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<885, col. b>²

Utrum in actionibus naturalium et irrationalium agentium vera causalitas finalis intercedat.

Whether true final causality intercedes in the actions of natural and irrational agents.

1. Haec quaestio generalis est de omnibus agentibus carentibus intellectu et voluntate, quibus omnibus commune est ut non possint actiones suas vel media ad finem referre seu ordinare. Et hinc oritur dubitandi ratio; nam propria causalitas finis non est sine hac ordinatione, ut satis declarant illae particulae *cuius gratia*, et *propter quod aliquid fit*, quibus causalitas finis solet declarari; et ideo difficile est invenire aut declarare causalitatem finalem in actionibus horum agentium et in effectibus eorum, prout ab ipsis provenit. In contrarium vero est quia haec etiam agentia agunt propter finem, ut late probat Aristoteles, in II Phys., c. 7; non potest autem intelligi operatio propter finem sine causalitate finis. Et de brutis est specialis difficultas; nam illa vere moventur ad amandum ex aliqua cognitione boni; ergo intercedit in eo effectu et opere motio metaphorica boni cogniti; ergo illa pertinet ad veram causalitatem finalem. Atque hoc confirmat experientia; nam videmus hirundinem ita congregare paleas vel aliquid simile efficere sicut expedit ad finem suum, et sic de aliis.

5R This general question concerns all agents lacking intellect and will, in all of which it is generally the case that they cannot refer or order their actions or means to the end. And from this arises the reason for doubting, for the proper causality of the end does not exist without this ordering as is sufficiently shown by those phrases by which the causality of the end is usually indicated: ‘for the sake of which’ (*cuius gratia*) and ‘for the sake of which something happens’ (*propter quod aliquid fit*). But to the contrary is the fact that even these agents act for the sake of the end, as Aristotle proves more widely in *Phys.* II, c. 7. Action for the sake of an end, however, cannot be understood without causality of the end. And there is a special difficulty concerning brute animals, for they truly are moved to loving as a result of some cognition of good. Therefore, the metaphorical motion of cognized good intervenes in that effect and action. Therefore, that belongs to true final causality. And experience confirms this for we see that a swallow gathers chaff or effects something similar in such a way as to procure its end and likewise with other things.

A reason for doubting.

Aristotle.

Vetus opinio de agentibus naturalibus.

20R *The ancient opinion concerning natural agents.*

2. In hac re fuit antiqua opinio veterum philosophorum negantium opera naturae provenire ex intentione alicuius finis, sed casu ita constituisse, vel ex concursu atomorum temere ita concurrentium, vel ex necessitate materiae, ut citato loco II

2. In this matter, there was an ancient opinion of the old philosophers who denied that the works of nature result from the intention of some end but [maintained] that they came about by chance either from the concurrence of atoms blindly concurring in that way or from the ne-

¹Latin text is from <http://perso.wanadoo.es/v963918818/d23.htm>. Retrieved February 11, 2008. Spelling errors corrected without note. I checked the text against the 1597 edition (generally the most reliable text) for significant textual variations. Marginal notes are as found in the 1597 edition. Many of those, though not all and not always in the right place, are included in the Vivès edition as italicised text. For recorded variants, A = 1597 edition, D = digital source, and V = Vivès edition.

²Numbers in angle brackets indicate page numbers in the Vivès edition for ease of reference, given that it is the most widely used edition.

Ratio dubitandi.

Aristoteles.

Aristoteles. 5 Phys., c. 7 et 8, contra Anaxagoram, Empedoclem, Democritum, et Epicurum disputat Aristoteles. Quae sententia adeo est absurda ut refutatione non egeat. Oportet tamen advertere aliud esse agere de constitutione totius universi, et de actione universalis naturae ad ipsum componendum et ita regendum ut conservari possit, aliud vero de actionibus propriis singulorum agentium naturalium. Prior actio seu effectio revera non est actio alicuius agentis naturalis intellectu carentis, sed est actio supremi auctoris naturae, qui sua sapientia totam universi naturam condidit ac moderatur; et ideo actio illa ad praesentem quaestionem non spectat, nec de illa dubitari potest quin propter finem ab auctore suo intentum, atque adeo ex causalitate finis profecta sit, iuxta doctrinam praecedentis sectionis. Atque hoc evidentissime docet ipsa universi pulchritudo et mira partium eius et causarum omnium consensio et ordinatio. Ex qua non solum sancti Patres, sed etiam sapientiores philosophi unum esse huius universi auctorem et gubernatorem, qui in finem a se intentum omnia constituit et ordinavit, intellexerunt, ut latius infra tractabimus demonstrando Deum esse, et multa de hac re erudite et breviter indicaverunt Conimbricenses, lib. II Phys., c. 9, q. 1.

3. Solum ergo hic inquirimus de actionibus naturalium causarum, sive illae sint omnino particulares, ut ignis, plantae, etc., sive aliquo modo universales, ut caeli. De quibus praeterea certum et clarum est non casu aut contingenter certas actiones operari, sed unumquodque agens naturale ex propensione propriae naturae habere definitam operationem, et operandi modum, ac certum terminum in quem per suam operationem tendit. Quod etiam est evidens experientia, nam lapis sua motu naturali semper fertur deorsum, ignis semper calefacit, ex diversis seminibus diversa viventia procreantur, et aliae potentiae et organa ad hoc munus, aliae vero ad alia destinatae sunt; et eam formam, situm, et reliqua omnia ad operandum necessaria in ea proportione habent res singulae, quae ad tales actiones vel effectus necessaria sunt. Quod in omnibus rebus naturalibus, et praesertim in viventibus et animalibus videre licet. Fuitque hoc necessarium ad convenientem

5R censity of matter, as Aristotle argues against Anaxagoras, Empedocles, Democritus, and Epicurus in the cited place in *Phys.* II, c. 7 and 8. This view is so absurd that there is no need for a refutation. Nevertheless, one must note that it is one thing to deal with the setting up of the whole universe and with the action of universal nature in setting itself up and ruling itself so that it can be conserved but another thing [to deal] with the proper actions of individual natural agents. The former action or accomplishment is not really the action of some natural agent lacking intellect but is the action of the supreme author of nature who puts together the whole nature of the universe and guides it by his wisdom. And therefore that action is not relevant to the present question nor can there be any doubt concerning it that it was made for the sake of the end intended by its author and for that reason was made by the causality of the end, according to the doctrine of the preceding section. And the very beauty of the universe and the marvelous harmony and ordering of its parts and causes teaches this most clearly. As a result of this [teaching] not only the holy Fathers but also the wiser philosophers understood that there is one author and governor of this universe who sets up and orders all things according to the end intended by himself. We will discuss this more thoroughly below in demonstrating that God exists and the Coimbra [commentators] pointed out many things concerning this matter with brevity and erudition in *Phys.* II, c. 9, q. 1.

30R 3. Therefore, we only inquire here concerning the actions of natural causes that are either entirely particular like fire, plants, and so on or that are in some way universal like the heavens. In addition, it is clear and certain concerning these that certain actions are done not by chance or contingently but that each natural agent has by the propensity of its proper nature a definite action and way of acting and a fixed *terminus* to which it tends through its action. This is also evident from experience, for a stone is always brought downwards by its natural motion, fire always heats, from different seeds different living things are begotten, and some powers and organs are fixed for this function but others for another function. And individual things have their form, situation, and the remaining things which are necessary for acting which are necessary for such actions or effects. These may be seen in all natural things but especially in living things and in animals. And this was necessary for the agreeable composition and governance of the universe itself, for it exists with various things and contraries which [would] ex-

Aristotle.

The Coimbra commentators.

ipsius universi compositionem et gubernationem, nam cum ex
 variis rebus et contrariis constat, quae varias etiam et interdum
 contrarias actiones exercent, si non essent omnia ita consti-
 45 tuta ut singula ordinate sua munera obirent, in ipso universo
 summa confusio esset et res ipsae minime conservari possent;
 ut autem huiusmodi concentus et ordo ex tot rebus consurgere
 posset, necessarium fuit res singulas in destinatos fines seu ter-
 minos suis actionibus tendere, ex quibus totius universi bonum
 50 consurgeret. Item hac ratione videmus naturales motus regu-
 lariter eodem modo perfici, raroque deficere, idque non ab-
 sque aliquo extrinseco impedimento occurrente. Item, in suis
 operibus ita se gerunt res naturales sicut expedit ut ad connatu-
 ralem terminum perveniant, quo termino consecuto cessant ab
 55 operando. Haec ergo omnia sunt manifesta signa haec agentia
 naturalia operari non casu ac temere, sed definito modo ten-
 dendo in certum aliquem scopum.

4. Iam vero solum superest quaestio (quae ex parte vide-
 tur pertinere posse ad loquendi modum), an ratione huius de-
 60 terminationis dicenda sint haec agentia agere propter finem,
 et (quod ad nos magis spectat) an eorum actiones dici possint
 proprie causatae a finali causa. Aliqui enim simpliciter negant
 utrumque loquendi modum, quia ipsa agentia non moventur a
 fine, in quo proprie causalitas <887> finis consistit. Item, fi-
 65 nis respectu harum actionum non se habet ut principium, sed
 tantum ut terminus; locus enim deorsum respectu lapidis non
 est principium motus quo descendit, sed tantum terminus; fi-
 nis autem, ut saepe diximus, ut habet solum rationem termini,
 non est causa, sed ut aliquo modo est principium. Alii vero
 70 simpliciter putant admittendas esse illas locutiones, quia Aris-
 toteles absolute ait agentia naturalia operari propter finem, et
 formam dicit esse finem naturalis generationis, et significat esse
 proprie causam finalem. Item, quia natura summo artificio et
 75 industria has suas operationes exercere videtur per media valde
 proportionata fini.

Resolutio de causalitate finis in agentibus mere naturalibus.

5. Nihilominus, proprius modus loquendi in hac materia est
 actiones horum agentium naturalium esse propter finem et esse

exercise different and sometimes also contrary actions if they were not all
 set up in such a way that each individual attended to its functions in an
 45R orderly way. In the universe itself there would be the greatest confusion
 and the things themselves could not be conserved at all. But in order
 that harmony and order can arise from so many things, it was necessary
 that individual things tend to definite ends or *termini* in their actions,
 out of which the good of the whole universe arises. Also, we see by this
 50R reasoning that natural motions are executed regularly in the same way
 and that they only rarely fail (and this not apart from the occurrence of
 some extrinsic impediment). Also, natural things manage themselves
 in such a way in their actions that it is made ready for them to arrive at
 their connatural *terminus*, which *terminus* having been achieved they
 55R cease from acting. Therefore, all these things are manifest signs that
 these natural agents act not by chance and blindly but by tending in a
 defined way to some fixed target.

4. But now there remains only the question (which it seems might
 in part only pertain to a manner of speaking) whether by reason of
 60R these determinations these agents should be said to act for the sake of
 the end and (what is more relevant to us) whether their actions can
 properly be said to have been caused by the final cause. For some sim-
 ply deny either way of speaking because the agents themselves are not
 moved by the end in which the causality of the end properly stands.
 65R Also, the end does not stand as a principle with respect to these actions,
 but only as a *terminus*. For the place below with respect to a stone is
 not the principle of motion by which it descends but only its *termi-
 nus*. The end, however, as we have often said, is not a cause insofar as it
 only has the nature of a *terminus*, but [only insofar] as it is a principle
 70R in some way. But others simply think that these locutions should be
 granted, since Aristotle unreservedly says that natural agents act for the
 sake of the end and says that form is the end of natural generation and
 indicates that it is properly a final cause. Also, because nature seems
 to exercise these actions with the highest artifice and industry through
 75R means that are very proportionate to the end.

The resolution concerning the causality of the end in merely natural agents.

5. Nevertheless, the more proper way of speaking in this matter is that
 the actions of these natural agents are for the sake of the end and are

Vide Lactantium,
 lib. de Opificio
 Dei, et
 D. Thomam 3
 cont. Gent. a c. 2.

Reiecto errore, in
 quo sita
 difficultas.

See Lactantius,
De Opificio Dei,
 and St. Thomas,
SCG III, from
 c. 2.

I reject the error
 in which the
 difficulty is
 located.

effecta causae finalis. Non tamen ut praecise egrediuntur ab
 5 ipsis naturalibus agentibus, sed ut simul sunt a primo agente,
 quod in omnibus et per omnia operatur. Vel e converso (et fere
 in idem redit), prout ipsa proxima agentia substant directioni et
 intentioni superioris agentis. Et ideo ipsa agentia naturalia non
 tam dicuntur operari propter finem, quam dirigi in finem a su-
 10 periori agente. Ita explicarunt rem hanc sapientiores theologi
 et philosophi, D. Thom., 1 part., q. 103, a. 1, et III cont. Gent.,
 c. 25, ubi utitur communi exemplo de sagitta quae in certum
 scopum tendit, non tamen in illum se dirigit, sed a iaculante di-
 15 rigitur. Idem Albertus, in II Phys., c. 2; et ibi alii philosophi, et
 Simplicius, text. 78; sumiturque ex Aristotele ibi, et I de Caelo,
 c. 4, text. 32, ubi, dum coniungit Deum et naturam, dicens ni-
 hil facere frustra, satis indicat naturam in agendo propter finem
 subordinari Deo. Et eodem modo, lib. II de Partib. animal.,
 c. 13, ait naturam nihil agere frustra; et ibidem ait naturam
 20 velle hoc vel illud propter finem, quod non potest intelligi de
 natura, nisi propter auctorem suum. Et eodem sensu ait, IV
 de Generat. animal., c. 2: *Omnia quae natura vel arte fiunt, ra-
 tione aliqua sunt.* Et hinc etiam manavit illud tritum axioma,
opus naturae esse opus intelligentiae, ut est apud Averroem, XII
 Metaph., com. 18; et Themistium, I Phys., text. 81, et I de
 25 Anim., text. 23. Denique, ideo Hippocrates, quem <col. b>
 imitatur Galen., lib. I de Usu part., naturalia agentia docta et
 indocta vocat, indocta in se, docta in directione primae causae.

6. Atque ita fit ut in his actionibus, ut sunt a naturalibus
 30 agentibus, non sit propria causalitas finalis, sed solum habi-
 tudo ad certum terminum; ut vero sunt a Deo, ita sit in illis
 causalitas finalis sicut in aliis externis et transeuntibus action-
 ibus Dei. Adaequatum enim principium harum actionum non
 est solum proximum agens naturale, nisi forte secundum quid,
 scilicet in tali ordine; tamen, absolute praecipuum est prima
 35 causa; ideoque in adaequato principio talium actionum inclu-
 ditur intellectualis causa intendens finem earum.

7. Unde ulterius recte concludit Aristoteles primam radi-

10 1 part.] *om. D.*

Cur res naturales
 diversis
 dispositionibus
 affectae.

5R effects of the final cause. Yet not precisely as coming out of the natural
 agents themselves, but as being at the same time from the first agent
 who acts in all things and through all things. Or, conversely (and per-
 10R haps it amounts to the same thing), as the proximate agents themselves
 stand under the direction and intention of a superior agent. And for
 that reason natural agents themselves are not so much said to act for the
 sake of the end as to be directed to the end by a superior agent. This is
 the way in which the wiser theologians and philosophers explain this
 15R matter. St. Thomas [explains it in this way] in I, q. 103, art. 1, and *SCG*
 III, c. 25, where he uses the example of an arrow which tends to a fixed
 target yet does not direct itself to it but is directed by the shooter. Like-
 wise, Albertus [Magnus] in *Phys.* II, c. 2, and other philosophers in the
 same place and Simplicius in text. 78. And it is taken from Aristotle
 here and in *De caelo* I, c. 4, text. 32, where, provided that he conjoins
 God and nature, he indicates sufficiently that nature in acting for the
 sake of the end is subordinated to God when he says that nothing is
 done in vain. And in the same way he says in *De part. an.* II, c. 13,
 20R that nature does nothing in vain. And in that very place he says that
 nature wills this or that for the sake of the end, which cannot be un-
 derstood of nature unless on account of its author. And in the same
 sense he says in *De gen. an.* IV, c. 2: ‘All things which are done by na-
 25R ture or art are for some reason.’ And from here flows that familiar
 axiom ‘the work of nature is the work of intelligence’ as it is in Aver-
 roes, *Metaph.* XII, com. 18, and in Themistius, *Phys.* I, text. 81, and *De*
anim. I, text. 23. Finally, for this reason Hippocrates in *De usu part.* I,
 whom Galen imitates, calls natural agents trained and untrained, un-
 trained in themselves, [but] trained in the direction of the first cause.

6. And thus it happens that there is no proper final causality in
 30R these actions insofar as they are from natural agents but only a habitu-
 de to a fixed *terminus*. But as they are from God, there is final causality
 in them just as in other external and transeunt actions of God. For the
 adequate principle of these actions is not only the proximate natural
 35R agent, except perhaps with qualification, namely, in such an order. Still,
 without qualification there is in particular the first cause. And therefore
 in the adequate principle of such actions is included an intellectual cause
 intending their end.

7. Hence, Aristotle rightly further concludes that the first root on

St. Thomas.

Simplicius.

Averroes.
 Themistius.
 Hippocrates.
 Galen.

Why natural
 things are
 affected by
 different
 dispositions.

cem ob quam res naturales habent has dispositiones, vel haec
 organa, aut has partes et similia, non esse sumendam ex sola
 40 materia, sed ex fine. Nam si materia sumatur secundum se,
 indifferens est et nullam habet necessitatem harum disposi-
 tionum seu proprietatum; si vero supponatur ut iam affecta
 45 his vel illis dispositionibus, iam illae introductae sunt propter
 aliquem finem seu formam, et ipsa forma indiget illis propter
 suam conservationem vel propter aliquam operationem; ipsa
 vero operatio rursus est vel propter conservationem speciei
 aut ipsiusmet individui, aut saltem propter communicationem
 suae perfectiones; in his enim naturalibus agentibus non sunt
 50 operationes quae ipsaemet sint fines; hoc enim proprium est
 intellectualium rerum. Atque ita omnis connexio et necessi-
 tas connaturalis quae per se est in his rebus naturalibus, sumi-
 tur ex ordine ad finem. Neque obstat quod naturales prop-
 rietates necessario convenient propter intrinsecam dimanationem
 a forma, quia una habitudo non repugnat alteri, sed
 55 habent inter se subordinationem, nam illa necessaria dimanatio
 reducitur ad efficientem causam, quae subordinata est finali;
 ideo enim natura dedit tali formae vim, ut ab ea dimanarent
 tales proprietates, quia illae sunt accommodatae ad finem
 propter quem est res quae per talem formam constituitur. Sic
 60 igitur, tam in constitutione et formatione harum rerum quam
 in earum actione, reperitur concursus finalis causae; intentio
 autem propria talis finis non est in ipsis naturalibus agentibus,
 sed in prima causa.

Quae necessitas
 asserendi
 connexionem
 rerum
 naturalium et
 directionem in
 finem.

8. <888>Sed videri potest alicui sine causa confictus hic
 65 modus agendi propter finem, esseque praeter Aristotelis inten-
 tionem. Nam imprimis Aristoteles, in XII *Metaph.*, videtur
 sentire Deum haec inferiora non agnoscere, nedum curare illa;
 et in *lib. de Mundo ad Alexan.*, significat non recte sentire de
 Deo qui putant Deum in curandis his inferioribus actionibus
 70 occupari. Deinde si, per impossibile, Deus non concurreret ad
 actiones agentium naturalium, sed eas independenter suos mo-
 tus agere sineret, nihilominus lapis descenderet deorsum, ignis
 generaret sibi simile, et sic de caeteris; non est ergo haec fi-
 nalis causalitas, sed mera naturalis necessitas. Et confirmatur,
 75 nam si agentia naturalia agerent ex intentione divina, nunquam

40R account of which natural things have these dispositions or these organs
 or these parts and similar things should not be taken from matter alone
 but from the end. For if matter is taken according to itself it is indiffer-
 ent and has no necessity for these dispositions or properties. But if it
 is supposed as already affected by these or those disposition, then these
 45R having been introduced are for the sake of some end or form and the
 form itself requires these for the sake of its conservation or for the sake
 of some action. But the action itself is in turn either for the sake of the
 conservation of the species or of the individual itself or at least for the
 sake of the communication of its perfections. For there are no actions
 50R which themselves are ends in these natural agents, for that is proper to
 intellectual things. And thus every connection and connatural neces-
 sity which is *per se* in these natural things is taken from the order to the
 end. Nor is it an objection that natural properties necessarily agree on
 account of the intrinsic dimanation of the form, since one habitudo is
 55R not repugnant to another but they have a mutual subordination. For
 that necessary dimanation is reduced to the efficient cause which is sub-
 ordinate to the final [cause]. For nature gave the power of such a form
 in order that such properties would dimanate from it, because these are
 appropriate to the end for the sake of which the thing exists which is
 60R constituted through such a form. Thus for this reason the concursus
 of the final cause is found in the constitution and formation of these
 things as in the action of them. But the proper intention of such an end
 is not in the natural agents themselves but in the first cause.

8. But it can seem to someone that this mode of acting for the sake
 65R of the end was fabricated without cause and is contrary to the intention
 of Aristotle. For, in the first place, Aristotle in *Metaph.* XII seems to
 think that God does not recognize these lower things, much less care
 about them. And in *Lib. de mundo ad Alex.* he indicates those who
 think that God is occupied in cares about these lower actions do not
 70R think rightly concerning God. Next, if, *per impossibile*, God were not
 to concur with the actions of natural agents but were to permit them
 to conduct their motions independently, the stone would still descend
 downwards, the fire would still beget what is similar to itself, and so on
 for the remaining things. Therefore, there is none of this final causality
 but mere natural necessity. And it is confirmed: for if natural agents
 75R

This necessity in
 asserting a
 connection
 between natural
 things and a
 direction to the
 end.

errarent in suis actionibus, nec deficerent a consequendis terminis earum; consequens est contra experientiam; cum saepe generentur monstra, quae peccata naturae appellantur. Sequela patet, quia divina intentio nec frustrari potest nec errare.

80 9. Respondetur: de Aristotelis mente iam satis ex dictis constat, latiusque infra ostendemus, ex eius sententia, habere Deum scientiam et providentiam harum rerum singularium et inferiorum; quod non obscure indicat infra, lib. XII, in fine, dum totum universum subiicit Deo tamquam supremo principi et duci. Ad primam vero rationem respondetur primo
85 ex illa hypothese impossibili sequi naturam ordinatissime operari tendendo in finem sine ulla directione vel intentione finis, quod per se est satis absurdum. Etenim eodem modo posset quis argumentari quod, licet hic mundus non esset ab alio
90 conditus, si ex se ita esset sicut nunc est, habere convenientissimum ordinem sine causalitate finis. Hoc tamen non obstat quominus de facto, sicut non potest esse nisi causatus, ita non potest esse nisi causatus a fine. Ita ergo dicimus motus et actiones rerum naturalium, sicut non possunt esse sine concursu
95 alicuius intellectualis agentis, ita non posse esse sine causalitate finis. Adde deinde quod, si per impossibile Deus per se et immediate non concurreret ad omnes actiones agentium naturalium, nihilominus mediate dici deberent ordinatae in finem ab auctore naturae, qui et naturalibus agentibus dedit tales virtutes propter tales actiones et ipsas actiones esse voluit propter
100 certos fines et generatim propter bonum et conservationem universi.<col. b>

10. Unde tandem addo plures esse motus vel actiones in his rebus naturalibus quarum non potest sufficiens ratio reddi ex privatis proprietatibus vel inclinationibus singularum rerum; aqua enim sursum ascendit ad replendum vacuum, cuius ratio ex peculiari aquae natura ac proprio impetu reddi non potest, sed ex fine qui in perfectione totius universi sit positus, quem oportet ab alio superiori agente intendi. Simile est de aqua
105 maris, quae ita in littore continet impetum et tumentes fluctus suos, ut terram nunquam cooperiat; utique propter mixtorum et viventium salutem, quem finem intendit supremus

Multi in natura effectus quorum nulla reddi potest sufficiens causa praeter finem intentum a prima causa.

acted according to divine intention, they would never err in their actions nor fail to reach their *termini*. [But] the consequence is contrary to experience, since monsters—which are called sins of nature—are often generated. That the consequence would follow is clear, because divine intention cannot be frustrated and cannot err.

80R

9. It is responded: concerning the mind of Aristotle it is already clear enough from what was said. And we will show more thoroughly below that according to his view God has knowledge and providence of these singular and lower things. He indicates this not obscurely later
85 in book XII at the end provided that the whole universe is subject to God as to a supreme prince and guide. But to the first argument it is responded, first, that from that impossible hypothesis it follows that nature acts most ordinately by tending to the end without any direction or intention of the end. This is absurd enough in itself. And indeed in the same way someone could argue that, even if this world were not preserved by another, if out of itself it would be then just as it is now, it has a most agreeable order without the causality of the end. Nevertheless, this is no objection to the fact that just as it cannot be except if it was caused so it cannot be except if it was caused by the end. So
90 therefore we say that the motions and actions of natural things cannot be without the causality of the end just as they cannot be without the concursus of some intellectual agent. I add, next, that if, *per impossibile*, God were not to concur *per se* and immediately with all the actions of natural agents, they ought still to be called mediately ordered to the end by the author of nature who also gives to natural agents such strength
95 for the sake of such actions and he wills such actions to be for the sake of fixed ends and for the sake of the good and conservation of the universe generally.

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10. Whence, I finally add that there are many motions or actions in these natural things for which no sufficient reason can be given from the private properties or inclinations of individual things. For water ascends up again to fill the vacuum, the reason for which cannot be given from the specific nature of water and its proper impetus. But [it can be given] according to the end which is placed in the perfection of the whole universe, which must be intended by another superior agent. It is similar with the water of the sea which contains the water's driving force and swelling waves at the shoreline in such a way that it never covers up the earth. This is certainly for the sake of the well-

The many effects in nature of which no sufficient cause can be given beyond the end intended by the first cause.

naturae Gubernator. Ex his ergo intelligimus, quando hae res naturales moventur vel operantur iuxta proprias et peculiare
 115R inclinationes suas, cum per illas etiam deserviant commodis et
 115 conservationi totius universi et suarum specierum, vel etiam
 individuorum et praecipue hominis, in eis etiam operari ex di-
 rectione in finem, per subordinationem ad superius agens.

11. Ad confirmationem respondetur simpliciter negando
 120 sequelam; quin potius Aristot., II Phys., text. 82, inde confir-
 mat haec agentia naturalia agere propter finem, quia, sicut ars
 intendens finem interdum illum non assequitur, ita in actioni-
 125 bus naturae, eo quod certum finem intendant, inde sequi mon-
 stra seu peccata naturae, quia non semper possunt finem suum
 assequi propter impedimentum occurrens. Alioqui, si natura
 non tenderet in certum finem, nulla essent monstra in natura,
 quia non magis aberraret ab scopo efficiendo monstrum quam
 efficiendo quodlibet aliud; nam monstrum proprie est vitium
 130 naturae a fine suo deficientis. Quod vero obiiciebatur de inten-
 tione auctoris naturae nil obstat, quia illa intentio non semper
 est absoluta et efficax, seu (ut theologorum more loquamur)
 per voluntatem beneplaciti vel consequentem, sed per volun-
 tatem generalem vel antecedentem, quae est quasi conditionata
 135 intentio, quae in hoc consistit quod Deus vult effectum perfec-
 tum sequi quantum iuxta ordinem naturalium causarum sequi
 potuerit, cum quibus, quantum in ipso est, vult concurrere.
 Simul autem vel permittit, vel etiam interdum vult et intendit
 monstra vel pec- <889> cata naturae, vel propter universi pul-
 140 chritudinem et varietatem, vel ut causas naturales suos motus
 et cursus agere sinat. Et ideo, neque cum causa impedita ab
 alia extraordinario modo vult concurrere, neque etiam impe-
 dientem causam peculiari cura aut providentia remove, regu-
 lariter loquendo, quamvis ob commune bonum interdum id
 145 efficiat, de quo latius theologi, partim In I, dist. 45, partim In
 II, dist. 37; et D. Thomas, I, q. 22, et q. 105; et legi potest Au-
 gust., XVI de Civit., c. 8, et lib. LXXXIII Quaestionum, q. 24.

Quomodo bruta animalia propter finem operentur.

being of mixed and living things, which end the supreme governor of
 nature intends. From these things, therefore, we understand that when
 115R these natural things are moved or act according to their proper and
 specific inclinations, in them is also acted according to the direction to
 the end through subordination to a superior agent, since through those
 [inclinations] they also serve the advantages and the conservation of
 120R the whole universe and its species.

11. To the confirmation is responded by simply denying that the
 consequence would follow, so that Aristotle rather does not confirm in
 125R *Phys.* II, text. 82, that these natural agents act for the sake of the end,
 because just as an art intending an end sometimes does not achieve its
 end, so also in the actions of nature in the case where they intend a
 certain end, monsters or sins of nature follow thereupon because they
 cannot always achieve their end on account of an impediment that oc-
 curs. Otherwise, if nature did not tend to a fixed end, there would be
 no monsters in nature because it would no more deviate from the target
 of effecting a monster than from effecting anything else. For a monster
 130R properly is a vice of nature falling short from its end. But what was
 objected concerning the intention of the author of nature is no objec-
 tion at all because that intention is not always absolute and efficacious
 or, to speak in the manner of theologians, not through the will of good
 pleasure or through consequence but through the general or antecedent
 135R will, which is, as it were, a conditioned intention that consists in this:
 that God will a perfect effect to follow insofar as it can follow according
 to the order of natural causes, since he wills to concur with these inso-
 far as it is in itself. But at the same time he either permits or sometimes
 140R even wills and intends monsters or sins of nature, either for the sake
 of the beauty of the universe and variety or in order to permit natural
 causes to conduct their motions and orbits. And for this reason he nei-
 ther wills to concur with an impeded cause in some extraordinary way
 nor even to remove the impeding cause by special care or providence,
 regularly speaking, although he sometimes effects it on account of the
 common good, concerning which the theologians [speak] more thor-
 145R oughly in I, dist. 45, and in II, dist. 37, as well as St. Thomas in I, q. 22
 and q. 105. Augustine can also be read: *De civ. Dei* XVI, c. 8, and *De
 div. quaest. octoginta tribus*, q. 24.

In what way brute animals act on account of an end.

Lege Arist. lib. 2
 Physic., c. 8; et 2
 de anim., c. 4; et
 1 Politic., c. 5.
 Aristoteles.

Read Aristotle,
Phys. II, c. 8, and
DA II, c. 4, and
Polit. I, c. 5.
 Aristotle.

D. Thomas.
 Augustinus.

St. Thomas.
 Augustine.

12. Superest ut de brutis animantibus pauca dicamus, in eis enim maior quaedam apparet participatio causalitatis finalis. Primo quidem, quia a bono sibi conveniente et cognito metaphorice alliciuntur, atque ita in illud tendunt per actum a se elicited et ab illa motione metaphorica causatum; illa ergo motio aliqua realis causalitas est et non nisi finalis. Deinde, ut consequantur illud obiectum conveniens quod appetivere, certa media etiam a se cognita appetunt tanta industria et prudentia ut videantur plane et cognoscere utilitatem eorum ad finem, et propter illam ea appetere. De qua sagacitate et industria animalium, et multa scribunt philosophi, et quotidiana experientia nobis satis constat. Quae adeo moverunt nonnullos philosophos, ut existimarent bruta uti ratione, licet imbecilliori et imperfectiori quam homines. Quae sententia referri solet ex Porphy., lib. III de Abstinentia. Est tamen non solum a doctrina nostrae fidei aliena, verum etiam ab omni ratione et communi hominum sensu; nam potentia rationalis, ut Aristoteles dixit, IX *Metaph.*, valens est ad opposita, nam medio discursu in rebus agendis nunc hoc medio, postea alio utitur; belluae autem non ita operantur, sed semper eodem modo, quod sufficiens signum est non ratione, sed impetu naturae duci. Adde quod, si animae brutorum rationales essent, etiam essent immortales.

13. Alii vero, ut hoc vitarent incommodum, in alium extremum errorem inciderunt, negantes bruta quidquam <col. b> vere cognoscere aut appetere appetitu elicito, sed solum naturali pondere ferri, ut lapidem, aut extrinsecus mota et attracta, sicut ferrum trahitur a magnete. Verum hoc aequè absurdum est, et contra evidentem experientiam, immo et contra divinam Scripturam. Verumtamen, contra hos duos errores in scientia de anima agendum est latius.

14. Quod ergo ad praesens attinet, dicendum est bruta non cognoscere formaliter rationem finis aut medii, quia non possunt unum cum alio conferre; unde nec in ipso fine cognoscunt propriam rationem convenientiae propter quam est per se amabilis, immo nec discernunt inter obiectum quatenus est

12. It remains for us to talk a little about brute animals, for in these there appears a greater certain participation in final causality. First, indeed, because they are metaphorically drawn to good that is agreeable to them and cognized, and thus they tend to it through an act elicited from themselves and caused by that metaphorical motion. Therefore, that motion is some real causality but not unless final. Next, in order to follow that agreeable object which they desired, they also desire certain means cognized by themselves with such diligence and prudence that they clearly seem also to cognize their utility towards the end and to desire them for its sake. Many philosophers write³ about this sagacity and diligence of animals and it is obvious enough to us from our daily experience. For this reason it has moved some philosophers to think that brute animals use reason, although more feebly and imperfectly than humans. This view is usually attributed to Porphyry, *De abstinentia* III. Nevertheless, it is not only alien to the doctrine of our faith, but in truth also to all reason and to humans' common sense. For rational power, as Aristotle said in *Metaph.* IX, is a power for opposites, for in the middle of thinking about things to be done it now uses this means and then another. But beasts do not act in this way, but always in the same way. This is a sufficient sign that they are not led by reason but by the impulse of nature. In addition say that if the souls of brute animals were rational, they they would also be immortal.

13. But others, in order to avoid this disadvantage, fell into the error of the other extreme, denying that any brute animals truly cognize or desire by an elicited appetite, [saying] instead that they are only carried off by a natural weight as a stone is or by some extrinsic having moved or attracted [them] just as iron is drawn by a magnet. But this truly is equally absurd and contrary to obvious experience and, indeed, contrary to divine Scripture. Nevertheless, more time should be spent against these two errors in the science of the soul.

14. What matters for the present, therefore, it should be said that brute animals do not formally cognize the concept of the end or of means, since they cannot relate one to the other. Hence, they also cannot cognize in the end itself the proper aspect of agreeability for the sake of which it is lovable in itself. Indeed, they also cannot distinguish

Lege Plinii, lib. 6
suae *Histor.*;
Plutarch in
proprio lib. de
Industr. animal.
Porphyr.
Aristoteles.

Bruta nihil vere
cognoscere, aut
vitaliter appetere,
absurdum.

Bruta rationem
finis formaliter
non norunt.

Read Pliny's
History, book 6;
Plutarch in his
own book *De
industria
animalium.*
Porphyry.

Aristotle.

[The view] that
it is absurd that
brute animals
truly cognize or
vitally desire.

Brute animals do
not formally
know the
concept of the
end.

³First name in marginal note difficult to make out in original, so I'm not sure that it is 'Plinii'. Book 8 of his *Naturalis Historia* would make sense, though it is not as clear that book 6 makes sense.

conueniens per se vel propter aliud, quia hoc totum magnam discretionem rationis requirit. Aliquo tamen modo cognoscunt et apprehendunt rem aliquam aut motionem ut sibi convenientem, et naturali instinctu iudicant sibi esse appetendum, prosequendum, vel fugiendum tale obiectum. Qui naturalis instinctus nihil aliud est quam quidam actus phantasiae seu aestimativae necessitate naturali ab illa profluens posito phantasmate talis rei; quo actu practice (ut humano modo loquar) iudicat brutum hoc esse sibi vitandum, vel prosequendum, aut appetendum, quamvis non valeat rationem convenientiae vel disconvenientiae discernere. Hoc autem naturali iudicio posito, appetitus etiam naturaliter illud sequitur.

15. Ex quo fit primo ut causalitas finis aliquo modo participetur a brutis, ut argumentum factum convincit, quia illa appetitio elicita sine dubio causatur ex metaphorica motione obiectiva boni convenientis, quae non potest ad aliud genus causalitatis revocari. Nihilominus tamen, addendum est illam causalitatem adeo esse imperfectam in eo genere ut sit quasi materialis motio finis potius quam formalis, ut significavit D. Thomas, I-II, q. 1, a. 2, et q. 6, a. 2. Et ratio est quia non cognoscunt formalem rationem convenientiae vel utilitatis; ergo non ita moventur ut possint ordinare unum in aliud, nec etiam aliquid formaliter appetere ut propter se amabile; ergo non tendunt formaliter in finem ut finem, nec in medium ut medium, neque in finem propter se et in medium propter finem, sed quantum est suo modo operandi, aequae tendunt in utrumque, et ideo merito dicuntur materialiter potius quam formaliter propter finem operari. Quapropter, quantum ad formalem relationem in finem, ita existimandum est de actionibus brutorum sicut aliorum agentium naturalium. Idemque iudicium est de appetitu sensitivo hominis, si per se solum consideretur et non ut subest motioni voluntatis vel rationis, de quo alias.

between an object insofar as it is agreeable in itself or for the sake of something else, because all this requires great discrimination of reason. Still, in another way they cognize and apprehend some thing or motion as agreeable to themselves and judge by natural instinct that they ought to desire, pursue, or flee such an object. This natural instinct is nothing other than a certain act of imagination or the estimative power flowing by a natural necessity from that posited phantasm of such a thing. By this act a brute animal practically (to speak in a human way) judge that this is to be avoided or to be pursued or to be desired, although it does not have the power to discern the concepts of agreeability or disagreeability. Moreover, once this natural judgement is posited, desire naturally also follows it.

15. From this it happens, first, that brute animals in some way participate in the causality of the end, as the argument that was made establishes, since that elicited desire is without doubt caused by the objective metaphorical motion of the agreeable good, which cannot be recalled to another genus of causality. Nevertheless, it should still be added that this causality is for this reason imperfect in that genus as it is, as it were, a material motion of the end rather than formal, as St. Thomas indicated in [ST] IaIIæ.1.2 and 6.2. And the reason is that they do not cognize the formal aspects of agreeability or utility. Therefore, they are not moved in such a way that they can order one to another nor can they formally desire something as lovable for its own sake. Therefore, they do not formally tend to an end as an end, to a means as a means, to an end for its own sake, nor to a means for the sake of the end, but insofar as it is in its way of acting they tend equally to either and therefore are rightly said to act materially for the sake of the end rather than formally. Wherefore, with respect to a formal relation to the end, one should think about the actions of brute animals just as one thinks about the other natural agents. And the judgement about the sensitive appetite of human beings is the same if it is only considered in itself and not as subordinate to the motion of the will or reason. [More] about this elsewhere.

Lege D. Thomi 1
p. q. 78, ar. 4, et
q. 87, ar. 1, ad 3,
et 2, q. 72,
art. 1, ad 3.

Bruta quam finis
causalitatem
participent.

D. Thomas.

Read St. Thomas,
Ia.78.4, Ia.87.1 ad
3, and IIaIIæ.72.1
ad 3.

How brute
animals
participate in the
causality of the
end.

St. Thomas.