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AQUINAS ON THE NATURE OF HUMAN BEINGS

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I

In this paper, I provide a formulation of Thomas Aquinas's account of the nature of human beings for the purpose of comparing it with other accounts in both the history of philosophy and contemporary analytic philosophy.¹ I discuss how his apparently dualistic understanding of the relationship between soul and body yields the conclusion that a human being exists as a unified substance composed of a rational soul informing, that is, serving as the specific organizing principle of, a physical body. I further address the issue of Aquinas's contention that a human rational soul can exist without being united to a body and show how this ability of a human soul² does not contradict the thesis that a human being exists naturally as embodied. I will also respond to two related questions. First, what accounts for the *individuation* of human beings as distinct members of the human species? Second, what is the principle of *identity* by which a human being persists through time and change?

II

According to Aquinas, a human being is a person. Aquinas adopts the definition of person developed by Boethius: "an individual substance of a rational nature."³ An example of an individual substance⁴ is Bill Clinton. As an individual substance, Bill Clinton can be

¹ I do not accomplish such a comparison in this paper, but plan to do so in future projects.

² The terms "rational soul" and "human soul" will be used interchangeably throughout this paper.

³ See Boethius, *Contra Eutychem et Nestorium*, III; Aquinas, *Summa theologiae* [ST] I, q. 29, a. 1. All translations are my own and, unless otherwise specified, are taken from the Leonine edition of Aquinas's works: *S. Thomae Aquinatis Doctoris Angelici Opera Omnia* (Rome: Commissio Leonina, 1882-).

⁴ By this term, Aquinas intends the Greek term *hypostasis* (Latin: *suppositum*). The terms *hypostasis* and *suppositum* are logically distinct in Aquinas's mind, but they refer to the same thing in reality; hence, I make no distinction between the terms here. See Aquinas, *Summa contra Gentiles* [SCG], bk. IV, ch. 38.

contrasted with humanity, which is not an individual substance, but is the nature in which many individual substances—including Bill Clinton, William Shakespeare, and myself—share.

Being of a rational nature, that is, having an intellective mind, distinguishes human beings from other material substances:

The form and species of a natural thing are known through their proper operations. Now the proper operation of a human being, insofar as he is a human being, is to understand and use reason. Hence the principle of this operation, namely the intellect, must be that by which a human being is categorized by species.⁵

In general, a person is a being that exists on its own with a specific nature, shared with other beings of its kind, to be rational.⁶ A human being is not simply a person, however. In addition to being rational, a human being is a sensitive, living, and corporeal substance. Human beings have a *material nature*:

It belongs *per se* to a human being that there be found in him a rational soul and a body composed of the four elements. So without these parts a human being cannot be understood, and they must be placed in the definition of a human being; so they are parts of the species and form.⁷

Aquinas further distinguishes human beings—from other types of persons—as rational *animals*:

Animal indeed is predicated of a human being *per se*, and similarly rational of animal. Hence this expression, rational animal, is the definition of a human being.⁸

Aquinas refers to human beings as essentially animal, because, through their material bodies, human beings share certain essential qualities with other members of the animal genus. The

⁵ Aquinas, *Quaestio disputata de anima* [QDA], q. un., a. 3. Cf. QDA, q. un., a. 1, *sed contra*; SCG, bk. II, ch. 60; Aquinas, *In decem libros ethicorum Aristotelis ad Nicomachum expositio* [In NE], bk. I, lect.10; In NE, bk. X, lect. 10.

⁶ Aquinas recognizes different types of beings as persons. In addition to human beings, Aquinas claims that angels are persons and that God exists as three distinct persons. Since my interest in this paper is solely with *human* persons, I will not entertain any further discussion of such other types of persons.

⁷ Aquinas, *In Boethii De trinitate expositio* [In BDT], q. 5, a. 3.

⁸ Aquinas, *In duodecim libros metaphysicorum Aristotelis expositio* [In M], bk. VII, lect. 3, §1326. Ed. M. R. Cathala and R. M. Spiazzi (Turin: Marietti, 1950).

primary exemplification of such similarity is the capacity for sense-perception. A human body, though, is unique among other kinds of animal bodies in that it is organized not only to support the capacity for sense-perception, but also the capacity for rational thought. The disposition of a human body is determined by its having a rational soul as its *substantial form*. As a substantial form, a human rational soul is responsible for (1) the *esse* (being) of a human being, (2) the actualization of the matter composing a human being, and (3) the unity of existence and activity in a human being.⁹

A human soul and the material body of which it is the substantial form are not two separately existing substances. A substantial form is the actualization of a material body. Aquinas asserts,

Body and soul are not two actually existing substances, but from these two is made one actually existing substance. For a human being's body is not actually the same in the soul's presence and absence; but the soul makes it exist actually.¹⁰

The intrinsic unity of matter and substantial form, body and soul, is responsible for the unified existence of a human being. Against the Platonic conception of a human soul as a substance which moves another substance—a human body—as an efficient causal agent, Aquinas contends, “If you say that Socrates is not one simply, but one due to the aggregate of mover and moved, many incoherencies follow.”¹¹ The primary incoherency is that Socrates would not be one being unqualifiedly (*unum simpliciter*).¹² If Socrates is not *unum simpliciter*, then he cannot count as a substance.

Aquinas notes various ways in which something may be considered a unity. For example, a heap of stones is a unity in terms of the constituent stones being spatially continuous,

⁹ See SCG, bk. II, ch. 68; Aquinas, *In Aristotelis librum De anima commentarium* [In DA], bk. II, lect. 2.

¹⁰ SCG, bk. II, ch. 69.

¹¹ Aquinas, *De unitate intellectus contra Averroistas* [DUI], ch. III.

¹² See ST I, q. 76, a. 1.

a house is a unity in terms of its constituent parts being functionally organized in a certain fashion, and a mover and that which it moves are a unity in terms of their agent/patient relationship.¹³ None of these types of unity count as *substantial* unity, though, according to Aquinas; that is, they are not *unum simpliciter*. Examples of things that are *unum simpliciter*, according to Aquinas, are elemental substances, certain mixtures of elemental substances, immaterial substances, and living organisms.¹⁴ The notion that Socrates is an aggregate of a mover and that which it moves is analogous to the aggregate of a sailor and the ship he pilots. One would not say that a sailor and his ship compose one *substance*; analogously, one would not say that Socrates's soul—the mover—and his body—the moved—compose one substance.¹⁵ One could say that a sailor and his ship, as well as Socrates's body and soul on the Platonic account, are unified in a certain respect or compose an aggregate sum, but such unity would not be *unum simpliciter*.

A human being is not merely an aggregate of body and soul. A material human body and its substantial form are metaphysically distinct, but neither of them alone is a substance. A human being does not naturally exist without being composed of both a material body and a rational soul. She is an individual substance brought about through a rational soul's informing a material body. Typically,¹⁶ when matter is informed by a rational soul, a new ontological entity—a human being—comes into existence.

¹³ See QDA, q. un., a. 10; SCG, bk. II, ch. 57.

¹⁴ See Robert Pasnau, *Thomas Aquinas on Human Nature* (New York: Cambridge University Press, 2002), 88.

¹⁵ Aquinas states that two things that are joined by a contact of power (*contactus virtutis*), that is, one thing is the efficient cause of change in the other, does not result in an unqualified unity. See SCG, bk. II, ch. 56; Norman Kretzmann, *The Metaphysics of Creation: Aquinas's Natural Theology in Summa Contra Gentiles II* (New York: Oxford University Press, 1999), 278-90.

¹⁶ This qualifier is utilized here due to Aquinas's understanding of the Incarnation of Christ, in which the unified substantial existence of both human and divine natures precludes a new ontological entity having come into existence when Christ's soul assumed a human body. See Aquinas, *Compendium theologiae* [CT], ch. 211.

An analogous example is the case of salt. The elements sodium and chloride, which are substances in themselves, come together to form a new substance—salt. When salt comes into existence, the sodium and the chloride each cease to exist as distinct substances; though they persist virtually as *parts* of a substance.¹⁷ Salt has a set of properties that is not merely the result of combining the sets of properties had by sodium and chloride, respectively. The composition of a human being by soul and body is not exactly the same as the case of salt, for soul and body do not exist as distinct substances prior to composing a human being. However, soul and body, like sodium and chloride, do not exist as distinct ontological kinds in a composite human being. Neither is it the case that the set of properties had by a human being is merely the result of combining the sets of properties had by her soul and body, respectively.

To summarize, neither a human soul nor the matter it informs alone is a substance. Rather, the two together compose a substance—a human being. A human being is not identical to her soul or her informed material body. Rather, a human being is *composed* of her informed material body: “a human being is said to be from soul and body just as from two things a third is constituted that is neither of the two, for a human being is neither soul nor body.”¹⁸

Aquinas holds that composition is not identity: something *A* may exist as composed of something else *B*, but *A* is not identical with *B*.¹⁹ Aquinas’s adoption of this thesis is found in a

¹⁷ For his account of how elements combine to form a new substance, see Aquinas, *De mixtione elementorum*; SCG, bk. IV, ch. 35; In M, bk. VII, lect. 17, §1680; ST I, q. 47, a. 2; ST I, q. 76, a. 4, ad 4; QDA, q. un., a. 9, ad 10.

¹⁸ Aquinas, *De ente et essentia* [DEE], ch. II. Cf. ST I, q. 75, a. 4.

¹⁹ Aquinas’s notion of composition without identity is similar to the contemporary notion of constitution without identity. For elucidation and defense of the latter notion, see Lynne Rudder Baker, “Why Constitution Is Not Identity,” *The Journal of Philosophy* 94 (1997): 599-621; Baker, “Unity Without Identity: A New Look at Material Constitution,” in *Midwest Studies in Philosophy* 23, ed. Howard Wettstein (Oxford: Blackwell, 1999), 144-65; Frederick Doepke, “Spatially Coinciding Objects,” *Ratio* 24 (1982): 45-60; Mark Johnston, “Constitution Is Not Identity,” *Mind* 101 (1992): 89-105; E. J. Lowe, “Instantiation, Identity and Constitution,” *Philosophical Studies* 44 (1983): 45-59; J. M. Shorter, “On Coinciding in Space and Time,” *Philosophy* 52 (1977): 399-408; Judith Jarvis Thomson, “Parthood and Identity Across Time,” *The Journal of Philosophy* 80 (1983): 201-20; Thomson, “The Statue and the Clay” *Nous* 32 (1998): 149-73; David Wiggins, “On Being in the Same Place at the Same Time,” *The Philosophical Review* 77 (1968): 90-5. For application of this notion to the issue of human nature, see Lynne

passage wherein he comments on different types of composition, including a type of composition which results in two things forming another thing that is *unum simpliciter*, that is, a substance:

Since something is composed from another in this way “as a whole”—that is, the whole is one—and not in the way as a heap of stones is, but as a syllable, which is one unqualifiedly [*unum simpliciter*]; in all such instances, the composite itself must not be that from which it is composed, as a syllable is not its elements. Just as the syllable BA is not the same as the two letters B and A; nor is flesh the same as fire and earth.²⁰

That Aquinas applies the notion of composition without identity to a human being’s relationship to her soul and body is evidenced by his discussion of the attribution of a human being’s capacities and activities. Aquinas contends that the capacities of a human being must be attributed to the human being herself, and not to any of her parts.²¹ A human being’s soul is the source of her capacities; a human being’s body is the material support for such capacities. However, a human being is that which *has* the capacities.

For example, I have the capacity to see. My capacity to see requires that I have eyes, optic nerves, and a visual cortex. I have these organs due to my soul informing my material body, hence both my soul and body are necessary for me to see; however, my soul does not see, and neither does my body, eyes, or visual cortex. Rather, *I* see by utilizing the visual capacity *I* have by virtue of being composed of my informed material body. That the capacity to see is attributable to me, and not to my soul or body, demonstrates that I am not identical to either my soul or my informed material body.

Rudder Baker, *Persons and Bodies: A Constitution View* (New York: Cambridge University Press, 2000); Kevin Corcoran, “Persons, Bodies, and the Constitution Relation,” *The Southern Journal of Philosophy* 37 (1999): 1-20.

²⁰ In M, bk. VII, lect. 17, §1674.

²¹ See Aquinas, *Quaestio disputata de spiritualibus creaturis* [QDSC], q. un., a. 11, ad 20. Referring to a human being’s soul and body as parts requires an extended notion of “part” than the standard conception of parts as *integral* to a substance, in the way a roof, walls, and floor are parts of a house. Such parts are composites of matter and form that exist even when they do not compose something else. Soul and body, on the other hand, can be understood as *metaphysical* parts that do not exist without composing a human being. For more on this distinction, see Eleonore Stump, *Aquinas* (New York: Routledge, 2003), 42, 209-10; Aquinas, *Scriptum super sententiis magistri Petri Lombardi* [In Sent], bk. II, dist. 3, q. 1, a. 4.

If capacities are properly attributed to the composite substance, then even more so are the activities that follow upon such capacities:

The action of anything composed of matter and form is not of the form alone or the matter alone, but of the composite . . . Therefore, if an intelligent substance is composed of matter and form, understanding will be of the composite itself.²²

Aquinas recognizes that certain capacities—rational thought and volition—can be had by a human soul itself. They are capacities that a human soul would have even if it were separated from a material body.²³ Nevertheless, as Eleonore Stump points out, “Aquinas thinks that there is something misleading about attributing cognitive functions just to the soul itself. Rather, even such higher cognitive functions as understanding are to be attributed to the whole material composite that is the human being.”²⁴ Even if certain capacities belong to a soul itself, it is still to a human being that their actual operation is attributable. Aquinas finds this to be important for the sake of a human being’s being morally responsible for her actions.²⁵

This way of construing Aquinas’s account of human nature allows for a human being to exist post-mortem as composed of her soul alone. Interpretations differ as to whether Aquinas explicitly holds a human being to persist between death and bodily resurrection. Robert Pasnau contends that Aquinas denies a human being’s substantial existence between death and resurrection; rather, a human being exists *partially* by virtue of her soul’s continued existence: “so my separated soul is not anyone other than I, and in a sense it is I, but it is not fully I, not I in the strictest sense.”²⁶

²² SCG, bk. II, ch. 50. Cf. QDA, q. un., a. 6, ad 14.

²³ See ST I, q. 77, aa. 5-8; QDA, q. un., a. 12, ad 16.

²⁴ Eleonore Stump, “Non-Cartesian Substance Dualism and Materialism Without Reductionism,” *Faith and Philosophy* 12 (1995): 512. See ST I, q. 75, a. 2, ad 2; ST I, q. 77, a. 5; DUI, ch. IV; In NE, bk. X, lect. 6; QDSC, q. un., a. 2, ad 2; CT, ch. 85.

²⁵ See DUI, ch. III.

²⁶ Pasnau (2002), 389. See ST II-II, q. 83, a. 11, ad 5; Aquinas, *In Aristotelis libros de caelo et mundo*, bk. I, lect. 24.

Stump, on the other hand, argues that such an interpretation does not cohere with Aquinas's attribution of many "personal" qualities to a separated human soul:

Aquinas thinks that after death a human soul either enjoys the rewards of heaven or suffers the pains of hell. He maintains that the separated soul is capable of understanding and choosing. He also holds that after death a human being can appear to the living; for example, speaking of the disembodied soul of a martyr Felix, Aquinas says that Felix – not a simulacrum but the human being Felix – appeared to the people of Nola. He thinks that the souls of the saints know the prayers of the living and respond to them. He claims that the holy Fathers in hell – who are separated souls – were waiting for Christ and were delivered by Christ's descent into hell. In these passages and many others, Aquinas attributes to disembodied souls properties which he and we take to be most characteristic of human persons, including intellectual understanding and love.²⁷

Without adjudicating this dispute at the level of textual interpretation, I wish to point out that Aquinas, by adopting the notion of composition without identity, can consistently hold that a human being is not identical to her soul²⁸ and yet persist between death and bodily resurrection as composed of her soul alone. Before death, a human being "is" her soul, meaning that she is composed of an informed material body, the existence and nature of which is provided by her soul. A human being exists—*is*—as composed of her soul as a part, but she is not identical to either it or the matter it informs. Since Aquinas conceives of a human being in this fashion, and since being composed of a set of parts does not equal identity with such parts, taken individually or as a set, a human being is not identical with her soul.

Furthermore, as Stump makes clear, that composition is not equal to identity entails that a composed substance may lose some of its constituent parts without loss of its identity.²⁹ Just as I normally exist with two hands, as defined by my human nature, I could lose a hand and still exist as the same human being. In the same way, just as a human being normally exists as composed of soul and body, she can lose her body and still be identical to herself. In such a state, a human

²⁷ Stump (2003), 52-3. See ST Supp., q. 69, aa. 2-5; ST Supp., q. 70, aa. 2-3; ST Supp., q. 72, a. 2.

²⁸ See Aquinas, *Super Primam Epistolam ad Corinthios lectura*, ch. XV, lect. 2.

²⁹ See Stump (2003), 51-2.

being exists composed of her soul alone, yet she is not identical to her soul. However, given that Aquinas defines the substantial existence of a human being as composed of soul and body, a human being who exists as a soul alone is *deficient* by not having all the parts proper to human nature.

Such a deficient mode of existence does not entail that a human being ceases to be “human,” that is, to exist as a rational animal, when she is composed of only her soul. A separated human soul has all the capacities proper to existence as a rational animal, namely intellectual, sensitive, and vegetative capacities.³⁰ Hence, though without her body a human being is unable to actualize many of her capacities, she remains a rational animal by virtue of her soul retaining all the capacities proper to such a nature.

I wish to note further that Pasnau’s interpretation rests upon taking Aquinas to hold that a substance’s existence need not be an all-or-nothing affair. I am not convinced that this is a position Aquinas holds. Stump’s conclusion, on the other hand, allows for a human being to exist composed of only her separated soul; a human being exists if her soul exists, and does not exist if her soul does not exist. Substantial existence remains, on Stump’s account, an all-or-nothing affair.

A human being, then, is a substance that exists, has a set of specific capacities, acts, and cannot be reduced to her parts taken individually or aggregately. While the existence and nature of a human being is dependent upon her having a substantial form actualizing a sufficiently complex organic material body, such parts are not acting substances in their own right. It is a human being who exists and acts by means of her soul and body, which together compose her.

³⁰ See ST I, q. 77, a. 8.

III

Aquinas argues that a human soul has a mode of being that distinguishes it from all other substantial forms of material substances.³¹ This distinction is due to a human soul's intellective capacities, which are not dependent upon any material body for their functioning. Hence, such capacities surpass the limits of matter in their ability to understand the universal forms of things; such universal forms are the natures of things understood as abstracted from any particular material conditions. Since intellective capacities surpass the limits of matter, no purely material process can be responsible for the generation of substantial forms with such capacities. All other substantial forms of material substances can be generated through purely material processes.

Aquinas thus argues that a human soul must receive its being (*esse*) directly from God:

It must be said that it is from the first cause [God] that such a soul has its *esse*, also that it is intellectual and is a soul and consequently that it is impressed in a body.³²

The *esse* had by a human soul due to its intellective capacities creates a problem for Aquinas. He asserts that a human soul is the substantial form of a material human body, and yet it is separable in both *esse* and intellective operations. A tension thus exists between a human soul's being both naturally united to a material body as its substantial form and separable from the body. I shall provide Aquinas's assertions first for the soul's separability, and then for its being naturally united to a human body. Afterward, I will demonstrate how an important distinction in Aquinas's thought resolves this tension.

According to Aquinas, something can be corruptible in two ways: *per se*, that is, through itself, and *per accidens*, that is, through another. No substantial form is corruptible *per se*, because corruption *per se* involves the separation of a thing from its substantial form. A

³¹ See *In Sent*, bk. I, dist. 8, q. 5, a. 2, ad 1.

³² Aquinas, *In librum de causis expositio* [In LDC], prop. V. Ed. C. Pera (Turin, Marietti, 1955). Cf. ST I, q. 90, a. 2; ST I, q. 118, a. 2; SCG, bk. II, chs. 87-88.

substantial form cannot separate from itself. Hence, since a human soul is a substantial form, it is not corruptible *per se*. However, substantial forms of material things, such as a rock, are corruptible *per accidens*. Material substantial forms are corruptible *per accidens*, because they are completely dependent for their *esse* and operation upon the bodies they inform. When such bodies are corrupted, their substantial forms are corrupted as well. A human soul is an exception.³³ Though it is the substantial form of a material body, a human soul has its *esse* directly from God and also has operations, namely intellectual cognition and volition, which do not depend upon any bodily organ to function. Hence, a human soul cannot be corrupted either *per se*, as is the case with any substantial form, or *per accidens*, due to its lack of complete dependence upon a material body for its *esse* and operation:

It is not the case that the soul's essence is united to the body such that it follows the body's condition completely, as with other material forms that are wholly submersed in matter to the extent that none of their powers or acts can proceed from them without matter. Now from the soul's essence proceed not only those powers or potencies that are corporeal in a way, inasmuch as they are acts of corporeal organs, namely sensitive and vegetative powers, but also intellectual powers which are wholly immaterial, that are not acts of either a body or a part of a body.³⁴

As noted in this passage, some capacities of a human soul, namely its vegetative and sensitive capacities that non-human animals also have, do act through material organs. Hence, it is not the case that the separable existence of a human soul entails that all of its capacities can be actualized in such a state. A human soul requires a material body to function completely, that is, for all of its capacities to be actualizable. Furthermore, Aquinas argues that a human soul communicates its *esse* to a material body such that there is one *esse* of a composite substance—a

³³ See ST I, q. 75, a. 6; SCG, bk. II, chs. 79-81; Joseph Bobik, *Aquinas on Being and Essence* (Notre Dame: University of Notre Dame Press, 1965), 151-2.

³⁴ Aquinas, *Quaestiones disputatae de veritate* [QDV], q. 13, a. 4. Cf. CT, ch. 84; ST I, q. 75, a. 6. In In LDC, prop. XV, Aquinas argues that a human soul's ability reflexively to know itself also requires that it be separable from its body.

human being. Hence, a soul must be *immediately* joined to such a body.³⁵ Additionally, while the intellective operations of a human soul do not themselves require a bodily organ, an intellect operates by abstracting universal forms from *phantasmata*.³⁶ An intellect has *phantasmata* through sense-perception of particular material substances. Since the activity of sense-perception requires proper material organs—eyes, ears, nose, etc.—an intellect does require a human body.³⁷

Despite the separability of its intellective operations from any material constituent, a human soul is naturally united to a particular material body as its substantial form.³⁸ That a human soul is naturally united to its body is also supported by Aquinas's contention that it is not an intellect itself that understands, nor the soul which is the foundation for intellective capacities. Rather, a human being understands by means of the intellective capacities she has by virtue of her soul; just as she sees by means of the capacity for sight she has by virtue of her eyes and visual cortex.³⁹ Hence, insofar as a human being naturally exists as composed of both soul and body, the existence and operation of a human soul is most properly in union with a particular material body.

To summarize, a human soul, while separable from its body by virtue of its essential intellective capacities, is naturally united to its body for the sake of its other capacities due to its

³⁵ See QDA, q. un., a. 1, ad 1; Kevin White, "Aquinas on the Immediacy of the Union of Soul and Body," in *Studies in Thomistic Theology*, ed. Paul Lockety (Houston: Center for Thomistic Studies, 1995), 209-80.

³⁶ The term *phantasmata*, transliterated as phantasms, is sometimes translated as sense-impressions or sensory images. Such translations, however, are problematic. As Pasnau describes it, "phantasms are not simply our ordinary sensory images. Rather, phantasms are the leftover impressions from those sensory images" (Pasnau (2002), 279; see 278-95). Norman Kretzmann describes them as "cognitive likenesses of particular external things reinstated in physical configurations of the organ of phantasia [that is, the brain]" (Kretzmann (1999), 355; see 350-64). The purpose of phantasms is to be available for the intellect to use in abstracting the intelligible form of perceived things. Hence, phantasms are between the immediate mental impression of an object perceived by sensation and the intellectual understanding of that object's nature as abstracted from any individuating characteristics.

³⁷ See QDA, q. un., a. 2; ST I, q. 101, a. 2.

³⁸ See QDA, q. un., a. 3, ad 16.

³⁹ See SCG, bk. II, ch. 76; In DA, bk. III, lect. 7; QDA, q. un., a. 4, ad 8; DUI, ch. II; DUI, ch. IV.

being the body's substantial form.⁴⁰ Because of this natural unity, a human body is disposed in terms of its organic structure with respect to the capacities of a human soul, including the intellect:

But a soul is united to a body in order to understand, which is its proper and principal operation. And thus it is required that the body united to a rational soul be optimally disposed toward the service of the soul in those things which are necessary for understanding.⁴¹

Since a human soul has its own *esse* and its own defining capacities, and it is also the substantial form of a material body, Stump refers to it as a “configured configurer.”⁴² As configured, a human soul is a subsistent being. Furthermore, it has certain specific and individual qualities. By specific qualities, I intend those qualities that are definitive of the nature of any human being, for example, having human DNA, sensory organs, organs such as a heart and lungs, and a cerebral cortex.⁴³ By individual qualities, I intend those qualities that are unique to each individual human soul as it is the substantial form of a particular human body, for example, having *these* organs, *this* cerebral cortex, *this* individual genetic structure.

Let me explain this last point. Aquinas asserts that no human soul precedes in existence the material body of which it is the substantial form: “But because it is naturally the form of a body, the soul was not created separately, but was necessarily created in the body.”⁴⁴ By being created in a particular material body, each human soul is distinct from all other human souls that are created in other bodies simply by virtue of each being spatio-temporally unique. Each human

⁴⁰ See QDSC, q. un., a. 11, ad 14; In DA, bk. II, lect. 2; SCG, bk. II, ch. 68; ST I, q. 76, a. 1. Note that to speak of a human soul as having capacities means only that it is the foundation, that is, the actualizing principle, for such capacities; as discussed above, the human being composed of a human soul is the proper subject of ascription for the vegetative, sensitive, and intellectual capacities proper to human nature.

⁴¹ QDA, q. un., a. 8, ad 15. Cf. QDA, q. un., a. 10, ad 1-2; In DA, bk. II, lect. 1; In DA, bk. II, lect. 19; ST I, q. 76, a. 5, ad 3; ST I, q. 91, a. 3.

⁴² See Stump (1995), 514-5.

⁴³ By these examples, I am not asserting that a human soul has these qualities in itself; rather, a human soul *has* these qualities by its capacity to actualize a material body to have them.

⁴⁴ ST I, q. 90, a. 4, ad 1. Cf. SCG, bk. II, ch. 83.

soul exists when and where the body it informs does. Since no two bodies can occupy the same place at the same time, no two human souls can either and thus each human soul will be unique in that way. Furthermore, the material disposition of each particular body affects the soul's actualization of its capacities. If a body has defective eyes, the soul will not be able to actualize its capacity for sight. Due to such differences in the actualization of its capacities, each human soul becomes further distinct from other human souls informing other bodies. Also, as each soul engages in sensitive and intellectual activities, it perceives different things and thus gains different knowledge from that of other souls. As a result of these differences, when it subsists apart from the body after a human being's death, each individual human soul retains its own set of qualities. It retains knowledge, experiential memory, and the blueprint for a particular body: "the human soul remains in its own *esse* when it is separated from the body, having an aptitude and natural inclination toward union with the body."⁴⁵

As configured, a human soul subsists with its own individual set of qualities. However, as a configurer, that is, as the substantial form of a material body, a human soul does not subsist with a complete specific nature. A soul alone is not identical to a human being, nor has it a complete human nature:

No part has its natural perfection separate from the whole. Hence the soul, since it is part of human nature, does not have its natural perfection unless it is in union with the body . . . Hence the soul, though it can exist and understand separate from the body, does not have its natural perfection when it is separate from the body.⁴⁶

⁴⁵ ST I, q. 76, a. 1, ad 6. I specifically use the definite article—*the* body—in my translation, because it is not to any body with which a separated soul has a natural inclination to be united, but to that particular body of which it is the substantial form. See my "The Metaphysics of Resurrection: Issues of Identity in Thomas Aquinas," *American Catholic Philosophical Quarterly* 74, Supp. (2000): 215-30.

⁴⁶ QDSC, q. un., a. 2, ad 5. Cf. Aquinas, *Quaestiones disputatae de potentia dei* [QDP], q. 5, a. 10; ST Supp., q. 93, a. 1.

Since a soul alone does not have a complete human nature, it alone cannot be identical to a human being:

Not every particular substance is a *hypostasis* or person, but what has its complete specific nature. Hence a hand or foot cannot be called a *hypostasis* or person; and similarly neither can the soul, since it is part of the human species.⁴⁷

Confusion may arise due to Aquinas's reference in this passage to particular substances.

In his early works, Aquinas took the term “substance” to refer to anything that had *esse*: substance equaled subsistence.⁴⁸ In later works, Aquinas makes a distinction between mere subsistence⁴⁹ and subsistence as a substance (*hypostasis* or *suppositum*):

“This something” [*hoc aliquid*] can be taken in two ways: one way, for any subsistent thing; the other way, for what subsists in its complete specific nature. The first way excludes the inherence of an accident or material form. The second way excludes also the imperfection of a part. Hence a hand can be called “this something” in the first way, but not in the second. Therefore, since a human soul is part of the human species, it can be called “this something” in the first way, as subsistent, but not in the second—for in this way the composite of soul and body is called “this something.”⁵⁰

In line with this distinction, at one point when Aquinas refers to a human soul as a substance, he qualifies it as meaning “something subsistent” and nothing more.⁵¹ With this understanding of a human soul, one can see how it can subsist with its own *esse*, but not as a complete substance such that it would either be identical to a human being or fail to be naturally joined to a material body as its substantial form.

This completes my exposition of Aquinas's account of the nature of human beings.

However, characterizing a human being as an individual substance prompts two further questions: (1) What is the principle of individuation for human substances that makes one

⁴⁷ ST I, q. 75, a. 4, ad 2. Cf. ST I, q. 29, a. 1, ad 5.

⁴⁸ This is especially true in the early treatise *De ente et essentia*.

⁴⁹ A subsistent being cannot be an accidental quality of a substance. It subsists on its own. Aquinas highlights this quality of persons in an alternative definition he gives: “subsistent in a rational nature” (ST I, q. 29, a. 3).

⁵⁰ ST I, q. 75, a. 2, ad 1. Cf. QDSC, q. un., a. 2, ad 16; QDP, q. 9, a. 1, ad 4; QDA, q. un., a. 1, ad 4; In DA, bk. II, lect. 1. See Stump (1995), 517.

⁵¹ See ST I, q. 75, a. 2, *sed contra*.

human being distinct from another? (2) What is the criterion of identity through time and change for human substances that makes me the same being as I was ten years ago? How Aquinas responds to these questions will provide background for an analytic formulation of Aquinas's account of human nature, which I will address in the final section of this paper.

IV

Aquinas asserts that a material substance, such as a human being, exists as an individual with its own substantial form by virtue of its material body: “a particular substance is not a substance and an individual among material things, except from matter.”⁵² Aquinas terms the matter of a particular material body *designated* matter:

Matter in whatever mode is not accepted as the principle of individuation, but only designated matter [*materia signata*]; and I term designated matter what is considered under determinate dimensions. Now such matter is not placed in the definition of what a human being is in so far as he is human, but it would be placed in the definition of Socrates if Socrates had a definition.⁵³

Here, Aquinas refers to designated matter a matter under determinate dimensions [*dimensiones determinatis*].⁵⁴ Elsewhere, Aquinas offers a distinction between matter under determinate dimensions and matter under interminate dimensions [*dimensiones interminatis*]⁵⁵ and asserts the latter as the principle of individuation for material substances:

Now dimensions can be considered in two ways. In one way according to their termination, and I say that they are terminate according to a determined measure and figure . . . and thus they cannot be the principle of individuation. For, since such a termination of dimensions frequently varies with respect to an individual, it would follow that an individual would not remain the same in number [that is, identical to itself]. In the other way, they may be considered without such determination—just in the nature of dimensions—though they can never be

⁵² In M, bk. V, lect. 10, §905.

⁵³ DEE, ch. II. See Bobik (1965), 75-80.

⁵⁴ Cf. QDV, q. 2, a. 6, ad 1; QDV, q. 10, a. 5.

⁵⁵ In translating *dimensiones interminatis* thus, I disagree with John Wippel, who offers the translation “indeterminate dimensions.” Wippel’s translation creates a tension in Aquinas’s thought, if not an outright contradiction, that I contend is not present. See John Wippel, *The Metaphysical Thought of Thomas Aquinas: From Finite Being to Uncreated Being* (Washington, DC: Catholic University of America Press, 2000), 358, 362.

without some determination . . . and from these interminate dimensions matter is made *this* designated matter, and in this way it individuates form.⁵⁶

John Wippel contends that there is an apparent shift in Aquinas's thought. Aquinas begins in DEE, ch. II and QDV, q. 2, a. 6, ad 1 with the assertion that designated matter, considered under *determinate* dimensions, is the principle of individuation for material substances. By the time of writing In BDT, q. 4, a. 2, Aquinas moves to the claim that the principle of individuation is designated matter, considered under *interminate*—Wippel translates as “indeterminate”—dimensions. Later, in In DA, bk. II and QDA, q. un., a. 9, Aquinas returns to designated matter, considered under *determinate* dimensions, as the primary individuating principle. Wippel claims,

Thomas remains faithful to his earlier view that designated matter is to be regarded as the principle of individuation for corporeal entities In these later texts he normally does not distinguish between determinate and indeterminate [interminate] dimensions. However, in two passages [In DA, bk. II and QDA, q. un., a. 9] we have found him referring to individuation as resulting from corporeal matter insofar as it is contained under determined dimensions, or from body insofar as it is subject to determined dimensions.⁵⁷

Wippel accepts the apparent discontinuity as evidence of a shift in Aquinas's thought. Nevertheless, he offers some conjecture as to possible reasons why Aquinas makes this shift. I find one of Wippel's conjectural conclusions plausible and contend that it offers an explanation for the return to talk of determinate dimensions in Aquinas's later works that does not contradict the passage from In BDT, q. 4, a. 2: “It may also be that, because he [Aquinas] realized that dimensions never actually exist in a given material entity without being determined, he concluded that it was not helpful to fall back upon them considered as indeterminate [interminate] in order to account for individuation.”⁵⁸

⁵⁶ In BDT, q. 4, a. 2.

⁵⁷ Wippel (2000), 371.

⁵⁸ Wippel (2000), 372.

In the above passage from In BDT, q. 4, a. 2, Aquinas states that dimensions “can never be without some determination.” Aquinas is concerned that, since the size and shape of an individual substance’s material body may change over time, the identity of that substance must be maintained despite such changes. I understand Aquinas’s solution to this concern to be his reference to the principle of individuation as designated matter that has *some* dimension, some measure or shape, but is not limited to *one* determinate measure or shape.

Matter must be designated to serve as an individuating principle. As designated, matter must have determinate quantitative dimensions. However, there is no particular determination of such quantitative dimensions that is necessary for matter to individuate. It is in this sense that Aquinas asserts designated matter to be under interminate dimensions in order to serve as an individuating principle. The interminate nature of such dimensions is that they need not be of any *particular* quantitative measure. It is required only that they be determinate by having *some* quantitative measure.

For example, it is necessary that my body have some measure of height and some measure of weight, and be either sitting, standing, kneeling, or lying down; however, it is not necessary that my body be 6’ 3”, or weigh 190 lbs., or be in a sitting position. All such determinate quantities are accidents of my body: “Quantitative dimensions are accidents consequent upon corporeity.”⁵⁹ The principle of individuation for material substances is designated matter considered as having some determinate dimensions that are accidental features of the matter as it is a body. As Joseph Owens puts it,

Whether these variations in size and shape are in zygote, embryo, fetus, child, adult, or aged person, they serve to designate the same individualizing portion of matter throughout all the dimensional changes. The matter is indeed determined by dimensions that are definite in actuality at any given instant, but which are considered as individuating dimensions insofar as they are not defined by the state

⁵⁹ ST I, q. 76, a. 6, ad 2. Cf. QDP, q. 9, a. 1.

in which they happen to be at any particular moment. The matter is determined by the dimensions, but the dimensions themselves may be undefined. It is in their undefined status that they serve as the individuating principle of a body.⁶⁰

Quantitative dimensions, determined to some, but not to any particular measure, are the key to matter's functioning as an individuating principle for material substances: "the primary reason for the diversification of things united in species is found in quantity."⁶¹

To explain Aquinas's apparent shift in thought, I would contend, in agreement with Wippel's suggestion, that one ought to take the passage from In BDT, q. 4, a. 2 as definitive in asserting interminate dimensions as the proper principle of individuation. In that passage, not only does Aquinas assert why interminate dimensions should be the principle of individuation, but he also shows why determinate dimensions could not serve as such a principle. That Aquinas later reverts to talk of determinate dimensions is due to his recognition, perhaps in the face of objections presented to him, that designated matter cannot exist without determinate quantitative dimensions, which does not preclude such quantitative dimensions being interminate with respect to the particular determination they have at any given time.

In addition to designated matter being considered as the primary principle of individuation, Aquinas considers other factors that may contribute to the explanation of how an individual material substance comes about. Aquinas refers to an individual substance's accidental features as a principle of individuation: "an individual is made by a collection of accidents that cannot be repeated in another"; "nothing can make diversity according to number except diversity of accidents."⁶² Another individuating factor is spatial location: "it is

⁶⁰ Joseph Owens, "Thomas Aquinas: Dimensive Quantity as Individuating Principle," *Mediaeval Studies* 50 (1988): 289.

⁶¹ In BDT, q. 5, a. 3, ad 3.

⁶² Both quotations are from In BDT, q. 4, a. 2, *sed contra*.

impossible for this matter to be distinct from that one except when it is distinct according to place.’’⁶³

These additional individuating principles do not contradict designated matter being the *primary* principle. With respect to place, Aquinas clearly shows how it functions as an individuating principle. It is a defining feature of designated matter that it cannot share the same spatial location with another instance of designated matter. As Kevin White suggests, the accident of place can be considered as the most important *sign* of individuation, but is not itself the *cause* of individuation.⁶⁴ Furthermore, the requisite quantitative dimensions for individuation, considered as determinate, are accidental features of a substance. Hence, a distinction in accidents, with respect to one type of accident, does play a primary role in the individuation of substances.⁶⁵

V

One important issue regarding Aquinas’s account of individuation concerns a human soul that is separated from a material body after a human being’s death. As noted earlier, Aquinas’s understanding of a human soul includes, by virtue of its intellectual capacities, that it is incorruptible and has its own *esse*. A human soul can subsist *per se*, though it does not subsist as a substance. Due to a human soul’s capacity to subsist without being the substantial form of a

⁶³ In BDT, q. 4, a. 3. Cf. Aquinas, *Quaestiones quodlibetales* [QQ] VII, q. 4, a. 3; QQ IX, q. 6, a. 1; ST Supp, q. 83, aa. 2-3.

⁶⁴ See Kevin White, “Individuation in Aquinas’s *Super Boetium De Trinitate*, Q. 4,” *American Catholic Philosophical Quarterly* 69 (1995): 553-5. Cf. Roderick Chisholm, “Individuation: Some Thomistic Questions and Answers,” *Grazer Philosophische Studien* 1 (1975): 38; Wippel (2000), 363.

⁶⁵ One point of debate concerns the *cause* of individuation for human beings. Joseph Owens argues that the *esse* possessed by a human soul that is created individually by God is responsible for the individuated existence of a human being. Lawrence Dewan counters that *esse* is not a causal factor of individuation, but that the combination of formal, material and efficient causes brings about both a human being’s existence and her existence as an individual substance. See Joseph Owens, “Thomas Aquinas (B. CA. 1225; D. 1274),” in *Individuation in Scholasticism: The Latter Middle Ages and the Counter Reformation, 1150-1650*, ed. Jorge J. E. Gracia (Albany: State University of New York Press, 1994), 173-94; Lawrence Dewan, “The Individual as a Mode of Being According to Thomas Aquinas,” *The Thomist* 63 (1999): 403-24. Space does not permit me to address this debate here.

particular body, a question arises as to how a separated human soul is able to maintain its individuation from other human souls. Aquinas sets up the problem with the following dilemma:

For, if human souls are multiplied according to the multiplication of bodies—as was shown above—then, with the destruction of bodies, souls cannot remain in their multitude. Hence one of two things must follow: either the human soul ceases to be completely or only one soul remains.⁶⁶

Either a human soul perishes when its respective body is corrupted, which Aquinas has established cannot happen since a human soul has its own *esse*, or only one soul remains as *the* soul for all human beings. The Latin Averroists defended the latter position and held that there is one specific form of humanity, and thus one intellect, for all human beings; it is this universal intellect that subsists without respect to any material body.

Aquinas accepts neither of these alternatives and proposes a third:

Everything has unity in the manner in which it has *esse*; and consequently, we make the same judgment about the multiplication of things and their *esse*. Now it is clear that the intellectual soul, according to its *esse*, is united to a body as form; and yet, at the destruction of the body, the intellectual soul remains in its *esse*. By the same reason, the multitude of souls is according to the multitude of bodies; and yet, with the destruction of bodies, souls remain in their multiplied *esse*.⁶⁷

The key to a separated human soul's individuality is its relationship to a particular body of which it is the substantial form. While it is not acting as the substantial form of a body when separated, a human soul does not lose its natural inclination to be the substantial form of one particular body: "Therefore, just as it is of the soul's nature that it is the form of a body, so it is of *this* soul's nature, in so far as it is *this* soul, that it has an inclination toward *this* body."⁶⁸ Because it is created by God *in* a particular body as its substantial form, a separated human soul preserves in

⁶⁶ SCG, bk. II, ch. 80.

⁶⁷ ST I, q. 76, a. 2, ad 2. Cf. In Sent, bk. VIII, dist. 1, q. 5, a. 2, ad 6; DEE, ch. V; QDA, q. un., a. 1, ad 2; QDSC, q. un., a. 9, ad 3.

⁶⁸ QDSC, q. un., a. 9, ad 4. Cf. QDSC, q. un., a. 9, ad 15; QDA, q. un., a. 1, ad 10; ST I, q. 76, a. 1, ad 6.

its subsistence the blueprint for that particular body of which it is the substantial form.⁶⁹ As Stump describes it,

It is possible for one separated soul to be distinguished from another on the basis of its *past* connection with matter, rather than on the basis of a present connection with matter. The disembodied soul of Socrates is the substantial human form which at some time in the past configured *this* matter, the matter that was part of Socrates in his embodied state. The disembodied soul of Plato is the substantial human form which at some time in the past configured the matter that was part of Plato in *his* embodied state.⁷⁰

I would add to Stump's description that it is not only by virtue of its past connection with a particular body that a separated human soul is individuated, but also by virtue of its potential future connection to the same body when it is resurrected deriving from its present inclination toward that body. I will return to the topic of bodily resurrection in the next section.

Based on the preceding discussion, I offer the following Thomistic account of individuation with respect to human beings. God directly creates the soul of each individual human being. A human soul is a subsistent being; it has its own *esse*. A human soul, however, is not created except in relation to a material body of which it is the substantial form. A material body is an individual instance of designated matter, defined as having interminate quantitative dimensions. A human soul informing a designated material body constitutes the *esse* of an individual human being. Each human being has a set of specific qualities shared with other human beings. Yet, each human being exists most properly as an individual and acts accordingly.⁷¹ At a human being's death, her soul maintains its subsistence and its individuality due to its unique relationship to a particular material body as its substantial form.

⁶⁹ See Eberl (2000), 221.

⁷⁰ Stump (2003), 54. Cf. W. Norris Clarke, *The One and the Many: A Contemporary Thomistic Metaphysics* (Notre Dame: University of Notre Dame Press, 2001), 105; Pasnau (2002), 182-5.

⁷¹ See Dewan (1999), 416.

VI

A human being is a substance composed of matter and substantial form, both components contributing to her being an individual substance. Hence, it would seem that the identity of a human being is found only in the matter/form composite, as Sandra Edwards holds. Edwards argues that all material substances, including human beings, maintain their persistent identity through time and change by the same substantial form informing the same designated matter. Stump, on the other hand, argues that substantial form alone is the principle of identity for material substances and that a human being retains her identity when she exists as a separated soul after the death of her body. I argue that Stump provides a more properly Thomistic principle of identity by satisfactorily accounting for a key issue in Aquinas's understanding of human nature, namely preservation of a human being's identity as she exists before her death and after she experiences bodily resurrection.

Edwards argues that designated matter, in which the same substantial form is continuously instantiated, is the proper Thomistic principle of identity. When a break in material continuity occurs, there results a new substantial form and a distinct substance. With reference to human beings, Edwards claims,

The identity of a man through time is the identity of his body, but it is the identity of a certain sort of body, that informed by a human soul which is at least capable of performing some of the operations characteristic of human beings . . . In the case of "the same man" we are concerned not just with the identity through time of a parcel of matter but with the identity through time of a parcel of matter of a certain sort, a living body endowed with characteristics essential to human beings or at least the potential for these characteristics. As long as the body exhibits these characteristics or has the potential to do so it is ensouled, and if there is no break in the history of such a body, then there is presumably no break in the history of its soul either.⁷²

⁷² Sandra Edwards, "Saint Thomas Aquinas on 'The Same Man,'" *Southwestern Journal of Philosophy* 10 (1979): 94.

There are several key points to note in this passage. First, Edwards asserts the primary principle of identity to be matter. Second, she states that the principle of identity is not just any matter, but an informed material body; substantial form thus plays a role in identity. Third, she claims that the presence of the same soul, informing the same material body—with the result that the same human being exists—is evidenced by the *continuous* history of the body.

Continuity of material existence plays a key evidentiary role in Edwards's account. She claims that there are no grounds for presuming the existence of the same substantial form informing two material bodies that exist at distinct, non-continuous times. Aquinas makes this point in an example he gives of fire:

While it continuously burns, a fire is said to be one in number, because its species remains; though wood may be consumed and new wood applied.⁷³

If all the matter loses the species of fire at once, and other matter is converted into fire, there will be a numerically distinct fire. But if, little by little, as one piece of wood burns another piece is substituted, and so on until all of the first piece is consumed, it will always remain the numerically same fire; since always what is added passes into what pre-existed.⁷⁴

Even though the matter of a particular fire may fluctuate in its constituents—wood is consumed and new wood added—as long as material continuity is maintained, the substantial form of that particular fire remains and the same fire persists. If, however, there is a break in material continuity—if a fire goes out and then is re-ignited—there is a change in substantial form and the re-ignited fire is not identical with the fire that previously went out. Aquinas notes the same material flux in human bodies. Bodies undergo cellular decay, and food is taken in and transformed by digestion into raw material to generate new cells and other bodily components.

⁷³ SCG, bk. IV, ch. 81.

⁷⁴ ST I, q. 119, a. 1, ad 5.

As long as there is material continuity, then the same substantial form and the same body persist through such changes in micro-level constituents.⁷⁵

Edwards argues that the identity of a material substance requires two things: (1) persistence of the same substantial form, and (2) continuous existence of the same material body. The identity of a material substance is due to the continuous existence of *this* body, which is evidence of the persistence of *this* substantial form. Edwards admits that substantial form may be the primary principle of identity, but not without reference to a continuously persisting body:

Identity of body is not sufficient for the identity of the man at different times. There must also be the same soul. Forms, however, including the human soul, are distinguished only by the matter they inform and so must be identified through time by means of this matter.⁷⁶

According to Edwards, both the soul and body of a human being are required for her persistence as the same substance. A break in the continuity of a human being's body results in a change of substantial form and loss of identity, as in the case of fire. This creates a problem for Aquinas, since, as a Christian, he believes that human beings will experience bodily resurrection and renewed existence as complete human beings. According to Edwards, a resurrected human body cannot compose the identically same human being that existed before death.⁷⁷

Stump argues, contrary to Edwards, that substantial form alone is the principle of identity for substances:

For any substances x and y , x is identical to y if and only if the substantial form of x is identical to the substantial form of y .⁷⁸

⁷⁵ See ST I, q. 119, a. 1, ad 1; CT, ch. 159; John Chandlish, "St. Thomas and the Dynamic State of Body Constituents," *Journal of the History of Medicine and Applied Sciences* 23 (1968): 272-5. Though Aquinas did not have the scientific resources to recognize the existence of cells as constituents of living bodies, he did understand that living bodies decay, that is, lose some material constituents, and are rejuvenated through nutrition, that is, gain new material constituents by digesting food.

⁷⁶ Edwards (1979), 93.

⁷⁷ See Edwards (1979), 95.

⁷⁸ Stump (2003), 46.

Stump does not ignore the importance of material continuity, but recognizes it as a non-essential component of identity. Stump admits that, since matter individuates form in the case of material substances, the continuity of substantial form and continuity of designated matter go hand-in-hand, as in the case of fire; the continuous existence of the same designated matter individuates the same substantial form. However, this does not entail that material continuity is necessary for the persistent identity of all material substances and the continuity of all types of substantial form.

Edwards fails to recognize the degrees to which a form may be related to matter for the sake of identity. Take Aquinas's example of a statue that is melted down and then reconstituted. The same material constituent, that is, the same bronze, is present in both statues; however, the form of each statue is distinct. Non-identical statues result, not from material discontinuity, but from *formal* discontinuity. Non-identical statues result, because the form of an artifact, such as a statue, has a fragile relationship to its matter. A significant change in the matter's quantitative dimensions, for example, the melting down of a statue, is sufficient to result in a formal change.⁷⁹

The form of a natural substance,⁸⁰ such as fire, does not have as fragile a relationship to its matter. The matter of such a substance may significantly change its quantitative dimensions without provoking a change in form. A small flame burning in an ember may grow to become a raging forest fire covering several thousand acres without ceasing to be the same fire.

⁷⁹ I will not discuss how significant a material change must be in order for a formal change to occur in an artifact. At one end of the spectrum, a statue of a man may have one of its arms chopped off by vandals and yet remain the same statue. At the other end of the spectrum, a statue may be chopped into a thousand or more pieces by vandals and thereby cease to exist.

⁸⁰ I am utilizing this term to refer to a material substance that occurs in nature, as opposed to an artifact. I am not referring to any created substance, which would include angels who are not material.

The form of a human being has a different relationship to the matter it informs. Aquinas makes the point that the identity of a statue is not analogous to the identity of human beings: “but the human form, namely the soul, remains after the dissolution of the body; and thus it is not a similar case.”⁸¹ The same distinction holds between human souls and the substantial forms of other natural substances. As established earlier, Aquinas conceives of a human soul as able to subsist without informing any material body. As a result, the persistence conditions of a human being’s substantial form are distinct from those of other natural substances, such as fire, and artifacts, such as a statue. For both artifacts and non-human natural substances, material continuity is required in order for the same substantial form—and hence the same statue or fire—to persist. On this point, Edwards is correct. For human beings, material continuity is not required for the same substantial form to persist.⁸² Therefore, Stump contends that substantial form should be understood as the primary Thomistic principle of identity, particularly for human beings.

The contention that the same human soul alone preserves the identity of a human being comes to the fore in Aquinas’s account of bodily resurrection. Discussing the identity between a human being as he exists before death as a soul/body unity, and a human being as he exists post-resurrection as a soul/body unity, Aquinas states the following:

For a human being to rise numerically the same, it is necessary that his essential parts are numerically the same. Therefore if the body of a risen human being is not of this flesh and this bone of which he is now composed, it will not be the numerically same human being rising.⁸³

Edwards asserts that an identical human being cannot be resurrected, because there is material discontinuity between death and resurrection. The body of a resurrected human being will not be

⁸¹ ST Supp., q. 79, a. 2, ad 4.

⁸² See ST Supp., q. 79, a. 2, ad 1.

⁸³ SCG, bk. IV, ch. 84.

the same as that which composed him before death. This is due to Edwards's univocal understanding of the relationship between matter and substantial form in different types of things. Like statues and fire, Edwards holds that material discontinuity implies formal discontinuity and hence loss of identity for human beings. Aquinas, aware of such objections,⁸⁴ nevertheless asserts that the same human being dies and is resurrected because of the unique relationship had by a human soul to its material body that allows a human soul to persist despite material discontinuity.

Aquinas argues that, since a human soul is the substantial form of a particular material body, the same human soul will inform the same human body at resurrection:

Just as the same form according to species should have the same matter according to species, so the same form according to number should have the same matter according to number. For, just as the soul of an ox cannot be the soul of a horse's body; so the soul of this ox cannot be the soul of another ox's body. Therefore, since the numerically same rational soul remains, it must be united again to the numerically same body in resurrection.⁸⁵

Aquinas asserts that the identity of a resurrected human being is "made when the same soul is conjoined to the numerically same body."⁸⁶ The identity of a resurrected body is effected by nothing other than its being informed by the same soul that informed it before death. This is possible because a human soul is the substantial form of its body and that by which the body exists with a specific nature and as the body of an individual substance: "for this animal, by this soul, is not only an animal, but an animate body and a body and also this thing [*hoc aliquid*] existing in the genus of substance."⁸⁷

That a human body's identity is by virtue of the soul's identity is also due to the fact that an individual human being has her *esse* because of her soul. The *esse* of a human being is

⁸⁴ See SCG, bk. IV, ch. 80.

⁸⁵ CT, ch. 153.

⁸⁶ ST Supp., q. 79, a. 2.

⁸⁷ CT, ch. 154. Cf. SCG, bk. IV, ch. 81.

nothing other than her soul's *esse* and this *esse* remains in the subsisting soul after death. This will be the same *esse* of the post-resurrection human being due to the same soul informing her body:

Therefore, the soul's *esse*, which is of the composite, remains in itself at the dissolution of the body; and, when the body is restored in resurrection, it is returned in the same *esse* that remained in the soul.⁸⁸

As the substantial form of a particular human body and the source of a human being's *esse*, a human soul is able to preserve the identity of an individual human being. Her soul is that by which, at resurrection, a human being has the same *esse* and the same body she had before death.

Aquinas further makes the point that, since the exact material constituents of a human being's body at the moment of her death persist in some form of existence, that is, they may be reduced to micro-level elementary particles without ceasing to exist altogether, it is possible for those exact same particles to recompose a resurrected body. However, while recomposition from the exact same particles may occur, it need not occur. As already noted, Aquinas recognizes that there is an ebb and flow to the material constituents of a human being's body throughout her life. This does not create a problem for a human being's identity, any more than it would in the case of fire, due to the persistence of the same substantial form. What is important for a human being's identity is the identity of her body *as a whole*, that is, as an organic unity. The identity of a body as a whole is safeguarded by the identity of its substantial form. Hence, at resurrection, any elementary material particles would suffice for the recomposition of a human being's body.⁸⁹ No matter from where such particles originate—even if they never had

⁸⁸ SCG, bk. IV, ch. 81.

⁸⁹ In certain passages, such as CT, ch. 154 and ST Supp., q. 79, a. 1, ad 3, Aquinas appears to hold the opposite view that the exact same material constituents that composed a human being's body prior to death must compose her resurrected body. However, in CT, ch. 154 and ST Supp., q. 80, a. 5, *sed contra*, Aquinas makes contrary assertions in agreement with the view I outline here. For reasons why I think Aquinas does better to hold the view that any material constituent can compose a human being's resurrected body, see Eberl (2000), 219-222.

composed that human being's body during her life—they are made to compose *her* body due to their matter being informed/configured by *her* soul.⁹⁰

Contrary to Edwards, Stump offers a properly Thomistic account of identity by affirming the primary role played by a human being's substantial form. A material body has a role in the coming-to-be and individuation of a human soul. However, matter itself has no intrinsic qualities that are unique and definitive of an individual substance. A human being is both a member of the human species and a unique, individual member of the human species by virtue of her soul. Any role matter plays in constituting the nature of a human being is metaphysically and ontologically dependent upon the soul as its substantial form. Furthermore, while matter is indeed requisite for a human being to actualize all her capacities as a rational animal, a human soul alone is sufficient for a human being's individual existence as a rational animal and her intellectual/volitional activities.

VII

Throughout this paper, for the most part, I have used Aquinas's own terminology to describe the nature of human beings. In this final section, I wish to translate Aquinas's account into more contemporary metaphysical terms. I will thus formulate my own account of the nature of human beings, following Aquinas, which will be suitable for comparison to contemporary accounts of human nature.

I claim that two things compose a human being: (1) a mind capable of rational, self-reflexive thought, and (2) an organic body with a specific genetic structure. (1) corresponds to what Aquinas refers to as the intellect and the rational nature part of the Boethian definition of a

⁹⁰ See Stump (1995), 517; Eberl (2000), 223-4.

person.⁹¹ (2) corresponds to what Aquinas would call the informed human body and the individual substance portion of Boethius's definition. Let us examine each of these in turn.

Aquinas claims that a human mind is not reducible to the functioning of a human brain. A mind is not identical to a brain, nor is the cognitive functioning of a mind merely the firing of neurons in a cerebral cortex. Rather, there are cognitive capacities of a human mind that cannot be wholly explained in neurophysical terms alone, such as self-reflexive consciousness and intellectual understanding of abstract concepts.⁹² A human mind has a special mode of knowing that transcends mere physicality.

This does not entail that there is no relationship between a human being's mind and her brain. In fact, Aquinas offers a very intimate relationship between the two, which is accomplished in three ways. First, certain cognitive functions of the mind are recognized by Aquinas to be localized in the brain. These are the cognitive functions human beings share with non-human animals and include what Aquinas terms the *estimative* capacity, by which animals are able to determine what is good versus what is harmful to them.⁹³

The second way in which a human mind is related to a brain is due to the mind's dependence upon sense-perception for gaining knowledge. Unlike Plato, Aquinas contends that a mind is a *tabula rasa* at its creation; it has no innate knowledge. The natural source of

⁹¹ The term "mind" does not precisely correspond to Aquinas's term "intellect." As will be shown, the mind includes certain capacities, such as the estimative capacity, that are distinct from the intellective capacity to understand universal concepts. Thus, the intellect is but one capacity of the mind. Contemporary philosophers, though, often understand the concept of mind in a fashion similar to Aquinas's concept of intellect and thus I propose the above substitution of terms.

⁹² There may be many other qualities of a human mind that are also irreducible to brain functioning, but I simply list here two of the most obvious examples that are cited in Aquinas's account as given above.

⁹³ See ST I, q. 78, a. 4. That Aquinas recognizes such a cognitive function to be a function of the brain fits with his mechanistic understanding of non-human animals as determined. Animals have the cognitive capacity to recognize goods versus harms, and they must act based upon such recognition. If an animal recognizes something as good, the animal must move towards it. An animal's brain is the origin of motivation for its body. Human beings share the estimative capacity and it too is localized in the brain. Nevertheless, human beings are not determined by it due to having higher cognitive capacities that are not defined by what physically occurs in the brain. Human beings are *free*.

knowledge for a human mind is its sensory experience of the surrounding environment.⁹⁴ Sense-perception is a mental capacity humans share with all other animals, and is a function of a brain and the sensory organs connected to it. When damage occurs to the brain or sensory organs, the mind's higher cognitive functions are affected.⁹⁵

The third way in which a human mind is related to a brain has to do with (2) above. For Aquinas, a human mind is not an independently existing entity. Rather, it is one set of capacities had by a human soul, which is the substantial form of a material body. One way to understand the notion of a human soul, as a substantial form, in contemporary terms is to think of it as a *principle of organization* for material particles. A human body is an *organic* construct. It has a variety of parts that operate both independently and collectively to support the existence and activity of a living, sensing, moving, and thinking thing. Both the independent operation of one of a body's organs, and its functional unity with the body's other organs, are governed by the *formal unity* of the organism itself.

All living organisms, and human beings in particular, are more than the sum of their parts. Yet, they are wholly dependent upon their parts for their organic unity and activity. I am not my liver; I am not my heart; I am not my heart and my liver; I am not the entire set of organic components of my body. Yet, I need my liver; I need my heart; I need the entire set of organic components of my body. I am *composed* of the organic components that can be collectively termed "my body," but I am not identical with my body and thus not reducible to it.

⁹⁴ See ST I, q. 84, a. 3. Aquinas recognizes that a human mind may gain knowledge by other means. God may directly infuse knowledge into it, similar to Augustine's account of divine illumination, and it can gain insight and new knowledge by reaching conclusions through discursive reasoning. However, the former is not a *natural* means of a human mind's acquisition of knowledge and Aquinas employs it only for the sake of explaining how a separated human soul can gain new knowledge. The latter is part of a human mind's natural intellectual processes, but is dependent upon sense experience for the formation of the concepts utilized in discursive reasoning.

⁹⁵ See ST I, q. 76, a. 5; ST I, q. 84, a. 7.

I am a being composed of an organic body that is suitably organized to support my activities of living, sensing, moving, and thinking. Most of my activities are wholly realized within the organic structure of my body, for example, moving, breathing, and seeing. But, my conscious mental functions are not wholly realized within my cerebral cortex; nevertheless, the functioning of my cerebral cortex supports them. Even those activities that are realized wholly within my body, though, should not be considered as activities of my body, as if my body were something separate from me. Rather, since I am composed of my body, I am the being who moves, breathes, and sees. I physically act *by virtue* of my body, but I am the *agent* of such activities. The same goes for my conscious mental activities. It is not my mind that knows, judges, hopes, chooses, etc. Rather, I perform these and other mental activities *by virtue* of my mind.⁹⁶

In providing an analytic formulation of Aquinas's account of human nature, it is necessary to discuss the principles of individuation and identity across time and change. I provide here two reasons why a human being exists as an individual substance that is not a part of another substance. First, a human being is composed of a material body that has a property of *unique* spatio-temporal existence: wherever or whenever a particular human body exists, no other material body exists at that same place at that same time which is not a constituent of that human body.

Second, the spatio-temporal uniqueness of a particular human body is due to her body's functional organization and formal unity. As a specific type of organized material body, a human body has certain material constituents as part of its existence, for example, its organs, genes, and micro-level structures. Furthermore, an organized human body does not allow certain

⁹⁶ For a similar assertion, referring to the relationship of human being and her brain, see Roderick Chisholm, "On the Simplicity of the Soul," in *Philosophical Perspectives* 5, ed. James Tomberlin (Oxford: Blackwell, 1991), 171.

other material things to be constituents of it, for example, the clothes worn upon it or the coffee cup held in its hand. Since such objects fail to be involved in a human body's formal unity or functional organization, they are not *parts* of it.⁹⁷ A human being's existence as an individual substance is thus signified by the unique spatio-temporal existence of her body—corresponding to Aquinas's conception of designated matter—and her body's formal unity and functional organization—corresponding to the dependence of a designated material body upon its substantial form.

The persistent identity of an embodied human being through time and change is due to the continuous formal/functional relationship of her parts. As Kit Fine argues, it is not the mereological sum of parts that make an object the same object at two distinct times. Rather, it is the existence of such parts in the proper *relationship* to each other: "Given objects *a, b, c, . . .* and given a relation *R* that may hold or fail to hold of those objects at any given time, we suppose that there is a new object—what one may call 'the objects *a, b, c, . . .* in the relation *R*.'"⁹⁸ Objects such as a carburetor, transmission, chassis, wheels, etc., may combine to form a new object—a car; only if, however, they stand in a certain relationship to each other such that the wheels are spaced in a rectangular formation touching the ground, the chassis is attached to the wheels, and the carburetor, transmission, and other engine parts are functionally organized appropriately. Fine offers his account as a contemporary equivalent to the notion of substantial form and terms the new object that results from the organized relationship among the previous objects a *rigid embodiment*: "An object of this special sort will be called a *rigid embodiment*,

⁹⁷ As Peter van Inwagen puts it, such things cannot be proper parts of a human body, because they are not "caught up in [its] life." See Peter van Inwagen, *Material Beings* (Ithaca: Cornell University Press, 1990), 94.

⁹⁸ Kit Fine, "Things and Their Parts," in *Midwest Studies in Philosophy* 23, ed. Howard Wettstein (Oxford: Blackwell, 1999), 65.

since the ‘form’ R is embodied in the fixed ‘matter’ a, b, c, \dots .”⁹⁹ A further equivalency between Fine’s and Aquinas’s accounts concerns the possibility of changes in particular material constituents without a change in a material substance’s identity as a whole. What constitutes rigid embodiment for a human being is an organized body with a certain genetic structure, certain vital organs, blood, etc. For an embodied human being to continuously exist as the same being, she must have a liver, a heart, a brain, the same basic genetic structure, blood, etc., all organized in a proper functional relationship to each other.¹⁰⁰

There are also temporary constituents of an embodied human being, which may cease to be his constituents without his ceasing to exist as the same human being, for example, the particular liver I now have, the blood coursing through my veins at this moment, my left foot. Not only do the micro-level constituents of these bodily parts naturally change through the complementary processes of decay and nourishment; but also, such parts may be exchanged through liver transplant, blood transfusion, and replacement by a mechanical foot. Such changes can occur without a consequent change in my identity. As long as the conditions of rigid embodiment are satisfied, an embodied human being’s persistent identity is preserved.

Fine’s conditions for persistent identity are not exactly equivalent to Aquinas’s, because Fine is concerned with identity conditions only for purely material substances. For Aquinas, human beings are not purely material; a human being can exist composed of her soul alone. This does not entail any contradiction between Fine’s and Aquinas’s respective accounts. Both recognize that it is not material parts alone, but also their formal/functional relationship to each other, that is responsible for a material substance’s persistent identity. Aquinas, because of his

⁹⁹ Fine (1999), 65.

¹⁰⁰ Fine postulates the following identity criterion for rigid embodiments: “The rigid embodiments $a, b, c, \dots / R$ and $a', b', c', \dots / R'$ are the same iff the state of a, b, c, \dots standing in the relation R is the same as that of a', b', c', \dots standing in the relation R' ” (Fine (1999), 66).

Christian belief in bodily resurrection, takes another step to affirm that a human soul alone preserves a human being's identity and is the principle of a resurrected material body's formal/functional unity. A human soul thus satisfies Fine's conditions of rigid embodiment and, consequently, guarantees the resurrection of an identical human being.

VIII

In this paper, I have had two goals: (1) to provide a coherent Thomistic account of the nature of human beings, and (2) to formulate this account in terms suitable for comparison to contemporary accounts of human nature. In conclusion, I wish to call to mind what I claim are the key elements of the Thomistic account I have described. A human being is composed of an organized material body capable of supporting capacities of life, sense-perception, and self-conscious rational thought. A human being is a distinct ontological entity that comes into existence through the coming into existence of a particular, suitably organized, material body. A human being has qualities that are not had by either her body or its organizing principle, and thus is not identical to those parts, taken individually or together. A human being is the agent responsible for the actualization of her capacities in intellectual, volitional, and behavioral activity. Such activity, though, can be accomplished by a human being only by virtue of her mind, her organized body, or the two of them working as one. Even though a human being's existence transcends her material body and she can persist without it, such does not entail that a human being ever ceases to bear some relationship to her body. A human being, while more than the sum of her parts, nonetheless does not naturally exist and act without being composed of those parts.¹⁰¹

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