DOI: 10.57630/PT.2544-1000.28.007

Marek Gensler Uniwersytet Łódzki

## WALTER BURLEY ON VOLUNTARY AND INVOLUNTARY MOTION IN MAN\*

Walter Burley, an English philosopher who was active in the first half of the fourteenth century, devoted many of his works to the philosophy of nature. His interests ranged from the mechanics of heaven to the mechanism of cognition. As befitting a philosopher of his period, he tried to link those distant areas with the help of Aristotelian philosophy. His commentaries on the Parva naturalia, most probably created for teaching purposes during his long regency at Arts in Oxford (1301-1307), are devoted to the problems of physiology and psychology; therein, one can find opinions which make it possible to reconstruct his views on the complex character of human nature: animal and rational at the same time.<sup>1</sup> The opinions Burley presents are by no means original: in each commentary, he finds a guide, usually an earlier scholastic philosopher, whose views serve as the main point of reference.<sup>2</sup> In this presentation, I shall focus on Burley's views concerning one of the aspects of this complexity — motion. Like all animals, a human being is capable of various kinds of motion but unlike other animals, s/he is not only able to move on the impulse triggered by sense perception but also on the impulse originating in reason. Distinguishing between the sources of action, delineating the spheres of their activity, and, most

<sup>\*</sup> This paper is a result of research financed from the grant of the Polish National Centre for Research (NCN) UMO-2016/23/B/HS1/00430.

<sup>&</sup>lt;sup>1</sup> Cf. M. Gensler, R. Родкоński, "O edycji komentarzy Waltera Burleya do *Parva naturalia*", *Przegląd Tomistyczny*, vol. 22 (2016), p. 89–107. All quotations in this text come from the critical edition prepared together with Monika Mansfeld. The folio numbers come from the manuscript selected as the basis: ms. Vatican, Vat. lat. 2151.

<sup>&</sup>lt;sup>2</sup> For a detailed study of Burley's sources in the *Parva naturalia* commentaries, see: M. Gensler, M. Mansfeld, "A Young Master and His Library. Walter Burley's Sources for Commenting the *Parva naturalia*", *Die Bibliothek* — *The Library* — *La Bibliothèque*. *Denkraume und Wissenordnungen*, edited by A. Speer, L. Reuke (Miscellanea Mediaevalia, 41), Berlin – Boston: De Gruyter, 2020, p. 238–249.

interestingly, analysing their overlap and potential conflicts or mutual reinforcement is not easy, but Burley tries to solve the problems by making the best use of the ideas of his predecessors, most of all Pierre d'Auvergne and Simon of Faversham. The border cases, in which it is possible to show the difference between the voluntary and the involuntary aspect of human motion, are sometimes common, like acting in fear, and sometimes rare, like moonwalking, yet in all of them we can see the workings of both physiology and psychology. What is worth seeing is whether Burley is making use of the received knowledge to analyse cases that somehow do not fit neatly in the general framework and, if so, how he does this. For this reason, the analysis of special cases must be preceded with what was already *the communis opinio doctorum* in his times.

For Burley, like for all Aristotelians, the starting point of any argument concerning human behaviour is accepting man as an animated body. A body that is animated is capable of moving itself, for the soul serves as the principle of its motion.3 This applies to all kinds of animated bodies including plants, which, although incapable of local motion, can nevertheless perform some other motions, the most visible of which is growth. The soul that is the principle of those motions in plants is the vegetative soul.<sup>4</sup> When we look at man, the most perfect animate being, we can see that although the soul that animates human beings is responsible for all the sensitive and vegetative functions of the body (the rational ones are detached from matter), not all motions proper to animated bodies will be of equal interest to someone who tries to address the problem of voluntary motion, since some of them, like the ones that are caused by the vegetative part of the soul, namely digestion and growth, seem to be detached from any interference, let alone the control of any other principle: we cannot digest or grow at will. Even here, however, there is at least one point in which the actions triggered by the vegetative principle and the will cross: the will can approve or disapprove of the processes belonging to the vegetative nature. As we shall see, this has an important consequence for Burley.

<sup>&</sup>lt;sup>3</sup> GUALTERUS BURLAEUS, *Commentarium in* De motu animalium, 1, f. 239rb: "[...] in libro *De anima* determinatur de motu quantum ad principia quae originem habent ex parte animae, in hoc autem libro determinatur de motu quantum ad principia quae originem habent ex parte corporis et parum determinatur de ipso quantum ad animam."

<sup>&</sup>lt;sup>4</sup> Gualterus Burlaeus, *Commentarium in* De motu animalium, 3, f. 241va-vb: "[...] si animalia habeant in se principium suae augmentationis, oportet quod habeant in se principium alterationis. Et huius ratio est: quia augmentatio fit aliquo adveniente quod convertitur in naturam rei, et illud est in principio contrarium, et ideo ad hoc quod fiat simile requiritur alteratio. Et ideo, si animal habeat in se principium augmentationis, habet in se principium alterationis. Et, si hoc, tunc requiritur aliquod fixum et stans in alteratione | et augmentatione. Et verum est quod animal habet in se principium suae augmentationis, scilicet animam vegetativam vel potentiam augmentativam, et illa est immobilis illo motu quo movet, quia non est augmentabilis."

It is in various local motions, caused by movements of limbs that have the sensitive soul as their principle, that we can look for examples of voluntary and involuntary actions in human beings.<sup>5</sup> They seem to be an area of overlap of actions originating in two, rather than one principle; for apart from the sensitive soul, the power over them is also exercised, at least in part, by the rational soul. It is here that we encounter a number of questions that have to be answered by anyone interested in the problem of voluntary and involuntary motion. How is motion caused by the sensitive soul in general? How is it caused in animals, where the sensitive soul is the sole principle? How is it caused in human beings, in which motor activity flows from two principles? Do these principles ever conflict in their actions or is the sensitive one always subordinate to the rational one to the degree that it can never win over it? Although only the replies to the last pair of these questions directly addresses the issue announced in the title, it is necessary to answer them all in order to present the framework in which the questions can sensibly be raised. Consequently, before we can move to psychology, we have to dwell for a moment on physiology since this explains how action originating in the soul is affected.

Walter Burley's teaching on physiology rests on the doctrine of elementary properties that are most active in all living creatures: natural heat (calidum naturale) and radical moistness (humidum radicale). The presence of both is necessary for any individual to live, and depletion of either results in death. In accordance with the general Aristotelian scheme, one of them — heat — is active, while the other — moistness — is passive. For this reason, whenever we observe any activity going on in a living body, we can be sure that it is due to a concentration of natural heat in that particular part of the body. In animals, the concentration of heat occurs thanks to the activity of the spiritus, the organic substance lighter and hotter than blood, which transports the heat to every part of the body. Burley observes that while the role of blood is to nourish the body, the role of the spiritus is to make the body perform actions. It does so, principally, by moving from the heart, which is its primary site, to the outlying organs. Hence it is the first organic mover (primum movens organice), while the

<sup>&</sup>lt;sup>5</sup> Gualterus Burlaeus, *Commentarium in* De motu animalium, 1, f. 239rb-va: "Sed in hoc libro determinatur de motu animalis quantum ad causas et principia eius. Unde hic determinatur de motu facto per appetitum ex parte corporis et animae, et principaliter ex parte corporis. Unde subiectum huius libri est motus appetitivus animalium vel etiam animal secundum quod est mobile motu appetitivo."

<sup>&</sup>lt;sup>6</sup> Cf. Gualterus Burlaeus, *Commentarium in* De longitudine et brevitate vitae *Aristotelis*, qu. 3 (*Utrum vivens possit perpetuari per totum tempus manens unum et idem numero*), f. 238va: "Dicendum quod calidum naturale aliquam deperditionem facit in humido radicali. [...] Et ideo necessarium est aliquando animal corrumpi."

principal mover (*principale movens*) is the vegetative soul.<sup>7</sup> Unlike plants, which do not have to engage in any activity,<sup>8</sup> animals have to move around both to find food and to find mates, as well as to escape from danger. All those actions require some exertion, which is nothing else but spending some internal heat and humidity; they are triggered by the flow of the *spiritus*. Radical humidity and natural heat are only partly replenished by the ones that come from food, because the latter ones are different from the former and, in a way, they do not fit completely for radical humidity and natural heat of the organism, which means that the former are ultimately spent altogether at a certain moment.<sup>9</sup> Naturally, the process of digestion, which is conversion of the nutrient into the body of the organism requires the *spiritus*, too.<sup>10</sup>

The *spiritus* is thus engaged in all actions of animals, because it is the principle and material agent of every motion in animals. The ones we are specially interested in here pertain to local motion. The *spiritus*'s natural action is in fact very simple, almost mechanical: because of its fiery-aerial nature it can be easily condensed or rarefied. These actions, in turn, translate into the pushing and pulling motions of the organs and limbs, which are mutually coordinated in such a way that a condensation and a related push in one part correspond

<sup>&</sup>lt;sup>7</sup> Gualterus Burlaeus, *Commentarium in* De motu animalium, 7, f. 243vb: "[...] declarat in quo primo invenitur spiritus et dicit quod in corde vel iuxta cor, quia spiritus est movens motum, et accipit principium movendi a principali movente, et ideo oportet quod coniungatur cum principali movente, et principale movens est in corde; ergo et cetera". Cf. also M. Gensler, "The Concept of 'Spiritus' in Walter Burley's *Parva naturalia* Commentaries", *Homo — Natura — Mundus: Human Beings and Their Relationships. Proceedings of the XIV International Congress of the Société Internationale pour l'Étude de la Philosophie Médiévale*, edited by R. Hofmeister Pich, A.C. Storck, A.S. Culleton, Turnhout: Brepols Publishers, 2020, p. 806.

<sup>&</sup>lt;sup>8</sup> Cf. Gualterus Burlaeus, *Commentarium in* De somno et vigilia *Aristotelis*, qu. 9 (*Utrum somnus sit necessarius omni animali propter salutem animalis*), f. 97va: "Nunc operatio animalis est perfectior quam operatio plantae, ideo potest animal fatigari in operando et planta non. Et causa potest esse, quia in plantis solum est virtus vegetativa, et ideo ipsa in operando per aliam virtutem non retrahitur, propter quod potest operari continue absque quiete. Sed non est sic de virtute animalis."

<sup>&</sup>lt;sup>9</sup> Gualterus Burlaeus, *Commentarium in* De longitudine et brevitate vitae *Aristotelis*, qu. 3, f. 238va: "Dicendum quod calidum naturale aliquam deperditionem facit in humido radicali, sicut ignis existens in lychno semper facit aliquam deperditionem, ita quod continue aliquid deperditur de lychno et numquam potest tantum humidum vel tanta pinguedo apponi lychno, quin manente igne fiat continua deperditio lychni et sic est ex parte ista, nam ad restaurandum humidum radicale advenit humidum nutrimentale. Illud tamen humidum non sufficienter restaurat, quia illud humidum nutrimentale non est naturale omnino ei, sed aliquo modo innaturale. Ideo continue appositum sibi continue ipsum debilitat, sed aliquo modo restaurationem facit, sed non restaurat sufficienter, quia debilitat."

<sup>&</sup>lt;sup>10</sup> Cf. M. Gensler, "The Concept of 'Spiritus' in Walter Burley's *Parva naturalia* Commentaries", p. 806–807.

to a rarefaction and related pull in another part.<sup>11</sup> A push of *spiritus* increases heat in a bodily part and a pull, conversely, increases coldness; this is clear if we remember that it is a hot substance. Burley is convinced that even a small alteration in the principle of motion, sc. the *spiritus* contained in the heart results in a visible change in the limbs. He notes that the results of such actions can be seen in people's faces when they blush or become pale; he explains these two processes as either a sudden push of the *spiritus* from the heart to the outer part of the body (caused e.g. by physical exertion or anger) or, to the contrary, pulling it back to the inside (here it serves as the explanation of shudder, trembling or fear).<sup>12</sup>

But how are these actions of the *spiritus* triggered? According to Aristotle, whose opinions Burley follows closely, motions in animals originate in a twofold way. Either they start in body parts and move to the centre (*principium*), or the other way round. The former refer to the motion of perception originated in the sensory organs that terminates in the heart, which is the site of the common sense and phantasy, the latter originate in the heart and terminate in other parts of the body. Burley observes that we can frequently observe chain reactions, when the heart, first stimulated by a sense perception, in turn activates another limb or organ, or the very sense organ which caused its action.<sup>13</sup> The

<sup>&</sup>lt;sup>11</sup> Gualterus Burley, *Commentarium in* De motu animalium, 7, f. 243vb: "Primum movens organice sit spiritus: quia movens organice debet esse tale quod possit moveri a movente principali et quod habeat virtutem movendi alia de facili et sine violentia. Motus autem quo moventur animalia motu progressivo est motus pulsus et tractus. In motu autem pulsus oportet quod movens impellat a se ad aliud, in motu tractus oportet quod ab alio trahat. Quare manifestum est quod in utroque motu oportet movens organice esse coniunctum moto principali immobili, sed hoc non potest esse, nisi illud movens posset augeri et diminui per condensationem et rarefactionem, quia non potest coniungi cum immobili et pellere, nisi rarefiat, nec trahere, nisi condensetur. Sed spiritus est huiusmodi, potest enim faciliter et sine violentia condensari et similiter rarefieri, nam habet gravitatem et levitatem secundum quod comparatur ad diversa et habet ista non alteratione sed compositione."

<sup>&</sup>lt;sup>12</sup> Gualterus Burley, *Commentarium in* De motu animalium, 5, f. 243ra: "Postea dicit Philosophus quod modica alteratione facta in principio fit maior diversitas in aliis partibus, ut gubernaculo navis transmutato secundum positionem fit magna transmutatio navis et partium navis, quia gubernaculum habet rationem principii. Similiter, modica alteratione facta in corde vel circa cor ad caliditatem vel frigiditatem fit magna et multa diversitas in partibus exterioribus. Si enim cor alteretur ad frigiditatem, removetur calor et spiritus ab exterioribus ad interiora et remanent partes exteriores frigidae, et tunc fit pallor, et quandoque tremor et timor. Si autem cor alteretur ad caliditatem, tunc mittuntur calor et spiritus ad exteriora, et fit rubor".

<sup>&</sup>lt;sup>13</sup> GUALTERUS BURLEY, *Commentarium in* De motu animalium, 8, f. 244ra: "Postea dat Philosophus modum motus in animalibus. Et dicit quod rationaliter motus quandoque fiunt a partibus ad principium et quandoque e converso, ita quod motus aliquando incipit a partibus et terminatur ad principium, sicut contingit in alteratione sensus (alterationes autem sensuum exteriorum terminantur ad cor), et quandoque incipit motus a principio et terminatur ad istas partes (nam facta alteratione in corde alterantur et aliae partes). Aliquando incipit motus ab una

true principles of local motion, however, are phantasy and, in humans, intellect in act. The process is described as follows. The senses are stimulated in such way that the organ of perception is altered by its object and the sensible species thus produced has the virtue of the object. It is interesting that Burley does not distinguish between sight, touch, hearing, etc. (together with the corresponding sensibles) but states that the sensible species has the virtue of heat or coldness. This allows him to simplify the explanation of the process to movements of the heat and coldness, transported by the *spiritus*, first from the senses to the heart, and then, thanks to the action started by phantasy, from the heart to the limbs. At this stage, he does not go into the details concerning the role of the intellect; he merely mentions that its role is the same as that of phantasy.<sup>14</sup> He does state, however, that in the sequence of actions involved in producing (generatio) local motion we can enumerate several interlocking alterations. These start in the senses, then move to phantasy and finally (in man) to the intellect, desire and will, which are acted upon in a similar way. Local motion as such appears at the end of this sequence.<sup>15</sup>

In describing the movement of heat to the heart and from it Burley does make an important distinction. He observes that while the motion originated in the sense is triggered by contact with the object that produces heat or coldness, the role of heat and coldness as agents in the phantasy is related to the sensations of pleasure and displeasure, respectively. As a result, we get something that could

parte et tendit in aliam partem vel ad eandem. Aliquando enim incipit motus a visu et ex hoc movetur cor et ex motu cordis alteratur visus vel auditus."

<sup>&</sup>lt;sup>14</sup> Gualterus Burley, *Commentarium in* De motu animalium, 5, f. 242vb-243ra: "[...] motus animalis fit per alterationem partium animalis, nam eadem pars fit maior et minor, et permutatur eius figura per extensionem et retractionem ⊠ ad extensionem movetur per caliditatem, ad retractionem per frigiditatem. Causam alterationis ad caliditatem et frigiditatem assignat Philosophus dicens quod principia alterantia ad caliditatem et frigiditatem sunt sensus et phantasia, et intellectus in actu. Et illud declarat Philosophus per rationem et per experimentum. Per rationem sic: sensus fit in actu per hoc quod recipit speciem sensibilem, sed species sensibilis habet consimilem virtutem qualem habet sensibile; et ideo, sicut calidum potest alterare ad caliditatem, ita et species calidi. Et ideo, si sensibile immutans sensum fuerit calidum vel frigidum, sensus habens speciem illius sensibilis habet virtutem alterandi corpus ad illa. Et eadem est ratio de phantasia et intellectu, quia sunt tales virtutes quales res sensibiles extra sunt in actu. Unde, quando aliqua sunt ordinata essentialiter, ita quod unum agit in virtute alterius, secundum retinet virtutem primi, sicut patet in semine quod est virtus hominis."

<sup>&</sup>lt;sup>15</sup> Gualterus Burley, *Commentarium in* De motu animalium, 4, f. 242ra: "[...] in animalibus motus localis est posterior, et hoc via generationis. Et ratio est: quia animal non movetur localiter, nisi prius facta alteratione in partibus corporis vel per sensum, vel per phantasiam. Cum enim sensus alteratur, provenit alteratio usque ad phantasiam. Phantasia autem alterata movetur intellectus, et similiter appetitus vel voluntas. Et tunc alteratur aliqua pars corporis quae primo movetur, et tunc movetur animal. Et sic manifestum quod motus localis est finis alterationis, et ideo est ultimus via generationis omnium motuum qui fiunt in animali, licet sit prior secundum substantiam et perfectionem."

be called a string of coding / decoding: perception to heat and heat to sensation. Being pleasant is associated with a sensation of warmth (Burley does not specify if it actually means such a subjective feeling); it activates both cognition and desire, which function as principles of action in animals. What is sensed as pleasurable is, by the same token, desirable. By contrast, being unpleasant, associated with a sensation of coldness (here the link between coldness and shiver seems to be more explicit), gives an adverse stimulation making it difficult to perform, or effectively preventing, an action of an individual, because the *spiritus* required for performing it has been withdrawn. Burley does not show how sensations are linked with passions; he seems to treat the sequence: warm — pleasant — desirable as obvious. <sup>16</sup>

Burley's analysis of motion is preceded by an introductory distinction; he distinguishes three types of motion: beside the obvious pair of voluntary and involuntary motions, he mentions also non-voluntary motions. Starting from the last one: the examples he gives suggest that non-voluntary ones concern the actions triggered by the vegetative part of the soul, since he mentions sleep and breathing among them. The involuntary motions are ones that are incontrollable by the will (contra imperium voluntatis), like, for instance, sexual arousal resulting in erection. In such motions, the will seems to be bypassed, probably because the movement of the spiritus bringing in the change in the heat or coldness that are immediate causes of the change in size of the organ is very swift. Burley notes that such motions usually follow perceptions that are received as pleasurable or saddening (delectabilia et tristabilia) and, consequently, causing desire or fear in the phantasy or some other power of the soul. He stresses that such "independent" alterations are usually related to actions of the heart and the genitals and explains that Aristotle himself noticed that phenomenon and for this reason called both organs quasi-animals.<sup>17</sup>

<sup>&</sup>lt;sup>16</sup> Gualterus Burley, *Commentarium in* De motu animalium, 5, f. 243ra: "[...] sensus et phantasia et intellectus habent virtutem alterandi corpus ad caliditatem et frigiditatem, et hoc sic: primum principium motus est appetibile et fugibile quae oportet meditari antequam moveatur animal. Et meditationi eorum sequitur caliditas vel frigiditas, nam omnia delectabilia et tristabilia fere sunt cum caliditate et frigiditate. Et hoc patet: ex passionibus audaciae enim et timoris, concupiscentia et cetera talia delectabilia et tristabilia sunt cum caliditate et frigiditate; ergo et cetera."

<sup>&</sup>lt;sup>17</sup> Gualterus Burley, *Commentarium in* De motu animalium, 8, f. 244ra: "Postea declarat Philosophus de causis motuum involuntariorum. Quidam enim sunt motus voluntarii et quidam involuntarii et quidam non-voluntarii. Motus non-voluntarii sunt somnus et vigilia, inspiratio et respiratio. Motus involuntarii sunt qui sunt contra imperium voluntatis qui non fiunt mediante aliquo appetitu animali vel intellectuali sed mediante aliquo appetitu naturali, sicut viso aliquo delectabili fit motus in genitalibus contra imperium voluntatis, et huiusmodi motus fiunt ab extrinseco continente. Ex hoc videntur quod, quando species alicuius delectabilis vel tristabilis recipitur in sensu vel phantasia vel in alia potentia animae, alterantur partes animalis ad calidum

With respect to voluntary motion, Burley introduces yet another distinction concerning the principle of motion. Having enumerated all motive powers: intellect, phantasy, sense, desire, will, anger, lust, and choice, he divides them into two groups, viz. the ones grouped around the intellect and desire, respectively, according to the criterion of character of action: judgement or inclination. According to him, sense, phantasy, and intellect belong together because their action contains the element of apprehension, which is necessary for forming a judgement. In anger, lust, choice, and will, we find the element of desire. Choice occupies a special place, for even though it belongs to the latter group, it requires prior deliberation, which makes it akin to the first group, too, since choice according to Aristotle is a habit and as such is a result of both cognition and appetite.<sup>18</sup>

Having established the two main principles of action, Burley goes on to characterize the practical intellect. He does so by comparing it to the speculative intellect and says that they are similar with respect to the mode of their action, i.e., they are not active all the time but are at rest when they are not engaged. The difference between them lies in the ends of their respective actions: for the speculative intellect, it is consideration and cognition, while for the practical one, it is operation. As a result, when the speculative intellect arrives at a conclusion in the process of ratiocination, it achieves its end and can rest. The practical intellect, in turn, achieves its end when it triggers an operation of the body as the conclusion of a process of practical reasoning. The mechanism

vel ad frigidum, et secundum hoc dilatantur vel diminuuntur. Et inter partes animalis partes quae magis notabiliter moventur isto motu sunt cor et genitalia. Et rationem huius assignat Philosophus: quia utrumque illorum est quasi animal per se". For the role of the *spiritus* in the actions of the sensitive soul, see: M. Mansfeld, M. Gensler, "Walter Burley on the 'Spiritus' in the *Parva Naturalia* Commentaries", *Przegląd Tomistyczny*, vol. 28 (2022), p. 177–192.

<sup>&</sup>lt;sup>18</sup> Gualterus Burley, *Commentarium in* De motu animalium, 4, f. 241vb: "Caelum et animalia sunt illa quae movent ex se, sed de motu caeli et movente caelum dictum est in aliis, et nunc est considerandum de motu animalis: quid scilicet est ibi movens (et hoc quia animalia sunt causa motus aliorum entium excepto motu totius, scilicet primo motu). Dicit igitur Philosophus quod moventia aut sunt intellectus, phantasia, sensus, appetitus, voluntas, ira, concupiscentia aut electio, sed omnia ista reducuntur ad duo, scilicet ad intellectum et appetitum, quia movens aut movet per modum apprehendentis (seu iudicantis) aut per modum inclinantis — primo modo movet intellectus et secundo modo movet appetitus. Et, quia intellectus, sensus et phantasia movent per modum iudicantis, ideo ista reducuntur ad intellectum. Et, quia ira, concupiscentia, voluntas et electio movent per modum inclinantis, ideo ista reducuntur ad appetitum. Quodlibet enim istorum est quidam appetitus. Electio enim est quidam appetitus non cuiuslibet, sed eius quod prius habitum est per deliberationem, et ideo dicit Philosophus quod electio est communis appetitui et intellectui."

<sup>&</sup>lt;sup>19</sup> Gualterus Burley, *Commentarium in* De motu animalium, 4, f. 242ra-rb: "Sunt enim duo principia motus, ut dictum est, scilicet intellectus et appetitus. Et ideo Philosophus primo docet qualiter intellectus practicus movet et secundo qualiter appetitus movet. Primo tamen compa-

of its action is explained as follows. In order to achieve its end, the practical intellect sometimes requires two syllogisms and at others only one, when it is sufficiently manifest to trigger action. In this respect, it is no different from the speculative one, which sometimes requires a more complex reasoning, composed of several syllogisms to arrive at a conclusion. It is interesting that in the two examples, which Burley presents in order to illustrate operations flowing from a single premise, one of them refers to a relatively simple action of walking, but the other, to a clearly complex action of building a house; apparently, what is important is that the premise is manifest enough to produce an immediate stimulus for action. The situation in which the practical intellect requires more than one syllogism to achieve its end is described as one in which the conclusion of the first reasoning is not sufficient to trigger action, so it serves as a premise in another reasoning (and, possibly, yet another) that is finally successful in obtaining the result.<sup>20</sup>

An example of such a case is when the practical intellect has to take into consideration two aspects of a planned action: whether it is good and whether it is feasible. These are the two principles which, according to Burley, determine the practical intellect. Consequently, the first thing to be considered is the goodness of the operation; it is only when it appears to be good that the intellect moves on to consider its feasibility. If the operation is considered to be unfeasible, no further action is taken.<sup>21</sup>

rat intellectum practicum et speculativum ad invicem secundum convenientiam et differentiam. Conveniunt enim in hoc quod intellectus practicus aliquando operatur et aliquando non, sicut intellectus speculativus intelligit aliquando et aliquando non. Sed differunt fine, quia finis intellectus speculativi est cognitio seu consideratio, nam, cum intellectus speculativus accipit duas propositiones et eas ordinat secundum debitum modum et figuram, statim infert conclusionem, et cognitio conclusionis est finis ratiocinationis. Sed finis intellectus practici est operatio."

<sup>&</sup>lt;sup>20</sup> Gualterus Burley, *Commentarium in* De motu animalium, 44, f. 242rb: "Qualiter autem intellectus procedit ad operationem manifestat in exemplis. Aliquando enim intellectus practicus utitur duabus propositionibus et quandoque supponit unam tamquam manifestam et ex alia expressa infert operationem. Adhuc, sicut intellectus speculativus ad investigandum aliquam conclusionem quandoque utitur uno syllogismo et quandoque duobus, sic intellectus practicus ad hoc quod fiat operatio quandoque utitur uno syllogismo, quandoque duobus. Exemplum primi: cum intellexerit quod omni homini inest ambulari et quod ipse est homo, statim ambulat; similiter, si intelligat quod bonum est faciendum et quod domus est bonum, statim facit domum. Exemplum secundi: intellectus enim practicus aliquando non potest venire ad operationem per unum syllogismum, et tunc facit duos syllogismos."

<sup>&</sup>lt;sup>21</sup> Gualterus Burlaeus, *Commentarium in* De motu animalium, 4, f. 242va: "[...] illa duo, scilicet bonum et possibile, sunt duo principia determinantia intellectum practicum ad operationem. Ad hoc enim quod intellectus practicus procedat ad operationem oportet quod finis pro quo fit operatio sit bonus vel saltem quod appareat esse bonus, et posito quod appareat esse bonus et non possibile sit acquirere illum vel appareat esse impossibile, non procedit operatio ulterius."

The superiority of an action triggered by reason rather than by phantasy alone is manifest to Burley. Of course, he is aware that neither practical nor speculative intellects are free from error, but the fact that the practical intellect can intervene in the process of human decision-making has a clear benefit of suppressing some operations that are pressed for by the desire, when they are considered harmful. Naturally, there is a price to pay for that benefit: non-human animal's actions, in which a stimulus (desire or fear) caused by the external senses or phantasy triggers an immediate reaction of the body, are faster than those of a hesitant human being, who can suspend a decision in order to consider the alternatives. As a result, decision-making in humans has a three-tier structure, with desire being both the ulterior and proximate motive, while the practical intellect is lying (or rather acting) in between.<sup>22</sup>

The picture, however, is more complex than the above scheme suggests. It is not only the practical intellect that can intervene in the actions pressed for by the desire (or fear). An opposite action takes place too, namely an action originated by our will can be hindered or completely blocked by an adverse stimulus coming from phantasy. Burley tries to explain it with two examples. The first, attributed to Aristotle, <sup>23</sup> highlights the fact that even a thought of something unpleasant, like shackles, gives us a sensation of cold and makes us shiver from the revocation of the *spiritus* from the limbs to the inside of the body. The other one, more precisely fitting our case, is taken from Avicenna: <sup>24</sup> our imagination, adversely stimulated, hinders our motor function. If a plank is placed on the ground, we can walk on it easily when we wish so. When the same plank is suspended at some height, however, our imagination intervenes

<sup>&</sup>lt;sup>22</sup> Gualterus Burlaeus, *Commentarium in* De motu animalium, 4, f. 242va: "[...] in practicis multotiens accidit error in syllogismo et in speculabilibus. Unde, quaecumque operantur non deliberantes, cito operantur, ut, si concupiscentia dicat quod sit potandum et sensus et intellectus dicant hoc esse potitivum, quamvis non secundum certitudinem deliberet, statim bibit. Et sic animalia multotiens faciunt impetum ad operationem, et sic accidit error multotiens. Postea declarat qualiter appetitus movet et quae est causa proxima. Et dicit quod ultima causa, id est proxima, ipsius motus est appetitus, quia ratio non movet, nisi secundum quod determinatur per appetitum, et adhuc non quiscumque appetitus movet sed appetitus existens in actu. Et appetitus fit in actu per sensum aut per phantasiam."

<sup>&</sup>lt;sup>23</sup> Aristoteles, *De motu animalium*, 701b 14–16.

<sup>&</sup>lt;sup>24</sup> AVICENNA, *Liber Sextus Naturalium*, IV, 4, in: Avicenna Latinus, *Liber de anima seu sextus de naturalibus*, ed. S. Van Riet, Louvain–Leiden: Peeters–Brill 1968, p. 64, v. 25–30: "Et propter hoc potest homo ambulare super trabem quae est in media via, sed si posita fuerit pons super aquam profundam, non audebit ambulare super eam eo quod imaginatur in animo eius forma cadendi vehementer impressa, cui oboedit natura eius et virtus membrorum eius et non oboediunt eius contrario, scilicet ad erigendum et ad ambulandum."

with images of our falling and potential injury, and the cold shiver it releases makes it much more difficult for us to perform the same action again.<sup>25</sup>

The complexity of the interplay between motor functions and the will becomes even more manifest when we analyse special, we could say 'abnormal', situations, in which a human being moves around; one of them is moonwalking, the other, fascination. They are both similar in one respect — the subject seems to act without conscious control of his or her actions. Burley's interpretation of these cases in his commentary on *De somno et vigilia* is interesting. Let us begin with the less exotic case of moonwalking. He claims that healthy sleep is such a state of the whole individual composed of a body and soul in which the links between the external senses and the internal ones are severed. The faculty that is principally immobilized by sleep is common sense; however, although its links with the external senses are cut off, the ones with other internal senses, phantasy and memory, are not. Such a state also adversely affects the way in which the practical intellect, which 'normally' works on the material originating in sense-perception via common sense, can influence the actions of an individual.

<sup>&</sup>lt;sup>25</sup> Gualterus Burlaeus, *Commentarium in* De motu animalium, 5, f. 243ra: "Patet per experimentum, scilicet quod species calidi et frigidi, delectabilis et tristabilis, talis existit qualis unaquaeque rerum. Nam propter hoc est, quod dicit Philosophus, quod ad solam apprehensionem vinculis [sic!] tremunt homines et timent [...]. Cum enim aliquis intelligat aliquod [de] vinculis, statim fit revocatio caloris et spiritus ad interiora et partes exteriores remanent frigidae. Et propter hoc tremunt et timent. Et Avicenna dicit quod ex sola imaginatione convenientis vel disconvenientis curatur vel infirmatur homo. Dicit etiam *Sexto naturalium* quod si aliquis incederit super trabem sursum positam ex imaginatione magna casus statim et subito cadit. Si tamen ille idem incederet super [...] trabem positam super terram, non caderet, quia non imaginaretur casum. Et sic sensus vel phantasia in actu habet virtutem alterandi partes corporis. Et istis partibus sic alteratis fiunt maiores vel minores, ut dicit Philosophus."

<sup>&</sup>lt;sup>26</sup> GUALTERUS BURLAEUS, Commentarium in De somno et vigilia, Qu. 2 (An somnus et vigilia sint passiones totius coniuncti ex anima et corpore), f. 91va: "[...] dicendum quod per somnum non solum debilitatur corpus, sed totum compositum ex sensu exteriori et suo organo. Et ideo non solum corpus est ligatum in somno, sed etiam anima quantum ad potentias exteriores est ligata."

<sup>&</sup>lt;sup>27</sup> Gualterus Burlaeus, *Commentarium in* De somno et vigilia, Qu. 10 (*Utrum dormiens possit facere opera vigiliae*), f. 98rb: "[...] in somno sensus communis ligatur et immobilitatur quantum ad fluxum et influentiam ad sensus exteriores, non tamen quantum ad influentiam ad sensus interiores."

Ibidem, Qu. 6 (An somnus sit passio sensus communis vel alicuius sensus particularis), f. 95ra: "[...] dicendum quod in somno non solum debilitatur virtus exterior, sed primo et principaliter debilitatur virtus interior, scilicet sensus communis. Unde licet quidam sensus interiores, ut phantastica et memorativa, salvantur in somno, quae virtutes sunt retentivae specierum sensibilium, et etiam aestimativa, quae percipit species non sensatas, tamen sensus communis, qui est receptivus specierum sensibilium, ligatur in somno."

With this information, it is possible to answer the question whether moonwalking can be considered a voluntary action. According to Burley it cannot. The reason why it is so is clear: in sleep we are reduced to the same state as other animals — our common senses, which coordinate all activity, are deactivated with respect to that function. The intellect is unable to influence the phantasy: it can speculate, because sleep does not refer to this aspect of its work, but since it lacks the connection with the internal senses, they are left on their own. Of course, someone could object that some people have dreams about mathematical theorems; for Burley, however, they are nothing but leftovers from our wakeful occupations retained by memory and manipulated by phantasy. He claims that such objects of knowledge cannot be acquired (apprehendere) without the intellect, but phantasy can conceive (comprehendere) of them, thus emphasizing the difference between understanding something and imagining it. 28 As a result, it has to be admitted that moonwalking may only have a semblance of voluntary action but in fact lacks its definitive feature, which is the intervening action of the practical intellect. When it happens, moonwalking is a manifestation of our fears or desires which are present in our imagination, and are then free to act on the body so that it performs certain actions.<sup>29</sup>

<sup>&</sup>lt;sup>28</sup> Gualterus Burlaeus, *Commentarium in* De somno et vigilia, f. 102rb: "Somnium non est passio intellectus: sicut in vigilia comprehendimus quae sine sensu non sunt comprehensibilia, ut album, pulchrum et huiusmodi, de quibus nec vere nec false iudicat intellectus absque sensu, cum sine sensu ea non comprehendat, similiter in somnio comprehendimus quaedam, quae scilicet sine sensu non sunt comprehensibilia, ut album et pulchrum et huiusmodi. Talia igitur nec comprehendimus intellectu nec opinione, sed sensu, igitur somnium non est passio intellectus nec partis opiniativae, quia si sic, in somno non comprehenderemus aliquid nisi per intellectum. Verumtamen aliquid comprehendimus in somnio, quod apprehendere non possumus sine intellectu, quia sicut in vigilia comprehendimus aliquid praeter ipsa sensibilia, puta intelligibilia, quae non possumus apprehendere absque intellectu, sic in somno comprehendimus aliqua praeter sensibilia, utpote quod in vigilia aliquis cognoverit de triangulo ipsum habere tres angulos, potest contingere quod ex tali studio apparebit sibi in somno triangulum habere tres angulos."

<sup>&</sup>lt;sup>29</sup> Gualterus Burlaeus, *Commentarium in* De somno et vigilia, Qu. 10 (*Utrum dormiens possit facere opera vigiliae*), f. 97vb-98ra: "Verumtamen dormientes possunt exercere opera motus, cuius ratio est, quia licet somnus sit immobilitatio sensuum exteriorum et licet in somno sensus communis immobilitetur per comparationem ad sensus exteriores, non tamen immobilitetur per comparationem ad memoriam, aestimativam et imaginativam. Nunc autem possibile est in vigilia aliquem effici circa aliquod delectabile vel tristabile, cuius species recipitur in virtute phantastica seu imaginativa. Et tunc contingit quod species illius delectabilis vel tristabilis occurrit virtuti imaginativae quae non est ligata. Ex illa similitudine contingit animam comprehendere rem, cuius est similitudo. Ad cuius apprehensionem sequitur appetitum ferri in illud, ut prosequatur. Ad quem appetitum sequitur alteratio in partibus animalis et ad illam alterationem sequitur extensio partium et ad illam extensionem consequitur motus animalis ad prosequendum illud cuius similitudo apparet in somno. Per hunc igitur motum contingit dormientes exercere opera vigiliae, quia ad apprehensionem delectabilis vel tristabilis sequitur alteratio ad caliditatem

Before drawing some conclusions, I would like to offer a few words to the analysis of an exceptional case related to the problem of voluntary motion in Burley, namely casting spells, which he calls fascination (fascinatio). It refers to a very special kind of motion, viz. the extramission of excess *spiritus* through the eyes of women. The case is exceptional because of the apparent contradiction with two scholastic-Aristotelian assumptions: first, that the eye is a completely passive sense organ and second that acts of the will can in no way interfere with the actions of the vegetative character. Burley describes a situation in which the spiritus that was not used for sustaining the foetus or production of milk in women moves upward (because of its light fiery-aerial nature) and, in the lack of any other action it can perform, leaves the body through the eyes. It then infects the surrounding air in such a way that if there is a male human being around (especially a young one, more prone to influence), he becomes fascinated by that woman. Thus far, it is a decent Aristotelian description of a purely physiological, vegetative process, having nothing to do with the will. Burley is even able to reject the objections concerning extramission by saying that the eyes are not acting as organs of sight then. But then he adds an interesting comment: a woman who thinks (imaginatur) of harming a man may stir a particularly dangerous (grossus et turbidus) humour by her imagination, which when reaching the man via her eyes and surrounding air makes him behave wildly (raucus), fall ill, or even die. To enhance the effect, he remarks that that is a way in which some animals kill their prey.<sup>30</sup> Someone could say, however, that this is a motion triggered by imagination and not the will. True, Burley speaks of imagination here. But as we have seen, he envisages the intervention of the practical intellect precisely in the work of phantasy. If a woman imagines some mischief with respect to a man, the practical intellect is there to pass its judgement of approval or disapproval. Even assuming that you cannot help causing morbid fascination in men, you can at least keep a safe distance from them.

et frigiditatem, quia omnes passiones animae sunt cum quadam alteratione calidi et frigidi. Et ad talem alterationem sequitur motus localis qui est motus vigiliae."

<sup>&</sup>lt;sup>30</sup> Gualterus Burlaeus, *Commentarium in* De somno et vigilia, Qu. 18 (*Utrum mulier menstruata inficiat speculum*), f. 105va-vb: "Illud autem quod subtilissimum est de menstruo, mittitur ad oculos, et illud proveniens ad oculos propter porositatem oculorum evaporat exterius et inficit aerem sibi proximum. Et illa pars aeris inficit aliam, et tunc usque ad speculum ipsum inficiendo. Et per similem modum contingit fascinatio, nam cum mulier vel aliqua vetula imaginatur fortiter ad maleficium alicuius pueri, causatur humor grossus et turbidus circa locum imaginationis illius mulieris, et illud quod est subtilius illius humoris mittitur superius ad oculos. Et illud tunc evaporans inficit aerem continue usque ad puerum vel pueros, quorum corpora sunt valde passibilia. Et ex hoc contingit mors vel infirmitas ex fascinatione. Et hoc modo oculus menstrui reddit hominem raucum et oculus alicuius animalis hoc modo interficit hominem."

Putting all things together, we can say that, apart from the last case, Burley has a simple and fairly consistent vision of voluntary motion, one very much in agreement with the communis opinio doctorum, which was probably his intention (we should bear in mind that his commentaries were written for teaching purposes). Our voluntary action is a direct result of the intervention of our practical intellect in the decision-making process disrupting the stimulus — reaction pattern characteristic for the non-human animals animated by the sensitive soul. In human beings, the information from the common sense is analysed by the intellect with respect to the criteria of goodness and feasibility, and the decision, which is a conclusion of one or more practical syllogisms, is recorded by the common sense again; then a standard physiological process involving the flow of the spiritus transmits the stimulus from the heart to the limbs. The case of fascination is only slightly different: women cannot stop the effusion of the spiritus through their eyes, because it is a vegetative process, but if they are aware of it, they can control it by focusing on certain men or by avoiding risky situations. What is interesting about this case is that therein Burley manifests his ability to apply general rules to seemingly exceptional situations in order to show that they are also natural (as opposed to supernatural) and that in such cases, too, the "exception proves the rule".

## Bibliography

- Aristoteles (ALPE XVII 2.II-III) Aristoteles, Guillelmus de Morbeka, De progressu animalium. De motu animalium. Translatio Guillelmi de Morbeka, ed. P. De Leemans, Turnhout: Brepols, 2011.
- AVICENNA, Liber Sextus Naturalium, in: Avicenna Latinus, Liber de anima seu sextus de naturalibus, ed. S. Van Riet, Louvain Leiden: Peeters Brill, 1968.
- Gensler, M., "The Concept of 'Spiritus' in Walter Burley's Parva naturalia Commentaries", Homo Natura Mundus: Human Beings and Their Relationships. Proceedings of the XIV International Congress of the Société Internationale pour l'Étude de la Philosophie Médiévale, eds. R. Hofmeister Pich, A.C. Storck, A.S. Culleton, Turnhout: Brepols Publishers, 2020, p. 805–815.
- Gensler, M., Mansfeld, M., "A Young Master and His Library. Walter Burley's Sources for Commenting the *Parva naturalia*", *Die Bibliothek The Library La Bibliothèque. Denkraume und Wissenordnungen*, ed. A. Speer, L. Reuke, (Miscellanea Mediaevalia, 41), Berlin Boston: De Gruyter, 2020, p. 238–249.
- Gensler, M., Родкоński, R., "O edycji komentarzy Waltera Burleya do *Parva natu-ralia*", *Przegląd Tomistyczny*, vol. 22 (2016), p. 89–107.

- Gualterus Burlaeus, *Commentarium in* De motu animalium, ms. Vatican, Vat. lat. 2151, f. 239r–244r.
- Gualterus Burlaeus, *Commentarium in* De longitudine et brevitate vitae *Aristotelis*, ms. Vatican, Vat. lat. 2151, f. 232r–239r.
- Gualterus Burlaeus, *Commentarium in* De somno et vigilia *Aristotelis*, ms. Vatican, Vat. lat. 2151, f. 88v–108v.
- Mansfeld, M., Gensler, M., "Walter Burley on the 'Spiritus' in the *Parva Naturalia* Commentaries", *Przegląd Tomistyczny*, vol. 28 (2022), p. 177–192.

## WALTER BURLEY ON VOLUNTARY AND INVOLUNTARY MOTION IN MAN

## SUMMARY

Walter Burley, an English philosopher active in the first half of the fourteenth century, composed a set of commentaries on Aristotle's small treatises on psychology and physiology. One of the issues raised in three of them is the problem of voluntary and involuntary motion in humans. Drawing from several earlier commentators of Aristotle, Burley analyses the nature of motion in animals and the specificity of human motion. He tries to explain the animal motion with the help of the concept of *spiritus*, both in the "regular" cases and in the exceptional ones. He identifies the position of practical intellect in the account of voluntary motion in humans.

Keywords: aristotelianism, medieval philosophy of nature, medieval physiology, medieval psychology

SŁOWA KLUCZE: arystotelizm, średniowieczna filozofia przyrody, średniowieczna fizjologia, średniowieczna psychologia, Walter Burley