On Animals, Men, & Robots Regina Cœli Academy Natural Philosophy – Physics Lecturer: Mr. Alan Aversa	O Creator ineffable, who of the riches of Thy wisdom didst appoint three hierarchies of Angels and didst set them in wondrous order over the highest heavens, and who didst apportion the elements of the world most wisely: do Thou, who art in truth the fountain of light and wisdom, deign to shed upon the darkness of my understanding the rays of Thine infinite brightness, and remove far from me the twofold darkness in which I was born, namely, sin and ignorance. Do Thou, who givest speech to the tongues of little children, instruct my tongue and pour into my lips the grace of Thy benediction. Give me keenness of apprehension, capacity for remembering, method and ease in learning, insight in interpretation, and copious eloquence in speech. Instruct my beginning, direct my progress, and set Thy seal upon the finished work, Thou, who art true God and true Man, who livest and reignest world without end. Amen.
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Living vs. Non-Living Bodies	Living vs. Non-Living Bodies
 Bodies are divided into two classes: some are living, Can move themselves others without life. Summa Theologiæ, l^a q. 18 a. 1 c. ("Whether to live belongs to all natural things?"): "[A]n animal begins to live when it begins to move of itself." Corollary (against panpsychism): Because not everything moves itself, there are somethings that are not alive. 	 In living bodies, in order to have intrinsically a moving part and a moved part in the same subject, the substantial form, called the soul, requires an organic disposition, or heterogeneous parts. Argument of <i>Summa Theologiæ</i>, l^a q. 75 a. 1 ("Whether the soul is a body?") in syllogistic or scholastic form: Major: The first principle or formal cause of life of those things which live cannot be corporeal. Minor: The soul (<i>anima</i>) is the first principle of life of those things which live. Conclusion: Therefore, the soul is not corporeal.
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Vegetative & Sensitive Souls		Human Souls		
 They do not subsist; 		 Human soul = "intellect" / "mind" / "rational soul" 		
 are not produced; 		 The human soul subsists by itself; 		
• in the sense of <i>creatio ex nihilo</i>		 independent of material conditions for some of its operations 		
 are a principle whereby the living thing exists and lives; 		- One such operation is intellection.		
 depend entirely on matter. 		 Only humans can understand universal concepts. 		
 They are indirectly destroyed at the dissolution of the compound. 		 is created by God when it can be infused into a sufficiently disposed subject; 		
		 and is incorruptible and immortal by nature. 		
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Substantial Form of a Human Substantial Form of a Human The rational soul is so united to the body as to By the rational soul, man is a: be its single substantial form. Man, Animal, • Opposed to Cartesian dualism: the body (a res Medieval deifinition of man: "Man is a rational animal." *extensa*) as distinct from the soul (a res cogitans) Living, - Interestingly, the guantum physicist Werner Heisenberg Body, wrote that the "concept of the soul for instance in the philosophy of Thomas Aquinas was more natural and Substance. less forced than the Cartesian concept of 'res cogitans,' · and being. even if we are convinced that the laws of physics and • Soul gives man every essential degree of perfection. chemistry are strictly valid in living organisms." (Physics & Philosophy p. 80). It communicates to the body the act of existence whereby itself exists. January 11, 2011 January 11, 2011 A.M.D.G A.M.D.G 8 Faculties of the Human Soul Intellectuality & Immateriality · Faculties (accidents) that naturally spring from the Intellectuality necessarily follows immateriality. human soul: Intellectuality means ability to reproduce in oneself the forms of the objects known, without any injury to the Organic proper form. - Subject organic faculties is compound (body + soul). No form can be known except as abstracted from - Senses matter. · Five exterior senses: touch, taste, smell, sight, hearing · Four interior senses: sensus communis, memory, imagination, The adequate object of intellection is being as cogitative sense such. Inorganic The proper object of the human intellect, in the - Subject of inorganic faculties is soul alone. present state of union, is restricted to the essences The intellect (intellectus) is an inorganic faculty. abstracted from material conditions. · Consequently, it is intrinsically independent of any organ. January 11, 2011 AMDG January 11, 2011 AMDG 9 10

How Hum	nans Receive Knowled	lge	Sense v	s. Intellectual Knowledge		
 Humans rece things. 	eive their knowledge from sensit	ole	Through the know the unit	se species (phantasms) we directly iversal;		
• Nihil est in il	ntellectu quod non prius in sensu.			ntellect abstracts the intelligible species		
	ng—besides the intellect, which is jible—is actually intelligible.		from the phantasm. This is also known as induction: particular → universal knowledge 			
 Because the 	ese things are individual			we know by the senses, and also by		
	e soul must have an active pow cts the intelligible forms from the			the intellect through a conversion to the phantasms;		
phantasms.Phantasms are "mental images".		 we rise by analogy to the knowledge of the spiritual. 				
				January 11, 2011	A.M.D.G.	11

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The Will's Relation to the Intellect		Are Intelligent ETs possible?			
 The will follows, does not precede, the intellect; The intellect, in presenting to the will some apprehended good, moves it as to the specification of its act. The object of the will is the good. it necessarily desires that which is offered to it as a good which entirely satisfies the appetite; it freely chooses among several good things that are proposed as desirable by the wavering judgment. Election, then, follows the last practical judgment; it is the will which determines it to be the last. 		 In other words: Can "any intellectual substance [be] united to any other [non-human] body as its form"? Cf. Summa Contra Gentiles, lib. 2 cap. 90 "That an intellectual substance is united only to a human body as its form" 			
Marie I. George The The	on Intelligent Extra-Terrestrial Lif (St. John's University, Jamaica, N omist, 65, 2, April 2001, 239-258.	lew York)	that could exis to body as its	s to our attention that one st is a separated intelliger mover. He himself thinks ces of this sort which mov	nce joined that there

material beings other than humans in the universe, both as a philosopher and as a theologian. As a philosopher he sought to understand the order of the universe and this entails ascertaining what beings are in the universe. As a theologian he sought knowledge of created beings insofar as it leads to a greater understanding, admiration, and love of the creator, and also insofar as it frees one from superstitious beliefs which pose an obstacle to faith in God. Although Aquinas was unable to approach the question of the existence of intelligent extra-terrestrial life from the scientific perspective of our day, he does raise some generally overlooked philosophical questions regarding the status of such beings. His theological reflections are helpful for addressing the frequently voiced claim that the discovery of intelligent extraterrestrial life would spell the end of Christianity. Aquinas's position is that it is possible that ETs of a certain sort exist, but improbable that they do.

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"Aquinas calls to our attention that one sort of ET that could exist is a separated intelligence joined to body as its mover. He himself thinks that there are intelligences of this sort which move the heavenly bodies. As for the other sort of ET which would consist of a separated substance united to a body as its form, Aquinas points that it is extremely unlikely that a pure intelligence be united to a body as its form, since the pure intelligence in no way profits from its union to the body. However, an intellectual substance of the rational sort is suitably united to a body since an intelligence of this sort can only acquire its ideas through sense experience.

"Aquinas does not favor the idea that other human-type beings exist because he thinks that the human soul represents the very lowest type of intelligence, whereas the human body represents the very highest material body. However, he does remain open to the possibility.

"From a theological standpoint, Aquinas explains that there is no reason for concern here because it is not the task of Scripture to classify the beings in the universe. Since Aquinas does not think that there in fact are other human-type beings, he has little reason to investigate any apparent conflicts between their existence and scriptural statements. His examination of whether many Incarnations are possible is useful for theological discussions of ET existence.

"Aquinas points out that the sort of body the composite being must have is specified to some extent by the requirements of the intellectual substance that is united to it. The body cannot be a simple body such as air or iron, because sense organs require a balance of elements, and indeed, a most subtle blend of elements; otherwise the being will lack a good sense of touch and well-functioning internal senses that provide reason with the starting points it needs for forming ideas. Aquinas further points out that rational beings need not have fingers, hands, and feet as humans do; he holds that even humans would still be human without them.

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"Aquinas explicitly denies that it is probable that other human-type bodies exist, for the reason noted above. There are two other probable	References	
arguments that can be drawn from Aquinas, one against and one in favor of the existence of other human-like creatures. On the one hand, the human species would reflect God's goodness in a special way by being unique, while on the other hand, it is befitting to God's goodness that he create more of better creatures. Aquinas leans in the direction of the former view, but realizes that the latter could in fact be the case. And by doing so, he gives us an example of the circumspection that this matter demands."	• 24 Thomistic Theses with Commentary by Fr. Lumbreras, O.P., S.T.Lr., Ph.D.	
	 Theses 13 – 21 are on psychology. 	
	 Relevant passages of St. Thomas Aquinas's Summa Theologiæ and Summa Contra Gentiles 	
	Science before Science by Dr. Anthony Rizzi	
	• Chapter 5: "On animals, men and robots"	
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