OLIVA SABUCO AND THE MATTER OF THE MATTER

Steven BARBONE*

Abstract. This exploratory study investigates the work of Oliva Sabuco de Nantes Barrera (1562–1626?). Sabuco's major work, New Philosophy of Human Nature neither Known to nor Attained by the Great Ancient Philosophers, which Will Improve Human Life and Health (1587), in many ways foresees the Cartesian system but avoids some of its problems even though or perhaps because her philosophical system rests heavily on the foundations of hylomorphism. The mind/soul is separate from the body, but the two function as a holistic unit. Mind and body affect and are affected by each other within or through the pia mater. This study's aim is to summarize Sabuco's thought and to indicate how her work may be able to address or to lend support to contemporary philosophical concerns.

Keywords: Sabuco, chilo, hylomorphism, individuation, mind-body problem

Many, perhaps most, contemporary philosophers will not have heard of Oliva Sabuco de Nantes (y) Barrera (1562-1626?) nor of her tremendous 7-full-treatises-ina-single-volume opus, Nueva Filosofía de la Naturaleza del Hombre, no conocida ni alcançada de los grandes filósofos antiguos: la qual mejora la vida y salud humana (1587) rendered in English as New Philosophy of Human Nature neither Known to nor Attained by the Great Ancient Philosophers, which Will Improve Human Life and Health. 1 Many putative—and very plausible—reasons abound for her absence in the canon and in the classroom: Eileen O'Neill suggests that it could be that certain political, social, and possibly intellectual interests were at play in the early nineteenth century to erase women's contributions-Sabuco's included—to philosophy in order to prevent women's "dismantling the male hegemony";2 Carlos G. Noreña weighs in that sixteenth-century Spanish philosophy is too often "stereotyped" or "caricature[d]" as either mysticism (Teresa of Avila or John of God) or high scholasticism (Francisco Suárez or Luis de Molina) so that contemporary philosophers often ignore Renaissance Spain's important contributions to humanism, health, and education;³ and Maria Vintró and Mary Ellen Waithe note that it was only as recently as 2003 that the work has most definitively been attributed to Oliva Sabuco since in more recent centuries it had been attributed to her father, Miguel Sabuco, who took full credit for the work in his last will and testament⁴ even though in the time more immediately after her death, la Doña Oliva was widely recognized as the genius behind this work.5

044, USA, email: barbone@rons

^{*}San Diego State University, Philosophy Department, 5500 Campanile Drive, San Diego, CA 92182-6044, USA, email: barbone@rohan.sdsu.edu

Whatever the reason or reasons for Sabuco's absence from the contemporary canon, current interest in her work is beginning to grow in the English-speaking world, especially after 2007 English translation by Mary Ellen Waithe *et al.* This was soon followed by the 2010 publication of a newer translation, *The True Medicine*, by Gianna Pomata.⁶ Pomata's title for Sabuco's work is rather telling since it highlights Sabuco's philosophy as medicine though not specifically just for the mind but perhaps for the entire human organism.⁷ Indeed, interest in the body and its health, especially as it was imagined to be a model for the health of the civil state and a reflection of the natural condition, seemed to hold a special fascination among Spanish Renaissance writers.⁸ In the last century, moderate interest in Sabuco's work had been ongoing, but it is mostly confined to Spanish literature and this last-mentioned theme. In Anglophone literature, apart from several essays penned by Waithe and her associates, work on Sabuco has been sparse, and much has focused on the issue of authorship.⁹

While this essay does not attempt to adjudicate the reasons for Sabuco's absence from the present canon nor estimate the value of philosophical work done during the Spanish Renaissance, the essay overviews Sabuco's conception of human nature and—in the interest of making her thoughts more known—how the human mind and body operate and function. While Sabuco did not explicitly seem to address the problem of individuation among humans in any explicit way, this study suggests where such a Sabucean principle might lie.

Sabucean Nature

Like so many others writing in her time period, Sabuco sees humankind as a miniature model of the universe within the larger universe itself so that there is "a single and general conception of *Nature*, in which cosmology and *human physiology* shared a unique and identical meaning as particular realizations of a *Universal physis*." Humanity is the microcosm, and we can learn about our own nature through the study of the whole of nature, the macrocosm, especially by careful observations of the natural world around us. Likewise, the study of human nature can help us better understand not only the entire world but also how we might set up our cities and social policies. Atilano Martinez Tomé remarks on this point in his prologue to his edited volume of Sabuco's work:

Doña Oliva Sabuco lives and synthesizes a period of History in which humankind was considered the measure of all things, the endpoint and the starting point in artistic creation, in urban design, and in the planning of livelihoods, and in the thoughts of the learned.¹¹

It is important to reflect on this comment: humankind, though it is the microcosm, is still the beginning, end, and measure of the macrocosm. This may be taken to mean that Sabuco does not envision humankind as less worthy or less important than the natural world. Humankind and nature both are a cosmos to themselves, and each reflects the other. At the same time and despite our special place within nature, we must not therefore imagine that somehow people are above or outside the natural realm. Again, Tomé reminds us that:

Indeed, what we want to highlight, neither more nor less, is her hierarchical, ordered conception of a metaphysical flow of nature in which humankind occupies a prominent place, but one that is always inside nature, never outside it and much less contrary to it.¹²

Sabuco's understanding of human nature is naturalistic and seems to be empirically based upon the study of the human body as well as observation of the non-human natural world, especially the operations of the moon and the sun as well as plants and non-human animals. Anyone—certainly or especially not merely the learned of the academies whose theories often blind them to the true study of nature—with senses can uncover nature's ways through careful observation. Perhaps this may explain how it is the Sabuco's philosophy mostly is transmitted through the dialogues of three simple shepherds—Antonio, Veronio, and Rodonio—rather than philosophers or other learned men since shepherding requires a keen eye for observation and shepherds were not taken to be especially well intellectually developed. 4

Further, for Sabuco, philosophy is an empirical study to gain knowledge and it is also medical philosophy to liberate humanity from unnecessary suffering, to live a healthy life in peace and harmony, so each all people might live up to "their full potential." For this reason, Sabuco's philosophy often reads as more a guide to practical, healthful living than what most would take as a philosophical treatise. While this may seem to speak against Sabuco's place within any philosophical canon, for her as for many others of her period, because the human body is a mirror of the entire natural universe, it is proper to natural philosophy to investigate the whole of nature as well as the functioning of the human body.

Among the first things to be realized from the contemplation of what nature presents is that as the macrocosm must have a (divine) Prince to direct all, so too does the microcosm of the human being have its own prince who directs the body's movements, and this prince Antonio describes as "the understanding, reason, and will, i.e., the soul [el ánima] that descended from heaven and resides in the head, divine member and responsible for all body movements." Further, as created subjects work to serve the divine Prince, so too within the human brain we find that there is a ruling part, which is housed in the brain's prime "cell" ("celda") in the forehead and is served by those in other "cells" (we might better understand "rooms" or "quarters") that act as housemaids to the "prince" who rules therefrom. 17

The brain rules over the body and its functions through the oversight of the production of and the regulation of "chilo," which seems to be a term special to Sabuco; indeed, her translators do not translate it, and neither does this study offer an English alternative. Chilo is not chyle nor white blood cells nor animal spirits nor lymph. It is the whitish cerebrospinal fluid produced in the spinal column, but Sabuco seems to believe that this is identical to "that milky secretion taken up by the lacterals during digestion and carried by the lymphatic system through the thoracic duct into the circulatory system." Sabuco is very explicit about her claims regarding chilo:

Chilo is the white fluid of the brain. It is the milk of Mother Moon, suited to the form [of the living thing]. It causes the growth of every living thing in continuous succession [of generations]. The more the chilo is suited to the form ["human"], the more subtle and penetrating it becomes [and] the more swiftly if ascends through the tissue of the skull and its fissures, up to the crown. Once there, [chilo] produces better biological function and growth. The thicker and more terrestrial, viscous, and coagulated [this chilo] is, the more sluggish it becomes in its ascent [from the core of the brain to the skull]. [...]

Blood is the son of the white *chilo*. [It is nothing but] white *chilo* reddened by three processes.¹⁹

That Sabuco should focus so much on chilo is worth noting. It was the Renaissance thinkers who formulated the notion that would become popular in the 17th century that transmission of the nervous impulse (what the later natural philosophers will identify as "animal spirits") is through a nervous fluid, succus nerveus; this notion first found in Sabuco.²⁰ Chilo's roles thus are multiple: it hydrates the brain; it is sent by the brain to other organs to nourish them and to make them function; it becomes milk or semen; it is "reddened" in the liver or heart or spleen to become blood; it is the cooling factor—not the heating factor—of the body. Since chilo is lunar-based, it is cool and moist, and this is what makes the body function well. Sabuco, therefore, is at odds with Aristotle and Hippocrates who imagined that male superiority is marked by the male's being warmer and drier while females are cooler and moister. In fact, Sabuco denies that either sex is superior, but chilo is certainly related to the cool and moist and thus the moon, which is usually associated with the feminine, rather than the hot and dry, which normally is a masculine attribute and is related to the sun. Indeed, because chilo is cool, not hot, this upends certain important characterizations of the difference between males and females according to the ancients. Even further, Sabuco maintains that though the sun produces males while the moon produces females, 21 the brain, which houses the soul, "faces" the moon, but the subservient heart is inclined toward the sun.²²

That *chilo* is moon milk is evident from the morning dew; this moon milk is moist and airy, but it is more watery at night and more airy during the day. The constant back and forth of lunar *chilo* to and from water and air explains tides and fountains.²³ Humans take in lunar *chilo* because this "moon water," or rarefied air, is absorbed by plants and non-humans, both of which are then ingested by humans. Once ingested, it is taken from the stomach to the brain, where it is processed before being distributed throughout the body. The heat of the human body and its digestive juices destroy the lunar *chilo*, but the human body is able to transubstantiate lunar *chilo* into human *chilo* in the brain because of the presence of recollected species,²⁴ which are neither Platonic Ideals nor exactly Aristotelian forms but are more akin to the intelligible species of the scholastics.

Keeping in mind that human being is a microcosm within the macrocosm, Sabuco sees a strong correlation between lunar *chilo* and human *chilo*. As the moon provides *chilo* for the life of the world, human *chilo* is central for human life. As the

moon waxes and wanes producing more or less lunar *chilo*, so the powers of both the brain and the body increase and decrease due to the changing amount of human *chilo*. As the sun warms the earth and destroys lunar *chilo*, the human heart and the stomach's digestive actions warm the body but destroy lunar *chilo*. Evaporation of the moist, which occurs during the heat of day, is like human *chilo*, which ascends to brain mostly at night due to body's heat during the day. In extreme heat, the lunar *chilo* is driven from even the deepest caves, which then warm up, and so likewise excessive heat in the body (fever) is a sign of waning human *chilo* and thus severe illness.²⁵ *Chilo* is a special nerve fluid—when it comes from brain in right amounts, we are improving (happy, healthy); when it is dried up, we are worsening (sad, sick, dying).²⁶

In short, once the lunar *chilo* has been converted into human *chilo*, it travels up and down spinal column from the brain at its stem and then is distributed throughout the body. We might imagine this as a sort of hydraulic system for hydration and dehydration of the brain and the body; if there is too much or too little *chilo* in the brain, intellectual functions are impeded; if the brain is unable to provide *chilo* to the body, the body suffers. This is why it is imperative to understand how the human body fits within nature so that we can treat it naturally, not so much to conserve a certain balance of hot-cold-moist-dry as per the ancients but to maintain the right amount of *chilo*—the body's fluid—as we must do with our car's fluids. As a car will malfunction without the proper fluid levels, so too will the body suffer illness, distress, and pain if there is not the proper level of *chilo*.²⁷

It is neatly a matter of mere hydraulics and mechanics, and while details vary, this general overview of the functioning of the human body seems to prefigure the mechanical and hydraulic view developed by the early modern philosophers of the next centuries. Most of Sabuco's work concerns how to maintain the right level of fluids at the right time through diet, activity, scheduling, etc. or how to restore the right level of *chilo* so that the *chilo* may operate correctly and efficiently throughout the body. Sabuco claims that important advances in medicine and even psychology depend on our knowledge of the role of *chilo* since this knowledge allows for the effective treatment for many types of what we today recognize as psychological ailments and affective disorders often caused by some organic disturbance within the brain or nervous system rather than some sort of spiritual corruption of the soul or actions of malevolent spirits.

Under Sabuco's view, the brain is in charge of the body, and it receives sustenance (during sleep) from rest of body.²⁹ We might, therefore, imagine the brain as a kind of sponge that is divided into fragments and fissures that aid it to "water" the rest of the body; these fissures and convolutions are not, Sabuco claims—based on her readings—pace Aristotle, folded into the brain in order to prevent headaches.³⁰ Sabuco is never long to criticize what she holds to be the ancients' positions, especially in a case like this where she believes such a mistaken notion may be harmful to the treatment of any person's ailments.³¹ The brain regulates the flow of *chilo* through what we know as the pia mater (what Sabuco calls "the brain marrow membrane").³² It is at the pia mater that soul-body interaction takes place through *chilo* at the dura mater, and these coverings must reach the base of skull for the best physical-emotional-

mental health; if they shrink (perhaps due to dehydration, age, or injury), there is decay in either or both the body or soul. Sabuco even recommends surgery to attach these to the base of the skull to help those who otherwise suffer some deficiency of *chilo*'s flow.³⁴ The pia mater and dura mater extend to become the esophagus and stomach, so what is ingested directly affects the brain (and vice versa).³⁵ If the pia mater should be injured, there is impeded mind-body interaction.³⁶

Recognizing that the head is the superior part of the human being, Sabuco postulates her model of humankind as an inverted tree. In Sabuco's thought, the head is like roots of a tree, and it sends nutrition (*chilo*) to rest of body. It is cool (like soil), and though heat is produced in heart, there is no fire in body, another error postulated by the ancients. ³⁷ The *chilo* extends to the outer limbs of the body, which then produce the "fruits," i.e., either the behaviors, which are wanted by the soul, or semen, which is necessary for reproduction.

A short, but necessary, digression on reproduction: Sabuco claims that understanding the principles of reproduction is another area where the ancients gaffed on a number of points. We are produced by two seeds, male and female, but these vary in strength from case to case.³⁸ There are both male and female semen; though female semen mixes with blood, usually both male and female semen are needed for reproduction even though on occasion, as we observe in nature, only the female type is needed as we see in plants that reproduce without the male (e.g., garlic and other bulbs).³⁹ The offspring takes on the morphology of the stronger (which is not necessarily the male) semen type, but it still takes characteristics from both. For this reason, prenatal—or perhaps even more precisely, pre-coital—nutrition of both the mother and father matter.⁴⁰

To return to the discussion of soul's relationship to the body, Sabuco insists that while the soul and body are separate and distinct entities (not substances), the soul operates on the brain and thus the body's motions. Here is where we might see Sabuco's somewhat anticipating Descartes: the pia mater (along with the dura mater) plays an analogous role to the pineal gland in Descartes' philosophy since it is the site of the soul-body interaction.⁴¹ It is not important in this essay to determine whether the pineal gland or the dura mater should be a more likely site for any putative soulbody interaction; what is worth underlining is that Sabuco prefigures Descartes in placing any such interaction in the brain rather than the heart. On the other hand, Sabuco does not anticipate Descartes in that while she rejects so much of the ancient philosophy, she still holds fast to a robust form of hylomorphism. Sabuco's human being is not two separate and distinct substances but only one composite substance.⁴² We are at rock bottom a "psycho-corporeal unity." 43 We do not have matter without form nor form without matter; the human being requires that matter and form be joined so that for any human, "Existence and essence are one," that is, there is no human without the body, nor certainly is there any human without the soul.⁴⁴ Death comes to the human being as its soul (ánima) weakens and becomes debilitated, and as a result, the brain is no longer able to keep the body, whose fibers have begun to dry up and to wither, nourished with the life-giving chilo.45 Death, then, is a natural end and neither a fault of nature nor a divine punishment but a natural occurrence that belongs to our own nature as much as it belongs to the natures of plants, non-human animals, and even to the stars and planets.⁴⁶

Such claims, easily enough, seem to run afoul of orthodox Christian doctrine, and Sabuco's work was often "corrected" even in her own lifetime by various offices of the Inquisition, which often led to different versions of the same edition having different passages crossed out. More commonly, there are marginalia entered by individual scribes for different committees of the Inquisition that guide the reader's interpretation of some passages.⁴⁷ The work was republished in 1588 (with typographical corrections), and then again in 1588, and then in 1622, and then every century since.⁴⁸ It does not seem, however, that it was this claim (among others) that bothered the Church hierarchy, since this understanding of human nature is not too far astray from Thomas Aquinas' claim that the sensitive soul (ánima) corrupts with the human animal while the rational soul remains incorrupt. Sabuco could claim (though I do not find such a claim within her work) that the soul is re-created at the time of the general resurrection, and this might have sufficed to have kept her in the Church's good graces. At the same time, there is some evidence that Sabuco does posit something that we might understand as soul (alma) in the more traditional and religious sense:

Rodonio. Why is it, Señor Antonio, that most animals carry their head down looking at the ground and humans carry it high, always up looking toward heaven?

Antonio. Because the origin and birth of the human soul [ánima] came from heaven, humans remained in the standing position, their head up, as though they were hanging from [heaven], just as plants' roots rested upside-down in the ground. [The soul] took its primary seat and chair inside the head and brain of humans. There, inside the royal palace where the divine soul [ánima] necessarily exists, the creator of nature built three halls (which are the three cells of the brain core). [Sabuco describes the places of the five senses within these cells. ...] At the highest point, [the creator] put two glass panes or windows to the soul [alma]. They are the eyes. [The creator put them there] so that by opening those panes, humans could see their heavenly home.⁴⁹

It is this passage where we see a soul (*alma*) that has a religious connotation rather than a merely animating one. We also see that the human or rational soul (*ánima*) is come from heaven and is divine. This may be what separates humans from non-human animals since both humans and non-human animals are sensate and impassioned.⁵⁰ Waithe (1989) further holds that the brain, which houses this soul (here we might specify *alma*), is thus the locus of rational, psychological, physical, and moral personhood.⁵¹ Talamo sees that because the intellectual soul is in the head and because non-human animals lack it, this is the sign of human immortality.⁵² There is, alas, a price to be paid: our rational soul provides us with the ability to feel the sad effects and affects of the passions and to be anxious about the present, past, and future, but it also provides the rationality and will to combat these afflictions.⁵³

Otherwise, we would be more like the non-human animals, which live naturally and die naturally without sickness because they do not give great attention to emotions.⁵⁴

There is yet something more to being human, and this is that according to Sabuco, we alone of all the animals can practice the virtue of temperance "because the understanding, a God-given temporal aspect of the immortal soul [ánima], deliberates, and then temperance acts upon the will. Other animals cannot do this." Humans are different in kind, not degree, from other animals. Sabuco notes that "Happiness consists in prudent choice: in knowing how to choose the mean in all things." Humans alone can figure out the mean, and this is what it means to be human, so there is something distinct about us *qua* humans. There is, then, a way to distinguish between humans and non-humans, but does Sabuco have any means for explaining human individuation?

In the short digression on reproduction, we find a clue, and given Sabuco's hylomorphic position, there ought not to be much surprise. There is no difference among human souls, that is, there is one type of universal human soul, and all people have this one kind. It is the matter, then, that individuates different humans. Both male and female semen are needed for reproduction, and the offspring will take on the characteristics of the stronger seed. It is not, to repeat the point made above, a question of the form of the seed but a matter of its matter insofar as the paternal matter and the maternal matter join to become what Sabuco calls a "third thing" (una cosa tercera).⁵⁷ This explains how it is that intelligent men can father stupid children or that brave men may have cowardly sons. The quality of the seminal matter is directly related to the food eaten by the mother and father, so good food consumed in the right amounts at the right times by the parents will bring about good offspring while if they were to ingest unhealthy food, their offspring will certainly suffer defects of body and/or soul. This is the case because the soul can develop only as well as the body it commands is able to absorb and to use the chilo distributed by the brain through the pia mater. It becomes imperative, then, for those intending to marry to consider carefully their intended's characteristics along with their intended's parents' characteristics as well as to ingest a great variety of healthful foods to provide any future offspring with enough matter of the right kinds to develop well. Sabuco, again never slow to point out the errors of the ancients, notes that differentiation of offspring is not due to the partners' imaginations during the sex act, or the position of the stars, or whether the (male) semen comes from the right or left testicle. On the other hand, the sun has a role to play in the procreation of males while the moon's presence will ensure female offspring.⁵⁸ Still the same, concerning the offspring, it is not the manner but the matter of coitus that will determine the individuating features. Individuation among humans, then, is rather surprisingly uncomplicated since it rests entirely on material conditions, most specifically those at play just prior to and at the time of conception.

Concluding Remarks

Oliva Sabuco's philosophy at best likely strikes many of us as an odd relic of pre-modern times or at worst as just plainly bad anatomy and science. A theory of individuation, while complete enough, seems almost too simple to be metaphysically interesting. In fact, it seems almost contemporary. At the same time, Sabuco's contributions ought to be brought to the contemporary philosophical table. Sabuco clearly pre-figures Descartes and other early modern philosophers in putting the soulbody conjunction in the brain rather than the heart, yet her hylomorphic stance helps her avoid some of the problems of Cartesian dualism because, for Sabuco, the soul and the body are not separate substances between which interaction is metaphysically impossible. Of course, we in the 21st century expect her to be able to explain how it is that the soul still operates on and is operated on by the body, but this simply is not really a problem she can consider since it is her hylomorphism that undercuts the question. We live on this side of the Cartesian mind-body split; we almost naturally (perhaps unnaturally for Sabuco) assume that the body and soul are distinct and separate substances, which we then have to struggle to explain their supposed interaction. For Sabuco, it would be absurd to imagine the soul without the body or the body without the soul, so there really is nothing to explain insofar as any putative interaction is concerned. It might be like wanting to understand the relationship between the lightening's flash and the lightening itself and then becoming frustrated because once clearly and distinctly conceived separately, they cannot be put back together. Perhaps—and this suggestion is far from original—one way to help solve the contemporary so-called "mind-body" question is simply not to ask it in the first place. Because Sabuco's human is an organic unity rather than two separate substances, there is no interaction left to explain. We are neither a mind that happens to be embodied nor a body that happens to be animated: we are, as noted above, a psycho-corporeal unity, and, to use a phrase found in more contemporary literature, extended minds.

Sabuco also pre-figures the modern period in offering a robust mechanical view of the world and of human workings. Without a doubt, she makes some serious blunders in her descriptions of the human body and its functioning, but the devil is always in the details. The overall schema she seems to get correct: there is an organic relationship between the brain and body, between the brain and the body's affects, and this does occur through some sort of physical medium or media. Sabuco calls it "chilo" and confounds it with many other body fluids and their functions. Still the same, she is on the right track, since all things being equal, chilo is a better explanation for the body's movements and affects than are spiritual forces. The successful medicalization of contemporary psychological and affective disorders seems to bear out Sabuco's position that when we treat the body, we are treating the soul.

Sabuco's account of reproduction also deserves some attention but not so much for its claim that it entails both male and female semen. Though such a claim does seem to anticipate the mid-17th-century discovery of ova and their contribution and necessity to reproduction,⁵⁹ it merits highlighting for what it seems to leave out: any mention or need for final or even formal causes. Despite basing her philosophy on hylomporphic principles, her science already anticipates the rejection of teleology and the focus on efficient causality that takes place in the early modern period.⁶⁰

Finally, Sabuco also remembers that philosophers must still be human, that we cannot altogether banish the passions or affects. Having emotions is a natural part of being human, and we can use our emotions, if we understand them, to promote

our own happiness and health.⁶¹ Emotions are not something to be stifled or overcome by reason. As an empirical study to gain knowledge and understanding of human functioning, her philosophy is indeed an ethics, a method to liberate humanity from unnecessary suffering and to live a physically and psychically healthy life. Hers is work that attempts to show others how they might lead the happy life, and this it seems, is the key vocation of the true philosopher.

Acknowledgements. My gratitude to anonymous reviewers whose comments served to strengthen this study.

References

- ¹ I agree with the suggestion of Waithe *et al.* that generally speaking, Sabuco's "hombre" is best understood as "human" rather than "man"; see Sabuco de Nantes Barerra, O., New Philosophy of Human Nature neither Known to nor Attained by the Great Ancient Philosophers, which Will Improve Human Life and Health, trans. with introduction by M. E. Waithe, M. Vintró, C. A. Zorita (Urbana and Chicago, IL: University of Illinois Press, 2007), 1–40, (9). Thus the English title of Sabuco's work is better understood to refer to human nature, not the nature of men.
- ² O'Neill, E., "Early Modern Women Philosophers and the History of Philosophy", *Hypathia* 20/3 (summer 2005): 185–97 (187). This essay is not the forum to explore O'Neill's charge.
- ³ Noreña, C. G., "Juan Huarte's Naturalistic Humanism", *Journal of the History of Philosophy* 10 (January 1972): 71–6 (71). Again, the current essay is not the place to address this issue.
- ⁴ Vintró, M. and M. E. Waithe, "Fué Oliva o Fué Miguel: el Caso del Sabuco", Boletín de Biblioteca Nacional de México, (Ciudad México) primer y segundo semestres de 2002 nueva época 1-2 (2002–03): 11–37. Cf. Waithe, M. E., "Oliva Sabuco de Nantes Barrera", in A History of Women Philosophers, Volume 2/500–1600, ed. M. E. Waithe (Dordrecht: Kluwer Academic Publishers, 1989), 261–83 (279–82); Waithe, M. E. and M. Vintró, "Posthumously Plagiarizing Oliva Sabuco: An Appeal to Cataloguing Librarians", Cataloguing and Classification Quarterly 35/3–4 (2003): 525–40.
- ⁵ Waithe, M. E. *et al.* note that Oliva (not her father, Miguel) is mentioned in the copyright of a 1604 work by physician and poet, Francisco Lopez de Uveda, that his work would be so well-known that it would rival in fame and influence the works of Cervantes and *Oliva* Sabuco. Waithe, M. E. *et al.*, (2007), 3–4.
- ⁶ Sabuco de Nantes Barrera, O., *The True Medicine*, trans. and ed. Gianna Pomata (Toronto: Iter Inc., 2010).
- ⁷ Philosophy as medicine for the mind would come in vogue later in the early modern period: "A second shared sentiment has to do with the view that the human mind had somehow become *ill* and that philosophy in general needed to act as a kind of healing influence or as *medicine* for the mind, to purify the mind of the many infective inadequate ideas that had rendered it ill and prevented it from playing a leading role in the envisaged progress of philosophy and of mankind in general. This notion of *medicina mentis* is quite common in early modern thought. Apart from Spinoza's theme of *emending the intellect* that pervades his works, Descartes also employs this notion in his *Regulæ* (Descartes, R., *The Philosophical Writings of Descartes*, trans. J. Cottingham, R. Stoothoff, and D. Murdoch [Cambridge: Cambridge University Press, 1984], 2 vols., (hereafter CSM), I, 30, 32). [...]. It is further notable in this regard that the main philosophical work of Walther Ehrenfried von Tschirnhaus (1651-1708), an experimental empiricist and friend of Spinoza, was actually named *Medicina Mentis*." De Bruyn, D., *Spinoza's Concept of Emending the Intellect: A Critical Investigation into Spinoza's Method of*

- Emending the Intellect with Special Reference to the Tractatus de Intellectus Emendatione (Turku, Finland: University of Turku, 2014), 10.
- ⁸ Barona, J. L., "The Body Republic: Social Order and Human Body in Renaissance Medical Thought", *History of Philosophical Life Sciences* 15/2 (1993): 165–80.
- ⁹ E.g., Vintró, M. and M. E. Waithe, (2002-03); Waithe, M. E., (1989); Waithe, M. E. and M. Vintró, (2003).
- ¹⁰ Barona, J. L., (1993): 165.
- ¹¹ "Doña Oliva Sabuco vive y sintetiza un período de la Historia en el cual el hombre es considerado como la medida de todas las cosas, el punto de llegada y el punto de partida en la creación artística, en el diseño urbano, en la planificación de los medios de subsistencia y en el pensamiento de los sabios." Sabuco de Nantes y Barrera, Oliva, *Nueva Filosofía de la Naturaleza del Hombre y Otros Escritos*, ed. A. M. Tomé (Madrid: Editora Nacional, 1981). "Prologo," Tomé, A. M., 13–55, (20).
- ¹² "Lo que sí queremos resaltar es, ni más ni menos, su concepción jerarquizada, ordenada, desde una vertiente metafísica, de la naturaleza, en la cual el hombre ocupa un lugar preeminente, pero siempre dentro de ella, nunca fuera y, mucho menos, en contra." Tomé, A. M., (1981), 18.
- ¹³ Waithe, M. E. et al., (2007), 16.
- ¹⁴ Waithe, M. E., (1989): 268. M. E. Waithe *et al.* even suggest that as in the Gospels, it was the shepherds, not the learned Magi, who were first to recognize the Christ Child, that Sabuco has peasant shepherds who are unprejudiced by academic learning be the first to grasp the nature of reality. Waithe, M. E., *et al.*, (2007), 38, n. 44.
- ¹⁵ "tutte le sue potenzialità." Talamo, P. "Passioni e Malattie nella *Nueva Filosofia* di Oliva Sabuco de Nantes", *Bruniana e Campanelliana; ricerche filosofique e materiali storico-testuali* 12/1 (2002): 201–6, (202).
- ¹⁶ Sabuco, O., (2007), 102. All quotations from Sabuco are the translations of Waithe, M. E., et al. (2007). We note in passing that here Sabuco's term translated by Waithe et al. as "soul" is "ánima," not "alma." Ánima might better be understood as the life-force or animating principle of bodies (as we find in Aristotle), while alma has a more religious connotation. Sabuco uses both terms, but ánima seems to be her preferred term. Unless noted otherwise, all uses of the term "soul" are to what might better be taken as "ánima" rather than "alma."
- ¹⁷ Sabuco, O., (2007), 102. J. L. Barona (1993) notes that this was not an uncommon metaphor used in Spanish physiology of the 16th century where the brain represents the high chambers of the ruler, who is served by those in the lower chambers or cells.
- ¹⁸ Waithe, M. E. et al., (2007), 19.
- ¹⁹ Sabuco, O., (2007), 262. Bracketed text is the translators'; the ellipsis is mine.
- ²⁰ Barona, J. L., (1993): 176.
- ²¹ The differentiation between male and female offspring was a point of interest in Sabuco's time among other naturalist philosophers, among them Juan Huarte (1529–1588), whose *Examen de Ingenios* (1572) proposes methods for the "proper mating of prospective parents [...] to procreate boys instead of girls, and to procreate talented sons (XVIII; 490–520)." Indeed, Huarte's aims focus on eugenics in order to breed only useful and talented members of society. Noreña (1972): 73. Talamo (2002) notes that the birthing of male or female offspring may be a matter of hygiene, but this thought falls within in a larger context that there is no difference between putative male and female souls. Talamo, P., (2002): 203.
- ²² Sabuco, O., (2007), 254–5.
- ²³ Sabuco, O., (2007), 263.
- ²⁴ See Waithe, M. E. *et al.*, (2007), 10. In Sabuco's Spanish, the term "*especies*" may be translated as both "species" or "spices," so the shepherd Rodonio questions Antonio's description of this

transubstantiation: "Eso de las especies (señor Antonio) no entiendo, si no es especies para la olla," Sabuco, O., (1981), 210: "I do not understand this thing, the species [or forms], Señor Antonio, unless they are the spices for the pot." Sabuco, O., (2007), 102; the bracketed text is the translators'.

- ²⁵ Sabuco, O., (2007), 304.
- ²⁶ Waithe, M. E., (1989): 275.
- ²⁷ Sabuco, O., (2007), 254; Waithe, M. E., (1989): 271. Sabuco, of course, does not use the analogy of the automobile.
- ²⁸ It is not the purpose of this essay to drawn a point by point comparison between Sabuco's schema and, say, that of René Descartes, whose mechanical view of the world and humankind are very developed in his works, *Le monde* and *Traité de l'homme*.
- ²⁹ Barona, J. L., (1993): 176.
- ³⁰ Sabuco, O., (2007), 256.
- ³¹ Indeed, Sabuco's Chapter 7, "Proper Philosophy of the Nature of Composite Things, of Humans, and of the World, Unknown to the Ancients," features a dialogue between the shepherd, Antonio, with a learned doctor in which the simple shepherd bests the doctor's knowledge by showing how often and in what ways the supposed knowledge of the ancients is inferior—if not dangerous to human health—to Sabuco's own theories. Subsections in this chapter include "Serious Errors and Ignorance of the Ancients about the Nature of the Small and the Big World" and "Ignorance of the Ancients Concerning the Small and Big Worlds."
- ³² Sabuco, O., (2007), 254.
- ³³ Waithe, M. E. et al., (2007): 18–9.
- ³⁴ Sabuco, O., (2007), 254.
- 35 Sabuco, O., (2007), 256.
- ³⁶ Waithe, M. E. et al., (2007), 22.
- ³⁷ Sabuco, O., (2007), 263. As an aside, Sabuco maintains that there is no elemental fire; warmth occurs from friction of sun's beams against hard, earthly bodies. As proof, she notes that no one has ever observed fire coming from the sky to mix with other things, Sabuco, O., (2007), 304–5. See also section 9 of chapter 7, "[The So-Called Element] Fire." Sabuco, O., (2007), 279–80.
- ³⁸ Sabuco, O., (2007), 152.
- ³⁹ Sabuco, O., (2007), 256.
- ⁴⁰ Sabuco, O., (2007), 152–3. On this topic related to sex, menstrual fluid is poison to the male who touches it since this female fluid may ascend and disrupt his own brain fluids; this is why many men get sick or weak after intercourse and many need to sleep to recover. Since the lunar forces are strongest at the end of the night, it is better and safer to have intercourse in the morning. Sabuco, O., (2007), 259.
- ⁴¹ Descartes identifies the pineal gland as the place where ideas are traced and thus the site of mind-body interaction. Descartes, R., *Œwres de Descartes*, 11 volumes, eds. Adam, C. and P. Tannery (Paris: Vrin, 1996)(hereafter AT), XI, 176–7 (*Traité de l'homme*); cf. letter to Meyssonnier, 29 January 1640 (AT III, 19–20); letter to Mersenne, 1 April 1640 (AT III, 47–9); letter to Mersenne, 30 July 1640 (AT III, 121–4); and letter to Mersenne, 21 April 1641 (AT III, 361–2). In his *Meditations*, he refers to but does not name this gland (AT VII, 86). It may be objected that the change of locale of the soul-body interaction from the pineal gland to the pia mater does not really seem to address the Cartesian and contemporary problem of mind-body interaction; this will be addressed later in the essay.
- ⁴² Descartes, in his sixth meditation, seems to argue for the position that the human being exists as two separate and distinct substances, mind and body. Descartes, R., AT VII, 71–90.

At the same time, however, in his *Principia philosophia*, he recognizes God as the only substance. Descartes, R., AT VIII, 24\\$ 51.

- 43 "un unità psiche-corpo." Talamo, P., (2002): 202.
- ⁴⁴ Waithe, M. E. et al., (2007), 16; cf. Talamo, P., (2002): 202.
- ⁴⁵ Sabuco, O., (2007), 118.
- ⁴⁶ Sabuco, O., (2007), 202.
- ⁴⁷ My thanks to an anonymous reviewer for help on clarifying this point.
- ⁴⁸ Waithe, M. E., (1989): 265.
- ⁴⁹ Sabuco, O., (2007), 111; the bracketed text is the translators' but for the Spanish terms and for the text with the ellipsis. "RODONIO.—¿Por qué, (señor Antonio) todos los más animales traen la cabeza baja, mirando a la tierra, y el hombre sólo la trae alta, siempre derecho, mirando al cielo? ANTONIO.—Porque como el origen, y nacimiento del ánima del hombre fue del cielo, quedose así, y casi colgado de él, y tomó su principal asiento, y silla en la cabeza, y cerebro del hombre (como la raíz de las plantas quedó asida al revés en la tierra) y allí en el alcázar real, donde había de estar el ánima divina, le fabricó el Hacedor de la Naturaleza tres salas (que son tres celdas de la médula del cerebro) [....] Púsole en lo más alto dos vidrieras, o ventanas del alma, que son los ojos, para que por aquellas vidrieras en abriéndolas viese su patria, que es el Cielo." Sabuco, O., (1981), 228. See also Barona, J. L. (2003): 177.
- ⁵⁰ Talamo, P., (2002): 203; Waithe, M. E., (1989): 268.
- ⁵¹ Waithe, M. E., (1989): 269.
- ⁵² Talamo, P., (2002): 203.
- ⁵³ Talamo, P., (2002): 203.
- ⁵⁴ Waithe, M. E., (1989): 273.
- ⁵⁵ Sabuco, O., (2007), 69. "[P]orque consiste en la voluntad deliberada, primero, por el entendimiento, que es el ánima divina celestial. Esos animales no pueden." Sabuco, O., (1981), 132.
- ⁵⁶ Sabuco, O., (2007), 97.
- ⁵⁷ Sabuco, O., (2007), 152; Sabuco, O., (1981), 290.
- ⁵⁸ Sabuco, O., (2007), 151–3.
- ⁵⁹ For an interesting account of this discovery, see Cobb, M., "An Amazing 10 Years: The Discovery of Egg and Sperm in the 17th Century", Reproduction in Domestic Animals 47/4 (2012): 2–6.
- ⁶⁰ My thanks to Lee Rice, Marquette University, for his helpful insight on this point.
- 61 Waithe, M. E., (1989): 273.