

# 1 The Epistemic Authority of Translations

Albert the Great, Thomas Aquinas,  
and John Buridan on Aristotle's  
*empeiria*

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During the high Scholastic period, the practice of *scientia* (understood here as the practice aimed at producing true and certain knowledge) consisted in commenting upon a given set of source texts. At the newly founded universities and the study houses of the mendicant orders, this overwhelmingly oral practice followed the rules of logic in its approach, thus emulating what the texts propounded. Ideally, therefore, the practice of *scientia* coincided with the practice of defining and demonstrating, at least when it came to the philosophical curriculum, the foundation of all high Scholastic scholarship and erudition. But what exactly was the role that the source texts—most of them Latin translations of the *corpus Aristotelicum* and accompanying works from Greek and Arabic—played for the particular practices of commenting by means of definitions and demonstrations? More concretely: What kind of epistemic authority did the Latin audience grant to the words of the translations when they practiced philosophical *scientia*?

In one sense, this question may seem trivial, at least if we assume that the words of the Latin translations delineated what was being defined and demonstrated. In Aristotle's *Physics*, for instance, what required definition and demonstration was the subject matter, the physical body subject to change and motion. That, certainly, was most thirteenth-century historical actors' approach to the translations. But the question begins to take on more weight if we turn to a seeming split between what is linguistic and what is logical, what is philological and what is methodological, what is semantics and what is subject matter. In short, there seem to be two different authorities in the words of the translations: the authority of language and the authority of *scientia*.

This split authority is particularly pertinent to the matter of experience (*experientia*, *experimentum*). Unlike many other issues in the period, experience was at once an object of *scientia* and, at least in some areas of natural philosophy, an instrument for acquiring it. As an object of *scientia*, experience was subject to definition and demonstration, just like any other universal. But as an instrument for acquiring *scientia*,

experience seemed to escape the hegemonic approaches of definition and demonstration, potentially opening up an approach complementary to them, as Michael Chase has shown for Antiquity.<sup>1</sup> This was usually a complex matter, too complex for this brief chapter. Among other things, in both cases the experience contained in the sources had already undergone interlingual translation, from Greek and Arabic into Latin, before it became part of the Scholastic practice of *scientia*. In turn, Latin commentators wove yet another layer of experience into the fabric of definitions and demonstrations. This layer, too, came in different shades: as an object of definition and demonstration, it added the Scholastics' own epistemic norms and convictions about experience; as an instrument for *scientia*, it added new experiential evidence, mostly in support of the premises of arguments.

If we wish to learn about the epistemic authority that the Latin audience granted the words in the translations of Aristotelian texts, then, we would ideally need a comprehensive investigation of all those passages that convey experience as an object of *scientia* and that use it as an instrument for *scientia*, in both the source texts and the Latin commentaries upon them. But “life is short, the art is long,” as Hippocrates once said, and this chapter is shorter still, so I will confine myself to looking at one particular passage of the *Metaphysics* that discusses experience as an object of *scientia*.<sup>2</sup>

This passage is particularly well suited to my purpose for two reasons. First, *Metaphysics* was the work by Aristotle that was available to the Latin audience in the greatest diversity of interlingual translations. As well as two incomplete translations, not discussed here, two complete translations from the Greek reached Latin readers,<sup>3</sup> the *translatio media* by an anonymous translator in the twelfth century, and the *translationis mediae revisio* by William of Moerbeke (composed c. 1265–72).<sup>4</sup>

Second, these Latin translations were divergent in their wording. In the opening passages, which convey the route from memory to experience, both Latin translations—the *translatio media* and the *revisio Moerbekana*—follow the Greek original to the letter. Both render the Greek *gignetai d'ek tēs mnēmēs empeiria* (from memory, experience arises, 980b27) and *ai gar pollai mnēmai tou autou pragmatos mias empeirias dynamin apotelousin* (for many memories of the same thing produce the power of one experience, 980b28–981a1) as “fit autem ex memoria experimentum” (but from memory experience arises) and “eiusdem namque rei multe memorie unius experientie potentiam faciunt” (for many memories of the same thing produce the power of one experience). In both the Greek and the Latin versions, *mnēmai / memorie* are given the active role of producing *mias empeirias dynamin / potentia experientie*.

When they convey the route from experience to the universal, however, the two Latin translations diverge rather strongly. The anonymous translator of the *translatio media* rendered the Greek *ek pollōn tēs empeirias ennoēmātōn mia katholou genētai peri tōn homoīōn hypolēpsis* (from

many thoughts of experience one judgment is gained concerning similar things, 981a5–7) as “ex multis experimento intellectis una fit universalis de similibus acceptio” (from many things understood through experience there arises one universal apprehension of similar things). Moerbeke set his red pencil to this Latin rendering. His revision translated the Greek instead as “ex multis experimentalibus conceptionibus una fit universalis de similibus acceptio” (from many experiential conceptions there arises one universal apprehension of similar things).<sup>5</sup>

These Latin translations of the Greek *ek pollōn tēs empeirias ennoēmātōn* seem to suggest a lack of unanimity about the role of intellection for experience.<sup>6</sup> But how did the Latin readers of the different translations build their philosophical *scientia* of experience upon the different formulations chosen by the translators? And what kind of epistemic authority did they grant to the translated words in that process, reframing and repurposing them in their very own acts of epistemic translation?

My aim in this essay is to show, first of all, that the Latin audience generally endowed the words of the Latin translations on experience with a *scientia*-centered authority as opposed to a language-centered authority. Having said that, this *scientia*-centered authority embraced quite different specificities in the commentaries of three of the most influential Scholastic commentators on Aristotle’s *Metaphysics*, Albert the Great (1200–1280), Thomas Aquinas (1225–1274), and John Buridan (1300–1361).

Albert the Great gave what I will call a “demonstrative” authority to the words on experience in front of him. His *scientia*, as will become clear, took the words of the Latin *translatio media* upon which he commented to convey quite literally true and certain knowledge of experience’s characteristics and epistemic role. Thomas Aquinas, in contrast, assigned an “authoritative” value to the words of the *translatio Moerbekana*. Aquinas’s *scientia* of experience was thus, as I show, an exegetical exercise, explaining what Aristotle meant by experience and its epistemic role. John Buridan probably used the *translatio Moerbekana* as his template, but strayed more significantly from the Latin translation in his *Lectura Erfordiensis*, a question commentary. Buridan did not grant primary epistemic authority to the words of the translation, which he used as a thematic framework. Rather, he introduced epistemic criteria derived from medical practice in order to account for what experience is and how it works. Having shown that Albert, Aquinas, and Buridan accorded divergent types of epistemic authority to the Latin translations, thus reframing and repurposing the words in significantly different ways, I close with a brief discussion on the value of reading these and similar commentaries as philosophical *scientia* in practice.

### **Albert the Great on Experience in the *translatio media***

The diverse epistemic functions and meanings that the Latin translations and the ensuing Latin tradition poured into the conceptual pair *experientia*

*experimentum* may be discerned from the short passage at the beginning of the *Metaphysics* that I outlined above. In the Greek original and the two Latin translations, *mnēmai / memorie* (memories) are interpreted as performing the active role of producing *mias empeirias dynamin / potentia experientie* (the power of one experience). But this *dynamis* or *potentia* does not yet seem to be perfected. This may be one reason why Albert reads the *translatio media* of Aristotle's *Metaphysics* through an act-potency lens: he explains that the apprehension of universals, inasmuch as it is taken directly from singulars (including singulars in memory and experience), is an imperfect act or a second potency. The act is imperfect because it is still in motion and has not yet reached its goal; this much is clear from Aristotle. But for Albert, it is also imperfect because it is disordered and mixed, presumably with particularity. In contrast to the *potentia experimenti*, Albert explains, *scientia* and *ars* are the noetic actualities or the goals to which experience is to lead, and, in contrast to experience, they are ordered and unmixed, unwavering and pure.<sup>7</sup>

In Albert's eyes, *ars* does not arise from experience alone—or from many experiences, for that matter—but rather from the simultaneous involvement of experience and a prior universal in the intellect. In his views on the emergence of *ars*, Albert was deeply influenced by the *translatio media*'s rendering of Aristotle's *ek pollōn tēs empeirias ennoēmatōn mia katholou genētai peri tōn homoion hypolēpsis* (from many notions gained by experience, one universal judgment about similar objects is produced) as “ex multis experimento intellectis una fit universalis de similibus acceptio” (from many things understood from experience, one universal apprehension arises about similar things). In his exposition commentary, he writes:

*But art arises and is generated and perfected in us, when from many things, not confused—to be sure no longer [confused]—through experience by the purification of a universal concept by true and certain reason, one universal apprehension arises, abstracted of all similar things in an essential way, [an apprehension] for which it is proven that there are no exceptions.*<sup>8</sup>

In this passage, Albert's “universal concept” (*universalis intellectus*) surrenders experience to an intellectual grasp. I here read *universalis intellectus* with MS family β, instead of *universalis intellectis* with MS family α. Read in this way, the status of experience is now elevated from a sensitive type of cognition to a mixed type of cognition; any newly acquired experience is informed simultaneously by the sensitive and the intellectual realms.

Albert here accepts the *translatio media*'s reading, with the probable change of *intellectis* to *intellectus*, thus highlighting the role of the prior universal whose role it is to purify, order, and essentialize the newly acquired experience. The concept has been generated “by true and certain

reason,” in reliance on the cognitive faculties that Albert considered the human soul to possess. Crucial among them is the agent intellect, for without this intellectual faculty to abstract the universal from the particular, there would be no universal concept in the first place. But the prior concept already present in the intellect matters too, as it immediately determines and specifies the new universal abstracted from experience. We are left, then, with a similar picture to the one Albert painted in his *Posterior Analytics* commentary, according to which every *ars* is achieved by a preexistent intellectual cognition.<sup>9</sup>

What Albert meant exactly by this preexistent intellectual cognition can be gleaned from his *Physics* commentary, a work he wrote at the very beginning of his commentary project in 1251. There, Albert distinguishes between confused and distinct universals of all things physical, similarly to the long commentary tradition on this passage, especially the works of Avicenna and Averroes, who exerted considerable influence on his view.<sup>10</sup> He explains that the “physical universal” (*universale physicum*) may be acquired by means of three different types of perception: perception through the external senses alone; perception through common sense and the external senses; and perception through “reason mixed in sense or in cognition” (*confusae rationis in sensu vel cognitionis*), common sense, and the external senses.<sup>11</sup> The last of these three types of perception is most relevant here, for it is this type of perception that does not concern the accidental properties of physical things, such as colors and shapes, but “extends over the common nature in the extended underlying subject,”<sup>12</sup> namely being (*esse*) and, as we learn later, substance (*substantia*). Albert here situates his discussion of perception through mixed reason, common sense, and the external senses solidly within a hierarchy of the soul’s sensitive and rational faculties.<sup>13</sup>

The cognitive process that Albert takes to be involved in knowledge acquisition of physical things—things that are “in their totality conceived with matter in their being and their definition”<sup>14</sup>—starts from a confused universal as their common factor, for instance, from “animal.”<sup>15</sup> Only afterwards does it proceed to an ever more specified universal, by increasingly determining and specifying the most general universal “animal” until it is finally defined through the proximate genus and specific difference, resulting in the most specific species (for instance, the six different species of eagles that Albert knew).<sup>16</sup> Albert identifies this cognitive process as a process of resolution (*resolutio*)—the “breaking down” of a vague universal into its different components—which he distinguishes from its opposite cognitive process, that of composition (*compositio*).<sup>17</sup>

*Resolutio* involves the intellect right from the start; the natural scientist uses it to acquire specific, essential knowledge about things in the world. *Compositio*, in contrast, requires the sensitive soul—the external senses and common sense—to be involved first, before the intellect enters the picture. But these senses together can only give rise to an overly general universal—a universal whose coming-to-be has not been regulated

by the prior involvement of the scientist's intellect in allocating the newly abstracted universal to the correct genus and species.<sup>18</sup> Precisely this kind of prior involvement of the intellect is required in order to reach the proper definition of any given thing.

In the *Metaphysics*, sense perception, just like experience, thus has a subordinate, mediating role, yet it is integral to the intellectual processes. Neither the product ultimately sought nor the perfect capacity and activity of the scientist, sense perception is nonetheless critical for facilitating the products of *ars* and *scientia* as a perfection of the scientist's soul through the structured study of physics, mathematics, and metaphysics.<sup>19</sup> The perfection of the soul through *ars* and *scientia* is ultimately achieved through the removal of disorder, instability, and the possibility of opposites, which are still present in the objects of sense perception and experience.<sup>20</sup>

Albert's considerations here focus on the epistemic content of these objects. He argues that their essential properties yield a true and certain universal because they are ordered, stable, and without exceptions. His thinking on the analytic process of cognition, as elaborated in his *Physics*, is clearly in conversation with the *translatio media* of the *Metaphysics*, which he took to imply the priority of the universal concept *before* any new perception and experience. For Albert, *ars* and *scientia* are therefore unthinkable without perception and *experientia*. These are required at the beginning of cognition (a point I could only touch on here), in assenting to first principles (which I have had to leave undiscussed), and in specifying those universals that are already present but are too general to be useful (the point addressed here).

Albert's exposition commentary on the *translatio media* of the *Metaphysics*, read in conjunction with his *Physics* commentary, thus reveals how he practiced his *scientia* of experience in its relation to universals, not to things in the world. It was the precise wording of the *translatio media* that conveyed to him, in an instrumental way, the *scientia* of experience. Yet those words required more precise explanation if they were to constitute true and certain knowledge in a comprehensive fashion. This is why I argue that for Albert, the authority of the *translatio media* of the *Metaphysics* was epistemic rather than linguistic.

But there is more. Albert's discussion discloses how much he tailored the *scientia* of experience contained in the *translatio media* to *doctrina*, his practice of *scientia* as in the classroom. Albert insists on the embeddedness of experience into prior, but too generic, universals and posterior, now specifically refined, universals, and he is committed to the intellectual process of *resolutio*. In both of these stances, experience is maximally conducive to theorizing—for the type of experience theorized here maps perfectly onto Albert's pedagogical conception of the order of natural *scientia*: from the generic universals, as contained in the *Physics*, to the most specific universals, as contained most prominently in the *De animalibus*.<sup>21</sup>

The *translatio media* of the *Metaphysics* thus possessed crucial epistemic authority for Albert, since its cautious phrasing “ex multis experimento

intellectis” (from many things understood through experience) confirmed to him the exact order and approach required for acquiring *ars* and *scientia* through *experientia* in dependence on universals. In contrast, the phrasing of the *revisio Moerbekana*, “ex multis experimentalibus conceptionibus” (from many experiential conceptions), no longer left that option open—leading its most prominent reader, Thomas Aquinas, in a strikingly different direction.

### Thomas Aquinas on Experience in the *revisio Moerbekana*

Unlike Albert the Great, Thomas Aquinas read Aristotle’s *Metaphysics* as positing grades of human cognition. Rather than the different cognitive processes of *resolutio* and *compositio* that Albert endorsed, and rather than the order in which *compositio* and *resolutio* yield *ars* and *scientia*, Aquinas advocated the cognitive process of *collatio*, naturally in his own peculiar reading of it.<sup>22</sup> *Collatio* was a view of sense perception and experience that Albert regarded as unsuited for philosophical *scientia* (though suited for rhetoric), as it could not yield ordered and distinctive universals.<sup>23</sup> But for Aquinas, in his commentary on the *revisio Moerbekana*, the corrected version of the *translatio media*, *collatio* was the solution, simply because there were no textual grounds to invoke the priority of a universal concept before experience.

What Aquinas found in the *revisio Moerbekana* was nothing but a straight path from memory, to experience, to the universal: “ex multis experimentalibus conceptionibus una fit uniuersalis de similibus acceptio” (from many experiential conceptions, one universal meaning arises about similar things).<sup>24</sup> These “experiential conceptions,” however, left little room for combining experience and the intellectual activities into an ordered process of *resolutio*, as had been the case with the *multis intellectis* prior to *experimentum* in the old translation. Without such an ordered process, Aquinas suggested, experience

derives from a *collatio* of many singulars that have been received into memory. But in this way, *collatio* belongs to humans alone, and pertains to the cogitative power, which is called “particular reason”: the collective [power] of individual intentions, just as universal reason is [a power] of universal intentions.<sup>25</sup>

The reference to cogitative power is Aquinas’s implicit tribute to Averroes. Much more relevant than the source or definition of this power, however, is Aquinas’s construal of its function as analogous to that of the intellect. *Collatio* applies analogously to both grades of cognition—to particular reason in causing experience, and to universal reason in causing universals—but there is no account of the involvement of universal reason in the activities of particular reason.

Whether by *collatio* Aquinas meant a cumulative or a combinatory activity of the cogitative and intellectual powers can be gleaned from his account of the causation involved: “For he [i.e., Aristotle] says first that, in humans, experience is caused from memory. But the kind of causation is the following: because from many memories of one thing humans receive an experience of something.”<sup>26</sup> The starting point for the many memories that give rise to one experience is one thing in the world, and not similar things. Whether this one thing is one in number or one in kind remains unsaid. The memories derived from it, though, seem to have established sufficient grounds for sameness in quality. The *collatio* of experience from many memories therefore equates to a quantitative accumulation of like qualities, and the analogous case holds true for the intellect.<sup>27</sup>

The sharp distinction between experience, with its focus on singulars, and art, with its focus on universals, resonates in the types of knowledge that Aquinas assigns to each grade of cognition. Experience equals knowledge of the fact (*quia*), art equals knowledge of the cause (*propter quid*), because “the artists know the cause.”<sup>28</sup> In contrast to Aquinas’s gradation, Albert’s solution included *quia* and *propter quid* knowledge for all *scientiae* and *artes*, and it did so because more general universals were involved in ordering the kind of experience that made possible more specific universals.

A further explanation of these divergences can be found in the different commentary practices the two men used to promote the norms of truth and certainty. Albert’s commentary practices relied on demonstration within a system of *scientia*. They followed the system’s peculiar didactic and natural orders, and they pursued nothing less than the perfection of the scientist as *homo solus intellectus*.<sup>29</sup> These practices entailed the systematic integration of all demonstrative knowledge available, which Albert believed could be found in the Aristotelian tradition. But they also required supplementation by new demonstrations: in Albert’s eyes, they lacked comprehensive authority, since the *scientiae* had not come down in full to the Latin world.

In contrast, Aquinas’s commentary practices used demonstration as an exegetical enterprise, selecting works from the *corpus Aristotelicum* and signposting the Philosopher’s authority in almost every section: “Aristotle says first,” “Then, when he says,” “Therefore, he says,” and so on. For Aquinas, Aristotle’s authority lay in the demonstrations presented in his works, and only when incomplete did these have to be expanded and explained (tweaked, too, especially when they apparently conflicted with the Christian faith). A comprehensive and literal system of *scientia* by means of *doctrina* versus textual exegesis is thus what marks out the particular takes on demonstration in Albert and Aquinas.<sup>30</sup> What did that mean for the Scholastic audience when neither a system nor exegesis were the main means to promote the norms of truth and certainty?



### John Buridan on Experience in His *Lectura Erfordiensis*

The epistemic function of experience, described by Albert earlier as the analytic process of *resolutio*, took center stage once again in the work of the fourteenth-century philosopher John Buridan. Buridan's *Lectura Erfordiensis* was a question-commentary taught at Erfurt and thus, as Lambert de Rijk aptly remarks, was not a classic commentary but "a course of metaphysical questions inspired by the subject matter of the first books of *Metaphysics*."<sup>31</sup> Quite independently of any direct link to the *translatio media* and Albert's commentary on it, or to the *revisio Moerbekana*, Buridan pursued his very own interpretation of experiential cognition (*cognitio experimentalis*) as a case of quasi-intellectual cognition. He did not conceive of it as something sensed, but connected it to prior sense perceptions by way of correspondence, checking similar properties against prior sense perceptions:

Sensible cognition [*cognitio sensitiva*] takes place in the presence of the sensible object itself: for it is just as you cognize this fire to be hot if you touch it. But memorative knowledge [*notitia memorativa*] is had of something that has previously been sensed through a preserved species in the memorative power: and thus, you cognize in this way that *this* fire which you sensed yesterday, was hot. But experiential cognition [*cognitio experimentalis*] is said of things that have never been sensed by you except through similar things that have been sensed by you. For instance, I say: You have never touched *this* fire, and nonetheless you cognize it to be hot. Even a dog that does not have an intellect would judge it from afar to be hot, because he has cognized many other, similar cases through touch to be hot, of which the memory has remained for him. For this knowledge [*notitia*] is called proper experiential knowledge, according to which experiential knowledge [*notitia experimentalis*] is distinguished from sensible and memorative knowledge.<sup>32</sup>

Buridan here exemplifies rather than explains how judgment about similar properties is possible, even for a dog: singling out the property of the heat of a fire without sensing its heat, the dog must rely on previous sense perceptions of other fires' heat. For humans, Buridan specifies the path of reasoning between similar properties even further as a path of syllogistic reasoning. Against what he considers a bad habit among some of his colleagues, their incorrectly identifying sense perceptions as experiences, Buridan suggests that a universal judgment is built by means of a proper inductive method. Only the repetition of many sense perceptions *without exceptions* gives rise to intellectual assent that something is always the case, even if it remains unsensed:

It is true that we often call sensitive cognition "experiential." Thus, if you have touched *this* fire, you sometimes say you know from

experience that it is hot. But this is improper [use] of [the term] experience, according to which experience is distinguished from actual sensation. And in this way, it is manifestly the case that experience is properly said to come to us from many sensations and memories. Consequently, if someone sees one time that *this* rhubarb purges the bile, he does not, after this, immediately judge with certainty that this other rhubarb purges the bile too. But if he sees it many times without exception, then he assents to the other case in a similar way. After this, you need to know from the power of the aforementioned types of cognition, the intellect arises to give approval to a universal proposition, both that all fire is hot and that rhubarb purges the bile. And this universal proposition is taken as a principle, so to speak, in art or in science.<sup>33</sup>

Unlike Aquinas's quantitative accumulations of memories to produce one experience, and of experiences to give rise to one universal, Buridan defines experience as a particular assent under new and strict epistemic conditions: invariability, recurrence, and similarity. This is an astonishing integration of epistemic criteria that, given the examples he chooses, Buridan surely borrowed from medical epistemology (the reference to the medical commonplace of rhubarb purging the bile makes this even more noticeable). For Albert and Aquinas, such conditions were only explicitly applicable on the level of intellect, but Buridan insisted on them for experience as well. His use of syllogisms and analogies—as Buridan knew well, excellent logician that he was—could also be applied to cognition of the particulars relevant for experiential cognition. Buridan also applied epistemic norms from the medical tradition for his natural philosophy,<sup>34</sup> but the fact that he integrates this medical rationality into his fundamental epistemological reflections on the *Metaphysics* is remarkable, setting new epistemic standards from a regulatory rather than an applied perspective.<sup>35</sup>

Both here and in his *Posterior Analytics*,<sup>36</sup> Buridan failed to specify what exactly identifies two properties as being sufficiently similar to one another. The two examples of the quality of heat in fire and the healing quality in rhubarb only allude to what Francis Bacon later specified in the lists of his *Novum Organon*.<sup>37</sup> Nonetheless, Buridan's view on *cognitio experimentalis* or even *notitia experimentalis* marks the beginning of the application of method on the level of the sensitive soul rather than on the level of the intellect, applying intellectual criteria of reflection, circumstances, and evidence to sense perceptions, as was a long-standing practice in medicine:

Experiential knowledge [*notitia*] is certain and infallible, if it is confirmed on the basis of exceedingly many sense perceptions and memories together with a reflection on the memories, circumstances, evidence of the art [*apparentia artis*], etc. Otherwise, experiences are fallacious.<sup>38</sup>

Sense perceptions, in Buridan's eyes, still directly affect the building and accumulation of memory, but memory only indirectly affects experiential cognition. Its role is to prepare the scientist to evaluate a new case in front of him as being something similarly applicable to the prior sense perceptions that are retained in his memory, and to assent to its similarity only if the other two criteria, invariability and recurrence, have been met. Unlike Albert, then, who brought experience and intellection close to one another by intertwining the two processes, Buridan extended epistemic criteria originally reserved for intellectual cognition to cover experiential cognition as well, a move that was most certainly inspired by his acquaintance with medieval medicine and its practice. At least nominally, Buridan took seriously and elaborated upon the seeds of induction that he found in Aristotle's *Posterior Analytics* II.19. This elaboration also made it possible to uncouple experiential knowledge from the scientist currently exercising it, for it is in the specification of its epistemic criteria that experience becomes an objectified process of reasoning about particulars.

For Buridan's conception of experience, unlike for Albert's or Aquinas's, the Latin translation of Aristotle's source text carried little epistemic authority. Even though Buridan's classroom commentary loosely followed Aristotle's *Metaphysics* in its general epistemic make-up of experience for any given cognitive process, he inserted epistemic criteria from a different discourse into the very core of experience. These he most certainly derived from his acquaintance with medical practice, a practice that appears to him to explain the usefulness of experience more accurately than do the remarks in the translations of Aristotle's *Metaphysics*.

Buridan's turn to an external practice, seemingly unrelated to that of philosophical *scientia*, marked a striking reorientation in his conception of the relationship between experience and *scientia*. It was no longer the translated text, nor the intellectual endeavors related to the translation, namely *doctrina* and exegesis, that conveyed *scientia* about experience. The necessary and sufficient criteria for experience to count as experience conducive to *scientia* were no longer determined by *scientia* itself, but rather by medical practice. Buridan may, then, perhaps have been one of the first medieval philosophers to dissolve the interpretive hegemony of *scientia* over experience.

## Conclusion

This essay has studied the epistemic authority that the *translatio media* and the *revisio Moerbekana* of Aristotle's *Metaphysics* were granted by Albert the Great, Thomas Aquinas, and John Buridan in their commentaries on the meaning and role of experience. The authority of the template differed substantially, in line with the strategies of epistemic translations the three commentators employed and the ends to which they did so.

Albert granted demonstrative authority to the *translatio media* in its power to convey a *scientia* of experience, which he elaborated upon by determining the precise relationship between the universals and experience.<sup>39</sup> Thomas Aquinas granted authoritative value to Aristotle's words as he found them in the *revisio Moerbekana*, and exegetically determined their epistemic value for the *scientia* that Aristotle propounded. John Buridan, finally, strayed away from the authority of the *revisio Moerbekana* in his question commentary *Lectura Erfordiensis*, and turned instead to the epistemic authority of medical practice. It was this practice, in his eyes, that disclosed the proper conditions under which experience is conducive to *scientia*.

In contrast to his two predecessors, Buridan thus gave the oral practices of lecturing and listening to the Latin translation of Aristotle's *Metaphysics*, and the textual practices of reading and writing commentaries upon it, much less epistemic authority to shape the subject matter of experience. Instead, he granted authority to those practices where experience was itself the approach of choice—thus translating the epistemic authority of experience into a practice outside the classroom. This is not to say that he embraced an empirical method for his *scientia*, quite the contrary. Indeed, Buridan followed a path of epistemic translation that his thirteenth-century predecessors had already walked—he commented on Aristotle's *Metaphysics* in the classroom just as Albert and Aquinas had done. But this path also enabled him to build his own, distinctive epistemic edifice out of a few highly canonized sentences. Contrary to Albert and Aquinas, he filtered the epistemic questions contained in these sentences through a different discourse, medicine, rather than through orality and exegesis. In his explicit use of this external discourse, Buridan acknowledged the importance of an empirical practice outside of philosophical *scientia* for determining the epistemic meaning and role of experience within it. Whether this particular type of epistemic translation was commonly continued by Buridan's school or other Scholastic thinkers of the fourteenth and fifteenth centuries remains to be studied. But it certainly set up a much more pronounced opposition between the epistemic practices of the classroom and those outside the classroom, thus opening up the cognitive possibility of identifying the classroom practices as “bookish” and those outside as “empirical.”

## Notes

- 1 See Chase in this volume.
- 2 Parallel passages are found in Aristotle's *Posterior Analytics* II. 19, 100a5–b5; *Nicomachean Ethics* VI. 7–8, 1141b8–1142a21; *Metaphysics* I. 1, 980b26–982a3.
- 3 As Gudrun Vuillemin-Diem explains, the two incomplete translations were the *translatio Iacobi* (“vetustissima”), made by James of Venice in the middle of the twelfth century, and the *translatio composita* (“vetus”), which revised the

- translatio Iacobi* and was made before 1236. Both translations translate the *Metaphysics* up to 1007a31, whereas the revision of the *translatio composita* breaks off at 998b23. Vuillemin-Diem, “Die *Metaphysica media*,” 7–8.
- 4 Vuillemin-Diem, “Die *Metaphysica media*,” 8–12. In addition, the Latin audience had access to at least one Latin translation of the *Metaphysics* from the Arabic (before 1237), which was transmitted together with Averroes’s *Long Commentary on the Metaphysics*. However, as is well known, Averroes bases his commentary on the Arabic translation by Eustathius (c. 850) from the Greek that starts with 987a9 rather than 980a21, but he also cites “another translation,” probably by Ishaq ibn Ḥunain (d. 910). In general, the transmission history of the *Metaphysics* from Greek to Arabic is extremely complex. See, e.g., Martin, “La Métaphysique.” I thank Michael Chase for pointing out this complexity and reference.
  - 5 Aristoteles Latinus, *Metaphysica, lib. I–X, XII–XIV, translatio anonyma sive ‘media’*, ed. Vuillemin-Diem, 7.21–22; Aristoteles Latinus, *Metaphysica, lib. I–X, XII–XIII.2, translationis mediae recensio*, ed. Vuillemin-Diem, 12.24.
  - 6 The two incomplete Latin translations provide yet other renderings. Aristoteles Latinus, *Metaphysica, lib. I–IV.4, translatio Iacobi sive ‘vetustissima’ cum scholis et translatio composita sive ‘vetus’* I. 1. 1 *vetustissima*, ed. Vuillemin-Diem, 5.18–19 and 23–24; *ibid. vetus*, ed. Vuillemin-Diem, 89.16–18.
  - 7 See Albertus Magnus, *Metaphysica*, I. 1. 7, ed. Geyer, 10.71–11.18.
  - 8 *Ibid.*, I. 1. 7, 11.36–41. The italicized passages in my translation are the source text that Albert glossed.
  - 9 See Albertus Magnus, *Analytica Posteriora*, I. 1. 3, ed. Borgnet, 8a.
  - 10 For a very helpful and detailed overview, see Lammer, *Elements*, ch. 2.
  - 11 See Albertus Magnus, *Physica*, I. 1. 6, ed. Hossfeld 11.51–71.
  - 12 *Ibid.*, 12.1–4.
  - 13 This could be understood to coincide with the estimative faculty, but Albert distinguishes it from *experientia*. See Albertus Magnus, *De anima*, II. 1. 2, ed. Stroick, 168.15–24.
  - 14 Albertus Magnus, *Physica*, I. 1. 1, ed. Hossfeld, 2.31–33.
  - 15 See *ibid.*, I. 1. 6, 11.93–12.19.
  - 16 See Albertus Magnus, *Metaphysica*, I. 1. 10, ed. Geyer, 14.84–15.10. On the eagles, Albertus Magnus, *De animalibus*, XXIII, tr. un., ed. Stadler, 1436.34–1437.17.
  - 17 See Albertus Magnus, *Physica*, I. 1. 6, ed. Hossfeld, 12.41–66. For the ancient background, see Chase, “*Quod est primum*.”
  - 18 See the passage cited in the previous note and also Albert’s very similar discussion on rhetoric in the *Posterior Analytics* above.
  - 19 Albert describes the connection between natural philosophy, mathematics, and physics in *Metaphysica*, I. 2. 10, ed. Geyer, 28.1–6.
  - 20 See *ibid.*, I. 1. 7, 11.41–48.
  - 21 See Albertus Magnus, *Physica*, I. 1. 4, ed. Hossfeld, 6.34–8.13.
  - 22 Two excellent papers have explained in much greater detail than space permits me to do here Aquinas’s take on experience in Aristotle’s *Metaphysics*: Lutz-Bachmann, “‘Experientia’”; King, “Two Concepts.”
  - 23 Albertus Magnus, *Analytica Posteriora*, I. 1. 3, ed. Borgnet, 11a. Albert defines cogitation earlier in his *De homine* (ed. Anzulewicz and Söder, 481.3–4). The Augustine reference here is probably to *Confessions*, XI. 18.

- 24 Aristoteles Latinus, *Metaphysica, lib. I–X, XII–XIII.2, translationis mediae recensio*, I. 1, ed. Vuillemin-Diem, 11.9–12.25.
- 25 Thomas Aquinas, *In duodecim libros Metaphysicorum Aristotelis expositio*, I. lect. 1, ed. Marietti, 8, par. 15.
- 26 *Ibid.*, 9, par. 17.
- 27 See *ibid.*, 9, par. 18.
- 28 See *ibid.*, 10, par. 24. It should be noted that in his commentary on the *Posterior Analytics*, Aquinas provides a rather different interpretation of how experience and reason relate. See Thomas Aquinas, *Expositio libri Posteriorum* II, lect. 20, ed. Leonina, 244.144–246.287.
- 29 For instance, Albertus Magnus, *De anima* I. 1. 1, ed. Stroick, 2.32–33; *Ethica* IX. 3. 1, ed. Borgnet, 585a; *Super Iohannem* VIII:32, ed. Borgnet, 352a. Albert develops the implications of this formula concisely in his *De natura et origine animae*, 2. 13, ed. Geyer, 38.85–39.8. See, e.g., Anzulewicz, “Anthropology”; Krause and Anzulewicz, “Albert the Great’s *Interpretatio*.”
- 30 Albert’s commentary on the *Metaphysics* can be identified as a proper *expositio* commentary. Not unlike Aristotle’s template, it is divided into *tractatus* and *capitula*. Its main mode of commenting consists in long paraphrases of the template, expanding upon it by extending sentences, adding paragraphs or even entire chapters. However, unlike Aquinas’s *expositio* commentary, Albert’s commentary is not divided into *lectiones*. These reflect the oral lectures of the university or *studium generale* classroom. Markedly absent from Albert’s commentary are also the *divisiones textus*, which typically stand at the beginning of a *lectio*, as is the case in Aquinas’s commentary. Unlike later *expositio* commentaries, neither Albert’s nor Aquinas’s contain *dubia* or appended *questiones*. As such, Albert’s and Aquinas’s commentaries differ strongly in form from Buridan’s *questio* commentary, which does not explain the base text in detail, but rather focuses on select themes in the text.
- 31 De Rijk, “Introduction,” lxxiv.
- 32 John Buridan, *Lectura Erfordiensis*, q. Iva, ed. De Rijk, 26.29–27.14.
- 33 *Ibid.*, 27.14–28.
- 34 This has recently been observed by Chiara Beneduce in her comprehensive study on Buridan’s acquaintance with ancient and medieval medicine, “Natural Philosophy.” See especially 187–89, on the epistemological relation between the two disciplines. For those who wonder about the precise medical sources of Buridan, Beneduce writes: “It is not easy, given our present state of knowledge, to determine how exactly Buridan got acquainted with those doctrines, whether his medical sources were second-hand or first-hand, and precisely to what extent he knew theoretical medicine” (182).
- 35 Galen’s *De sectis* II reports similar epistemic values held by the Empirics, but these are not his own. On this possible background of John Buridan, see Chase in this volume, especially 31. The medieval Latin translation of *De sectis* was made by Burgundio of Pisa from the Greek original. See McVaugh, “Galen.”
- 36 See, e.g., John Buridan, *Analytica Posterior*, I, q. 2a, ad 9, ed. King ([http://indivdual.utoronto.ca/pking/resources/buridan/QQ\\_in\\_Post\\_An.txt](http://indivdual.utoronto.ca/pking/resources/buridan/QQ_in_Post_An.txt)), where he connects the criterion of repetition with Averroes’s take on induction at the beginning of his *Physics*.
- 37 See, e.g., the discussion of heat and its reliance on fire in book II, aph. 11–22.

- 38 John Buridan, *Lectura Erfordiensis*, q. Iva, ed. De Rijk, 29.1–5.
- 39 The most likely reason why Albert commented on the *translatio media* instead of the *revisio Moerbekana* is simply a matter of availability and common practice. Albert wrote his commentary around 1264 (for the dating, see Albertus-Magnus Institut, “Albertus Magnus,” 30); Moerbeke’s translation was probably made between 1265 and 1272 (for the dating, see Vuillemin-Diem, “Die *Metaphysica media*,” 11). Common practice is discussed at length in Vuillemin-Diem, “Praefatio.”

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