIE 8, [II/7].
- <sup>12</sup> “He alone [30] must be the subject of what I affirm of him, so that if he did not exist, I would not be able to affirm anything at all of him, though I can do this of other things, even if they do not exist. [I find] also that he must be the subject of all other things”. Spinoza, B., *Short Treatise*, I, 1, § 9, ST [I/17].
- <sup>13</sup> Spinoza, B., *Short Treatise*, I, 1, § 9, ST [I/17].
- <sup>14</sup> Spinoza, B., *Short Treatise*, I, 1, § 9, ST [I/18].
- <sup>15</sup> Spinoza, B., *Short Treatise*, I, 1, § 9, ST 16, [I/43].
- <sup>16</sup> Spinoza, B., *Short Treatise*, I, 1, § 9, ST 16, [I/42].
- <sup>17</sup> Spinoza, B., *Short Treatise*, I, 1, § 9, ST II5, [I/63].
- <sup>18</sup> Spinoza generally prefers to express this by quoting the Bible and using traditional metaphors. As he writes to van Blyenbergh, for instance: “Indeed, since they do not know God, they are nothing but a tool in the hand of the master, that serves unknowingly, and is consumed in serving. The pious, on the other hand, serve knowingly, and become more perfect by serving.” (Letter 19, in Spinoza, B., EP 19 [IV/94]). Years later, in a letter to Oldenburg, he quotes a statement from the Apostle Paul, according to which men are in God’s power “as clay is in the power of the potter, who, of the same mass, makes some vessels for honor, and others for dishonor” (Paul, Rom. 9: 20-21, quoted by Spinoza in Letter 75 to Oldenburg, in Spinoza, B., E 75 [IV/311a]).
- <sup>19</sup> Spinoza, B., ST 14, [I/77].
- <sup>20</sup> Spinoza, B., ST [Appendix II], [I/117].
- <sup>21</sup> Noordegraaf, L. & G. Valk, *De Gave Gods. De pest in Holland vanaf de late Middeleeuwen* (Bergen: Octavo, 1988), 230.
- <sup>22</sup> Meinsma, K.O., *Spinoza et son cercle* (Paris: Vrin, 1984), 160.

- <sup>23</sup> Sangiacomo, A., “Before the conatus doctrine: Spinoza’s correspondance with Willem van Blijenbergh,” *Archiv für Geschichte der Philosophie* 98/2 (2014): 144 - 168.
- <sup>24</sup> Buyse, F., (2017),
- <sup>25</sup> Spinoza, B., DPP, [I/193].
- <sup>26</sup> Spinoza, B., EIVA1, [II/210].
- <sup>27</sup> Spinoza, B., EIIIIP, [II/137].
- <sup>28</sup> Spinoza, B., PTI4, [III/274].
- <sup>29</sup> I have elsewhere described the so-called “parallelism” as a *perspectivism* governed by “algebraic proportion”. See Rovere, M., “La tentation du parallélisme : un fantasme géométrique dans l’histoire du spinozisme,” in *La théorie spinoziste des rapports corps/esprit et ses usages actuels*, ed. C. Jaquet (Paris : Hermann, 2009), 49-70.
- <sup>30</sup> Spinoza, B., *Ethics*, III, 17, scol., EIII17s, [II/154].
- <sup>31</sup> Spinoza, B., *Ethics*, V, axiom, E VA, [II/281].
- <sup>32</sup> Spinoza, B., *Ethics*, V, axiom, p. E VA, [II/281].
- <sup>33</sup> Spinoza, B., EVp7, [II/285].
- <sup>34</sup> Spinoza, B., EVp7, [II/285].
- <sup>35</sup> Spinoza, B., *Ethics*, V, 16, EVp16, [II/290].
- <sup>36</sup> Spinoza B., *Ethics*, V, 36, EVp16, [II/302].